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submission

Please see attached submission from Northern Beaches Council.

7 November 2023

Ms Lauren Templeman
Manager Place & Infrastructure (Metro North)
NSW Department of Planning and Environment
Email: lauren.templeman@planning.nsw.gov.au

Our Ref: 2023/728483

Dear Ms Templeman,

Northern Beaches Council Submission – Planning Proposal for Patyegarang, Morgan Road, Belrose (Lizard Rock) – PP-2022-3802

Thank you for the opportunity to make a submission on the Planning Proposal for Patyegarang, Morgan Road, Belrose (Lizard Rock), on exhibition until 7 November 2023.

Council considered a report on the matter at its meeting on 24 October 2023 resolving:

That Council prepare a submission to the NSW Department of Planning and Environment objecting to the currently exhibited Patyegarang Planning Proposal for the site at Morgan Road, Belrose (also known as “Lizard Rock”) based on the concerns raised in this report and further noting Council’s:

- 1. Concern regarding privatisation of paper Crown Roads, and*
- 2. Requesting that a public hearing take place concerning the proposed land rezoning.*

The attached submission calls on the Sydney North Strategic Planning Panel to reject the Planning Proposal by the Metropolitan Local Aboriginal Land Council as it lacks strategic and site-specific merit, locating over 1,300 people and 450 dwellings in a highly bushfire prone area away from any local or strategic centre services and resulting in enormous impacts on bushland with high biodiversity values.

Should you require any further information or assistance in this matter, please contact my office on (02) 8495 5327.

Yours faithfully



Joseph Hill
Acting Director Planning & Place



Northern Beaches Council Submission Planning Proposal for Patyegarang Project (Lizard Rock), Morgan Road, Belrose

November 2023

Contents

EXECUTIVE SUMMARY	3
INTRODUCTION	8
<i>Subject Site - Patyegarang</i>	8
<i>Strategic Context</i>	9
<i>Planning Proposal objectives and intended outcomes</i>	10
<i>Background</i>	11
Chronology	11
Council meetings	14
Independent bushfire reviews	14
Overview of changes to the revised Planning Proposal.....	15
DISCUSSION OF KEY ISSUES.....	20
<i>Strategic Merit</i>	20
Consideration of Development Delivery Plan (DDP)	20
Inconsistencies with regional planning plans	20
Inconsistencies with SEPPS and Local Planning Directions	25
Inconsistencies with DPE-endorsed local strategic directions	27
The need for the Planning Proposal has not been established.....	35
<i>Site Specific Merit</i>	35
Aboriginal Heritage.....	35
Bush Fire Risk	37
Biodiversity	40
Waterways.....	43
Slope Stability Risk	48
Urban Design and Landscaping	48
Likely Infrastructure Demand	53
Infrastructure contributions income	56
Voluntary planning agreement.....	56
Road infrastructure	58
Traffic, active transport and parking	63
Stormwater management / flood.....	65
Social and Economic Impact.....	66
<i>Inadequate Consultation</i>	69
CONCLUSION.....	70
APPENDIX 1 – Excerpts from Development Delivery Plan (DDP).....	71
APPENDIX 2 – Aboriginal Heritage Office submission.....	74
APPENDIX 3 – Blackash Independent bushfire report submission.....	77
APPENDIX 4 – Meridian Urban Independent Bushfire report	111

EXECUTIVE SUMMARY

This submission calls on the Sydney North Strategic Planning Panel to reject the Planning Proposal by the Metropolitan Local Aboriginal Land Council as it lacks strategic and site-specific merit, locating over 1300 people and 450 dwellings in a highly bushfire prone area away from any local or strategic centre services and resulting in enormous impacts on bushland with high biodiversity values. It will place further pressure on local traffic and infrastructure which already is at capacity.

The Planning Proposal prepared by GYDE Consulting on behalf of MLALC (the proponent) and dated July 2023 was placed on public exhibition on 26 September 2023 for a period of 6 weeks (closing 7 November 2023).

The exhibited Planning Proposal was prepared on behalf of the proponent to rezone 22 allotments of land with a total area of 710,007 sqm (71ha) in Morgan Road, Belrose, for residential development of up to 450 dwellings, a cultural centre, private open space, and land for environmental conservation. Prior to exhibition it was revised to address the conditions of the Gateway Determination issued by DPE on 9 June 2023 by:

- Proposing a statutory model to create a 450-dwelling cap for the site
- Proposing a R2 low density residential zone with dual occupancies as an additional use
- Removing references to Seniors Housing and a proposed E1 Local Centre zone
- Proposing an RE2 private recreation zone to incorporate asset protection zones (bushfire)
- Identifying minimum allotment sizes of 200, 450, and 600 sqm for different areas of the site
- Discussing Council's Affordable Housing Contribution Scheme requirements
- Preparing a draft Development Control Plan to accompany the Local Environmental Plan.

Council provided comment on an earlier draft version of the Planning Proposal. In our submission dated 24 November 2022, Council voiced strong objection to the proposal on grounds of the irreversible and enormous loss of biodiversity and bushland of about 44.7 ha (or approximately 45 rugby fields) and severe bushfire risks exacerbated by lack of evacuation options and a reliance on compulsory acquisition of public land to provide evacuation, amongst other matters.

The exhibited Planning Proposal fails to address the majority of issues raised by Council in its original submission.

On 24 October 2023, Council considered a report on the exhibited Planning Proposal and resolved:

That Council prepare a submission to the NSW Department of Planning and Environment objecting to the currently exhibited Patyegarang Planning Proposal for the site at Morgan Road, Belrose (also known as "Lizard Rock") based on the concerns raised in this report and further noting Council's:

- 1. Concern regarding privatisation of paper Crown Roads*
- 2. Request that a public hearing take place concerning the proposed land rezoning.*

Submission Summary

In summary, Council **opposes** the exhibited Planning Proposal for Patyegarang (Lizard Rock) for the following reasons:

Lack of strategic merit:

1. **Inconsistency with the Greater Sydney Regional Plan and the North District Plan** particularly with respect to increasing housing density in areas subject to hazards (see excerpt from Meridian Urban

report below), urban releases in the Metropolitan Rural Area, preserving remnant bushland and high biodiversity precincts, walkable cities, integrating land use and transport, delivering high quality open space and reducing carbon emissions.

2. **Failure to consider State Environmental Planning Policies** noting the Planning Proposal provided simple Yes/No answers to compliance against SEPPs, contrary to State Government LEP making guidelines.
3. **Disproportionate weight given to the Development Delivery Plan (DDP)** noting that the DDP contains no detailed analysis of environmental issues and mostly outlines MLALCs strategic interests in land (not the community's interests) and must only be "taken into account" by the Planning Proposal Authority i.e. it is not the determining matter for consideration in the assessment of the Planning Proposal, being only one matter amongst many in law that the Planning Proposal Authority must consider, including regional plans and local strategic planning statements.
4. **Inconsistency with NSW Government Local Planning Directions** particularly relating to bushfire risk, conservation of land, housing development, and integrating land use and transport.
5. **Inconsistency with Council's Local Strategic Planning Statement – Toward 2040** particularly related to Healthy and valued coast and waterways, Protected and enhanced bushland and biodiversity, Protected scenic and cultural landscapes, Protected Metropolitan Rural Area, Greener urban environments, A low-carbon community, with high energy, water and waste efficiency, Adapted to the impacts of natural and urban hazards and climate change, Infrastructure delivered with employment and housing growth, Access to quality social housing and affordable housing, and Frequent and efficient regional public transport connections
6. **Inconsistency with Council's Local Housing Strategy** which seeks to focus housing growth in identified established centres, close to public transport and services, and away from areas subject to hazards. Ad hoc planning proposals such as the subject site undermine Council's strategic planning framework, infrastructure planning and potentially the success of planned centres.
7. **Inconsistency with Council's Affordable Housing Policy** which seeks 10% affordable rental housing for all planning proposals for up-zoning. The Affordable Housing Discussion Paper submitted with the Planning Proposal to address Gateway conditions does not commit to dedication of land or housing to Council for use in perpetuity as affordable housing which is inconsistent with Council's current Affordable Housing Contributions Scheme. Rather it proposes affordable housing be provided for 15 years only and managed by MLALC, at the end of which a "review" will be undertaken to determine the appropriateness of the scheme.
8. **Inconsistency with Biodiversity Conservation Act** - The proposed future development will have a significant effect on threatened species as defined in Section 7.2 of the BC Act. The proposal is located in natural areas identified in various studies as having high to very high biodiversity conservation values. On this basis, the proposal has not demonstrated that sufficient or appropriate reasonable steps have been taken in the hierarchy of 'avoidance and minimisation' of impacts, before 'offsetting' is applied, as required by Section 6.4 (1) of the BC Act 2016.
9. **Inconsistency with Council's Conservation Zones Review** which recommends application of the C3 Environmental Management zone to most of the site due its high environmental value.

Lack of site-specific merit:

10. **High Bushfire Risk** - The site is bushfire prone (vegetation category 1). Safe evacuation routes have not been demonstrated, development density is unclear, and the proposal relies on compulsory acquisition of Council land for the development of a slip lane on Morgan Road. It is questionable whether the slip

lane would resolve evacuations concerns given the severe to catastrophic bushfire risk posed by the development.

11. **Major loss of high biodiversity habitat** – The proposal would facilitate the clearing of approx. 44.7 hectares and a further 6.9 hectares including threatened species subject to indirect impacts, resulting in significant impacts on core habitat, known habitat for various threatened species of flora and fauna, and Threatened Ecological Communities (TECs). This will be accentuated by the proposed small minimum lot sizes and the required land clearing to provide Asset Protections Zones (APZs) on relatively small lots together with the need for significant cut and fill of land to achieve required road gradients.
12. **Uncertainty about public benefits that can be derived from the project** - specifically, affordable housing, open space, community infrastructure, impacts of urban heat, and (viable) active and sustainable transport network that connects beyond the site itself. There are significant concerns around active transport relating to a combination of lack of connectivity, lack of shade (due to bushfire risk mitigation requirements) and steepness of roads. Finally, it is uncertain whether or not the proposal would be supported by the Aboriginal community itself, as both known and potential Aboriginal heritage sites may be put at risk. The Planning Proposal records show that only five Aboriginal people (of whom one is a member of MLALC) have been consulted to date, and only on the Development Delivery Program (DDP) and prior to the specifics around the proposed scale, density and extent of the development were released.
13. **Major impacts on waterways and riparian corridors** - The Planning Proposal would result in significant environmental impacts within the Snake Creek / Narrabeen Lagoon catchment. The proposal is a major catchment disturbance that will affect the value of the valley setting and receiving waters, and impact riparian land. Proposals to permit APZs within the Riparian corridor on land zoned RE2 Private Recreation, will require significant clearing and for this clearing to be maintained, diminishing the environmental quality and functioning of these corridors. These areas should be zoned C2 consistent with their intended function. Furthermore, on-site stormwater retention, especially for smaller lots, has not been adequately considered and Council questions the functionality of proposed systems on very small (200sqm) lots.
14. **Insufficient information about required infrastructure upgrades** - (e.g., new roads, stormwater detention) and impact on social infrastructure capacity (e.g., libraries). New roads are proposed on valley slopes that exceed the maximum grades recommended by Austroads and are unwalkable. To achieve complying gradients, excessive and expensive cut and fill will need to be undertaken, further impacting existing biodiversity and the environmental quality of the proposed development. The significant infrastructure costs – which also would include relocation of a transmission line - would need to be borne by future residents (as community title), making the feasibility of the project questionable.
15. **Insufficient modelling of traffic and transport and Active Transport proposals** – The modelling fails to consider impacts on the broader Morgan Road corridor. No Morgan Road upgrades are proposed. Active transport planning is insufficient, appearing as an afterthought rather than the focus for the new development as required under Council's MOVE Strategy.
16. **Proposed LEP provisions to cap dwelling numbers in R2 zone inadequate** – Provisions in the Housing SEPP and Codes SEPP do not require reference to Council's LEPs before a complying development certificate can be issued for dual occupancy or secondary dwelling development. There is a strong likelihood that approvals will be granted for development over and above the 450 dwelling cap based on Council's experience elsewhere (Warriewood Valley). In addition, seniors housing is permitted in the R2 zone under the Housing SEPP, contrary to the requirements of the Gateway determination. If the Planning Proposal proceeds, zoning the land instead as C3 – Environmental Management resolve

these issues and also prohibits other uses vulnerable to bushfire hazard that are permitted in the R2 zone, including community facilities, schools, childcare centres etc.

17. **Proposal relies upon acquisition of public bushland for private benefit – Morgan Road Slip Lane –** Bushfire evacuation from the site is dependent upon a slip lane at Morgan Road and Forest Way. This is Council-owned bushland that provides a vegetation buffer to properties on Forest Way. The Planning Proposal proposes compulsory acquisition of this land by Transport for NSW to facilitate this private development. Council will oppose this acquisition.
18. **Site-specific DCP is inadequate** – the DCP fails to provide sufficient guidance relating to integration of ESD principles and the balancing of different design priorities, some of which will be competing, such as landscaping requirements, retention of tree canopy, urban heat considerations, and Asset Protection Zone (APZ) considerations. No design options are provided for the 200 sqm allotments within the site, yet these are the most likely to impact the existing environmental quality and character of the area.
19. **The archaeological report does not provide sufficient information about aboriginal sites** - it does not address the main issues adequately, i.e. about the known Aboriginal sites and the potential for unrecorded sites. There is a great deal of background information for the region but much less information provided about the survey work, the current sites in their context, best management options for the site and steps for further investigation.
20. **Privatisation of paper Crown Roads** – The proponent has made a Crown Road purchase application to acquire around 3.2ha of unformed roads and include this land as part of the development. Council objects in principle to the privatisation of such land.
21. **Development feasibility not demonstrated** - The overall feasibility of the development scheme is questionable given the significant level of infrastructure required to support a proposal of this size. The financial arrangements regarding ongoing management of infrastructure are unclear. No evidence has been provided to demonstrate whether the proposed uplift is feasible from a development perspective.
22. **Insufficient Public Engagement** – No engagement activities have been scheduled to take place during the public exhibition of the draft Planning Proposal. Council calls for a public hearing to ensure that community members, and namely the local Aboriginal community, are given a voice on matters that deeply concern them. This would be in keeping with minimum engagement standards and DPE's own Community Participation Plan.¹

¹ We note that only five Aboriginal people have been consulted to date, where this engagement took place at the Development Delivery Plan public exhibition stage and prior to the release of information about the scale and extent of the proposal.

Excerpt from Report:
Bush Fire Review – Patyegarang Planning Proposal
Prepared by Meridian Urban for the Northern Beaches Council, October 2023

Bush fire risk is a major issue of concern raised by Council with this Planning Proposal. Council engaged Meridian Urban to provide a third-party technical review of the proponent's Bush Fire Strategic Study (BFSS) and evaluation against the NSW Government's guide: Planning for Bushfire Protection 2019 (PBP). Chapter 4 of the PBP relates to strategic planning in bushfire prone areas.

- *The BFSS makes a number of statements which do not appear to be underpinned by a depth of detail, information or evidence which raises question as to whether it is sufficiently fulsome in its consideration. Mere compliance with bush fire protection measures does not address the nature of matters outlined by Chapter 4 of PBP.*
 - *The BFSS does not provide an evidence-based assessment of the severity or intensity of potential impact on life or property in context of the broader surrounding landscape which is required by Table 4.2.1 of Chapter 4 of PBP.*
 - *The fire history section maps a 2014 wildfire event across almost the entirety of the site, with a history of fire across the broader surrounding area which also identified by the Deferred Lands Bush Fire Risk Assessment prepared by Meridian Urban to inform Northern Beaches Council's strategic planning activities.*
 - *Assuming an urban use of the subject land, the scenario modelled by Meridian Urban and referenced by the BFSS continues to identify potential fireline intensities of well in excess of 40,000kW/m within 150m of the site at FFDI 100 (i.e. fire runs). This does not appear to be discussed by the BFSS, or the potential impacts on people or property as a result.*
 - *Whilst the draft BFRMP for the Northern Beaches is not publicly available information, the Belrose to Davidson focus area identifies that built assets are in the 'highest risk category, the highest in the BFMC area'. The planning proposal land directly adjoins this focus area. It is likely not directly included in it because at present, it is not developed. However, the planning proposal represents a potential expansion of this focus area, which is identified by NSW RFS as the highest risk area of the BFMC.*
 - *The BFSS identifies that a high voltage transmission line traverses the planning proposal land, stating that 'it is understood that the line is to be relocated to a more appropriate site or preferably, underground'. No further detail is provided. Given the magnitude of cost and potential implications of such an activity, owing to a third party, addition detail is required. This includes timeframes regard its relocation (if feasible) relative to development and implications if it is not undergrounded.*
-

INTRODUCTION

Subject Site - Patyegarang

The land that is subject to the Planning Proposal is an amalgamation of 22 allotments and the 2 roads on site with a total area of 701,000sqm (70.1ha), as identified in the figures and tables below.



Figure 1: Aerial view of site, outlined in white

A legal description of the site and the 22 allotments is provided in Table 1 below.

Table 1: legal description of the site, including site area and ownership

Lot Description	Site Area	Ownership
Lot 89 DP 752038	38,503.6sqm (3.85ha)	MLALC
Lot 90 DP 752038	43,151sqm (4.32ha)	MLALC
Lot 91 DP 752038	43,961sqm (4.4ha)	MLALC
Lot 92 DP 752038	67,684sqm (6.77ha)	MLALC
Lot 93 DP 752038	42,942sqm (4.29ha)	MLALC
Lot 176 DP 752038	7,504sqm (0.75ha)	MLALC
Lot 177 DP 752038	6,547sqm (0.65ha)	MLALC
Lot 178 DP 752038	10,031.6sqm (1ha)	MLALC
Lot 189 DP 752038	30,379sqm (3.04ha)	MLALC
Lot 190 DP 752038	30,234.5sqm (3.02ha)	MLALC
Lot 191 DP 752038	31,064sqm (3.11ha)	MLALC
Lot 196 DP 752038	35,833.5sqm (3.58ha)	MLALC

Lot Description	Site Area	Ownership
Lot 197 DP 752038	42,239.6sqm (4.22ha)	MLALC
Lot 944 DP 752038	32,434sqm (3.24ha)	MLALC
Lot 945 DP 752038	30,303.6sqm (3.03ha)	MLALC
Lot 946 DP 752038	30,230.3sqm (3.02ha)	MLALC
Lot 947 DP 752038	29,240.9sqm (2.94ha)	MLALC
Lot 948 DP 752038	41,331.9sqm (4.13ha)	MLALC
Lot 953 DP 752038	22,617.9sqm (2.26ha)	MLALC
Lot 2600 DP 752038	23,801.6sqm (2.38ha)	MLALC
Lot 2 DP 1242330	28,967.1sqm (2.9ha)	MLALC
Lot 1 DP 1285945	8034sqm (0.8ha)	MLALC
Total Site Area	677,000sqm (67.7ha)	

Strategic Context

The land subject to the planning proposal is on land identified as a “Deferred Matter” pursuant to Warringah Local Environmental Plan (LEP) 2000 and is identified within the B2 Oxford Falls Valley locality statement (See Figure 2)



Figure 2: Locality B2 - Oxford Falls Valley within Warringah LEP 2000

The land is identified within the Metropolitan Rural Lands Area (MRA) and Future potential MRA within Council’s Local Strategic Planning Statement (LSPS) - *Towards 2040*.

The site was subject to a previous planning proposal and was recommended for investigation into future development potential by the Planning Assessment Commission in its 2009 report of the *Review of four sites in Oxford Falls Valley for Urban Development*. It was the subject of Stage 2 of the [Oxford Falls Valley and Belrose North Strategic Review Planning Proposal](#), which proposed transfer of the planning controls from Warringah LEP2000 to Warringah LEP2011 (Stage 1). Stage 1 was progressed through to public exhibition but was withdrawn by Council following concerns about the costs of required studies to progress the work. The

DPE agreed that the Planning Proposal should not proceed and that the rezoning of this land should occur as part of the preparation of the comprehensive Northern Beaches LEP.

It should be noted that the Planning Proposal endorsed by the DPE for exhibition at that time proposed that the site be entirely zoned E3 Environmental Management.

Council is undertaking several studies to inform future planning for this site (inclusive of the additional MLAC sites identified in the Planning Systems SEPP) in preparing the new Northern Beaches LEP and Development Control Plan (DCP) (LEP/DCP Technical Studies). These include a Conservation Zones Review (formerly known as the Environmental Zones Review) and supporting technical studies:

- Deferred Lands Strategic Bush Fire Assessment;
- Deferred Lands Biodiversity Assessment;
- Biodiversity Planning Review;
- Watercourse, Wetlands and Riparian Lands Study, and
- Estuary Planning Level Studies for Cowan Creek/Cottage Point and North and Middle Harbour.

Other technical studies either finalised or being finalised include the Environment Study, Stormwater Management Study, Geotechnical Review, Local Character Study, Urban Design Study, Social Infrastructure Study and Employment Study.

Council's investigations and technical studies are being delivered as part of our program '[Planning our Sustainable Future](#)'. As outlined in *Towards 2040*, these studies will inform our comprehensive LEP and DCP, and place-based planning in the MRA and MRA investigation area.

The planning proposal is to be assessed in terms of the alignment with *Towards 2040*, supported by the former Greater Sydney Commission (GSC) for consistency with the *Greater Sydney Region Plan* (GSRP) and *North District Plan* (NDP). Attention is drawn to the principles of *Towards 2040*, including the strategic principles for managing growth and change.

Planning Proposal objectives and intended outcomes

The Executive Summary of the Planning Proposal notes the following intended objectives and intended outcomes (page 6):

"The Planning Proposal intends to unlock currently undeveloped and unmanaged land at Morgan Road, Belrose (the "Site"), owned by the MLALC, to facilitate the delivery of new housing, social infrastructure, and conservation of the Site's significant environmental and Aboriginal heritage. [...]"

The outcome of this Planning Proposal will be to implement the Northern Beaches Development Delivery Plan established under Chapter 3 of State Environmental Planning Policy (Planning Systems) 2021 by providing appropriate zoning to deliver up to 450 dwellings and the protection of significant biodiversity and cultural values on the site."

The Planning Proposal seeks to transfer the site from Warringah LEP 2000 to Warringah LEP 2011 and implement standard instrument zones as follows:

- R2 Low Density Residential zone for areas to be developed as housing
- C2 Environmental Conservation zone for areas to be conserved
- RE2 Private Recreation zone for areas of open space, some riparian corridors, and a cultural facility – also permitting environmental management works, bushfire works, Asset Protection Zones and stormwater services.

Additionally, the Planning Proposal seeks to:

- permit dual occupancies as an additional permitted use within the R2 Low Density Residential zone subject to a minimum allotment size of 600sqm
- introduce maximum building heights (8.5 metres)
- introduce a range of small, medium to large residential lot sizes – 200sqm, 450 sqm and 600 sqm for different parts of the site.
- introduce a dwelling cap across the entire site of 450 dwellings

Of the 70.1ha of land, the Planning Proposal seeks to conserve 19.8 hectares (28%) of the site. It is estimated that approximately 44.7 hectares (an area equivalent to approximately 45 rugby fields) of land will be cleared to make way for the development as well as required Asset Protect Zones (APZs).

Background

Chronology

The following key phases in the strategic planning process have occurred:

- Phase 1: DDP exhibition and adoption
- Phase 2: Draft Planning proposal (pre-Gateway)
- Phase 3: Gateway determination
- Phase 4: Revised planning proposal and public exhibition

As indicated below, the only engagement to have taken place until now was during the statutory public exhibition of the DDP during Phase 1, and prior to release of specific information about the development (namely regarding the scale, extent and likely impacts of the proposal).

The only method for the community – including local Aboriginal community – to have input on the proposed development is to provide a submission via DPE's online portal. No engagement activities have been scheduled to take place during the public exhibition of the draft Planning Proposal.

Phase 1: DDP exhibition and adoption

Between 7 February and 21 March 2022, the Department of Planning and Environment (DPE) exhibited an Explanation of Intended Effect (EIE) and a draft Northern Beaches Aboriginal Land Development Delivery Plan (DDP).

The DDP considered the high-level opportunities and constraints associated with potential future development of 6 sites to be included in the Planning Systems State Environmental Planning Policy (SEPP), previously known as the Aboriginal Lands SEPP. The SEPP was introduced to provide greater support to Aboriginal Land Councils via the NSW planning system to achieve their aspirations and realise community benefits under the *Aboriginal Land Rights Act 1983*.

The sites subject to Chapter 3 of the Planning Systems SEPP are shown in Figure 3 below, identifying the Patyegarang site (Lizard Rock).

The public exhibition of the draft DDP generated a total of 1,132 submissions, including a detailed submission from Council (dated March 2022) as per Council Resolution (070/22) from Council meeting 22 March 2022. The Council meeting resolved to include specific key concerns, all of which remain relevant to the current Planning Proposal and are incorporated throughout this submission.

A high-level summary of the DDP engagement outcomes was included in DPE's Finalisation Report. The current Planning Proposal also refers to a Consultation Outcomes Report prepared by WSP (Gyde 2023: 92). However, this document has not been made publicly available.



*Figure 3: Land Application Map, showing MLALC land subject to Chapter 3 of the Planning Systems SEPP
(Source: NSW Legislation)*

The DPE Finalisation Report summarises the top concerns raised by the community. Of these, the top five concerns raised by the community were: biodiversity and threatened species impacts (76%), infrastructure (60%), strategic framework and urban development (47%), culture and heritage (41%), bushfire (31%). The only referenced support for the proposed development of the Lizard Rock site was from NSW Aboriginal Land Council.

On 5 August 2022, the SEPP was amended to include the six sites and the Northern Beaches Aboriginal Land DDP was approved by the Minister.

Phase 2: Draft Planning Proposal (pre-Gateway)

On 27 October 2022, Council was notified that a Planning Proposal for Morgan Road, Belrose (Lizard Rock) had been submitted for independent review by the Strategic Planning Panel of the Sydney North Planning Panel (SNPP).

At its meeting 22 November 2022, Council resolved to provide its submission to SNPP opposing the Planning Proposal and lodged its submission by letter dated 24 November 2022.

Council commissioned Blackash Bushfire Consulting to provide a review of the bushfire strategic study as provided at that time, and incorporated the advice into a draft submission. The report from Blackash Consulting is provided at Appendix 3.

On 22 December 2022, the SNPP determined that the Planning Proposal should be submitted to DPE for a Gateway determination subject to the following qualifications:

- The number of dwellings to be capped at 450
- 10% affordable housing to be provided
- The final zoning arrangements and boundaries to be resolved to maximise the retention of important biodiversity values
- A site specific DCP, to guide future development to deliver on the objectives and intended outcomes of the Proposal, to be finalised in consultation with Council and the Department before exhibition of the planning proposal.

This decision was considered at an extraordinary Council meeting held on 24 January 2023, at which time Council resolve to:

1. Note the decision of the Strategic Planning Panel of the Sydney North Planning Panel that the planning proposal for Morgan Road, Belrose (Lizard Rock) proceed to a Gateway determination.
2. Decline the offer to be the Planning Proposal Authority for the planning proposal and notify the Planning Panel's Secretariat of Council's decision by 2 February 2023.
3. Write to the Panel and request more detailed reasoning addressing the merits of each of the issues raised by the Northern Beaches Council in its submission to the Department of Planning and Environment of 24 November.
4. Reiterate its strong opposition to the planning proposal and write to the NSW Premier and the NSW Leader of the Opposition to seek their support to overturn the decision of the Strategic Planning Panel of the Sydney North Planning Panel.
5. Ask the Chief Executive Officer and the Mayor to request meetings with the NSW Premier and the NSW Leader of the Opposition to oppose this development and request a meeting with the NSW Minister for Aboriginal Affairs to discuss supporting alternatives with the Aboriginal Land Council for different solutions.
6. Write to the Commonwealth Minister for the Environment in relation to the potential that this proposal concerns matters of national environmental significance and is a controlled activity under the *Environment Protection and Biodiversity Conservation Act 1999*.
7. Staff provide a briefing to Councillors in relation to the potential to seek an emergency declaration from the Federal Government on behalf of the Aboriginal community under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.
8. Obtain further legal advice regarding all matters relevant to the progress of the planning proposal.
9. Following the receipt of such advice, investigate and brief Councillors on the proposition of commencing proceedings in the Land and Environment Court to injunct the progress of the planning proposal.
10. Write to the NSW Premier and NSW Leader of the Opposition to rule out further development on the Northern Beaches than that set out in the Northern Beaches Housing Strategy

Phase 3: Gateway determination

On 9 June 2023, DPE issued a Gateway determination, stipulating that the Planning Proposal could proceed to public exhibition subject to several conditions, including:

- updating the Planning Proposal to provide further information about a range of matters that had been insufficiently or inconsistently described, (i.e. proposed land use zone/s, dwelling cap, developable area and physical constraints of the site, affordable housing, minimum lot

- sizes, and permissible land uses);
- preparation of a site-specific Development Control Plan; and
- providing affordable housing commitments in a manner consistent with the Northern Beaches Affordable Housing Contribution Scheme supported by financial viability assessment, prior to making the LEP.

Phase 4: Revised Planning Proposal (Patyegarang) and public exhibition

On 1 September 2023, the SNPP, being the PPA for the Planning Proposal, determined that the revised Planning Proposal (Gyde, July 2023) addressing the Gateway conditions was suitable for public exhibition. DPE subsequently supported the Panel's recommendation to exhibit the Planning Proposal.

The public exhibition of the Planning Proposal commenced on 26 September for a period of six weeks until 7 November 2023. The public exhibition consists of the Planning Proposal, 24 Appendices, and 5 background documents.

Council meetings

At the ordinary Council meeting held on 26 September 2023, Council resolved (Resolution 263/23) among other things that it receive a report at the next Council meeting outlining the changes to the revised Planning Proposal.

A summary of the changes to the revised Planning Proposal (which is the exhibited Planning Proposal prepared by Gyde and dated July 2023) was reported to Council at their meeting 24 October 2023.

The Council report noted that there were no substantial changes to the Planning Proposal resulting from the initial engagement and that the original submission prepared by Council was still relevant as the concerns had not been addressed (see section below).

Among other things, on 24 October 2023 it was resolved:

- That Council prepare a submission to the NSW Department of Planning and Environment objecting to the currently exhibited Patyegarang Planning Proposal for the site at Morgan Road, Belrose (also known as "Lizard Rock") based on the concerns raised in this report and further noting Council's:*
- 1. Concern regarding privatisation of paper Crown Roads*
 - 2. Request that a public hearing take place concerning the proposed land rezoning.*

Independent bushfire reviews

Given the central importance of bush fire risk to the viability of the project, Council commissioned a second independent bushfire consultant, Meridian Urban, to conduct a third party technical review of the bushfire strategic study for the Planning Proposal, having regard to the broader bushfire hazard and risk considerations of the area as well as the previous review undertaken by Blackash Consulting on the bushfire components of the draft Planning Proposal.

The Blackash Consulting and Meridian Urban reports are provided at Appendix 3 and 4 respectively.

The Meridian Urban Bushfire Review reaffirmed the inappropriateness of the proposed scale, density and urban design of the site, and highlighted significant inadequacies, omissions and wrongful assumptions that underpin the Planning Proposal's bushfire strategic studies (BFSS). In particular, the review found:

- The risk of bushfires for the site is significantly underestimated in the Planning Proposal's BFSS

and the modelling and evidence base is inadequate

- The BFSS takes an adhoc approach to hazard management, which ignores strategic aspects of bushfire management and namely as related to the proposed density, landscape (within and surrounding the proposed development), urban design and infrastructure provision
- The BFSS fails to adequately consider safe evacuation of future residents and adjoining communities, and especially the overreliance on Morgan Road and the (compulsory) acquisition of Council land for a slip lane onto Forest Way

It was considered that even after bushfire mitigation measures are put in place, future residents and properties would be exposed to residual risks for which they may not be able to obtain insurances.

Overview of changes to the revised Planning Proposal

Unchanged elements of the Planning Proposal

The proposal provides for the development of 450 dwellings in a highly bushfire prone area with very restricted evacuation and transport routes. The proposal would involve the clearing of approximately 70% of the 70.1 ha site in an undisturbed bushland area with high conservation value.

The proposed rezoning to R2 low density residential and RE2 private recreation remains inconsistent with the North District Plan, Council's Local Strategic Planning Statement and Local Housing Strategy, and Council's most recent and extensive work underpinning proposals for zoning of the Deferred Lands area under the new consolidated LEP for the whole of the LGA.

The revised Planning Proposal still does not provide sufficient information or evidence to support the proposed re-zoning, particularly regarding bushfire mitigation and management (see Appendices 3 and 4), urban design, or onsite water detention and stormwater management. Nor have any new or significant mitigation measures or actions been identified to respond in a meaningful way to the concerns Council raised in its submission on the draft Planning Proposal (November 2022).

The overarching concerns remain unchanged, namely significant loss of high biodiversity habitat, major impacts on waterways, bushfire risk and reliance on Council land to implement required evacuation measures, and inconsistency with key strategic planning documents and current and proposed future zoning of the land. Council staff also continue to have concern about the significant inconsistencies and gaps in the underpinning information, particularly regarding urban design and location of dwellings, lack of flood modelling, stormwater management, traffic modelling, visual impact assessments and calculations for the affordable housing component.

Changed elements of the Planning Proposal

The following key changes and potential implications have been identified based on a page-by-page review of the draft and the revised Planning Proposals:

1. Changes to land use zoning

The revised Planning Proposal has introduced RE2 Private Recreation land use zone – in addition to the originally proposed zones of R2 Low Density Residential and C2 Environmental Conservation, as shown in Figure 4 below. Council staff are concerned that the proposed residential zoning is inconsistent with current LEPs as well as Conservation Zones Review methodology which seeks to protect lands with high environmental values such as the proposed site.

Inconsistencies exist between the draft structure plan, land zoning map and the height of buildings map in the Planning Proposal documentation. The zoning map shows land at the southern end of the site (beyond the proposed road) proposed to be zoned R2 low density residential, yet the structure plan shows this area as “open space/ protection area”. The same R2 zoned area is not included in the height of buildings map, meaning there is no building height control applying to the land.

The proposal to zone areas along creek corridors (and the Aboriginal carvings) as RE2 Private Recreation does not provide appropriate environmental protection for these areas as the zone will allow land clearing for APZs to occur, as well as community facilities and stormwater services. As a minimum, these areas should be zoned C2, consistent with other parts of the site and APZs should not be permitted. Community facilities could be an additional permitted use on the carvings site.

The proposal intends to cap development on the site to 450 dwellings by:

- creating an LEP clause which restricts development to 450 dwellings (not lots)
- Create restrictions in the Community Title scheme for the development
- Condition development consents(s) for subdivision of land to prohibit the issue of any DA approvals or complying development certificates where the total number of dwellings on the site exceeds 450

The proposal intends to permit dual occupancy development in the R2 zone. Dual Occupancies and secondary dwellings are permitted as complying development under the Codes SEPP and Housing SEPP in the R2 zone.

Despite the proposed controls to cap development, Council is not confident that the controls will work in practice. Certifying Authorities are not required to review Council’s LEP when assessing complying development certificates. This has been Council’s experience in Warriewood Valley which, despite density controls in place under the Pittwater LEP, has had complying development certificates issued for dwellings exceeding the LEP requirements.

Whilst a complying development certificate cannot be issued which is inconsistent with an overarching condition of consent, this is difficult to control in practice and there is concern that separate consents could be issued for subdivision of different parts of the site at different times, with the potential for complying development certificates being issued by private certifiers for more than 450 dwellings.

