

Central Coast

Local Planning Panel

Central Coast
Supplementary Local Planning Panel
Business Paper
23 May 2024



Meeting Notice

**The Supplementary Local Planning Panel
of Central Coast
will be held remotely - online,
Thursday 23 May 2024 at 1.00 pm,
for the transaction of the business listed below:**

1 Procedural Items

1.1 Disclosures of Interest.....3

2 Planning Reports

2.1 DA/60589/2020 - 129 Alan Street, Niagara Park - Proposed Dwelling House &
Garage - LPP Supplementary Report4

Kara Krason
Chairperson

Item No: 1.1
Title: Disclosures of Interest
Department: Governance

23 May 2024 Local Planning Panel

Reference:

The NSW Local Planning Panel Code of Conduct states that all panel members must sign a declaration of interest in relation to each matter on the agenda before or at the beginning of each meeting.

Recommendation

That Panel Members now confirm that they have signed a declaration of interest in relation to each matter on the agenda for this meeting and will take any management measures identified.

Item No: 2.1

Title: DA/60589/2020 - 129 Alan Street, Niagara Park -
Proposed Dwelling House & Garage - LPP
Supplementary Report

Central Coast
Local Planning Panel

Department: Environment and Planning

23 May 2024 Supplementary Local Planning Panel

Reference: F2020/02502 - D16175805

Author: Robert Eyre, Principal Development Planner. Residential Assessments

Section Manager: Ailsa Prendergast, Section Manager. Residential Assessments

Manager: Andrew Roach, Unit Manager, Development Assessment

Summary

An application has been received for construction of a new dwelling house at Lot 14 DP 2480, 129 Alan Street, Niagara Park.

The application was considered by the Local Planning Panel at its meeting of 16 December 2021. (Attachment 4). The matter was deferred at that meeting pending the submission of additional information, primarily in relation to legal matters pertaining to access (the land is accessed via a Right of Way (ROW)).

The matter was again considered and deferred at the Panel meetings of 18 October 2022 (Attachment 5) and 28 February 2023 (Attachment 6), for the receipt of additional information. The additional information, including further legal advice, has been obtained and the matter is referred to the Panel for consideration.

This report provides commentary in relation to the matters raised by the Panel. Extensive legal advice has been received to the matters raised by the LPP.

The application is required to be referred to the Local Planning Panel for determination as the proposed development is classified as 'designated development' under *Interim Development Order No.122 - Gosford*.

No public submissions were received to the exhibition of the proposal.

The application is recommended for approval, subject to conditions.

Applicant	J Kechagias
Owner	J Whyte and C Whyte
Application No	DA60589/2020
Description of Land	Lot 14 DP2480 No. 129 Alan Street Niagara Park
Proposed Development	New dwelling house
Site Area	20,160m ²
Zoning	7(a) Conservation under IDO 122
Existing Use	Vacant
Employment Generation	No
Estimated Value	\$345,000.00

Recommendation

- 1 That the Local Planning Panel grant consent to DA60589/2020 for the development of a dwelling house on lot 14 DP2480 No. 129 Alan Street, Niagara Park subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.***
- 2 That Council advise relevant external authorities of the Panel's decision.***

Background

The application for a Dwelling House and associated Garage at 129 Alan Street, Niagara Park was initially considered by the Local Planning Panel at its meeting of 16 December 2021. Supplementary reports were considered by the Panel on 18 October 2022 and 28 February 2023. The previous reports, draft conditions, plans and related documents previously considered by the Local Planning Panel are separately provided.

At the meeting of 28 February 2023, the matter was deferred by the Panel with the following resolution:

That the Local Planning Panel further defer consideration of this matter for electronic determination, to seek the following:

- 1 Updated legal advice that addresses the further information provided by Council in the supplementary report advising that the proposed works on the adjoining property that do not form part of the application are not exempt development nor complying development, which alters the assumptions included in the currently provided legal advice. On the basis that such works are not exempt development, will the works beyond the site boundary require separate development approval either prior to any approval issued for the new dwelling becoming an operational consent (deferred commencement condition) or prior to*

commencement of works? How will the works be facilitated without development approval?

- 2 *Legal review of the draft conditions of consent in the context of the legal advice provided to the panel confirming that the works beyond the boundary are not currently part of the application. The draft conditions include several conditions relating to design and development details for the off-site works, in addition to conditions proposed by external authorities which cover works subject to the DA and works on the adjoining land that do not form part of the DA. What is the legal mechanism for conditioning and carrying out works on an adjoining property where landowners consent and development approval for such works is not to be provided?*
- 3 *A further supplementary report that includes an assessment in response to the provision of legal advice that addresses the matters outlined above, including an updated set of draft conditions.*

Report

Legal advice dated 18 May 2023 has been received (refer to Attachment 12). In summary the legal advice states:

1. Section 4.17(1)(f) of the *Environmental Planning and Assessment Act 1979* contains the power to impose a condition requiring the carrying out of works whether or not being works on land to which the application relates. The fact that the works off site are not exempt development does not impact the power available under Section 4.17(1)(f). Council (and the Local Planning Panel) has the power to impose condition 2.4 of the proposed conditions of consent.
2. Condition 2.4 provides development consent for the proposed works in the right of carriageway. The fact that the works in the right of carriageway are not exempt development does not change the previous advice. No separate consent for the works in the right of carriageway is required as the works have been considered and are required under this consent.
3. Works can be carried out in a right of carriageway where the terms of the easement permit upgrade and maintenance of the right of carriageway. The applicant has provided legal advice in relation to the terms of the right of carriageway which confirms upgrade and maintenance works are permitted (refer to Attachment 9). The legal advice submitted by the Applicant's solicitor has been reviewed by Council's Solicitor and is considered correct.

4. It is a separate matter for the applicant on the DA to make arrangements for permission to be obtained to carry out the works on the land not the subject of the DA. That is in the right of carriageway.
5. Condition 2.4 and the balance of conditions are reasonable and appropriate. It is recommended that in addition to condition 5.5 that compliance with the Vegetation Management Plan be required at all times (refer amended condition 6.4).

Late Public Submission/Further Legal Advice

- On 28 June 2023, a very late submission was received on behalf of the Central Coast Better Planning Group, which contended that the EIS did not comply with clause 71 of the *Environmental Planning and Assessment Regulation 2000*. In particular, that the EIS was not signed and did not contain certain statements including the name and address of the person who prepared the EIS.

It should be noted the application was lodged on 20 January 2021, and exhibited from 29 January 2021 to 9 March 2011 with no public submissions received.

Further legal advice was sought on the above issue. The legal advice received on 23 November 2023 states:

As discussed below, the remaining matter is for the assessment of the EIS as against item 6 in Part 3 of Schedule 2 of the EP&A Regulation 2000 to be undertaken.

We set out a Table which contains each of the matters set out in item 6, and our comments against each of the requirements, for Council's assessment and consideration:

Item 6 requirement	Comments
<i>(a) the name, address and professional qualifications of the person by whom the statement is prepared,</i>	<i>The name and professional qualifications of John Kechagias is provided on page 2 of the EIS. The author is described on page 2 as John Kechagias. There is not an address detail, but we would assume when the EIS was lodged, or through various email communications with Mr Kechagias, the address of Apex Intelligent Design is provided.</i>
<i>(b) the name and address of the responsible person,</i>	<i>A "responsible person" is not designated in the document but by the detailing of Mr Kechagias as the author of the report and the provision of his details it is reasonable to assume he is the responsible person for the purposes of the Regulations.</i>

<p>(c) the address of the land— (i) in respect of which the development application is to be made, or (ii) on which the activity or infrastructure to which the statement relates is to be carried out,</p>	<p>The property description, being the land in respect the development application is made is detailed on page 6 of the EIS and is No 129 Alan Street Niagara Park (Lot 14 in DP 2480). There is also a detailed description of the property provided on page 6 of the EIS.</p>
<p>(d) a description of the development, activity, or infrastructure to which the statement relates,</p>	<p>The proposed development is detailed on page 6 to page 7 of the EIS. In summary the application seeks approval for the construction of a single storey dwelling house comprising 4 bedrooms and a study with a detached garage and new driveway on Lot 14, DP 2480 at 129 Alan Street Niagara Park.</p>
<p>(e) an assessment by the person by whom the statement is prepared of the environmental impact of the development, activity, or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule,</p> <p>The matters referred to in the Schedule are contained in item 7 – which provides:</p> <p>(1) An environmental impact statement must also include each of the following— (a) a summary of the environmental impact statement, (b) a statement of the objectives of the development, activity or infrastructure, (c) an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure, (d) an analysis of the development, activity or infrastructure, including— (i) a full description of the development, activity or infrastructure, and (ii) a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected, and (iii) the likely impact on the environment of the development, activity or infrastructure, and (iv) a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and (v) a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out,</p>	<p>The copy of the document we have been provided with does not attach the Appendix A which is titled "EIS Requirements", however, there are several details included within the primary document.</p> <ul style="list-style-type: none"> • We have not located a "Summary" of the environmental impact statement; however section 6 does provide a summary of the environmental impact measures. • The objectives of the development are not specifically addressed under any heading set out as "objectives of the development". We consider that this requirement may be met by the "Description of the proposal" which is detailed at pages 6, 7 and 8 in the EIS. • The feasible alternatives to the carrying out of the development, having regard to the objectives, including consequences of no development are analysed over sections 5.1, 5.2, 5.3 and 5.4 of the EIS. • The analysis of the development is undertaken in section 1.2. The description of the environment likely to be affected by the proposal is set out under sections 1.8, 1.9, and Part 2 of the EIS. An analysis of the environmental impacts of the development is undertaken in section 3 of the EIS. The description of the measures proposed to mitigate the impact of the development are addressed in section 6 of the EIS. No other approvals are needed to undertake the proposal on the site. • The section 6 in the EIS deals with the measures set out above, in a single section. The compilation is not detailed however, item 7(1)(e) does not request an analysis, rather just a "compilation"

<p>(e) a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d)(iv),</p> <p>(f) the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4).</p>	<p>of the environmental impact measures proposed.</p> <ul style="list-style-type: none"> • The reasons justifying the development are dealt with across the various sections set out above. There is an analysis of the biophysical, economic, and social considerations that is dealt with in sections 2 and 3 of the EIS. We have been unable to locate an analysis of the principles of ecologically sustainable development, referable to the proposal, in the EIS. There is a reference to ESD on page 41 but no analysis referable to the proposal is undertaken.
<p>(f) a declaration by the person by whom the statement is prepared to the effect that—</p> <p>(i) the statement has been prepared in accordance with this Schedule, and</p> <p>(ii) the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and</p> <p>(iii) that the information contained in the statement is neither false nor misleading.</p>	<ul style="list-style-type: none"> • There is a statement on page 41 of the EIS indicating that the document has been prepared in accordance with the Regulations. Notably, the EP & A Regulation 1980 is referred to, although that is not considered to be a specific concern. • There does not appear to be a statement that the information contained in the statement is neither false nor misleading. That may have been provided separately to Council but is required.
<p>(2) The person preparing the statement must have regard to the following—</p> <p>(a) for State significant development—State Significant Development Guidelines,</p> <p>(b) for State significant infrastructure—State Significant Infrastructure Guidelines.</p>	<ul style="list-style-type: none"> • The proposal is not in relation to state significant development or infrastructure, so this clause is not relevant to this application.

Summary and Recommendations

The EIS largely addresses the criteria required in items 6 and 7 of Part 3 of Schedule 2 of the EP&A Regulation 2000.

However, we recommend that the EIS be supplemented with a statement that addresses ecologically sustainable development, and in that regard the applicant can be directed to item 7 (4) of Part 3 of Schedule 2 of the Regulation which addresses the particular principles of ESD that should be assessed in the EIS, having regard to the application. We also consider that there should be a clear statement that the information contained in the statement is neither false nor misleading. Both of these matters can be attended to by providing supplementary information. In addition, given these matters are to be

addressed in supplementary information, it would also be prudent to obtain a "Summary" of the EIS.

Following the supplement to the EIS addressing the above matters we see no impediment on a legal basis for the grant of consent.'

Applicant's Submission

The applicant has now submitted a supplement to the EIS addressing the above matters which includes:

1. Address and contact details of person who prepared EIS and their qualifications.
2. The document is signed.
3. It references the *Environmental Planning and Assessment Regulation 2000*.
4. There is a declaration that the material is neither false nor misleading
5. An executive summary has been provided.
6. A response towards the requirements to the *Environmental Planning and Assessment Regulation 2000* for ecologically sustainable development has been added in Section 7 of this EIS.
7. The conclusion has been expanded (refer to Attachment 2).

Advertising/Renotification

Chapter 7.3 of the *Gosford Development Control Plan 2013* sets out in respect of applications where a development application has been amended prior to determination that:

'... if in the opinion of Council or staff with the appropriate delegated authority the amendments are minor, or will result in no additional impacts, the amendments will not require readvertisement or re-notification.'

Similar provisions exist in the current *Central Coast Development Control Plan 2022*.

In this case, the amended information submitted (amended EIS with minor changes) are considered minor, they do not significantly change the development proposed and do not create any additional impacts.

As such, it is the view of assessing officers that renotification of the proposal is not warranted.

Conclusion/Recommendation

The application was correctly notified under the provisions of GDCP 2013. No public submissions were received.

2.1 DA/60589/2020 - 129 Alan Street, Niagara Park - Proposed Dwelling House & Garage - LPP Supplementary Report (cont'd)

The proposal is supported by external authorities and Council's internal referral assessment staff, subject to conditions.

The EIS has been reviewed, including independent legal review, and minor amendments made to satisfy the requirements of the legislation and the issues raised in the submission received well outside the exhibition period. As such the application is recommended for approval, subject to conditions.

Attachments

1 	DA60589/2020 Draft Conditions of Consent	D14943925
		
2 	PUBLIC - Redacted Architectural Plans 129 Alan Street, Niagara Park	D14971905
	DA 60589 2020	
3 	Revised Plans 129 Alan Street NIAGARA PARK DA/60589/2020	D15105043
		
4 	DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling	D14943625
	House	
5 	Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park	D15124258
	- Dwelling House and Detached Garage.	
6 	DA 60589/2020 - 129 Alan St Niagara Park - Supplementary Report	D15546182
	and Legal Advice - Dwelling House & Garage	
7 	Ecological Report - Appendix C - PAN-52378 DA/60589/2020	D15076275
		
8 	Easement/Restriction Letter - Appendix A - PAN-52378	D15076278
	DA/60589/2020	
9 	Owner's additional legal opinion for the LPP - 129 Alan Street, Niagara	D15160936
	Park - DA/60589/2020	
10 	Updated Letter to Central Coast Council - re Right of Way	D15346843
	DA/60589/2020 129 Alan Street, Niagara Park (WWSB 222179)	
11 	222179 Advice on ROW Final Version - 129 Alan Street NIAGARA	D15452822
	PARK - DA/60589/2020	
12 	Advice on Right of Way - 129 Alan Street NIAGARA PARK -	D15682185
	DA/60589/2020	
13 	Environmental Impact Statement (Rev C) - PAN-52378 - 129 Alan	D15972541
	Street, NIAGARA PARK - DA/60589/2020	
14 	Updated Flora and Fauna Report FINAL Sept 2021 - 129 Alan Street,	D14841113
	NIAGARA PARK DA/60589/2020	
15 	Schedule of External Finishes 129 Alan Street, Niagara Park	D14421900
	DA/60589/2020	

1. PARAMETERS OF THIS CONSENT

1.1. Approved Plans and Supporting Documents

Implement the development substantially in accordance with the plans and supporting documents listed below as submitted by the applicant and to which is affixed a Council stamp "Development Consent" unless modified by any following condition.

Architectural Plans by: Apex Intelligent Design

Drawing	Description	Sheets	Issue	Date
A-01.1	Site Plan	1	-	30/05/2019
A-01.2	Site Detail	1	-	30/05/2019
A-04	GA Ground	1	-	30/05/2019
A-04	Roof Plan	1	-	30/05/2019
A-05	Window Schedule	1	-	30/05/2019
A-06	Elevations North/East	1	-	30/05/2019
A-07	Elevations West/South	1	-	30/05/2019
A-08	Schedule of External Finishes	1	-	30/05/2019

Supporting Documentation

Document	Title	Date
J Kechagias	Environmental Impact Statement Rev C	29/11/2023
Douglas Partners	Site Classification & On-Site Effluent Disposal Assessment Project 82899.01	November 2020
Larry Cook Consulting P/L	Further Information Waste-Water Management Plan Ref:22009-A	04/02/2022
Apex Intelligent Design	Stormwater & Sediment Control Plan S-01	
Enviro Ecology	Integrated Bushfire & Vegetation Management Plan Rev C	04/09/2021
Fraser Ecological Consulting	Flora & Fauna Assessment	08/09/2021 & 02/03/2022
Beveridge Williams	Engineering Plans 7 Sheets. Issue P3	22/03/2022
Bushfire Code & Hazard Solutions Pty Ltd	Bushfire Assessment Report	09/11/2020
Apex Intelligent Design	BASIX Certificate No1030876S	16/11/2020
Mactree Surveys	Arboricultural Impact Assessment	17/11/2020

J Kechagias	Waste Management Plan	16/11/2020
Trehy Ingold Neate	Survey Plan SH01 Rev A	22/02/2017

- 1.2. Carry out all building works in accordance with the Building Code of Australia.
- 1.3. Comply with the conditions/requirements from the Authorities as listed below and attached as a schedule of this consent.

Government Agency / Department / Authority	Description	Ref No	Date
NSW Rural Fire Service	Conditions Clause 55(1) of EPA Regulation 2000	DA20210205000446-CL55-1	03/05/2021
Ausgrid	Conditions of approval		10/03/2021

- 1.4. Comply with all commitments listed in BASIX Certificate as required under clause 97A of the *Environment Planning and Assessment Regulation 2000*.
- 1.5. The development being carried out in accordance with the Environmental Impact Statement prepared by J Kechagias dated 24 November 2020 except where modified by the conditions of this consent.

2. PRIOR TO ISSUE OF ANY CONSTRUCTION CERTIFICATE

- 2.1. All conditions under this section must be met prior to the issue of any Construction Certificate.
- 2.2. No activity is to be carried out on site until any Construction Certificate has been issued, other than:
 - a. Site investigation for the preparation of the construction, and / or
 - b. Implementation of environmental protection measures, such as erosion control etc. that are required by this consent.
- 2.3. Submit an application to Council under Section 138 of the *Roads Act, 1993*, for the approval of required works to be carried out within the road reserve.
Submit to Council Engineering plans for the required works within a public road that have been designed by a suitably qualified professional in accordance with Council's Civil Works Specification and Gosford DCP 2013 Chapter 6.3 - Erosion Sedimentation Control. The Engineering plans must be included with the Roads Act application for approval by Council.
Design the required works as follows:

- a. The reconstruction of the existing access crossing within Alan Street to service the property. The crossing shall be a minimum 6.0metres wide sealed pavement incorporating splays to accommodate the swept turning paths of the RFS 10m Tanker and extend from the Alan Street carriageway to the property boundary.
 - b. The provision of a stormwater drainage pipeline across the Alan Street access crossing connecting into the existing piped road crossing.
 - c. The construction of a minimum 4m wide sealed carriageway within Ilberry Street road reserve (Chainage 159 to 210) in accordance with the following:
 - Inner radius should have minimum radius of 6m
 - The minimum distance between inner and outer curves is 6m
- Note: A minimum 4.0 m vertical clearance is to be maintained at all times
- d. The provision of a stormwater drainage works including a road crossing, headwalls and scour protection for works within Ilberry Street road reserve.
 - e. Preparation of a Geotechnical Engineers report supporting the roadworks to accommodate the NSW Rural Fire Service 23-tonne fire-fighting tanker.

2.4. Submit engineering plans for the following works within the private property "Right of Carriageway" designed by a suitably qualified professional, in accordance with Council's Civil Works Specification and Gosford DCP 2013 Chapter 6.3 - Erosion Sedimentation Control.

- a. The construction of the existing "Right of Carriageway" connecting to the Alan Street access crossing with a sealed 6.0m wide pavement.
- b. The construction of the "Right of Carriageway" to a 4m wide sealed pavement including a passing bay located at Chainage 80, stormwater drainage works in accordance with Table 7.4 (a) as detailed in NSW Rural Fire Service *Planning for Bush Fire Protection 2019*.
- c. Services conduits (including draw wire) for Power and Phone, within the accessway corridor in accordance with the relevant authority's specifications and requirements.
- d. Storm water discharging arrangement within the site identified in the "Stormwater Plan & Sediment Control Plan", Drawing No. S-01 prepared by Apex Intelligent design.
- e. Piping of all stormwater from impervious areas within the site to proposed storm water management system,
- f. The provision of water, electricity and gas shall comply with Table 7.4a of *Planning for Bush Fire protection 2019*.
- g. Erosion and sedimentation controls.

The engineering plans and any associated reports for the above requirements must form part of the Construction Certificate.

- 2.5. Submit an application to Council under the provisions of section 68 of the *Local Government Act 1993* for an approval to install an on-site sewage management system. The system must be designed generally in accordance with the Report on Site Classification and On-Site Effluent Disposal Assessment, Project no. 828899.01, dated November 2020 and prepared by Douglas Partners. The section 68 application can be found on Council's website: www.centralcoast.nsw.gov.au

2.5. Identify 'No Go Area'

Identify trees and native vegetation proposed for retention and those approved for removal must be clearly marked on all final engineering and landscaping plans. All fenced tree protection areas must be clearly marked as "No Go Area" on all plans. The location of any threatened species and ecological communities must also be marked on all plans.

- 2.6. Comply with impact mitigation measures and recommendations as stated in the flora and fauna report (*Fraser Ecological Consulting – 08 September 2021*). Where these recommendations contained within the flora and fauna assessment are inconsistent, the conditions of consent prevail.

2.7. Submit tree removal/retention survey plan

Submit a tree removal/retention survey plan to Council's Ecologist/Environment Officer for approval. The tree removal/retention plan is to be completed by an appropriately qualified (AQF level 5 +) and experienced Arborist, in consultation with an appropriately qualified and experienced Bushfire Consultant to ensure the proposed tree retention is compliant with the requirements of the prescribed Bushfire Asset Protection Zone. The Plan for management of vegetation within the bush fire asset protection zone must be easily interpreted and is to be reviewed and approved by Council's Ecologist prior to its implementation on site.

Trees to be retained/removed within the bush fire asset protection zone and driveway area are to be selected as per the following criteria:

Trees to be retained:

- threatened species
- hollow bearing trees
- larger healthy native trees
- trees containing nests or signs of fauna usage; and
- trees growing in clusters

Trees that may be suitable for removal:

- damaged trees or trees with poor structural form
- non-natives

- small/regrowth trees; and
- trees that are likely to damage assets or infrastructure

Maximum tree retention should be prioritised within the parameters of the prescribed bushfire Asset Protection zone.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

2.8. Conduct works according to Vegetation Management Plan

Conduct all works in accordance with the Integrated Bushfire & Vegetation Management Plan dated 08/09/2021 prepared by Enviro Ecology (Council Reference D14841113).

No development or any works contrary to the Vegetation Management Plan are permitted in the designated Vegetation Management Zone as shown on the approved plan.

2.9. Submit a pavement report prepared by a practicing Geotechnical Engineer for accessway. This report must be submitted with the construction certificate application for the internal works.

The pavement depths must be determined in accordance with Council's specifications and following traffic loading. Also needs to satisfy the requirements of the NSW Rural Fire Service for a 23-tonne fire-fighting tanker.

Name of Street	Traffic Loading (ESAs)
Access way	1x10 ⁴

2.10. Submit engineering / structural plans of any proposed retaining walls greater than 600mm in height. The plans must be designed by a practising Structural / Civil Engineer. The plans for the proposed retaining walls must form part of the Construction Certificate.

2.11. Completion of the road works, associated stormwater drainage works and service utility conduits prior to commencement of building works for the dwelling house. The works must be completed in accordance with Council's Civil Works Specification and Gosford DCP 2013 Chapter 6.3 - Erosion Sedimentation Control, and documentary evidence for the acceptance of such works must be obtained from the Roads Authority.

3. PRIOR TO COMMENCEMENT OF ANY WORKS

- 3.1. All conditions under this section must be met prior to the commencement of any works.
- 3.2. No activity is to be carried out on-site until the Construction Certificate has been issued, other than;
 - a) Site investigation for the preparation of the construction, and / or

- b) Implementation of environmental protection measures, such as erosion control and the like that are required by this consent
 - c) Demolition approved by this consent.
 - 3.3. Appoint a Principal Certifying Authority for the building work:
 - a) The Principal Certifying Authority (if not Council) is to notify Council of their appointment and notify the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work no later than two (2) days before the building work commences.
 - b) Submit to Council a *Notice of Commencement of Building Works* or *Notice of Commencement of Subdivision Works* form giving at least two (2) days' notice of the intention to commence building or subdivision work. The forms can be found on Council's website www.centralcoast.nsw.gov.au
 - c) The owner of 137 Allan Street shall be notified at least 7 days prior to commencement of work within the right of carriageway.
 - 3.4. Erect a sign in a prominent position on any work site on which building, subdivision or demolition work is being carried out. The sign must indicate:
 - a) The name, address and telephone number of the principal certifying authority for the work; and
 - b) The name of the principal contractor and a telephone number at which that person can be contacted outside of working hours; and
 - c) That unauthorised entry to the work site is prohibited.
 - d) Remove the sign when the work has been completed.
 - 3.5. Submit both a Plumbing and Drainage Inspection Application, with the relevant fee, and a Plumbing and Drainage Notice of Work in accordance with the *Plumbing and Drainage Act 2011* (to be provided by licensed plumber). These documents can be found on Council's website at: www.centralcoast.nsw.gov.au.
- Contact Council prior to submitting these forms to confirm the relevant fees.
- 3.6. Prepare a Construction Traffic and Pedestrian Management Plan (CTPMP) for all activities related to works within the site. The plan must be prepared and implemented only by persons with Roads and Maritime Service accreditation for preparing and implementing traffic management plans at work sites.
- The CTPMP must describe the proposed construction works, the traffic impacts on the local area and how these impacts will be addressed.
- The CTPMP must address, but not be limited to, the following matters:
- Ingress and egress of construction related vehicles to the development site.
 - Details of the various vehicle lengths that will be used during construction and the frequency of these movement.
 - Use of swept path diagrams to demonstrate how heavy vehicles enter, circulate and exit the site or Works Zone in a forward direction.

- Deliveries to the site, including loading / unloading materials and requirements for work zones along the road frontage to the development site. A Plan is to be included that shows where vehicles stand to load and unload, where construction plant will stand, location of storage areas for equipment, materials and waste, locations of Work Zones (if required) and location of cranes (if required).
- Works Zones if heavy vehicles cannot enter or exit the site in a forward direction.
- Control of pedestrian and vehicular traffic where pre-construction routes are affected.
- Temporary Road Closures.

Where the plan identifies that the travel paths of pedestrians and vehicular traffic are proposed to be interrupted or diverted for any construction activity related to works inside the development site an application must be made to Council for a Road Occupancy Licence. Implementation of traffic management plans that address interruption or diversion of pedestrian and/or vehicular traffic must only take place following receipt of a Road Occupancy Licence from Council or the Roads and Maritime Service where on a classified road.

Where a dedicated delivery vehicle loading and unloading zone is required along the road frontage of the development site a Works Zone Application must be lodged and approved by Council. A minimum of 3 months is required to allow Traffic Committee endorsement and Council approval.

The Construction Traffic and Pedestrian Management Plan must be reviewed and updated during construction of the development to address any changing site conditions.

A copy of the Construction Traffic and Pedestrian Management Plan must be held on site at all times and be made available to Council upon request.

- 3.7. Tree protection is to be as per the recommendations of the Arboricultural Impact Assessment, prepared by Mactrees 17/11/20.

3.8. Implement Nest Box Replacement Strategy

Implement the Nest Box Replacement as per the approved Integrated Bushfire & Vegetation Management Plan (Enviro Ecology, 04/09/2021) and provide documentary evidence of compliance to Council's Ecologist and Principal Certifying Authority (if applicable) for their records.

The nesting boxes are to be constructed of durable materials such as High Density Polyethylene (HDPE) and cypress pine and maintained for no less than three years post installation.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

3.9. Conservation Fencing

Erect a minimum 1.8metre high chain wire link security fence along the boundary between the area identified on the approved Vegetation Management Plan as being a Vegetation Management Zone and the Bushfire Asset Protection Zone, as per the approved Integrated Bushfire & Vegetation Management Plan (Enviro Ecology, 04/09/2021). A lockable access gate

must be provided for maintenance purposes. The fence must be sign posted at intervals of no less than thirty (30) metres to identify the conservation value of the land and discourage access.

The sign must read as follows:

"KEEP OUT"

This is an environmental protection area.

Fines will apply for offences which cause damage to this area, under the NSW Biodiversity Conservation Act 2016.

Conservation fencing is to remain in perpetuity.

3.10. Protect Threatened species

Engage a suitably qualified Ecologist to oversee the implementation of the protection of the threatened species (*Rhodamnia rubescens*) identified within the prescribed bushfire Asset Protection Zone. The identified *R. rubescens* individuals should be fenced and protected as per the specifications within the approved Integrated Bushfire & Vegetation Management Plan (Enviro Ecology, 04/09/2021). Evidence of compliance with this condition must be submitted to Council's Ecologist for review and approval.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

3.11. Conduct works according to Vegetation Management Plan

Conduct all works in accordance with the Integrated Bushfire & Vegetation Management Plan dated 04/09/2021 prepared by Enviro Ecology (Council Reference D14841113).

No development or any works contrary to the Vegetation Management Plan are permitted in the designated Vegetation Management Zone as shown on the approved plan.

3.12. Comply with impact mitigation measures and recommendations as stated in the flora and fauna report (*Fraser Ecological Consulting – 08 September 2021*). Where these recommendations contained within the flora and fauna assessment are inconsistent, the conditions of consent prevail.

3.13. Keep a copy of the stamped approved plans on site for the duration of site works and make the plans available upon request to either the Principal Certifying Authority or an officer of Council.

3.14. Do not commence site works until the sediment control measures have been installed in accordance with the approved plans / Gosford DCP 2013 Chapter 6.3 - *Erosion Sedimentation and Control*.

4. DURING WORKS

- 4.1. All conditions under this section must be met during works.
- 4.2. Carry out construction or demolition works during the construction phase of the development only between the hours as follows:
- 7:00am and 5:00pm Monday to Saturday

No construction or demolition works associated with the development are permitted to be carried out at any time on a Sunday or a public holiday.

- 4.3. During the construction phase of the development, if any Aboriginal object (including evidence of habitation or remains) is discovered during the course of the work:
- a) All excavation or disturbance of the area must stop immediately in that area, and
 - b) The Office of Environment & Heritage must be advised of the discovery in accordance with section 89A of the *National Parks and Wildlife Act 1974*.

Note: If an Aboriginal object is discovered, an Aboriginal heritage impact permit may be required under the *National Parks and Wildlife Act 1974*.

- 4.4. Implement and maintain all erosion and sediment control measures at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.
- 4.5. Keep a copy of the stamped approved plans on-site for the duration of site works and make the plans available upon request to either the Principal Certifying Authority or an officer of Council.
- 4.6. Notify Council when plumbing and drainage work will be ready for inspection(s) and make the work accessible for inspection in accordance with the *Plumbing and Drainage Act 2011*.
- 4.7. Undertake the removal of trees as listed in Table 4-3 Trees identified for removal of the Arboricultural Impact Assessment by Mactrees 17/11/20, in a manner so as to prevent damage to those trees that are to be retained.

4.8. Supervision by suitably qualified Ecologist required

Supervision by a suitably qualified Ecologist is required for all vegetation clearing and construction works. The Ecologist must:

- Mark trees for retention and removal (including any threatened species identified for retention)
- Supervise and or confirm the installation of fencing around any conservation areas
- Provide an environmental induction to civil contractors and subcontractors

- Supervise vegetation clearing, removal of habitat trees and earthworks (where applicable)

The Ecologist must provide updates in writing to Council's Environment Officer/Ecologist upon completion of the above environmental control measures.

4.9. Undertake clearing in accordance with survey plan

Undertake clearing in accordance with the approved tree removal/retention survey plan. Trees must be removed in such a manner so as to prevent damage to surrounding trees to be retained.