Also, it is not clear how a certifier must consider the cap. Is it dependent upon the number of dwellings already approved, the number commenced, or the number completed e.g. that have an Occupation Certificate? Determining whether the application before them will exceed the 450 cap will be problematic.

The Housing SEPP also permits seniors housing in the R2 zone despite any prohibition in an LEP. This could lead to development applications being made for this form of housing that could contribute to the 450 dwelling cap. The DPE Gateway determination for the Planning Proposal specifically required the removal of additional permitted uses for seniors housing in the R2 zone. This would require an exemption from the Housing SEPP to ensure seniors housing is not permitted.

The R2 zone under Warringah LEP 2011 also permits a range of uses in addition to seniors housing that are vulnerable to hazards such as bushfire, including bed and breakfast accommodation; Centre-based child care facilities; Community facilities; Educational establishments; Places of public worship; and Respite day care centres. It is not clear if these uses will be prohibited.



Figure 4: Proposed land use zoning (Source: Figure 30 in Revised Planning Proposal)

2. Minimum lot sizes

The revised Planning Proposal specifies and maps minimum lot sizes of 200m², 450m², and 600 m² (See Figure 5 below). Council staff have significant concerns regarding potential biodiversity loss resulting from the location of bushfire Asset Protections Zones (APZs), underestimation of impacts on water quality and on-site detention, and visual impacts/ loss of landscaping resulting from APZs being located along any roads, including Morgan Road.



Figure 5: Minimum lot sizes (Source: Figure 30 in Revised Planning Proposal)

3. Site Specific DCP

Inclusion of Site-Specific Development Control Plan (DCP) prepared by Gyde Consulting and COX, July 2023. Key concerns include:

- The provisions of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (Code SEPP), State Environmental Planning Policy (Housing) 2021 (SEPP Housing), and National Construction Code (NCC) will override any DCP controls, resulting in larger developments that do not comply with the DCP intent. The requirement for clearing of land in Bushfire Asset Protection Zones is inconsistent with and will override requirements in the DCP to retain existing bushland and significant trees.
- References to proposed timber construction to “fit” with the local environment are unlikely to meet bushfire requirements.

4. Changes and inconsistencies in the urban design principles

The urban design principles in the revised Planning Proposal are identical to the design principles in the draft version, with one very notable exception: one of the 15 urban design principles has now been amended to include the following caveat (our emphasis in underscored font) *“Protect the natural bushland interface by containing APZs within developable areas where possible and practical”*.

Furthermore, there are differences between the wording of the Design Principles in the GYDE report, the Urban Design Report, and the draft DCP, as follows:

- The Planning Proposal Report states, ‘Protect the natural bushland interface by containing APZs within developable areas where possible and practical’, whereas the Urban Design 2023 Report states, ‘Protect the natural bushland interface by containing APZs within developable areas’. Four of the other design principles differ very slightly between the GYDE report and the Urban Design Report.
- The Urban Design Principles in the new Site-Specific (DCP) differ significantly from the Design Principles in the Urban Design Report. It is unclear if there is any relationship between the Design Principles in the Concept Development Plan and the new DCP.

5. Slip lane

The draft Planning Proposal included a description and map of the proposed slip lane for evacuation purposes as required by the RFS (left turn slip lane from Morgan Road and allow traffic to bypass the traffic lights and directly enter Forest Way – see Figure 6 below), requiring acquisition of Council land. No discussion in relation to this matter has been undertaken.

The revised Planning Proposal states that *“If Council refuse to negotiate then Transport for NSW have the powers to compulsorily acquire the land”*. Council opposes the compulsory acquisition of Council/community land by a Government Authority to facilitate a private residential development.



Figure 5: Morgan Road slip lane (Source: Near map)

DISCUSSION OF KEY ISSUES

A discussion of the key issues is provided below, with more detailed comments provided in Appendix 2 (Aboriginal heritage) and 3 and 4 (independent bushfire reports).

Strategic Merit

Consideration of Development Delivery Plan (DDP)

The Northern Beaches Aboriginal Land Development Delivery Plan (DDP) is a very general document, with only two (2) pages of the document pertaining to the Patyegerang (Lizard Rock) site.

The table of contents of the 38 paged DDP as well as the pages that apply to the Lizard Rock site are attached to this submission at Appendix 1. As shown in the Appendix, the DDP does not include any information about the objectives for the land, the proposed number or location of dwellings, or any information regarding bushfire risks or environmental constraints.

The DDP contains no detailed analysis of environmental issues and mostly outlines MLALCs strategic interests in land (not the community's interests) and must only be "taken into account" by the Planning Proposal Authority i.e. it is not the determining matter for consideration in the assessment of the Planning Proposal, being only one matter in amongst many that the Planning Proposal Authority must consider in law, including regional plans and local strategic planning statements.

Council raised significant concerns regarding the merit of the DDP in its submission on the DDP (dated March 2022), emphasising bushfire risks and severe impacts on the high conservation values of the undisturbed bushland that would be associated with any form of development of the Lizard Rock site. The issues raised then remain relevant; they have not been resolved in the present Planning Proposal.

Inconsistencies with regional planning plans

The site is highly constrained, non-urban land which is not considered suitable for land release given its high conservation value and bushfire risk. As such, the Planning Proposal does not relate to the overarching key strategic directions of the Greater Sydney Region Plan 2018, the Northern Beaches LSPS Toward 2040, and the Northern Beaches Local Housing Strategy, and in particular the directions below which set specific strategies for avoiding developments altogether in areas of high risk:

- *"Avoid locating new urban development in areas exposed to natural and urban hazards and consider options to limit the intensification of development in existing urban areas most exposed to hazards"* (Greater Sydney Region Plan 2018: Strategy 37.1)
- *"Avoid intensification of development, inappropriate development and incompatible land uses in areas exposed to natural and urban hazards"* (LSPS Toward 2040, Priority 8, Priority 15)
- *"Limit development where there are unacceptable risks from natural and urban hazards, or impact on tree canopy"* (Local Housing Strategy; Priority 15 housing principle)

Greater Sydney Region Plan – A Metropolis of Three Cities

The proposal's inconsistency with the relevant objectives of the Greater Sydney Region Plan is provided in Table 2.

Table 2: Inconsistency with relevant priorities in the Greater Sydney Region Plan (GSRP)

Relevant Planning Objectives - GSRP	Inconsistency
Objective 2 - Infrastructure aligns with forecast growth – growth infrastructure compact	The planning proposal will increase demand on existing infrastructure and require the provision of new infrastructure to support the development. However, the infrastructure assessment provided in the planning proposal does not adequately address the demand for infrastructure delivery.
Objective 5 – Benefits of growth realised by collaboration of governments, community and business	Given the significance of the planning proposal, it is unacceptable that there has been no communication with Council about the planning proposal prior to its lodgment to the NSW Department of Planning and Environment – particularly as key aspects of the proposal rely on Council assets (such as the slip lane on Forest Way to facilitate safe egress from the development) – and further that Council has been given only limited time review and comment on the proposal and numerous supporting documents.
Objective 10 – Greater housing supply	The proposal will support residential uses on the site; however, the objective is to support new housing in the right location and must be coordinated with local infrastructure. Councils endorsed LSPS and LHS provide a centres-based approach to new housing for the location on the Northern Beaches LGA to 2036. The subject site is an isolated site, away from transport, services, and facilities to support the incoming population. Future residents will be required to rely on private cars for transport. The Planning Proposal is not the right location for development of this scale and is inconsistent with both endorsed strategic documents and objective 10.
Objective 11 – Housing is more diverse and affordable	The objective is to provide diverse housing choices, particularly in the form of additional affordable rental housing (with targets in the range of 5–10 per cent of new residential floor space being generally viable). Council's affordable housing policy requires areas of urban renewal (areas of zoning uplift) to provide 10% affordable rental housing. The Planning Proposal makes no commitment to providing affordable housing, stating instead: <i>"The proponent will, prior to finalisation to the LEP, confirm and document the proposed mechanism of the delivery of affordable housing. This will involve the consideration of whether the proponent, Metropolitan Aboriginal Land Council, will provide and retain affordable housing at the site as a community housing provider or whether an affordable housing contribution will be provided and whether or not the contribution will be made to an Indigenous Community Housing Provider. It is intended that the viability of any affordable housing provision, whether through provision of housing as community housing provider or financial contribution will be based on a financial viability assessment. The proposed Affordable Housing Contribution rate will be documented and considered prior to finalisation of the LEP"</i> . (Gyde 2023: page 12).
Objective 12 - Great places that bring people together	The 450 dwelling development is isolated and does not enhance local identity through place-based planning and design.

Relevant Planning Objectives - GSRP	Inconsistency
Objective 13 - Environmental heritage is identified, conserved and enhanced	The Aboriginal heritage report submitted with the planning proposal provides insufficient information regarding the ongoing protection of Aboriginal sites at Lizard Rock and visitation management. Refer to comments below under Aboriginal heritage.
Objective 14 - Integrated land use and transport creates walkable and 30-minute cities	To achieve a 30-minute city the integration of land use and transport planning is required to create walkable cities. Council's adopted position within its LHS for exploring additional housing diversity is the identification of Centre Investigation Areas within an 800- metre radius of the B-line bus stops. These areas have been identified as the most appropriate location within a walkable distance to services, jobs, and public transport. The Planning Proposal to change the zoning and significantly increase the number of dwellings on this site, which is located well outside of the 800-metre investigation area, is inconsistent with this stated approach.
Objective 25 - The coast and waterways are protected and healthier	The proposal would result in significant environmental impacts within the Snake Creek / Narrabeen Lagoon catchment. The proposal is a major catchment disturbance that will affect the value of the valley setting and receiving waters, and impact riparian land.
Objective 27 - Biodiversity is protected, urban bushland and remnant vegetation	The proposal would facilitate development that would result in approximately 44.7 hectares (an area equivalent to approximately 45 rugby fields) being cleared, and a further 6.9 hectares (including threatened species) subject to indirect impacts, resulting in significant impacts on core habitat, known habitat for various threatened species of flora and fauna, and Threatened Ecological Communities (TECs), contrary to adopted policy and the <i>NSW Biodiversity Conservation Act 2016</i> .
Objective 28 – Scenic and cultural landscapes are protected	The clearing of existing bushland and existing canopy trees within the proposed subdivision allotment area removes all the vegetation such that a 'cleared' site will alter the current vistas into the site from 'forest' land to 'cleared'.
Objective 29 - Environmental, social and economic values in rural area are protected and enhanced	The proposal is inconsistent with principles to avoid urban intensification and subdivision in the Metropolitan Rural Area (MRA) and future MRA investigation area and to limit development to a scale, form and density consistent with the existing character and use
Objective 30 - Urban tree canopy cover is increased	A large portion of the site, estimated at 70%, is proposed for bushland and tree canopy removal, disconnecting existing bushland and wildlife corridors.
Objective 33 - A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change	The planning proposal indicates that it seeks to provide a green and resilient urban environment and will provide sustainable transport options which can contribute to reducing emissions. There is limited other information contained in the planning proposal about reducing carbon emissions and managing energy, water and waste efficiently. The proposed development is a car dependent enclave which is at odds with this priority.

Relevant Planning Objectives - GSRP	Inconsistency
Objective 37 - Exposure to natural and urban hazards is reduced	The proposal seeks to locate 450 dwellings within a bushfire prone area. The proposal is inconsistent with principles to avoid intensification of development, inappropriate development and incompatible land uses in areas exposed to bush fire.

North District Plan

As shown in Table 3 below, the Planning Proposal is inconsistent with the priorities of North District Plan.

Table 3 : Inconsistency with relevant priorities of North District Plan

Relevant Planning Priority - NDP	Inconsistency
Planning Priority N1 - Planning for a city supported by infrastructure	The proposal will increase infrastructure requirements, however the infrastructure assessment and service delivery plan is inadequate and incomplete. There has been no collaboration with Council regarding infrastructure provision or upgrade needed.
Planning Priority N2 - Working through collaboration	There has been no collaboration with Council prior to lodgement of this planning proposal.
Planning Priority N5 – Providing housing supply, choice, and affordability, with access to jobs, services, and public transport	Priority N5 identifies that councils are in the best position to investigate and confirm which parts of their local government area are suited to additional housing opportunities through the preparation of local housing strategies (LHS). The Northern Beaches LHS has identified that there is sufficient capacity to accommodate future housing demand in and around centres in existing urban areas without the need to encroach on existing undeveloped areas such as within the Deferred Lands area and the Metropolitan Rural Area. The proposal is inconsistent with Councils LHS.
Planning Priority N12 – Delivering integrated land use and transport planning and a 30-minute city	Councils' adopted position within its LHS for exploring additional housing diversity is the identification of Centre Investigation Areas (Mona Vale, Narrabeen, Dee Why, Brookvale and Manly Vale) and within an 800- metre radius of B-line bus stops. The Planning Proposal seeks to significantly increase the number of dwellings in an area that is outside the 800-metre investigation area.
Planning Priority N15 - Protecting and improving the health and enjoyment of Sydney Harbour and the District's Waterways	Much of the proposal is in the Narrabeen Lagoon catchment which is of high environmental, social and economic value to the Northern Beaches. The proposed clearing of land and urbanization to provide 450 dwellings would result in unavoidable impacts to creeks, wetlands, and their associated riparian environments at such a scale as proposed would be inconsistent with the objectives and principles of the objectives and principles of the GRSP, NDP and Towards 2040
Planning Priority N16 - Protecting and enhancing bushland and biodiversity	The loss of such a large area of natural bushland and tree canopy removes biodiversity and alters the scenic landscape quality of the site and is not consistent with this planning priority.

Relevant Planning Priority - NDP	Inconsistency
Planning Priority N17 – protecting and enhancing scenic and cultural landscapes	The extensive land clearing for both development and the maintenance of APZs will result in an irreversible change to the landscape.
Planning Priority N18 – better managing rural areas	The proposal is inconsistent with principles to avoid urban intensification and subdivision in the MRA and future MRA investigation area and to limit development to a scale, form and density consistent with the existing character and use
Planning Priority N19 - Increasing urban tree canopy cover and delivering Green Grid connections	The proposal is inconsistent with the principle to protect, maintain and enhance the existing urban tree canopy, including mature trees. Vegetation clearing in sites within the 'Future MRA investigation area' and urban areas, will significantly impact the Northern Beaches Council's urban tree canopy measured as 39% (GSC, 2019), and hinder the ability for Greater Sydney to meet their target of 40% by 2036.
Planning Priority N20 - Delivering High Quality Open Space	It is unclear about the community value of the proposed public open spaces indicated in the proposal would provide when such spaces are spread across various locations within the proposed R2 land use zoned areas, that will limit the available area space for open space use.
Planning Priority N21 - Reducing carbon emissions and managing energy, water and waste efficiently	There is limited other information contained in the planning proposal about reducing carbon emissions and managing energy, water and waste efficiently. The proposed development is a car dependent enclave which is at odds with this priority.
Planning Priority N22 - Adapting to the impacts of urban and natural hazards and climate change	The site is identified as bushfire affected which will result in an intensification of development, inappropriate development and incompatible land uses in areas exposed to high risk of bush fire, likely to increase risks to life and property and present difficulties in evacuation.

Metropolitan Rural Area

The proposal is also clearly inconsistent with the Greater Sydney Region Plan (GSRP) and North District Plan (NDP) as it relates to the operation of the "Metropolitan Rural Area" or MRA.

Table 4: Metropolitan Rural Area

GSRP	NDP
<p>The MRA is an area identified in the GSRP having:</p> <p><i>...a wide range of environmental, social and economic values. It covers almost one quarter of Greater Sydney and contains farms; rural towns and villages; rural residential developments; heritage, scenic and cultural landscapes; mineral resources; and locations for recreation and tourism. Its areas of high environmental value</i></p>	<p>The NDP reinforces:</p> <p><i>It should be noted that no part of the Northern Beaches is identified as an existing Growth Area or an Urban Investigation Area</i></p>

GSRP	NDP
<i>have been mapped by the Office of Environment and Heritage.</i>	
The GSRP goes on to say: <i>Urban development is not consistent with the values of the Metropolitan Rural Area. This Plan identifies that Greater Sydney has sufficient land to deliver its housing needs within the current boundary of the Urban Area, including existing Growth Areas and urban investigation areas.</i>	And: <i>The District's rural areas provide opportunities for people to live in a pastoral or bushland setting. Urban development is not consistent with the values of the Metropolitan Rural Area.</i>
And: <i>Restricting urban development in the Metropolitan Rural Area will help manage its environmental, social and economic values, help to reduce land speculation, and increase biodiversity from offsets in Growth Areas and existing urban areas</i>	Importantly, the North District Plan also states: <i>Parts of the urban-rural fringe are owned by the Local Aboriginal Land Council. Future planning of these areas may require flexibility in order to balance rural values with the objectives of greater economic participation and community and cultural use of these areas by Aboriginal people.</i>

Inconsistencies with SEPPs and Local Planning Directions

As shown below, the Planning Proposal is inconsistent with certain State Environmental Planning Policies (SEPPs) and Local Planning Directions issued by the Minister for Planning under section 9.1(2) of the Environmental Planning and Assessment Act 1979.

SEPPs

The Planning proposal fails to address relevant SEPPs.

The Planning Proposal purports to address consistency with SEPPs in a half page table on page 42 of the Planning Proposal. A single word response is provided regarding compliance with each SEPP - "yes". This level of assessment is insufficient and does not meet the requirements of DPE's Local Environmental Plan Making Guideline August 2023, which mandates the inclusion of a table to address consistency with SEPPs.

In particular, at page 72 of the Guideline, it states that "The achievement of strategic merit is not a yes/no response". Given the absence of legislated requirements for the LEP-making process, the LEP-Making Guideline must be given even greater weight than would otherwise be the case.

Local Planning Directions

Table 6: Relevant Local Planning Directions and extent of inconsistency

Relevant Local Planning Directions	Inconsistency
1.1 – Implementation of Regional Plans	The proposal is inconsistent with the Greater Sydney Region Plan and North District Plan as outlined earlier in this submission. The extent of the inconsistency is not of minor significance. The planning proposal does not achieve the overall intent of the Regional Plan and

Relevant Local Planning Directions	Inconsistency
	undermines the achievement of the Regional Plan's vision, land use strategy, goals, directions or actions in respect of matters relating to the environment, housing, metropolitan rural area and infrastructure provision (as outlined earlier in this submission).
3.1 – Conservation Zones	The proposal is inconsistent with this direction in that it does not facilitate the protection and conservation of environmentally sensitive areas. Council's Conservation Zones Review exhibited in 2022 recommended applying Zone C3 Environmental Management to most of the site due to its high environmental value. The DPE endorsed the exhibition of a Planning Proposal in 2015 for Oxford Falls Valley which also proposed that the zoning of this site be E3. Whilst that proposal did not proceed, it was not because of any disagreement about the proposed zoning of this site
3.7 – Public Bushland	The proposal is inconsistent with the objectives of this direction and does not give priority to retaining public bushland. The proposal seeks to use public land at the intersection of Morgan Road and Forestway as a slip lane; such land is occupied by bushland currently providing aesthetic and environmental value and should be retained.
4.3 – Planning for Bushfire Protection	The proposal is inconsistent with this direction in that it has not had adequate regard to Planning for <i>Bushfire Protection 2019</i> , seeks to place inappropriate development in hazardous areas, and proposes inadequate asset protection zones to protect life and property, and inadequate safe evacuation routes in the event of a bushfire. Refer to commentary in the 'Bush Fire Risk' section of this submission for more detail.
5.1 – Integrating Land Use and Transport	The proposal is inconsistent with this direction in that the proposed location and subdivision design does not improve access to housing, jobs and services by walking, cycling and public transport; and does not increase the choice of available transport and reduce dependence on cars. Some of the dwellings are proposed to be located up to 2km from the nearest bus stops on Forestway. The focus of the proposal is a car-based development, contrary to Council's adopted position on developments focusing on use of public transport as the first option.
6.1 – Residential Zones	The proposal is inconsistent with this direction in that it does not make efficient use of existing infrastructure and services; and does not reduce the consumption of land for housing and associated urban development on the urban fringe. Council's Local Housing Strategy has identified that there is sufficient capacity to accommodate future housing demand in and around centres in existing urban areas, without the need to encroach on existing undeveloped areas such as within the Deferred Lands area and the Metropolitan Rural Area.
9.1 – Rural Zones	The site is identified as being within a "Metropolitan Rural Area" (MRA) and "Future Potential MRA". The proposal is inconsistent with this direction which states that a planning proposal must not rezone land from a rural zone to a residential zone, and not contain provisions that will increase the permissible density of land within a rural zone. A minimum subdivision standard of 20 Ha currently applies in the area

Relevant Local Planning Directions	Inconsistency
	and this will be reduced to 200 sqm minimum allotment size. The matters for which inconsistency may be justified have not been met.

Inconsistencies with DPE-endorsed local strategic directions

As outlined below, the proposal inaccurately and selectively suggests compliance with Council's Local Housing Strategy as well as the Local Strategic Planning Statement (LSPS).

Local Strategic Planning Statement – Toward 2040

The proposal is inconsistent with many priorities of Towards 2040 including those relating to waterways, biodiversity and housing.

The Northern Beaches Council's LSPS (Towards 2040) was made by the Chief Executive Officer under delegated authority based on Council's resolution 25 February 2020 with support from the Greater Sydney Commission (GSC) and sets out a 20 year vision for land use in the area.

Table s7 below shows Council's identification of inconsistencies with *Towards 2040* ble 7 including reference to relevant *Towards 2040* planning priorities, and related GSRP objectives and NDP priorities.

Table 7 : Inconsistencies with LSPS priorities and alignment with relevant GSRP and NDP priorities

Inconsistency with LSPS <i>Towards 2040</i> Priorities	Relevant aligned GSRP Objectives and NDP Priorities
Theme: Sustainability, Direction: Landscape	
<p>Priority 1 - Healthy and valued coast and waterways</p> <p>Much of the proposal is in the Narrabeen Lagoon catchment which is of high environmental, social and economic value to the Northern Beaches. Ecological water quality monitoring has been undertaken for 10 years demonstrating consistently high results. Impacts from the proposal would likely have negative impacts on the lagoon water body.</p> <p>It is considered that impacts to creeks, wetlands, and their associated riparian environments at such a scale as proposed would be inconsistent with the objectives and principles of the objectives and principles of the GRSP, NDP and Towards 2040. It is also inconsistent with Council's LEP and DCP, Draft Environment Study, Protection of Waterways and Riparian Lands Policy and Warringah Creek Management Study (2004).</p>	<p>Objective 25 – the coast and waterways are protected and healthier</p> <p>Priority N15 - Protecting and improving the health and enjoyment of Sydney Harbour and the District's waterways</p>

Inconsistency with LSPS <i>Towards 2040</i> Priorities	Relevant aligned GSRP Objectives and NDP Priorities
<p>Priority 2 - Protected and enhanced bushland and biodiversity</p> <p>The loss of such a large area of natural bushland and tree canopy removes biodiversity and alters the scenic landscape quality of the site and is not consistent with this LSPS priority.</p> <p>The proposal disconnects bushland and wildlife corridors, removing the ecological patterns of the site and adjoining lands. The proposed development does not avoid or minimise environmental impacts due to the concentration of the proposed development across a contained area of the site. Existing tree canopy is not incorporated for preservation within the road pattern as value added asset street trees, including significant canopy trees.</p> <p>The proposed C2 Environmental Conservation zone does not include valuable bushland and biodiversity areas, including the watercourses and creeklines, all areas of retained and protection vegetation, and the sites of significance, as identified in the Structure Plan.</p>	<p>Objective 27 - Biodiversity is protected, urban bushland and remnant vegetation is enhanced</p> <p>Planning Priority N16 - Protecting and enhancing bushland and biodiversity</p>
<p>Priority 3 - Protected scenic and cultural landscapes</p> <p>Whilst the development is located in a valley and not on the ridgeline, the residential areas rise to the northern part of the site, and the extensive land clearing of existing bushland and existing canopy trees within the proposed subdivision allotment area removes all the vegetation such that a 'cleared' site will alter the current vistas into the site from 'forest' land to 'cleared' land, with the highest elevation at RL146, such that the visual impact from surrounding lands impacts the scenic quality of the landscape.</p> <p>Surrounding residential lands to the west are located at a higher elevation and the proposed development will result in the existing 'forest' landscape character altered to a cleared site with limited potential, due to the allotment pattern, to reduce the visual impact with future tree canopy planting, including United Church land (RL148 to RL180), Lyndhurst Estate (RL148 to RL1720) and residential properties west of Forest Way and directly west of the development site (RL 170 to RL186 at Skene Place).</p>	<p>Objective 28 – Scenic and cultural landscapes are protected</p> <p>Planning Priority N17 – protecting and enhancing scenic and cultural landscapes</p>
<p>Priority 4 – Protected Metropolitan Rural Area</p> <p>The proposal is inconsistent with principles to avoid urban intensification and subdivision in the MRA and future MRA investigation area and to limit development to a scale, form and density consistent with the existing character and use.</p>	<p>Objective 29 - Environmental, social and economic values in rural area are protected and enhanced</p> <p>Planning Priority N18 – better managing rural areas</p>

Inconsistency with LSPS <i>Towards 2040</i> Priorities	Relevant aligned GSRP Objectives and NDP Priorities
<p>Priority 5 - Greener urban environments</p> <p>The proposal is inconsistent with the principle to protect, maintain and enhance the existing urban tree canopy, including mature trees.</p> <p>Vegetation clearing in sites within the 'Future MRA investigation area' and urban areas, will significantly impact the Northern Beaches Council's urban tree canopy measured as 39% (GSC, 2019), and hinder the ability for Greater Sydney to meet their target of 40% by 2036.</p> <p>A large portion of the site, estimated at 70%, is proposed for bushland and tree canopy removal, disconnecting existing bushland and wildlife corridors. Renewal of tree canopy presents a challenge with future lack of space for tree planting to offset the canopy loss within the proposed subdivision allotments due to road and individual lot patterns and expected infrastructure delivery above and below the ground.</p>	<p>Objective 30. Urban tree canopy cover is increased</p> <p>Planning Priority N19. Increasing urban tree canopy cover and delivering Green Grid connections</p>
<p>Priority 6 - High quality open space for recreation</p> <p>It is unclear what community value the proposed public open spaces indicated in the Open Space Structure Plan provides when such spaces are spread across various locations within the proposed R2 land use zones, that will limit the available area space for open space use.</p> <p>Open space(s) of considerable area are not proposed to facilitate community benefits for recreation and social interaction, to provide flexible and multifunctional spaces.</p>	<p>Planning Priority N20 -Delivering High Quality Open Space</p>
Theme: Sustainability, Direction: Efficiency	
<p>Priority 7 - A low-carbon community, with high energy, water and waste efficiency</p> <p>The planning proposal indicates that it seeks to provide a green and resilient urban environment, and will provide sustainable transport options which can contribute to reducing emissions. There is limited other information contained in the planning proposal about reducing carbon emissions and managing energy, water and waste efficiently. The proposed development is a car dependent enclave which is at odds with this priority.</p>	<p>Objective 33. A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change</p> <p>Planning Priority N21. Reducing carbon emissions and managing energy, water and waste efficiently</p>
Theme: Sustainability, Direction: Resilience	
<p>Priority 8 - Adapted to the impacts of natural and urban hazards and climate change</p> <p>The proposal is inconsistent with principles to avoid intensification of development, inappropriate development and incompatible land uses in areas exposed to bush fire. The proposals are likely to increase risk to life and property and be difficult to evacuate.</p>	<p>Objective 37. Exposure to natural and urban hazards is reduced</p> <p>Planning Priority N22. Adapting to the impacts of urban and natural hazards and climate change</p>

Inconsistency with LSPS <i>Towards 2040</i> Priorities	Relevant aligned GSRP Objectives and NDP Priorities
Theme: Infrastructure and Collaboration, Direction: Resilience	
<p>Priority 9 - Infrastructure delivered with employment and housing growth</p> <p>Given the significance of the planning proposal, it is unacceptable that there has been no communication with Council about the planning proposal prior to its lodgment to the NSW Department of Planning and Environment – particularly as key aspects of the proposal rely on Council assets (such as the slip lane on Forest Way to facilitate save egress from the development).</p>	<p>Objective 2 - Infrastructure aligns with forecast growth – growth infrastructure compact</p> <p>Objective 5 - Benefits of growth realised by collaboration of governments, community and business</p> <p>Planning Priority N1 - Planning for a city supported by infrastructure</p> <p>Planning Priority N2 - Working through collaboration</p>
Theme: Liveability, Direction: Housing	
<p>Priority 15 - Housing supply, choice and affordability in the right locations</p> <p>The proposal is inconsistent in that it does not locate new housing in strategic or local centres within reasonable walking distance (800m) of high-frequency public transport. See section Local Housing Strategy below. The proposal indicates that it would deliver a diversity of housing including secondary dwellings, dwelling houses, seniors housing and dual occupancies. Further information about the mix and quantum of housing types delivered through the development is required.</p>	<p>Objective 10 Greater Housing Supply</p> <p>Planning Priority N5 - Providing housing supply, choice and affordability, with access to jobs, services and public transport</p>
<p>Priority 16 - Access to quality social housing and affordable housing</p> <p>No commitments to affordable housing have been made (see above section on inconsistencies with regional planning).</p>	<p>Objective 11 - Housing is more diverse and affordable</p> <p>Planning Priority N5 - Providing housing supply, choice and affordability, with access to jobs, services and public transport</p>
Theme: Liveability, Direction: Great Places	
<p>Priority 18 - Protected, conserved and celebrated heritage</p> <p>The Aboriginal heritage report submitted with the planning proposal provides insufficient information regarding the ongoing protection of Aboriginal sites at Lizard Rock and visitation management. Refer to comments below under Aboriginal heritage.</p>	<p>Objective 13 - Environmental heritage is identified, conserved and enhanced</p> <p>Planning Priority N6 - Creating and renewing great places and local centres, and respecting the District's heritage</p>

Inconsistency with LSPS <i>Towards 2040</i> Priorities	Relevant aligned GSRP Objectives and NDP Priorities
Theme: Productivity, Direction: Connectivity	
Priority 19 - Frequent and efficient regional public transport connections The proposal is inconsistent with principles to focus growth within 800m of high- frequency public transport.	Objective 14 – integrated land use and transport creates walkable and 30- minute cities Planning Priority N12 - Delivering integrated land use and transport planning and a 30-minute city

Local Housing Strategy

The endorsed Local Housing Strategy states that development in non-urban areas is not required to meet Council’s housing targets and is not consistent with good planning principles as established by the Government through its strategic planning framework.

The planning proposal identifies the potential for the development to address Council’s Local Housing Strategy (LHS) “Priority 1 – Housing Targets – Meet District Plan and 6-10 year housing target”.

Council’s LHS was approved by the Department of Planning and Environment (DPE) on 16 December 2021, consistent with the Greater Sydney Region Plan, North District Plan and Towards 2040. It guides planning for a diversity of housing within the Northern Beaches LGA for the next 20 years and builds on the designation of strategic, local and village centres identified in the LHS.

The LHS identifies that we will need to accommodate around 12,000 new homes by 2036 to provide for population growth. The shortfall between what is needed and what is currently proposed for development is less than 300 dwellings.

The approved LHS has identified that there is sufficient capacity to accommodate future housing demand in and around centres in existing urban areas without the need to encroach on existing undeveloped areas such as within the Deferred Lands area and the MRA.

The Planning Proposal incorrectly states that Council fell short of the NDA 0-5 year dwelling target of 3,400 dwellings by 1,082 homes.

It is acknowledged by DPE that the 2016 to 2021 housing completions data outlined in the DPE dashboard is incomplete. The data does not count completions data for secondary dwellings, seniors housing developments, and boarding house rooms constructed in the Northern Beaches. In the period 2016-2021, 841 secondary dwellings, 259 seniors living units, and 268 boarding house rooms were completed on the Northern Beaches. Together with the 2318 other completed “homes” identified in the dashboard, this equates to 3686 new dwellings – meeting the 5 year dwelling target of 3,400 dwellings.

Council’s LHS also includes a dwelling target for the years 2021-2026 of 3,582 dwellings. As identified in Council’s LHS Implementation and Delivery Plan submitted to DPE on 4 July 2022, this target will be achieved largely through the projects detailed within the LHS Implementation and Delivery Plan, being the new Northern Beaches Local Environmental Plan, Frenchs Forest Structure Plan, Brookvale Structure Plan and Mona Vale Place Plan.

Ad hoc planning proposals such as the subject site, undermine Council's strategic planning framework, infrastructure planning and potentially the success of planned centres.

It is noted also that the population projections included in the LHS were based on population projections from 2019, which did not account for impacts of Covid-19. Recent Population projections released in June 2022 by DPE indicate that the population projections for the Northern Beaches to 2036 have decreased by close to 2,900 people.

Northern Beaches LGA	2016	2021	2026	2031	2036	2041
Population projections 2019	265,450	269,600	275,250	281,800	288,450	296,650
Population projections 2022	265,468	274,015	276,063	280,440	285,591	289,529
Difference	18	4,415	813	-1,360	-2,859	-7,121

Table 8: DPE Northern Beaches population projections

Most recent figures from the ABS (April 2023) also show an estimated residential population of 263,090 people in 2022 for the Northern Beaches. This figure is significantly lower than the projected population that informed the housing supply targets.

Irrespective of this, Council also needs to provide for a diversity of dwelling types to meet local needs. To achieve this goal, the LHS outlines the following options:

- Housing diversity areas (HDAs) that will permit seniors housing, boarding houses and dual occupancies within 400m of identified local centres including Avalon Beach, Newport, Warriewood, Belrose and Freshwater.
- Centre investigation areas (CIAs) that will be subject to detailed planning to consider a broader range of housing types within 800m of Brookvale, Dee Why, Mona Vale, Manly Vale and Narrabeen, and in Forestville and Beacon Hill subject to the future B-Line route.

The approach of having a defined CIA allows for a range of housing types, that can be designed in keeping with neighbourhood character yet build on local assets and features and account for constraints. It enables a broader approach to how a centre might function in terms of aspects such as walking and cycling access or integrated planning for open space and other neighbourhood amenities.

Planning for infrastructure to support proposed growth will be a key element of this work, and will consider potential impacts on local infrastructure, including transport, traffic, environmental sustainability, and climate change.

The proposals access to existing centres is also limited, promoting vehicle usage and not active travel options.

Inconsistency with the Conservation Zones Review

The planning proposal proposes the majority of the site to be rezoned to R2 Low Density Residential.

This is inconsistent with the recommendation of the Conservation Zones Review to apply Zone C3 Environmental Management to the land due to its environmental constraints and characteristics. The recommended zoning for the area is based on extensive research, technical studies and mapping, including:

- Deferred Lands Strategic Bush Fire Assessment;
- Deferred Lands Biodiversity Assessment;
- Biodiversity Planning Review;

- Watercourse, Wetlands and Riparian Lands Study, and
- Estuary Planning Level Studies for Cowan Creek/Cottage Point and North and Middle Harbour.