Only vegetation which has been shown for removal on the approved plans is to be cleared, pruned or damaged. No further clearing through the use of Rural Fires Act 1997 10/50 Code of Practice is to take place on the site. Fire protection zones will be managed in accordance the Approved Bush Fire Assessment Report (*Building Code & Bushfire Hazard Solutions Pty Limited, 9th November 2020*).

4.10. Requirements for underscrubbing

Carry out tree or other vegetation removal consisting of underscrubbing in accordance with the following requirements:

- Underscrubbing is to be carried out with the use of rubber tyred machinery only
- Provision for exclusion zones for intermittent or permanent watercourses
- Provision for retention of all trees in accordance with the approved tree removal/ retention plan
- Fallen timber is to be recycled (such as through chipping, grinding, mulching), and left on-site or otherwise removed from the site for an approved recycling process. Temporary windrows or heaps are to be placed across contours and be a minimum of 20 metres from any vegetation which is to be retained
- No vegetation is to be pushed into those areas of no disturbance (exclusion zones), particularly drainage lines
- Removal of noxious weeds is to be by hand implements only in those areas to be retained (i.e. in the exclusion zones)
- All erosion control measures to be in place prior to clearing
- If there is to be a time lapse between clearing and sowing or planting, then a suitable cover crop must be required to be planted

4.11. Conduct works according to Vegetation Management Plan

Conduct all works in accordance with the Integrated Bushfire & Vegetation Management Plan dated 04/09/2021 prepared by Enviro Ecology (Council Reference D14841113).

No development or any works contrary to the Vegetation Management Plan are permitted in the designated Vegetation Management Zone as shown on the approved plan.

4.12. Manage native fauna during clearing and construction phase

Manage native fauna appropriately during clearing and construction phase of the approved works. In this regard, an appropriately licensed Fauna Ecologist is to be engaged to advise and supervise the clearing of trees. Where, in spite of precautions, wildlife is injured, the Fauna Ecologist is to take the necessary action to treat the animal, which may include veterinary treatment or transfer of the animal to a volunteer wildlife carer group such as WIRES or Wildlife Arc.

4.13. Felled native trees to be used in landscaping

Utilise timber from felled native trees by:

- Re-instating logs as ground habitat in areas of retained vegetation, and/or
- Wood chip or tub grind into mulch for landscaping, soil stabilisation or bush regeneration, and/or
- Using for firewood (but not piled burned on-site); and/or
- Recycling for use in construction materials, furniture or fencing.

4.14. Stockpiling will be undertaken within the approved works foot print.

Stockpiling will not be undertaken in locations that impact on adjacent areas of retained native, estuarine or aquatic vegetation or within a tidal zone or that has the potential to cause water pollution.

Stockpiles are to be managed to suppress dust, prevent erosion and reduce the impact of sediment and other contaminants on the environment. This may require compaction and the installation of adequate sediment and erosion control measures around the stockpiles in accordance with the Blue Book and Best Practice Erosion and Sediment Control (IECA) guidelines.

No contaminated material is permitted to be stockpiled onsite.

4.15. Weeds and pathogens

Vehicles and other equipment to be used on site must be free of soil, seeds and plant material before entering/leaving the site to prevent the spread of exotic plant species and pathogens.

Standard hygiene protocols will be used to clean tools and other equipment. All vehicles and machinery must be inspected prior to site entry and those failing inspection are to be sent away for cleaning. Appropriate records of inspections shall be maintained.

4.16. Comply with impact mitigation measures and recommendations as stated in the flora and fauna report (*Fraser Ecological Consulting – 08 September 2021*). Where these recommendations contained within the flora and fauna assessment are inconsistent, the conditions of consent prevail.

4.17. Re-use, recycle or dispose of all building materials during the demolition and construction phase of the development in accordance with the Waste Management Plan signed by J Kechagias dated 16 November 2020.

4.18. Construct the works within the road reserve that required approval under the Roads Act. The works must be constructed in accordance with Council's Civil Works Specification and Gosford DCP 2013 Chapter 6.3 - Erosion Sedimentation Control.

4.19. Arrange with the relevant service provider / Authority (e.g., Ausgrid, Jemena, communications provider) for the supply of services concurrent with the engineering work. Arrangements must include where required any relocation of existing mains and services and dedication of easements for mains and services.

5. PRIOR TO ISSUE OF ANY OCCUPATION CERTIFICATE

5.1. All conditions under this section must be met prior to the issue of any Occupation Certificate.

5.2. Submit a Certificate of Compliance for all plumbing and drainage work and a Sewer Service Diagram showing sanitary drainage work (to be provided by licensed plumber) in accordance with the *Plumbing and Drainage Act 2011*.

5.3. Obtain an Approval to Operate the on-site sewage management system from Council.

5.4. Comply with impact mitigation measures and recommendations as stated in the flora and fauna report (*Fraser Ecological Consulting – 08 September 2021*). Where these recommendations contained within the flora and fauna assessment are inconsistent, the conditions of consent prevail.

5.5. Implement Vegetation Management Plan

Implement vegetation management activities in accordance with the Integrated Bushfire & Vegetation Management Plan prepared by Enviro Ecology dated 04/09/2021.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

5.6. Protect Bushland / Aboriginal Heritage Management Zone

Protect the Vegetation Management Zone outside of the approved bushfire Asset Protection Zone by either of the two following approaches:

- This area will be placed under a 'Restriction on Use' pursuant to section 88B and 'Public Positive Covenant' 88E of the *Conveyancing Act 1919*. These instruments must require the land to be managed under an approved Vegetation Management Plan for the conservation of all identified threatened entities and sensitive ecological communities. The public positive covenant must be created to require the implementation of the approved Integrated Bushfire & Vegetation Management Plan (Enviro Ecology, 04/09/2021).

The 88B 'Restriction on Use' covenant must specify that no works unrelated to, or inconsistent with the implementation of the approved Integrated Bushfire & Vegetation Management Plan are to occur within this area.

The Restriction on Use must state the following:

- All bushland included for restoration and maintenance by the approved Integrated Bushfire & Vegetation Management Plan (VMP) (Enviro Ecology, 04/09/2021) must continue to be maintained in perpetuity, with environmental weeds being continually suppressed and destroyed and the land to be maintained as an ecologically sensitive area in perpetuity. Weed densities must never exceed more than 2% woody weed cover in any 1000m² or 20% exotic ground cover in any 1000m² area.
- No bushland is to be removed or modified, including for bushfire asset protection purposes without the consent of Central Coast Council
- No stockpiling of materials or equipment is to occur within the identified vegetation retention area.
- There is to be no ownership of dogs or cats.

The public positive covenant must permit Council or its nominee to enter and inspect the site and carry out any works required under the Bushland Management Plan, at the owner's cost, if the owner fails to implement and maintain the site in accordance with the Bushland Management Plan as amended and approved by Council.

The public positive covenant must be submitted to Council's General Counsel for approval.

The authority empowered to release, vary or modify the Restriction is Central Coast Council.

- The area must be dedicated under a conservation covenant to an eligible environmental body that is on the Register of Environmental Organisation (the Register). The dedication of this area, under a conservation covenant, must be conserved in perpetuity for the conservation of threatened species and their habitat.

Provide written evidence to Council from a suitably qualified ecologist detailing the implementation, supervision and compliance of the ecological protection measures specified in this consent and the Vegetation Management Plan.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

5.7. Complete the building in accordance with the provisions of *Planning for Bush Fire Protection 2019 (NSW)* and the requirements of Australian Standard AS 3959-2009 - *Construction of Buildings in Bush Fire Prone Areas* and additional measures as contained within Appendix 3 of the *Planning for Bush Fire Protection Guidelines* for a Bush Fire Attack Level of BAL 40.

5.8. Rectify any damage not shown in the dilapidation report submitted to Council before site works had commenced. Any damage will be assumed to have been caused as a result of the site works undertaken and must be rectified at the applicant's expense.

5.9. Completion of the engineering works required to provide vehicle access to the development site in accordance with Council's Civil Works Specification and Gosford DCP 2013 Chapter 6.3 - Erosion Sedimentation Control.

6. ONGOING OPERATION

6.1. Comply with impact mitigation measures and recommendations as stated in the flora and fauna report (*Fraser Ecological Consulting – 08 September 2021*). Where these recommendations contained within the flora and fauna assessment are inconsistent, the conditions of consent prevail.

6.2. Landscape using local plant stock

Supply any plant stock used in landscaping from provenance specific seed/material collected from locally endemic species to maintain genetic diversity. Non-provenance specific material is prohibited. The Landscape Plan is to integrate with the required Vegetation Management Plan where applicable.

6.3. Monitor nest boxes / salvaged hollows usage and repair / replace

Monitor nest boxes/salvaged hollows to determine their usage and to carry out repairs or replacement as required every six months for a minimum period of five years following installation. Monitoring and reporting is to be undertaken by the consulting Ecologist and reports are to be submitted to Council after each monitoring event.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

6.4. Implement and maintain vegetation management activities

Implement and maintain at all times the vegetation management activities in accordance with the approved Integrated Bushfire & Vegetation Management Plan dated 04/09/2021 prepared by Enviro Ecology (Council Reference D14841113).

Progress reports are to be submitted to Council's Ecologist by the 30th June each year for a minimum of 10 years after the release of the construction certificate. Reports are to detail the progress of the works and any recommended additional actions, with a final report certifying completion of the Integrated Bushfire & Vegetation Management Plan at the end of the implementation period, or once the specific objectives of the plan have been met. Any recommended additional actions must be completed to the satisfaction of Council prior to lodgement of the final report.

Note, subject to current rates outlined in Council's Fees and Charges, a service fee applies for Council to review any required compliance with this development condition

6.5. Minimise external lighting

Use external lighting that minimises overspill into retained vegetated areas.

7. PENALTIES

Failure to comply with this development consent and any condition of this consent may be a criminal offence. Failure to comply with other environmental laws may also be a criminal offence.

Where there is any breach Council may without any further warning:

- Issue Penalty Infringement Notices (On-the-spot fines);
- Issue notices and orders;
- Prosecute any person breaching this consent, and/or
- Seek injunctions/orders before the courts to retain and remedy any breach.

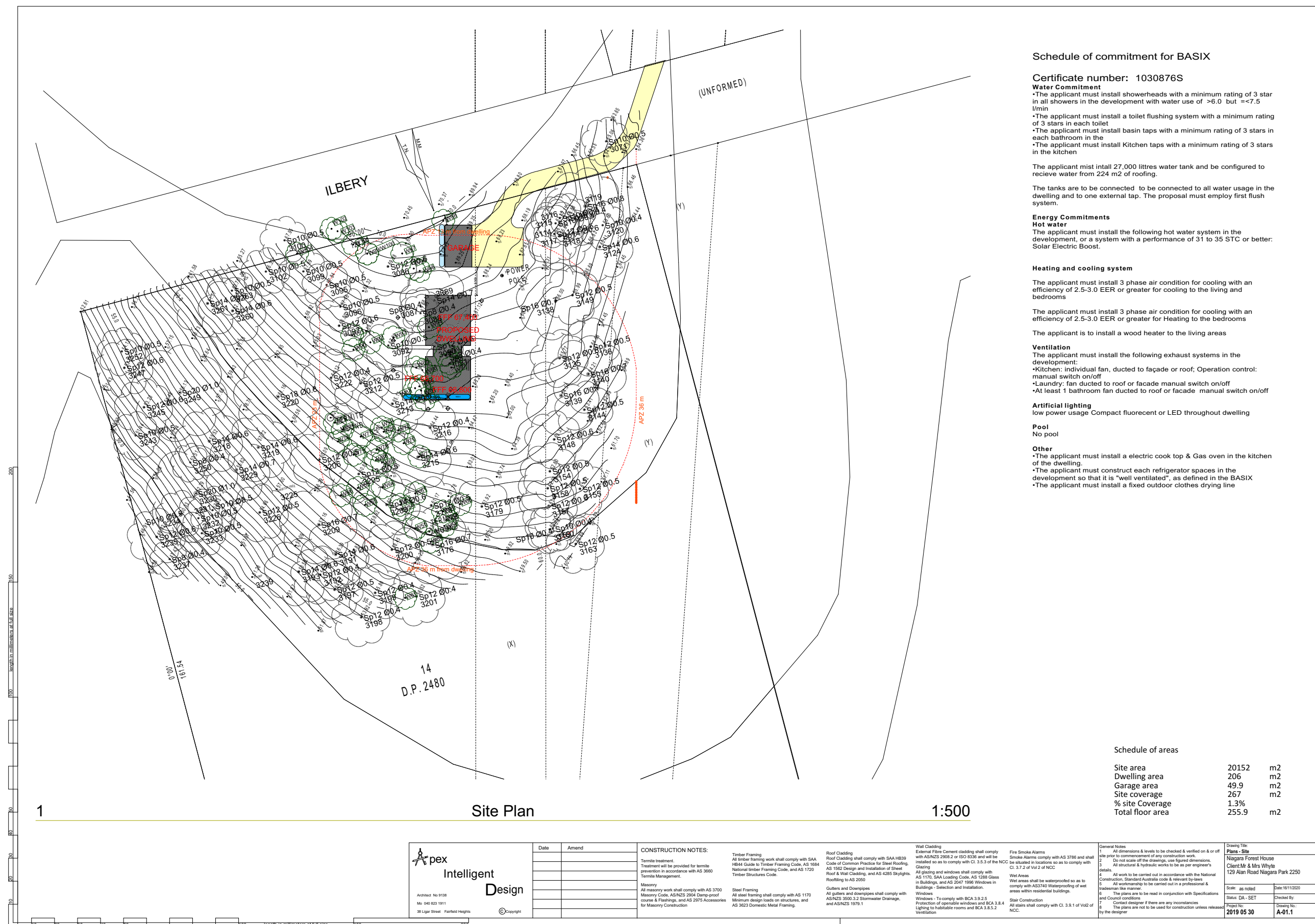
Warnings as to Potential Maximum Penalties

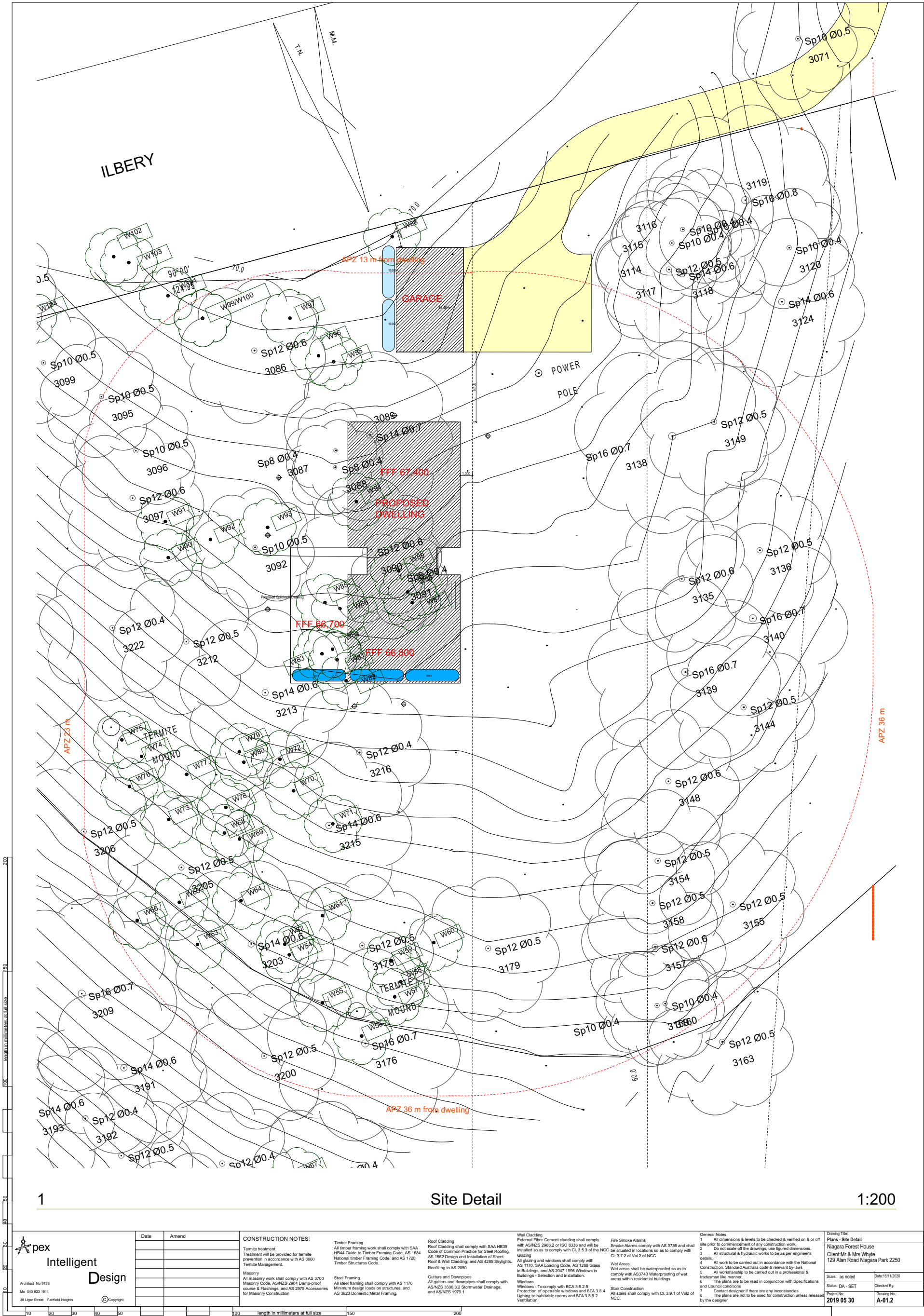
Maximum Penalties under NSW Environmental Laws include fines up to \$1.1 Million and/or custodial sentences for serious offences.

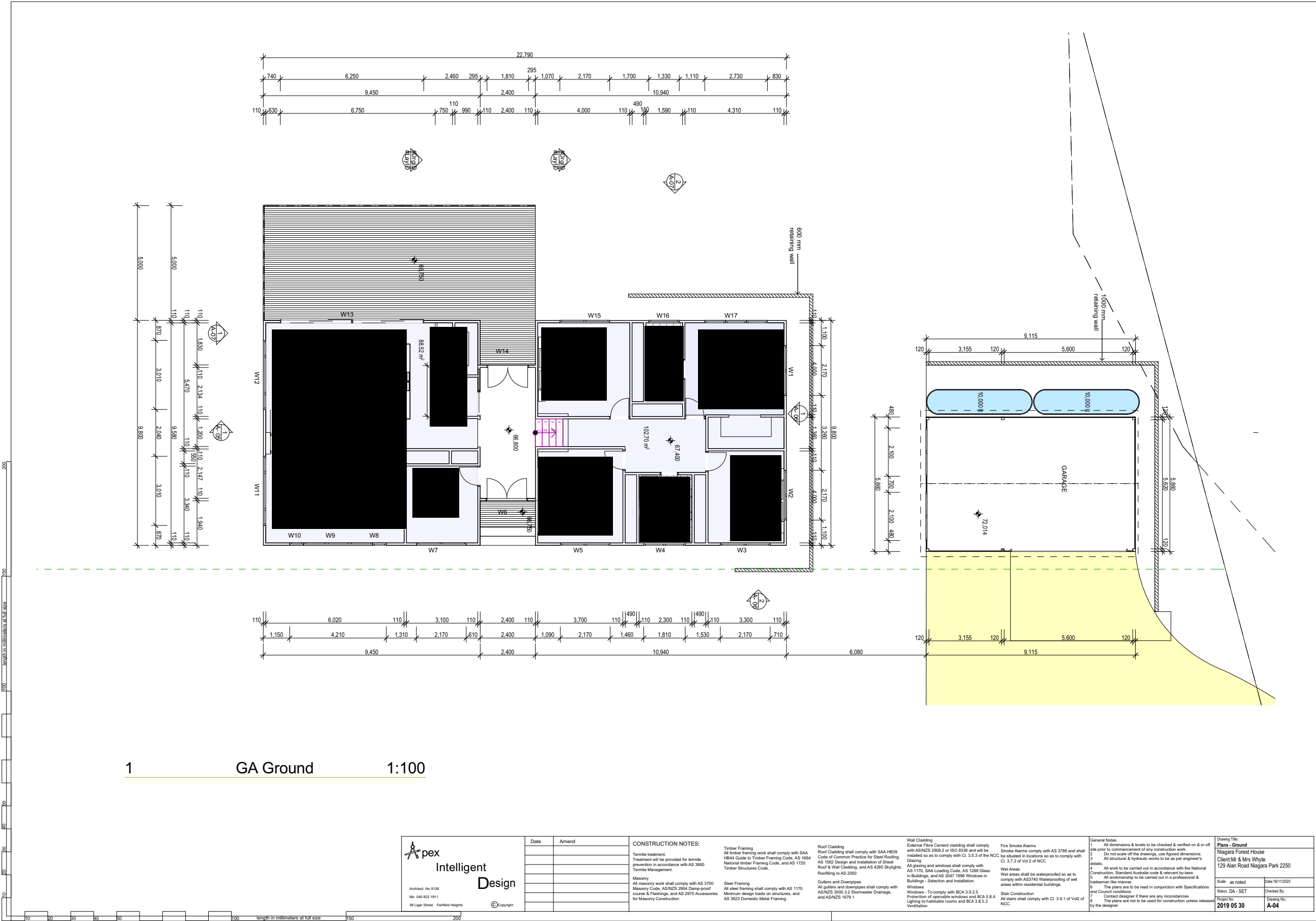
ADVISORY NOTES

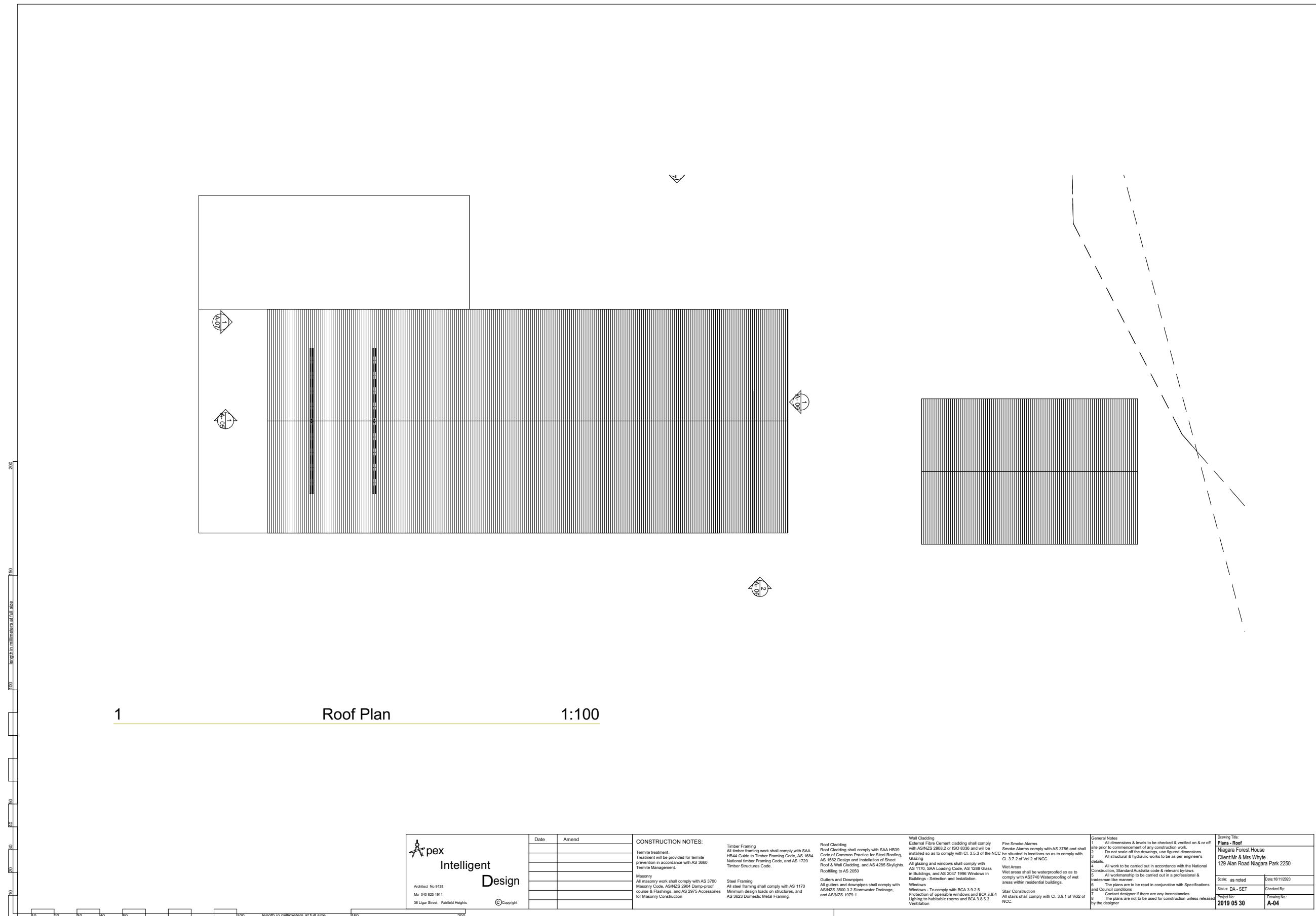
- Discharge of sediment from a site may be determined to be a pollution event under provisions of the *Protection of the Environment Operations Act 1997*. Enforcement action may commence where sediment movement produces a pollution event.
- The following public authorities may have separate requirements in the following aspects:
 - a) Australia Post for the positioning and dimensions of mail boxes in new commercial and residential developments
 - b) Jemena Asset Management for any change or alteration to the gas line infrastructure
 - c) Ausgrid for any change or alteration to electricity infrastructure or encroachment within transmission line easements
 - d) Telstra, Optus or other telecommunication carriers for access to their telecommunications infrastructure
 - e) Central Coast Council in respect to the location of water, sewerage and drainage services.
- Carry out all work under this Consent in accordance with SafeWork NSW requirements including the *Workplace Health and Safety Act 2011 No 10* and subordinate regulations, codes of practice and guidelines that control and regulate the development industry.
- Dial Before You Dig
Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at www.1100.com.au or telephone on 1100 before excavating or erecting structures. (This is the law in NSW). If alterations are required to the configuration, size, form or design of the development upon contacting the Dial Before You Dig service, an amendment to the development consent (or a new development application) may be necessary. Individuals owe asset owners a duty of care that must be observed when working in the vicinity of plant or assets. It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial Before You Dig service in advance of any construction or planning activities.
- Telecommunications Act 1997 (Commonwealth)
Telstra (and its authorised contractors) are the only companies that are permitted to conduct works on Telstra's network and assets. Any person interfering with a facility or installation owned by Telstra is committing an offence under the *Criminal Code Act 1995 (Cth)* and is liable for prosecution. Furthermore, damage to Telstra's infrastructure may result in interruption to the provision of essential services and significant costs. If you are aware of any works or proposed works which may affect or impact on Telstra's assets in any way, you are required to contact: Telstra's Network Integrity Team on phone number 1800 810 443.
- Install and maintain backflow prevention device(s) in accordance with Council's *WS4.0 Backflow Prevention Containment Policy*. This policy can be found on Council's website at: www.centralcoast.nsw.gov.au

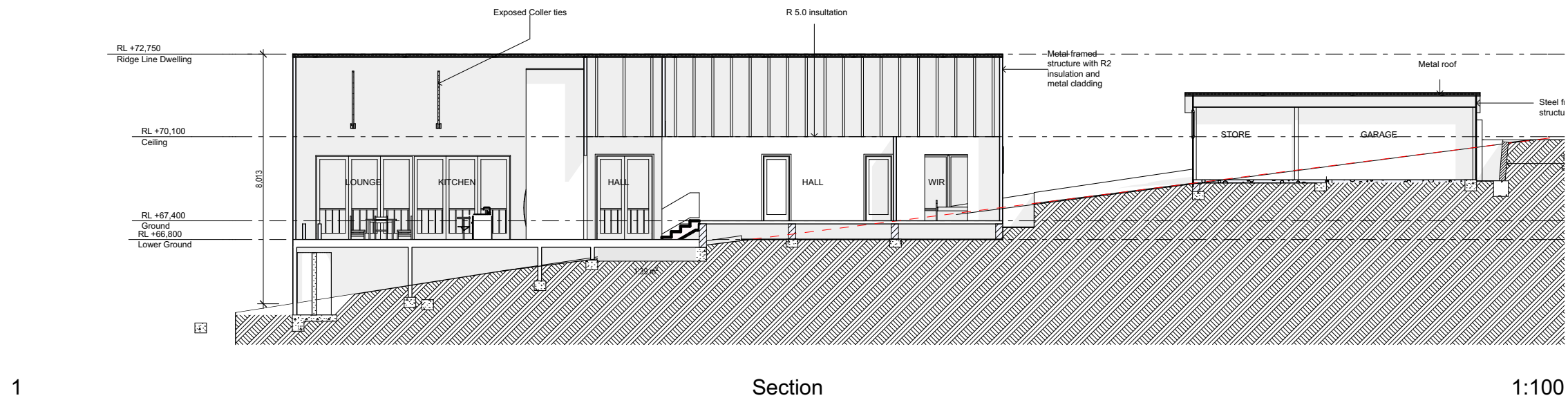
- It is an offence under the Biodiversity Conservation Act 2016 to harm protected native wildlife. If during works fauna is displaced, it must not be harmed. If required works will cease and fauna will be transferred to the nearest veterinary hospital and Council's Ecologist will be notified within 24hrs.
- The inspection fee for works associated with approvals under the Roads Act is calculated in accordance with Council's current fees and charges policy.











Section

1:100

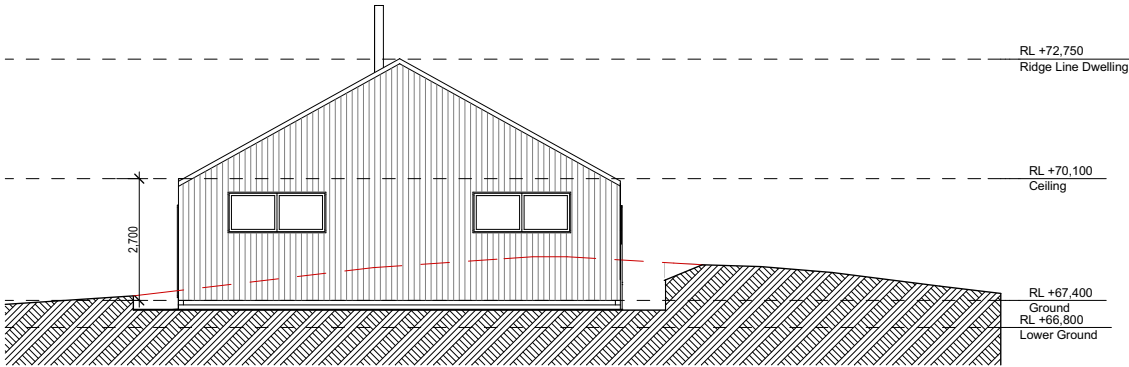
Window schedule

Type	Height mm	Width mm	Type	Glazing
W1	900	2170	As to elevations	Al Single glazed
W2	900	2170	As to elevations	Al Single glazed
W3	900	2170	As to elevations	Al Single glazed
W4	900	1810	As to elevations	Al Single glazed
W5	900	2170	As to elevations	Al Single glazed
W6	2700	1810	As to elevations	Al Single glazed
W7	1350	2170	As to elevations	Al Single glazed
W8	2100	600	As to elevations	Al Single glazed
W9	750	3010	As to elevations	Al Single glazed
W10	2100	600	As to elevations	Al Single glazed
W11	2400	3010	As to elevations	Al Single glazed
W12	2400	3010	As to elevations	Al Single glazed
W13	2700	6250	As to elevations	Al Single glazed
W14	2700	1810	As to elevations	Al Single glazed
W15	900	2170	As to elevations	Al Single glazed
W16	900	1330	As to elevations	Al Single glazed
W17	1800	2710	As to elevations	Al Single glazed

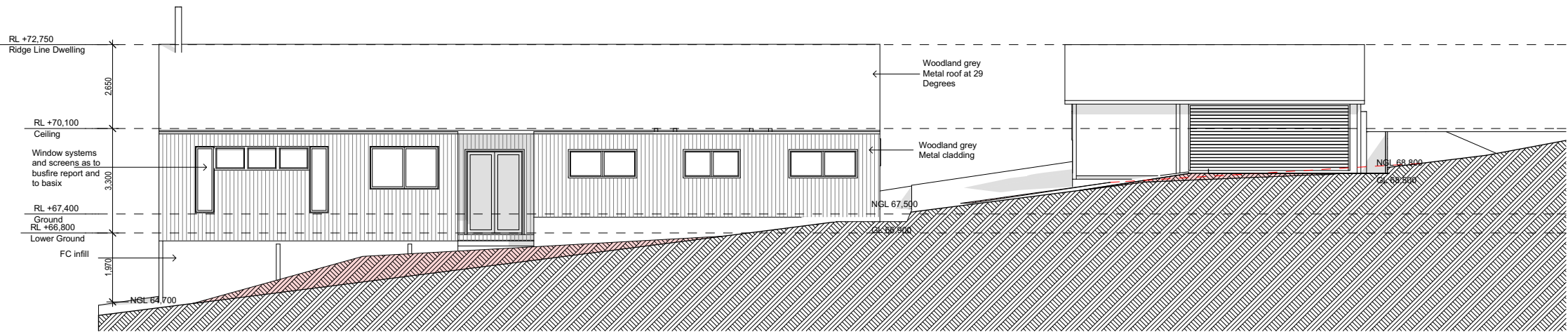
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3 Perspective 1



1 North 1:100



2 East 1:100

pex
Intelligent
Design

Archited: No 9138
Mo: 040 823 1911
38 Liger Street Fairfield Heights

© Copyright

Date	Amend

CONSTRUCTION NOTES:

Timber Framing
All timber framing work shall comply with SAA HB44 Guide to Timber Framing Code, AS 1684 National Timber Framing Code, and AS 1720 Timber Structures Code.

Masonry
All masonry work shall comply with AS 3700 Masonry Code, AS/NZS 2904 Damp-proof course & Flashings, and AS 2975 Accessories for Masonry Construction.

Steel Framing
All steel framing shall comply with AS 1170 Minimum design loads on structures, and AS 3623 Domestic Metal Framing.

Roof Cladding
Roof Cladding shall comply with SAA HB39 Code of Common Practice for Steel Roofing, AS 1562 Design and Installation of Sheet Roof & Wall Cladding, and AS 4285 Skylights. Roofing to AS 2050.

Gutters and Downpipes
All gutters and downpipes shall comply with AS/NZS 3005 3.2 Stormwater Drainage, and AS/NZS 1879.1.

Wall Cladding
External Fibre Cement cladding shall comply with AS/NZS 2989.2 or ISO 828 and will be installed so as to comply with CI. 3.5.3 of the NCC.

Glazing
All glazing and windows shall comply with AS 1170, SAA Loading Code, AS 1288 Glass in Buildings, and AS 2047 1998 Windows in Buildings - Selection and Installation.

Windows
Windows - To comply with BCA 3.9.2.5 Protection of operable windows and BCA 3.8.4 Lighting to habitable rooms and BCA 3.8.5.2 Ventilation.

Fire Smoke Alarms
Smoke Alarms shall comply with AS 3786 and shall be situated in locations so as to comply with CI. 3.7.2 of Vol 2 of NCC.

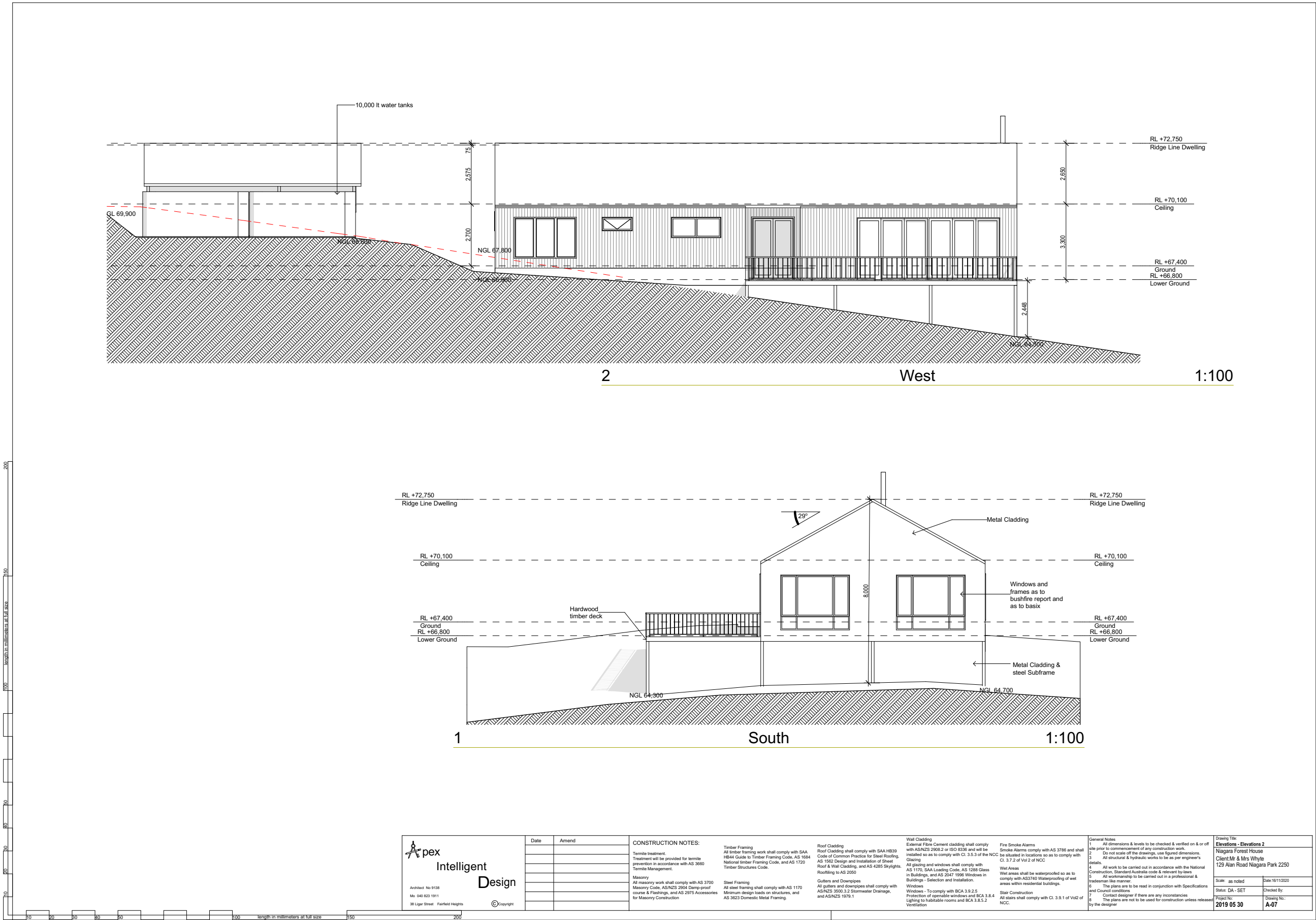
Wet Areas
Wet areas shall be waterproofed so as to comply with AS3740 Waterproofing of wet areas within residential buildings.

Stair Construction
All stairs shall comply with CI. 3.9.1 of Vol 2 of NCC.

General Notes

- All dimensions & levels to be checked & verified on & or off site prior to commencement of any construction work.
- Do not scale off the drawings, use figured dimensions.
- All structural & hydraulic works to be as per engineer's details.
- All work to be carried out in accordance with the National Construction Standard Australia code & relevant by-laws.
- All workmanship to be carried out in a professional & tradesman like manner.
- The plans are to be read in conjunction with Specifications and Council conditions.
- Contact designer if there are any inconsistencies.
- The plans are not to be used for construction unless released by the designer.

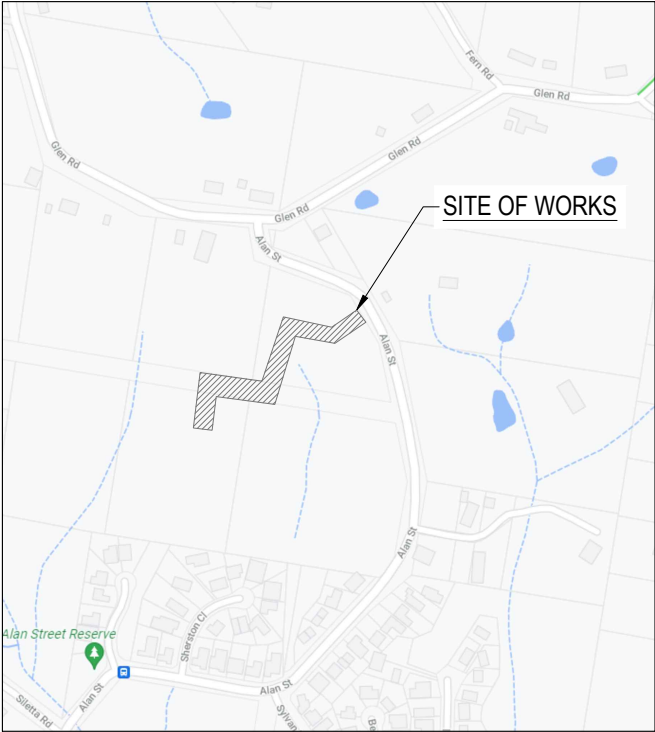
Drawing Title:	
Elevations - Elevations 1	
Niagara Forest House	
Client: Mr & Mrs Whyte	
129 Alan Road Niagara Park 2250	
Scale: as noted	Date: 16/11/2020
Status: DA - SET	Checked By:
Project No: 2019 05 30	Drawing No: A-06



129 ALAN ST, NIAGARA PARK

PROPOSED PROPERTY ACCESS

Drawing Sheet Index	
Sheet Number	Sheet Title
001	COVER SHEET
002	TYPICAL CROSS SECTIONS AND DETAILS
010	LAYOUT PLAN
100	ROAD LONGITUDINAL SECTION
200	ROAD CROSS SECTIONS
550	SOIL WATER MANAGEMENT PLAN
551	SOIL WATER MANAGEMENT DETAILS



SITE PLAN

NOT TO SCALE

SOURCE: GOOGLE MAPS

APPROVALS AND CERTIFICATES REQUIRED

1. Work within privately owned property shown on this drawing is not to commence until a construction certificate for those works has been issued by either the appointed accredited certifier or Council. The construction requirements only of Central Coast Council's Civil Works specifications are to be adopted for these works unless noted otherwise on these drawings.
2. Works shown on these drawings that are located within Alan St & Iberry St road reserves must be approved by Council under a Roads Act Works Approval prior to the commencement of any works. Central Coast Council's Standard Notes apply to these works

CENTRAL COAST COUNCIL STANDARD NOTES

1. All work is to be carried out in accordance with Central Coast Council *Civil Works Specification* and to the satisfaction of Council's Representative.
2. The Service Provider is responsible for ongoing maintenance of erosion and siltation control measures.
3. All public utilities shall be clearly identified in the field prior to any civil works. Council does not accept any responsibility for damage or relocation costs to public utilities during construction of the development.
4. The Service Provider shall submit a "Notice of Intention to Commence" to Central Coast Council's email address: DeveloperCivilWorks@centralcoast.nsw.gov.au as supported by all required documentation for review and confirmed by receipt of a reply, containing written acceptance, prior to the commencement of any works.
5. It is the Service Provider's responsibility to ensure that all works shall be carried out in accordance with the *Work Health and Safety Act 2011*.
6. Permission to enter, construct works and discharge stormwater onto adjoining properties shall be obtained and submitted to Council prior to the commencement of any works.
7. Pavement to be designed and certified by a practising consulting geotechnical engineer and submitted to Council for approval prior to the commencement of any works. Approved pavement design reports shall prevail over any design requirements or pavement details shown on the approved plans.
8. These drawings shall be read in conjunction with the conditions stated in Central Coast Council's engineering plan approval correspondence and the conditions of the Development Consent.
9. If the standard or requirements for works shown on the drawings differ from that required by Council's *Civil Works Specification* then the requirements of the *Civil Works Specification* will prevail. Clarification shall be obtained from Council's Representative if there is concern that the requirements of Council's *Civil Works Specification* may not be appropriate for a specific circumstance.
10. The Service Provider shall address all pre-construction requirements of Council's *Civil Works Specification* prior to commencement of any works.

CONSTRUCTION NOTES

1. Contractor to implement appropriate erosion and sediment controls prior to any site disturbance.
2. Areas to be disturbed in carrying out the works shall be limited to the access road pavement surface and the inlet and outlet areas of existing storm water pipes where some works are required.
3. Where the design cross sections show the design surface to match the existing levels the intention is to utilize the existing pavement in these areas. The existing pavement is to be assessed by a practicing geotechnical engineer to determine the suitability of the pavement once sealed to cater for the required design loading. Any modification of the existing pavement to cater for the required design loading is to be in accordance with the geotechnical engineer's recommendations.
4. Where the design cross design indicates the surface of the existing pavement is to be raised for a correction to the longitudinal grade of the access road this shall be carried out in accordance with recommendations of the geotechnic engineer. The existing pavement is to be assessed by a practicing geotechnical engineer to determine the suitability of the pavement once raised and sealed to cater for the required design loading. Any modification of the existing pavement to cater for the required design loading is to be in accordance with the geotechnical engineer's recommendations.

FOR DEVELOPMENT
APPLICATION PURPOSES ONLY

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P3	MINOR AMENDMENTS	22.03.22	CPS	CS					
P2	MINOR AMENDMENTS	15.03.22	CPS	CS					
P1	MINOR AMENDMENTS	1.03.22	CPS	CS					
P0	ISSUED FOR INFORMATION	24.02.22	CPS	CS					
REV	DESCRIPTION	DATE	DRN	APP.	REV	DESCRIPTION	DATE	DRN	APP.

Designed
Date
24.02.2022
C. SHEPPEARD
Drawn
C. SHEPPEARD
Approved
Date
24.02.22
C. SLATER
PS Number
PS1000



Project Details
129 ALAN ST, NIAGARA PARK
PROPOSED PROPERTY ACCESS
Drawing Title
COVER SHEET

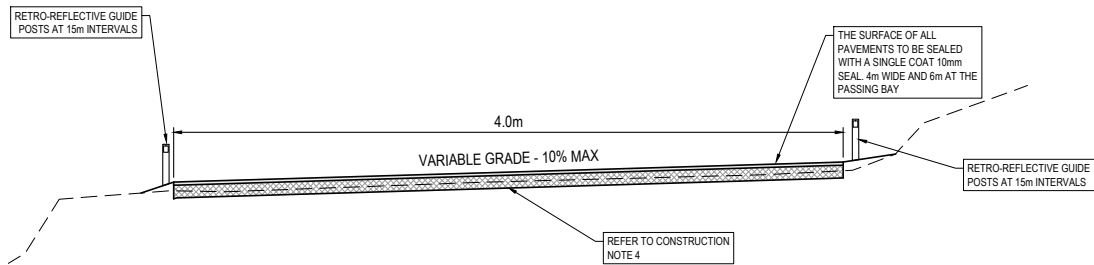
Sheet 01 of 07

Scale
NOT TO SCALE

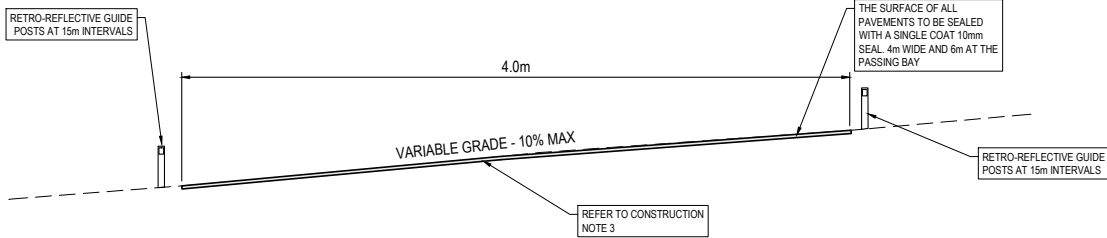
Project Ref
1801668
Stage No
CC
Drawing No
001
Rev
P3



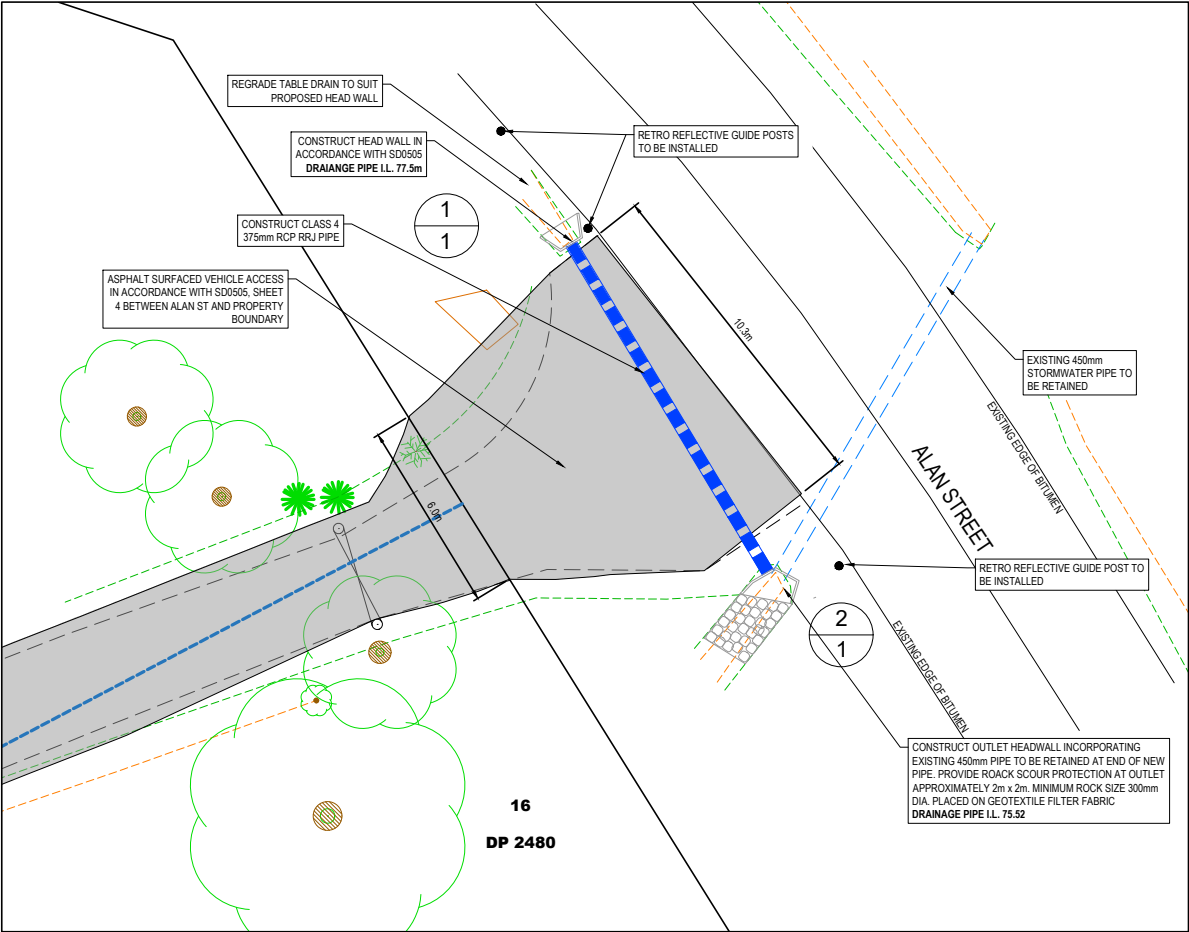
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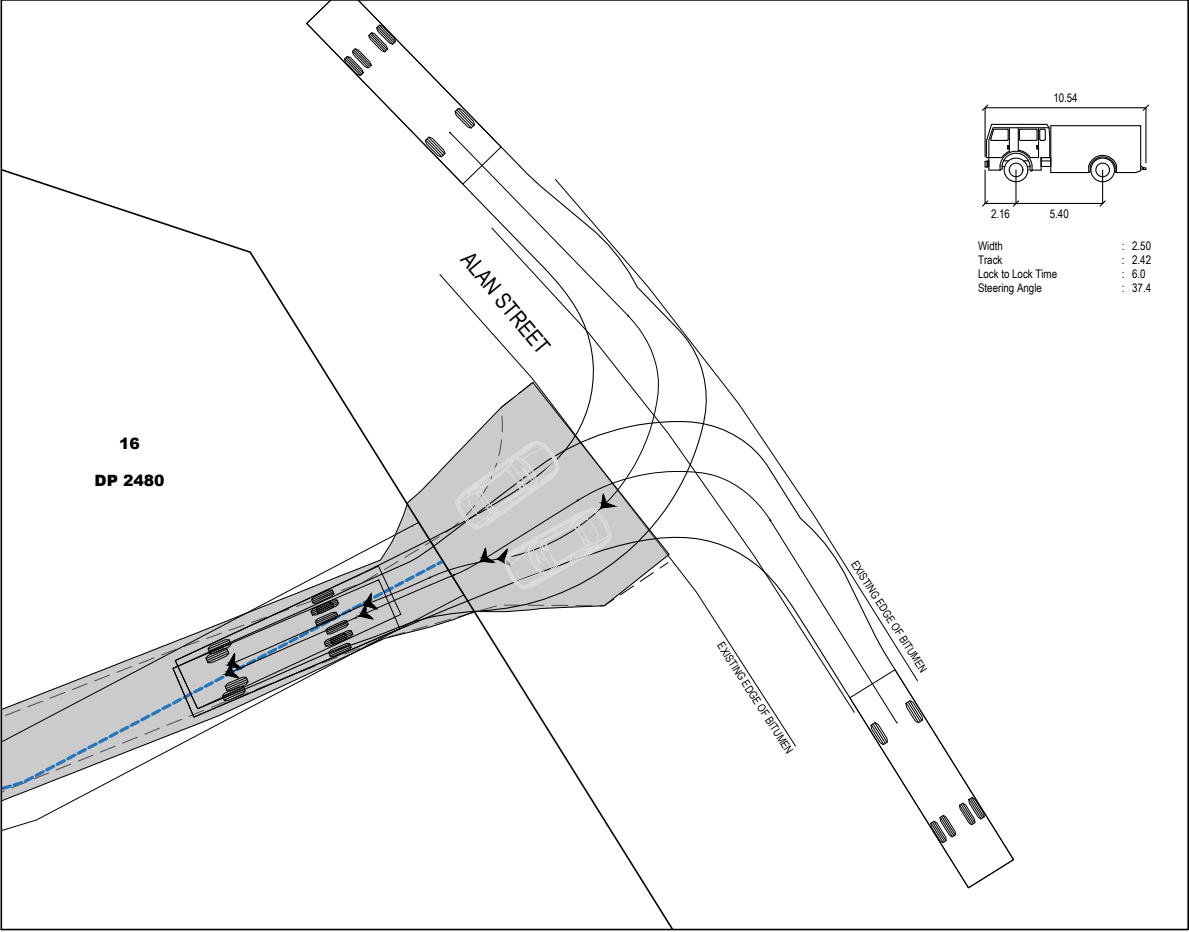
TYPICAL SECTION
PAVEMENT REGRADE AND REPLACEMENT
N.T.S



TYPICAL SECTION
RETAIN EXISTING PAVEMENT
N.T.S



ROADS ACT WORKS
VEHICLE ACCESS CROSSING DETAILS
SCALE 1:100



10.5m FIRE TANKER SWEEP PATHS
SCALE 1:150

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APPLICATION PURPOSES ONLY

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P3	MINOR AMENDMENTS	23.03.22	CPS	CS					
P2	MINOR AMENDMENTS	15.03.22	CPS	CS					
P1	MINOR AMENDMENTS	1.03.22	CPS	CS					
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REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP

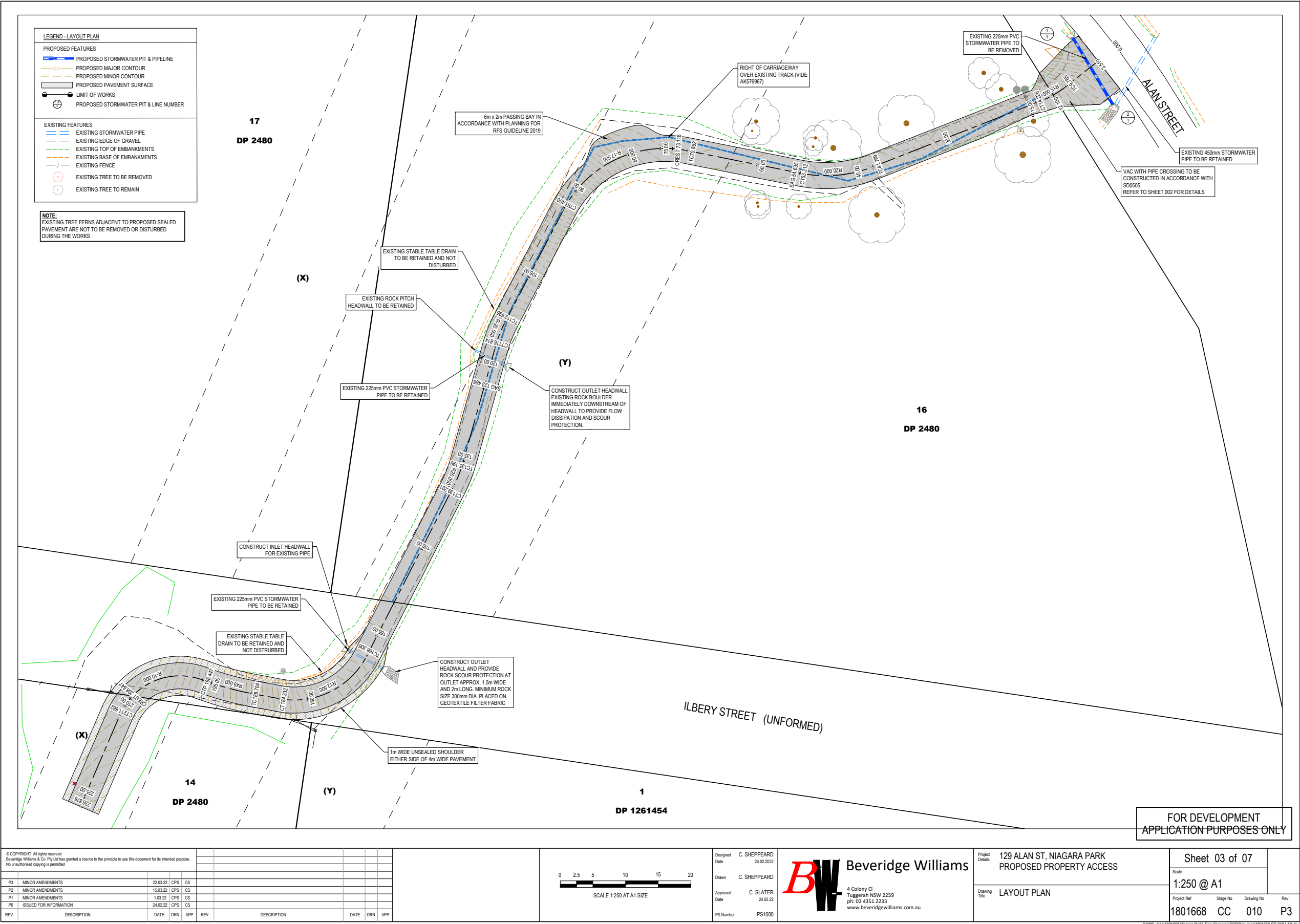
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Date	24.02.2022
Drawn	C. SHEPPEARD
Approved	C. SLATER
Date	24.02.22
PS Number	PS1000

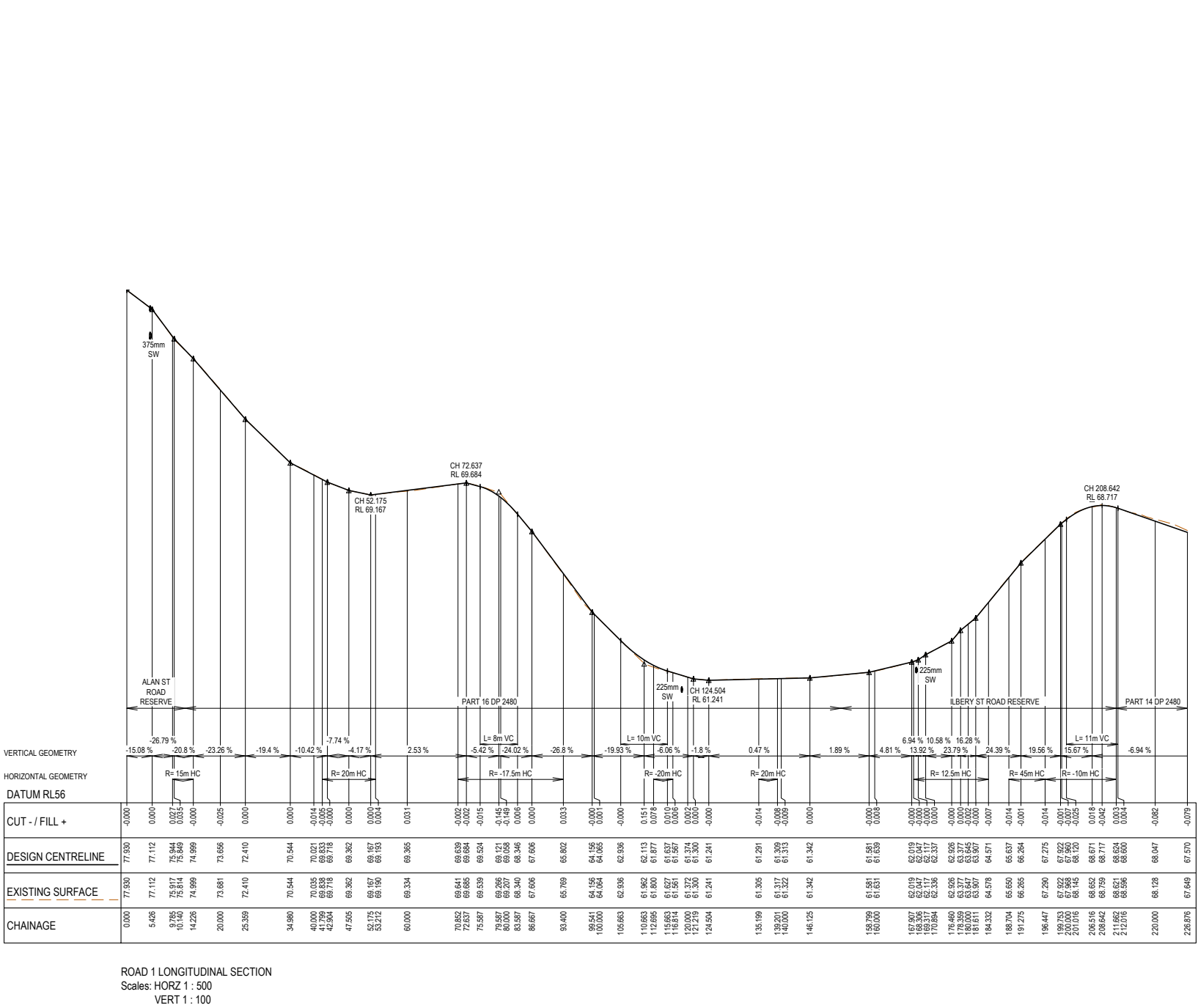


Project Details	129 ALAN ST, NIAGARA PARK PROPOSED PROPERTY ACCESS
Drawing Title	TYPICAL CROSS SECTIONS AND DETAILS

Sheet 02 of 07	Scale AS SHOWN
Project Ref 1801668	Stage No CC
Drawing No 002	Rev P3

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P2	MINOR AMENDMENTS	15.03.22	CPS	CS					
P1	MINOR AMENDMENTS	1.03.22	CPS	CS					
P0	ISSUED FOR INFORMATION	24.02.22	CPS	CS					

HORIZ 1:500

VERT 1:50

SCALE AT A1 SIZE

Designed
Date

C. SHEPPEARD
24.02.2022

Drawn
C. SHEPPEARD

Approved
Date

C. SLATER
24.02.22

PS Number
PS1000

BW

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ph: 02 4351 2233
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Project
Details