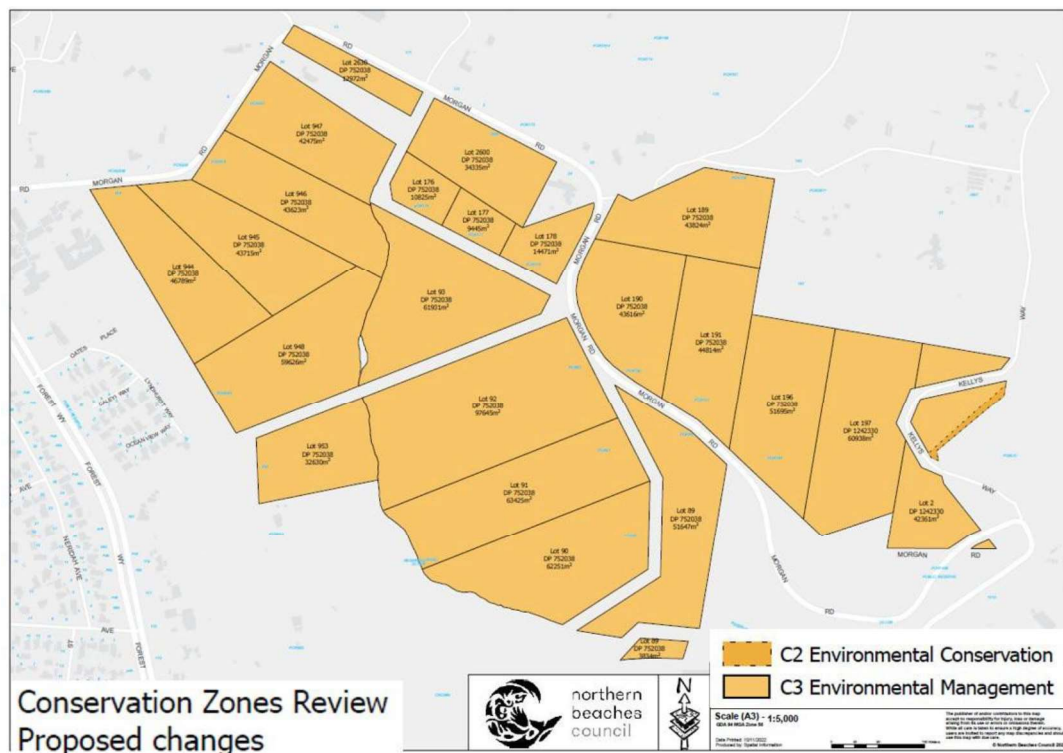
It is further inconsistent with the methodology of the C Zones review to apply a C zone to land adjoining national parks and/or reserves with high biodiversity value.

As part of developing a single LEP for the Northern Beaches, there needs to be consideration of how the unique character and diverse coastal, bushland and cultural values should be protected from inappropriate future development. Land that has high conservation values can be protected and managed through conservation zones (or C zones). C zones are used to protect and manage land that is of important environmental value. C zones are also used to limit the intensification of developments that are known to be subject to hazards.

Across Pittwater, Warringah and Manly, there is variation in how the current conservation zones (C zones) have been applied. As a result, there is a need to develop a single set of C zones to allow the transition to the new LEP.

Council has commenced the process of undertaking a review of the conservation zones to develop a consistent approach for identifying land across the Northern Beaches with important environmental values and land subject to hazards that should be protected and managed by a C2 Environmental Conservation, C3, Environmental Management or C4 Environment Living zone. Council exhibited the C Zones Review in 2022 and is currently awaiting advice from the DPE regarding the Review and its methodology.

The Review proposes a C3 Environmental Management zone be applied to the majority of the Patyegarang (Lizard Rock) site, except for one small parcel on the far east of the site, proposed as C2 Environmental Conservation (see Figure 7 below). The C3 zone would permit detached dwelling-houses with limited other compatible land uses. Importantly, dwelling density would be limited to 1 Dwelling per 20 hectares, as currently applies.



This recommendation is on the basis of the site's High Environmental Value (HEV) and bushfire status. Biodiversity values of the site are shown in Figure 8 below.

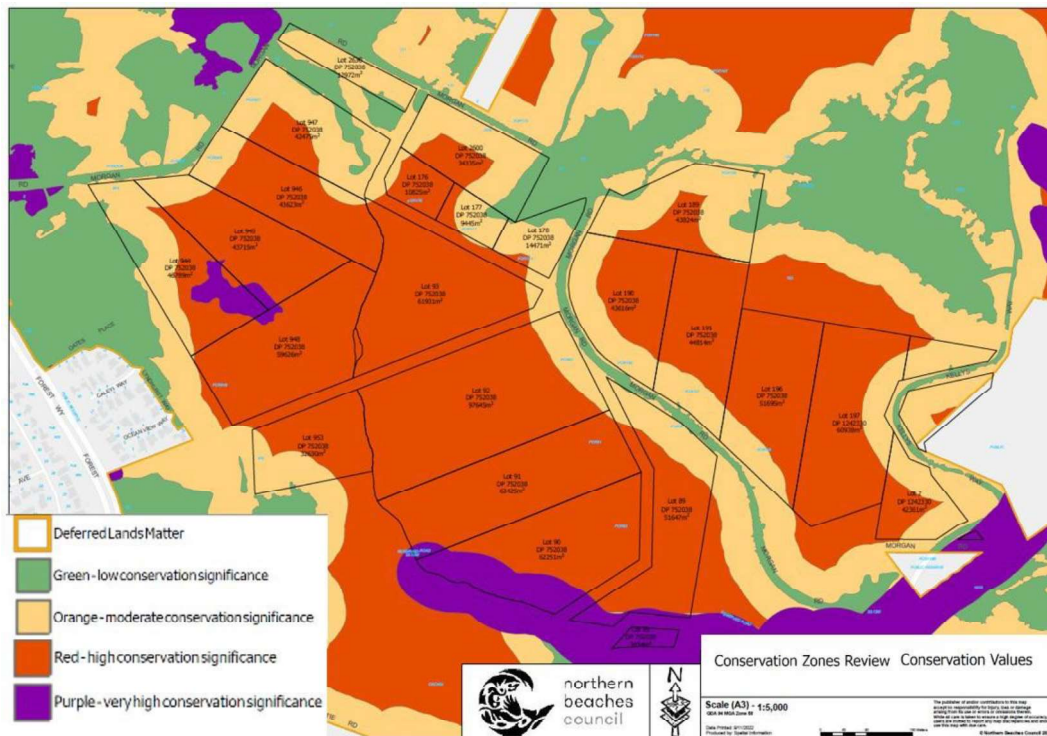


Figure 8: Biodiversity values of site identified in Conservation Zones review

Contrary to the C Zones review, the exhibited Planning Proposal proposes the majority of the site to be zoned R2 Low Density Residential, and with 19.8 hectares (28%) of the site to be zoned C2-Environmental Conservation (See Figure 9 below).

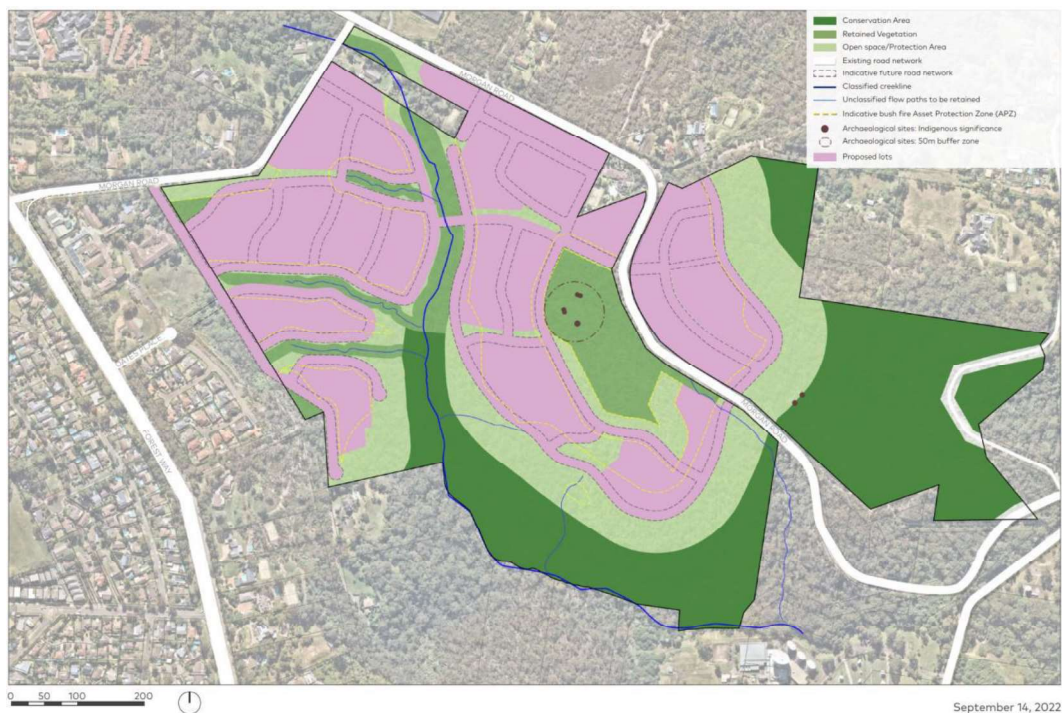


Figure 9: Site - proposed zoning sought in exhibited Planning Proposal – within WLEP 2011

The need for the Planning Proposal has not been established

As shown above, the Planning Proposal is inconsistent with core principles and strategic directions for good urban planning – namely regarding provision of quality housing in close proximity to transport routes and avoiding intensification of development in high risk areas.

No argument has been provided as to the unsuitability of the existing planning controls applying to the land under Warringah LEP 2000 and why the particular elements of this Planning Proposal e.g. dwelling numbers, lot sizes, zones etc. have been settled upon. The current dwelling density under Warringah LEP 2000 is 1 dwelling per 20 hectares whereas the proposed 450 dwellings will introduce significantly higher densities. Further, the car-dependent urban design and landscaping will create a hot, unwalkable/cyclable environment with potential to negatively impact on health and wellbeing of future residents.

No alternatives have been considered, or if they have been, no information has been provided about this consideration.

No consideration has been given to Council's current Conservation Zones exhibition (and related environmental and hazards studies), which proposes this land be zoned mostly C3 – Environmental Management. Refer to comments below under 'Conservation Zones Review'.

Insufficient justification has been provided for the inclusion of dual occupancy in the proposed R2 low density residential zone. Warringah LEP 2000 permits both those uses however they are subject maximum dwelling density, height, and locational controls (for seniors housing must adjoin a locality primarily used for urban purposes) which heavily restrict opportunities for development. Warringah LEP 2011 specifically prohibits dual occupancy and seniors housing in the R2 zone. State Environmental Planning Policy (Housing) excludes seniors housing from the area covered by Warringah LEP 2000.

Site Specific Merit

Aboriginal Heritage

The Aboriginal cultural heritage report submitted with the planning proposal is inadequate. It provides only basic information about the known sites and potential for unrecorded sites and misses the opportunity to demonstrate the significance of the sites and how the proposal can safeguard them from current and future impacts.

Council acknowledges the thought and effort that has gone into the planning proposal to conserve and protect significant Aboriginal rock engravings at Lizard Rock from destruction by vandals. An Aboriginal cultural heritage report, *Aboriginal Archaeological Assessment Morgan Road, Belrose, NSW*, October 2022, prepared by Dominic Steele Consulting Archaeology, has been submitted with the planning proposal.

The Aboriginal Heritage Office (AHO) was requested by Council to review the planning proposal and associated documents, including the Aboriginal cultural heritage report. Appendix 2 to this submission includes advice provided to Council from the AHO following a review of the proposal.

In summary, the following key points are made:

- This is a large land parcel and there is an opportunity to provide good environmental and urban outcomes that would not be possible with smaller or individual landowners.
- MLALC is operating for its members as a community organisation, not simply for the profit of a

single company or family, and this gives scope for a greater net benefit across the community.

- There is increasing expectation in the wider community that Aboriginal communities should be given a fairer go in relation to correcting past wrongs and in protecting cultural heritage
- It is likely that the majority of Aboriginal people living in NBC, whether members of MLALC or not, may not wish any bushland to be cleared for redevelopment.
- Bringing the urban fringe closer to Aboriginal sites will put them at greater risk of damage from visitation, graffiti and vandalism.

More specifically, there are a number of issues that require further clarification:

- The archaeological report does not provide sufficient information to address the main issues adequately, i.e. about the known Aboriginal sites and the potential for unrecorded sites. There is a great deal of background information for the region but much less information provided about the survey work, the current sites in their context, best management options for the site and steps for further investigation.
- The main rock engraving sites west of Morgan Road appear to be wholly within the proposed conservation zone, however, the maps provided show the sites and the buffer zone to be further west than the AHO understands the engravings to be. The only site mapping provided in the report is of a very general nature and likely to be inaccurate. The rock engravings east of Morgan Road do appear to be more correctly mapped, however, the conservation zone status of these sites is unclear as it is mapped across different proposed zonings.
- The report notes that the area was visited under different survey conditions but does not provide information whether night recording / wet rock survey for engravings was undertaken. There is no map of survey units provided.
- MLALC is not proposing the damage or destruction of any Aboriginal sites. However, given that the rock engravings are well known and are likely to be incorporated into a managed visitor experience, it seems a lost opportunity to not have included more information in this report at this stage as to how the sites will be protected. The only photos of the sites in their current context are not very clear or detailed. While the proposed conservation zone for the main platform is identified, ideally there would be more discussion as to whether there is sufficient space to provide formal walking areas, protective barriers, and signage.
- If the rock engravings become a centrepiece of the area, there needs to be careful planning to allow for controlled visitation, surveillance, a management program to ensure graffiti can be removed and to highlight the figures to make them easier to see. Ideally a mechanism would be put in place to allow an authority, such as the land manager or a MLALC department, to have a permit to carry out basic non-harm management as the current system requiring a Heritage NSW officer to be present is very slow and impractical. None of this information is presented in the report or proposed to be included at a later assessment/management stage.
- It is recommended that comprehensive site management plans are prepared for the known sites, including more detailed recording to provide a contemporary baseline recording. Highlighting (non-impact cleaning of the grooves under Heritage NSW authorisation) should be carried out as part of the recording process.

Bush Fire Risk

The proposal in its current form will result in an intensification of development, inappropriate development and incompatible land uses in areas exposed to high risk of bush fire. Fundamental aspects of the design in terms of evacuation have not been demonstrated.

The subject site is identified as bushfire prone (vegetation category 1) on the Northern Beaches Bushfire Prone Land Map 2020 – refer to Figure 10 below. Ministerial Local Planning Direction no. 4.3 therefore applies to this Planning Proposal (pursuant to Section 9.1(2) of the *Environmental Planning and Assessment Act, 1979* (EPA Act)), the objectives of which are to:

- protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
- encourage sound management of bush fire prone areas.

The direction further requires the relevant planning authority to consult with the Commissioner of the NSW Rural Fire Service (RFS) and to take into account any comments by the Commissioner. A planning proposal must:

- have regard to the NSW Rural Fire Service's *Planning for Bushfire Protection 2019*,
- introduce controls that avoid placing inappropriate developments in hazardous areas, and
- ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone (APZ).

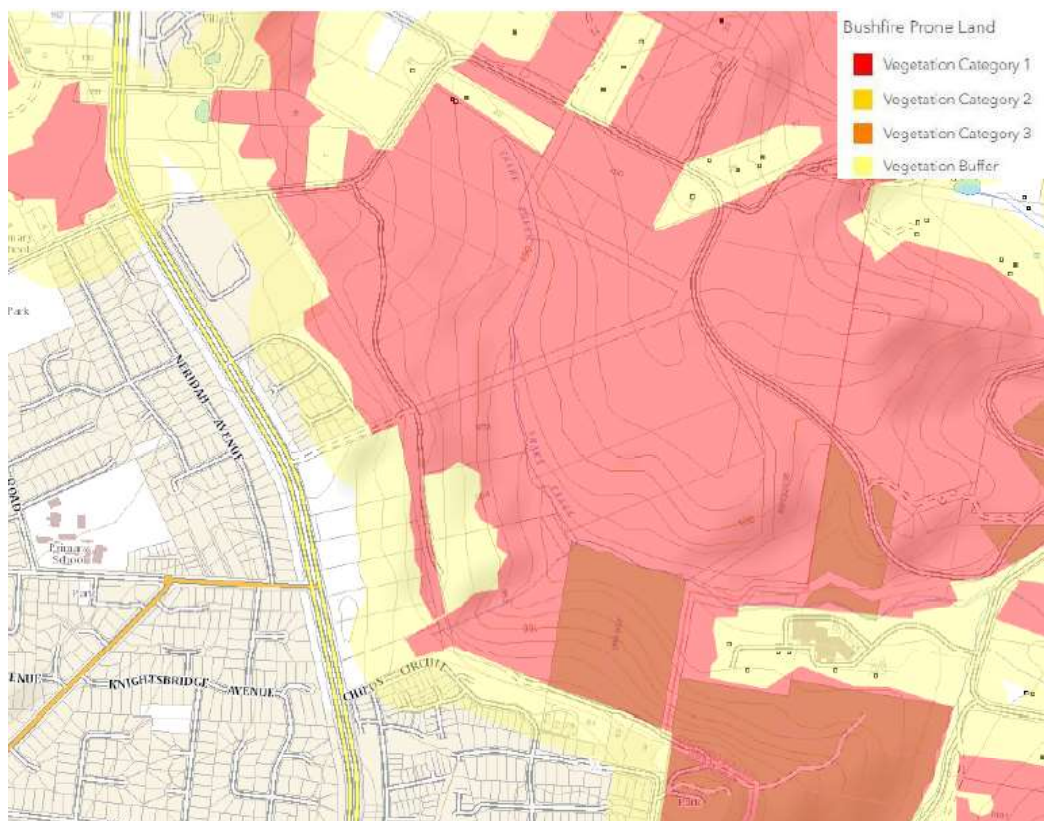


Figure 10: Bush fire prone land map (Source: Planning Portal).

Extract from Meridian Urban Bush Fire Review – Patyegarang Planning Proposal (October 2023)

Independent Bush Fire Reviews

In 2022, Council engaged Blackash Bushfire Consulting to undertake an independent bushfire review of the draft Planning Proposal and supporting documents (Travis Bush Fire Strategic Study - BFSS), and subsequently in 2023, Council engaged Meridian Urban to undertake a third-party review of the BFSS accompanying the exhibited Planning Proposal having regard to the broader bush fire hazard and risk considerations of the area.

The Meridian Urban Report, *Bush Fire Review – Patyegarang Planning Proposal* (October 2023), is included as Appendix 4 to this submission. In summary, the following matters are raised:

- The Deferred Lands area is not a low-risk location and thus requires strategic consideration. This is underscored by specific statements contained in the Deferred Lands Strategic Bush Fire Risk Assessment and the NSW RFS draft BFRMP.
- The BFSS makes a number of statements which are not underpinned by detailed information or evidence, bringing into question their accuracy. Mere compliance with bush fire protection measures does not address the nature of matters outlined by Chapter 4 of PBP.
- The BFSS does not make assessment of land use in terms of appropriateness of density, settlement pattern and land use type, as required by Chapter 4 of PBP. This review highlights a number of potential matters which require further consideration from a strategic perspective.
- The concerns raised by both Council and the Blackash review regarding the draft planning proposal in relation to evacuation do not appear to have been addressed. This is a key element at a strategic level. Should the proposed arrangements turn out not to be viable, there is the potential for a sub-optimal outcome to occur which would result in risk transfer to emergency services, surrounding landholders and the wider community, as well as any future residents.

The Blackash report is included as Appendix 3 to this Submission. In brief it concludes that:

- The planning proposal includes key bushfire mitigation strategies including the provision of complying asset protection zone (APZ), a linking road network and emergency management arrangements that have been based on traffic modelling and movement of vehicles from the site.
- The proposal has been developed on the premise of evacuation being provided by Morgan Road and a new slip lane on to Forest Way and a new emergency access on to Oates Place. The availability and utility of both of these key aspects has not been demonstrated, yet these are fundamental enabling provisions for the proposal. If one or both of these options are not available, the planning proposal will need to rethink the design response to activation of the site. This is a fundamental issue to be resolved.
- In its current form, the proposed development presents an unacceptable and, in some cases, a catastrophic risk to future residents.
- Concern is also raised about the accuracy of weather conditions data referenced in the planning proposal SFS documentation, and limitations in regard to its assessment of the proposal against infrastructure, particularly water, electricity and gas. Further information is required.

There has been minimal change made to the exhibited Planning Proposal (Gyde, 2023) in respect of bush fire risk, and as such, issues of concern raised by Council in response to the earlier draft proposal remain valid.

Density and bushfire

The development's threshold of 450 dwellings is a clear limitation due to the bushfire threat. Nonetheless, the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 (the 'SEPP') undermines the intent to limit the development quantum on this land, as the landuse table for the R2 zone is the key trigger in determining if it is exempt or complying development, or if a DA is required.

This SEPP does not require consideration of other clauses in an LEP, in this case the quantity of dwellings permitted on this land. This has the potential to inflate the population of an at-risk community beyond what was planned and modelled, thus potentially affecting to the evacuation of the community.

Evacuation in the event of a bushfire

Significant deficiencies in the traffic modelling, particularly evacuation in a bushfire event, need to be resolved in consultation with the following key agencies:

- Transport for NSW, as the road authority for Forest Way,
- NSW Rural Fire Service and Emergency Services on the evacuation strategy,
- Northern Beaches Council, as the owner of the land upon which the intersection upgrade is to be accommodated.

The proposal's Transport Assessment has not demonstrated that the development achieves the access and egress assessment considerations of Section 4 of PBP (2019) which relevantly state:

- *The capacity for the proposed road network to deal with evacuating residents and responding emergency services, based on the existing and proposed community profile;*
- *The location of key access routes and direction of travel;*
- *The potential for development to be isolated in the event of a bush fire.*

This is a critical requirement that must be rectified.

The report does not appear to include commentary on the influence of the childcare centre and nursing home located on the corner of Morgan Rd and Forest Way within the evacuation strategy. The evacuation model does not take into account other traffic generators such as commercial properties (e.g. the Telstra and Optus sites), in addition to large animal evacuations which would utilise Morgan Road as the primary evacuation route.

The report also uses an assumption of 25% that will "*stay and defend rather than evacuate*", however modelling should also include a worst-case scenario whereby 100% of the proposed community is afforded the opportunity to evacuate.

Refer also section 'Traffic' later in this submission.

Servicing – Bush fire – water supply and undergrounding of power lines

Augmentation of utility services is required to service the site. Before any Planning Proposal proceeds, two key fire-fighting matters must be addressed, water supply and undergrounding of power lines.

Sydney Water must confirm that the potential future augmentation accounts for water capacity and pumping requirements necessary for fire-fighting purposes.

There needs to be certainty that the existing 33kV powerlines are undergrounded which is a critical element for evacuation in a bushfire event. One of the main evacuation routes from the site is adjacent to the current

33kV alignment and passes underneath these powerlines in one location. The location of these powerlines pose significant risk during a bushfire event and must be undergrounded to eliminate this risk.

The Planning Proposal provides no evidence that this undergrounding can be practically achieved.

Biodiversity

The planning proposal will result in impacts on core habitat, known habitat for various threatened species of flora and fauna and Threatened Ecological Communities (TECs), and is inconsistent with adopted biodiversity related policy and strategy documents published by both the NSW Government and Northern Beaches Council.

Specifically, the planning proposal is not supported because:

- Impacts to approximately 44.7 hectares of bushland in good condition with high biodiversity conservation values.
- Likelihood of substantial additional impacts resulting from bushfire protection clearing requirements within riparian zones which dissect the proposal and along primary access and egress roads.
- The resulting significant impacts to threatened species including those identified as being at risk of 'Serious and Irreversible Impacts' (refer to Sections 6.2 (i) and 7.2 of the NSW Biodiversity Conservation Act 2016).
- The resulting 'Prescribed Impacts' that are additional to the impacts of native vegetation clearing, impacting habitats or features of the environment that are irreplaceable.

The proposal has not adequately demonstrated the hierarchy of 'avoidance and minimisation' of impacts, before 'offsetting' is applied (refer to Section 6.4 (1) of the NSW Biodiversity Conservation Act 2016).

Biodiversity Values of the Lizard Rock Site

The Lizard Rock site is almost entirely represented by intact remnant native vegetation or bushland, mostly in good condition, of which approximately 44.7 hectares would be cleared to make way for the proposed future development. The Planning Proposal report incorrectly states that the site 'predominantly comprises disturbed bushland' and that 'a significant proportion of the site is suffering from land degradation' (page 12, Gyde Consulting, October 2022).

This is contrary to Council's knowledge of the site and in contradiction with the 'Preliminary Biodiversity Development Assessment Report' (BDAR) submitted with the planning proposal which indicates most areas of vegetation are intact or in uniform good condition with areas of degradation limited to areas fringing the existing residential development (Hayes Environmental, October 2022).

It is Council's observation that the TEC, Coastal Upland Swamp, is located within the proposed road footprint (currently a unformed Crown Road reserve) located east of Lyndhurst Estate and adjoining the proposed emergency evacuation route via Oates Place. In regard to the Duffys Forest TEC, it is Council's experience in the local area that this TEC has a high likelihood of occurrence on this site and identification is often missed during survey. Staff acknowledge that on site survey by Council has not been undertaken but that structural dominants visible from Morgan Road may be consistent with the TEC. It is recommended that any consent authority for the planning proposal include an independent expert ecologist to review and visit the site for confirmation.

The planning proposal nominates most of the Snake Creek riparian corridor running through the development site as a retained corridor with the intent to 'maintain connectivity and protect water quality'. It is noted that these areas are also mapped on the NSW Governments Biodiversity Values Map. In the context

of likely bushfire protection requirements of the NSW RFS, it is Council's experience with other major planning proposals (e.g. Ingleside) that retention of these areas may not be feasible. Furthermore, vegetated areas along primary access and egress routes (e.g. Morgan Road) include significant biodiversity that will likely require future clearing to facilitate safe evacuation during a bushfire event. With reference to Section 4.1 Strategic Principles of Planning for Bushfire Protection 2019, the development may therefore have environmental constraints to the area which cannot be overcome.

Council notes that threatened biodiversity values of the site include those listed under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Early consultation and or referral to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) is recommended.

Previous biodiversity studies

The Lizard Rock site provides an important contribution to both local and regional biodiversity habitat and connectivity. In a previous Sydney Metropolitan wide assessment of native fauna habitat values and conservation priorities, the former NSW Department of Environment and Conservation identified land including the Lizard Rock site as having very high fauna habitat values (see Figure 1, DECC 2008).

Between 2010 and 2013, industry recognised experts undertook intensive and wide-ranging fauna surveys of predominantly government tenures (e.g. Crown Land and Crown Road reserves) directly adjoining the site. This study also identified numerous threatened fauna records further demonstrating the presence of high conservation value fauna habitats (Kavanagh et al 2015) that would be impacted by the proposal.

NSW government mapping identified in the Sydney North District Green Grid attributes the Lizard Rock site as 'High Environmental Value' (refer to Figure 8, Tyrrell Studio 2017). More recent biodiversity studies across the deferred lands attributes much of the site to 'High' and 'Very High' biodiversity conservation value (Arcadis, 2021 and 2022). The proposal also impacts upon a larger area of important 'core habitat' within the Northern Beaches. According to GANSW (2020), core habitat areas of bushland are the least disturbed and the most biodiverse, representative of the structure, function, and composition of natural areas. More recent mapping of core habitats and corridors across the Northern Beaches attributes the entire Lizard Rock site to core habitat (SMEC 2021).

Consistency with requirements of the NSW Biodiversity Conservation Act (BC Act)

Based on review of submitted documentation, the proposed future development will have a significant effect on threatened species as defined in Section 7.2 of the BC Act. As noted above, the proposal is located in natural areas identified in various studies as having high to very high biodiversity conservation values. On this basis, the location of the proposal has not demonstrated that sufficient or appropriate reasonable steps have been taken in the hierarchy of 'avoidance and minimisation' of impacts, before 'offsetting' is applied, as required by Section 6.4 (1) of the BC Act 2016.

The Lizard rock site includes known and potential habitat for various threatened species of flora and fauna. The preliminary BDAR notes requirements for the offsetting of Eastern Pygmy-possum across the entire development footprint. Other threatened fauna species likely to be impacted by the proposal include (but are not limited to) Red-crowned Toadlet, Giant Burrowing Frog, Powerful Owl, Spotted-tail Quoll and Rosenberg's Goanna. The preliminary BDAR incorrectly refers to Rosenberg's Goanna as a predominantly nocturnal species and despite the presence of known breeding habitat (termite mounds) considered the likely construction impacts upon non-breeding shelter habitat only.

Threatened flora with known and potential habitat impacted by the proposal includes species that are identified as being at risk of a serious and irreversible impacts (SAII) (DPIE, 2022).

As noted in Council's previous comments on the Development Delivery Plan, the endangered orchid *Microtis angusii* is identified as a species at risk of SAI, and a population of the species occurs within areas which would be impacted by the Lizard Rock proposal. The preliminary BDAR makes no reference to *M. angusii*. The occurrence of SAI candidate species *Genoplesium baueri* (an endangered orchid) has recently been confirmed within nearby areas of the deferred lands (Arcadis, 2022) and occurs in the same habitat types impacted by the proposal. As noted in the preliminary BDAR, further targeted survey work is required in regards to this species. Both orchids (*M. angusii* and *G. baueri*) are also listed under the Commonwealth EPBC Act. Council also considers that further assessment is also needed to determine the occurrence of Threatened Ecological Communities which the preliminary BDAR states are absent from the site.

In addition to the 44.7 hectares of bushland directly impacted by the proposal, the preliminary BDAR notes a further 6.9 hectares (including threatened species) that are likely subject to indirect impacts. The preliminary BDAR notes the degree of uncertainty with regards to indirect impacts and does not include any assessment of offsets regarding indirect impacts. Indirect impacts to the adjoining natural landscape may be further increased in response to increasing bushfire protection measures (e.g. such as increased frequency of hazard reduction burns) that would need to be applied as part of a future updates to the Warringah Pittwater Bush Fire Risk Management Plans.

Based on Council's experience with development impacts, the indirect impacts of a development of this scale are likely to be substantial, and the precautionary principle should be applied consistent with the principles of ecologically sustainable development.

As identified in the preliminary BDAR, the proposal will also result in additional 'Prescribed Impacts' (prescribed impacts) which must be assessed as per clause 6.1 of the BC Regulation. Prescribed impacts occur on habitat features that are not native vegetation such as caves, rocky outcrops and flyways. Prescribed impacts (including direct and indirect impacts) that are applicable to the current proposal include impacts on:

- Threatened species habitat including caves, crevices, cliffs, rocks and other geological features of significance
- Areas connecting threatened species habitat, such as movement corridors
- Water quality, water bodies and hydrological processes that sustain threatened entities
- threatened species or fauna from vehicle strikes.

Council considers that the scale of 'Prescribed Impacts' resulting from the proposal will be substantial. Because these types of features cannot be readily replaced or offset, it is important that measures to avoid or minimise impacts are undertaken.

The planning proposal does not nominate how the future developments biodiversity offset obligation would be met but includes conservation zoning to approximately 19.8 hectares. Despite the extensive land holdings of the applicant within the locality, no reference is made to the establishment of a local Biodiversity Stewardship Site. Should the planning proposal be approved, Council's recommends establishment of a local Biodiversity Stewardship Agreement and that offsets obligations from the Lizard Rock site are retired from within the locality.

Amended calculations of biodiversity offset credits

Within the revised exhibited Planning Proposal (Gyde 2023), the quantity of preliminary biodiversity offsets (ecosystem and species credits) calculated for the proposal has been slightly reduced based on predicted retention of vegetation within the new RE2 – recreation zoning (~6.9 hectares of mostly riparian corridors within residential area). The BDAR acknowledges the uncertainty of impacts which may result to the RE2 zone.

Biodiversity offset calculations for Planning Proposals are preliminary and would not be finalised until the subdivision development application. It is noted that retention of vegetation in RE2 zone is likely subject to bushfire protection requirements which may be determined by the RFS in response to the Planning Proposal and subsequent subdivision, potentially resulting in additional clearing of the site.

Consistency with NSW Government and Council Policy and Strategy

The proposed large scale of impacts to biodiversity are inconsistent with the objectives and principles of Council's strategic planning and policy documents including:

- Warringah 2000 Local Environment Plan (refer to Clauses 56 - Retaining distinctive environmental features on sites, 58 Protection of existing flora and 59 Koala habitat protection of WLEP 2000),
- Northern Beaches Local Strategic Planning Statement (refer to Priority 2, Protected and enhanced bushland and biodiversity)
- Northern Beaches - Environment and Climate Change Strategy (refer to Theme 1, Bushland)
- Northern Beaches Bushland and Biodiversity Policy – (refer to principal 3 - Ensuring that new developments on the Northern Beaches are consistent with the principles of ecologically sustainable development and are designed to first avoid and then minimise impacts upon bushland and biodiversity, in addition to responding to bush fire risk).

Refer also to commentary above under Alignment with Regional Strategic Plans.

DCP exhibited with Planning Proposal

The following issues are raised from a biodiversity perspective in relation to the DCP prepared by the proponent and exhibited with the revised Planning Proposal:

- The DCP refers to Biodiversity Certification which does not form part of the current planning proposal.
- The biodiversity and vegetation management chapter of the DCP appears to have limited practical application beyond the subdivision application. The emphasis appears to be on areas such as the C2 zone and residential interface including open space areas and riparian corridors. These areas would not be subject to DA's beyond subdivision. The content within Appendix 1 of the DCP should be incorporated into each relevant section rather than as an appendix.
- The biodiversity and vegetation management chapter of the DCP does not make adequate declaration or define what constitutes 'Vegetation' (including native vegetation) or trees (other than 'significant trees'). Section 2.9 of the Biodiversity and Conservation SEPP applies to vegetation declared in a DCP. If not declared in a DCP then permit requirements for tree or vegetation removal are subject to doubt.

Waterways

The Planning Proposal would result in significant environmental impacts within the Snake Creek / Narrabeen Lagoon catchment. The proposal is a major catchment disturbance that will affect the value of the valley setting and receiving waters, and impact riparian land.

The proposal discusses potential water quality management measures for stormwater runoff for when the site is developed however, does not provide a 'Waterway Impact Statement' that is required for any development works located within waterways and riparian lands as per the requirements of the Council's Protection of Waterways and Riparian Land Policy (PL 740) and the Warringah Development Control Plan 2011.

The technical requirements of a Waterway Impact Statement are required to address four main areas:

- Waterway Analysis,
- Assessment of Impacts,
- Assessment of Compliance with the Warringah Development Control Plan, and
- Provision of Mitigation Measures.

It is considered that an aquatic ecology report would form the backbone of the Waterway Impact Statement. A vegetation management plan is also required under the controlled activity permit for Waterfront Land (Water Management Act 2000) to detail how the restoration or rehabilitation will be carried out on any impacted waterways. Council cannot fully evaluate the proposal without a Waterway Impact Statement.

In addition, it is believed the proposed zoning of the upper riparian corridor to recreational zone (RE2) would not provide a sufficient level of protection to the core riparian areas and function as would a C2 zoning. Environmental Conservation zoning of the riparian area is required to protect the high ecological, cultural and aesthetic values of Snake Creek.

Infrastructure such as roads, drainage, stormwater structures, services, Asset Protection Zones should follow the control activity permit requirements for Waterfront Land (Water Management Act 2000).

Where appropriate 50% of the outer vegetated riparian zone width may be used for non-riparian uses including asset protection zones, recreational areas, roads, development lots and infrastructure. However, an equivalent area connected to the riparian corridor must be offset on the site and the inner 50% of the vegetated riparian zone must be fully protected and vegetated with native endemic riparian plant species.

The proposal will result in significant environmental impacts and is inconsistent with the adopted waterway related policy and strategy documents published by both the NSW Government and Northern Beaches Council. The proposed riparian zones are not satisfactory in the context of the Snake Creek Catchment and no Aquatic Ecology Assessment or Waterway Impact Statement has been submitted.

Much of the proposal is in the Narrabeen Lagoon catchment which is of high environmental, social and economic value to the Northern Beaches. Ecological water quality monitoring has been undertaken for 10 years demonstrating consistently high results. Impacts from the proposal would likely have negative impacts on the lagoon water body.