129 ALAN ST, NIAGARA PARK
PROPOSED PROPERTY ACCESS

Drawing
Title

ROAD LONGITUDINAL SECTIONS

Sheet 04 of 07

Scale
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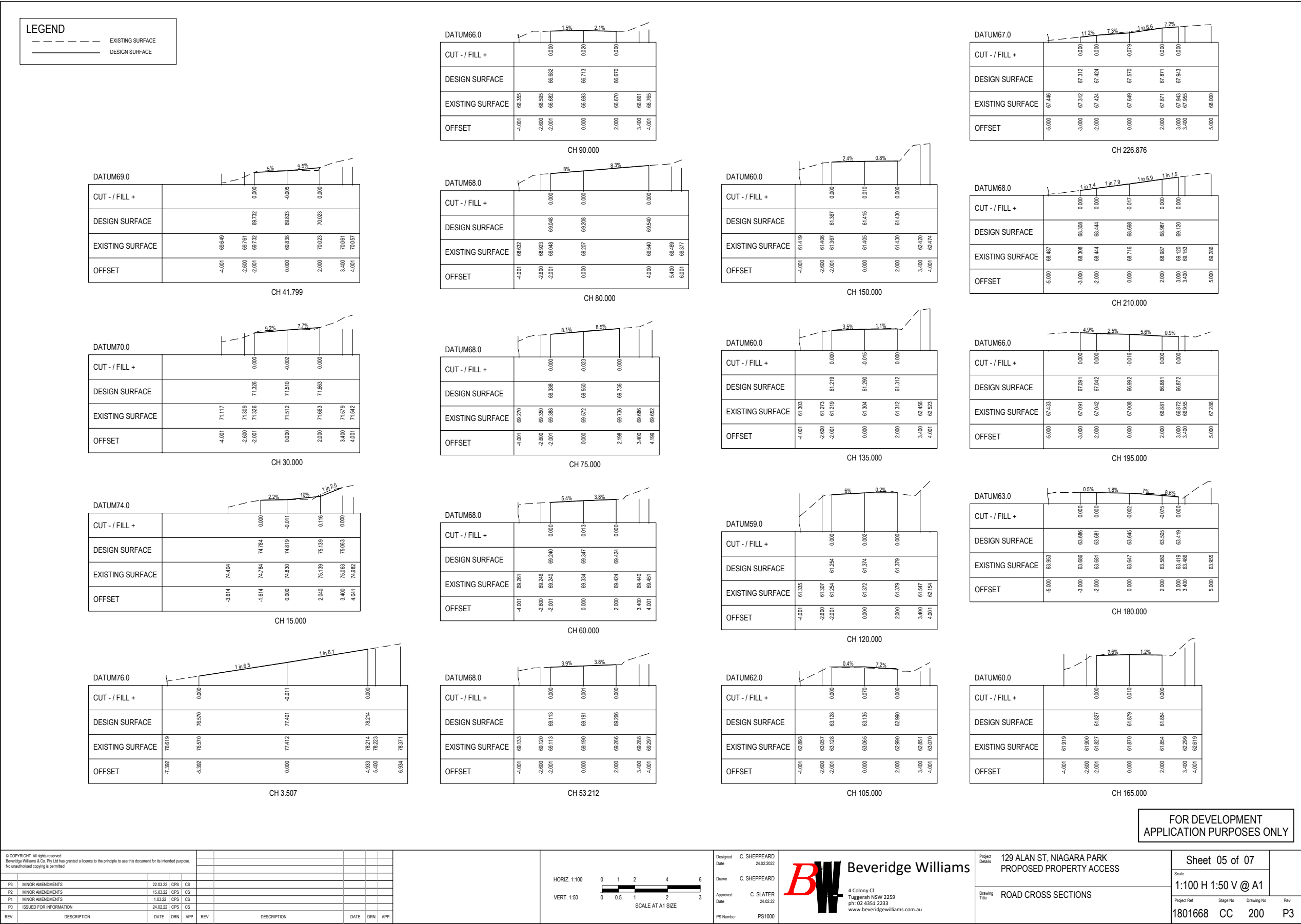
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P3 MINOR AMENDMENTS

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P2 MINOR AMENDMENTS

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P1 MINOR AMENDMENTS

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DESCRIPTION

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SCALE AT A1 SIZE

Designed
Date

C. SHEPPEARD
24.02.2022

Drawn
Date

C. SHEPPEARD
24.02.22

Approved
Date

C. SLATER
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PS Number

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129 ALAN ST. NIAGARA PARK
PROPOSED PROPERTY ACCESS

Drawing
Title

ROAD CROSS SECTIONS

Sheet 05 of 07

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Project Ref

1801668

Stage No

CC

Drawing No

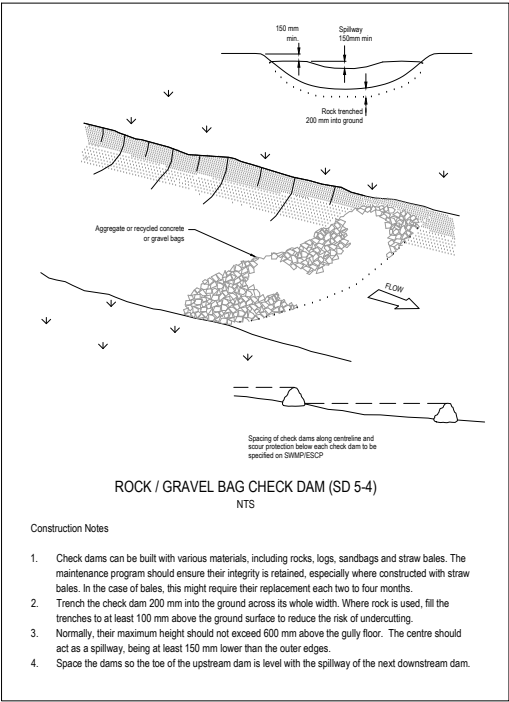
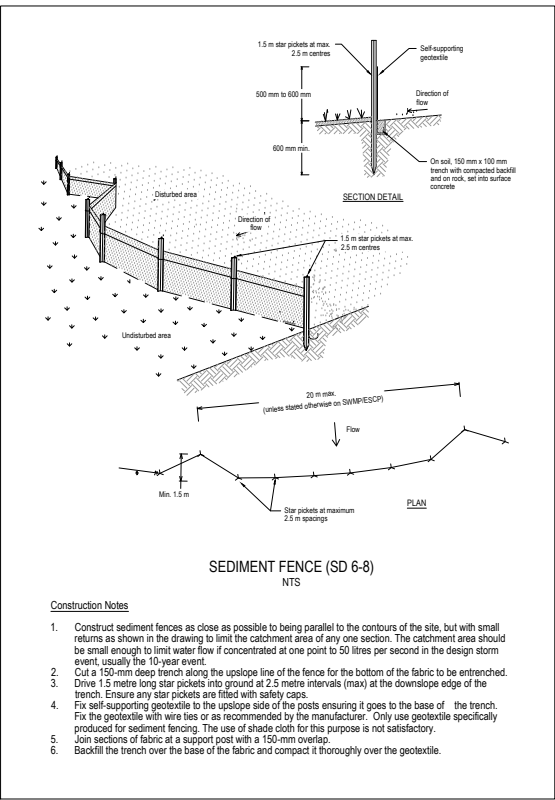
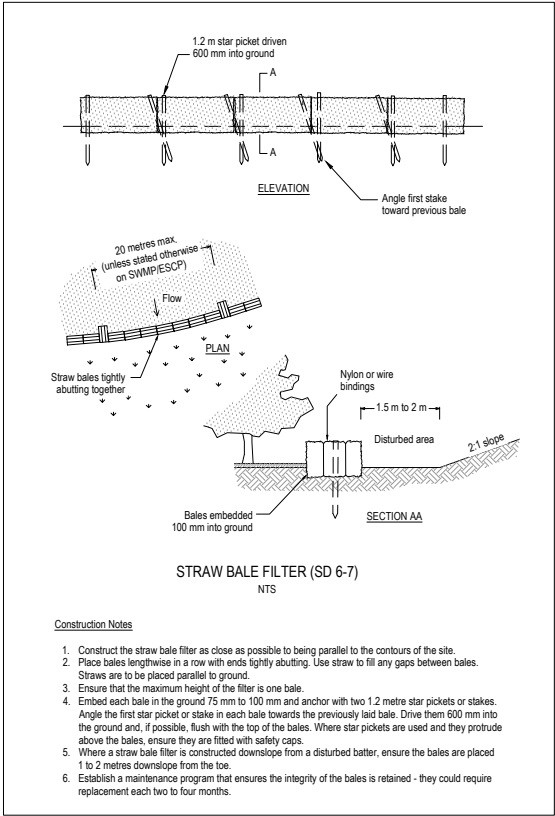
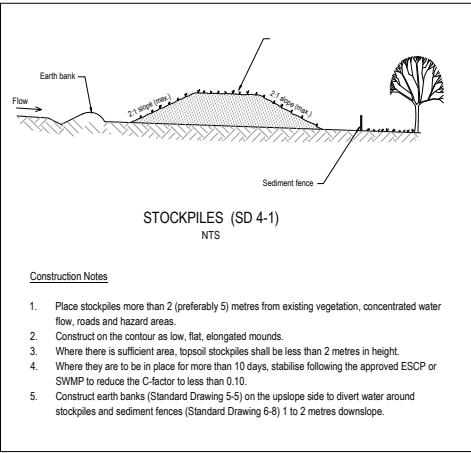
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P0	ISSUED FOR INFORMATION	24.02.22	CPS	CS					

Designed	C. SHEPPEARD
Date	24.02.2022
Drawn	C. SHEPPEARD
Approved	C. SLATER
Date	24.02.22
PS Number	PS1000



Project Details	129 ALAN ST, NIAGARA PARK PROPOSED PROPERTY ACCESS
Drawing Title	SOIL WATER MANAGEMENT DETAILS

Sheet 07 of 07			
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Project Ref	Stage No	Drawing No	
1801668	CC	551	P3

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Item No: 4.1
Title: DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House
Department: Environment and Planning

Central Coast
 Local Planning Panel

16 December 2021 Local Planning Panel Meeting

Reference: DA/60589/2020 - D14943625
 Author: Robert Eyre, Principal Development Planner South
 Manager: Ailsa Prendergast, Section Manager, Development Assessment South
 Approver: Andrew Roach, Unit Manager, Development Assessment

Summary

An application has been received for construction of a new dwelling house on 129 Alan Street, Niagara Park. The application has been examined having regard to the matters for consideration detailed in section 4.15 of the *Environmental Planning and Assessment Act 1979* and other statutory requirements with the issues requiring attention and consideration being addressed in the report.

The application is required to be referred to the Local Planning Panel for determination as the proposed development is classified as designated development under IDO No122-Gosford.

Applicant	J Kechagias
Owner	J Whyte and C Whyte
Application No	DA60589/2020
Description of Land	Lot 14 DP2480 No. 129 Alan Street Niagara Park
Proposed Development	New dwelling house
Site Area	20160m ²
Zoning	7(a) Conservation under IDO 122
Existing Use	Vacant
Employment Generation	No
Estimated Value	\$345,000.00

Recommendation

- 1 That the Local Planning Panel grant consent to DA60589/2020 for the development of a dwelling house on lot 14 DP2480 No. 129 Alan Street, Niagara Park subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.**
- 2 That Council advise relevant external authorities of the Panel's decision.**

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)**Key Issues**

- Access driveway/ROW
- Ecology
- Bushfire Risk
- Service authority requirements

Precis:

Proposed Development	Dwelling House
Permissibility and Zoning	7(a) Conservation. Permissible with consent
Relevant Legislation	<ul style="list-style-type: none"> • <i>Environmental Planning & Assessment Act 1979 – Section 4.15</i> • <i>Local Government Act 1993 – Section 89</i> • <i>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</i> • <i>Interim Development Order No 122</i> • <i>Gosford Local Environmental Plan 2014</i> • <i>Gosford Development Control Plan 2013</i> • <i>Protection of the Environment Operations Act 1997</i> • <i>Roads Act 1997</i> • <i>Rural Fires Act 1997</i> • <i>Water Management Act 2000</i>
Current Use	Vacant land
Integrated Development	No
Submissions	Nil

Variations to Policies

Clause	3.1.3.2 Front setback
Standard	20m
LEP/DCP	DCP
Departure basis	89.5%

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

The Site & Surrounds

The site is located on the western side of Alan Street. Adjoining development comprises residential and rural residential lots either vacant or with single dwelling houses on some lots. An electricity easement traverses in a north-south direction on the eastern side of the site. The topography is generally steep.

The site is vacant with dense vegetation except for the cleared electricity easement. The site has access to Alan Street via the adjoining unformed Ilbery Road and a ROW to the north over the adjoining 137 Alan Street.

The site is identified as "bushfire prone land" on Council's bushfire maps. A Bushfire Assessment Report prepared by Bushfire Code & Bushfire Hazard Solutions Pty Ltd dated 9 November 2020 was submitted with the application recommending the proposal comply with BAL-40.



Figure 1-Locality Plan

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

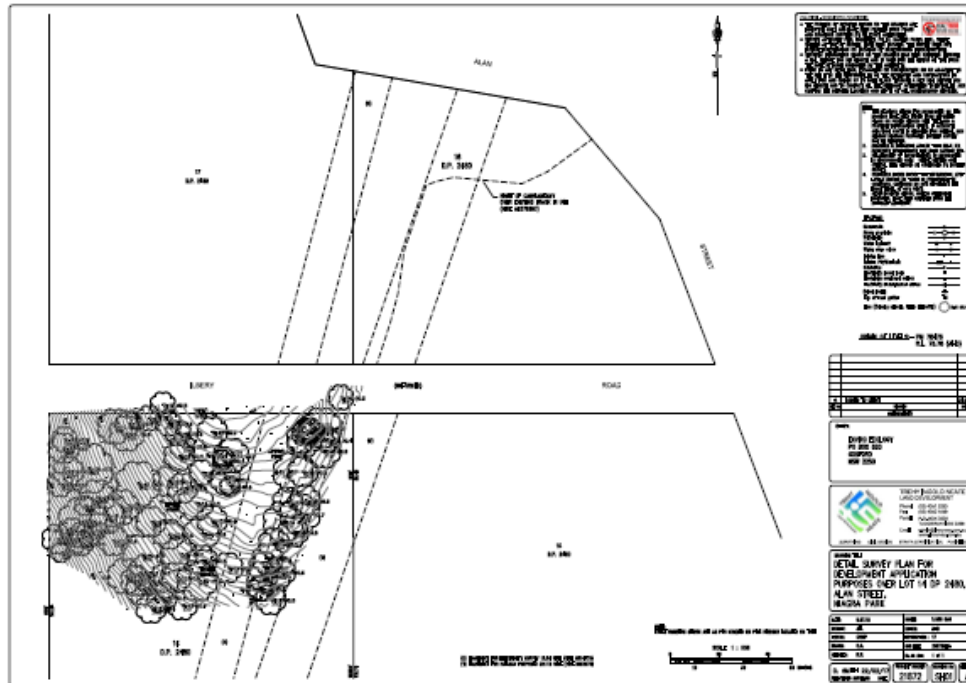


Figure 2-Survey Plan/ROW

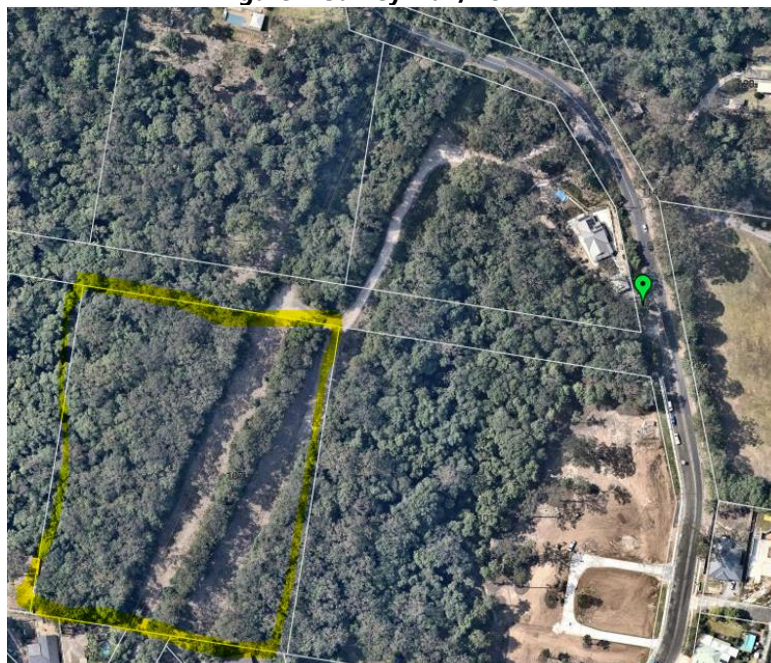


Figure 3- Existing driveway from Alan St to Site (in yellow).

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

The Proposed Development

The proposal comprises:

- New single storey dwelling 4-bedroom house of 206m².
- Detached 3 car garage.
- Installation of water tanks and upgrading driveway to Alan Street.
- OSSM.
- Upgrading of the access driveway from Alan Street to the boundary of the site.

The proposed garage will be setback 2.1m from the boundary of Ibery Road. The proposed dwelling will be setback 17.915m from Ibery Road.

The OSSM is proposed to be located within the cleared electricity easement which Ausgrid have approved subject to conditions.

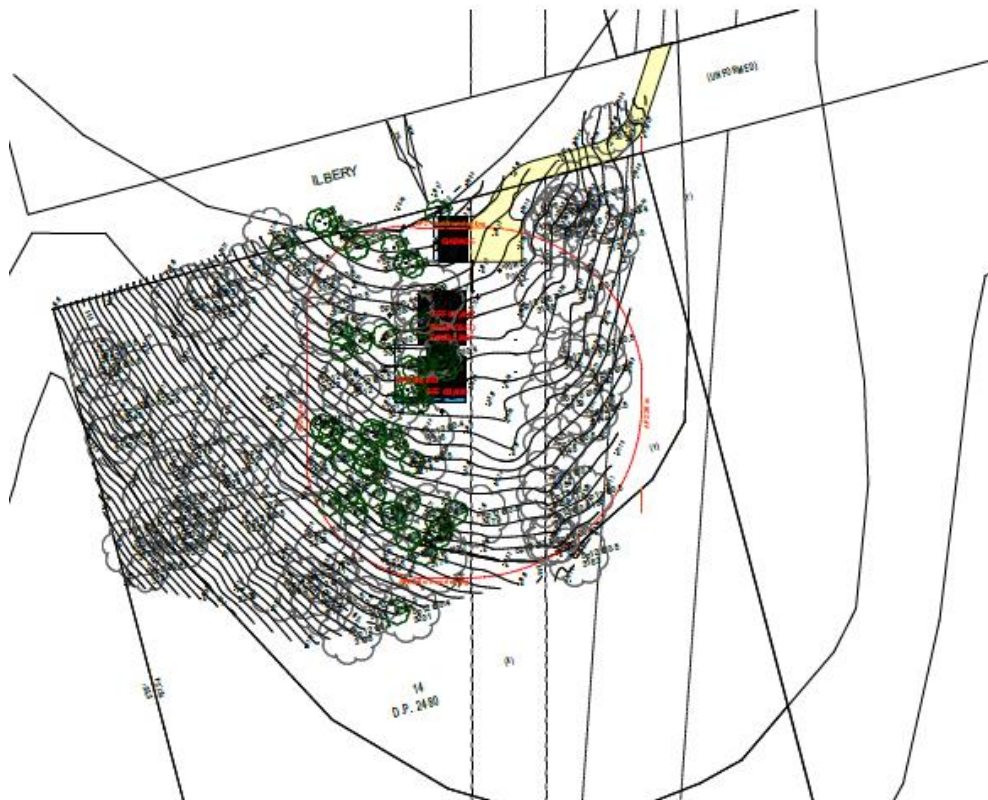


Figure 4- Site Plan

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

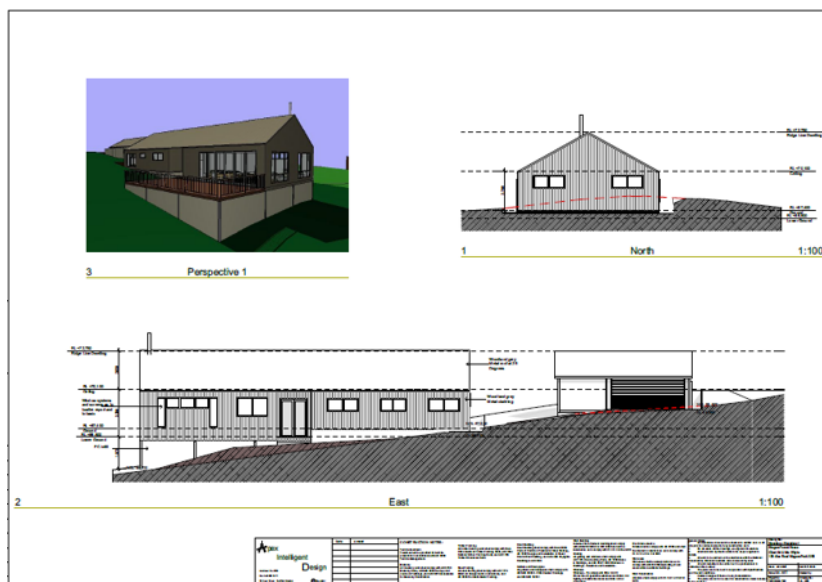


Figure 5- Proposed Elevations

History

Council's records show no prior applications have been lodged on this site.

Assessment:

Having regard for the matters for consideration detailed in Section 4.15 of the *Environmental Planning and Assessment Act 1979* and other statutory requirements, Council's policies and Section 10.7 Certificate details, the assessment has identified the following key issues, which are elaborated upon for Council's information. Any tables relating to plans or policies are provided as an attachment.

Provisions of Relevant Instruments/Plans/Policies:**Draft Environmental Planning Instruments**

The following draft Environmental Instruments apply to this application:

- Draft Central Coast Local Environmental Plan 2018
- Draft State Environmental Planning Policy (Exempt and Complying Development) 2008
- Draft State Environmental Planning Policy (Environment) 2017
- Draft State Environmental Planning Policy (Short Term Rental Housing) 2019

The site is proposed to be zoned E2 Environmental Conservation under the draft CCLEP 2018. The E2 zone permits a dwelling house with consent.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

The proposal is consistent with the draft plans.

Permissibility

The subject site is zoned 7(A) Conservation IDO 122 under Interim Development Order No 122. The proposed development is defined as a dwelling house which is permissible in the zone with consent of Council.

State Environmental Planning PoliciesState Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The application is supported by a BASIX certificate which confirms the proposal will meet the NSW government's requirements for sustainability, if built in accordance with the commitments in the certificate.

The proposal is considered to be consistent with the requirements of State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

Gosford Local Environmental Plan 2014

The zoning of the zone is a deferred matter (DM) under the GLEP 2014. The land is zoned 7(a) under IDO 122.



Figure 6-Zone Map

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

Interim Development Order No 122

Development Standard	Required	Proposed	Compliance with Controls	Variation %	Compliance with Objectives
Clause 22(5)	EIS required due to common ownership provisions.- See comments below.	EIS submitted	Yes	N/A	Yes
Clause 28	Prescribed building materials	External colour scheme/materials comply.	Yes	N/A	Yes- see figure5.
Clause 29 Maximum building height	8m	8.3m	Yes- clause 29(2) permits departure to a minor extent.	3.75% at end of dwelling only.	Yes-only over a minor part of the building due to land slope.
Clause 30	Not within 50m of a ridge unless physical characteristic of land require otherwise.		Yes	N/A	Yes

IDO 122 Common-ownership Provisions

Under the provisions of Clause 22 of IDO 122, a dwelling house is permitted on 7(a) zoned land if the lot:

- Has an area of 40ha or greater.
- The lot is less than 40ha and was created after 18 February 1977.
- The lot was in existence prior to 18 February 1977 and was in the same ownership as adjoining lots which are to be consolidated.
- If the lot was in existence prior to 18 February 1977 and was in the same ownership as adjoining lots but is not to be consolidated with adjoining lots and

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

an Environmental Impact Statement (EIS) is submitted with the application as the proposal constitutes Designated Development.

Searches of the applicable property records by the Applicant identified that site was held in common ownership with the adjoining lots as at 18 February 1977. Therefore, the application to erect a dwelling house was lodged with Council with the required EIS.



Figure 7- External Finishes

Zone 7(a) Conservation IDO 122

The objectives for the 7(a) Conservation IDO 122 are:

- (a) the conservation and rehabilitation of areas of high environmental value;
- (b) the preservation and rehabilitation of areas of high visual and scenic quality in the natural landscape;
- (c) the provision and retention of suitable habitats for flora and fauna;
- (d) the prohibition of development on or within proximity to significant ecosystems, including rainforests and estuarine wetlands;
- (e) the provision and retention of areas of visual contrast within the City, particularly the "backdrop" created by the retention of the ridgelines in their natural state;
- (f) the provision of opportunities for informal recreational pursuits, such as bushwalking and picnics, in appropriate locations;
- (g) the minimisation or prohibition of development so that the environmental and visual qualities of the natural areas are not eroded by the cumulative impact of incremental, individually minor developments;

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

- (h) the minimisation or prohibition of development in areas that are unsuitable for development by virtue of soil erosion, land slip, slope instability, coastal erosion or bushfire hazard.

The proposed development meets the objectives of the zone.

Gosford Development Control Plan 2013Chapter 2.1 Character.

The site is located within the Niagara Park 10-Scenic Buffer area where the desired character is houses on large lots. The proposal complies with the desired character. It is single storey set well back from Alan Street.

Chapter 2.2 Scenic Quality.

The proposal is located so as not to impact the scenic quality of the area.

Chapter 3.1.3.2a Front Setback.

The front setback required on large lots is 20m. The proposal does not have frontage to Alan Street. The site has frontage to an unformed road being Ilbery Road. The proposed garage is setback 2.1m and the proposed dwelling house is setback 17.915m from the boundary of Ilbery Road. Ilbery Road is unlikely to be constructed and the site gains access to Alan Street via a ROW which passes across Ilbery Road.

The proposed location is appropriate for the site as to locate the buildings further away from Ilbery Road would result in greater tree removal and ecological impacts.

The setbacks are supported.

Chapter 3.1.3.2 Side and rear setbacks.

The required rear setbacks are rear 10m and side 5m. The proposed dwelling and garage are located in excess of the minimum required to the rear and side boundaries.

Chapter 3.1.4 Residential amenity.

The proposal is located so as to mitigate the impact on tree removal and complies with BASIX requirements.

Chapter 3.1.5 Access and car parking.

Access is via a ROW from Alan Street which will be required to be constructed to a 4m wide to meet bushfire requirements.

Chapter 3.1.7.2 Outbuildings

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

Maximum floor area 100m². Proposed garage 53.5m².

Chapter 6.1 Acid Sulphate Soils.

The site is not mapped as containing acid sulphate soils.

Chapter 6.3 Erosion Sedimentation Control.

An erosion and sedimentation control plan has been submitted and will be required as a condition of consent.

Chapter 6.5 On-Site Effluent Disposal.

The site is not connected to the sewer and on- site effluent disposal is required. The applicant has submitted a waste- water report which has been assessed by Council's OSSM officer as satisfactory. The OSSM system is located in the cleared land to the east of the dwelling house within the electricity easement. Ausgrid have no objection subject to conditions.

Chapter 6.6 Tree and Vegetation Management.

The proposal requires the removal of a number of trees to erect the house and garage and bushfire protection. The impact has been assessed by Council's ecologist and tree assessment officer and support the proposal subject to conditions.

Chapter 6.7 Water Cycle Management.

The application was accompanied by a water cycle management plan which has been assessed by Council's Development Engineer as satisfactory.

Chapter 7.1 Car Parking

Two car parking spaces are required and a 3- car garage is proposed which complies with the DCP.

Chapter 7.2 Waste Management

A waste management plan has been submitted.

Other Matters for Consideration

Development at Zone Interface

The southern boundary of the site is zoned R2 Low Density Residential. The proposal is consistent with existing and future development on the adjoining R2 zone. The proposed

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

dwelling location is on the northern side of the site and way from the adjoining zone boundary.

Right of way

Access to the site from Alan Street is partly over the adjoining lot 16 DP2480 No137 Alan Street.

Council provided the owner of the adjoining land over which the ROW is located a copy of the engineering plans submitted by the applicant and draft engineering conditions. The driveway will require upgrading to meet RFS and Council standards. No objection was received from the adjoining owner. **(Refer engineering conditions).**

Planning Agreements

The proposed development is not subject to a planning agreement / draft planning agreement.

Development Contribution Plan

The subject site is located within Development Contribution Plan Cp Central Coast Regional Section 7.12 where dwelling house developments are not subject to section 7.12 contributions.

Any Submission made in Accordance with this Act or Regulations

The application was advertised from 29 January 2021 to 9 March 2021. No public submissions were received in relation to the application.

Internal Consultation

Internal Referral Body	Comments
Development Engineer	Supported, subject to conditions. Refer conditions 2.2-2.4, 2.9-2.11, 3.6, 3.13, 3.14, 4.18, 4.19, 5.8, 5.9.
Tree Assessment Officer	Supported, subject to conditions. Refer conditions 3.7 and 4.7.
Ecologist	Supported, subject to conditions. Refer conditions 2.5-2.8, 3.8-3.12, 4.8-4.16, 5.4-5.6, 6.1-6.5.
OSSM	Supported, subject to conditions. Refer conditions 2.5 and 5.3.
Waste	Supported subject to conditions. Refer condition 4.17.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

Development Engineer

The conditions require the upgrading and sealing of the driveway from Alan Street to the site to comply with RFS conditions, passing bays and sight distance requirements.

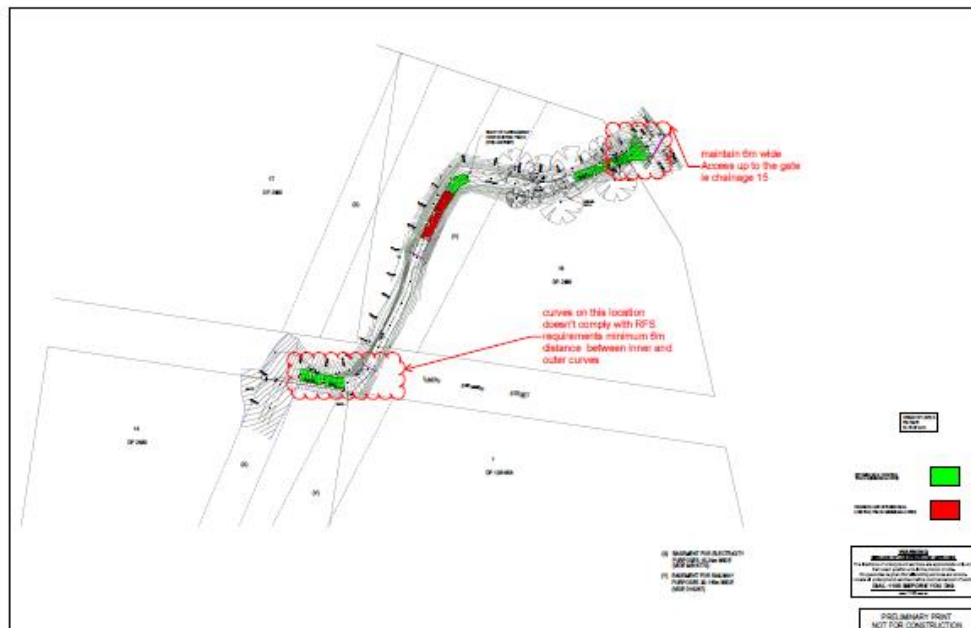


Figure 8-Proposed driveway.

Tree Assessment.

The subject application has been considered with its accompanying Arboricultural Impact Assessment and following a site inspection with development staff and the project Architect.

Clearing for the development utilises the existing cleared service corridor, resulting in 42 existing trees being identified for removal.

Trees to be removed appear to be relatively young age class. When mentioned, the Project Arborist mentioned that the site was cleared as orchard in the past.

Trees to be removed are located within the proposed building footprint and the proposed APZ.

The Arborist has targeted removal of lesser quality and or smaller trees within the APZ, leaving several larger trees mostly within the outer edge of the zone.

The proposal is supported, subject to conditions.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)Ecology

The objectives of the relevant policies, zoning objectives and potential environmental impacts associated with the proposal have been considered. Council's Ecologist has no objection to the proposal subject to the attached conditions being included within any consent granted. It is noted that the proposal has had to re-assess the site a number of times due to the original (and subsequent) Flora and Fauna Impact Assessment and vegetation management plans being sub-standard and omitting key details of the site including not identifying *Rhodamnia rubescens* (Critically Endangered BC Act) or accurately mapping the extent of rainforest vegetation within the western extent of the property. After multiple requests for information and guidance from Council's Ecologist, the proposal represents a development with satisfactory ecological impacts, consistent with surrounding developments and others approvals within DM land previously zoned 7(a).

It should also be noted that the overarching Environmental Impact Statement does not reflect the updated details of the amended Flora and Fauna Impact Assessment or IBVMP. No threatened species or ecological communities are to be directly impacted as a result of the proposal. Two threatened entities were identified within the property being *Rhodamnia rubescens* (Critically Endangered - BC Act) and Lowland Rainforest (Endangered Ecological Community - BC Act). 14 of the 49 *R. rubescens* identified within the property occur within the prescribed bushfire Asset Protection Zone (APZ). Those within the APZ are to be protected by a fenced 2m tree protection zone and are to be monitored and treated with fungicide for Myrtle Rust infection every 3 months for the 5 year duration of the IBVMP with the results being relayed to Council's Ecologist.

The identified area of Lowland Rainforest EEC vegetation along the western boundary of the property is to be buffered by a minimum of 35m of retained native vegetation from the approved APZ and >50m from the location of the approved dwelling. The minimum 35m protective vegetated buffer between the proposed APZ and the identified rainforest vegetation does not strictly adhere to Clause 5(a) of the Central Coast Rainforest Policy (50m development buffer), however the intent of the policy of the policy has been reflected by the position of the proposed dwelling being in the position with the least ecologically significant footprint. In addition, all retained native vegetation, outside of the prescribed APZ, is to be retained, maintained and protected in perpetuity under the implementation of protective 88B & E covenants.

Alternative locations for the proposed dwelling were considered by Council's Ecologist, however the current proposal appears to represent the least ecologically significant impact by avoiding the removal of identified threatened species as well as minimising the extent of edge effects by utilising existing cleared areas and retaining the majority of the subject property (including the areas of highest biodiversity value) for in perpetuity conservation. The proposed development footprint (dwelling + APZ) represents approximately 20% of the subject property, leaving approximately 80% to be retained, maintained and restricted for conservation in perpetuity.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

As per the Flora and Fauna Impact Assessment undertaken, the proposal is not likely to result in a significant impact upon a listed threatened entity, in accordance with Section 7.3 of the BC Act. This conclusion is concurred with by Council's Ecologist.

The proposal does not trigger the NSW Biodiversity Offsets Scheme via the three relevant triggers. No area of the subject property is identified on the NSW Biodiversity Values Map. The proposal is not likely to result in a significant impact to a threatened species. The proposal does not exceed the relevant area clearing threshold of 0.5ha (5,000m²).

In accordance with Clause 11(3) of SEPP (Koala Habitat Protection) 2021, the proposal is expected to represent low or no impact to the Koala. No records of sightings have been made within at least 2.5km of the subject property.

The conditions applied to the proposal reflect the sensitivity of the subject property. Their implementation resulting in the in-perpetuity conservation and management of approximately 80% of the property is seen as in keeping with the intention of the zoning of the property with consideration of surrounding properties and similarly approved developments on 7(a) zoned land within the LGA.

External Referral Body	Comments
Ausgrid	Supported, subject to conditions.
Department of Planning, Industry and Environment	Council may determine the application after the exhibition period has expired and a period of 21 days has expired after which Council has forwarded any submissions. No submissions were received, and Council may determine the application.
Integrated Approval Referral Body	Comments
NSW Rural Fire Service.	Supported, subject to conditions

Likely Impacts of the Development

a) Built Environment

The subject site is zoned 7(a) Conservation under IDO 122 and is surrounded mainly by residential and rural developments.

The proposed development is not considered to have adverse amenity impacts to adjoining development from overshadowing, privacy, noise generating activities and views.

A thorough assessment of the impacts of the proposed development on the built environment has been undertaken in terms of IDO 122 and GDCP 2013 compliance. The potential impacts are considered reasonable.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

b) Natural Environment

The proposed development is not considered to have any adverse impacts on scenic quality or the streetscape of Ocean View Road.

The redevelopment of the site will result in a development consistent with that of existing and future development in this location. There is no significant tree removal and the proposed development does not impact the natural environment.

The submitted SWMP, Water Cycle Management Plan and ecology report provides an overall concept which will be in character with the area.

There will be no significant impact upon the natural environment as a result of the proposal.

c) Economic Impacts

The proposal is considered to meet the aims of the *Central Coast Structure Plan 2036* and facilitates economic development that will lead to more local employment opportunities and residential accommodation on the Central Coast.

d) Social Impacts

The proposed development will have beneficial social impacts as it will provide employment in construction and the provision of a dwelling house in consistent with the environmental values of the area.

Suitability of the Site for the Development

The site is considered to be suitable for the proposed development as follows:

- The scale of the proposed development is consistent with the objectives of the zone.
- There are no environmental hazards which would prevent development of the site.
- Utility services are available to the site.

The Public Interest

The approval of the application is considered to be in the public interest as follows:

- The proposal is consistent with the relevant objectives of the applicable environmental planning framework, including the IDO 122 and GDCP 2013.
- The proposal does not result in any unreasonable environmental impacts and will not unreasonably impact the amenity of neighbouring properties.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

Ecologically Sustainable Principles:

The proposal has been assessed having regard to ecologically sustainable development principles and is considered to be consistent with the principles.

The proposed development is considered to incorporate satisfactory stormwater, drainage and erosion control and the retention of vegetation where possible and is unlikely to have any significant adverse impacts on the environment and will not decrease environmental quality for future generations. The proposal does not result in the disturbance of any endangered flora or fauna habitats and is unlikely to significantly affect fluvial environments.

Climate Change

The potential impacts of climate change on the proposed development have been considered by Council as part of the assessment of the application.

This assessment has included consideration of such matters as potential rise in sea level; potential for more intense and/or frequent extreme weather conditions including storm events, bushfires, drought, flood and coastal erosion; as well as how the proposed development may cope, combat, withstand these potential impacts. The proposed development is considered satisfactory in relation to climate change

Conclusion

This application has been assessed under the heads of consideration of section 4.15 of the *Environmental Planning and Assessment Act 1979* and all relevant instruments and policies. The potential constraints of the site have been assessed and it is considered that the site is suitable for the proposed development. Subject to the imposition of appropriate conditions, the proposed development is not expected to have any adverse social or economic impact. It is considered that the proposed development will complement the locality and meet the desired future character of the area.

Accordingly, the application is recommended for **approval** pursuant to section 4.16 of the *Environmental Planning and Assessment Act*.

Reasons for the Decision

The reasons for the decision as recommended under the assessment of this application are as follows:

- 1 The proposal is satisfactory having regard for the relevant environmental planning instruments, plans and policies.
- 2 The proposal has been considered against the provisions of IDO 122, *Gosford Local Environmental Plan 2014* and Gosford DCP 2013 and has been found to be satisfactory.

4.1 DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House (contd)

- 3 There are no significant issues or impacts identified with the proposal under s.4.15 of the *Environmental Planning and Assessment Act 1979*.

Attachments

- | | | |
|----------|---|-----------|
| 1 | DA60589/2020 Draft Conditions of Consent | D14943925 |
| 2 | Redacted Architectural Plans 129 Alan Street, Niagara Park
DA/60589/2020 | D14971905 |
| 3 | Engineering Civil plans - DA 60589-2020 | D14968906 |
| 4 | DA 60589-2020 - Ausgrid response - 129 Alan St Niagara Park_A-20210 | D14532531 |
| 5 | RFS Determination Letter 129 Alan Street, NIAGARA PARK DA60589
Part 1 | D14620086 |

Item No: 2.1
Title: Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park - Dwelling House and Detached Garage.

Central Coast
 Local Planning Panel

Department: Environment and Planning

18 October 2022 Supplementary Local Planning Panel

Reference: DA/60589/2020 - D15124258
 Author: Robert Eyre, Principal Development Planner South
 Section Manager: Ailsa Prendergast, Section Manager, Development Assessment South
 Unit Manager: Andrew Roach, Unit Manager, Development Assessment
 Executive: Alice Howe, Director Environment and Planning

Summary

An application has been received for construction of a new dwelling house at Lot 14 DP 2480, 129 Alan Street, Niagara Park. The application was considered by the Local Planning Panel at its meeting of 16 December 2021. The matter was deferred at the meeting pending the submission of additional information and is referred back to the Panel for consideration. This report provides commentary in relation to the matters raised by the Panel. The application is recommended for approval.

The application is required to be referred to the Local Planning Panel for determination as the proposed development is classified as 'designated development' under *Interim Development Order No.122 - Gosford*.

Applicant	J Kechagias
Owner	J Whyte and C Whyte
Application No	DA60589/2020
Description of Land	Lot 14 DP2480 No. 129 Alan Street Niagara Park
Proposed Development	New dwelling house
Site Area	20,160m ²
Zoning	7(a) Conservation under IDO 122
Existing Use	Vacant
Employment Generation	No
Estimated Value	\$345,000.00

Recommendation

- 1 That the Local Planning Panel grant consent to DA60589/2020 for the development of a dwelling house on lot 14 DP2480 No. 129 Alan Street, Niagara Park subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.**
- 2 That Council advise relevant external authorities of the Panel's decision.**

**2.1 Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park -
Dwelling House and Detached Garage. (contd)**

[Click here to enter text.](#)

Background

The application for a Dwelling House and associated Garage at 129 Alan Street Niagara Park was initially considered by the Local Planning Panel at its meeting of 16 December 2021. A copy of the report presented to that meeting is included as **Attachment 1**.

The matter was deferred at the meeting with the following resolution:

'That the Local Planning Panel defer consideration of this matter for electronic determination, to seek the following:

- 1 Details of the terms of the access easement through 137 Alan Street (Lot 16 DP2480) Niagara Park.*
- 2 The extent of works proposed to and within the easement and Ilbery Road, road reserve.*
- 3 Assessment of the environmental impacts of those proposed works through 137 Alan Street (Lot 16 DP2480) Niagara Park and the Ilbery Road road reserve.*
- 4 Owners consent from 137 Alan Street (Lot 16 DP2480) Niagara Park or alternatively legal advice to indicate owners consent is not required for the development application on this land.*
- 5 Investigate any land owner consent requirements for works proposed within the Ilbery Road road reserve.*
- 6 Confirmation that the proposed On Site Sewerage Management (OSSM) system can function practicably and reasonably within the terms of Ausgrid proposed Conditions of Approval and Council's proposed condition 2.5.*
- 7 Consideration of whether the address of the application needs to change, and whether re-notification is required, in accordance with Council's notification policy.*

The applicant is to provide the above information to the consent authority within 3 months of the panel meeting date.

The Panel requests Council to submit a supplementary assessment report addressing the above matters to a special electronic Panel meeting.'

2.1 Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park - Dwelling House and Detached Garage. (contd)

With regard to the matters set out in the resolution, the following additional information is provided, dealing with each of the seven matters separately:

1 Details of the terms of the access easement through 137 Alan Street (Lot 16 DP2480) Niagara Park.

Comment: The right of carriageway burdens 137 Alan Street (Lot 16 DP 2480) and benefits 129 Alan Street (Lot 14 DP2480). The right of carriageway is nominated on the deposited plan as "Right of Carriageway over Existing Track in Use" and has no fixed dimensions or width having regard to the site topography.

The NSW Land Registry Services Guidance for Easements over a Track in Use provides that an easement over a track in use may in situations where:

- the track in use is extensive and/or it traverses rough or steep terrain over rural land.
- the easement site might vary, from time to time, due to changing physical conditions.

The guidance further notes that:

'As the site of an Easement over track in use is designed to be 'ambulatory' i.e. the location of the track 'in use' may move over time'

Further information is contained in *Attachment 6*.

2 The extent of works proposed to and within the easement and Ilbery Road, road reserve

Comment: The applicant has submitted amended engineering plans for works within the right of carriageway (refer to *Attachment 3*). These plans have been reviewed and assessed as satisfactory by Council's Development Engineer.

3 Assessment of the environmental impacts of those proposed works through 137 Alan Street (Lot 16 DP2480) Niagara Park and the Ilbery Road road reserve.

Comment: The applicant has submitted an additional Ecological Assessment from Fraser Ecological (refer to *Attachment 5*).

2.1 Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park - Dwelling House and Detached Garage. (contd)

Fraser Ecological advise that, as part of the preparation of the Ecological Assessment, a physical site inspection was undertaken, in addition to a review of the proposed works as set out in the engineering plans (*Attachment 3*) and relevant ecological records.

The Ecological Assessment notes that the proposed works are atop of an existing access track which is clear of native vegetation. There is some minor regrowth along the edges of the track which is mostly exotic vegetation.

No threatened species were identified within or immediately adjacent to the area of proposed works. In addition, the proposed works are relatively minor in nature and the proposed controls ensure no surrounding bushland habitat is impacted by the works.

Council's Ecologist has reviewed the engineering plans and Ecological Assessment and advises that '*the ecological response letter sufficiently addresses point 3 in the RFI from the planning panel*'.

4 **Owners consent from 137 Alan Street (Lot 16 DP2480)) Niagara Park or alternatively legal advice to indicate owner's consent is not required for the development application on this land.**

Comment: The applicant has submitted a legal opinion which states that in accordance with Part 14 of the *Conveyancing Act 1919-Schedule 8*, the owner of the land benefited by the right of access may enter the land, carry out work within the easement including construction and maintenance. That is, the owner of the land benefited from a right of carriageway does not require permission from the owner of the land burdened to maintain the right of carriageway (refer to *Attachment 7*).

The driveway plan (*Attachment 3*) was referred to the owner of 137 Alan Street who has not objected to the upgrade of the right of way.

Amended *Condition 3.3c* will require the owner of 137 Alan Street to be notified at least seven days prior to work commencing on the driveway.

The imposition of such a condition is permitted in accordance with Section 4.17(1) of the *Environmental Planning and Assessment Act 1979*, which states in part:

'A condition of development consent may be imposed if:

(f) it requires the carrying out of works (whether or not being works on land to which the application relates) relating to any matter referred to in section 4.15(1) applicable to the development the subject of the consent,

2.1 Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park - Dwelling House and Detached Garage. (contd)

Separate legal opinions have been received from both the applicant's solicitor and Council's solicitor that confirm that the consent of the owner of the land burdened by the right of way is **not** required in this case and the advertising of the application did not require to include the land burdened by the right of way (refer to *Attachment 7* and *Attachment 8*, respectively).

5 Investigate any landowner consent requirements for works proposed within the Ilbery Road road reserve.

Comment: Ilbery Road is a public road and owners consent is not required. **Condition 2.3** requires approval under Section 138 of the *Roads Act 1993* for work within Ilbery Road.

6 Confirmation that the proposed On Site Sewerage Management (OSSM) system can function practicably and reasonably within the terms of Ausgrid proposed Conditions of Approval and Council's proposed condition 2.5.

Comment: The applicant has submitted a supplementary report by Larry Cook Consulting Pty Ltd (refer to *Attachment 4*). The report confirms that the OSSM system can function within the terms of Ausgrid's and Council's conditions.

7 Consideration of whether the address of the application needs to change, and whether re-notification is required, in accordance with Council's notification policy.

Comment: The address/description are the legal description and are those allocated in Council's rating system. They do not need to change or to be renotified under Council's notification policy (refer to *Attachment 7* and *Attachment 8*).

Attachments

1	DA/2020/60589 - 129 Alan Street, Niagara Park - Proposed Dwelling House	D14943625
2	DA60589/2020 Draft Conditions of Consent	D14943925
3	Revised Plans 129 Alan Street NIAGARA PARK DA/60589/2020	D15105043
4	Further Information – Wastewater Management Plan - Appendix D - PAN-52378 DA/60589/2020	D15076284
5	Ecological Report - Appendix C - PAN-52378 DA/60589/2020	D15076275
6	Easement/Restriction Letter - Appendix A - PAN-52378 DA/60589/2020	D15076278
7	Owner's additional legal opinion for the LPP - 129 Alan Street, Niagara Park - DA/60589/2020	D15160936
8	Updated Letter to Central Coast Council - re Right of Way DA/60589/2020 129 Alan Street, Niagara Park (WWSB 222179)	D15346843

2.1 **Supplementary Report DA/60589/2020 - 129 Alan Street Niagara Park -
Dwelling House and Detached Garage. (contd)**

Item No: 2.1**Title:** DA 60589/2020 - 129 Alan St Niagara Park -
Supplementary Report and Legal Advice - Dwelling
House & Garage**Central Coast**
Local Planning Panel**Department:** Environment and Planning

28 February 2023 Supplementary Local Planning Panel

Reference: DA/60589/2020 - D15546182

Author: Robert Eyre, Principal Development Planner South

Ailsa Prendergast, Section Manager Development Assessment South

Manager: Andrew Roach, Unit Manager, Development Assessment

Executive: Alice Howe, Director Environment and Planning

Summary

An application has been received for construction of a new dwelling house at Lot 14 DP 2480, 129 Alan Street, Niagara Park. The application was considered by the Local Planning Panel at its meeting of 16 December 2021. The matter was deferred at that meeting pending the submission of additional information, primarily in relation to legal matters pertaining to access (the land is accessed via a Right of Way (ROW)). The matter was again considered and deferred at the Panel meeting of 18 October 2022, for the receipt of additional information. The additional information, including further legal advice, has been obtained and the matter is referred back to the Panel for consideration. This report provides commentary in relation to the matters raised by the Panel. The application is recommended for approval.

The application is required to be referred to the Local Planning Panel for determination as the proposed development is classified as 'designated development' under *Interim Development Order No.122 - Gosford*.

Applicant	J Kechagias
Owner	J Whyte and C Whyte
Application No	DA60589/2020
Description of Land	Lot 14 DP2480 No. 129 Alan Street Niagara Park
Proposed Development	New dwelling house
Site Area	20,160m ²
Zoning	7(a) Conservation under IDO 122
Existing Use	Vacant
Employment Generation	No
Estimated Value	\$345,000.00

2.1 DA 60589/2020 - 129 Alan St Niagara Park - Supplementary Report and Legal Advice - Dwelling House & Garage (contd)

Recommendation

- 1 That the Local Planning Panel grant consent to DA60589/2020 for the development of a dwelling house on lot 14 DP2480 No. 129 Alan Street, Niagara Park subject to the conditions detailed in the schedule attached to the report and having regard to the matters for consideration detailed in Section 4.15 of the Environmental Planning and Assessment Act 1979.**
- 2 That Council advise relevant external authorities of the Panel's decision.**

Background

The application for a Dwelling House and associated Garage at 129 Alan Street, Niagara Park was initially considered by the Local Planning Panel at its meeting of 16 December 2021. A supplementary report was considered by the Panel on 18 October 2022. The previous reports, draft conditions, plans and related documents previously considered by the Local Planning Panel are separately provided.

At the meeting of 18 October 2022, the matter was deferred by the Panel with the following resolution

'That the Local Planning Panel further defer consideration of this matter for electronic determination, to seek the following:

- 1 Owners consent from 137 Alan Street (Lot 16 DP2480) Niagara Park or alternatively legal advice to confirm that owners consent is not required for the proposal which includes construction of new driveway access and associated drainage works, that cross the adjoining allotment (137 Alan Street), as outlined in submitted engineering plans.*
- 2 Legal advice to confirm whether the proposed new driveway access and associated drainage works included in the submitted engineering plans are required to be notified in accordance with Council's Development Control Plan and any other relevant planning legislation that satisfies matters in relation to the public interest.*
- 3 Legal advice to confirm whether formal amendment to the development application description to include 137 and 129 Alan Street Niagara Park is required, considering the proposal includes driveway and engineering works over 137 Alan Street, upon which the proposed dwelling house and garage rely.'*

This supplementary report is to provide additional information requested by the Panel.

2.1 DA 60589/2020 - 129 Alan St Niagara Park - Supplementary Report and Legal Advice - Dwelling House & Garage (contd)

Supplementary Report -Legal Advice.

Legal advice in relation to the access matters has been sourced from external legal counsel, Wilshire Webb Staunton Beatie Lawyers. The legal advice, dated 15 November 2022, is provided in full as Attachment 1.

Exempt and Complying Development.

The works required to upgrade the driveway over the ROW through the adjoining property are not classified as exempt or complying development due to the area of the driveway being greater than 150m².

The imposition of such a condition requiring the upgrade or the carrying out of work on the adjoining property is permitted in accordance with Section 4.17(1) of the *Environmental Planning and Assessment Act 1979*, which states in part:

'A condition of development consent may be imposed if:

(f) it requires the carrying out of works (whether or not being works on land to which the application relates) relating to any matter referred to in section 4.15(1) applicable to the development the subject of the consent,

Separate legal opinions have been received from both the applicant's solicitor and Council's solicitor that confirm that the consent of the owner of the land burdened by the ROW is not required in this case and the advertising of the application did not require to include the land burdened by the ROW.

Conclusion

The legal advice confirms the previous advice to the Panel relating to the construction of the driveway and associated works required in the engineering plans over 137 Alan Street (Lot 16 DP 2480) Niagara Park that:

1. The consent of the adjoining owner is not required for the works.
2. The works are not required to be notified.
3. Amendment to the application is not required.

The Panel can now determine the application in accordance with the reports and draft conditions provided and the recommendation above.

Attachments

1	Legal Advice Wilshire Webb Staunton Beatie Lawyers - Dated 15 November 2022	Provided Under Separate Cover	D15452822
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2.1	<i>DA/60589/2020 - 129 Alan Street, Niagara Park - Proposed Dwelling House & Garage - LPP Supplementary Report</i>
Attachment 6	<i>DA 60589/2020 - 129 Alan St Niagara Park - Supplementary Report and Legal Advice - Dwelling House & Garage</i>

2.1	DA 60589/2020 - 129 Alan St Niagara Park - Supplementary Report and Legal Advice - Dwelling House & Garage (contd)
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Fraser Ecological

665 Scenic Road Macmasters Beach NSW 2251
042323 8193
alohafraser@gmail.com

Dear Robert,

Fraser Consulting has reviewed and inspected the works areas as identified in the Beveridge Williams CC Plans for the proposed access to 129 Alan Street, Niagara Park.

This letter has been prepared specifically to address Item 3 below.

3 Assessment of the environmental impacts of those proposed works through 137 Alan Street (Lot 16 DP2480) Niagara Park and the Ilbery Road reserve.

An inspection was undertaken over the subject property on the 3-02-2022 upon receiving the engineering plans dated 24-02-2022 prepared for over the existing access. The proposed works are atop of an existing access track which is clear of native vegetation.

The CC plans identified minor grading works over the existing access track. The current access has some minor regrowth of vegetation at the edges of the existing track this regrowth comprises mostly exotic Lantana camara (Lantana) a weed of national significance and Ageratina adenophora (Crofton Weed). Bracken fern is presently growing over the existing rock lined swale situated along the western side of the track between chainages 83-110 and along the eastern side of the track.

No threatened species of plant or animal, endangered populations or endangered ecological communities listed under the NSW Biodiversity Conservation Act 2016 were identified within or immediately adjacent to the works area. The proposed works are not located upon the NSW Biodiversity Values Map.

The proposed works are minor in nature and sufficient mitigation measures "erosion and sedimentation" controls are proposed under the Beveridge Williams Plans to ensure that the surrounding bushland "habitat" is not adversely impacted upon by the proposed works.

Should you wish to discuss further please do not hesitate to contact me on.

Kind regards,

Alex Fraser, Principal Ecologist (Fraser Ecological)

2nd March 2022

Site Photographs along the existing access

Photograph 1 looking from the access gate south (4m wide)



Photograph 2 looking from the access gate south plantings left and right of track



Photograph 3 existing access (4m tape)



Photograph 4 existing access (4m tape) rock swale left



Photograph 5 existing access (4m tape)



Photograph 6 existing access (4m tape)



Photograph 7 existing access (4m tape)



Photograph 8 Lantana weed adjacent to the access within Ilbery Road



Photograph 9 Paspalum and Crofton Weed adjacent to the existing rock line swale



Photograph 10 existing access (4m tape) site boundary in the rear of photograph



Photograph 11 existing access (4m tape) site boundary in the rear of photograph





Our Ref: JS:200045
Your Ref:

Wyong Village Plaza
Suites 7 & 8
Cnr Alison Rd & Margaret St
PO Box 650
Wyong NSW 2259

4 March 2022

Central Coast Council - Gosford
PO Box 21
GOSFORD NSW 2250

Telephone:
(02) 4351 2313

Facsimile:
(02) 4351 4177

Dear Sir/Madam

**Re: Development Application No 60589/2020
Proposed DESIGNATED Dwelling House & Garage
on LOT: 14 DP: 2480 No 129 Alan Street NIAGARA
PARKEASEMENTS/RESTRICTION**

We act for Mr John and Christina Whyte registered proprietors of No 129 (Lot 14 DP 2480) Alan Street, Niagara Park to address Council's request for further information dated 23rd of December 2021.

The property is subject to a Development Application No 60589/2020 Proposed DESIGNATED Dwelling House & Garage. Council's request as set out below:

"1 Details of the terms of the access easement through 137 Alan Street (Lot 16 DP2480) Niagara Park"

"4 Owners consent from 137 Alan Street (Lot 16 DP2480) Niagara Park or alternatively legal advice to indicate owners' consent is not required for the development application on this land"

The details of the terms of the access easement through Lot 16 DP 2480 are detailed in Appendix A. Access to the "development lot" already exists by way of easement over Lot 16 DP 2480. Mr and Mrs Whyte benefit "right of carriage way". We again attach that Plan (Appendix A).

Fitzsull Pty Ltd
ACN 159 120 617
ABN 93 159 120 617
an incorporated legal
practice trading as
Direct2U Law &
Direct2U Conveyancing

Directors
Joanne Sullivan
Alison Farr



[Easement over a track in use - Registrar General's Guidelines \(nswlrs.com.au\)](https://www.nswlrs.com.au)

Easement over a track in use

An easement over a track in use is created as a Right of Carriage Way, or Right of Way or Easement for Access in situations where:

*the track in use is extensive and/or it traverses rough or steep terrain over rural land.
the easement site might vary, from time to time, due to changing physical conditions.*

The right of carriage way has no fixed dimensions or width having due regards to the site topography as such can move from time to time.

In accordance with schedule 8 Construction of certain expressions under part 14 of the CONVEYANCING ACT 1919 - SCHEDULE 8

http://classic.austlii.edu.au/au/legis/nsw/consol_act/ca1919141/sch8.html

“Part 14 - Right of access

1. The owner of the lot benefited may--

(a) by any reasonable means pass across each lot burdened, but only within the site of this easement, to get to or from the lot benefited, and

(b) do anything reasonably necessary for that purpose, including--

• entering the lot burdened, and

• taking anything on to the lot burdened, and

• carrying out work within the site of this easement, such as constructing, placing, repairing or maintaining trafficable surfaces, driveways or structures.

2. In exercising those powers, the owner of the lot benefited must--

(a) ensure all work is done properly, and

(b) cause as little inconvenience as is practicable to the owner and any occupier of the lot burdened, and

(c) cause as little damage as is practicable to the lot burdened and any improvement on it, and

(d) restore the lot burdened as nearly as is practicable to its former condition, and

(e) make good any collateral damage.”

Mr and Mrs Whyte do not require permission from the registered proprietor of Lot 16 DP 2480 to carry out works within the easement e.g. maintaining trafficable surfaces.

The owners of Lot 16 DP 2480 currently understand the existing easement and rights under that easement when they purchased the lot from Mr and Mrs Whyte in 2017.

We trust the information provided is sufficient for Council to continue assessment of the application.

Should you require any further information please do not hesitate to contact me.

Yours faithfully

DIRECT2U LAW & CONVEYANCING



Joanne Sullivan
jsullivan@direct2u.net.au

Attachment 8

Easement/Restriction Letter - Appendix A - PAN-52378 DA/60589/2020

Req:R808225 /Doc:DL AK576967 /Rev:04-Aug-2016 /Sts:NO.OK /Pgs:ALL /Prt:21-Nov-2016 15:19 /Seq:1 of 2

Ref:160441 /Src:M0110

Releasee: 2-1

**TRANSFER GRANT
EASEMENT ETC
OVER OWN LAND**New South Wales
Section 46A Real Property Act 1990

AK576967J

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

(A) TORRENS TITLE

Servient Tenement LOT 16 DP2480	Dominant Tenement LOT 14 DP2480
------------------------------------	------------------------------------

(B) LODGED BY

Document Collection Box 302G	Name, Address or DX, Telephone, and Customer Account Number if any LegalStream Tel: 023 0122 Fax: 9233 6411 LLPN: 123824M Reference: TREM4 INCOLD: 21872: RP: BC	CODE TO
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(C) REGISTERED PROPRIETOR

of both the dominant and the servient tenements referred to at (A) JOHN STRACHAN WHYTE & CHRISTINA LOUISE WHYTE
--

(D) DESCRIPTION

Plan for
136.30

of the easement <input checked="" type="checkbox"/>
RIGHT OF GARRIAGEWAY OVER EXISTING TRACK IN USE (REFER TO ANNEXURE 'A')

(E) MORTGAGE / CHARGE / COVENANT CHARGE (if any)

affecting the servient / dominant tenement referred to at (A)			
Number	Torrens Title	Type of Instrument	Mortgagee / chargee / covenant chargee

The abovementioned registered proprietor of both the dominant and the servient tenements referred to above hereby grants
(F) AN EASEMENT out of the servient tenement and appurtenant to the dominant tenement in the terms specified above at (D).

(G) DATE

I certify I am an eligible witness and that the registered proprietor signed this dealing in my presence.
[See note* below]

Certified correct for the purposes of the Real Property Act 1900 by the registered proprietor.