It is considered that impacts to creeks, wetlands, and their associated riparian environments at such a scale as proposed would be inconsistent with the objectives and principles of the objectives and principles of the GRSP, NDP and Towards 2040. It is also inconsistent with Council's LEP and DCP, Draft Environment Study, Protection of Waterways and Riparian Lands Policy and Warringah Creek Management Study (2004).

Previous assessments by the former NSW Planning and Assessment Commission (PAC 2009) and NSW Independent Planning Commission (IPAC 2019) have also cited impacts to biodiversity and waterways (including cumulative impacts) among the concerns raised during review of previous urban development plans including those for Lizard Rock.

The main watercourse within the proposal triggers assessment and referral to NSW Natural Resources Access Regulator for a controlled activity approval. This proposal is also inconsistent with the objectives of the NSW Water Management Act 2000; to provide for the sustainable and integrated management of the water sources of the state for the benefit of both present and future generations and, in particular ecologically sustainable development, protect, enhance and restore water resources, management of water sources with other aspects of the environment including native vegetation and native fauna.

Council's Protection of Waterways and Riparian Land Policy

The planning proposal appears to have considered Council's Protection of Waterways and Riparian Land Policy. Council is committed to managing, protecting and restoring waterways and riparian land in a manner that:

- allows them to function as natural systems where possible,
- considers risk from instability, erosion and flooding, and
- is consistent with Council's planning controls and guidelines as well as NSW and Australian legislation and guidelines.

The Policy also states that natural ecological processes of waterways and riparian land shall be maintained and enhanced, bushfire asset protection zones shall be maintained outside of riparian land, and public access should be located outside riparian zones where possible except for crossing points or other strategic locations.

The Policy recommends that development within waterways and riparian land be avoided. Where a waterway has not yet been identified on Council's Waterways and Riparian Land Map, the riparian land widths are to be applied from relevant State guidelines.

The Lizard Rock site forms part of the Snake Creek catchment, flowing into Narrabeen Lagoon via Middle Creek. Narrabeen Lagoon is a high conservation value asset with primary aquatic habitats (natural and modified), migratory routes, landscape qualities, and recognised recreational importance.

The planning proposal nominates most of Snake Creek riparian corridor running through the development site as a retained corridor with the intent to 'maintain connectivity and protect water quality' and states that it is mainly a Strahler 1st Order creek with a 10 metre riparian zone and is a low priority creek as it is classified as Group B creek in the Warringah Creek Management Study (2004).

Council contends that Snake Creek is mainly a Strahler 2nd Order creek and should be mapped with a 20 metre riparian zone plus a 10 metre buffer and that a Group B creek is not a reference to priority, but that the creek has some degradation in the upper catchments, but high ecological value downstream.

The planning proposal indicates that much of the riparian corridors will remain intact, however there appears to be sections of the smaller mapped tributaries impacted by development and there is at least one creek crossing planned. The overall scale and size of the development also makes it very unlikely that there will be no impact on riparian land.

The proposed development is a major catchment disturbance that will affect the value of the valley setting and receiving waters. The fragmentation impacts of upslope land uses will modify the general valley setting and compromise the natural integrity of the site. The urbanisation project is considered detrimental to catchment processes due to its significance and cumulative impacts, especially considering the developments in the Frenchs Forest Precinct.

Additional documentation is needed to address Council's concerns including a Waterway Impact Statement. A Waterway Impact Statement should demonstrate to Council the development will either enhance, or as a minimum, will not adversely affect ecological function or limit opportunities to reinstate the area in the future to the greatest possible extent. Where appropriate, a Waterway Impact Statement is to demonstrate through an attached engineer's report the proposed development is not at risk from damage from creek bank erosion.

The planning proposal states that 'A separate aquatic ecology assessment of the subject property and draft Structure Plan has been carried out by Marine Pollution Research P/L'. This was not provided to Council and may provide information on the impact of the proposed development on the watercourses and their ecology.

Water Quality Management

The revised stormwater management plan (appendix 17) submitted with the exhibited Planning Proposal (Gyde, 2023) is similar to the original document (accompanying the draft Planning Proposal) with the exception that concept WSUD diagrams for individual lots and roads are not included.

Council notes the changed subdivision lot arrangement and lot size differences and considers the proposed water quality model is currently insufficient to quantify the water quality and site water balance.

The new proposed lot sizes (200sqm, 450sqm, 600sqm) design should be modelled accurately to estimate the impacts on water quality and volume and develop an effective water management strategy. The current model is based on an a homogenous 600m² lot with 60% effective imperviousness, that Council considers provides a very coarse underestimation of the impacts. Lot scale treatment is only proposed for 600sqm lot and includes two 5000L tanks and a biofiltration area. No treatment chain is proposed for the smaller lot sizes, the twin tanks and biofiltration on smaller lots are considered not the best options due to size constraints.

Northern Beaches Council has experience with small private biofiltration set ups in the Warriewood Valley and is not supporting these systems due to implementation and maintenance issues.

Importantly, no comparison with predevelopment scenario modelling has been supplied (only developed with/without mitigation). The significant quality of the existing forested catchment (the headwaters of Narrabeen Lagoon) must be used as a base line condition. The proposal water related technical studies are insufficient to quantify the cumulative impacts on the downstream creek system and catchment area and to Narrabeen Lagoon itself.

There is no explanation in the stormwater management plan of how on-site stormwater detention (OSD) will be implemented in accordance with councils Water Management for Development Policy.

There are no supporting calculations and DRAINS model to demonstrate how OSD will work and whether OSD be lot based or constructed as a community-based asset.

Council's experience shows lot based OSD systems are problematic on smaller sized lots as the land available to achieve the required storage volumes is insufficient and the ongoing maintenance of the devices by individual property owners is often not undertaken. This limits the effectiveness of the devices. Combining the OSD and water quality requirements on these smaller lots results in ineffective controls that are prone to failure or removal by the individual property owners.

The most suitable and proven arrangement as seen in the Warriewood Valley release area is to have community controlled larger scale OSD/bioretenion basins that effectively serve several lots managed by community associations in perpetuity where auditing and maintenance of the facilities is undertaken in accordance with community by laws. Stormwater industry groups have previously undertaken studies detailing the advantages of community-controlled water management facilities versus individual mum and dad owned devices.

Council's Water Management Policy

The requirements for water management on development sites are stated in the Water Management for Development Policy. The main principles are as follow:

- Improve the quality of water discharged to our natural areas to protect the ecological and recreational condition of our, beaches, waterways, riparian areas and bushland.
- Minimise the risk to public health and safety.
- Reduce the risk to life and property from any flooding and groundwater damage.
- A sustainable and holistic catchment wide approach is taken to development, of both private land uses and public facilities, on flood prone land.
- Climate change will inform decisions for future water infrastructure.
- Water sensitive urban design measures will be integrated into the built form to maximise liveability and reduce the impacts of climate change e.g. urban heat island effect and intensified rainfall events.
- Wherever possible, water courses are to be conserved or restored to their natural state. Reduce the consumption of potable water by encouraging water efficiency, the reuse of water and use of alternative water sources.
- Protect Council stormwater drainage assets during development works and to ensure Council's drainage rights are not compromised by development activities.

Narrabeen Lagoon Catchment

The proposed development will not improve existing Narrabeen Lake catchment water quality or the site runoff quality, contrary to the claims made in the stormwater management report submitted with the exhibited Planning Proposal. No modelling or calculations to support the proponent's claims are provided.

Northern Beaches Council participated in a pilot study with the NSW Department of Planning and Environment (DPE) to apply the Risk-Based Framework for Considering Waterway Health Outcomes in Strategic Land-Use Planning Decisions (Dela-Cruz et al., 2017) in the Narrabeen Lagoon catchment.

The pilot study was completed in 2021 with a recommended stormwater management strategy and targets for the Narrabeen Lagoon catchment. Snake Creek, part of the Oxford Creek sub-catchment, was identified that it is at the point where any increase in flows or pollutants could result in significant deterioration downstream, and that the recommended stormwater management strategy is to avoid impact to the existing hydrological regime and to avoid an increase in the amount of pollution entering the waterway from future greenfield development.

The planning proposal sets out a Stormwater Management Plan document (Craig & Rhodes 2022) that states it complies with Council's Water Management for Development Policy, including demonstration that impervious areas are minimised, and Water Sensitive Urban Design (WSUD) is incorporated in the landscaping and build design to meet the Policy's requirements.

Council considers that water quality modelling (MUSIC model) results are unclear and that they need to follow the Northern Beaches Council WSUD & MUSIC Modelling Guidelines to ensure they meet the requirement to have no impact on water flow quality and quantity. As the site has numerous escarpments and rocky outcrops and has high susceptibility to erosion, some proposed solutions identified in the planning proposal may not be fit for purpose in some locations.

The stormwater report submitted with the exhibited Planning Proposal does not include the revised proposed zoning and lot size changes, as such, the model does not adequately relate to the project.

Slope Stability Risk

The planning proposal identifies sites which could have potential 'moderate' or 'high' slope stability risk and would require slope stability measures. Construction of infrastructure and changes to land formation due to the proposed development would increase this slope stability risk.

There has been minimal change made to the exhibited Planning Proposal (Gyde, 2023) in respect of slope stability risk, and as such, issues of concern raised by Council in response to the earlier draft proposal remain valid.

Preliminary Site Investigation, dated 29 September 2022, prepared by SMEC has been submitted with the planning proposal. The slope stability risk assessment undertaken by SMEC indicates that it is a preliminary assessment based on high level observation with limited geological mapping.

Prior to the site inspections, SMEC identified 9 zones within the development area which could have potential slope stability risk. Access to some areas of those identified zones has been restricted due to topography and vegetation. Even with these limitations, the level of risk to the properties on those zones was assessed as "moderate" or "high" requiring slope stability remedial measures.

Construction of infrastructure and changes to land formation due to proposed development would increase this slope stability risk. The proponent will need to carry out detailed investigation and assessment of slope stability risk and ensure slope stability remedial works are implemented to reduce the risk levels to an acceptable level.

Urban Design and Landscaping

The proposal is not supported from an urban design and landscaping perspective. Proposing a new green-field land release and a new settlement of 450 separate dwellings on relatively small lots (of 200, 450 and 600 sqm) is untenable given the site constraints and location. It is also out of keeping with the surrounding area, where the current WLEP2000 permits 1 dwelling per 20ha.

The proposal is out of step with current best practice (e.g. as per the GANSW *Better Placed* urban design principles) and instead appears to mimic urban design practices of the 1970s in creating a sparse, isolated, car-reliant, enclave in a landlocked valley and characterised by sparse vegetation, steep roads that inhibit walking or cycling, and very minimal public amenity (only one community facility, no local shops, and lack of shading).

The proposal has not considered alternative urban design concepts to the one proposed. For example, a nucleated/compact settlement form would have been more land-efficient and potentially more cost-effective for infrastructure delivery as well as enabling liveability – as per the Greater Sydney Commission's vision of a poly-centric 30-minute city. It is also unclear from the information supplied how the proposed new settlement relates to or integrates with Belrose or Frenchs Forest.

Lack of commitment to environmentally sustainable design

Similarly, the lack of commitment to environmentally sustainable design (ESD) principles it is out of step with NSW Government identified priorities and namely its net zero target of 70% reduction of greenhouse gas emissions by 2035 compared to 2005 levels.

The Planning Proposal makes no mention of ESD principles in its overall objectives (Planning Proposal page 25) or in the new Development Control Plan; this despite the explicit requirements of Council's *LSPS Towards 2040* for large scale developments and planning proposals:

ensure new developments and retrofits provide an independent sustainability certificate such as the Green Star Rating Tool, Passive House or a recognized equivalent (Priority 7, Priority 15)

This also aligns with Action 7.3 of the LSPS:

Develop LEP and DCP controls to improve energy, water and waste efficiencies in new developments and require developments in strategic centres, employment hubs and areas subject to urban intensification to provide an independent sustainability certificate such as the Green Star Rating Tool, Passive House or a recognised equivalent (threshold to be developed)

Lack of integration with surrounding landscapes and traffic network

The Frenchs Forest Precinct was rezoned by the NSW Department of Planning and Environment in 2022 to facilitate 2,000 new homes and 2,000 new jobs. Traffic and transport considerations were crucial in determining the level of growth that could be supported in Frenchs Forest. Extensive traffic modelling was undertaken which considered impacts to the regional road network including Forest Way, Warringah Road and Roseville Bridge.

The traffic modelling for the Frenchs Forest Precinct did not anticipate the level of development proposed in this Planning Proposal. It is likely that future residents and visitors of the subject site will place further strain on the regional road network, as users will likely be car dependent owing to the urban form and long distance from bus stops and cycling routes. It is noted that some residents would be approximately 1-2km from the nearest bus stop on Forest Way. This view is also shared by Council's Transport Network business unit who state that 'no consideration has been given to the broader network impact of an additional 380+ am peak journeys on the road network. Modelling needs to be provided for key decision point intersections along Forest Way for both the am and pm peak periods to ensure the proposal does not exceed the network capacity'.

It is likely that the additional population resulting from this proposal will utilise the social infrastructure to be provided in Frenchs Forest which includes the new community hub, town centre open space, and embellishments to local parks. This level of growth has not been factored into the strategic planning of the Frenchs Forest centre and would hence impact not only future residents' ability to access services, but also residents in Frenchs Forest.

Design principles

There are differences between the wording of the Design Principles in the GYDE report and the Urban Design Report. One significant difference is as follows:

- The GYDE 2023 Planning Proposal Report states, '*Protect the natural bushland interface by containing APZs within developable areas **where possible and practical***',
- Whereas the Urban Design 2023 Report states, '*Protect the natural bushland interface by containing APZs within developable areas*'.
- Four of the other design principles differ very slightly between the GYDE report and the Urban Design Report.

The Urban Design Principles in the new Site-Specific Development Control Plan (DCP) differ significantly from the Design Principles in the Urban Design Report. It is unclear if there is any relationship between the Design Principles in the Concept Development Plan and the new DCP.

Summary of new draft DCP – land use planning considerations

The site specific Patyegarang Project Draft Development Control Plan (DCP) document outlines proposed development control requirements. The document begins with an overview of the project and its objectives. It then provides a site description, including its location, size, and current zoning. The document also identifies the key stakeholders involved in the project and outlines their roles and responsibilities.

The draft DCP then provides guidelines for the site's development. These guidelines cover various topics, and the document provides guidelines for the site's development, including; a vision, structure plan, urban design principles, built form, setbacks, height, landscaping, indicative 'development principle diagrams' with lots, and discussion on environmental management. These are:

- Building design guidelines cover a range of issues, including building height, setbacks, and materials.
- Landscaping guidelines cover issues such as the use of native plants, water management, and the provision of open space.
- Environmental management guidelines cover issues such as waste management, pollution control, and the protection of natural habitats.

The DCP is a very high-level document that provides minimal- and at times conflicting – direction. Our specific concerns are outlined below.

DCP Urban Design Principles and Concept Plan Design Principles –

It is unclear what relationship exists between the DCP Urban Design Principles and the Concept Plan Design Principles. As noted previously, the Urban Design Principles in the new Site-Specific Development Control Plan (DCP) differ significantly from the Design Principles in the Urban Design Report.

Asset Protection Zones', DCP Controls, SEPP (Exempt and Complying Development Codes) 2008, SEPP (Housing) 2021, & the National Construction Code (NCC) –

The draft DCP notes in section 1.3 relationship to Other Documents and Instruments, *'The provisions of the Environmental Planning and Assessment Act and Regulations (as amended), the National Construction Code, the Local Government Act 1993 or any relevant State Environmental Planning Policy (SEPP) or Regional Environmental Plan, apply irrespective of the provisions of this Plan'*.

The provisions of the SEPP (Exempt and Complying Development Codes) 2008 (SEPP Exempt and Complying Development), SEPP (Housing) 2021 (SEPP Housing), and National Construction Code (NCC) will override any DCP controls. In some instances, it is questionable what level of control the draft DCP will provide.

The proposed zoning is R2 and under the SEPP Exempt & Complying Development development could potentially be undertaken as Complying Development, subject to the requirements for complying development and development standards. Also under SEPP Housing, Seniors Housing is permissible in an R2 zone. This is of particular concern given the very high risks of bushfires in the area (as well as vulnerability to urban heat).

An addendum to the Planning for Bushfire Protection 2019, with an effective date of 1 May 2023 was legislated to coincide with adoption of the National Construction Code (NCC) 2022. The PBP addendum included new measures for vulnerable occupants, including schools, residential age-care facilities, child-care centres, and hospitals, and to accord with the NCC 2022. Uses such as; child-based child care facilities, community facilities, educational establishments, group homes, places of public worship, respite day care centres and secondary dwellings are currently permitted with consent in the Warringah LEP in the R2 zone.

Depending on the land use, under the National Construction Code 2022, Volume One, Building Code of Australia Class 2 to 9 Buildings and the PBP addendum certain land uses, such as, schools, residential age-care facilities, child-care centres, and hospitals may require different APZs, and further erosion of the Bushlands to accommodate the required APZ's. If the R2 zoning is permitted, it will be difficult to control future development and additional removal of trees to create APZ's for the protection of property. This should be investigated further by Building Control and Bushfire specialists.

As illustrated in Figure 11 below, it is unclear how the APZ will be able to manifest on land not in the ownership of the MLALC. (See highlighted)



Figure 11: July 2023 version of the Concept Plan in the Urban Design Framework Report.

Landscape and Open Space

The planning proposal fails to satisfy the landscape objectives of the current applicable Warringah Local Environmental Plan (LEP) 2000 - Deferred Lands, and of the R2 Low Density Residential zone of Warringah LEP 2011 to which rezoning is sought.

- Currently applicable: Warringah LEP 2000 - Deferred Lands –
 - the desired future character objectives of the B2 Oxford Falls Valley Locality Statement, as worded in the Warringah LEP 2000 is not achieved by the proposed development due to extensive land clearing and subdivision allotment pattern, including *“The natural landscape setting including landforms and vegetation will be protected and, where possible, enhanced”*, and *“Building will be located and grouped in areas that will minimise disturbance of vegetation and landforms”*.
- Proposed R2 Zone in Warringah LEP 2011 -
 - the landscape objectives of the R2 Low Density Residential zone are not achieved due to extensive land clearing and a subdivision allotment pattern that is unable to

provide “ ... low density residential environments characterised by landscaped settings that are in harmony with the natural environment of Warringah.”

- the failure to include all the existing watercourses and creeklines, all areas of retained and protected vegetation, and the sites of significance as C2 Environmental Conservation zones impacts upon the resilience of the nominated C2 Environmental Conservation zoned areas to maintain the ecological, cultural and aesthetic values; and protect the visual character.

A scheme that groups areas of R2 Low Density Residential zone amongst C2 Environmental Conservation zones would be better able to address these concerns, and may ultimately require a reduction in dwelling numbers across the property to achieve a balanced proposal.

Summary of new draft DCP – landscaping and open space considerations

Asset Protection Zone -

The requirement for the IPA APZ will be more restrictive to the future lot developments than outlined in the various objectives and controls of the DCP. It is noted that the IPA requires maximum 15% canopy cover, maximum 10% shrub cover and areas of grass to be kept to a maximum height of 100mm (which indicates lawn rather than native grass planting).

9.3 Residential Landscaping – the following controls don’t align with the bushfire requirements “landscaped areas must have a bushland character...” and “the use of turf should be minimised in favour of planting native species”.

9.1 Building Design and 9.2 Building Facades, Verandas, Porches and Decks – it is outlined that “building design must respond to the natural landscape and topography of the site. This includes the use of elevated building forms using bearer and joist construction...”. The idea of this is supported to protect environmental features, however, concerns are raised that this wouldn’t be an acceptable bushfire solution. Furthermore, the controls also speak to timber decking rather than cut/fill which is also not likely to be an accepted bushfire solution.

The realistic possibility to retain significant trees on individual lots is questionable when the wider planning proposal area is to be treated as the one APZ (as shown in the Bushfire Report). It is possible that the retained vegetation areas plus the proposed street tree canopy (shown on the Illustrative Master Plan) already exceed the 15% canopy cover and limit further tree retention.

Landscape Visual Assessment -

The greatest visual impact of the planning proposal will be the scarring of the landscape through the expansive removal of native vegetation (which cannot be replaced due to the APZ requirements) and replacement with built form.

Urbis states Council’s WLEP and WDCP includes “...policies and guidelines that are relevant to visual effects and views, which would be assessed at a more fine-grained level subsequent to the approval of this planning proposal”. The Landscape Visual Assessment document omits discussion of the impact resulting from the initial bushfire clearing requirements and the ongoing bushfire management of the land. The APZ impact should be detailed in these initial investigations. Furthermore, the Planning for Bushfire Protection guideline has undergone substantial changes since Council’s policies were released resulting in an unbalanced relationship.

Urbis identifies that *“the visual character of the Morgan Road streetscape will change depending on the treatment of access road intersections and extent of road reserve tree removal immediately adjacent to the site and retention of vegetation inside and along the boundary of the site”*. A large portion of the streetscape will be bounded by 200m² and 450m² lots which when combined with the APZ requirements will limit what buffer landscaping can be retained or reinstated, and as such the Morgan Road streetscape will be impacted and changed.

Urbis responds to Planning Priority N17 (of The North District Plan) stating that the proposal will allow for “Protection and preservation of mature trees and large areas of native vegetation and habitat on the site” and “preservation of the many rock-shelves”.

The APZ requirements will not allow for the preservation of mature trees and large areas of native vegetation (15% canopy cover and 10% shrub cover for IPA). Furthermore, the preservation of the rock-shelves may be possible but with tree canopy and understorey vegetation removed for bushfire compliance, the landscape character of the rock-shelves will be diminished and will be at risk of becoming icebergs in a landscape rather than an integrated natural feature.

Likely Infrastructure Demand

The proposal and resulting increase in population will generate demand for local infrastructure including community facilities, library services, open space, active transport and the road network. The planning proposal does not adequately consider this demand.

For the purposes of quantifying likely infrastructure demand for the additional population generated by the development, it has assumed the development outcome will be 450 additional dwellings without seniors housing. Based on the *Social Impact Assessment* (Gyde, Section 6.2 Demographic Characteristics) for Belrose the average number of people per household is 2.9 and the average number of motor vehicles per dwelling is two. Based on these rates per dwelling, Council calculates that this development of 450 new dwellings will result in an additional anticipated population of 1,305 people and 900 cars.

Conversely and without supporting calculation, Gyde advises that *“The increase in population because of the project is estimated to be 1,428, which is considered to have a minor impact on the demand for services and infrastructure.”* (Social Impact Assessment, p44).

The additional 1,305 people in the Morgan Road Planning Proposal generates demand for the following local infrastructure:

- Community Facility floorspace (social infrastructure)
- Library Services floorspace (social infrastructure)
- Open Space (active and passive)
- Active transport
- Traffic infrastructure

Demand for Community facility floorspace

Based on the population demand, the community floorspace required for the increased population resulting from the proposed development would be 104.4m². This is calculated using the ratio adopted in the Northern Beaches Community Centres Strategy (the Strategy). The planning proposal would add to the current gap in floor space provision in Frenchs Forest (which in 2020 is 468m², and by 2036 is estimated to be 1,695m² accounting for anticipated growth (but excluding additional demand from new developments).

The Strategy identifies working with the State Government to plan for an integrated facility as part of the Frenchs Forest Town Centre Masterplan. In the Masterplan, the Town Centre would include a District- level

facility with 1,124m² of floorspace, however that additional floorspace still leaves a significant gap for the Frenchs Forest catchment area. The Lizard Rock Planning Proposal would further increase this gap to a total of 909m².

A Cultural Community Centre is incorporated as a key element of the planning proposal. This is discussed in the Social Impact Assessment as a key piece of social infrastructure that can provide positive social, economic and cultural outcomes. The facility is referred to using several different names and lacks specifics about the design and delivery timeframe making it difficult to quantify its potential impact.

Further detail of this facility, including the design and availability of spaces for community and when it will be delivered, is necessary to determine the extent of the potential positive impacts and understand how it can work towards contributing to the current and forecast under supply in Community Centre space in the Frenchs Forest area.

Demand for Library Services floorspace

Based on the widely used and accepted benchmark, People Places State Library NSW, the Planning Proposal will result in demand for an additional 43m² of library floorspace.

Both existing nearby libraries (Forestville Library, and Glen Street Library, Belrose) provide less than half the recommended floorspace for the existing catchment population in the Frenchs Forest planning area. Currently, the floorspace gap is 788m² GFA. If this Planning Proposal proceeds with the anticipated 450 dwellings, the gap in library floorspace increases to 831m² GFA.

There is currently no option to deliver additional library floorspace in the existing facilities or on this site.

Demand on Open Space Areas (Passive and Active)

This Planning Proposal will require its own open space areas commensurate with the demand from this development alone, as the subject site is not located within easy walking or riding distance to any existing or planned, future recreational open space areas, and all existing and planned open space areas in Belrose, Forestville and Frenchs Forest only account for the current population, background growth and planned population under the Frenchs Forest Place Strategy.

The Planning Proposal includes *“a total of seven (7) new public open spaces for a variety of uses including picnic and BBQ areas, children's playgrounds, shelter, lookout points and tree reserves”*. (p.63). These areas include riparian corridors and nominal areas at road intersections that are seemingly connected by a future pedestrian/cycleway network.

Delivery of these passive open space areas remains uncertain given that much of the land is proposed R2 Zone and there is no clear link to existing recreational open space areas and sportsgrounds identified on the Draft Structure Plan submitted with the planning proposal. To ensure certainty that the identified open space and pedestrian/cycleway networks within the site are delivered in a timely manner, the Draft Structure Plan should be referenced in a statutory provision.

Regardless of zoning and ownership (now or in the future) the recreational value of riparian corridors is limited as their primary utility is environmental protection.

The additional population resulting from this Planning Proposal will generate demand for a new playground which should be accommodated and notated within the open space areas identified on the Draft Structure Plan. As this infrastructure is only required to support the development under this Planning Proposal, this infrastructure should be delivered by direct provision. (The draft Northern Beaches Open Space and Outdoor

Recreation Strategy and Action Plan, exhibited in June 2022, identifies a general benchmark of 1 playground per 1,300 people).

The additional demand for active recreation (particularly sportsgrounds) generated by this Planning Proposal will further increase this existing deficit. The location of the closest sportsground to the subject land is Wyatt Reserve, Belrose. This field is fully allocated to summer and winter sports and cannot be increased above its current use.

Active transport

Council notes that the Urban Design Framework (Cox) and Figure 7 in the Planning Proposal (Gyde) shows a pedestrian and cycleway network within the development that connects to Council's planned network District Route within the Forest Way road corridor to connect from the new Frenchs Forest Strategic Centre to Terrey Hills village. The pedestrian and cycleway network within the proposed development would need to be delivered by direct provision. To ensure certainty that the network within the site is delivered in a timely manner, the Figure 7 in the Planning Proposal should be referenced in a statutory provision.

It is confirmed that, in accordance with the principles of Council's MOVE Transport Strategy, access to the public transport network is required including bus infrastructure at key locations along Morgan Road, and kerb and gutter along both sides of Morgan Road will be required for the length of the development site and up to the intersection with Forest Way.

Given the steepness of the road, and the requirements for clearing of tree canopy, it is not clear how active transport provisions would work in practice – the proposed infrastructure would be subject to significant urban heat.

Traffic infrastructure

The Planning Proposal is accompanied by a Traffic Assessment, prepared by JMT Consulting. This report includes traffic modelling which purports to demonstrate appropriate access/egress to the site, especially during a bushfire event.

It is unclear if the bushfire evacuation modelling has considered appropriate traffic inputs during an emergency scenario. Deficiencies are identified in the modelling assumptions namely:

- No traffic growth considered along the Morgan Road and Forest Way Corridors.
- The traffic counts used are from 2019 when construction of the road network for the Frenchs Forest Hospital were underway. This may not accurately reflect traffic volumes along Forest Way or other parts of the network pre/post construction.

Concern is raised that consultation on the traffic modelling and assumptions has not occurred with Transport for NSW or Council prior to its completion.

Morgan Road is a key corridor for access/egress to the subject site, particularly in emergencies and is the evacuation route for residents (existing and future) from this location. The submitted evacuation modelling has not accounted for the pre-requisite inputs associated with evacuation to a designated area away from the bushfire threat, instead modelling evacuation onto Forest Way only. An assessment of broader area impacts is required, particularly on Forest Way, to the designated safety area for evacuees.

Morgan Road is currently at a rural standard which reflects the existing traffic volumes. Any future development of this land is contingent upon the upgrade of this road to support development contemplated by this Planning Proposal, in particular its role as an evacuation route. As the need to reconstruct Morgan

Road is generated by this Planning Proposal alone, the full costs of road reconstruction (including kerb/gutter and drainage) of Morgan Road for the entire length of the development site up to Forest Way should be via direct provision.

Refer to further comments below under 'Road infrastructure'.

Infrastructure contributions income

The proposition that the potential future 7.12 contributions levied on this site will provide infrastructure commensurate with the demands of this development is not supported.

The Northern Beaches Section 7.12 Contributions Plan 2022 applies to the subject site. This Plan imposes an infrastructure levy on new development to fund public infrastructure identified in the Plan's works schedule. This infrastructure is provided across the local government area, from Palm Beach in the north to Manly in the south.

A generally accepted principal of local infrastructure planning is that a 7.12 contributions plan is appropriate for existing, infill areas where development and population growth (and the resulting increase in infrastructure demand) is sporadic and difficult to plan for.

The exhibited Planning Proposal (Gyde, 2023: page 35) states:

"The Planning Proposal will facilitate the delivery of new and upgraded infrastructure by way of increased revenue for Council, increased provision of housing, and future Section 7.12 contributions payments required in future development applications. Additionally, proponent-led and funded proposed infrastructure delivery will comprise of:

- *new transport infrastructure comprising road infrastructure,*
- *new social infrastructure including a community cultural centre,*
- *stormwater management infrastructure to improve water quality of Narrabeen Lagoon. "*

The proposal that the potential future 7.12 contributions levied on this site will provide infrastructure commensurate with the demands of this development is false and misleading.

This Planning Proposal has very clear, identifiable infrastructure requirements critical to meeting the demands generated by the development of this site. Most infrastructure requirements are in or immediately abutting the development site and for this reason, should be direct provision.

The exception would be the additional community facility and library floorspace and active open space generated by the additional population for this development, as this cannot be delivered in isolation in the development site.

Voluntary planning agreement

It is unclear with whom MLALC is wanting to enter into a planning agreement. The details of the agreement are unclear and not consistent with Council policy.

The exhibited Planning Proposal (Gyde, 2023) includes Appendix 23: Non-binding Voluntary Planning Offer, dated July 2023.

The following is commentary specific to the MLAC letter to the Department of Planning (DPE) dated 12 October 2022, entitled “Proposed planning agreement” included within the Planning Proposal, an extract of which reads as follows:

“...MLALC propose to enter into a Planning agreement to support the Planning Proposal. This letter provides an outline of the potential contributions that may form the basis of that offer and is provided for the purpose of facilitating future discussions with the Department of Planning and Environment and Northern Beaches Council...”

Planning agreements are a legal arrangement made between a developer and a planning authority to facilitate the dedication of land free of charge, provide a monetary contribution towards a public purpose, or provide any other material public benefit. Planning agreements are:

- voluntary and initiated by the developer, and
- established under a legal and procedural framework set out in:
 - Division 7.1 of Part 7 of Environmental Planning and Assessment Act 1979 (the ‘Act’) and Division 1 of Part 9 of the Environmental Planning and Assessment Regulation 2021,
 - Planning Agreements Practice note (NSW Government, February 2021), and
 - State Voluntary Planning Agreements Process Guide (NSW Government, October 2021).

Council asserts its role as an independent authority to assess a developer’s offer for a public purpose where it is not considered state and regional infrastructure. Confirmation is required regarding whether the developer’s offer is to Council and does relate to a matter of state or regional infrastructure.

The elements listed in the letter are, in the main, critical lead-in service infrastructure facilitating the creation and registration of serviced land ready for sale at market. If not for the development contemplated by the Planning Proposal, the lead-in service infrastructure is not required.

Any on-going maintenance and management of the infrastructure via a Community Title Management Scheme is not a contribution for a public purpose but is the mechanism demonstrating orderly development of the land. The range of infrastructure includes:

- internal road network noting that the collector roads in the internal road network play a role in the evacuation for this development and must adhere with the emergency evacuation strategy to be established for this land,
- the riparian corridor traversing the site
- location of public open space areas distinct from the:
 - open space/protection zone (seemingly associated with the riparian corridors),
 - areas for retained vegetation,
 - conservation area.
- Active transport network and walking trails (within the broader internal road network and open space structure)
- Stormwater management facilities
- The Asset Protection Zones (APZ).

The Planning Proposal identifies minimum Asset Protection Zone (APZ) requirements for the subject site under the Bushfire Protection Assessment (Travers Bushfire and Ecology) which is required regardless of whether the bushfire threat may be outside the development site. The portion of the site fronting Morgan Road (identified as locations N1 and N2) requires an APZ of 24m which is omitted from Figure 1.4 of the Bushfire Protection Assessment. This is because it is opposite Council land (Lot 2 Morgan Road), identified as

urban bushland that cannot be cleared under the Generic Parks Plan of Management (Warringah Council, 2008) and the land would be an identified bushfire threat to the proposal.

Planning for Bushfire Protection (2019) page 28 notes:

“APZs should be contained within the overall development site and not on adjoining lands. APZs on adjoining land are not encouraged. Where an APZ is proposed on adjoining land, a guarantee must be provided that the land will be managed in perpetuity.”

In the event the developer does voluntarily offer to enter into a planning agreement with Northern Beaches Council, the following matters must be accounted for:

- In June 2022, Council adopted its Planning Agreements Policy (Council Policy) and accompanying Guidelines to help guide developers on Council’s preferred approach to planning agreements. The developer should review both documents as it clearly identifies the legal and procedural obligations to be satisfied by the developer, and details the criteria Council uses to assess the Offer.
- The timing of any Offer to Council is now. As the Planning Proposal is being considered by the Department (as the relevant planning authority), an offer to Council is separately considered by Council.

Council already has in place an Affordable Housing Scheme 2021, requiring 10% affordable housing dwellings to be delivered in any residential development uplift. Accordingly, affordable housing contributions resulting from this Planning Proposal must be consistent with Council’s own Scheme and will be part of the statutory provisions effected in a rezoning.

Council’s affordable housing policy requires areas of urban renewal (areas of zoning uplift) to provide 10% affordable rental housing, and yet the Planning Proposal makes no commitment to providing affordable housing, stating instead:

“The proponent will, prior to finalisation to the LEP, confirm and document the proposed mechanism of the delivery of affordable housing. This will involve the consideration of whether the proponent, Metropolitan Aboriginal Land Council, will provide and retain affordable housing at the site as a community housing provider or whether an affordable housing contribution will be provided and whether or not the contribution will be made to an Indigenous Community Housing Provider. It is intended that the viability of any affordable housing provision, whether through provision of housing as community housing provider or financial contribution will be based on a financial viability assessment. The proposed Affordable Housing Contribution rate will be documented and considered prior to finalisation of the LEP”. (Gyde 2023: page 12).

Road infrastructure

The planning proposal provides insufficient information to adequately consider necessary infrastructure to support the development. Council is concerned about the implications resulting from lack of detail, inadequate modelling and wrongful assumptions (some of which are beyond the control of the developer)– and namely how upgrades that would be necessary in Morgan Road, Oxford Falls Road and Oates Place.

The planning proposal is not supported in the current form and requires further information on the compliance with Austroads road geometry and appropriate road long section grades for the proposed road designs given the topography.