Signature of witness:

Valerie Seyer

Signature of registered proprietor: -

Name of witness:

Address of witness:

VALERIE SEYER
11 GREENOAKS RD
NARARA 2250

JOHN STRACHAN WHYTE

CHRISTINA LOUISE WHYTE

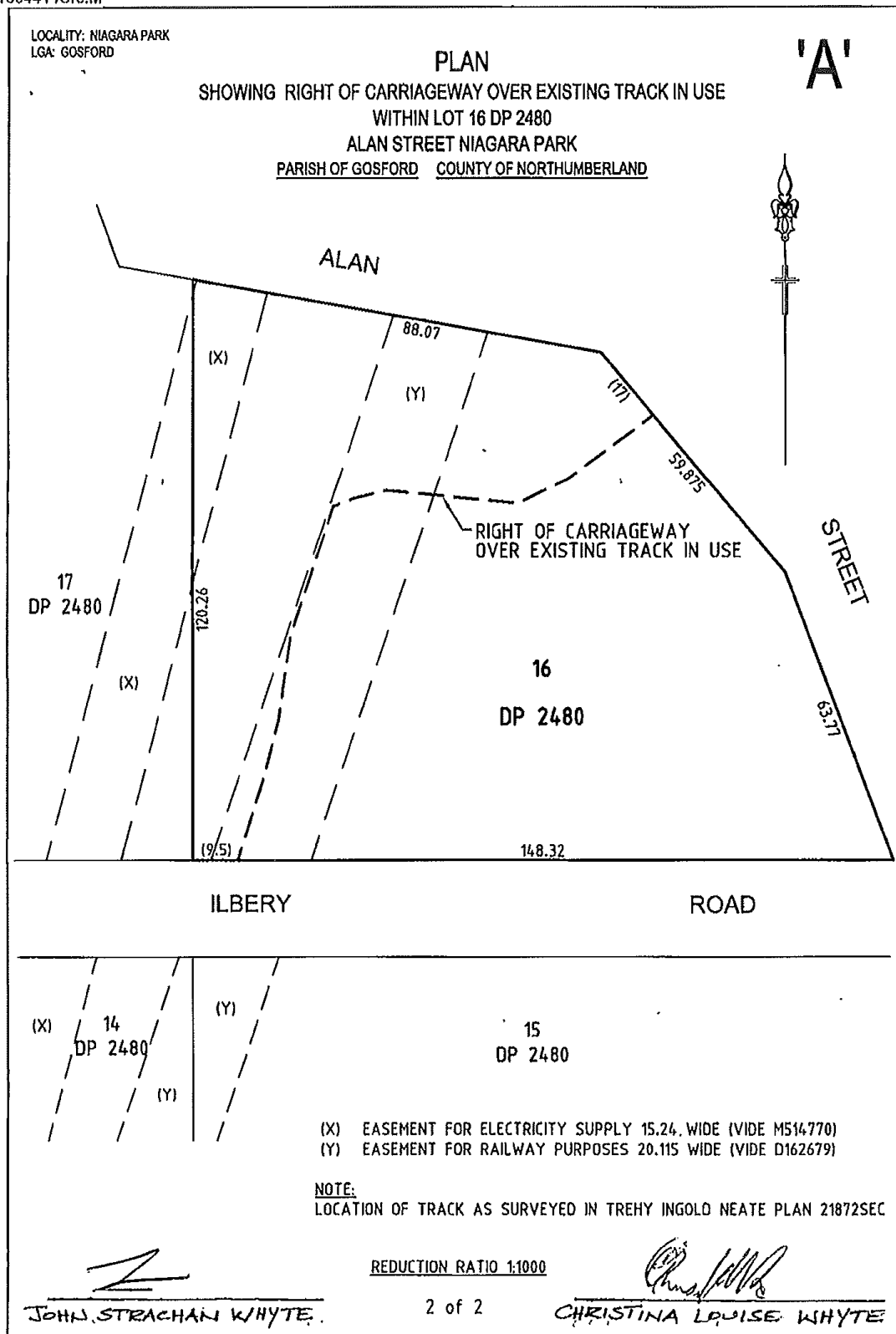
* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.
ALL HANDWRITING MUST BE IN BLOCK CAPITALS

Page 1 of 2

659m
TO 29/7/16

1303

Req:R808225 /Doc:DL AK576967 /Rev:04-Aug-2016 /Sts:NO.OK /Pgs:ALL /Prt:21-Nov-2016 15:19 /Seq:2 of 2
Ref:160441 /Src:M



PJ DONNELLAN
& CO
SOLICITORS AND ATTORNEYS

Level 2, 91 Mann Street, Gosford
PO Box 1207, Gosford NSW 2250
DX 7206 Gosford
Phone 02 4324 3988 Fax 02 4323 1623
Email mail@pjdonnellan.com.au

Our ref: PJW.dm 2022 Whyte
Your ref: Robert Eyre
DA/60589/2020

10 May 2022

The Chief Executive Officer
Central Coast Council
49 Mann Street
GOSFORD NSW 2250

By email: ask@centralcoast.nsw.gov.au

Dear Sir

Re: John Strachan Whyte and Christina Louise Whyte
Property: 129 Alan Street Niagara Park Lot 14 DP 2480
DA/60589/2020 DESIGNATED for Dwelling House and Garage

We advise that we act for the abovenamed who have provided us with a copy of your letter dated 23 December 2021 seeking additional information at the request of the Local Planning Panel (LPP). We have been asked to address the requests for additional information referred to in paragraphs numbered 1 and 4 of the letter as follows:

1. *Details of the terms of the access easement through 137 Alan Street (Lot 16 DP 2480) Niagara Park.*
4. *Owners' consent from 137 Alan Street (Lot 16 DP 2480) Niagara Park or alternatively legal advice to indicate owners' consent is not required for the development application on this land.*

Details of terms of access easement

An easement burdening Lot 16 in DP 2480 (the Servient Tenement) traverses Lot 16 creating right of carriageway providing access for the benefit of Lot 14 in DP 2480 (the Dominant Tenement) over a track in use. The right of carriageway was created not by way of s88B instrument, but by way of Transfer Granting Easement Etc Over Own Land (the Transfer Granting Easement). **Attached** is a copy of the Transfer Granting Easement, registered number AK576967, showing a plan of the track in use over which the easement is granted at annexure 'A'.

At the time the easement was registered, our clients were the owners of both the Dominant and the Servient Tenement. They proceeded to register the easement by way of a dealing under the *Real Property Act 1900* (Transfer Granting Easement) rather than by way of s88B instrument.

An easement over an existing track in use may be created either by way of s88B instrument or by the registration of a dealing such as a transfer granting easement (or in the case of Old System land, by way of deed). In the case of a transfer granting easement as in this case, the site of the easement to be created over the track in use is required to be depicted in a plan



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- 2 -

Central Coast Council

10 May 2022

signed by a registered surveyor and annexed to the dealing creating the easement.¹ This was the case in this instance, the plan forming annexure 'A' to the Transfer Granting Easement (annexure 'A') having been prepared by Trehy Ingold Neate, Surveyors.

Annexure 'A' shows the location of Easement for Railway Purposes 20.115 wide, marked (Y) on the plan (Railway Easement). The existing track in use over which the easement is granted is marked on annexure 'A' with a dashed line of irregular trajectory running from the north-eastern boundary of Lot 16 in a generally westerly direction and then in a generally southerly direction through the Railway Easement and ending at Ilbery Road, providing access to Lot 14.

The track in use is depicted as an existing physical feature on the burdened land and no width for the easement is shown, consistently with the guidelines of Land Registry Services². Instead, the "approximate centre line" of the track is shown on the plan, prepared by a registered surveyor.³

Because the easement is described in "short form" and was not created by s88B instrument, its terms are not expressly set out, and it must be read having regard to s181A of the *Conveyancing Act 1919* (the Act). This provides for the construction of certain short form expressions under the Act as set out in Schedule 8 of the Act.

At (D), the Transfer Granting Easement describes the rights granted to the Dominant Tenement as an "easement" for "right of carriageway over existing track in use (refer to annexure 'A')". Annexure 'A' shows the existing track in use as providing access from Alan Street through Lot 16 to Lot 14. Accordingly, it describes both a right of carriage way and an easement providing right of access.

Section 181A(1) means that in an instrument or a dealing⁴ purporting to create a right of way, the expression "right of carriage way" is taken to include all the words set out in Part 1 of Schedule 8 of the Act.

Part 1 of Schedule 8 of the Act reads as follows:

Part 1 - Right of carriage way

Full and free right for every person who is at any time entitled to an estate or interest in possession in the land herein indicated as the dominant tenement or any part thereof with which the right shall be capable of enjoyment, and every person authorised by that person, to go, pass and repass at all times and for all purposes with or without animals or vehicles or both to and from the said dominant tenement or any such part thereof.

Accordingly, the terms of the Transfer Granting Easement include that our clients as owners of the Dominant Tenement may go, pass and repass along the existing track in use whether by vehicle or otherwise.

Because the easement also creates a right of access from Alan Street to our clients' land via the existing track in use as shown in annexure 'A' to the Transfer Granting Easement, s181A(2) of the Act is also relevant. This section means that in an instrument (or a dealing) that purports to create an easement "of the following kind" (it goes on to list various kinds of

¹ See Land Registry Services online publication

https://www.nswlrs.com.au/deposited_plans/easements_restrictions/easement_over_track_in_use#:~:text=A%20easement%20over%20a%20track,due%20to%20changing%20physical%20conditions.

² See above

³ See above

⁴ Section 181A(4) provides that section 181A "extends to dealings under the *Real Property Act 1900*"

- 3 -

Central Coast Council

10 May 2022

easements, including a "right of access"), the terms of the easement are taken to include all the words set out in Schedule 8 of the Act relating to the particular kind of easement. In this case, the "kind" of easement created is a right of access as depicted in annexure 'A' to the Transfer Granting Easement.

Part 14 of Schedule 8 of the Act should therefore taken to be included in the terms of the easement created. It provides as follows:

Part 14 - Right of access

1. *The owner of the lot benefited may--*
 - (a) *by any reasonable means pass across each lot burdened, but only within the site of this easement, to get to or from the lot benefited, and*
 - (b) *do anything reasonably necessary for that purpose, including--*
 - *entering the lot burdened, and*
 - *taking anything on to the lot burdened, and*
 - *carrying out work within the site of this easement, such as constructing, placing, repairing or maintaining trafficable surfaces, driveways or structures.*
2. *In exercising those powers, the owner of the lot benefited must--*
 - (a) *ensure all work is done properly, and*
 - (b) *cause as little inconvenience as is practicable to the owner and any occupier of the lot burdened, and*
 - (c) *cause as little damage as is practicable to the lot burdened and any improvement on it, and*
 - (d) *restore the lot burdened as nearly as is practicable to its former condition, and*
 - (e) *make good any collateral damage.*

Accordingly, these provisions should be included as terms of the easement over the existing track in use and are directly relevant to the question of whether the consent of the owners of Lot 16 is required for the carrying out of the works proposed within the access way shown in the Transfer Granting Easement.

Owners' consent

It is noted that the Council's Assessment Report for the subject DA⁵ stated that:

Council provided the owner of the adjoining land over which the ROW is located a copy of the engineering plans submitted by the applicant and draft engineering conditions. The driveway will require upgrading to meet RFS and Council standards. No objection was received from the adjoining owner.

Under Part 14 of Schedule 8 of the Act, our clients, as owners of the lot benefited, may do "anything reasonably necessary" for the purpose of passing across the lot burdened for the purpose of getting to or from their Lot 14, including carrying out works for "constructing, placing, repairing or maintaining trafficable surfaces, driveways or structures" within the site of the easement over the existing track in use on Lot 16.

⁵ See page 100 of the Local Planning Panel papers dated 16 December 2021

- 4 -

Central Coast Council

10 May 2022

That being the case, the consent of the owner of the burdened lot, number 137 Alan Street Niagara Park (Lot 16 DP 2480) is not required for the works the subject of the DA within the site of the easement over the existing track in use.

Yours faithfully

PJ DONNELLAN & CO**Pauline J Wright**

<https://pjdonnellan.sharepoint.com/sites/Legal/Shared Documents/Paulines Matters/2022 Whyte/L to Council.docx>

Req:R187674 /Doc:DL AK576967 /Rev:04-Aug-2016 /Sts:NO.OK /Pgs:ALL /Prt:08-Aug-2016 15:49 /Seq:1 of 2

Ref:21872/14 /Src:M

Releasee: 2.1

**TRANSFER GRANT
EASEMENT ETC
OVER OWN LAND**

New South Wales

Section 46A Real Property Act 1900

**AK576967J**

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

(A) TORRENS TITLE

Servient Tenement LOT 16 DP2480	Dominant Tenement LOT 14 DP2480
------------------------------------	------------------------------------

(B) LODGED BY

Document Collection Box 302C	Name, Address or DX, Telephone, and Customer Account Number if any LegalStream Tel: 9231 0122 Fax: 9233 6411 LLPN: 123824M Reference: TREH4 INCOLD: 21872: RP: 6C	CODE TO
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(C) REGISTERED PROPRIETOR

of both the dominant and the servient tenements referred to at (A) JOHN STRACHAN WHYTE & CHRISTINA LOUISE WHYTE
--

(D) DESCRIPTION

Plan fee
\$ 136.30

of the easement <input checked="" type="checkbox"/> RIGHT OF GARRIAGEWAY OVER EXISTING TRACK IN USE (REFER TO ANNEXURE 'A')
--

(E) MORTGAGE / CHARGE / COVENANT CHARGE (if any)

affecting the servient / dominant tenement referred to at (A)			
Number	Torrens Title	Type of Instrument	Mortgagee / chargee / covenant chargee

The abovementioned registered proprietor of both the dominant and the servient tenements referred to above hereby grants
(F) AN EASEMENT out of the servient tenement and appurtenant to the dominant tenement in the terms specified above at (D).

(G) DATE

I certify I am an eligible witness and that the registered proprietor signed this dealing in my presence.
[See note* below]

Certified correct for the purposes of the Real Property Act 1900 by the registered proprietor.

Signature of witness:

Valerie Seyer

Signature of registered proprietor:

Name of witness:

Address of witness:

VALERIE SEYER
11 GREENOAKS RD
NARARA 2250

John Strachan Whyte
JOHN STRACHAN WHYTE

Christina Louise Whyte
CHRISTINA LOUISE WHYTE

* s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.
ALL HANDWRITING MUST BE IN BLOCK CAPITALS

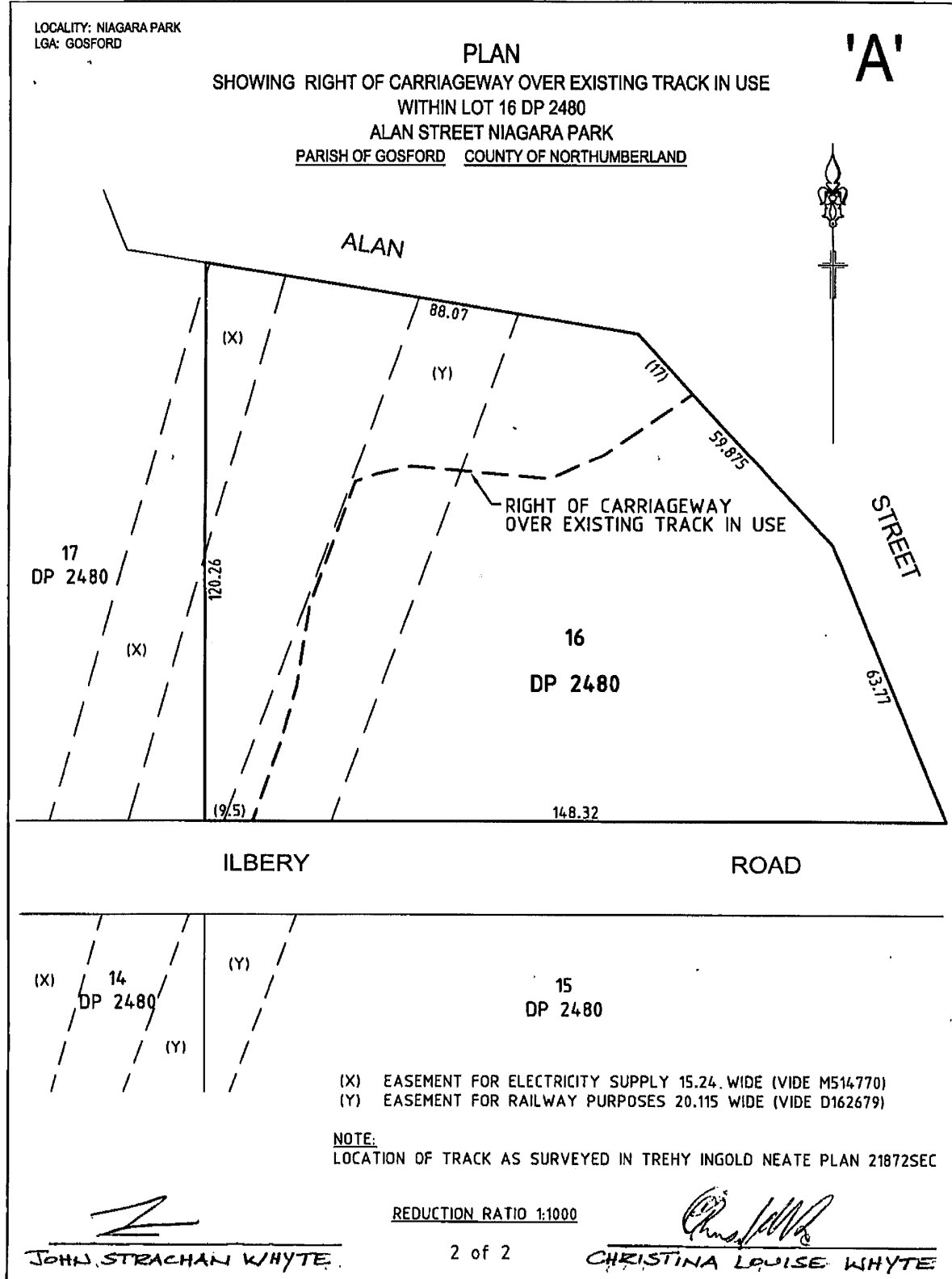
Page 1 of 2

659m
TO 29/7/16

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Ref:21872/14 /Src:M



crose@wilshirewebb.com.au

Wilshire Webb Staunton Beattie Lawyers

Our Ref: CR 222179

15 September 2022

General Manager
Central Coast Council
2 Hely Street
WYONG, NSW 2232

Attention: Ailsa Prendergast

By email: Ailsa.Prendergast@centralcoast.nsw.gov.au;
Edward.Hock@centralcoast.nsw.gov.au;
Karen.Hanratty@centralcoast.nsw.gov.au

Dear Sir / Madam

**ADVICE ON RIGHT OF WAY REGARDING DA/60589/2020
129 ALAN STREET, NIAGARA PARK**

1. We refer to our earlier advice dated 11 August 2022. Council has advised of the following updated factual matters:
 - a. The DA submitted was for "Single storey dwelling and detached garage". It did not propose upgrading/works within the Right Of Way (ROW). The applicant contended that the existing ROW and access was suitable for access to the site.
 - b. Council requested a survey plan and preliminary engineering plans for the ROW by letter dated 8 March 2021 to ensure it would meet Council's Civil Works specification and bushfire standards and what impact any works within the ROW may have. The applicant disputed the need for such plans but eventually provided preliminary plans for Council's assessment. The preliminary engineering plans were provided to the owner of the land burdened by the ROW and their comments considered in the assessment of the engineering plans by Council's engineer and ecologist.
2. Council requested our advice in respect of DA/60589/2020 which proposes construction of a dwelling house and garage at 129 Alan Street, Niagara Park (DA). The above new factual matters impact upon the earlier advice we provided. We now provide an updated letter of advice which reflects the new additional facts.

Analysis

Is land owner's consent required?

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3. The first proposition to be established is whether the access proposed by the DA is consistent with the terms of the ROW. A letter was provided on behalf of the applicants to the DA by PJ Donnellan & Co, in May 2022 (**Letter**). That Letter describes the terms of the ROW and indicates that access by vehicle and by pedestrians is permitted over the carriageway of 4 metres. It is also clear that upgrade and maintenance of the ROW are permitted under its terms. We agree that there is no conflict as between the condition proposed by the Council, and the terms of the ROW.
4. We set out in our earlier advice a consideration of a range of cases that consider whether owner's consent is required where a development application proposes to utilise an existing right of way for access to the proposal. As we indicated, the answer differs depending on the facts of the case. We refer to our earlier letter in that regard.
5. In particular, the additional facts provided by Council indicate that the applicant in its application had not proposed any works to the ROW, and no amendment to the application has been made. Rather, some additional information has been provided by the applicant to address matters raised by the Council. Having regard to the decision in *Huntington & Macgillivray v Hurstville City Council (No 2)* [2005] NSWLEC 155 and *Hillpalm Pty Ltd v Tweed Shire Council* (2002) 119 LGERA 86 (**Hillpalm**), in particular, those comments of his Honour [75] – [78] (as referred to in our 11 August 2022 letter), that **owner's consent is not required**, because the application does not 'relate to' the land the subject of the ROW. The facts now even more closely align with the facts in *Hillpalm*, and so it is appropriate to reach the same conclusion as his Honour in those proceedings.

Re-Notification and DA description

7. Given we have concluded that the DA does not relate to the land burdened by the ROW, there is no need to renotify the application, particularly having regard to the steps already taken by Council in relation to notification.
8. Please let us know if Council has any further questions arising.

Yours faithfully

WILSHIRE WEBB STAUNTON BEATTIE



CECILIA ROSE

Partner

Local Government, Environment & Planning

crose@wilshirewebb.com.au



Wilshire Webb Staunton Beattie Lawyers

Our Ref: CR 222179

15 November 2022

General Manager
Central Coast Council
2 Hely Street
WYONG, NSW 2232

Attention: Ailsa Prendergast

By email: Ailsa.Prendergast@centralcoast.nsw.gov.au;
Edward.Hock@centralcoast.nsw.gov.au;
Karen.Hanratty@centralcoast.nsw.gov.au

Dear Sir / Madam

**ADVICE ON RIGHT OF WAY REGARDING DA/60589/2020
129 ALAN STREET, NIAGARA PARK**

- 1) The Local Planning Panel has requested legal advice in relation to the following matters:
 - a) Confirmation as to whether owner's consent is required from 137 Alan Street (Lot 16 DP 2480) in relation to the construction of new driveway access and associated drainage works that cross the adjoining allotment, as outlined in submitted engineering plans
 - b) Whether the proposed new driveway access and associated drainage works included in the submitted engineering plans are required to be notified in accordance with Council's Development Control Plan and any other relevant planning legislation that satisfies matters in relation to the public interest; and
 - c) Whether formal amendment to the development application description to include 137 and 129 Alan Street Niagara Park is required, considering the proposal includes driveway and engineering works over 137 Alan Street, upon which the proposed dwelling house and garage rely.

- 2) We will address questions 2 and 3 first because the answer to those question are linked. We note that both the second and the third questions posed make an assumption that the proposal before the Council "includes driveway and engineering works over 137 Alan Street (**Property**), upon which the proposed dwelling house and garage rely". We address below whether that assumption is able to be made having regard to the powers available to Council and the Applicant under the *Environmental Planning and Assessment Act 1979 (EP & A Act)* and *Environmental Planning and Assessment Regulation 2000* (which applies to this

development application, having been lodged prior to 1 March 2022, see Schedule 6, Part 1, Clause 3 of the Environmental Planning and Assessment Regulation 2021) (2000 Regulation).

Details of the Development Application, and “Land to which the Development application relates”

- 3) The Environmental Impact Assessment (EIS) accompanying the development application describes the Property the subject of the development application as [at 1.1]:

“The site is a regular shaped allotment with an area of 2.1ha and is identified as Lot 14 in DP 2480, No. 129 Alan Street, Niagara Park. The site is located within a rural residential area. The site contains an easement for electricity supply 15.24m wide and an easement for railway purposes 20.115m wide located in the western area of the site and trend approximately northeast to southwest.”
- 4) The “Property description then goes on to say: “Access is available directly from Alan Street”. It then describes “Access is available via right of way over No 107 (Lot 16 DP 2480) which has direct access to Alan Street.”
- 5) At [1.2] The EIS describes the proposal, relevantly in the following terms:

“The application seeks approval for the construction of a single storey dwelling house comprising four (4) bedrooms and a study with a detached double garage and new driveway on Lot 14 DP 2480, Alan Street, Niagara Park.
- 6) Figures 1-1 and 1-2 show a site plan with the proposed area of works, which does not extend beyond the lot boundary. Page 7 of the EIS describes that “Access to the proposed residence will be gained directly from Alan Street via an existing driveway approximately 4 metres wide. The stormwater works are described on page 7-8 but there is no description of any works outside Lot 14.
- 7) The Bushfire Assessment Report supporting the EIS identifies the right of carriageway servicing the Property. The Bushfire Assessment Report does not propose works on the adjoining allotment or in relation to the right of way. The Report acknowledges there is bushfire managed land in the adjacent lot and notes it is not relied upon for the purposes of the subject application (see pg 12).
- 8) The Bushfire Assessment Reports includes Recommendations in respect of the Property Access at page 17. It sets out requirements for the new section of the driveway to comply with, and the maintenance (as distinct to requiring works to) of the existing right of way .
- 9) We are instructed that Council requested a survey plan and preliminary engineering plans for the right of way by letter dated 8 March 2021 to ensure it would meet Council's Civil Works specification and bushfire standards and also would describe what impact any works within the right of way have. The applicant

disputed the need for such plans but eventually provided preliminary plans for Council's assessment. The preliminary engineering plans were provided to the owner of the land burdened by the ROW and their comments considered in the assessment of the engineering plans by Council's engineer and ecologist.

10) A review of Council file has confirmed that:

- The survey plan records the right of carriageway but only details survey points on Lot 14;
- The applicant at no time requests an amendment to its application
- All the documents provided were in response to Council's request for additional information.

Questions 2 and 3 – Has the application been amended, and is notification required?

11) The course of conduct described above raises an issue as to whether, by the Council exercising its powers under clause 54 of the 2000 Regulations by implication, the applicant seeks to amend the development application pursuant to clause 55 of the 2000 Regulations, or alternatively whether an application in writing by the applicant to amend its application must be made, (ie, not by 'implication'). The status of the "additional information" is also relevant for consideration having regard to the facts in this matter.

12) The power conferred on the consent authority in respect of clause 55, is the power to accept / agree (or not) to an application for an amendment made by the applicant. As Bignold J said in *Ervin Mahrer & Partners v Strathfield Municipal Council* (2001) 115 LGERA 259 ; [2001] NSWLEC 140 (at [85]–[86]):

*"85... the relevant power conferred upon a consent authority is **not** the power to amend a development application, but the power to agree (or not to agree) to an amendment made by the applicant. Accordingly, absent any such proposed amendment by the applicant, the question arises as to whether there is any relevant power vested in the consent authority. ...*

...

*86... The power conferred by **cl 55** of the Regulation upon a consent authority is, by its nature, only a responsive power in the sense that it is only enlivened by an applicant seeking to amend the development application."*

13) The applicant must be the author of the application to amend its development application. The power to amend is separate and distinct to the power for Council to request additional information in clause 55 of the 2000 Regulations.

14) The decision of *Lateral Estate Pty Ltd v Council of the City of Sydney* [2017] NSWLEC 6 (***Lateral Estate***) is instructive in this regard. This case related to an application made by the Council to demonstrate that the applicant was out of time to appeal the application. The applicant said it had amended its development application so the time period to calculate the appeal timeframe then would be extended to take account of that amendment. In describing the exchange between

the applicant and the Council, and considering how it was to be construed, his Honour Justice Sheehan noted [81] – [86]:

[81] *V'landys acknowledges that a condition of DC may lawfully modify details of the development in the DA, but Council submits that, in so doing, the DA itself is not necessarily amended. The development is defined by the DA, and not by conditions of consent (subs par 21, and Olsson v Goulburn Mulwaree Council & The Minister Administering The Crown Land Act 1989, Olsson v The Minister Administering The Crown Land Act 1989(2010) 176 LGERA 71 ; [2010] NSWLEC 169, at [26] per Craig J).*

[82] *I accept the Council's proposition that the statutory regime I outlined above is designed to establish "carefully defined time limits" (par 22), and would be "completely undermined" if "any correspondence between an applicant and a council concerning the proposed development would arguably re-start the deemed refusal period" — either side could manipulate the timings. (See Tp14, LL29–39.)*

[83] *The DA could be amended only with Council's agreement, and I do not accept the applicant's contention that Hand's email of 13 April 2016 ([56] above) amounted to Council's accepting the conditions email as an amendment to the DA. An indication of intended further examination of the proposals concerning Council's conditions does not satisfy the requirement of such "agreement".*

[84] *As Mr Lazarus said (Tp14, LL21–25):*

Rather, what is happening is, in accordance with the second of the pathways identified by Biscoe J that there is negotiation as to the proposed conditions of consent which may have the effect once the development is approved or the development application is approved of modifying the development.

[85] *I find that what the applicant was proposing here was that the Council amend the conditions it intended imposing, to better fit the SEE, and ensure that any approval would reflect the application (Tp27, LL44–47). The applicant proposed amendments not to its DA proposal, but to a Council proposal (Tp28, LL3–6). The applicant's email did not engage cl 113. As Mr Lazarus pointed out (Tp28, L41 — p 29, L13), debating conditions is a s 80A function, not a cl 55 function. The applicant opted for the second V'landys pathway, but now says it wants the first (see [76] above).*

[86] *The applicant did not in any way make clear to Council that it was seeking to amend the DA, and the notations on the mark-ups do not amount to the necessary "written particulars" of some "changed development" (Council's subs pars 23 and 24, and see also Tp25, LL30–37). The particulars provided were of changes suggested to proposed conditions, not changes to the applicant's proposed development (Tp29, L41 — p 30, L9).*

- 15) In this matter, the Council engaged with the applicant, requesting additional information for the purposes of amending the conditions it intended on imposing, which related to the drainage and surfacing / treatment of the right of way. What was occurring was a negotiation in relation to the conditions of consent. Council made it clear the application could not be granted unless certain conditions could be imposed relating to the drainage and right of way works. The applicant responded by providing information and engaging in the discussion in respect of conditions. The applicant was not proposing amendments to its proposal but a proposal put to it by Council. His Honour Justice Sheehan in *Lateral Estate*

concluded there was no amended development application. The facts in this matter then must lead to the same conclusion. The applicant has made no application to amend its development application. On that basis, no amendment to the application has been made or can be made.

- 16) As to question 3, only the applicant can amend its development application. Where the applicant makes no amendment to the development application, there is no basis to notify the development. Also notable is that there is no power in the 2000 Regulations that can require the applicant to amend its application. It is a matter for the applicant to make that application.
- 17) These facts also inform question 2, which relates to notification of the application. As we are instructed, Council undertook notification of the original development application pursuant to clause 7.3.2.2 of the *Gosford Development Control Plan 2013*. Compliance with clause 7.3.2.10 "Notification of Proposals Amended Prior to Determination" is not triggered because there has been no amendment to the development application. No further notification of the application is required under either the EP & A Act or the *Gosford Development Control Plan 2013*.

Question 1 – Is owner's consent required?

- 18) There is a concern as to whether the consent authority can validly exercise its power to determine the application. Section 4.12 of the EP & A Act relevantly provides:

4.12 Application (cf previous s 78A)

- (1) A person may, subject to the regulations, apply to a consent authority for consent to carry out development.

- 19) Section 4.16 and 4.17 of the EP & A Act relevantly provide:

4.16 Determination (cf previous s 80)

- (1) **General** A consent authority is to determine a development application by—
(a) granting consent to the application, either unconditionally or subject to conditions, or
(b) refusing consent to the application.

...

(4) Total or partial consent A development consent may be granted—

- (a) for the development for which the consent is sought, or
(b) for that development, except for a specified part or aspect of that development, or
(c) for a specified part or aspect of that development.

...

(11) Other restrictions on determination of development applications

The regulations may specify other matters of a procedural nature that are to be complied with before a development application may be determined.

...

4.17 Imposition of conditions (cf previous s 80A)

(1) **Conditions—generally** A condition of development consent may be imposed if—

...

(f) it requires the carrying out of works (whether or not being works on land to which the application relates) relating to any matter referred to in section 4.15(1) applicable to the development the subject of the consent, or

...

20) Having regard to the requirements in the EP & A Act outlined above, in determining the development application, the consent authority takes into consideration those matters in section 4.15(1) of the EP & A Act that are relevant to “the development the subject of the development application.”

21) There are a number of recent decisions in the Land and Environment Court and the Court of Appeal that emphasise the centrality of the “development the subject of the development application”. In particular in *Al Maha Pty Ltd v Huajin Investments Pty Ltd* (2018) 365 ALR 86, Preston CJ of the LEC indicated that [at 91]:

[91] The land on which the development is to be carried out is to be determined not only from the address and formal particulars of title shown on the development application form but also from the documents that must accompany the development application. The Regulation requires the development application to be accompanied by specified documents, including “a site plan”, “a sketch of the development”, and “a statement of environmental effects” (in the case of development other than designated development or State significant development) or “an environmental impact statement” (in the case of designated development or State significant development) (cl 2(1)(a),(b),(c),(e) of Sch 1 of the Regulation). The site plan must indicate, amongst other matters, “the location, boundary dimensions, site area and north point of the land” (cl 2(2)(a) of Sch 1 of the Regulation).

22) Preston CJ of LEC then noted that the development application would also be accompanied by a statement of environmental effects or an environmental impact statement, all carrying out an analysis of the development and a description of the land the subject of the development application. At [94] – [95] Preston CJ of LEC noted:

[94] If the accompanying documents reveal that part of the proposed development extends to land other than the land whose address and formal particulars of title are shown in the development application form, that other land is also the subject of the development application: see Owners — Strata Plan 37762 v Pham [2005] NSWLEC 500 at [32]. Conversely, the description of the land on which the development is to be carried out in the accompanying documents (such as the statement of environmental effects) can also confine the land to which the development application relates to be a lesser parcel of land than is described in the development application form: see Rose Bay Afloat Pty Ltd v Woollahra Council (2002) 126 LGERA 36; [2002] NSWLEC 208 at [60]–[63].

[95] The giving of owner’s consent to the making of a development application with respect to the owner’s land for the purpose of cl 49 of the Regulation is an essential prerequisite to, and part of the process of, a consent authority’s determination of the application. That is to say, the giving of owner’s consent

*is necessary to enable the consent authority to exercise its function to grant development consent to the application if it be minded to do so. On an appeal from a determination of the consent authority, the Land and Environment Court cannot uphold the appeal and grant development consent to the development application unless the **owner's consent** to the making of the application has been given: Sydney City Council v Ipoh Pty Ltd (2006) 68 NSWLR 411; [2006] NSWCA 300 at [34(c) and (e)].*

- 23) Recently in *Stokes v Waverley Council (No. 2)* [2019] NSWLEC 174 (**Stokes**), his Honour Justice Robson had cause to examine many of the previous cases relating to owner's consent in an appeal against a Commissioner's decision where the Commissioner had refused a development application on the basis that existing piles for a development were shown over the boundary of adjoining land and the application was said to "rely upon" the piles for support. Robson J observed at [65]:

"Section 4.17 regulates the statutory scope of conditions of consent. A condition of consent can be imposed requiring works off-site. There is no provision in the EPA Act or the EPA Regulation which would require landowner's consent to such a condition. However, any works physically carried out without the appropriate authorisation would be a trespass to land."

- 24) Clause 49(1) and 50(1) of the 2000 Regulations provide:

49 Persons who can make development applications (cf clause 46 of EP&A Regulation 1994)

- (1) A development application may be made—
(a) by the owner of the land to which the development application relates, or
(b) by any other person, with the consent in writing of the owner of that land.

...

50 How must a development application be made? (cf clause 46A of EP&A Regulation 1994)

- (1) A development application—
(a) must contain the information, and be accompanied by the documents, specified in Part 1 of Schedule 1, and

...

- 25) Part 1 of Schedule 1 of the 2000 Regulation relevantly provide that:

Schedule 1 Forms

Part 1 Development applications

1 Information to be included in development application

- (1) A development application must contain the following information—
...
(b) a description of the development to be carried out,
(c) the address, and formal particulars of title, of the land on which the development is to be carried out,
...
(i) evidence that the owner of the land on which the development is to be carried out consents to the application, but only if the application is made by a person other than the owner and the owner's consent is required by this Regulation,

- 26) Robson also observes at [69] and [70]:

69. It follows that landowner's consent from adjoining owners is required where a development application proposes work on adjoining land.

70. For the purpose of landowner's consent to a development application, **there is a distinction between the works the subject of the relevant development application, and off-site works that may be carried out pursuant to conditions of consent: s 4.17(1)(f) of the EPA Act.** [Emphasis added]

27) In *Stokes*, Robson J identified that the error made by the Commissioner was to conflate "the land to which the development application relates to" for the purposes of clauses 49 and 50 of the 2000 Regulations, with the words "works that the development relies upon" (at [79]). The concept of reliance on a structure or land is not included in the statutory scheme either explicitly or by implication (at [79]).

28) We understand there to be a concern by the consent authority that the application in this case "relies upon" works to be carried out in the right of way. Constructing the facts we have been provided with indicates that Council formed the view that additional information was required and it considered works should be carried out in the right of way, and proposes to impose conditions to address that concern. His Honour Justice Robson reiterated at [87] in *Stokes*:

In the circumstances, I accept Ms Stokes' submission that nowhere in Al Maha is the concept of "reliance" on off-site works referred to as the foundation for a requirement of landowner's consent, and I do not consider it to be a requirement on a proper reading of the legislation.

29) The analysis of the application documents provided to us indicates that the driveway and drainage works "off site" were never included in the proposal, as set out in the development application material. The proposal does not extend to land other than that shown on the development application form (*cf. Owners Strata Plan 37762 v Pham* [2005] NSWLEC 500 at [32], where accompanying documents revealed part of the proposal did extend to other land not on the DA form). A further observation is that, absent the development application it may have been possible for the driveway works to have been completed as exempt development pursuant to the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* (see Subdivision 14 – Driveways and hard stand spaces, Part 2).

30) The facts and findings in *Currey v Sutherland Shire Council* (1998) 100 LGERA 365 (**Currey**), are also apposite in this matter. In *Currey*, the Court of Appeal considered whether owner's consent was required for a subdivision that relied on a right of way access over land that was not included in the development application. The Council sought additional information from the applicant in relation to details of road upgrading to be provided as part of the consent process. The Court considered those documents did not form part of the development application (see page 2-3). Stein JA determined that (page 4):

"...the fact that the Council imposed a condition requiring work to be carried out on land outside the subdivision does not give rise to its notional inclusion

within the development application, see Hope JA in Grace Bros v Willoughby Municipal Council (1980) 44 LGRA 422 at 425."

31) The chronology and documents in this application reveal that:

- The applicant lodged an application that related to Lot 14 in DP 2480;
- No works (drainage or engineering) were described in the DA relating to the right of way;
- Council requested additional information in relation to the proposed access over the ROW;
- Over objection, additional details were provided ;
- The applicant has not amended its application;
- Council considers conditions should be imposed in respect of the access to the house and garage, which will require works to the existing right of way; and
- The terms of the existing right of way permit works to be undertaken to upgrade the driveway / accessway.

32) His Honour Justice Handley in *Minister for Urban Affairs and Planning v Rosemount Estates Pty Ltd* (1996) 91 LGRA 31 (at page 83) said:

"The fact that a condition is imposed upon a developer to do work on the property of another does not mean that the condition is invalid; it may not be able to be performed but that and any consequences flowing from non-performance are different matters."

33) In *Hillpalm Pty Ltd v Tweed Shire Council and Heavens Door Pty Ltd* (2002) 119 LGRA 86 (noting whilst the matter was appealed, the decision in respect of owner's consent was not challenged on appeal), the neighbouring landowner complained to the Court on the basis that it said the development application also related to its land because access to the proposed subdivision was to be obtained over their lot and a sealed pavement was to be constructed in their lot over the right of way. They also complained that they had not been notified of the application (as an adjoining neighbour). (see [12]).

34) At [18] – [34] his Honour Justice Lloyd undertook an analysis of the documents forming the development application, and the exchanges between the applicant and the Council, in order to establish the "the land to which the application related". His Honour Justice Lloyd determined that all of the express indications in the development application were to Heaven's Door Land as being the land to which the development application related [68]. Even though the Statement of Environmental Effects made reference to the sealing of the road within the right of way, his Honour considered those statements to be made in the context of ensuring the consent authority could assess the impacts of the development, rather than as a proposal relating to the land burdened by the right of way (see [73] – [75]). At [77] his Honour determined:

[77] Neither do I consider it relevant that the council, when it granted consent, imposed conditions related to work to be done on Hillpalm's land. As Stein JA said in Currey at 368, "...the fact that the council imposed a condition requiring

work to be carried out on land outside the subdivision does not give rise to its notional inclusion within the development application..."

- 35) Having regard to the findings in all of the above cases and taking into consideration the particular facts of this matter, including a review of the development application file, owner's consent is not required from the owner of Lot 16. The development application does not relate to Lot 16.

Summary of the relevant principles of owner's consent:

- Owner's consent is required for the land to which the development application relates: *Hillpalm Pty Ltd v Tweed Shire Council and Heavens Door Pty Ltd* (2002) 119 LGERA 86;
- Determining the land to which the development application relates requires a textual analysis of the proposal and the documents supporting the proposal: *Hillpalm Pty Ltd v Tweed Shire Council and Heavens Door Pty Ltd* (2002) 119 LGERA 86;
- Owner's consent from land neighbouring the building development is not required merely because the proposed access to the development is via a right of way across their land : *North Sydney Council v Ligon 302 Pty Ltd* 185 CLR 470
- It is not relevant in considering whether owner's consent was required, that the consent authority imposed conditions requiring work to be carried out on land outside the subject application: *Currey v Sutherland Shire Council* (1998) 100 LGERA 365
- There is no concept of "reliance" on land forming part of the application: *Stokes v Waverley Council (No. 2)* [2019] NSWLEC 174;

Summary of Advice

- The proposal before the Council does not "include" works over the right of carriageway and drainage works in the right of carriageway, as the applicant has not amended its application. Documents have been supplied by the applicant which respond to Council's request for additional information. The consent authority may use the documents supplied for the purposes of imposing conditions of consent if it considers that information necessary and required to be included in conditions of consent (*Lateral Estate, Currey*).
- The applicant has not amended its development application (*Stokes, Ervin Maher, Lateral Estates*);
- Only the applicant has power to amend the application. Council cannot compel an owner to make an amendment to the application (*Currey, Ervin Maher*).
- The consent authority has power to impose conditions that require works to be carried out on land, not being land to which the application relates (section 4.17(1)(f) EP & A Act);
- As there is no amendment to the application, there is no basis that the application is required to be notified, or would be notified.

- Owner's consent from the owner of Lot 16 is not required because the development application does not relate to Lot 16 (see *Hillpalm, Stokes, Currey*).

Yours faithfully

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Our Ref: CR 222179

18 May 2023

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Attention: Ailsa Prendergast

By email: Ailsa.Prendergast@centralcoast.nsw.gov.au;
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Dear Sir/Madam,

**ADVICE ON RIGHT OF WAY REGARDING DA/60589/2020
129 ALAN STREET, NIAGARA PARK**

1. The Local Planning Panel (LPP) has requested updated legal advice following further information provided by Council in a supplementary report. The LPP has also requested that a review of the proposed draft conditions of consent be undertaken, in particular the conditions relating to design and detailing of off site works. The LPP has requested confirmation of the legal mechanism for conditioning and carrying out works on adjoining land where land owners consent was not required as part of the application.
2. We set out a summary of the advice below.

Summary

3. No further consent is required for works outside the land the subject of the development application. That the works are not exempt development do not change the earlier advice provided.
4. Works can be carried out in an easement, in particular a right of carriageway where the terms of the easement permit upgrade and maintenance of the right of carriageway. The applicant provided legal advice in relation to the terms of the right of carriageway which confirmed upgrade and maintenance works were permitted. That legal advice has been reviewed and is considered correct.

5. Section 4.17(1)(f) in the *Environmental Planning and Assessment Act 1979* (EP & A Act) contains the power to impose a condition requiring the carrying out of works **whether or not being works on land to which the application relates**.
6. Proposed condition 2.4 provides development consent for the proposed works in the right of carriageway.
7. Condition 2.4 and the balance of the conditions are reasonable and appropriate.
8. We recommend one further condition be imposed requiring compliance with the Vegetation Management Plan, to assist with compliance options if any issues arise.

Advice

Question One – Works not exempt development on adjoining land

9. While not specifically addressed in the earlier advice dated 15 November 2022, the advice did not assume that the works that would be required to be carried out in the right of carriageway benefitting the land the subject of the development application were exempt development. That the works to be carried out are not exempt development does not change the earlier advice provided.
10. In particular, reference is made to the decision of his Honour Justice Robson in *Stokes v Waverley Council* (No. 2) [2019] NSWLEC 174 (**Stokes**), where he indicated at [65]:

*“Section 4.17 regulates the statutory scope of conditions of consent. A condition of consent can be imposed requiring works off-site. **There is no provision in the EPA Act or the EPA Regulation which would require landowner’s consent to such a condition.** However, any works physically carried out without the appropriate authorisation would be a trespass to land.”* **[Emphasis added]**
11. As in *Stokes*, the works “off site” in this proposal are not exempt development, but that does not impact on the power available under section 4.17(f). The terms of section 4.17(1)(f) do not contain a restriction as to the nature of the works to be carried out off site, other than that the nature of the works are “any matter referred to in section 4.15(1) applicable to the development the subject of the consent”. That criteria is satisfied given the works are in the nature of works to provide access to the proposal. Council has the power to impose condition 2.4 of the proposed conditions of consent.
12. As alluded to in paragraph [65] in *Stokes*, once development consent is granted, it is a separate matter for the applicant on the DA to make arrangements for permission to be obtained to carry out the works on the land not the subject of the DA (in this case that land is the “right of carriageway”).
13. An example pertinent for consideration is where a consent condition requires the installation of a stormwater drainage pipe across downstream land (not the subject of the DA). In some circumstances the consent requires a particular

easement to be obtained (again on land not the subject of the DA, and without land owners consent on the DA assessment), but in other circumstances the condition just requires the drainage to be installed. The consequence of the condition in that circumstances is that the consent holder must make arrangements to obtain the appropriate permission or authorisation, to carry out those works (see paragraph [65] above in *Stokes*). That will usually require the acquisition of an easement, in the form of a stormwater drainage easement.

14. The cases that have discussed the power in section 4.17(1)(f) and the power for a condition to require works to be undertaken "off site" were extensively considered in the advice dated 15 November 2022.
15. No separate consent is required for the works the subject of condition 2.4. The proposed condition provides the power for the work to be carried out in terms of the planning legislation. Access to land to physically carry out the works in this matter is available already under the right of carriageway.
16. In the circumstances of this application, the easement is already in place, the land the subject of the DA benefits from a right of carriageway, and that right of carriageway contains terms that permit the upgrade of the carriageway as well as maintenance works to be carriageway. In this case, the permission to carry out the works already exists in the form of the terms of the right of carriageway. The problem identified by his Honour Justice Robson in the last sentence of [65] does not arise in this matter as a consequence of the terms of the right of carriageway.
17. So in answer to the question of the LPP as to "how will the works be facilitated without development approval", the works have development approval via the imposition of condition 2.4 in the proposed conditions. The terms of the right of carriageway give the permission for those works to be carried out.

Question Two – Review of the draft conditions and the legal mechanism for conditioning and carrying out works on an adjoining property where land owners consent and development approval for such works is not to be provided?

18. In particular a review of condition 2.4 has been undertaken. The condition is sufficiently detailed to ensure it is certain in its terms. The condition is imposed in accordance with the power available in section 4.17(1)(f) of the EP & A Act, the condition is in relation to a matter under section 4.15(1) of the EP & A Act in that the likely impact of the development has been assessed and considered and relates to the terms of Council's Gosford DCP 2013, Chapter 6.3. The condition relates to the DA in that it facilitates appropriate access to the land the subject of the DA, to a standard suitable for the proposed use of the land (as a single residence).
19. In addition to condition 5.5 we would recommend that condition be amended, or an additional condition be added which requires not only the implementation of the vegetation management plan, but compliance with the vegetation management plan at all times. Whilst condition 5.6 requires a restriction on use to be imposed that requires compliance with the Vegetation Management Plan, the enforcement of that condition requires Supreme Court proceedings. An additional condition simply requiring compliance with the VMP enables orders to be issued under the EP & A Act if there is non compliance.

The restriction as to user is still important because it notifies incoming owners of their obligations, but a restriction as to user alone has limited options for enforcement.

20. The balance of the conditions are reasonable and appropriate in the circumstances of this DA.
21. The legal mechanism for conditioning and carrying out works on adjoining property where land owners consent has not been provided is section 4.17(1)(f) of the EP & A Act.
22. The issue of a legal mechanism for obtaining development approval for works off-site does not arise in the circumstances of this matter because proposed condition 2.4 provides development approval for those works to be carried out.
23. The issue of land owner's consent to a DA, the concept of "work" that is development under the EP & A Act which requires approval, and physical access to and to undertake works are separate and distinct legal processes, and not contingent upon one another. To break these concepts down in the context of this matter, we set out as follows:
 - a. Land owner's consent – not required for works off site – see paragraph [65] of *Stokes* and advice on 15 November 2022;
 - b. Development is defined as including "the carrying out of a work" – section 1.5 EP & A Act. The works are not 'exempt' development either under the LEP or pursuant to the *SEPP (Exempt and Complying Development Codes) 2008*, so development consent is required to carry out the works. Proposed condition 2.4 provides the approval to carry out those works.
 - c. Permission to enter land is required, otherwise a trespass occurs (see paragraph [65] of *Stokes*). Permission to enter land and carry out works already exists pursuant to the terms of the existing right of carriageway.
24. We hope that the above information clarifies the legal position to assist the LPP. We would be pleased to discuss any of the matters we have raised above.

Yours faithfully

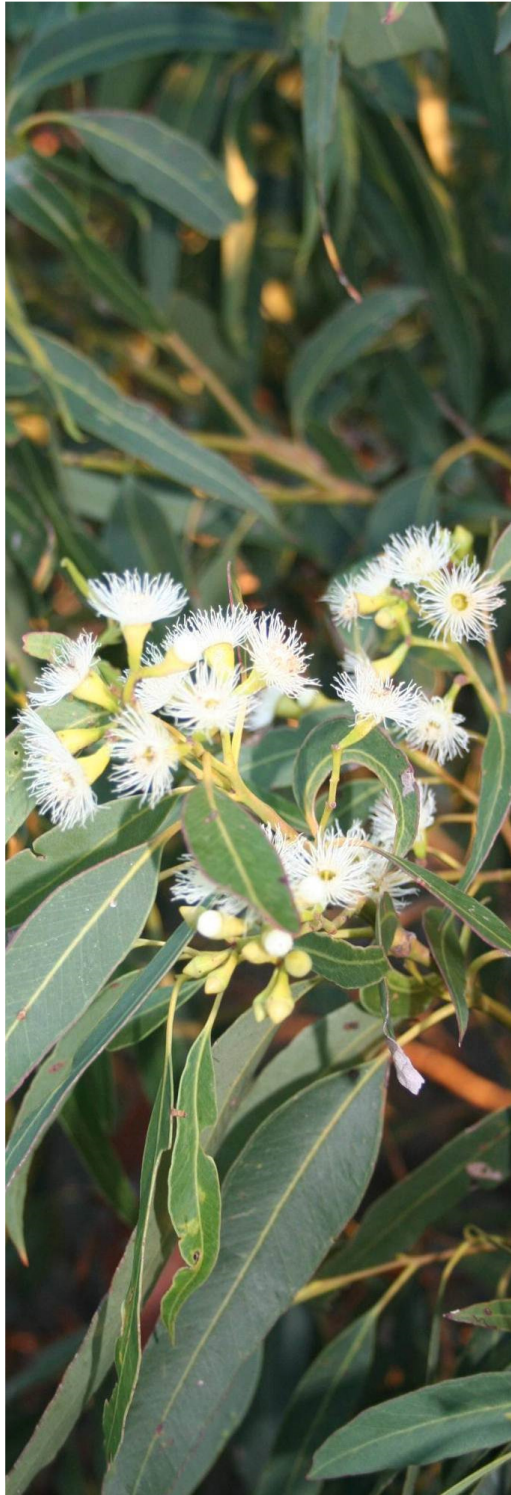
WILSHIRE WEBB STAUNTON BEATTIE



CECILIA ROSE

Partner

Local Government, Environment & Planning



**Environmental Impact
Statement for No 129 (Lot
14 DP 2480) Alan Street,
Niagara Park NSW**

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Revision	Details	Date	Amended By
A	EIS	24/11/2020	John Kechagias
B	EIS	10/07/2023	John Kechagias
C	EIS	29/11/2023	John Kechagias

This environmental impact statement has been prepared in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

This statement contains all available information that is relevant to the environmental assessment of the development, that of a proposed dwelling, detached garaged and civil and site works to support the dwelling and garage.

The information contained in this statement is neither false or misleading

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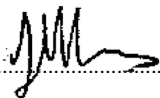
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Signed:

Date: 29th November 2023



Contents

	Page Number
1.....	Executive Summary5
2.....	Introduction6
2.1 Property description	6
2.2 Description of the proposal	6
2.3 Current and Adjacent Land Uses	8
2.3.1 Gosford Local Environment Plan 2014	8
2.3.2 Gosford Interim Development Order 122	8
2.4 Statutory planning consideration	10
2.4.1 Environmental Planning and Assessment Act, 1979 (EP&A Act)	10
2.5 The Provision of Environmental Planning Instruments	10
2.5.1 State Environmental Planning Policy No. 71 – Coastal Protection:	10
2.5.2 State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004:	11
2.5.3 Gosford Interim Development Order 122	11
2.6 Relevant Development Control Plans (DCPs)	12
2.7 Environmental Assessment	12
2.7.1 Overview	12
2.7.2 Context and Setting	12
2.7.3 Building and Construction	13
2.7.4 Interim Development Order No 122	13
2.7.5 Character	14
2.7.6 Designated Development – Clause 22(5)	14
2.7.7 Rural Conservation Zone: Building Materials - Clause 28	14
2.7.8 Rural Conservation Zone: Height – Clause 29	14
2.7.9 Rural Conservation Zone: Ridge Line – Clause 30	15
2.7.10 Climate Change and Sea Level Rise	15
2.7.11 Section 94 Contributions	15
2.7.12 Gosford DCP 2018 Chapter 3.1 – Dwelling Houses and Ancillary Structures	15
2.7.13 Building Lines in Rural & Environmental Zones	19
2.7.14 Cut and Fill	20
2.7.15 Visual Impact /Scenic Quality	20
2.7.16 Water Cycle Management	20
2.7.17 Bushfire	20
2.8 Natural Environment	21
2.8.1 Flora and Fauna	21
2.8.2 Tree Removal	21
2.8.3 Water Management	22
2.8.4 Noise	22
2.8.5 Waste	22
2.9 Site Suitability	22
2.9.1 Bushfire	22
2.9.2 Flooding	22
2.9.3 Acid Sulphate Soils	23
2.9.4 Hazards (Other)	23
2.9.5 Social and Economic Effects	23
2.9.6 Conclusion	23
3.....	Description of the environment27
3.1 Physical, Environment	27
3.1.1 Topography-	27
3.1.2 Geology/ Hydrology	27
3.1.3 Geotechnical	27
3.1.4 Infrastructure	27
3.1.5 Aesthetics/Scenic Visual	28
3.1.6 Natural Hazards	28
3.1.7 Climate meteorology	28
3.2 Natural Environment	30
3.2.1 Flora & Fauna	30
3.3 Social Environment	30
3.4 Aboriginal/European Heritage	31
3.5 Economic Environment	32
4.....	Analysis of environmental impacts36
5.....	Contact with relevant Government authorities38
7.. Ecological Sustainable Development (Environmental Planning and Assessment Regulation 2000).....	38
7.1 Principles of ecological sustainable development (section 7(4) of part 3 of schedule 2)	38

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

7.1.1	Precautionary principle	39
7.1.2	Inter-generational equity	39
7.1.3	Conservation of Biological Diversity and Ecological Integrity	39
7.1.4	Improved valuation and pricing	40

▪ 8	Environmental Impact Mitigation Measures	40
▪ 9	Justification	40
9.1	The "do nothing" Option	40
9.2	Other locations within the site;	41
9.3	Other feasible locations	41
9.4	Leave the site undeveloped (option 1)	42
▪ 10	Conclusion	42

List of tables

Table 1-1	Assessment of the proposal against the provisions of the GIDO 122	12
Table 1-2	Assessment of the proposal against the provisions of the GDCP 2013	Error! Bookmark not defined.
Table 1-3	Minimum Information in Geotechnical Report (Source Chapter 6.4 Gosford DCP 2013)	Error! Bookmark not defined.
Table 2-1	Regional temperature ranges	28
Table 2-2	Precipitation data Niagara Park	28
Table 2-3	Wind direction, wind speed, mean rainfall & temperature	29
Table 2-4	Industry	33

List of figures

Figure 1-1	Proposed development	24
Figure 1-2	Proposed development	25
Figure 1-3	Topographic Map	26
Figure 2-1	AHIMS Web Service 1000 metres	31

List of appendices

Appendix A	EIS Requirements
Appendix B	Site Survey
Appendix C	BASIX Report
Appendix D	Waste Management Plan
Appendix E	Bushfire Assessment
Appendix F	Flora & Fauna Assessment
Appendix G	Arboricultural Impact Assessment
Appendix H	Aboriginal AHIMS Web Services (AWS)
Appendix I	Site Classification and On-Site Effluent Disposal Assessment
Appendix J	Water Cycle Management Plan
Appendix K	Architectural Plans
Appendix L	Schedule of External Finishes

Terminology

This report uses the following terminology:

- EIS Environmental Impact Statement
- AIA Arboricultural Impact Assessment
- FFA Flora & Fauna Assessment
- APZ Asset Protection Zone;
- BMP Bushland Management Plan;
- TSC Act *Threatened Species Conservation Act 1995*;
- EPBC Act *Environment Protection and Biodiversity Conservation Act 1999*;
- EP&A Act *Environmental Planning and Assessment Act 1979*;
- OEH Office of Environment & Heritage (NSW);
- LGA Local Government Area;
- NOW NSW Office of Water
- EEC Endangered Ecological Community;
- WSUD Water Sensitive Urban Design; and
- Threatened species refers to those flora and fauna species listed as vulnerable, endangered or critically endangered under the TSC Act or EPBC Act

1. Executive Summary

In this environmental impact assessment (EIS) we will go on to discuss the environmental impact and mitigation measures proposed by the development.

The proposed development is for a 4-bedroom dwelling with a study and a detached garage. To support that development, it is proposed to; create an asset protection zone (APZ) to mitigate the effects of bushfires, make upgrades to the access road/accessway to the site, establish a waste water irrigation area, and manage weeds and vegetation on site through a vegetation management plan (VMP).

The proposed location of the dwelling is carefully selected in the following ways;

- 1 It is to be located adjacent to an existing power line easement which has several benefits. It reduces the need for clearing to create the APZ, the cleared area of the power easement can be employed as a waste water irrigation area without disturbing the vegetated areas. Access to the dwelling can through that established easement in part.
- 2 The proposal is to be placed in the location of what was an orchid. That location is now infested with weeds that are spreading into the bushland. The proposal will remove the worst area of weeds and in combination of the VMP improve the condition of native vegetation.
- 3 The proposed location is on the upper part of the site on a relatively level part of the site which means the majority of the site remains undisturbed.

We will go on to discuss in this EIS how the combination of siting, proposed supporting infrastructure and on-going management will result in minimal environmental impact.

2. Introduction

Apex Intelligent Design has been engaged by the property owner to prepare an Environmental Impact Statement (EIS) for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park NSW within Central Coast LGA, hereafter referred to as the study area (Figure 1-1).

This EIS has been prepared specifically to address the requirements for preparation of an Environmental Impact Statement for a dwelling house on Lot 14 DP 2480 No 129 formerly No 103 Alan Street Niagara Park (Gosford City Council Ref: 130113) dated 4th of February 2015 see (Attachment A).

2.1 Property description

The site is a regular shaped allotment with an area of 2.1 ha and is identified as Lot 14 DP 2480, No. 129 Alan Street, Niagara Park. The site is located within a rural residential area. The site contains an easement for electricity supply 15.24m wide and an easement for railway purposes 20.115m wide located in the western area of the site and trend approximately northeast to southwest.

The site is currently vacant and identified as bushfire prone land. The site slopes down from the northeast to the southwest with an average slope of approximately 10-14°, is heavily vegetated with an intermittent watercourse located upon the adjoining allotment Lot 15 DP 2480. Access is available directly from Alan Street. Council's reticulated water mains supply and sewage system is not available to the site. The site is identified within the Coastal Open Space System as being desirable for future voluntary acquisition.

The land subject to this application is known as No 129 (Lot 14 DP 2480) Alan Street, Niagara Park.

- The site is located within an established rural locality and is adjoined by rural dwellings, vacant bushland, residential and associated ancillary structures and the local road network. The said allotment is vacant and dominated by naturally occurring local native vegetation species within Open Forest vegetation.
- The top of an escarpment is located greater than 180 metres from the proposed dwelling footprint. An ephemeral/intermittent watercourse is located downslope, greater than 40 metres to the west.
- The site is bound to the north by unformed Ilbery Road, south by residential and to the east and west by bushland. The site is regular in shape and maintains an area of approximately 2.1 hectares.
- Access is available via right of way over No 107 (Lot 16 DP 2480) which has direct access to Alan Street.
- Council's reticulated water mains supply and sewage system is not available to the site.
- Arrangements will be made with relevant Service Authorities to ensure all essential utility services (electricity, telephone etc) are available to the site.
- Site slopes primarily extend toward the south-western property boundary adjoining Ilbery Road at an average grade of approximately 10-14 degrees. Supplementary details may be obtained from the Detail Survey Plan prepared by Beveridge William, attached as Appendix B to this Report.
- The site is zoned 7(a) – Conservation and Scenic Protection (Conservation) under the provisions of Gosford City Council's Interim Development Order (IDO) No. 122.
- Council's mapping indicates the allotment is bushfire prone.

2.2 Description of the proposal

The application seeks approval for the construction of a single storey dwelling house comprising four (4) bedrooms and a study with a detached double garage & new driveway on Lot 14 DP 2480, No. 129 Alan Street, Niagara Park.

The proposed dwelling house is to be located within the northern portion of the site and constructed as a pole home with colorbond walls & roof. Works require removal of trees generally for the building footprint and asset protection zones, installation of an on-site sewage management system and water supply via rainwater tanks with a capacity of 27,000 litres for house hold use and 20,000 litres for fire fighting. The proposed development is shown on (Figure 1-1). The proposed driveway, building footprint and associated asset protection zones are shown on (Figure 1-2).

The development proposes the construction of a single storey residence as per the design shown on the Architectural Plans prepared by Apex Intelligent Design, Sheets 1 to 7 dated November 2020 attached (Appendix K) The associated construction will require tree clearing and the installation of an on-site wastewater treatment system.

The proposed residence is single storey, above ground construction with fibre cement walls and colorbond metal roof sheeting. The configuration comprises 4 bedrooms, study, kitchen and living areas, bathroom, laundry, double garage and a veranda within the western portion of the building.

The proposed residence is to be sited within the northern half of the site being an area considered most suitable for development purposes in terms of minimising potential environmental impacts.

Proposed tree clearing will be limited to those trees and vegetation located within the development footprint and Asset Protection Zone. In total, 119 trees have been assessed within the development area, 40 of which have been identified for removal to accommodate the proposed development. A comprehensive Flora and Fauna Assessment together with an Arboricultural Impact Assessment (AIA) prepared by Mr Stephen McKay accompany this submission as Appendix F and Appendix G respectively. Section 4.2 of the AIA nominates specific trees for removal and presents the findings of the Safe Useful Life Expectancy (SULE) Assessment. Trees and vegetation proposed for retention will be protected in accordance with Council requirements prior to, during and post construction works. Section 5 of the AIA specifies tree protection measures to minimise potential impacts that may arise during the construction phase and clearing of native vegetation.

Individual trees within and in close proximity to the development area of the site have been numbered and shown on the Site Plan Prepared by Apex Intelligent Design (Appendix L). These Plans should be read in conjunction with the Flora and Fauna Assessment prepared Fraser Ecological Consulting and the AIA prepared by Mr Stephen McKay together with the Bushfire Hazard Assessment prepared by Building Code Bushfire Solutions, dated 9th of November 2020 attached as Appendix E.

The proposed development seeks to remove only those trees within and immediately adjacent to the development footprint. Tree removal is also associated with the establishment of Asset Protection Zones (APZ's) in order to comply with the requirements of Planning for Bushfire Protection (PBP 2019) and is detailed in the AIA (Appendix G).

The proposed dwelling is proposed as pole construction to avoid extensive cut and fill works, minimal cut will be required for the construction of the garage floor and the rear of the dwelling.

Access to the proposed residence will be gained directly from Alan Street via an existing driveway approximately 4 metres wide.

Stormwater disposal from the proposed dwelling house will be captured and directed to a series of rainwater tanks located beneath the rear of the dwelling with a total capacity of approximately 27,000 litres. 20,000 litres, adjacent to the garage, is dedicated for the exclusive use by NSW Rural Fire Services in the event of an emergency as per the recommendations in the Bushfire Hazard Assessment (Appendix E). The proposed rainwater tank capacity far exceeds the minimum 20,000 litre requirement of BASIX and 10,000 litre requirement of Chapter 6.5 *Water Cycle Management*. The roof area catchment including the provision of appropriately sized rainwater tanks together with non-built upon areas, consisting of soft landscape will, in

combination, substantially manage stormwater reuse and runoff from this site. Overflow from the rainwater tank will be piped to a turf stabilised level spreader located on the south-western side of proposed dwelling.

Runoff across the slope will generally not be impeded by the proposed development due to the suspended nature of the dwelling.

Utilities are currently available to the land and where necessary, arrangements with the relevant service authorities will be undertaken to ensure availability to the proposed new dwelling.