No consideration has been given to the broader network impact of an additional 380+ am peak journeys on the road network. Modelling needs to be provided for key decision point intersections along Forest Way for both the am and pm peak periods to ensure the proposal does not exceed the network capacity.

Aside from the inadequacy of the existing modelling and evidence base, Council is particularly concerned about the prospect of a developer seeking to compulsorily acquire the community land on Morgan Road to develop a slip lane that can enable evacuation. Not only would this have implications for the existing aged care facility; it would also set a highly inappropriate and unpopular precedent for public land being taken over for private development purposes.

Other issues of key concern are provided below.

Acquisition of public land for private purposes

There are several significant assumptions regarding road infrastructure that are outside of the developers control to implement, and which have the potential to undermine the viability of the project as a whole. These are:

- The construction of slip road access from Morgan Road to Forest Way is proposed in Council's Forest Way Buffer strip and will see the loss of traffic/green buffer to Wesley Gardens Aged Care Village. (see below)
- Should the slip lane be constructed as planned, concerns are raised regarding the conflicting movements of vehicles using the slip lane and buses (6 routes using this stop and high frequency services).
- The concept also appears to show no room for the footpath along the eastern side of Forest Way for the relocation the existing footpath without acquisition of land from the adjoining private property.

Slip lane Morgan Road and Forest Way

The Planning Proposal identifies that the Forest Way/Morgan Road intersection will require an upgrade to service the 450 dwellings anticipated by the future development. This intersection upgrade involves the construction of a slip lane into the southbound lane of Forest Way (see Figure 12 below).



Figure 12: Proposed upgrade to Morgan Road / Forest Way intersection (Source: Gyde 2023 Planning Proposal)

The Traffic Assessment (JMT Consulting) identifies that this upgrade is:

- essential to provide the main egress point for evacuation in a bushfire event and
- required to be delivered when 230 dwellings are completed within the development

The land identified to accommodate the future slip lane is owned by Council. To this end, JMT Consulting advises that (p. 25):

- “The land required to facilitate the upgrade is owned by Council and currently zoned RE1 – making it suitable for the purposes of road widening.”

This land, Lots 10 and 11 in DP 807906 (see Figure 13 below), has not been identified in the Planning Proposal document itself. This land is zoned RE1 Public Recreation under Warringah LEP 2011 and is classified Community Land. Currently, Council’s land is part of a broader vegetated buffer along both sides of Forest Way from Morgan Road extending 1.4km south to Dawes Road (see image below). The vegetated buffer provides visual treatment and noise attenuation between the busy road corridor and adjacent developments.

It is inappropriate for this Planning Proposal to assume that public purpose land should be identified for an alternate private purpose without benefit of prior discussions with the authority who owns that land. Council notes that the Planning Proposal is not contemplating acquisition of this land.

Regardless, any proposition to include Council’s land for road widening requires Council resolution as the landowner before contemplating a reclassification of land under the Local Government Act and rezoning of that land to reflect the new public purpose.



Figure 13: Land ownership of proposed ‘slip lane’ from Morgan Road onto Forest Way

The future development contemplated by this Planning Proposal bases its bushfire evacuation strategy on the intersection upgrade being delivered. Resolution of the intersection upgrade with key agencies is critical before a decision to rezone this land is determined. The key agencies being:

- Transport for NSW, as the road authority for Forest Way,
- NSW Rural Fire Service and Emergency Services on the evacuation strategy,
- Northern Beaches Council, as the owner of the land upon which the intersection upgrade is to be accommodated.

Morgan Road

No details are provided regarding the proposed upgrades to Morgan Road or consideration as to the suitability of the Morgan Road geometric alignment.

Morgan Road from the eastern extent of the site to the Forest Way intersection will need to be reviewed as the corridor will change from a rural road to a residential collector road and additional measures will be required to reduce the vehicle speeds in the area based on the change of classification.

Considerable upgrade to existing infrastructure is considered essential to support the proposed development. This includes construction of kerb and gutter, footpaths/shared paths, street lighting, traffic calming, street landscaping and stormwater drainage along the full length of Morgan Road for the frontage of the development site.

An assessment of the geometric alignment of Morgan Road will need to be undertaken to identify any deficiencies and propose solutions to correct those deficiencies, including vertical and horizontal curve radii, sight distance, and intersection safety.

Adequate corner splays at the intersection of proposed internal roads with Morgan Road will be required to enable to construct roundabouts at those intersections as part of the development to facilitate safe traffic movement.

The road carriageway proposed in Oates Place must be constructed to public road standards as must the road from Morgan Road to Lot 955 (towards Perentie Road) and include footpath and cycleway provision for pedestrians from the development site to Forest Way. Provision of a signalised pedestrian crossing at Oates Place may be necessary.

Public Road access will be required to be constructed to provide access to Lot 954 & Lot 955 given the absence of any right of carriageway of existing Lots 944 and Lot 945 after Crown Land was converted to MLALC.

Oxford Falls Road

Transport assessment undertaken by JMT Consulting considers that 30% of the traffic generated by the proposed development would travel east along Morgan Road and Oxford Falls Road to Wakehurst Parkway. However, no assessment is provided regarding the impact of this increased traffic on the section of Morgan Road, Oxford Falls Road and the intersection of Wakehurst Parkway.

Work would be required to be undertaken to ensure the road and intersection can operate at an acceptable level of service. This includes the need to upgrade all weather/extreme weather access (flood, fire, etc) with upgrades to Oxford Falls Causeway (multicell culvert or single span bridge) and intersection of Oxford Falls Rd and Wakehurst Parkway (traffic signals or roundabout) allowing the removal of the causeway flood gates.

The proposed development would also need to demonstrate that it does not impact down stream flood levels at Oxford Falls Road/Morgan Road Bridge and that flow and velocities do not impact stream bank erosion along Oxford Falls Road.

Road slope

There are a number of proposed roads to be constructed down the valley slopes, and whilst no design details have been provided, road gradients will be in excess of the maximum grades recommended by Austroads (section 8.5.3) which are 9-10%. The Transport Assessment by JMT Consulting has not addressed this potential issue and the feasibility of road construction within the valley slopes.

There are no details as to the excessive grades, safety and suitability of the road construction and whether proposed roads comply with Australian design standards. Additionally, to achieve complying gradients, excessive cut and fill will need to be undertaken resulting in excessively high retaining walls of which no detail has been provided.

Detailed investigation and assessment of slope stability risk at the development site is required to inform the implementation of slope stability remedial works to reduce the risk levels to an acceptable level. All slope stability remedial works are to be fully contained in the property and not in public road reserve.

Public transport infrastructure

Infrastructure to support public transport is considered essential given some dwellings are proposed to be located 1km to 2km from the nearest bus stop on Forest Way. The local bus operation shall be required to design a road network that accommodates and provides a loop service through the subdivision to provide access to public transport. The proponent shall also be required to provide illuminated bus shelters at each bus stop. The internal community title road network to be designed accordingly.

No detail for the provision of Active Transport infrastructure is provided in any of the supporting documents along the key routes in Morgan Road and Forest Way. The Morgan Road corridor is listed as part of the road cycling network; however, this predates the proposal and as such a review of the network is required should the proposal be approved.

General/ Infrastructure Upgrades

Considerable studies and implementation of upgrades to existing infrastructure is considered essential to support the proposed development. This includes:

- Transport assessment undertaken by JMT Consulting considers that 30% of the traffic generated by the proposed development would travel east along Morgan Road and Oxford Falls Road to Wakehurst Parkway. A queue length and Safe Stopping Distance analysis will be required at this location.
- The assessment of the intersection of Oxford Falls Road and Wakehurst needs further analysis as the sidra results don't seem to indicate the actual site performance and the council would require the SIP files to undertake a suitable review of the model along with the base counts to support the input for the development of the model.
- The traffic signals at Morgan Road and Forest Way will need to be upgraded as part of the enabling works and will need a UPS to ensure signals and camera (Full ITS) are functional at all times to allow emergency operations in all conditions.
- Undertake the assessment of the impact of the increased traffic on the operation of the intersection at Oxford Falls Road and Wakehurst Parkway and undertake the required work to operate the intersection at an acceptable level of safety and service.
- Construction of kerb and gutter, footpaths/shared paths, street lighting, traffic calming, street landscaping and stormwater drainage along the full length of Morgan Road for the frontage of the development site.
- An assessment of the geometric alignment of Morgan Road will need to be undertaken to identify any deficiencies and propose solutions to correct those deficiencies, including vertical and horizontal curve radii, sight distance, and intersection safety.
- Upgrade all weather/extreme weather access (flood, fire, etc) with upgrades to Oxford Falls Causeway (multicell culvert or single span bridge) and intersection of Oxford Falls Rd and Wakehurst Parkway (traffic signals or roundabout) allowing the removal of the causeway flood gates.
- Demonstrate the proposed development does not impact downstream flood levels at Oxford Falls Road/Morgan Road Bridge and that flow and velocities do not impact stream bank

erosion along Oxford Falls Road

- Any existing crown road reserve with Council public road carriageway will require the gazettal and transfer to Council.
- The road carriageway proposed in Oates Place must be constructed to public road standards as must the road from Morgan Road to Lot 955 (towards Perentie Road and include footpath and cycleway provision for pedestrians from the development site to Forest Way. Provision of a signalised pedestrian crossing at Oates Place may be necessary.
- Public Road access to be constructed to provide access to Lot 954 & Lot 955 given the absence of any right of carriageway of existing Lots 944 and Lot 945 after Crown Land was converted to MLALC.
- Carry out the detailed investigation and assessment of slope stability risk at the development site and ensure to implement required slope stability remedial works to reduce the risk levels to an acceptable level. All slope stability remedial works are to be fully contained in the property and not in public road reserve.
- Undertake the upgrade of the section of Morgan Road abutting the development site including the construction of stormwater drainage and kerb & gutter.
- Provide adequate corner splay at the intersection of proposed internal roads with Morgan Road to enable the construction of roundabouts at those intersections as part of the development to facilitate safe traffic movement.

Traffic, active transport and parking

The modelling fails to consider impacts on the broader Morgan Road corridor. No Morgan Road upgrades are proposed. Active transport planning is insufficient, appearing as an afterthought rather than the focus for the new development as required under Council's MOVE Strategy.

Traffic Modelling

The traffic modelling undertaken to support the planning proposal only considers the intersection of Forest Way and Morgan Road and does not consider the cumulative impact on the Morgan Road corridor. The assumption of no traffic growth along the corridor indicates a lack of understanding on the network issues, impacts of recent projects and how the traffic performance is affected within broader region.

The intersection performance in the morning peak increases the northbound queue length by 153.8 m (or 21 vehicles) and results in a further reduction in through traffic speed from 39.6km/h to 30.6km/h in the 80km/h zone. The modelling provided is focused on the traffic generation from the development filtering through into the existing road network not the impact the development proposal has on the existing road network.

There is also no modelling of the intersection of Oxford Falls Road and Wakehurst Parkway (known blackspot location). There is also no supporting modelling to demonstrate no net impact on the adjoining intersections along the Forest Way or Wakehurst Parkway corridors.

Substantial road network modelling needs to be provided to determine whether the proposal can be supported or whether further works are required along the road network. The example of this is the left turn option proposed has no supporting information around the impact of pedestrians crossing on the free flow of traffic, especially given the demographic of the adjoining population in the seniors living developments adjoining the site.

Active transport

The provision of Active Transport connectivity is mentioned briefly in the document, however the main focus for the proponent seems to be a car-based transport project, contrary to Council's adopted position on developments focusing on use of public transport as the first option. The proposed active transport options appear to be an after thought to tick the compliance box.

Council would be expecting full integration with the principles of the MOVE Transport Strategy providing for place within the residential streets (without compromising the access for emergency services) and substantial connectivity to the public transport services along Forest Way without making the regional movement corridor performance worse than the current level.

Based on the residential population forecast increases as part of the development and the adjoining development capacity, solutions to access public transport need to be considered. This should include suitable bus infrastructure at the three main points serviced at the intersection without it affecting the operational capacity of the road network with increase passenger loading times.

Future detailed proposals are to include details of suitable interchange facilities between Active and Public Transport modes, along with details on the Active Transport connectivity to suitable local services, such as shops, medical services, schools and community recreational facilities.

Parking Provision

All dwellings are to provide suitable onsite parking to facilitate the public domain amenity expected by the community. On street parking is to be managed in accordance with Council's guidance that this is for the short-term use of residents and visitors, not the long-term storage of vehicles, trailers and other non-motorised items. This includes both public and community titled roads proposed in the development footprint and curtilage of the proposal.

Kerb and gutter, inclusive of the construction of a suitably designed scheme (below) to address traffic speed, provide clear delineation of parking and traffic lanes along the full site frontage in Morgan Road and extending to the Forest Way intersection needs to be provided by the development to manage the interface between the development and the existing public road.

Traffic Management

Where the development induced traffic joins with the existing public road corridor, suitable traffic facilities are to be provided, in the form of roundabouts, with mid-block devices to be included to provide a self-enforcing precinct maximum design speed of 40km/h on all roads adjoining the precinct.

Public Transport

Any proposal submitted will need to be further assessed on the latest service provision, timetable and patronage numbers. The applicant is required to liaise with the TfNSW and the service provider to determine whether the development will require additional servicing along key routes.

Bushfire Evacuation Modelling

The bushfire evacuation modelling assumptions are considered preliminary and further evidence-based modelling is required prior to this being supported. Consideration of local fire behaviour and multiple scenarios needs to be considered to determine the most appropriate evacuation plan and impact on the road network in the bushfire prone interface area.

The traffic modelling provided for the emergency evacuation of the proposed precinct does not meet the requirements to demonstrate the real time evolving situation and does not consider the broader area

impacts. The modelling only resolves the evacuation of the precinct with no consideration given or demonstrated on how the emergency situation would evolve on a variety of scenario events.

The applicant is required to consider a worst case scenario of full evacuation including traffic from the areas to the north simultaneously being evacuated along Forest Way, movements required to facilitate the assisted evacuation of the nearby Seniors Living developments and the inability of traffic to filter through the network to the north, west and east.

Modelling of bushfire evacuation is to include the full route to the area designated as the community safer place, in this case Lionel Watts Recreation area, and on to the main exit corridor of Warringah Road to identify any obstructions to a full timely evacuation.

Stormwater management / flood

The planning proposal provides insufficient information to adequately consider the proposed stormwater detention system and test the claim that the system would mitigate any increase in stormwater quantity and quality.

Stormwater Management Plan, Morgan Road, Belrose and Flood Impact and Risk Assessment, Morgan Road, Belrose, both dated September 2022 and prepared by Craig and Rhodes, were submitted with the planning proposal.

The submitted Stormwater Management Plan states it complies with Council's Water Management for Development Policy. However, it is unclear how the plan addresses the stormwater detention requirements of Council's policy for the proposed development to ensure post development stormwater flows are less than pre development flows. The development footprint is to include all housing lots and the road network. The Stormwater Management plan also needs to demonstrate that the water quantity objectives/measures can be achieved given that the majority of the land features challenging topography and steep slopes.

It is recommended a peer review of the Stormwater Management Plan's water management strategy (quality and quantity) be undertaken to demonstrate that all the objectives of Council's Water Management Policy for Development and the claim that the stormwater system would mitigate any increase in stormwater quantity and quality.

In order to manage stormwater runoff, the development proposes to have detention and bioretention systems on each lot while runoff from the roads are proposed to be managed at source. The stormwater management approach is to have two rainwater tanks on each lot. The second 5kL tank leaks to a 10m² bioretention system. At a street scale, cross street roads are proposed to be treated by bioretention systems and sub surface storages. Roads adjacent to riparian zones are proposed to be treated via infiltration systems. An XP-RAFTS hydrological model and two dimensional TUFLOW hydraulic model were used to assess the pre and post development conditions at the site. The results indicate that the 1% AEP post peak flows are similar to pre-development flows.

Due to the site constraints, including steep grades and geotechnical conditions, Council is concerned with how the systems will perform overtime. How will the systems be maintained and what impact will no maintenance have on their long-term performance? How will the detention/bioretention systems function in areas of high bedrock and minimal soil depth? Is there a potential for subsurface water to cause landslips or undermine downstream structures?

Council has concerns that the planning proposal could have long term adverse or cumulative impacts on flood behaviour (onsite with R2 development and the downstream environment). Council must be satisfied that

the proposed systems can reduce post development flows to predevelopment levels over the life of the development.

More information is required including, but not limited to: undertaking more detailed flood modelling (pre and post), providing the actual flood models, details of all parameters included in the model, detailed report confirming constructability, detailed operational report including demonstrating how all stormwater, WSUD and detention (anything for managing potential adverse flood effects) will be maintained in perpetuity. This must be conducted in accordance with all relevant guidelines and manual to satisfy Council, and sufficient time is needed to conduct a detailed assessment of the model including civil constructability and ongoing maintenance feasibility.

Council would recommend a peer review of the Flood Impact and Risk Assessment and the Stormwater Management Plan. The Flood Report notes that the proposed development areas and roads are above the PMF event. As such, the houses would provide shelter during large flood events. The Planning Proposal should be referred to the State Emergency Service (SES).

Social and Economic Impact

Council considers the overall social impact resulting from the proposal to be extremely negative, and strongly correlated to the exposure to bushfire risk, poor urban design, and extensive and expensive infrastructure requirements (with capital and ongoing costs to be carried by the future residents). Based on the above analysis of these factors, we find the social impacts to both future residents, wider community and other key stakeholders (namely the local Aboriginal community, RFS, and ratepayers more generally) to be strongly prohibitive to the social viability of the proposal.

Social, financial and physical health of future residents

Risks to human life and property - There are significant risks to life and property due to increasing likelihood of bushfires and extreme weather conditions and lack of evacuation options.

Significant financial risks – the bushfire risks are likely to be exacerbated by financial strains related to the need to provide and maintain extensive infrastructure as well as uncertainties about obtaining insurance – and hence also likely uncertainties about mortgage requirements and resell values. It is unlikely that future residents (and potentially even developers themselves) would be able to obtain required insurances as they are located in a bushfire area; and if insurance is not an issue now, it is likely to become one in near future (see also Meridian’s consideration of residual risk at Appendix 4)

Social isolation impacts - The development will be socially isolated with minimal opportunities for neighbour interaction or development of social cohesion (which also is a fundamental aspect of resilient communities).

Urban heat and poor wellbeing - Located inland in a valley, with very little tree canopy and shade, the development is significantly exposed to urban heat. Research shows that urban heat is one of the biggest threats to wellbeing in a heating climate (and a larger risk than e.g. bushfire risk).

Poor physical health outcomes: lack of useable, shaded, connected and appropriately graded active transport infrastructure, as well as minimal open space and recreation facilities, is likely to create a car-dependent enclave that is prohibitive of healthy living.

Affordable Housing

The planning proposal is not consistent with the Council’s Affordable Housing Strategy. It is unclear whether housing proposed would meaningfully impact on housing affordability in the area.

Council's LHS identifies a significant undersupply of affordable housing on the Northern Beaches to support key and essential workers, and through Councils adopted Affordable Housing Policy aims for the provision of 10% affordable rental housing in areas subject to urban renewal or greenfield development (areas of zoning uplift). This is reinforced through Council's LSPS, which contains several principles and actions in relation to social and affordable housing, including seeking a minimum of 10% affordable rental housing to be included in new planning proposals, consistent with Council's existing Affordable Housing Policy.

Council's affordable housing policy requires areas of urban renewal (areas of zoning uplift) to provide 10% affordable rental housing, and yet the Planning Proposal makes no commitment to providing affordable housing, stating instead:

"The proponent will, prior to finalisation to the LEP, confirm and document the proposed mechanism of the delivery of affordable housing. This will involve the consideration of whether the proponent, Metropolitan Aboriginal Land Council, will provide and retain affordable housing at the site as a community housing provider or whether an affordable housing contribution will be provided and whether or not the contribution will be made to an Indigenous Community Housing Provider. It is intended that the viability of any affordable housing provision, whether through provision of housing as community housing provider or financial contribution will be based on a financial viability assessment. The proposed Affordable Housing Contribution rate will be documented and considered prior to finalisation of the LEP". (Gyde 2023: page 12).

Further information about the mix and quantum of housing types delivered through the development and the delivery mechanism and quantity of affordable rental housing is required to determine if this development would meaningfully impact on housing affordability in the area.

Economic impact

Comparing the latest version of Economic Impact Statement (EIS) (Feb 2023) in the exhibited Planning Proposal, with that submitted with the previous draft Planning Proposal (dated Sept 2022), the key change is the removal of reference to the 5,030sqm of floorspace for neighbourhood service/amenities throughout the document.

The estimated employment generation for the proposal is now as follows – see extract from exhibited Planning Proposal EIS below.

Table 3: Estimated Employment Generation, Subject Land (i.e., Planning Approval)

Land uses	Yield	Employment Density	Potential Employment Dividend
Aboriginal Cultural Centre - direct	400-500 sqm GFA ⁷	70-90 sqm per employee	5 to 6
Indirect jobs			4 to 5
Total			9 to 11

Source: Macropian

The EIS Feb 2023 version (in 3.3. Post-development – Other Local Employment) does identify 60-70 direct jobs and about 40-50 indirect jobs, arising from the increased spending from new households at local businesses in the Frenchs Forest-Belrose SA2 area with the centres at Glenrose Village, Forestway Shopping Centre and Belrose Super Centre in particular benefiting from this.

Confusingly however, the Feb 2023 Social Impact Assessment does still reference 5,030sqm floorspace for neighbourhood services/amenities (p17), and concluding *"The planning proposal is highly likely to increase the services and service levels provided in the community, with 5,030sqm of floorspace for neighbourhood service/amenities and associated new public space"*.

The EIS Feb 2023 version does clarify that there will be no retail on the proposed site, but rather that there will be growth in demand for retail floorspace/jobs in surrounding commercial centres, as a result of the proposed 450 dwellings. The only direct on-site employment from the planning proposal would therefore be 5-6 jobs in the Aboriginal Cultural Centre. This would address Council's concerns in my response about potential impact of retail development within the proposed site on surrounding commercial centres. However, the initial EIS was ambiguous about this and in reality very little 'direct' employment generation from the proposal.

Social impact

The planning proposal provides insufficient information to determine the likely social impacts (positive and negative) of the proposed development, and effectiveness of the mitigation strategies claimed.

Population increase and service demand

The Social Impact Assessment, Morgan Road, Belrose, October 2022, prepared by Gyde Consulting and submitted with the planning proposal, identifies an estimated increase in population from the development of 1,428 people, however there is no further breakdown of this estimated population increase provided. (Note comments earlier in this submission which query the estimated population calculated).

It is therefore difficult to forecast the associated increase in demand for services and social infrastructure in a meaningful way without understanding the population breakdown, e.g. service age groups. Services and infrastructure of particular note would be childcare centres, schools, and community centres.

Refer also to comments in this submission and 'Likely Infrastructure Demand'.

Community engagement as social impact mitigation

The Social Impact Assessment identifies community engagement as a mitigation strategy for a number of the identified impacts of the development including: Existing and future community sense of identity and belonging, and Increased population impacts. Further information is required to understand what community engagement is proposed and how this can effectively mitigate those impacts.

Inadequate Consultation

The engagement on the DDP and the Planning Proposal has been extremely poor and fails to meet the most basic standards for good consultation, as per the IAP2 public engagement framework as well as DPE's own Community Participation Plan. See text box to the right with an overview of all engagement activities carried out to date.

The Planning Proposal cannot claim to represent the interests of Aboriginal people, when only five (5) Aboriginal people have been consulted on the DDP (of which at least one is themselves a member of the MLALC and hence may have a vested interest in the proposal).

According to the Planning Proposal, no Aboriginal people (outside of MLALC) have been consulted on the draft Planning Proposal. While it is noted that this is not a statutory requirement, it is nevertheless important to consider the extent to which the development of 450 dwellings on land of such high cultural sensitivity is supported by the local Aboriginal community, and the wider Aboriginal community who have an interest in protecting cultural heritage into the future.

Consistent with the LEP Planmaking Guidelines, we therefore call upon the Planning Proposal Authority to hold a public hearing in respect of the proposal.

Summary of engagement to date

- one webinar 17 February 2022 held through Adobe Connect – attended by 91 people (DPE Finalisation Report, page 7)
- One meeting 18 February 2022 with Uncle Alan Madden as an Aboriginal Elder and member of MLALC (Gyde, July 2023 – page 130)
- One public online meeting: 'representatives of the Aboriginal Community across the Northern Beaches LGA were invited to attend an online project briefing' (Gyde, July 2023 – page 130) – note the report does not specify if anyone attended this meeting
- one Aboriginal group 'talk to a planner' session was held on Microsoft Teams on 21 February 2022 and was attended by four **4 people**. (DPE Finalisation Report, page 7) – our emphasis

CONCLUSION

Council contends that the proposed development would put lives at risk, potentially creating uninsurable properties (further affecting the ability of future residents to obtain a mortgage over their homes), and irreversibly impacting more than 44.7 ha of high conservation value bushland.

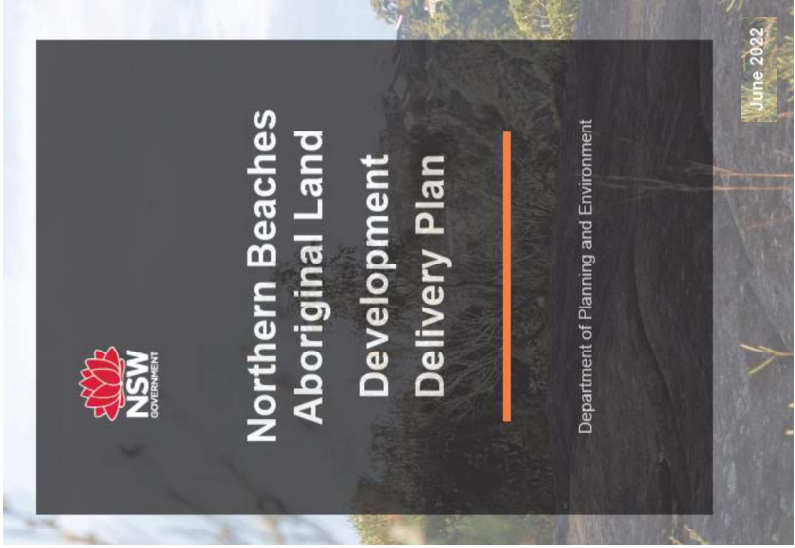
The NSW Government has a duty of care to not put lives at risk, and to protect significant environmental values. For these reasons and related matters regarding the proposal's lack of strategic and site-specific merit, the planning proposal should be rejected. The risks are too high, and likely impacts on future residents and the wider community too great.

The land has burnt in the past (with out-of-control hazard burns in 2014 and surrounding areas burning in the 1994 fires) and is highly likely to burn again in the future, with extreme temperatures and fire weather projected to increase in frequency and intensity. With evacuation routes almost exclusively relying on access to Morgan Road, the 1,300 or so future residents would be isolated in an area that is identified as highest category bushfire risk. Even if the private developer were to be successful in compulsorily acquiring the publicly owned land necessary for constructing a slip lane onto Forest Way there would still be no way to evacuate if an accident were to happen on Morgan Road.

Council strongly opposes the proposal and calls on the Panel to reject it, protect the land in perpetuity via appropriate zoning (as per the Conservation Zones Review) and explore alternate ways of ensuring that MLALC can derive economic benefits from its land in a way that is sensitive to the natural, cultural, environmental and heritage value of this special place. This would likely be more in keeping with the sentiments of the broader local Aboriginal community.

APPENDIX 1 – Excerpts from Development Delivery Plan (DDP)

Excerpt 1: Table of Contents, showing the number of pages (2) relevant to the Planning Proposal (our emphasis in red box)



Contents	
Acknowledgment	3
Disclaimer and Copyright	4
Abbreviations	4
Executive Summary	5
Supporting Economic, Social and Cultural Outcomes for the Benefit of Aboriginal People	6
About the MLALC	8
MLALC Community Land and Business Plan	8
Aboriginal Land Planning Framework	9
Aboriginal Land Rights Act 1983	9
State Environmental Planning Policy (Aboriginal Land)	9
Aboriginal Land SEPP Guideline	10
Development Delivery Plans	11
Role of Planning Panels	11
Planning Circulars	11
Strategic Context	12
Greater Sydney Region Plan	12
North District Plan	13
Northern Beaches Local Strategic Planning Statement	14
Northern Beaches Local Housing Strategy	14
Strategic Assessment of MLALC Lands	15
Northern Beaches DDP Sites	16
Lizard Rock, Morgan Road, Belrose	18
Aquatic Drive, Frenchs Forest	20
Forest Way, Belrose	22
Corymbia Circuit	24
Faxton Street	26
Ralston Avenue	28
Appendices	30
Appendix 1: MLALC Community Land and Business Plan	
Appendix 2: Strategic Assessment - Findings and Recommendations	

Lizard Rock, Morgan Road, Belrose

A short-term opportunity to explore low impact residential, conservation, cultural and recreation outcomes.

Site Description

The Lizard Rock site is approximately 71ha and located on Morgan Road in Belrose. The site includes multiple lots, including Lots 86, 89, 90, 91, 92, 93, 176, 177, 178, 189, 190, 191, 196, 944, 945, 946, 947, 948, 953, 2600 and 2630 all in DP752038, Lot 2 DP 1242330 and Lot 197 DP1153773.

Indicative Constraints Mapping

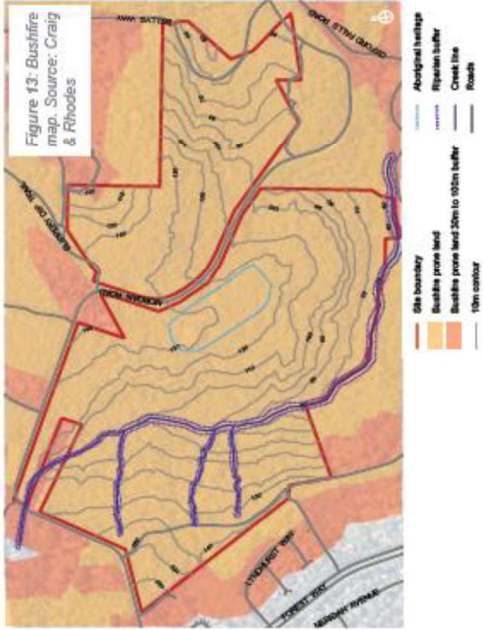
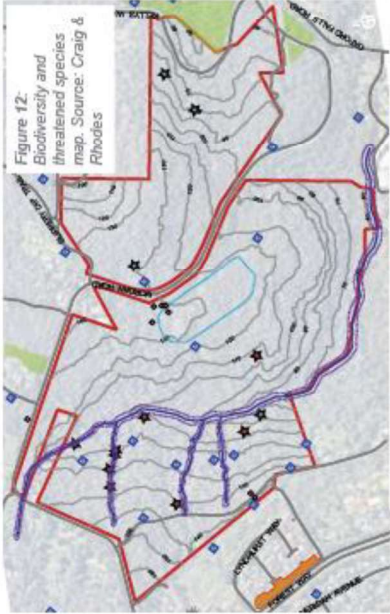
High level constraints mapping (Figures 12 to 15) indicates that the site contains archaeologically sensitive land and an archaeological Potential Archaeological Deposit (PAD) of high significance, pockets of high value vegetation, and various threatened species have been recorded on the site including the Glossy Black-Cookatoo, Large Bent-winged Bat, Little Bent Winged Bat, Powerful Owl, Eastern Pygmy Possum, Red-crowned Toadlet as noted in the Strategic Assessment.

Detailed surveys and comprehensive biodiversity assessment will be required to confirm the presence of threatened species and Ecological Endangered communities (EECs) on the site.

The site contains waterways and riparian corridors which are of ecological significance for threatened frog species, and biodiversity values have been mapped along Snake Creek. The site is within the catchment of Narrabeen Lagoon.

The site is mapped as bushfire prone land and parts of the site in the southern and eastern portion contain steep slopes (over 18 degrees) which is a constraint to development. The Telstra Earth Satellite facility is located to the south of the site and impacts to the facility would need to be addressed in any future development proposal.

The constraints mapping is indicative and further site investigation, including ground truthing and site surveys, is required to confirm site constraints, land capability and areas with high conservation value to be protected.



Planning Opportunities

The site may have potential for a range of uses, including low density housing, new recreation areas, conservation areas, and cultural community space, subject to further investigation. Potential land use and conservation outcomes for the site would be determined through detailed site investigations and comprehensive assessment as part of any planning proposal process.

The site is well located, with access from Forest Way and close to employment, health and educational facilities, including Austlink Business Park, Forestway Shopping Centre, Northern Beaches Hospital, and local schools.

Development within the site could provide for an opportunity for improved conservation outcomes, including arrangements for the ongoing management and protection of bushland areas, riparian corridors, and Aboriginal cultural heritage as part of any development proposal for the site. Upgrades to the Morgan Road and Forest Way intersection, and local road upgrades to Morgan Road, would provide improved access to the site.

The Strategic Assessment indicates there is no flooding, drainage, salinity, acid sulfate soils or land contamination constraints, and there may be potential for sensitively located development along the ridgelines to minimise development in areas with steep slopes and watercourses. Protecting scenic values and landscape character would be an important consideration in any development proposal.

The location, extent and scale of any future development would be informed by detailed site investigations and an assessment of the site's suitability for residential uses as part of a future planning proposal.

Future site investigations and planning process

A planning proposal would be required to facilitate any future development on the site. Detailed site investigations, including environmental studies, biodiversity assessments, bushfire, Aboriginal cultural heritage and archaeological investigations would be required to determine the potential for any future development on the site.

These studies would ensure environmental and archaeological impacts, as well as bush fire risk, are appropriately considered and managed, and would identify areas of high environmental value and heritage significance that should be protected.

The Independent Planning Review prepared by WSP provides further information on the key matters to be addressed in future site investigations.



APPENDIX 2 – Aboriginal Heritage Office submission



Aboriginal Heritage Office

Ku-ring-gai, Lane Cove, North Sydney, Northern Beaches,
Strathfield and Willoughby Councils

29 Lawrence St, Freshwater NSW 2096
Email: aho@northernbeaches.nsw.gov.au
www.aboriginalheritage.org

Monday, 7 November 2022

Aboriginal Heritage Office – Review

Planning Proposal for Lizard Rock, Morgan Road, Belrose

The Aboriginal Heritage Office¹ (AHO) has been requested by Northern Beaches Council to review the above planning proposal and associated documents. It appears a great deal of thought and effort has gone into the proposal and this should be acknowledged. An Aboriginal cultural heritage report has been submitted (Appendix 20: Aboriginal Archaeological Assessment Morgan Road, Belrose, NSW by Dominic Steele Consulting Archaeology). The AHO has only undertaken a preliminary review of this report due to the short lead time and provides the following information that may assist. Some information from an earlier review of Metropolitan Local Aboriginal Land Council land development proposals is presented here again for background.

Land holdings context

It is recognised that the Metropolitan Local Aboriginal Land Council has legal, practical and ethical responsibilities to manage its land in the best interests of the Aboriginal community and the environment.

It should be acknowledged that historically Aboriginal peoples owned and had responsibility for all of the land across Australia. From 1770 this was gradually taken from them conceptually and then physically. The loss of land was unsought and it was resisted. Each generation searched for ways to hold onto or reacquire land and each success lead to a new wave of dispossession. Where Aboriginal people could regroup and live on the margins of the new society, eventually the fringe became new development opportunities for an expanding urban landscape.

With the commencement of the *NSW Aboriginal Land Rights Act 1983*, Local Aboriginal Land Councils could claim vacant crown land, again land that was largely on the fringes and lowest in priority. There were many ways that government agencies and authorities could reject each claim, so that only the claims that had the least arguable utility were actually regained by the LALCs. With time this land has become more valuable in the perceptions of wider society. Private landholders and developers have been given opportunities to rezone and develop land, sometimes with poor environmental and planning outcomes. It is considered only fair that MLALC should be given opportunities to plan and develop its land.

Given the historic injustices and the ways that governments and wider society used their powers and means to exclude Aboriginal people from their own land, it may be appropriate for current governments, agencies and society to provide more help and assistance to Aboriginal people to ensure positive outcomes for them. It may be that with additional assistance and expertise in a spirit of collaboration better outcomes may be produced than simply treating the proponent as a normal developer.

¹ The AHO is a unique partnership of local Councils in northern Sydney working to protect and promote Aboriginal heritage and history. The local government Aboriginal heritage position created in 2000 and shared initially by four Councils was a first for Australia and has steadily grown to a strong collaboration of six Councils (including the amalgamated Northern Beaches).

Some key points:

- This is a large land parcel and there is an opportunity to provide good environmental and urban outcomes that would not be possible with smaller or individual landowners.
- MLALC is operating for its members as a community organisation, not simply for the profit of a single company or family, and this gives scope for a greater net benefit across the community.
- There is increasing expectation in the wider community that Aboriginal communities should be given a fairer go in relation to correcting past wrongs and in protecting cultural heritage.

Challenges

- It is likely that the majority of Aboriginal people living in NBC, whether members of MLALC or not, may not wish any bushland to be developed.
- There is a high expectation by the wider community that Aboriginal people should not develop bushland regardless of the merits and regardless of the equity issues.
- Bringing the urban fringe closer to Aboriginal sites will put them at greater risk of damage from visitation, graffiti and vandalism.

What is required in terms of Aboriginal cultural heritage?

An Aboriginal cultural heritage report (Appendix 20: Aboriginal Archaeological Assessment Morgan Road, Belrose, NSW by Dominic Steele Consulting Archaeology) has been provided as part of the planning proposal. The AHO has carried out a preliminary review and considers that there are a number of issues that require further clarification.

The AHO considers that the archaeological report does not provide sufficient information to address the main issues adequately, ie about the known Aboriginal sites and the potential for unrecorded sites. There is a great deal of background information for the region but much less information provided about the survey work, the current sites in their context, best management options for the site and steps for further investigation.

The main rock engraving sites west of Morgan Road appear to be wholly within the proposed conservation zone, however, the maps provided show the sites and the buffer zone to be further west than the AHO understands the engravings to be. The only site mapping provided in the report is of a very general nature and likely to be inaccurate.

The rock engravings east of Morgan Road do appear to be more correctly mapped, however, the conservation zone status of these sites is unclear as it is mapped across different proposed zonings.

The report notes that the area was visited under different survey conditions but does not provide information whether night recording / wet rock survey for engravings was undertaken. There is no map of survey units provided.

MLALC is not proposing the damage or destruction of any Aboriginal sites. However, given that the rock engravings are well known and are likely to be incorporated into a managed visitor experience, it seems a lost opportunity to not have included more information in this report at this stage as to how the sites will be protected. The only photos of the sites in their current context are not very clear or detailed. The Urban Design Framework document (Appendix 6) actually provides better quality images of some of the sites (photogrammetry) and it would be expected that this level of recording would be utilised to properly document the heritage sites and demonstrate how they will be protected.

While the proposed conservation zone for the main platform is identified, ideally there would be more discussion as to whether there is sufficient space to provide formal walking areas, protective barriers and signage.

If the rock engravings become a centrepiece of the area, there needs to be careful planning to allow for controlled visitation, surveillance, a management program to ensure graffiti can be removed and to highlight the figures to make them easier to see. Ideally a mechanism would be put in place to allow an authority, such as the land manager or a MLALC department, to have a permit to carry out basic non-harm management as the current system requiring a Heritage NSW officer to be present is very slow and impractical. None of this information is presented in the report or proposed to be included at a later assessment/management stage.

It is recommended that comprehensive site management plans are prepared for the known sites, including more detailed recording to provide a contemporary baseline recording. Highlighting (non-impact cleaning of the grooves under Heritage NSW authorisation) should be carried out as part of the recording process.

Overall, the report provides only basic information about the known sites and potential for unrecorded sites and misses the opportunity to demonstrate the significance of the sites and how the proposal can safeguard them from current and future impacts.

In summary, it is recommended that further detail be provided about the known Aboriginal sites and the potential for unrecorded sites, particularly in relation to the survey work, the current sites in their context, best management options for the site and steps for further investigation.

Aboriginal Heritage Office

Ku-ring-gai, Lane Cove, North Sydney, Northern Beaches, Strathfield and Willoughby Councils

APPENDIX 3 – Blackash Independent bushfire report submission



Independent Bushfire Review

Planning Proposal Morgan Road, Belrose

Prepared for
Northern Beaches Council



10 November 2022

Version V1.0



Document Tracking

Project Name:	Bushfire Review Morgan Road, Belrose		
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Version	Primary Author(s)	Description	Date Completed
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Fire Protection Association of Australia BPAD Level 3 BPD-PA 16373



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Contents

Glossary of Terms	4
1. Introduction	6
2. Credentials	9
3. Strategic Planning for Bushfires	10
4. Legislative Framework	12
5. Review of Documents	13
5.1. Gyde Planning Proposal Morgan Road Belrose October 2022	13
5.2. Bushfire Protection Assessment – prepared by Travers Bushfire & Ecology	16
5.3. Strategic Bushfire Study, prepared by Travers Fire and Ecology – not received	20
5.4. Transport Assessment, prepared by JMT Consulting, September 2022	25
6. Conclusion	28
Appendix 1 References	29
Appendix 2 Curriculum Vitae Lew Short	30
Appendix 3 Planning Direction 4.3 Planning for Bushfire Protection	32
Appendix 4 Requirements of a Bush Fire Strategic Study (PBP p. 35)	34

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Glossary of Terms

This section defines those core terms and concepts which are adopted throughout the body of this report.

Term	Definition
Asset Protection Zone (APZ)	A fuel-reduced area surrounding a built asset or structure which provides a buffer zone between a bushfire hazard and an asset. The APZ includes a defensible space within which firefighting operations can be carried out. The size of the required APZ varies with slope, vegetation and FFDI.
Bushfire	A general term used to describe fire in vegetation, includes grass fire.
Bushfire attack mechanisms	The various ways in which a bushfire can impact upon people and property and cause loss or damage. These mechanisms include flame contact, radiant heat exposure, ember attack, fire wind and smoke.
Bushfire Attack Level (BAL)	A means of measuring the severity of a building's potential exposure to ember attack, radiant heat, and direct flame contact. The BAL is used as the basis for establishing the requirements for construction to improve protection of building elements and to articulate bushfire risk.
Bushfire prone land (BPL)	An area of land that can support a bushfire or is likely to be subject to bushfire attack, as designated on a bushfire prone land map.
Bushfire Hazard	Any vegetation that has the potential to threaten lives, property, or the environment.
Bushfire Strategic Study (SBS)	Provides the opportunity to assess whether new development is appropriate in the bushfire hazard context.
Bushfire Threat	Potential bushfire exposure of an asset due to the proximity and type of a hazard and the slope on which the hazard is situated.
Mitigation	The lessening or minimizing of the adverse impacts of a bushfire event. The adverse impacts of bushfire cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures include engineering techniques, retrofitting and hazard-resistant construction as well as on ground works to manage fuel and separate assets from bushland.

Planning for Bushfire Protection 2019 (PBP)	NSW Rural Fire Service publication effective from 1 March 2020 which is applicable to all new development on bushfire prone land in NSW.
Risk	The degree of risk presented by that interaction will depend on the likelihood and consequence of the bushfire occurring. Risk may be defined as the chance of something happening, in a specified period of time that will have an impact on objectives. It is measured in terms of consequences and likelihood.
Risk assessment	A systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking, having regard to factors of likelihood, consequence, vulnerability, and tolerability.
Risk-based land use planning	The strategic consideration of natural hazard risk and mitigation in informing strategic land use planning activities.

1. Introduction

Blackash Bushfire Consulting has been engaged by Northern Beaches Council (Council) to review documents associated with the bushfire aspects of the Morgan Road Planning Proposal. The assessment of the Planning Proposal bushfire aspects has been undertaken impartially and without prejudice. I confirm that I do not have any conflict of interests or pecuniary interest regarding the independent review or in executing my role as providing expertise for Council. In preparing my review, I have not had any meetings or discussions with staff from Northern Beaches Council, the NSW Rural Fire Service or other agencies or bodies about issues pertaining to the Planning Proposal.

The site is shown in Figure 1 (the site) and Figure 2. The site comprises an amalgamation of 22 allotments with a total area of 710,007sqm (71ha).

The site is on designated Bushfire Prone Land and the bushfire provisions for new development area applicable. Strategic planning is the first stage in the planning process. It is needed to ensure that future developments are not exposed to an unacceptable risk of bushfire. For Planning Proposals Section 9.1 (2) Direction No 4.3 of the *Environmental Planning and Assessment Act, 1979* (EPA Act) must be applied. This requires Council or the consent authority to consult with the Commissioner of the NSW Rural Fire Service (RFS) and to take into account any comments by the Commissioner and to have regard to the planning principles of *Planning for Bushfire Protection 2019* (PBP). This has been completed by the applicant and is identified in the Planning Proposal documentation.

In undertaking the review, I have had regard to:

- *Gyde Planning Proposal Morgan Road Belrose October 2022*
- *Bushfire Protection Assessment – prepared by Travers Bushfire & Ecology*
- *Strategic Bushfire Study, prepared by Travers Fire and Ecology – not received*
- *Transport Assessment, prepared by JMT Consulting, September 2022*

Land use planning can be an effective tool in minimising or avoiding the impact of natural hazards such as bushfire. From a risk management perspective, the safest approach is always to avoid high risk areas and to comply with the Planning Direction and *Planning for Bushfire Protection 2019* (PBP).

The intended outcome of the Planning Proposal Gyde p. 18) is to:

implement the Development Delivery Plan for the subject site created under State Environmental Planning Policy (Planning Systems) 2021. The objective of the Planning Proposal is to create a residential community embodying strong conservation principles to support the enhancement of the unique environmental and Aboriginal cultural heritage characteristics of the site.

The intended outcome of the Planning Proposal is to amend the applicable local planning controls to accommodate up to 450 new residential dwellings as well as a new cultural community centre and protection of aboriginal heritage sites.

As identified in the Gyde document (p. 5), 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 additional permitted uses within the appropriate zone for residential land uses such as dual occupancies and seniors housing, as well as community facilities
- introduce maximum building heights (8.5 metres)
- introduce a range of small, medium to large residential lot sizes.



Figure 1 Draft Structure Plan (Source Gyde p.19)



Figure 2 Concept Plan (source Gyde p. 20)

2. Credentials

This independent review has been prepared by Lew Short from Blackash Bushfire Consulting. Current Curriculum Vitae are at Appendix 2.

Lew Short is the Director at Blackash Bushfire Consulting which has been trading for over eight years. Lew is FPAA BPAD-A Certified Practitioner No. BPD-PA-16373 who is recognised by the RFS as qualified in bushfire risk assessment and has been accredited by the Fire Protection Association of Australia as a Level 3 BPAD qualified consultant. A site inspection was completed on Monday 7 November from publicly accessible areas, including Oates Place.

Lew established and led the Community Resilience Group for the NSW Rural Fire Service (RFS). His areas of responsibility included land use planning, community engagement, education, vulnerable communities, bunkers, Neighbourhood Safer Places, business systems and projects, social media, integrated risk management and environmental management. He was responsible for the establishment, management, and leadership of the development assessment function for the RFS at a State level where he was responsible for the assessment of over 80,000 development applications in Bushfire Prone Areas.

At Emergency Management Victoria, Lew was one of three State Risk and Consequence Manager which is an operational role in the State Control Centre of Victoria, to lead and facilitate strategic risk management to support the Emergency Management Commissioner on an all hazards, all agencies basis. The primary responsibility is to ensure state level risks for major emergencies and consequences of emergencies are identified and proactive mitigation strategies are applied to minimise impacts on the state of Victoria. It was responsible informing and supporting strategic decision making for the State Control Team (SCT), the State Emergency Management Team (SEMT), departments and agencies about the potential consequence of State-level emergency risks.

Lew holds several qualifications including undergraduate and post graduate level in environmental management and specialising in bushfire management. Lew is an expert in the bushfire field and can interpret and apply legislation, policy and bushfire requirements while drawing on extensive professional expertise and operational experience.

3. Strategic Planning for Bushfires

Land use planning is widely recognised as an important measure for limiting future vulnerabilities and losses in areas of new development and a critical element for building disaster resilient communities.

The physical design and layout of communities and settlements are central to the many functions that sustain the social, economic, and environmental support systems for the community. Land use planning provides the opportunity to manage new growth and residual risk resulting from new development by complying with legislation and standards, limiting, or modifying the location of new development and influencing its layout. This can limit both the impacts of new development on natural systems, ecosystem services and hazards and the flow on impacts on the existing community, as well as limiting the impacts that natural hazards can have on new development and its users.

The strategic planning system is particularly important in contributing to the creation of resilient, safe, and sustainable communities that are in keeping with the policy and intent of government.

Comprehensive consideration of bushfires and risks in the NSW planning system needs sound understanding of the landscape context and risks, as well as clarity on risk management principles and on the approach to strategic planning and development controls that will adequately mitigate identified risks. Where there are competing policy objectives, such as biodiversity conservation and provision of asset protection zones, an agreed methodology or guidance is critical. Where the required outcomes cannot be provided, PBP notes (p. 34) that strategic planning should provide for the exclusion of inappropriate development in bushfire prone areas as follows:

- *the development area is exposed to a high bush fire risk and should be avoided;*
- *the development is likely to be difficult to evacuate during a bush fire due to its siting in the landscape, access limitations, fire history and/or size and scale;*
- *the development will adversely effect other bush fire protection strategies or place existing development at increased risk;*
- *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; and*
- *the development has environmental constraints to the area which cannot be overcome.*

In a bushfire context, strategic planning must ensure that future land uses are in appropriate locations to minimise the risk to life and property from bushfire attack. Services and infrastructure that facilitate effective suppression of bushfires also need to be provided for at the earliest stages of planning. Passive protection is required to be built into the proposal with the provision of managed areas of vegetation to prevent the spread of fire towards vulnerable built assets. These managed areas are in the form of asset protection zones (APZ) which provide separation from unmanaged bushland or bushfire prone

areas. PBP provides minimum setback distances for residential subdivision (29kW of radiant heat) and Special Fire Protection Purpose (SFPP) development (10kW of radiant heat). The other Bushfire Protection Measures need to be provided within the PP with key considerations being access, emergency management arrangements (i.e., evacuation) and the provision of services and fire fighting infrastructure.

As such, planning decisions must be based on the best available evidence and rigorous merits-based assessment to ensure that new development - people, homes and businesses are not exposed to unacceptable risk from bushfire. The framework provided within PBP provides the minimum requirements for new development within bushfire prone areas.

Improved land use planning decisions and building controls for developments in bushfire prone areas are intrinsic to an integrated approach to the bushfire management in NSW. The application of legislation, policy, and guidelines provides one of the most effective means of bushfire planning to ensure future developments are resilient and capable of protecting life.

The importance of sound land use planning has been recognised in most significant bushfire inquiries, including Natural Disasters in Australia which noted that land use planning that considers natural hazard risks is the single most important mitigation measure in preventing future disaster losses in areas of new development, and that planning, and development controls must be effective, to ensure that inappropriate developments do not occur¹.

The Strategic Bushfire Study (SBS) as provided by Travers Bushfire and Ecology is a strategic level assessment, requiring a balance between providing sufficient information to determine the suitability of the site, without overly burdening proponents with detail to be managed / finalised at subsequent DA stage. PBP (p. 19) notes that:

The most important objective for strategic planning is to identify whether new development is appropriate subject to the identified bushfire risk on a landscape scale. An assessment of proposed land uses and potential for development to impact on existing infrastructure is also a key element of the strategic planning process in bushfire prone areas. Land use planning policies can be introduced to limit the number of people exposed to unacceptable risk.

PBP does not articulate threshold limits for what constitutes an unacceptable risk.

Once development has been assessed as being appropriate in its bushfire prone context, it will need to be capable of complying with PBP. The ability of proposed land uses and associated future developments to comply with PBP will be assessed at the strategic planning stage. The expectation will be that the subsequent development will be able to comply with PBP at the DA stage.

¹ Ellis, S et al (2004) National Inquiry on Bushfire Mitigation and Management (p.92)

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4. Legislative Framework

The site is on designated Bushfire Prone Land and the bushfire provisions for new development area applicable.

Strategic planning is the first stage in the planning process. It is needed to ensure that future developments are not exposed to an unacceptable risk of bushfire. For Planning Proposals Section 9.1 (2) Direction No 4.3 (see Appendix 3) of the *Environmental Planning and Assessment Act, 1979* (EPA Act) must be applied. This requires Council or the consent authority to consult with the Commissioner of the NSW Rural Fire Service (RFS) and to take into account any comments by the Commissioner and to have regard to the planning principles of PBP.

The requirements of Planning Direction 4.3 Planning for Bushfire Protection are at Appendix 3.

The requirements of PBP Strategic Planning are at Appendix 4.

5. Review of Documents

The four documents reviewed provide a coherent and integrated approach to the Planning Proposal. Each of the reviewed documents is aligned with intent and purpose, providing a comprehensive overview of the application with technical papers providing specialist review and measures that have been incorporated into the Planning Proposal.

Bushfire is recognised as a key design consideration and design response matter for action which has been well articulated throughout the documents.

Detailed review is in the following section.

5.1. Gyde Planning Proposal Morgan Road Belrose October 2022

The Gyde (2022) Planning Proposal (GPP) document provides an integrated overview of the Planning Proposal, recognising bushfire as a key constraint that is reflected in the design and approach to the PP. The GPP has relied upon the underlying technical Bushfire Protection Assessment, Strategic Bushfire Study and Traffic Assessment which is to be expected.

Key bushfire mitigation strategies include the provision of complying APZ, a linking road network and emergency management arrangements that have been based on traffic modelling and movement of vehicles from the site.

The Gyde PP states (p. 22) that:

Enhanced bushfire evacuation

In the event of a fire, new roads within the Site will provide adequate access for firefighting operations, which link to perimeter roads and/or to fire trail networks and adequate water supply. The Site's access points are designed to accommodate expected traffic flows in accordance with Austroads guidelines, including traffic from neighbouring properties. The Planning Proposal proposes the upgrade of the Forest Way / Morgan Road intersection, comprising a left turn slip lane from Morgan Road to facilitate efficient traffic flows out of the Site, particularly during a bushfire emergency situation, and will be the primary egress route for new residents and surrounding residents evacuating from Morgan Road. Refer to the Transport Assessment undertaken by JMT Consulting at Appendix 15.

While roads have been provided within the site, the PP relies on a new slip lane onto Forest Way and a connection to Oates Place in the east. Indeed, the PP is predicated on these two key emergency management arrangements being in place and viable (see Section 5.4 Transport Assessment, prepared by JMT Consulting, September 2022) to accommodate evacuating residents and incoming emergency

services. As a key component of the PP, it is not evident that the slip lane would be approved for Forest Way which is a State Classified Road (MR 529) by RMS. This is a vitally important aspect of the Planning Proposal and would require documentation from RMS supporting such a proposal. Similarly, the proposed emergency access onto Oates Place appears to be over private land or at least on lands not under control by the applicant. During the site inspection, the end of Oates Place includes a drainage line/ creek and a large fall (including a cliff line) that would make a temporary road difficult. Again, as a key emergency management failsafe, actions to secure such an alternative access should be demonstrated in the PP, including concept drawings for such a connection road.

The GPP notes in the executive summary (p. 5) of the document that among other outcomes, the Planning Proposal (PP) seeks to

- *secure additional permitted uses within the appropriate zone for residential land uses such as dual occupancies and **seniors housing**, as well as community facilities*

This is at odds with not providing inappropriate development on the site which is reflected in the Gyde document

- *The proposal does not involve "inappropriate development" such as schools or retirement villages. P. 42 & p. 101*

And the Travers Bushfire and Ecology (p vii) documents note that vulnerable uses are excluded from the site:

- *The proposal does not involve "inappropriate development" such as schools or retirement villages.*

Future use and restrictions need to be established up front with appropriate mechanisms to limit vulnerable uses, if this is the intention of the PP. Alternatively, if SFPP development is a consideration, it should be flagged within the PP for consideration.

It is appreciated that the proposed concept master plan includes measures taken to reduce or avoid harm and loss due to bushfire, such as APZs, and the protection of other values such as biodiversity and the functioning of natural systems, including the Site's waterways. This is not always an easy task as bushfire management (i.e., the creation and management of APZs) is fundamentally at odds with many other aspects (vegetation retention, ecology, waterways etc.) of modern PP and subdivisions. The PP has taken a balanced approach to the availability of the site and the need to enhance biodiversity and the protection Aboriginal artefacts. The balance has been well struck.

The APZs will be contained wholly within the subject land and incorporate fire trails (not relied upon but available for management purposes), perimeter road verges, riparian buffers, and vegetation corridors.

This will improve the level of bushfire protection to adjoining developments. While the benefit to adjoining uses is a consideration, the PP must stand alone on its merits, which in most part it does.

The PP does not address adjoining unmanaged vegetation parcels that provide for a series of pinch points along Morgan Road which is the key evacuation road. These pinch points have potential to be impacted by bushfire and indeed to carry fire adjacent to Morgan Road, thus potentially halting evacuation. The PP identified through the Strategic Bushfire Study (SBS), the potential of 9 fire paths to and/or within the site. The consideration of fuels close to evacuation paths needs to be considered. Similarly, within the development, a number of pinch points exist that if on fire, would restrict or halt evacuation from the site. As the site has a known fire history and identified fire runs, the safe access and ingress for emergency services should be provided with APZs along key evacuation routes.

Key matters for consideration:

1. Consideration of the likely success of a slip road onto Forrest Way.
 - 1.1. In principal support from RMS for the slip road
 - 1.2. Supporting documentation from RMS that a slip road is safe and viable
 - 1.3. Concept designs of the proposed slip way and impact on adjoining neighbors and pedestrian access
2. Consideration of the likely availability (approvals) and utility (through a drainage/ creek line and significant drop/ cliff) of an emergency access onto Oates Place
3. Identification of potential pinch points along the Morgan Road evacuation route and consideration of vulnerability of the access if impacted by fire
4. Consideration of APZ within the site adjacent to vegetated areas that form pinch point which may restrict or inhibit evacuation out of the site

5.2. Bushfire Protection Assessment – prepared by Travers Bushfire & Ecology

The Bushfire Protection Assessment prepared by Travers Bushfire & Ecology (BPA) meets the requirements of the Clause 45 of the *Rural Fires Regulation* for submission and for PBP.

The BPA is thorough and outlines the history of the site considering bushfire and the availability of the PP and future development applications to comply with PBP.

Due to time limits in this review, I have not undertaken a review of the vegetation, slope, or commensurate asset protection zones (APZ) and have accepted these as being accurate within the BPA.

The PP is afforded perimeter roads which is a requirement of PBP. The road network provides options for access within the site with linking bridge to the eastern precinct.

Two dead end roads are shown on Figure 1 and Figure 2 in the southeast of the PP. Figure 1-3 of the BPA (see Figure 3) shows these two dead end roads joined up as perimeter roads. The Figure 1-3 in the BPA does not provide a legend identifying the road types or the width of the roads kerb to kerb. The discrepancy between the dead-end roads and the joined roads needs to be clarified. Figure 1-3 and Figure 1-4 appear to have the dead-end road (western) at different locations

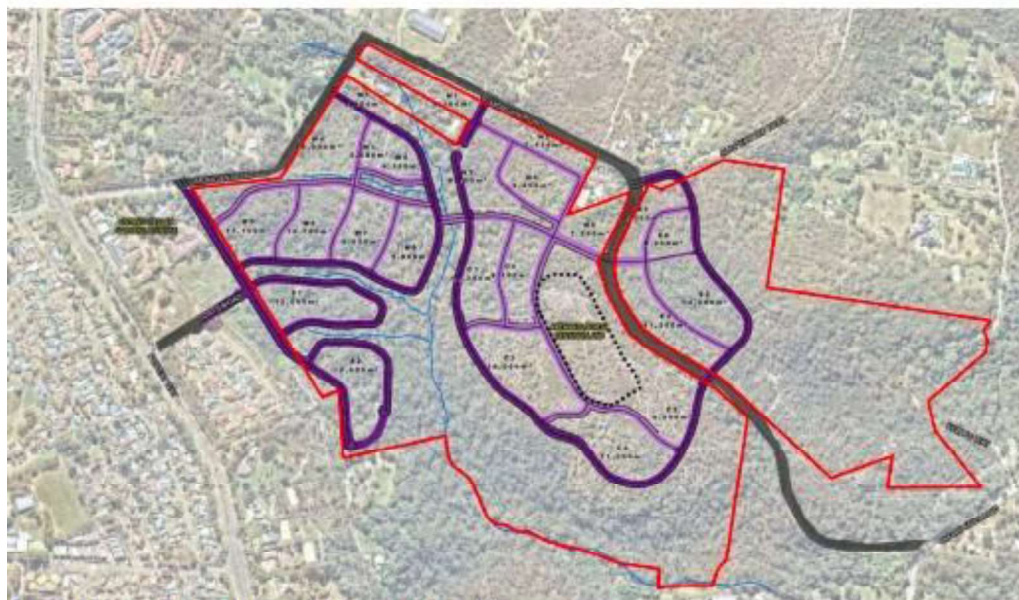


Figure 3 Proposed Road Layout (source BPA p. 4)

The proposed APZ are shown in Figure 4. As noted in Section 5.1, several pinch points are evident within the site and external to the site (see Figure 5). These could be rectified with provision of APZ as has been provided elsewhere within the site. The external pinch points should be considered as a scenario of fire burning within them which restricts passage.



Figure 4 Proposed Asset Protection Zones (source Bushfire Protection Assessment p. 5)

It is noted in the Transport Assessment that a conservative position has been taken with the modelling of up to 900 vehicles evacuating the site. This position should be considered on eventualities of access being compromised. As a response, the SBS and BPA can provide commentary on the inherent protections built into the provision of complying APZ with commensurate construction of houses. Where houses/ assets are built in accordance with the *Australian Standard for Construction of Buildings in Bushfire Prone Areas* (AS3959), the properly constructed and maintained (i.e., APZs) provide a secure environment for people to shelter in during the impact and passage of a bushfire. The AS3959 provides inherent protection up to a design fire of Forest Fire Danger Index (FFDI) of 100, which is the same as PBP. Fires burning under Catastrophic (i.e., above FFDI 100) would require evacuation as the fire is above

the safety levels provided by AS3959 and PBP. Forecast Catastrophic fire weather is usually known up to 4 days in advance from the Bureau of Metrology, with the RFS issuing warning for people to leave bushfire prone areas the day before or the morning of such forecast conditions. As such, the PP and the site would be effectively reduced from occupants. This reduces the risk significantly.



Figure 5 Potential Pinch Points

However, it would be prudent to provide APZ along key roads, to ensure unrestricted access as a key redundancy and safety measure.

The ongoing management of the conservation land will be maintained as a Community Association arrangement on an ongoing basis

p. 2 Conservation land - The environmental management zone will be maintained in perpetuity by the future community association and Metropolitan Local Aboriginal Land Council. The area is an ecologically significant landscape which is known to contain threatened flora, fauna, ROTAP species and the EEC, Coastal Upland Swamp.

It is not clear from the documentation if similar arrangements will be in place for the ongoing management of APZ. This should be clarified in the BPA and or SBS.

It is noted (p. 8) that Travers Bushfire and Ecology have had ongoing engagement with the RFS.

The additional information sought by the RFS on the 1st October 2021 was provided in an amended bushfire report dated 6th October 2021. The report was re-submitted back to the RFS earlier this year whereby the RFS provided comments on 13 May 2022 whereby they advised they had no specific objections.

The position of the RFS is noted and would suggest tacit agreement on the PP by the RFS. It is unclear from the documentation if the RFS have set their mind to the availability and utility of access and potential pinch points in the site and surrounding areas. This is in part recognised in the BPA (p. 22):

*Egress in a bushfire evacuation scenario can be accommodated safely **pending the upgrade of the Morgan Road / Forest Way intersection** to accommodate a free flow slip lane from Morgan Road. This upgrade is required following the development of 230 or more dwellings on the site.*

As identified above, the evacuation is contingent on the "pending upgrade of the Morgan Road/ Forest Way intersection. Indeed, it could be assumed that the PP by its very nature is contingent on the slip road which will accommodate up to 90% of traffic evacuating the site and Oates Place which will accommodate the remaining 10% of traffic evacuating the site. As such, the slip road is a key enabling provision for the PP. The report is well considered and considers the requirements of P8P.

Key matters for consideration:

5. The discrepancy between the dead-end roads in the southeast of the site and the joined perimeter roads needs to be clarified.
6. Several pinch points are evident within the site and external to the site (see Figure 5). These could be rectified with provision of APZ as has been provided elsewhere within the site. The external pinch points should be considered as a scenario of fire burning within them which restricts passage or where required, owners of land approached to determine potential for areas to be managed providing surety for evacuation routes.
7. The ownership and ongoing management arrangements for APZs should be documented.
8. The evacuation is contingent on the "pending upgrade of the Morgan Road/ Forest Way intersection." The likely success of the slip road should be investigated as a key enabling provision of the PP. If the slip road is not viable, the PP will need to consider other options for the access and bushfire safety.

5.3.Strategic Bushfire Study, prepared by Travers Fire and Ecology – not received

The SBS has been conducted in conjunction with a BPA. Both documents provide a coherent and integrated approach to bushfire for the site and in consideration of the surrounding area. The SBS has analysed the potential and historic threats to the site, the current and projected access provisions and any adverse impacts on the existing and projected infrastructure serving the community.

The SBS has been clear on the bushfire risk affecting the site and has not shied away from the heavily vegetated and steep land of the site and surrounds. The basis of the SBS is sound and well supported by data and bushfire expertise by Mr. John Travers. The SBS has followed the requirements as set out in PBP Table 4.2.1 for the requirements of a SBS (see Appendix 4).

The SBS describes the fire potential adequately. The statement (p. 6) that:

The proposed site is located downhill of fire threats and potential fire runs located to the northwest, north and northeast. Following a general principle of fires gaining intensity and rate of spread when travelling uphill, the siting of the proposal downhill of fire runs should in theory mitigate the most intense fires.

is agreed. The SBS notes the potential of fire to approach from the south as a possibility and the PP has responded with APZs in accordance with PBP or greater to reduce this risk. This is to be commended.

Figure 2-5 of the SBS underplays the potential fire runs into the site. The PP provides APZs that are in accordance with PBP and as such, the fire runs should be provided which reflect potential fire penetration into the site.

Of note, the retained vegetation within the site (conservation zone) has potential for spot fire ignition and small-scale fires. This provides potential for pinch points (see earlier sections) to restrict access. This is particularly relevant considering section 2.1.4 of the SBS that identifies significant fire history affecting the site. Again, the provision of APZs is in keeping with PBP throughout the site which manages this risk to tolerable levels.



Figure 6 Additional Potential Fire Runs

Section 2.2 of the SBS is a landuse assessment that considers potential bushfire risk. This part of the SBS relies on modelling work completed by Meridian Urban stating (section 2.2 – no page number):

The Deferred Lands Strategic Bush Fire Risk Assessment prepared by Meridian Urban for Northern Beaches Council (March 2022) analyses and identifies land within the deferred matter zoning of the area base on potential fire intensity and inferred fire risk. The Morgan Road site is located within an area mapped by the study as being of lower potential fire intensity and by inference, lower fire risk.

The Morgan Road site is, of all potential development sites identified within the deferred matter zoning area, a preferred site for development in that it is located in an area identified as lower potential fire risk.

The SBS provides three maps extracted from the Meridian Urban study at FFDI 62, FFDI 100 and FFDI 134 – all of which rely on hazard reduction to mitigate fuels. It could not be derived from the Meridian Urban study the extent of reliance on hazard reduction or scenarios where hazard reduction was not undertaken. The NSW planning system through PBP takes a credible worst case fire weather scenario of FFDI 100 reflecting a 1:50 fire weather event. As such, my analysis has focused on the aspect.

The Meridian Urban FFDI 100 fire intensity map is shown at Figure 7. The map shows the PP site as having a modelled fire intensity of 4,000 – 20,000kW/m. Fireline intensity is a measure of fire intensity at the fire front. It is measured as the amount of energy released per metre width of the fire edge. As such, 4,00kW of radiant heat is the equivalent of 4,000 1m radiant heat bars within an area of 1m by 1m.

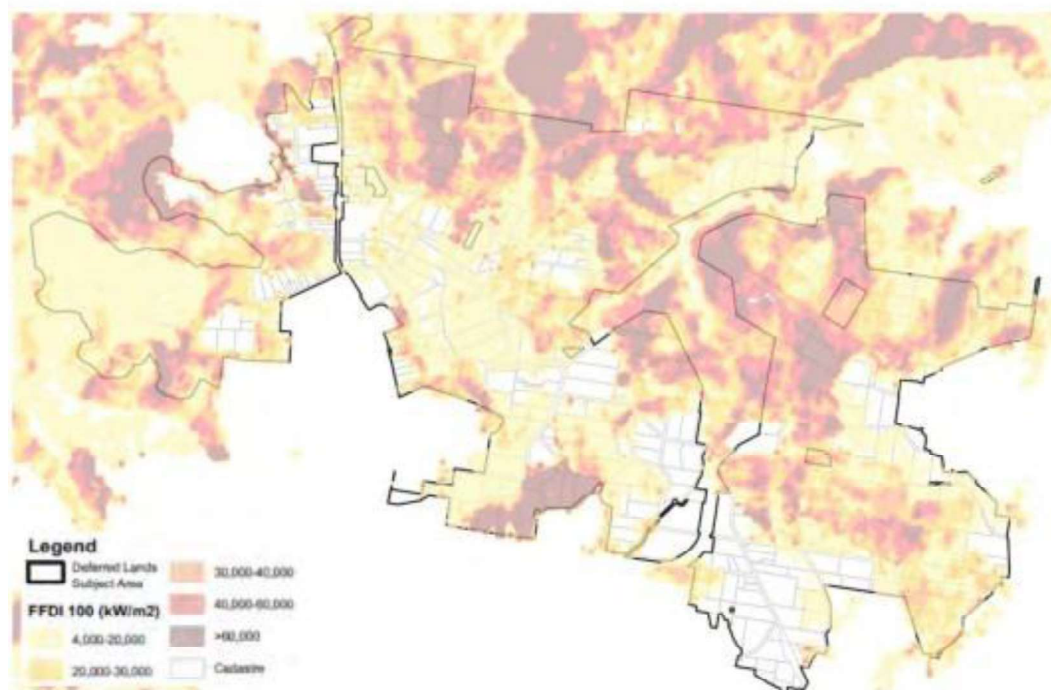


Figure 7 Deferred Lands Strategic Bush Fire Risk Assessment Northern Beaches Council (source Meridian Urban p. 50)

The Meridian Urban report (p. 78) states that

It is important to note that for some aspects of the risk analysis undertaken by this assessment, mapped Fireline intensity up to 4,000kW/m has been removed from the dataset as this class is considered sufficiently low that it not necessarily be considered as part of the risk profile for examination for strategic land use planning purposes.

Of note, the above states that radiant heat levels below 4,00kW as being of low risk (see Figure 8).

Potential bush fire intensity classes	Potential fireline intensity
Very high	40,000+ kW/m
High	20,000-40,000 kW/m
Medium	4,000-20,000 kW/m
Low	0-4,000 kW/m

Figure 8 Potential bush fire intensity classes and corresponding potential Fireline intensity ranges (source Meridian Urban p. 78)

The SBS has taken a view that 4,000 – 20,000 kW is a low risk. Figure 8 shows that 4,000 – 20,000 kW is medium bushfire risk. As a comparison, Figure 9 shows the impact of radiant heat at the lower limits with 10 kW/m² being the upper limit for fire fighters to safely operate within for short periods of time.

Crew leader what radiant heat is not tolerable

Radiant Heat Flux	Likely Effects	Approx. distances
>29 – 110 kW/m ²	Flame Zone	0 - 20 metres
29 kW/m ²	Ignition of most timbers without piloted ignition (3 minutes exposure) (Level 3 construction) during the passage of a bush fire. Toughened glass could fail.	20 metres
19 kW/m ²	Screened float glass could fail (Level 2 construction) during the passage of a bush fire.	27 metres
12.5 kW/m ²	Standard float glass could fail (Level 1 construction) during the passage of a bush fire. Some timbers can ignite with prolonged exposure and with piloted ignition source (eg embers).	40 metres
10 kW/m ²	Critical conditions. Firefighters not expected to operate in these conditions although they may be encountered. Considered to be life threatening < 1 minute in protective equipment. Fabrics inside a building could ignite spontaneously with long exposures.	45 metres
7 kW/m ²	Likely fatal to unprotected person after exposure for several minutes	55 metres
4.7 kW/m ²	Extreme conditions. Firefighter in protective clothing will feel pain. (60 seconds exposure)	70 metres
3 kW/m ²	Hazardous conditions. Firefighters expected to operate for a short period (10 minutes)	100 metres
2.1 kW/m ²	Unprotected person will suffer pain after 1 minute exposure – non fatal.	140 metres

Note: assumes flame temperature of 1090K for all scenarios.

Figure 9 Radiant heat flux and effects on buildings and people for a modelled forest fire (FDI 100 on flat ground) source PBP 2006 p. 60

Similarly, the RFS Group Leaders Manual shows tolerable levels of radiant heat from a firefighting perspective. Of note, at lower FFDI in forest fuels a fire will crown at approximately +2,000 kW with indirect

attack being recommended. At 12,000 to 18,000kW the fires are extreme and beyond firefighting capability to control. At 18,000 – 25,000kW which is identified within the Meridian report as medium hazard, fire fighters are focusing on protecting life and are employing safeguarding/ defensive strategies. The notion that 4,000kW represents a low hazard is not supported and underrepresents the potential fire impacting the site. This is of particular concern, particularly if the RFS have relied upon the modelling and risk levels both within the Meridian report and the SBS.

FDI	FLAME HEIGHT (M)	RADIANT ENERGY RELEASED (KW/M)	FIRE DANGER RATING (FDR)/ METHOD OF ATTACK
0–12	0–0.5	0–50	Low: Fires generally self-extinguish or hand tool line will hold the fire
12–15	0.5–1.5	50–500	Moderate: Offensive operations usually possible in bush fuels. Most properties usually defensible
15–25	1.5–3.0	500–2000	High: Fire too intense for direct attack. Parallel attack recommended
25–50	3.0–10	2000+	Very High: Crown fire at upper intensities. Indirect attack recommended
50–75	10+	12000–18000	Severe: The fire may be worse than anything previously experienced. Actions should be focused on safeguarding people and defensive operations. Offensive operations may be possible at night
75–100	12+	18000–25000	Extreme: As for Severe but crew and public safety becomes a major concern. Safeguarding refuges and defensive operations may be the only safe options
100+	15+	25000+	Catastrophic: Fire Behaviour is very dangerous, devastating and difficult to accurately predict. Expect significant ember attack. Actions must focus on safeguarding lives

Figure 10 Approximate fire suppression thresholds (forest) based on 20t/ha (source NSW RFS Group Leader Manual p. 45)

However, it is evident from the BPA and the SBS that appropriate APZs have been provided within the site.

Figure 10 Approximate fire suppression thresholds (forest) based on 20t/ha (source NSW RFS Group Leader Manual p. 45)

The SBS has provided consideration of radiant heat modelling at the Forest Way and Morgan Road intersection but has not considered potential radiant heat from other non-managed bushland areas along Morgan Road.

Key matters for consideration:

9. The SBS underplays the potential fire runs into the site. The PP provides APZs that are in accordance with PBP and as such, the fire runs should be provided which reflect potential fire penetration into the site.
10. The retained vegetation within the site (conservation zone) has potential for spot fire ignition and small-scale fires. This provides potential for pinch points (see earlier sections) to restrict access. Provision of APZs within the retained vegetation should be considered to ensure access.
11. The SBS has taken a view that 4,000 – 20,000kW is a low risk. This is not supported as per Figure 10 and should be reconsidered.
12. Unmanaged vegetation along Morgan Road should be considered in terms of potential pinch point and impact on evacuation.

5.4. Transport Assessment, prepared by JMT Consulting, September 2022

The purpose of the transport assessment (p. 3) is to understand the implications of the PP on the adjacent transport network and identify any upgrades or mitigation measures required to support the future site development.

The report focuses on in part, the access arrangements, and considerations for bushfire, including evacuation management. The key access roads are:

Forest Way is an Arterial Road p. 7

Forest Way is a State Classified Road (MR 529) that traverses in a north-south direction between Mona Vale Road in the north and Warringah Road in the south, carrying approximately 40,000 vehicles per day. It is generally subject to 70km/h or 80km/hr speed zoning. Forest Way carries two lanes of traffic as well as one bicycle lane in either direction within a divided carriageway of width 9.5 metres.

Morgan Road is a Collector Road p. 7

Morgan Road is a collector road that runs in an east-west direction to the north and east of the site, carrying approximately 5,000 vehicles per day. It has a posted speed limit of 50 km/h and

accommodates a single lane of traffic in either direction within an undivided carriageway. Morgan Road forms a signalised intersection with Forest Way Road with all movements permissible.

Access to and from the site is shown in Figure 11. The site access should be considered having regard to additional pinch points (Figure 5) and the implications on access by potential fire impact.

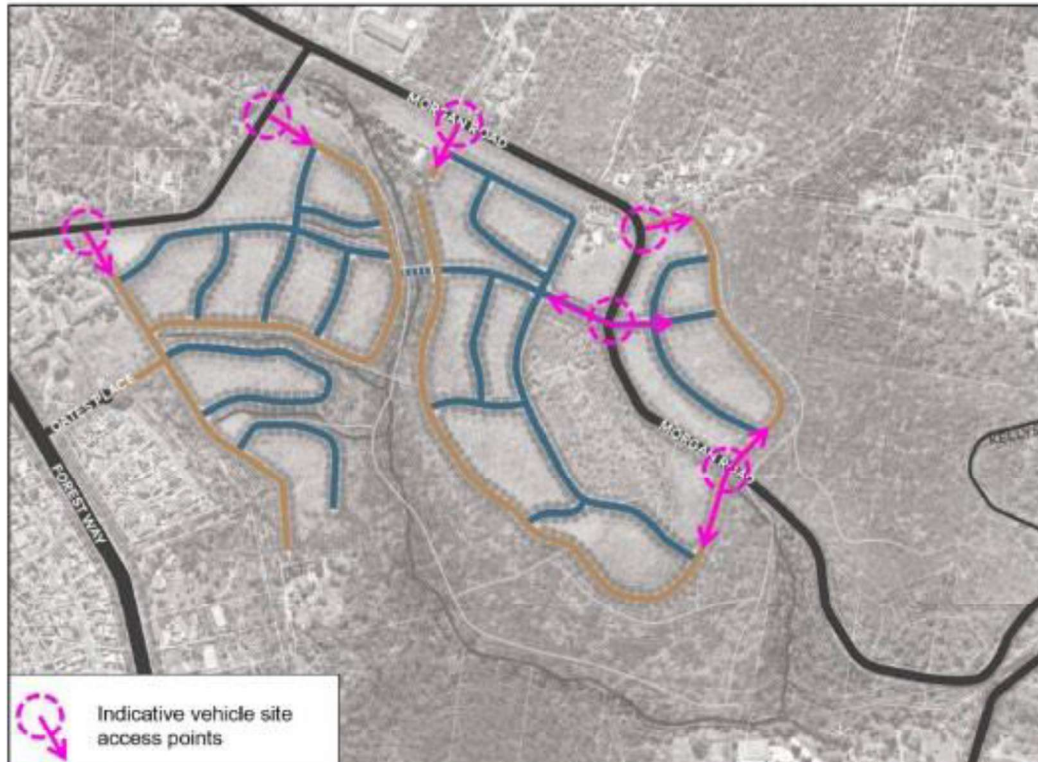


Figure 11 Indicative vehicle site access arrangements (source p. 14 Transport Assessment, prepared by JMT Consulting, September 2022)

Section 6 of the report provides detail on traffic analysis for bushfire evacuation providing assessment of the ability of the road network to accommodate traffic flows during a major bushfire evacuation event. The assumptions made in the traffic modelling are conservative and supported, specifically that:

p. 27 Based on work undertaken by Cox Architecture the total development yield considered is 450 residential dwellings. In addition, the existing dwellings adjacent to Morgan Road east of Forest Way have been taken into consideration, which number approximately 50 households, making a total of 500 households for consideration.

p. 27 As a highly conservative assumption 100% of all dwellings in the precinct are considered at risk and would be required to evacuate the precinct during a major bushfire event.

However, section 6.3 of the Traffic Assessment identifies the road network performance during bushfire emergency, but it does not identify the number of vehicles per hour or the required time to safely evacuate all 900 cars from the site for Morgan Road or Oates Place.

The report states that:

Access to the site will be Morgan Road at the western, northern, and eastern boundaries of the site and a new bridge across Snake Creek will provide active transport connections on a daily basis and vehicular egress during a bushfire or emergency.

This is supported and the bridge increases the options for egress from the site. The provision of APZs should be considered along key pinch points (Figure 5), including the bridge to reduce the risk that it cannot be used as intended during a bushfire emergency.

The report notes that

No vehicle access via Oates Place (except in the event of a bushfire evacuation)

As previously identified, the availability of Oates Place and the utility of providing emergency access should be considered by the PP as a key emergency management arrangement.

The evacuation is contingent on the slip road on to Forest Way and access out of Oates Place. As fundamental aspects of the PP, these foundation pieces need to be shored up as part of the application. Failure of one or both of these strategies has significant considerations for the PP.

Key matters for consideration:

13. The total time to evacuate the PP precinct and surrounding areas should be clarified.

6. Conclusion

Lew Short from Blackash Bushfire Consulting has completed a review of the bushfire documents presented as part of the Planning Proposal. The assessment of the Planning Proposal bushfire aspects has been undertaken impartially and without prejudice.

The site is on designated Bushfire Prone Land and the bushfire provisions for new development area applicable.

The PP and associated technical document provide a coherent, evidence-based assessment of the proposal which has responded well to the bushfire risk within and external to the site.

A number of key matters for consideration have been provided within the report. Some of these are minor and technical in nature. The PP has been developed on the premise of evacuation being provided by Morgan Road and a new slip lane on to Forest Way and a new emergency access on to Oates Place. The availability and utility of both of these key aspects has not been demonstrated in the PP and are fundamental enabling provisions for the PP. If one or both of these options are not available, the PP will need to rethink the design response to activation of the site. This is a fundamental issue to be resolved.

The bushfire design consideration and response for the PP and from the design team is to be commended in the balanced and sympathetic approach that has been taken for a balanced utilisation and conservation of the site.



Lew Short | Principal

Blackash Bushfire Consulting

Appendix 1 References

Councils of Standards Australia AS3959 (2009) – *Australian Standard Construction of buildings in bushfire-prone areas*

Gyde Planning Proposal Morgan Road Belrose October 2022

JMT Consulting Transport Assessment, prepared by, September 2022

Keith, David (2004) – *Ocean Shores to Desert Dunes – The Native Vegetation of New South Wales and the ACT*. The Department of Environment and Climate Change

Meridian Urban (2022) *Deferred Lands Strategic Bush Fire Risk Assessment Northern Beaches Council*

NSW Rural Fire Service (2015) *Guide for Bushfire Prone Land Mapping*

NSW Rural Fire Service (2019). *Planning for Bushfire Protection: A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners*. Draft for Public Exhibition

NSW Government (1979) *Environmental Planning and Assessment Act 1979*. NSW Government Printer.

Travers Bushfire & Ecology Bushfire Protection Assessment

Travers Fire and Ecology Strategic Bushfire Study

Appendix 2 Curriculum Vitae Lew Short

Qualifications

- BPAD Level 3 Accredited Practitioner Fire Protection Association of Australia
- Graduate Diploma of Bush Fire Design University of Western Sydney, 2006
- Graduate Certificate of Applied Management Australian Institute of Police Management, 2005
- Graduate Certificate of Management Macquarie Graduate School of Management
- Macquarie University, 2001
- Bachelor of Arts, Resource and Environmental Management Macquarie University, 1994
- Current member Ku-ring-gai Bushfire Brigade (advanced fire fighter).

Project Experience

- Program Director for AFAC on the Nationally significant review of the Fire Danger Ratings System and National Board Member.
- Non-executive Board member Green Cross Australia.
- Developed Community Resilience Framework for Emergency Management in Victoria
- State Consequence Manager for various all hazards state level incidents in Victoria including bushfire.
- NSW RFS Planning for Bush Fire Protection 2006 and associated policy, guidelines, and manager of business practice
- Responsible for over 80,000 bushfire protection assessment at NSW Rural Fire Service
- Bushfire expert in Land and Environment Court cases
- Project manager various bushfire technical reports
- State level manager for NSW Rural Fire Service
- Member of the NSW Building Regulation Advisory Committee, which formulates state-wide policy and input into the Building Code of Australia.
- Represented AFAC on Australian Standards committees (FP20 for AS3959) and the National Building Codes Committee, which determines changes to the Building Code of Australia for bushfire.
- Chair AFAC Bushfire Reference Group and member AFAC Community Safety and Built Environment Group.
- Pioneered various bushfire alert and communication systems

Career Summary

Organisation: **Blackash Bushfire Consulting**

Position: Principal

August 2014 - Present

Organisation: **Emergency Management Victoria**

Position: General Manager Risk, Consequence & Resilience
November 2014 – December 2016
State Consequence Manager
January 2015 – December 2016

Organisation: **Eco Logical Australia**

Position: Principal, Emergency Management & Resilience
January 2013 - Present

Organisation: **NSW Rural Fire Service**

Position: Group Manager Community Resilience
July 2008 – December 2012

Organisation: **NSW Rural Fire Service**

Position: Manager Development Control
May 2003 – July 2008

Organisation: **Ku-ring-gai Council**

Position: Manager Natural Environment and Bushland
April 2001 – May 2003

Organisation: **Ku-ring-gai Council**

Position: Bushland Group Co-ordinator
November 1998 – April 2001

Organisation: **Ku-ring-gai Council**

Position: Bush Fire Management Program Coordinator
November 1995 - November 1998

Organisation: **Ku-ring-gai Municipal Council**

Position: Fire and Natural Resource Officer, 1994 - 1995

Appendix 3 Planning Direction 4.3 Planning for Bushfire Protection

Objectives

The objectives of this direction are to:

1. (a) protect life, property, and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
2. (b) encourage sound management of bush fire prone areas.

Application

This direction applies to all local government areas when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to, land mapped as bushfire prone land.

This applies where the relevant planning authority is required to prepare a bush fire prone land map under section 10.3 of the EP&A Act, or, until such a map has been certified by the Commissioner of the NSW Rural Fire Service, a map referred to in Schedule 6 of that Act.

Direction 4.3

1. (1) In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of clause 4, Schedule 1 to the EP&A Act, and take into account any comments so made.
2. (2) A planning proposal must:
 1. (a) have regard to *Planning for Bushfire Protection 2019*,
 2. (b) introduce controls that avoid placing inappropriate developments in hazardous areas, and
 3. (c) ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone (APZ).
3. (3) A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:
 1. (a) provide an Asset Protection Zone (APZ) incorporating at a minimum:
 - i. an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and
 - ii. an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,
 2. (b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the *Rural Fires Act 1997*), the APZ provisions must be complied with,
 3. (c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,
 4. (d) contain provisions for adequate water supply for firefighting purposes,
 5. (e) minimise the perimeter of the area of land interfacing the hazard which may be developed,
 6. (f) introduce controls on the placement of combustible materials in the Inner Protection Area.

Consistency

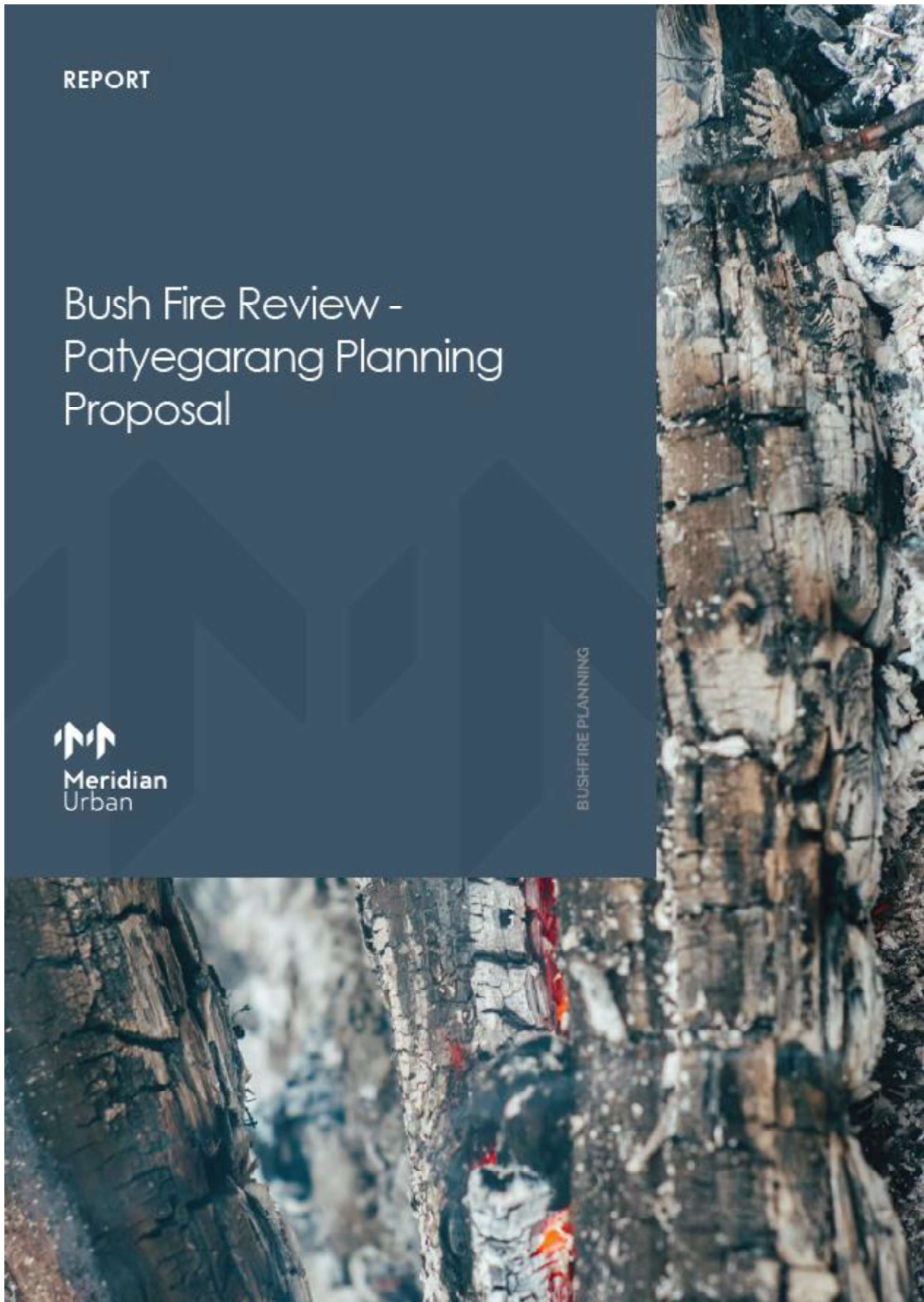
Appendix 3 Planning Direction 4.3 Planning for Bushfire Protection

A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Planning Secretary (or an officer of the Department nominated by the Secretary) that the council has obtained written advice from the Commissioner of the NSW Rural Fire Service to the effect that, notwithstanding the non-compliance, the NSW Rural Fire Service does not object to the progression of the planning proposal.

Appendix 4 Requirements of a Bush Fire Strategic Study (PBP p. 35)

ISSUE	DETAIL	ASSESSMENT CONSIDERATIONS
Bush fire landscape assessment	A bush fire landscape assessment considers the likelihood of a bush fire, its potential severity and intensity and the potential impact on life and property in the context of the broader surrounding landscape.	<ul style="list-style-type: none"> ➤ The bush fire hazard in the surrounding area, including: <ul style="list-style-type: none"> ➤ Vegetation ➤ Topography ➤ Weather ➤ The potential fire behaviour that might be generated based on the above; ➤ Any history of bush fire in the area; ➤ Potential fire runs into the site and the intensity of such fire runs; and ➤ The difficulty in accessing and suppressing a fire, the continuity of bush fire hazards or the fragmentation of landscape fuels and the complexity of the associated terrain.
Land use assessment	The land use assessment will identify the most appropriate locations within the masterplan area or site layout for the proposed land uses.	<ul style="list-style-type: none"> ➤ The risk profile of different areas of the development layout based on the above landscape study; ➤ The proposed land use zones and permitted uses; ➤ The most appropriate siting of different land uses based on risk profiles within the site (i.e. not locating development on ridge tops, SFPP development to be located in lower risk areas of the site); and ➤ The impact of the siting of these uses on APZ provision.
Access and egress	A study of the existing and proposed road networks both within and external to the masterplan area or site layout.	<ul style="list-style-type: none"> ➤ The capacity for the proposed road network to deal with evacuating residents and responding emergency services, based on the existing and proposed community profile; ➤ The location of key access routes and direction of travel; and ➤ The potential for development to be isolated in the event of a bush fire.
Emergency services	An assessment of the future impact of new development on emergency services.	<ul style="list-style-type: none"> ➤ Consideration of the increase in demand for emergency services responding to a bush fire emergency including the need for new stations/brigades; and ➤ Impact on the ability of emergency services to carry out fire suppression in a bush fire emergency.
Infrastructure	An assessment of the issues associated with infrastructure and utilities.	<ul style="list-style-type: none"> ➤ The ability of the reticulated water system to deal with a major bush fire event in terms of pressures, flows, and spacing of hydrants; and ➤ Life safety issues associated with fire and proximity to high voltage power lines, natural gas supply lines etc.
Adjoining land	The impact of new development on adjoining landowners and their ability to undertake bush fire management.	<ul style="list-style-type: none"> ➤ Consideration of the implications of a change in land use on adjoining land including increased pressure on BPMs through the implementation of Bush Fire Management Plans.

APPENDIX 4 – Meridian Urban Independent Bushfire report



REVISION SCHEDULE

Rev	Date	DETAILS	APPROVED BY
A	26/10/2023	DRAFT	LG
B	03/11/2023	FINAL	LG

FPAA NSW BPAD Accreditation No. 33131

Member Planning Institute of Australia
Member Fire Protection Association of Australia
Member International Association of Wildland Fire
Member Natural Hazard Mitigation Association (USA)
Member Association of Fire Ecology



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Northern Beaches Council

Bush Fire Review - Patyegarang Planning Proposal

CONTENTS

1	Introduction.....	1
1.1	Background	1
2	Statutory overview.....	4
2.1	Local planning direction 4.3	4
2.2	Planning for Bush Fire Protection 2019	5
2.3	Local government planning instruments and studies.....	7
2.4	2020 NSW Bush Fire Inquiry and Royal Commission into National Natural Disaster Arrangements.....	7
2.5	Risk-based land use planning	8
2.5.1	Changing property finance and insurance context	8
3	Deferred Lands Strategic Bush Fire Risk Assessment.....	10
4	Draft NSW RFS Bush Fire Risk Management Plan.....	11
5	Blackash independent bush fire review	12
6	Assessment against Chapter 4 of PBP.....	15
6.1	Summary.....	15

1 Introduction

This report is commissioned by Northern Beaches Council (Council) and provides a technical review of the bush fire strategic study for the Patyegarang, Morgan Road (Lizard Rock) Planning Proposal (the Planning Proposal).

It is understood the exhibited Planning Proposal has been prepared on behalf of the proponent, the Metropolitan Local Aboriginal Land Council (MLALC), to rezone land with frontage to Morgan Road, Belrose for residential development of up to 450 dwellings, a cultural centre, private open space, and environmental conservation.

Council has commissioned Meridian Urban to undertake a third party review of the bush fire strategy study, having regard to the broader bush fire hazard and risk considerations of the area.

1.1 Background

The subject land comprises 22 separate titles and comprises undeveloped land measuring a total of 70.1 hectares. The site is a 'Deferred Matter' and is subject to Warringah Local Environmental Plan (LEP) 2000.



Figure 1 - Subject site and immediate locality (Source: Nearmap)

The draft Planning Proposal was reviewed by Council in late 2022. At that time, Council commissioned Blackash Bushfire Consulting to provide a review of the Travers Bushfire and Ecology's Bush Fire Strategic Study (BFSS) as provided at that time.

A Gateway Determination was issued by the Department of Planning and Environment (DPE) on 9 June 2023, which included a number of conditions. The Planning Proposal was subsequently revised to address these conditions. On 26 September 2023, DPE, on behalf of the Sydney North Planning Panel commenced public exhibition of the Planning Proposal, which forms the subject of this review.

The revisions to the Planning Proposal, included an updated BFSS, to meet DPE's Gateway Determination conditions included:

- Proposing a statutory model to create a 450-dwelling cap for the site

- Proposing a R2 low density residential zone with dual occupancies as an additional use
- Removing references to Seniors Housing and a proposed E1 Local Centre zone
- Proposing an RE2 private recreation zone to incorporate asset protection zones (bushfire)
- Identifying minimum allotment sizes of 200, 450, and 600 sqm for different areas of the site
- Discussing Council's Affordable Housing Contribution Scheme requirements
- Preparing a draft Development Control Plan to accompany the LEP.

The Planning Proposal identifies minimum lot sizes at 200m² in proximity to the Morgan Road area of the site, along with 450m² and 600m² allotments with the broader site to maintain vegetated waterway corridors throughout.



Figure 2 - Proposed minimum lot sizes (Source: Gyde, 2023)

It is understood that Council is concerned that the Planning Proposal as currently exhibited does not address the severity of potential bush fire risks that both exist and will be generated as a result of the Planning Proposal, as well as other concerns in relation to impacts on biodiversity, inconsistency with Council's Local Strategic Planning Statement and Local Housing Strategy, and ability to implement the required infrastructure identified for bush fire evacuation.

This review focuses only on the submitted BFSS exhibited as part of the Planning Proposal. A separate bush fire protection assessment is also provided which details, to the extent possible, potential compliance with the bush fire protection measures of Planning for Bush Fire Protection 2019 (PBP). However, the ability to comply with bush fire protection measures of PBP alone is

not sufficient to meet the requirements for the strategic assessment required by Chapter 4 for planning proposals.

2 Statutory overview

2.1 Local planning direction 4.3

Local Planning Directions are issued by the Minister for Planning which apply to relevant planning authorities under Section 9.1.(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). These directions apply to planning proposals lodged with DPE. Direction 4.3 relates to Planning for Bush Fire Protection.

The objectives of the direction are to:

- a. protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
- b. encourage sound management of bush fire prone areas.

The direction applies to land mapped as bush fire prone land under Section 10.3 of the EP&A Act, which is the case for the subject land.

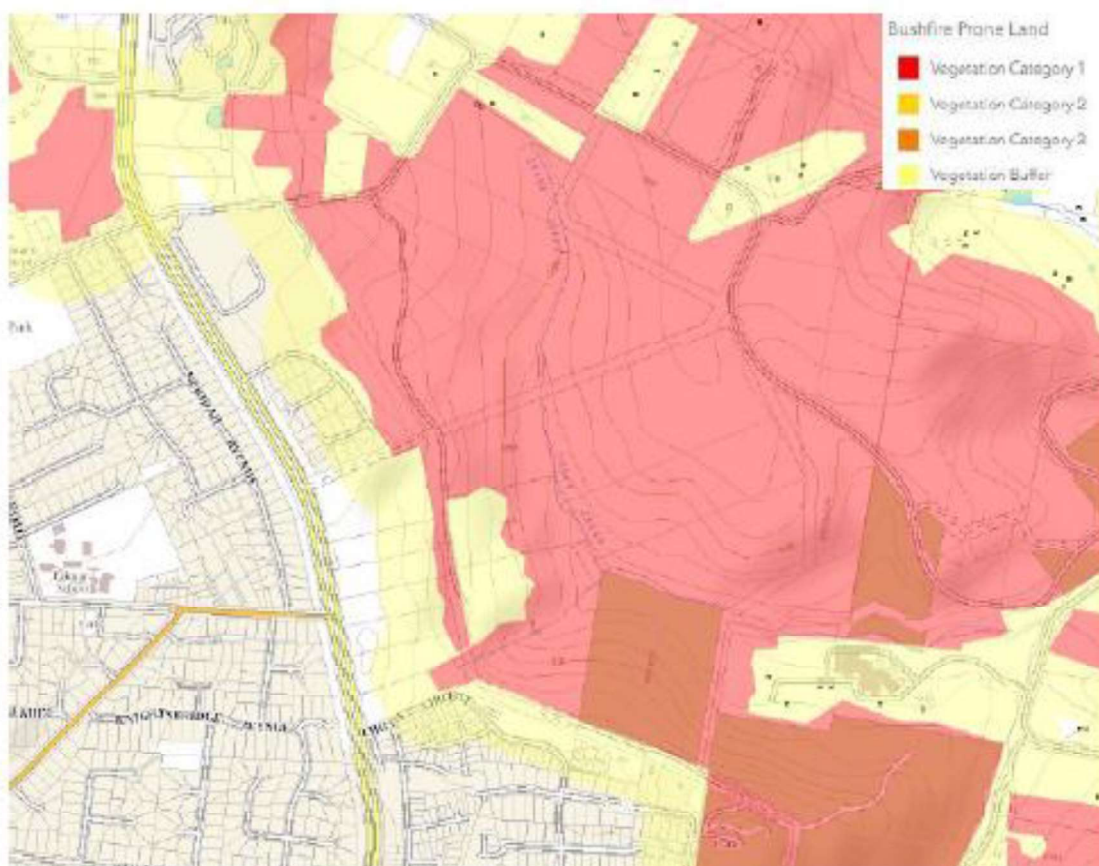


Figure 3 - Bush fire prone land map (Source: Planning Portal)

Direction 4.3 is set out in detail as follows:

Direction 4.3

(1) In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of clause 4, Schedule 1 to the EP&A Act, and take into account any comments so made.

(2) A planning proposal must:

- (a) have regard to *Planning for Bushfire Protection 2019*,
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- (c) ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone (APZ).

(3) A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:

(a) provide an Asset Protection Zone (APZ) incorporating at a minimum:

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- ii. an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,

(b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with,

(c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,

(d) contain provisions for adequate water supply for firefighting purposes,

(e) minimise the perimeter of the area of land interfacing the hazard which may be developed,

(f) introduce controls on the placement of combustible materials in the Inner Protection Area.

Having regard to the above, the compatibility of land uses relative to the strategic assessment themes set out by Table 4.2.1 of PBP 2019 is a key measure set out by Direction 4.3.

2.2 Planning for Bush Fire Protection 2019

PBP 2019 is a document of statutory weighting that provides guidance and development standards to enhance community resilience to bush fires in NSW. It is given effect by the *Environmental Planning and Assessment Act* (EP&A Act) section 4.14 (applicable to Development Consent) and section 9.1 (2) (Local Planning Direction 4.3 - Planning for Bush Fire Protection).

In accordance with the EP&A Act, development must meet the requirements of PBP, which uses a performance-based approach to achieve an appropriate level of bush fire protection. PBP applies to strategic planning including strategic development proposals, including regional strategies and plans (e.g., housing strategies, growth plans), Local Environmental Plans (LEPs), Development Control Plans (DCPs), Masterplans and Precinct Plans.

Chapter 4 of PBP relates to strategic planning. It has two main components, as outlined below.

4.1 Strategic principles

The chapter establishes strategic principles which include:

- Ensuring land is suitable for development in the context of bush fire risk

- Ensuring new development on BFPL will comply with PBP
- Minimising reliance on performance-based solutions
- Providing adequate infrastructure associated with emergency evacuation and firefighting operations
- Facilitating appropriate ongoing land management practices.

It further outlines high level criteria for the **exclusion of inappropriate development** in bush fire prone areas where the development:

- Is exposed to high bush fire risk
- Is likely to be difficult to evacuate
- Will adversely affect other bush fire protection strategies or place existing development at increased risk
- Is within an area of high bush fire risk where density of existing development may cause evacuation issues
- Has environmental constraints which cannot be overcome.

PBP 2019 goes on to state that *'the most important objective for strategic planning is to identify whether new development is appropriate subject to the identified bushfire risk on a landscape scale. An assessment of proposed land uses and potential for development to impact on existing infrastructure is also a key element of the strategic planning process in bushfire prone areas. Land use planning policies can be introduced to limit the number of people exposed to unacceptable risk'*. Unacceptable risk in the context of PBP is not further defined.

PBP 2019 also states that relevant bush fire protection measures are to be considered at the strategic planning stage to ensure future development can comply. For example, planning controls in LEPs and DCPs may have implications for the provision of appropriate APZs.

The BFSS submitted with the Planning Proposal makes no specific comment regarding the criteria for the exclusion of inappropriate development outlined above, and how the proposal avoids these outcomes. For example, the Planning Proposal incorporates R2 proposed zoning which, under State Environment Planning Policies (SEPPs), allows certain permissible uses to occur such as secondary dwellings and Special Fire Protection Purposes (SFPPs) like seniors housing. The Planning Proposal notes that SFPPs are avoided however, the zoning rationale in combination with the Housing SEPP 2021 provides the ability for these uses to occur in the zones proposed. Overall, these aspects of land use potentially enable increased density and residential population beyond that assessed, and also the potential for SFPPs which gives rise to the potential for vulnerable populations. This adds to the existing proliferation of these uses within the wider area, and the potential burden placed on emergency services. It also raises different considerations for egress and access that has not been contemplated by the BFSS.

The BFSS has not explored the implications of the proposed zoning rationale relative to the landscape assessment or as part of the land use assessment.

Further assessment of the BFSS supporting the Planning Proposal is provided later in this report.

4.2 Strategic planning in bush fire prone areas

PBP requires strategic planning proposals in bush fire prone areas to prepare a Bush Fire Strategic Study (BFSS), pursuant to the requirements in Table 4.2.1 of chapter 4. This includes the following components:

- Bush fire landscape assessment
- Land use assessment

- Access and egress study
- Consideration of emergency services impacts
- Infrastructure assessment
- Consideration of adjoining land.

Additional detail is provided for the processes relating to each strategic proposal, including consideration for potential implications on bush fire protection measures.

2.3 Local government planning instruments and studies

The land is subject to the following local planning instruments, policies, and studies:

- Local Strategic Planning Statement
- Warringah Local Environmental Plan (LEP) 2000 (Deferred Matter)
- Deferred Lands Strategic Bush Fire Risk Assessment
- Local Housing Strategy
- Local Character Study
- Northern Beaches Environment and Climate Change Strategy 2040
- Northern Beaches Resilience Strategy.

2.4 2020 NSW Bush Fire Inquiry and Royal Commission into National Natural Disaster Arrangements

In July 2020 the Final Report of the NSW Bushfire Inquiry (the 2020 Inquiry Report) was released. That report included 76 recommendations as to how NSW can improve the way it plans for and responds to bush fires.

The 2020 NSW Inquiry Report highlights a number of limitations about how bush fire is currently examined in the planning system. These include that:

- Bush fire protection needs to be understood across a landscape and considered through strategic planning activities. This has resulted in residential development areas being approved by the planning system without proper consideration or understanding of the bush fire risk across local government areas
- Current approaches within the planning system to quantify bush fire threat to development are hazard-based rather than risk-based
- The planning system is heavily reliant on development controls for bush fire prone land, with less mature provisions identified for strategic approaches to identifying, responding to and managing risk. This further includes the need to ensure cumulative risk is also considered.

The 2020 NSW Inquiry Report made specific key recommendations about the role of strategic planning moving forward, to appropriately address risk, including the generation of potential future risk by today's planning decisions.

The 2020 Royal Commission into National Natural Disaster Arrangements was undertaken following the 2019/2020 Black Summer Bushfires and incorporated a particular focus on land use planning, as well as building provisions. Recommendation 19.3 relates to the mandatory consideration of natural hazard risk in planning activities.

2.5 Risk-based land use planning

Disaster risk does not just affect existing communities. The Australian Disaster Resilience Handbook Collection – Land Use Planning for Disaster Resilient Communities (2020) describes the difference between existing and future risks as:

'Existing risks are risks to the existing community and built environment that exist due to the legacy of past decisions.

Future risks are the risks that will be created due to changes such as the cumulative impacts of new development in areas affected by natural hazards and climatic changes...'

A third type of risk is also relevant to bush fire – that is **residual risk**. Residual risk refers to the bush fire risk remaining after mitigation efforts have been deployed. Despite best efforts of land and fire management practices, the interaction of bush fire with the built environment will continue to occur.

Decisions we make today can determine risk for existing and future communities. This is particularly relevant to land use planning decisions and policies that can influence where and how development occurs, and therefore the level of exposure of people and property to bush fire hazard.

The Australian Institute of Disaster Resilience (AIDR) Planning Handbook outlines nationally agreed principles for land use planning to build disaster resilient communities. It focuses on land use planning and its role in supporting disaster resilient communities, stating that:

'Land use planning that considers natural hazard risk is the single most important mitigation measure in minimising the increase in future disaster losses in areas of new development'.

The Planning Handbook acknowledges the role of land use planning instruments in disaster resilience stating:

'Land use planning instruments for managing change must consider current and future risks and establish measures to treat risk to new development and its users and to limit any impacts of new development on natural hazards and associated risks to the existing community to an acceptable level in terms of its consequences to the community' (AIDR, 2020).

In particular, it emphasises that strategic planning is a critical land use planning approach and can be the most effective mechanism for avoiding or reducing exposure to natural hazards.

Whilst these factors may not be of statutory effect at the current time, sufficient best practice principles exist to guide strategic planning decisions, particularly recognising and reflecting the important findings of state and national inquiries and commissions.

It is acknowledged that PBP 2019 is not underpinned by a risk framework, but recent Inquiries and Commission cite it is necessary for strategic planning activities. The BFSS makes statements in relation to the Planning Proposal not being exposed to high risk however, an assessment of risk against an appropriate risk framework is not evident in order for this determination to have been made.

2.5.1 Changing property finance and insurance context

The dimensions of risk relevant for consideration through land use planning processes are different to that contemplated by mitigation and building processes. For example, involving issues of future insurability, finance availability for at-risk property, growing government expenditure on rebuilding, reconstruction and recovery, and climate adaptation of the built environment.

The costs of disaster impacts on NSW over the next forty years under a low carbon emissions scenario will exceed \$360 billion¹, noting a low emissions scenario is currently unlikely to be achieved based on existing global carbon policy.

A recent roundtable facilitated in partnership by the Insurance Council of Australia, Master Builders Australia and the Planning Institute of Australia identified that, without reform, as the population increases, pressure will grow for more housing to be developed in high-risk areas².

The 2019-20 Black Summer bushfires total insurance damage totalled \$2.32 billion.

The 2020 Royal Commission notes increasing interest from the finance sector in understanding the implications of climate change and disasters on assets and investments. It also acknowledges the rising costs of insurance premiums, giving rise to conditions of un-insurability and under-insurance.

These are important considerations for strategic land use planning in managing risk.

This is further underscored by the Insurance Council of Australia's report titled 'Building Australia's Resilience' released in 2023 which sets out policy recommendations for federal and state governments and focuses on the following pillars:

- Resilience Investment
- Land Use Planning
- National Construction Code and Standards.

This document cites the importance of risk-based approaches to development and strategic planning that considers current and future extreme weather risk to avoid rising costs of insurance, un-insurability and insurance affordability stress driven by land use planning decisions. The Committee for Sydney's 'Defending Sydney' document highlights the direct link between land use planning and insurance prices:

'Insurance Group Australia (IGA) have highlighted an explicit link between residual risk, insurance, and land use planning controls. Insurance is fundamentally a tool to transfer the financial risk of natural hazards for a price, and that price is based on the risk (alongside other pricing components). The level of natural hazard risk a community faces is directly impacted by land use planning and development controls. Generally speaking, the tighter these controls, the less residual risk. If we do not have tight planning controls, insurance becomes less affordable. Further, if insurance becomes less affordable for households, this could limit access to mortgage finance as banks require insurance to secure their loan. High insurance prices may in turn also impact on the market value of homes in high risk area'.³

¹ Deloitte Access Economics and the Australian Business Roundtable for Disaster Resilience and Safer Communities, 2021, 'Special Report: Update to the Economic Costs of Natural Disasters in Australia', Available online at

http://australianbusinessroundtable.com.au/assets/documents/Special%20report%3A%20Update%20to%20the%20economic%20costs%20of%20natural%20disasters%20in%20Australia/Special%20report%20_Update%20to%20the%20economic%20costs%20of%20natural%20disasters%20in%20Australia.pdf

² ICA, MBA, PIA, 2023, 'Communique: National Industry Roundtable: Land Use Planning and Resilience', Available online <https://masterbuilders.com.au/wp-content/uploads/2023/07/Final-Communique-National-Forum-Land-Use-Planning.pdf>

³ Committee for Sydney, 2023, 'Defending Sydney', Available online at <https://sydney.cra.au/wp-content/uploads/2023/10/Committee-for-Sydney-Defending-Sydney-October-2023.pdf>

3 Deferred Lands Strategic Bush Fire Risk Assessment

In 2021, the Deferred Lands Strategic Bush Fire Risk Assessment was completed by Meridian Urban on behalf of Northern Beaches Council. The subject site forms part of the Deferred Lands.

The purpose of the risk assessment was to inform the selection of risk-responsive and appropriate strategic land use planning controls for the Deferred Lands area as part of the formulation of a new Northern Beaches Local Environmental Plan (LEP) and Development Control Plan (DCP).

The primary objectives of the risk assessment were to:

- Understand and interpret the bush fire risk profile of the Deferred Lands area; and
- Identify potential strategic land use planning approaches and controls for including within a new Northern Beaches LEP and DCP.

The risk assessment also constitutes a BFSS for the purposes of PBP 2019, as an input to inform decision-making for Council's new LEP.

The risk assessment examined multiple scenarios, including the landscape as is, a partly-developed outcome which assumed the subject site (along with other lands) were developed, and a fuel modified scenario. This included bush fire behaviour modelling for three different fire weather scenarios.

Modelling for the existing landscape as is identifies the site as subject to fireline intensities exceeding 20,000kW/m at FFDI 100 which is the required fire weather planning threshold.

Assuming an urban use of the subject land, the scenario modelled by Meridian Urban (using multiple Phoenix RapidFire simulations) continues to identify potential fireline intensities of well in excess of 40,000kW/m within 150m of the site at FFDI 100.

There are statements made within the Deferred Lands Bush Fire Risk Assessment in relation to the Planning Proposal site, including that *'depending upon the treatment of fuels internal to these locations (i.e. the retention of vegetated corridors and patches of bushland, the risk of fire across the landscape will require careful consideration'*. This included risk issues associated with:

- Density, settlement pattern in relation to exposure and potential for urban fire intrusion
- Ability to evacuate.

The Deferred Lands Bush Fire Risk Assessment further states that development of...*'PAC sites (which includes the planning proposal land)... appear only to alter fireline intensities at the lower end of the spectrum. In this regard, whilst these sites, for the most part, avoid potentially higher fireline intensity areas of the precinct, they may remain directly adjacent to areas where high and very high fireline intensity may occur. This risk assessment is not intended to critique these sites or their future development, however it does provide a landscape-scale understanding of potential risk for Council and other stakeholders to consider in strategic planning processes'*.

The BFSS prepared in support of the Planning Proposal states that the site *'is within an area mapped by the study as being of lower potential bush fire risk'* as per the 2021 Deferred Lands Bush Fire Risk Assessment. However, as per above **this is not the case** and the BFSS does not appear to consider the implications of the above with respect to the subject land.

4 Draft NSW RFS Bush Fire Risk Management Plan

The draft Bush Fire Risk Management Plan (BFRMP) for the Northern Beaches, prepared by NSW Rural Fire Service (NSW RFS), is not currently publicly available, but it does provide further evidence as to the high-risk nature of the area within which the Planning Proposal is located.

BFRMPs set out the types of work scheduled to reduce the risk of bush fires to existing assets in an area. To achieve this, a comprehensive analysis of bush fire risk is undertaken. This is performed to guide planned mitigation works rather than for land use planning purposes, but its information remains of relevance.

The Planning Proposal land adjoins the Belrose to Davidson focus area within the BFRMP. It is not included within the focus area because it is not currently developed. The Belrose to Davidson focus area identifies that built assets are in the *'highest risk category, the highest in the BFMC area'*.

This is notably due to the proliferation of special fire protection purposes (vulnerable uses) in this area. An assessment of whether the Planning Proposal potentially exacerbates the emergency management needs of these uses does not appear to have been undertaken. It is acknowledged the BFSS provides commentary that clearing of the Planning Proposal land will reduce the threat to these facilities, however this does not appear to be supported or justified by evidence such as bush fire behaviour modelling or traffic assessments which consider emergency evacuations across the area, etc.

5 Blackash independent bush fire review

Blackash Bushfire Consulting (Blackash) was engaged by Council in 2022 to review the draft Planning Proposal and supporting BFSS (a previous version) provided by the proponent prior to the Gateway Determination.

The Blackash review identifies a range of issues that in large part do not appear to have been addressed by the current Planning Proposal or the BFSS that supports it. One of the issues is in relation to the fire runs or potential fireline intensities surrounding the Planning Proposal land which the Blackash review is said to have been 'underplayed' by the BFSS. Both the BFSS and the Blackash report have omitted or mis-interpreted key information contained within the Deferred Lands Strategic Bush Fire Risk Assessment which relates to this, as discussed earlier in this report. Extensive fireline intensities are modelled within proximity to the Planning Proposal land which, in combination with retained vegetation as part of the Planning Proposal, has not been assessed in terms of potential bush fire behaviour.

A further key issue identified by the Blackash report relates to evacuation, key aspects of which have not been appropriately demonstrated by the current version of the BFSS.

The Blackash report raises several key issues for consideration, which are reproduced in the table below. All of the issues raised are important considerations for PBP (Chapter 4) compliance. The table below indicates which issues in the Blackash report we consider to be critical to a sufficiently detailed BFSS for the purpose at hand:

Table 1 - Critical issues for consideration as part of a BFSS

Key issue for consideration (Blackash Review)	Criticality for a Bush Fire Strategic Study and PBP Compliance (Meridian Urban)
<p>Consideration of the likely success of a slip road onto Forrest Way.</p> <p>1.1. In principal support from RMS for the slip road</p> <p>1.2. Supporting documentation from RMS that a slip road is safe and viable</p> <p>1.3. Concept designs of the proposed slip way and impact on adjoining neighbours and pedestrian access.</p>	Critical – must be considered as part of strategic planning / planning proposal.
Consideration of the likely availability (approvals) and utility (through a drainage/ creek line and significant drop/ cliff) of an emergency access onto Oates Place.	Critical – must be considered as part of strategic planning / planning proposal.
Identification of potential pinch points along the Morgan Road evacuation route and consideration of vulnerability of the access if impacted by fire.	Critical – must be considered as part of strategic planning / planning proposal.
Consideration of APZ within the site adjacent to vegetated areas that form pinch point which may restrict or inhibit evacuation out of the site.	Critical – must be considered as part of strategic planning / planning proposal.
The discrepancy between the dead-end roads in the southeast of the site and the joined perimeter roads needs to be clarified.	Non-critical – can be addressed at the site or subsequent approval level

Several pinch points are evident within the site and external to the site. These could be rectified with provision of APZ as has been provided elsewhere within the site. The external pinch points should be considered as a scenario of fire burning within them which restricts passage or where required, owners of land approached to determine potential for areas to be managed providing surety for evacuation routes.	Critical – must be considered as part of strategic planning / planning proposal.
The ownership and ongoing management arrangements for APZs should be documented.	Critical – must be considered as part of strategic planning / planning proposal.
The evacuation is contingent on the “pending upgrade of the Morgan Road/ Forest Way intersection.” The likely success of the slip road should be investigated as a key enabling provision of the PP. If the slip road is not viable, the PP will need to consider other options for the access and bushfire safety.	Critical – must be considered as part of strategic planning / planning proposal.
The SBS underplays the potential fire runs into the site. The PP provides APZs that are in accordance with PBP and as such, the fire runs should be provided which reflect potential fire penetration into the site.	Critical – must be considered as part of strategic planning / planning proposal.
The retained vegetation within the site (conservation zone) has potential for spot fire ignition and small-scale fires. This provides potential for pinch points (see earlier sections) to restrict access. Provision of APZs within the retained vegetation should be considered to ensure access.	Critical – must be considered as part of strategic planning / planning proposal.
The SBS has taken a view that 4,000 – 20,000kW is a low risk. This is not supported as per and should be reconsidered.	Critical – must be considered as part of strategic planning / planning proposal.
Unmanaged vegetation along Morgan Road should be considered in terms of potential pinch point and impact on evacuation.	Critical – must be considered as part of strategic planning / planning proposal.
The total time to evacuate the PP precinct and surrounding areas should be clarified.	Critical – must be considered as part of strategic planning / planning proposal.

The Blackash review concludes by noting (pg. 28):

...the PP has been developed on the premise of evacuation being provided by Morgan Road and a new slip lane on to Forest Way and a new emergency access on to Oates Place. The availability and utility of both of these key aspects has not been demonstrated in the PP and are fundamental enabling provisions for the PP. If one or both of these options are not available, the PP will need to rethink the design response to activation of the site.

Similarly, pinch points within and external to the site have not been addressed sufficiently to ensure access (evacuation) availability during bushfire impact. These are fundamental issue to be resolved.

Other considerations of loss of vegetation for the development, roads and APZs will clash with ecology and biodiversity considerations for the site.

From a bushfire perspective, it is recommended that the Planning Proposal does not proceed to gateway until the key matters for consideration identified within this report are satisfactorily resolved.

The above conclusion is supported from our review of the available documentation.

A more detailed summary of Blackash's comments relative to the assessment performed by the BFSS supporting the Planning Proposal is provided in the following section.

6 Assessment against Chapter 4 of PBP

This section provides an assessment of how the Planning Proposal has been evaluated against the provisions of Chapter 4 of PBP.

Importantly, PBP 2019 states that *'strategic planning should provide for the exclusion of inappropriate development in bush fire prone areas as follows:*

- *the development area is exposed to a high bush fire risk and should be avoided;*
- *the development is likely to be difficult to evacuate during a bush fire due to its siting in the landscape, access limitations, fire history and/or size and scale;*
- *the development will adversely effect other bush fire protection strategies or place existing development at increased risk;*
- *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; and*
- *the development has environmental constraints to the area which cannot be overcome'.*

Insufficient evidence is provided by the Planning Proposal and BFSS to be reasonably satisfied that the above requirements have been met, as summarised below and in the table that follows.

6.1 Summary

The commentary as outlined previously in this report and as provided in Table 2 that follows, addressing Table 4.2.1 of Chapter 4 of PBP, is summarised as follows:

- Insufficient evidence is contained within the BFSS to justify the compatibility of land uses relative to the strategic assessment themes set out by Table 4.2.1 of PBP 2019 and required by Direction 4.3. This is noting:
 - o The proposed zoning rationale (which is to be considered as part of the land use assessment) has not been measured against the characteristics of hazard captured by the landscape assessment. Proposed R2 zoning potentially unlocks permissible uses which have not been assessed, including potential SFPPs. The zoning currently proposed could allow development under SEPPs that have unascertained risks which has not been addressed.
 - o The BFSS does not make an assessment of land use in terms of appropriateness of density, settlement pattern and land use type, as required by Chapter 4 of PBP. This review highlights a number of potential matters which require further consideration from a strategic perspective.
 - o The BFSS makes statements in relation to the Planning Proposal not being exposed to high risk however, the BFSS has not adopted a risk framework that clearly informs this view.
- The Deferred Lands area is not a low-risk location and thus requires strategic consideration, underscored by specific statements contained in the Deferred Lands Strategic Bush Fire Risk Assessment and the NSW RFS draft BFRMP. The risk dimensions raised by these assessments requires further consideration before a Planning Proposal should proceed.
- The evidence which underpins statements made within the BFSS is not clear in some cases, raising the need for further detail to be provided in order to ensure it is sufficiently fulsome in its consideration against the intent of Chapter 4 of PBP 2019.

Mere compliance with bush fire protection measures does not address the nature of matters outlined by Chapter 4 of PBP.

- The Planning Proposal and BFSS relies upon assumptions of activities beyond its control, for example changes to the road network and land ownership associated with this, as well as the electricity network. Detail that specifies certainty in relation to these outcomes has a potential bearing on the assessment of land use appropriateness.
- The concerns raised by both Council and the Blackash review of the draft Planning Proposal in 2022 in relation to evacuation do not appear to have been addressed, and uncertainty remains. This is a key element at a strategic level. Should the proposed arrangements turn out not to be viable or feasible, there is the potential for a sub-optimal outcome to occur which would result in risk transfer to emergency services, surrounding landholders and the wider community, as well as any future residents. The potential quantum of this is currently unknown, and thus should be a key point of focus of the BFSS.

Table 2 - Review summary of PBP Chapter 4 bush fire strategic study requirements against the planning proposal BFRS and Blackash review

PBP Chapter 4 Themes	Travers Bush Fire Strategic Study 2023 (BFRS)	Blackash Independent Review	Meridian Urban Commentary
<p>Bush fire landscape assessment</p>	<ul style="list-style-type: none"> The proposed site is located downhill of fire threats and potential fire runs located to the north west, north and north east. Following a general principle of fire gaining intensity and rate of spread when travelling uphill, the siting of the proposal downhill of fire runs should in theory mitigate the most intense fires. The general principle of increased intensity and rate of spread of fires travelling uphill is not universal. The possibility of vortex winds, resulting in vorlicity driven lateral spread on the lee side of a landscape rise, such as south east of the Morgan road / Forest Way intersection, cannot be completely discounted. However, the disconnection of vegetation provided by the road network and existing development, combined with the vegetation reduction provided by the proposed development, the risk of increased downhill fire spread is heavily reduced. The existing landscape fire risk, that is, with no development on the proposed location, would possibly result in fire igniting from ember attack on the slopes below the existing residential and SFP development located along Forest Way and Morgan Road. In that the proposal would result in the removal of vegetation from a significant portion of the site and that development would result in APZ and property management, the risk to existing development would be significantly reduced. 	<ul style="list-style-type: none"> The BFRS underplays the potential fire runs into the site. The Planning Proposal provides APZs that are in accordance with PBP and as such, the fire runs should be provided which reflect potential fire penetration into the site. 	<ul style="list-style-type: none"> The BFRS makes representations regarding fire behaviour based upon 'general principles' of fire behaviour and how they may apply. <ul style="list-style-type: none"> The BFRS provides only a narrative of potential bush fire behaviour based on selected inputs. It does not model potential fire behaviour relative to the site, before or after proposed development to inform this narrative. Whether or not modelling is required, further substantiated evidence is required. The BFRS does not appear to consider the retention of bushland within the boundary of the site and relative risk this may pose. The BFRS does not provide an evidence-based assessment of the severity or intensity of potential impact on life or property in context of the broader surrounding landscape which is required by Table 4.2.1 of Chapter 4 of PBP. The fire history section maps a 2014 wildfire event across almost the entirety of the site, with a history of fire across the broader surrounding area which was also identified by the Deferred Lands Bush Fire Risk Assessment prepared by Meridian Urban to inform Northern Beaches Council's strategic planning activities. Other land uses, including a significant clustering of SFPs are located in the locality and should be considered as part of the landscape assessment in the context of 'potential impact on life and property in the context of the broader surrounding landscape' as prescribed by Table 4.2.1 of Chapter 4 of PBP. The BFRS does not provide sufficient detail to evaluate the impact of the proposed development on existing surrounding uses and occupants.
<p>Land use assessment</p>	<ul style="list-style-type: none"> The site is as far as practicable, located away from potentially dangerous situations, in that it is not located on a ridge-top, is located in a position sheltered from the identified major fire threat potential from the north west and where potential uphill fire runs are limited in width and length. The Deferred Lands Strategic Bush Fire Risk Assessment prepared by Meridian Urban for Northern Beaches Council (March 2022) analyses and identifies land within the deferred matter zoning of the area base on potential fire intensity and inferred fire risk. The Patyegarang project site is located 	<ul style="list-style-type: none"> The retained vegetation within the site (conservation zone) has potential for spot fire ignition and small-scale fires. This provides potential for pinch points (see earlier sections) to restrict access. Provision of APZs within the retained vegetation should be considered to ensure access. The SBS has taken a view that 4,000 – 20,000kW is a low risk. This is not supported and should be reconsidered. Unmanaged vegetation along Morgan Road should be considered in terms of 	<ul style="list-style-type: none"> The land use assessment conducted by the BFRS references that the site is within an area mapped by the study as being of lower potential bush fire risk. <ul style="list-style-type: none"> The mapping that is cited from the 2021 Deferred Lands Strategic Bush Fire Risk Assessment forms one of multiple scenarios, a 'hypothetical' scenario, which assumed the site (along with other lands) were developed and including fuel reduction. This ignores the other scenarios which formed part of that risk assessment, including the 'without fuel reduction' scenario which identifies the site as subject to fireline intensities exceeding 20,000kW/m at FFDI 100 which is the required fire weather planning threshold.

PBP Chapter 4 Themes	Travers Bush Fire Strategic Study 2023 (BFSS)	Blackash Independent Review	Meridian Urban Commentary
	<p>within an area mapped by the study as being of lower potential fire intensity and by inference, lower fire risk.</p> <ul style="list-style-type: none"> The Patyegarang project site is, of all potential development sites, identified within the deferred matter zoning area, a preferred site for development in that it is located in an area identified as lower potential fire risk. 	<p>potential pinch point and impact on evacuation.</p>	<ul style="list-style-type: none"> <ul style="list-style-type: none"> The scenario adopted by the Deferred Lands Strategic Bush Fire Risk Assessment made broad assumptions as part of the developed scenario which are not sufficient to support the observations drawn by the BFSS without further modelling, particularly to include the extent of vegetation and corridors sought to be retained by the planning proposal. Assuming an urban use of the subject land, the scenario modelled by Meridian Urban and referenced by the BFSS continues to identify potential fireline intensities of well in excess of 40,000kW/m within 150m of the site at FFDI 100 (i.e. fire runs). This does not appear to be discussed by the BFSS, or the potential impacts on people or property as a result. There are statements made within the Deferred Lands Bush Fire Risk Assessment in relation to the planning proposal site, including that 'depending upon the treatment of fuels internal to these locations (i.e. the retention of vegetated corridors and patches of bushland, the risk of fire across the landscape will require careful consideration'. This included risk issues associated with: <ul style="list-style-type: none"> Density, settlement pattern in relation to exposure and potential for urban fire intrusion Ability to evacuate. The Deferred Lands Bush Fire Risk Assessment further states that 'the approved development and reduced fuel PAC sites hypothetical land use scenarios appear only to alter fireline intensities at the lower end of the spectrum. In this regard, whilst these sites, for the most part, avoid potentially higher fireline intensity areas of the precinct, they may remain directly adjacent to areas where high and very high fireline intensity may occur. This risk assessment is not intended to critique these sites or their future development, however it does provide a landscape-scale understanding of potential risk for Council and other stakeholders to consider in strategic planning processes'. <ul style="list-style-type: none"> The BFSS has not addressed these statements that relate to the planning proposal site. Whilst the draft BFRMP for the Northern Beaches is not publicly available information, the Belrose to Davidson focus area identifies that built assets are in the 'highest risk category, the highest in the BFM area'. The planning proposal land directly adjoins this focus area, it is likely not directly included in it because at present, it is not developed. However, the planning proposal represents a potential expansion of this focus area, which is identified by NSW RFS as the highest risk area of the BFM.

PBP Chapter 4 Themes	Travers Bush Fire Strategic Study 2023 (BFS)	Blackash Independent Review	Meridian Urban Commentary
Access and egress	<ul style="list-style-type: none"> Provision of significantly enhanced access infrastructure is proposed. This upgrade includes the provision of a slip lane allowing traffic to turn unhindered by traffic management devices from the northern end of the Patyegarang project site to a southerly direction along Forest Way. Radiant heat impact (Bushfire Attack Level – BAL) has been calculated using the acceptable solutions tables of PBP 2019. Currently, the intersection of Forest way and Morgan road is potentially impacted by a fire emanating from the North West. The current situation could potentially result in direct flame impact on the western most lane of Forest Way in a northerly direction 	<ul style="list-style-type: none"> Consideration is required of the likely success of a slip road onto Forest Way <ul style="list-style-type: none"> In principal support from RMS for the slip road Supporting documentation from RMS that a slip road is safe and viable Concept designs of the proposed slip way and impact on adjoining neighbours and pedestrian access. Consideration of the likely availability (approvals) and utility (through a drainage/ creek line and significant drop/ cliff) of an emergency access onto Oates Place is needed. 	<ul style="list-style-type: none"> Separate to this is the issue of impacts / increased burden on mitigation for other landholders and managers (including NSW RFS, National Parks, Council, private landholders, etc) in the broader landscape as a result of development on the site for residential purposes, which has not been addressed. The land use assessment contained within the BFS does not examine the risk profile of the site or its surrounds given the context of information or evidence that it has drawn upon. The BFS suggests the planning proposal land is lower risk however this is not the context suggested by the Deferred Lands Strategic Bush Fire Risk Assessment and the NSW RFS draft BFRMP. The BFS does not assess the appropriateness of land use typologies, density or settlement pattern proposed, as required by Table 4.2.1 of Chapter 4 of PBP. <ul style="list-style-type: none"> Having regard to the above, this is a broader consideration than simply whether asset protection zones can be applied. Though it is acknowledged Table 4.2.1 identifies ability of APZ provision, this is not the only consideration but is relied upon strongly by the BFS. The 200m2 minimum lot size areas in proximity to Morgan Road represents a density which is potentially incompatible with the fire runs and potential bush fire activity from the north, contributing to potential risk through density, proximity of dwellings (house-to-house ignition) and exposure to bush fire hazard to the north. The density and settlement pattern in this regard and in context to this particular risk does not appear to have been assessed. <ul style="list-style-type: none"> APZ compliance in this area along the Morgan Road frontage does not appear to be made clear by the BFS relating to bush fire hazard external to the site. The BFS appears to rely upon a BAL assessment to measure flame contact or radiant heat exposure for the road network, justifying a slip lane (which is understood to be outside the boundary of the subject land) <ul style="list-style-type: none"> Based on the BFS, two points of access / egress is proposed for evacuation. Whether this is sufficient to enable timely evacuation does not appear to have been assessed. How the development of the site might impact the ability of surrounding occupants to evacuate does not appear to have been addressed, which relates to the capacity of the road network noting the site forms part of a broader catchment which would also likely be subject to evacuation at the same or similar time. It is not clear from the BFS whether there is likely to be

PBP Chapter 4 Themes	Travers Bush Fire Strategic Study 2023 (BFS)	Blackash Independent Review	Meridian Urban Commentary
	<p>and both lanes of Wyatt Avenue. The radiant heat impact reduces in a south easterly direction from the North West corner of the intersection, culminating in a BAL rating of 12.5 potentially impacting on the proposed slip lane location.</p> <ul style="list-style-type: none"> Secondary access in the north west of the site would be provided by a junction with Lyndhurst Way. This link would provide an advantage for existing residents to evacuate via a route to the east, avoiding interaction with fires emanating from the North West. Access to and egress from the southern end of the Patyegarang project site is limited by a load limited bridge, not suitable for heavy vehicles. Discussions with Northern beaches fire control staff have indicated that Northern Beaches Council have granted permission for NSW RFS heavy tankers to use the bridge despite the load limit in emergency situations. Discussions and planning for the replacement of the bridge are ongoing. It is further recommended that the current potential scenario for evacuating residents from Wyatt Avenue in particular through a zone of potential direct flame impact be assessed and where possible and practicable, mitigation measures implemented 	<ul style="list-style-type: none"> Identification of potential pinch points along the Morgan Road evacuation route and consideration of vulnerability of the access if impacted by fire requires addressing. Consideration is required for APZs within the site adjacent to vegetated areas that form pinch point which may restrict or inhibit evacuation out of the site. The total time to evacuate the PP precinct and surrounding areas should be clarified. 	<p>an impact on the ability for nearby SFPs to be evacuated or tended to by emergency services.</p> <ul style="list-style-type: none"> Table 4.2.1 of PBP requires a study of the existing and proposed networks in relation to evacuation – this ideally should include capacity, not just its exposure to flame contact and radiant heat. <ul style="list-style-type: none"> An assessment of radiant heat to determine evacuation effectiveness does not consider likely times to arrival of fire (evacuation window) or the traffic likely to be entering the road network, and already travelling on the road network. The assumption that persons within a vehicle would be reasonably protected from radiant heat flux of 12.5 kW/m², which is a measure of radiant heat impact on buildings, is not sufficiently justified by evidence supplied by the BFS rating. PBP identifies that standard glass is likely to fail at this level of radiant heat exposure, and 7 kW/m² is likely fatal after just a few minutes. This is not to say that roads need to be immune from radiant heat, but rather this measure of assessment and the assumptions upon which it relies is potentially course in nature. Risk is also potentially amplified if vehicles are standing on the road network in traffic, and unable to evacuate (and exposed to sustained levels of radiant heat flux). The proposed slip land to Morgan Road is external to the Planning Proposal land and at the discretion of other land holders. The reliance on such an outcome which is not in the control of the Proponent and may not be technically feasible is an issue to be addressed. <ul style="list-style-type: none"> The Planning Proposal does not appear to include any upgrades to Morgan Road itself which will be carrying broader traffic from a wider area during any emergency evacuation. The Oates Place / Lyndhurst Way evacuation point relies on fairly substantial road upgrades in an existing low density residential area. How it is intended to function during an emergency remains unclear. The change of grades between the two also requires further examination in terms of feasibility. <ul style="list-style-type: none"> The Planning Proposal assumes that around 10 per cent of vehicle movements would occur via this route. Should Morgan Road be unavailable for evacuation, the pressure placed on egress from Oates Place, and the feasibility of this, warrants further assessment. Whilst Table 4.2.1 does not explicitly specify the need to consider the gradient of the road network, in this case the steep and meandering nature of the road network is a factor worthy of consideration in terms of the level of

PIP Chapter 4 Themes	Traverse Bush Fire Strategic Study 2023 (BFS)	Blackash Independent Review	Meridian Urban Commentary
Emergency services	<ul style="list-style-type: none"> Analysis of the existing emergency services capacity shows a high density of NSW Rural Fire Service (RFS) Brigades operating in the area surrounding the site. Outside of the Northern Beaches Fire District are similar high densities of NSW RFS and Fire and Rescue NSW brigades which would presumably be in a position to support local resources in the event of a major fire. Discussions with Northern Beaches fire control staff indicate that the current capacity of local RFS Brigades is sufficient to meet the increased demand posed by the addition of the proposed development. 	N/A	<p>reliance sought to be placed on Morgan Road for evacuation.</p> <ul style="list-style-type: none"> The BFS states that 'discussions with Northern Beaches fire control staff indicates that the current capacity of local RFS brigades is sufficient to meet the increased demand posed by the addition of the proposed development'. <ul style="list-style-type: none"> The question of impact on emergency services is potentially a broader operational matter also, beyond just brigade capacity. This is, particularly relevant considering the risk profile identified by NSW RFS under the draft BRMP and the exposure of existing uses (including SFPPs) which will require emergency services attention during events.
	<p>Infrastructure</p> <ul style="list-style-type: none"> The Sydney Water network capacity report for the Warringah water distribution area (30 June 2021) identifies the Belrose water supply zone as having limited capacity. The Sydney Water Growth Servicing Plan 2020 – 2025 does not specifically identify the Belrose area as a priority for supply upgrades. It is recommended that further study be conducted to analyse the capacity of the existing water supply network and what upgrades may be necessary to cater for the increased demand posed by the proposal. An existing high voltage transmission line traverses the site. It is understood that the line is proposed to be relocated to a more appropriate site or preferably, underground. 	N/A	<ul style="list-style-type: none"> The BFS identifies that reticulated water supply could be a challenge and that further studies are required. <ul style="list-style-type: none"> How water supply arrangements can appropriately satisfy the considerations of Table 4.2.1 is not clear. This presents a particular potential vulnerability which does not appear to have been resolved by the planning proposal. The BFS is also not clear on whether water supply implications may involve a broader impact on supply volumes or pressures for adjoining areas as part of the network. The BFS identifies that a high voltage transmission line traverses the planning proposal land, stating that 'it is understood that the line is to be relocated to a more appropriate site or preferably, underground'. No further detail is provided. Given the magnitude of cost and potential impacts of such an activity, owing to a third party, addition detail is required. This includes timeframes regard its relocation (if feasible) relative to development and implications if it is not undergrounded.
Adjoining land	<ul style="list-style-type: none"> Existing development on the eastern side of Forest Way and north of the Patyegarang project site are posed with a bushfire threat from vegetation within the proposal site. Removal of a proportion of this vegetation for development will significantly reduce the bushfire threat to these assets. The existing development comprises a mixture of development types and of construction standards, reflecting a pattern 	N/A	<ul style="list-style-type: none"> The BFS appears to suggest that development that is currently exposed to bush fire hazard would be aided by the proposed development, including a better outcome, owing to clearing of the subject land, noting the addition of 450 new households which will be introduced which increases exposure (or more, acknowledging the permissibility of secondary dwellings under the planning system which may increase population and development exposure which is also not addressed). <ul style="list-style-type: none"> How the above is evidenced is not made clear.

PBP Chapter 4 Themes	Towers Bush Fire Strategic Study 2023 (BFSS)	Blackash Independent Review	Meridian Urban Commentary
	<p>of development carried out over an extended period of time, some pre dating the requirement for bushfire protection measures. Improving the bushfire protection outcome for these properties would be difficult from logistical, financial and legal reasons.</p> <ul style="list-style-type: none"> By effectively relocating the bushfire threat to the periphery of the proposed development, an opportunity arises to provide current best practice measures for the proposed development, providing an acceptable outcome for new development and significantly better outcome for existing assets. 		<ul style="list-style-type: none"> The vulnerabilities of older building stock to ember attack is potentially not likely to change by the addition of more people and property at the bushland interface. The BFSS does not explore and assess the potential impact on the ability of surrounding land uses to evacuate, which includes a large number of SPPs.