Council's reticulated water main supply or sewage system is not available to the site. Water supply will be provided via a series of rainwater tanks with a combined capacity of 22,000 litres as described above. An adequately sized sewage treatment system is proposed to be installed onsite to service the proposed dwelling. The Onsite Effluent Disposal Assessment prepared by Douglas Partners Pty Ltd (Appendix I) illustrates that adequate area for the installation of a suitable wastewater treatment system is available onsite to cater for the needs of future occupants. Based on the findings of the Onsite Effluent Disposal Assessment and identified limitations, it is concluded that the site and soil characteristics are conducive to support onsite effluent disposal in accordance with the NSW Environment and Health Protection Guidelines subject to recommendations contained within the assessment. The proposed effluent application area of 375m² is based on a nitrogen concentration of as detailed within Table 7 of the assessment. The nominated application area is also shown on the Architectural Plans (Appendix K).

The proposed dwelling has been designed to ensure integration with existing rural development within the immediate locality and designed to address the requirements of Gosford City Council's *Development Control Plan 2013 (DCP) Dwelling Houses*. Specific details relating to the proposed development are discussed in detail under "Section 1.6 below – Relevant Development Control Plans" within this report.

The proposal is likely to maintain and enhance the existing and desired character of the immediate locality with the proposed built form being sympathetic to the rural built form.

All works associated with the proposed development will be carried out in accordance with relevant Australian Standards and the current edition of the Building Code of Australia.

2.3 Current and Adjacent Land Uses

2.3.1 Gosford Local Environment Plan 2014

The subject site is identified as "Deferred Matter" on the Land Application Map and as such Gosford LEP 2014 does not apply to the site in accordance with Clause 1.3(1A). The assessment and determination of this application has been made under Interim Development Order No. 122 (IDO 122).

2.3.2 Gosford Interim Development Order 122

The site is zoned 7(a) – *Conservation and Scenic Protection (Conservation)* under the provisions of *Gosford City Council's Interim Development Order (IDO) No. 122* and is located within a well-established rural area adjoined and surrounded by local road networks, existing dwellings and associated ancillary structures.

Lands immediately to the north, east & west are also zoned 7(a).

Properties within the general locality of the subject site have benefited from Gosford City Council's approval to erect a dwelling house on land with similar characteristics in past years.

The objectives of zone no 7(a) are:

- a) *the conservation and rehabilitation of areas of high environmental value;*
- b) *the preservation and rehabilitation of areas of high visual and scenic quality in the natural landscape;*

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

- c) *the provision and retention of suitable habitats for flora and fauna;*
- d) *the prohibition of development on or within proximity to significant ecosystems, including rainforests and estuarine wetlands;*
- e) *the provision and retention of areas of visual contrast within the City, particularly the "backdrop" created by the retention of the ridgelines in their natural state;*
- f) *the provision of opportunities for informal recreational pursuits, such as bushwalking and picnics, in appropriate locations;*
- g) *the minimisation or prohibition of development so that the environmental and visual qualities of the natural areas are not eroded by the cumulative impact of incremental, individually minor developments;*
- h) *the minimisation or prohibition of development in areas that are unsuitable for development by virtue of soil erosion, land slip, slope instability, coastal erosion or bushfire hazard.*

The proposed development satisfies the objectives of the 7(a) zone and is permissible with Council consent. The development merely proposes the construction of a single storey quality designed residence, being a low scale and low impact form of development that:

The proposal is considered to be consistent with the objectives of the zone in that it:

- provides an appropriate land use which is compatible with the objectives of the zone and with neighbouring properties;
- proposes construction of a dwelling type and scale that is compatible with the character of existing and future development;
- does not detract from the amenity or potential recreational pursuits enjoyed by nearby residents;
- has been designed with consideration of the slope and topography of the site and follows the form of the hillside;
- preserves the existing rural amenity together with the aesthetic and scenic values of the land;
- retains suitable and significant habitats for flora and fauna;
- provides for opportunities to enable informal recreational pursuits;
- seeks to locate the proposed residence within an area of the site considered to be most suitable for development purposes and which will result in the least environmental impact;
- sites the dwelling in areas of the site already disturbed and aims to reduce vegetation removal where possible and retain suitable habitats for flora and fauna.

Clause 22 permits the erection of one (1) dwelling house on an allotment of land zoned 7(a) having an area of not less than 40 hectares OR were not held in common ownership with adjoining parcels of land as at 18th February 1977.

As the said land is below the aforementioned minimum allotment size, it was necessary to establish whether or not this land was held in common ownership as at 18 February 1977 in accordance with the provisions of sub-clause (3). It is understood that where the land was held in common ownership as at 18 February 1977, application may be considered by Council under the provisions of Designated Development.

Following an extensive search of applicable property records, it has been identified that the said land was held in common ownership with an adjoining allotment as at 18 February 1977 and as such application to erect a dwelling house may only be made under the preparation of an Environmental Impact Statement (EIS). As such, lodgement of a DA for a dwelling constitutes Designated Development.

Clause 27 simply states that Clauses 28, 29 and 30 apply to land zoned 7(a).

Clause 28 provides specific requirements for building materials used in the construction of dwelling houses on land zoned 7(a). It requires that consideration be given to the use of materials and colours that have a low reflectivity and which blend with the landscape of the site and surrounding natural environment on which they are to be used. In this instance, external materials and finishes have been selectively chosen to reflect and

9

integrate with the changing streetscape and which ensure light, glare and reflection is minimised to adjoining residences. The proposed dwelling will be a metal clad pole construction with colorbond metal roof sheeting. The garage will be metal clad construction on a concrete slab with colorbond metal roof sheeting.

Proposed building materials have been assessed according to the requirements of BASIX to ensure compliance with the standards for thermal comfort, solar access and energy efficiency.

Clause 29 prescribes that the height of a building constructed on land zoned 7(a) shall not exceed 8 metres. The proposed residence is single storey and is below the stipulated 8 metre maximum height control.

Clause 30 relates to ridgelines and outlines Council's desire to restrict development from being constructed within 50 metres of a prominent ridgeline or prominent visible brow. As Council will note during the assessment of this application, the proposed residence will not be located on or within 50 metres of a prominent ridgeline or visible brow.

Clause 34 relates to the Preservation of Trees and in conjunction with Council's Chapter 6.6 – Preservation of Trees or Vegetation DCP 2013 requires that consent be granted prior to the removal of trees on an allotment of land within the Gosford City Local Government Area. As previously stated in this report, Council consent is sought for the removal of existing trees as listed in the AIA (Appendix G).

The native bushland setting will be preserved and a leafy green environment maintained. Landscaping that resembles a typical residential setting in a suburban environment is not suitable for this site.

2.4 Statutory planning consideration

2.4.1 Environmental Planning and Assessment Act, 1979 (EP&A Act)

Under the EP&A Act, a development is Integrated if, in order for it to be carried out, it requires development consent and one or more approvals from other authorities. In accordance with Section 4.46, the application does not constitute Integrated Development.

The site is located within bushfire prone land and as per the requirements of Section 4.14, a Bushfire Hazard Assessment has been prepared for the proposed development by Building Code Bushfire Hazard Solutions, dated 9th of November 2020 (Appendix E).

For the purposes of Section 1.7 of the EP&A Act and, in particular, the administration of Sections 4.12, 4.15 and 5.17, certain factors must be considered in deciding whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats as a result of the proposed development. As the development proposes the removal of existing native vegetation, a Flora and Fauna Assessment prepared by Fraser Ecological Consulting and AIA have been prepared by Mr Stephen McKay (Appendix F and Appendix G respectively). Subject to the implementation of recommended ameliorative measures, both assessments concluded that the proposed development will not result in a significant impact on the environment.

Section 4.15 of the Act relates to the management of development in an environmentally responsible way. The section outlines heads of consideration that may be relevant to a development proposal. In this instance, we believe the following matters are of relevance, and have been taken into consideration during the preparation of this proposal.

2.5 The Provision of Environmental Planning Instruments

2.5.1 State Environmental Planning Policy No. 71 – Coastal Protection:

This SEPP applies to the Gosford City Council Local Government Area. The objective of this policy is to manage the coast of NSW in an ecologically sustainable way.

Matters for consideration by a consent authority are outlined under Clause 2 and 8 of this SEPP. However, due to the location of the site, minor nature of the development and negligible impacts created, the considerations outlined under Clause 2 and 8 are not regarded as relevant in this instance.

During all construction works associated with the proposed development, ameliorative soil erosion and nutrient control measures will be used to reduce the potential of polluting local waterways. If necessary, the Applicant

will provide further details at Construction Certificate stage. The proposed development is not located within a sensitive coastal location.

2.5.2 State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004:

The proposed development is subject to the provisions and requirements contained within this SEPP. A BASIX Assessment has been undertaken and a BASIX Certificate issued, Certificate No. 1030876S. A copy of the BASIX Certificate is attached (Appendix C). If Development Consent is granted, Council will impose relevant conditions to ensure BASIX commitments are incorporated into the dwelling design.

2.5.3 Gosford Interim Development Order 122

Under the Gosford Interim Development Order 122, the subject site is zoned 7(a) Conservation and Scenic Protection (Conservation). The objectives of zone 7(a) are:

- (a) *the conservation and rehabilitation of areas of high environmental value;*
- (b) *the preservation and rehabilitation of areas of high visual and scenic quality in the natural landscape;*
- (c) *the provision and retention of suitable habitats for flora and fauna;*
- (d) *the prohibition of development on or within proximity to significant ecosystems, including rainforests and estuarine wetlands;*
- (e) *the provision and retention of areas of visual contrast within the City, particularly the "backdrop" created by the retention of the ridgelines in their natural state;*
- (f) *the provision of opportunities for informal recreational pursuits, such as bushwalking and picnics, in appropriate locations;*
- (g) *the minimisation or prohibition of development so that the environmental and visual qualities of the natural areas are not eroded by the cumulative impact of incremental, individually minor developments;*
- (h) *the minimisation or prohibition of development in areas that are unsuitable for development by virtue of soil erosion, land slip, slope instability, coastal erosion or bushfire hazard.*

The proposal is considered to be consistent with the objectives of the zone in that:

The proposal provides an appropriate land use which is compatible with the objectives of the zone and with neighbouring properties;

The proposed location of the dwelling considers the already disturbed character of the existing vegetation and aims to reduce vegetation removal where possible and retain suitable habitats for flora and fauna.

The proposal considers the nearby ridgeline and has, where possible, sited the dwelling in such a way that there are minimal significant impacts to the visual amenity of the ridgeline.

The proposal ensures dwelling of a type and scale compatible with the character of existing and future development and does not detract from the amenity or potential recreational pursuits enjoyed by nearby residents.

The dwelling design has considered the slope and topography of the site and has incorporated a design that follows the form of the hillside.

Consideration of the provisions within GIDO 122 that are relevant to this project are addressed in the following table.

Table 0-1 Assessment of the proposal against the provisions of the GIDO 122

Relevant Clause	Comment	Comply
22 (2) Restriction of the erection of dwelling-houses in Zone No. 7(a)	The subject site is <40ha and has been in existence prior to 18 February 1977. Council has confirmed that a building entitlement does not exist on the site. Pursuant to section 3.17 of the EP&A Act 1979, the erecting of a dwelling house on this site, under Section 22 of the IDO, is declared as designated development for the purposes of the Act.	No
28(1) Rural Conservation Zone-Building Materials	The proposal incorporates 'prescribed materials' into the external finishing on the dwelling including, fibre cement cladding (of low reflectivity) rendered, logs walls for the retaining walls and Colourbond roof.	Yes
29(1) Rural Conservation Zone-Height	The building height will not exceed 6m above the NGL.	Yes
30(1) Rural Conservation Zone-Ridge Lines	The subject site does not incorporate a visible ridgeline (as marked on the survey plan and also identified in Gosford GEMS mapping). The proposed dwelling is not located within 50m of a ridgeline.	Yes
34 Tree Preservation	Some vegetation removal is proposed to accommodate the proposed dwelling, driveway and Asset Protection Zone (APZ). The attached Flora and Fauna Report deems the proposal is not likely to significantly affect any threatened species, populations of ecological communities or detract from the scenic amenity of the area.	Yes

2.6 Relevant Development Control Plans (DCPs)

2.7 Environmental Assessment

2.7.1 Overview

This section identifies and assesses the impacts of the development with specific reference to the heads of consideration under section 4.15 of the Act.

2.7.2 Context and Setting

The context and setting of the development site is described in **Section 1.1** of this Statement.

The proposal consists of a single storey residential dwelling which is considered to positively contribute to the quality and transitioning identity of the locality. The proposed development is compatible with the existing built form, as well as the future built form of the neighbouring sites which are zoned "7(a) *Conservation and Scenic Protection*".

The immediate locality comprises a mix of single and double storey residential dwellings on residential allotments. Existing development and the proposed development is representative of the desired future character of the area.

2.7.3 Building and Construction

Compliance with the BCA will be demonstrated with the Construction Certificate documentation.

2.7.4 Interim Development Order No 122

Permissibility

The proposal is permissible with the consent of Council, pursuant to the statutory provisions of clause 5(2) (b) and clause 22 (5) - designated development provisions of IDO No. 122 in relation to the erection of a dwelling house on land zoned 7(a) - Conservation and Scenic Protection (Conservation).

Objectives of Zone

Clause 5(3) of Interim Development Order No 122 stipulates that consent must not be granted for development of land within the prescribed zone, unless the objectives of the zone have been taken into consideration in conjunction with the objectives of the Local Government Act 1993, pertaining to Ecologically Sustainable Development.

The objectives of the 7(a) Conservation zone are:

- a. the conservation and rehabilitation of areas of high environmental value;
- b. the preservation and rehabilitation of areas of high visual and scenic quality in the natural landscape;
- c. the provision and retention of suitable habitats for flora and fauna;
- d. the prohibition of development on or within proximity to significant ecosystems, including rainforests and estuarine wetlands;
- e. the provision and retention of areas of visual contrast within the City, particularly the "backdrop" created by the retention of the ridgelines in their natural state;
- f. the provision of opportunities for informal recreational pursuits, such as bushwalking and picnics, in appropriate locations;
- g. the minimisation or prohibition of development so that the environmental and visual qualities of the natural areas are not eroded by the cumulative impact of incremental, individually minor developments;
- h. the minimisation or prohibition of development in areas that are unsuitable for development by virtue of soil erosion, land slip, slope instability, coastal erosion or bushfire hazard.

In this instance, it is considered that the proposal is consistent with the stated objectives of the 7(a) Conservation - IDO122 Zone for the following reasons:

- The proposal is a modest-scaled single storey dwelling. Consideration has been given to the slope and topography of the site with a building design that follows the form of the hillside to avoid cut and fill works and tree removal generally within the building footprint and asset protection zones to reduce disturbance of the natural bushland setting.
- The location of the dwelling within already disturbed existing vegetation reduces removal of significant vegetation to retain habitats for flora and fauna. Consideration has been given to the design of on-site wastewater and stormwater management to minimise environmental impacts.
- The proposal is compatible with the future character of the area and the zone and does not impact on the amenity of adjoining residential development.

The proposal is also consistent with the principles of Ecologically Sustainable Development, as specified within the Local Government Act 1993.

2.7.5 Character

Clause 5(4) of Interim Development Order No 122 stipulates that the Council must not grant consent for development unless it has taken into consideration the character of the development site and the surrounding area, where, for the purpose of this provision, character means the qualities that distinguish each area and the individual properties located within that area.

The site is located within Character Area: Niagara Park 10: Scenic Buffers of Gosford DCP 2013 Chapter 2.1 - Character. The area is characterised by medium to large scale residential dwellings, on large allotments situated on gentle to moderate slopes, these areas are elevated and they contribute to the scenically-distinctive buffers that separate neighbouring valley suburbs.

The proposal addresses the desired character as follows:

- Site characteristics require tree removal for the building footprint and asset protection zones. These works are proposed for a small portion of the site, the dwelling is proposed to be located towards the northern boundary at the unformed Ilbery Road street frontage and the natural bushland setting over the majority of the site is retained.
- Appropriate measures will be undertaken to mitigate bushfire risk to the development.
- The development is of an appropriate bulk and scale for the locality as it is single storey and reflects the modest character and simple articulation of traditional farm buildings. The visual impact of the building to the street frontage is reduced by its east/west orientation as it moves away from the road in a westerly direction and the retention of vegetation along the street frontage and proposed driveway.

In this instance, the proposal does not detract from the character of the immediate locality.

2.7.6 Designated Development – Clause 22(5)

The property is less than 40 ha and has been identified as held in common ownership with an adjoining allotment as at 18 February 1977. In accordance with clause 22(5), the erection of a dwelling house on the land is designated development. The proposal has been submitted in accordance with the designated development provisions and an Environmental Impact Statement prepared.

2.7.7 Rural Conservation Zone: Building Materials - Clause 28

The external materials are required to be of prescribed materials (i.e. dark tones and non-reflective) to blend with natural bushland setting. The applicant has submitted a colour scheme, the schedule of external finishes indicates the external materials and finishes are of low reflectivity; materials will comprise colorbond cladding with colorbond roof sheeting. Therefore, a condition of the consent is imposed for prescribed materials, for dark tones to walls and roof materials ensure compliance with this requirement.

2.7.8 Rural Conservation Zone: Height – Clause 29

Clause 29 stipulates the maximum height of a building or structure shall not exceed 8 metres (i.e. measured from the topmost point of a building and natural ground level below).

The proposal is single storey with a maximum height of 8.0m and complies with this requirement.

2.7.9 Rural Conservation Zone: Ridge Line – Clause 30

Clause 30(1) stipulates that a building shall not be erected within 50m of any ridge line or prominent visible brow.

The proposal is not located on or within 50m of any ridge line or prominent visible brow and complies with this requirement.

2.7.10 Climate Change and Sea Level Rise

Climate change and sea level rise have been considered in the assessment of this application.

Climate change and sea level rise will be felt through:

- increases in intensity and frequency of storms, storm surges and coastal flooding;
- increased salinity of rivers, bays and coastal aquifers resulting from saline intrusion;
- increased coastal erosion;
- inundation of low-lying coastal communities and critical infrastructure;
- loss of important mangroves and other wetlands (the exact response will depend on the balance between sedimentation and sea level change); and
- impacts on marine ecosystems.

Government action may mitigate the impact of climate change and the question of sea-level rise may be able to be addressed through the construction of containment works or through Council's policies that may be developed over time.

In the absence of any detailed information at the present however, refusal of this application is not warranted.

2.7.11 Section 94 Contributions

The land zoned 7(a) Conservation and Scenic Protection (Conservation) - IDO 122 is not subject to a Contribution Plan.

2.7.12 Gosford DCP 2018 Chapter 3.1 – Dwelling Houses and Ancillary Structures

The proposed dwelling has been assessed in accordance with the relevant provisions of Gosford Development Control Plan 2018 (Gosford DCP 2013) Chapter 3.1 –Dwelling Houses and Ancillary Structures as summarised in the table below.

Table 1-2 Assessment of the proposal against the provisions of the GDCP 2018

Relevant Clause	Comment	Comply
Part 2 - Scenic Quality & Character		
	The vegetation lining the driveway provides an effective buffer to retain the ecological and scenic qualities of the subject land. Clearing has been minimised in order to preserve the long term diversity of the site and general locality. The dwelling design is sympathetic to the topography of the site and blends in with	Yes

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

	development in the area. The bulk and scale of the proposal is disguised by moving away from the road in a westerly direction, low-reflectivity finishing materials for the facade, and facades that do not incorporate large expanses of bland, unbroken walls.	
Part 3 - Specific Controls & Development Types – Residential		
3.1.5 Site Occupancy	The site coverage for the proposed dwelling is less than 1.3%	Yes
3.1.1.1 Objectives	The proposed dwelling maintains a setback from The Ridgeway of >50m. The development has been sited to consider the impacts of vegetation removal. Approximately half of the proposed vegetation removal is dominated by weeds. The accompanying Flora and Fauna report concludes that the proposal is unlikely to have any significant effects on any threatened species, population of communities. The proposal also considers the impact that earthworks may have on the environment, and hence has been designed as a pole house design that is sympathetic to the topography and amenity of the site can be built. The on-site stormwater detention and sewage management system will not be located within 40m of a lagoon, watercourse or body of water. The proposal meets the objectives of the DCP	Yes
3.1.2.1 Building Height	The dwelling does not exceed 8m in height and is significantly setback from boundaries such that it is well within any boundary enveloped	Yes
3.1.2.3 Floor Space Ratio		N/A
3.1.3 Setbacks	The proposal has no defined front, side or rear setbacks, being accessed from a right of way. There is an unformed road to the north which acts in effect to separate the site further from the northerly neighbour. Setbacks are from 16 (+20)m* to 120 m from any boundary for the dwelling and 2.1 m for the outbuilding * An unformed road effectively increase the setback to the north by 20 m	Yes
3.1.3.2g Ridgelines Setback	The proposal is greater than 50 metres from the crest of any ridgeline	Yes
3.1.3.3.2 Garage Door Articulation	The garage door is not facing any boundary or street, even the unformed road	Yes
3.1.4.1 Views	The proposal does not block any views being isolated and is not readily view from any property	Yes
3.1.4.2 Visual Privacy	The proposal does not overlook any neighbouring properties nor is the proposed dwelling visible from any neighbouring dwelling	Yes
3.1.4.3 Private Open Space Areas	The proposal has a 59 m ² deck adjacent to the living area that has a minimum dimension of 5 m. The proposal meets the minimum requirement of 24 m ² and 3 m width	Yes
3.1.4.4 Sunlight Access	The proposal has no restriction on solar access to its Private open space and no nearby neighbours	Yes
3.1.5 Car Parking and Access	The proposal affords 4 or more parking spaces with two being covered meeting the DCP requirement of 2 parking spots for 4 or more bedroom dwellings.	Yes
3.1.6 Earthworks	The house design on poles aims to follow the contours of the land, minimising the need for cut and fill. maximum cut 1.2 m for garage greater than 2 m from boundary complying with DCP maximum cut of 3 m	Yes
3.1.6.2 Retaining Walls and Structural Support	Any retaining walls greater than 600 mm in height will be designed by a professional engineer	Yes
3.1.6.3 Drainage	Drainage is dispersed on site via a water dispersion system. The concept of discharging to the council system is not applicable in this instance	Yes
3.1.7 Outbuilding and Other Ancillary Development	The proposed garage is appropriately sited in that it reduces the need for roadway while having no significant environmental affects to the neighbouring properties	Yes

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

3.1.7.2 Outbuildings	The outbuilding is 53.5 m2 and complies with the max requirement of 100 m2	Yes
3.1.7.5 Fencing	No fencing proposed with this application	N/A
External Colours and Reflectivity of Building Materials	In accordance with the provisions of the GIDO 122, finishing materials have been selected to blend in with the surrounding environment and are of low reflectivity.	Yes
Driveways	The grade of the proposed driveway will not exceed 25%. Vehicular access to and from the site is designed so that reverse egress to Ilbery Road will be avoided. Adequate space is provided on site for turning and parking.	Yes
Part 6 Environmental Controls		Yes
6.3.5 Erosion and Sediment Control Plans	Erosion and sediment control measures have been indicated on the plans that accompany this Development Application.	Yes
6.4 Geotechnical Requirements	<p>No detailed geotechnical report is considered to be necessary in accordance with the requirements of Chapters 6.4 of DCP 2013.</p> <p>The Site Classification and On-Site Effluent Disposal Assessment prepared by Douglas Partners (Appendix I) has identified the soil type upon the subject property as Rnt Terrigal Formation. Therefore landslip Hazard Assessment Matrix has been undertaken.</p> <p>A slopes assessment has been undertaken using the site survey (Appendix B) which identifies the dwelling position at RL 68.18-65.28 a rise of 2.9m over the development run of 22.795m, therefore the slope has been calculated as 7.25 Degrees.</p> <p>Under the landslip Hazard Assessment Matrix the site falls within a category 1 "Low Hazard Area" as the slope is between 0 degrees & <12.5 degrees. The site is also located greater than 100m from a prominent cliff line.</p> <p>Table R1 states that geotechnical report is not required for category 1 "Not required unless the development is of extensive proportions and/or a major structure is proposed."</p> <p>The Site Classification and On-Site Effluent Disposal Assessment prepared by Douglas Partners (Appendix I) addresses Table R2 of Chapter 6.4 see Table 1-2 below.</p>	Yes
6.5.4 On-Site Effluent and Greywater Disposal	<p>A Site Classification and On-Site Effluent Disposal Assessment (Appendix I) has been prepared by Douglas Partners which has been prepared in accordance with Chapter 6.5 of the DCP 2013.</p> <p>Conclusion of the assessment, a characteristic surface movement in the order of 20-45 mm has been calculated for this site based on the results of the field work. Therefore residential structures founded on natural sandy clay at the site should be designed based on a 'Class P' classification in accordance with AS 2870 – 2011: Residential Slabs and Footings (Ref 1).</p> <p>In accordance with Environment and Health Protection Guidelines (Ref 2) and AS 1547 – 2012 (Ref 3), the site is considered suitable for the disposal of domestic effluent provided that the limitations raised in Section 5.2.6 are addressed and recommended site and soil improvements contained within this report are implemented. Primarily this includes:</p> <ul style="list-style-type: none"> · Blending lime into the site soils to improve the pH within the application areas; 	Yes

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

	<ul style="list-style-type: none"> · Blending gypsum into the site soils to improve the ECe and Sodicity within the application areas; · Raising of the application area with 0.2 – 0.3 m of good quality topsoil; · Terracing the application area to <10% slope for ETA/EST systems or increasing application areas accordingly; · Construction of a clay bund upslope of the effluent disposal area to reduce surface runoff entering the application area; · Improving the sun and wind exposure of the application area to promote evapotranspiration by removal of trees; and · Construction of clay bund upslope of the effluent disposal area to reduce surface runoff entering the application area. <p>Based on the constraints outlined above, and the buffer distances recommended in Table 6, it is suggested that sufficient room is available for the proposed on-site effluent disposal.</p> <p>Disposal of treated effluent could be carried out via subsurface drip irrigation or ETA/ETS. Treatment of the effluent should be undertaken using either an AWTs or an AWTs with nutrient removal</p>	
6.6 Preservation of Trees or Vegetation	Vegetation removal is proposed to accommodate the proposed dwelling and Asset Protection Zone (APZ). The attached Flora and Fauna Report (Appendix F), the proposal is deemed to not significantly affect any threatened species, populations of ecological communities or detract from the scenic amenity of the area.	Yes
6.7.7.4 On-Site Detention Targets for Stormwater	The proposal does not require onsite detention	N/A
Part 7 General Controls		Yes
7.1.3 Car parking requirements for specific land uses	Adequate car parking has been incorporated into the design of the proposed dwelling. Covered car parking for 2 vehicles has is proposed	Yes
7.1.4.2 Parking	The proposed garage has internal dimensions 5.8m x 9m and provides parking for two vehicles. The driveway is >3m wide.	yes
7.2.9 Waste Management	A Waste management Plan has been submitted with this development application (Appendix I).	Yes

Table 1-3 Minimum Information in Geotechnical Report (Source Chapter 6.4 Gosford DCP 2018)

ITEM	DESCRIPTION	REPORT
		Class 1
1	A description of the Assessment process adopted and the work undertaken to provide the assessment	Yes
2	A site description, including vegetation, bedrock outcrops, site	Yes

	seepage & groundwater, existing development, etc.	
3	Description of site substrata and identification of the geological formations present in accordance with standard geological practice [e.g. Terrigal Formation (Rnt) of the Narrabeen Group]	Yes
4	The depth to weathered bedrock over the site generally and within the building area in particular.	Yes
5	The site slopes observed [expressed in degrees] and maximum site slope. Delineation of site into areas of common slope and measured slope angles in the various areas.	Yes
6	A site plan indicating relevant geological features & location of proposed development on the land relative to those features [preferably at a scale of 1:200].	Yes
7	At least one geological section through the site and proposed development [preferably at a scale of 1:200]	Yes
8	Logs of boreholes put down to determine depth of soil/weathered rock strata. The borehole to penetrate the site strata to bedrock and at least one borehole to be within the building area of the site.	Yes
9	A "Risk Assessment" of the various parts of the land in accordance with the Australian Geomechanics Society Guidelines – March 2000 or as subsequently amended, delineation of the land into areas where different degrees of risk are determined, together with a site classification in accordance with As 2870-1996 [or latest amended edition].	Yes
10	A statement of the effect of the proposed site development on the site, and adjoining land, stability. (EIS)	Yes
11	An assessment of the stability of the land immediately surrounding and above/below the site and possible effects of instability [e.g. a rock fall] on the adjoining/nearby land on the site.	Yes
12	A descriptive Report which includes: Sufficient detailed information and recommendations for a structural engineer and/or civil engineer to provide a design for the development to accommodate any instability, or potential instability, considered to affect the land and/or related land. Any items that are required to be inspected by the Geotechnical Engineer during the course of construction together with details of any further geotechnical studies required at the site.	Yes

The proposal is generally in accordance with the objectives of Chapter 3.1 – Dwellings Houses and Ancillary Structures of Gosford DCP 2018 with the exception of the following:

2.7.13 Building Lines in Rural & Environmental Zones

Clause 3.1.6.3 requires:

- A setback of 30m to a public road unless environmental considerations warrant a lesser distance.
- A setback of 40m to a permanent or intermittent watercourse as defined under the Water Management Act 2000.

In this instance, environmental considerations warrant a reduced setback to the public road. The western portion of the site contains utility easements for Energy Australia and State Rail Authority. The dwelling house is proposed to be located toward the northern boundary of the site to avoid these site constraints.

The building footprint is proposed within an area of disturbed vegetation and topography and follows the form of the hillside. The dwelling is articulated and therefore a variable building line occurs with a minimum 2.1m setback to the garage and a maximum setback of 14m to the northern portion of the dwelling house from the unformed public road. Visual impact of the proposed building on the streetscape is minimised as existing vegetation is generally retained along the northern boundary; tree removal proposed is generally within and immediately adjacent to the development footprint. The development including stormwater detention and sewage management is not located within 40m of the intermittent watercourse.

In this instance, the proposal is considered to be consistent with the objectives for setbacks to ensure that buildings, particularly dwelling houses, constructed in environmental zones are so located and designed so as to minimise any adverse effect on the existing natural environment.

2.7.14 Cut and Fill

The dwelling house is designed as pole construction to avoid extensive cut and fill works with a finished floor level of RL 66.8 & RL 67.4m AHD. Site classification for onsite effluent disposal assessment indicates variable depth of soil and rock over the site and the building footprint.

In this instance, the extent of the excavation work is variable from 0.5m to 1.2m and is considered appropriate for site conditions and does not exceed maximum cut and fill under the DCP requirements. Works in excess of 1 metre in height and 3 m in depth are permitted providing the excavations are adequately retained and drained in accordance with engineering details. The excavation works are not considered to adversely affect adjoining properties, achieves the objectives for cut and fill works and are generally in accordance with the requirements of Clause 3.1.6 of Gosford DCP 2018.

2.7.15 Visual Impact /Scenic Quality

Tree removal required with the construction of the building and bushfire protection zones have the potential to detract from the scenic quality of the land.

The proposal is a single storey dwelling which proposes a building design that is set into and follows the form of the hillside. The native bushland setting/backdrop will be preserved and the choice of external materials (i.e. dark toned non reflective) will lessen the visual impact of the proposal when viewed from the street and downslope of the site. Landscape management will be carried out as described by the Bushland Management Plan which is to be conditioned with the Development consent.

As such the proposal is not considered to be detrimental to the landscape amenity and scenic quality of the locality.

2.7.16 Water Cycle Management

The proposal is subject to the requirements of Gosford DCP 2013 Chapter 6.7 - Water Cycle Management for smaller scale developments in excess of 50m². The proposal is considered to satisfy the requirements of the DCP as follows:

- Water conservation is achieved in accordance with BASIX Certificate No 1030876S.
- Stormwater quality is achieved through sediment and erosion control measures found on plan S-01 prepared by Apex Intelligent Design.
- The BASIX Certificate requires rainwater retention of 27,000L which is in excess of Deemed to Comply criteria in clause 6.7.7 Retention Targets. The condition contained in the recommendation reflects minimum requirement in accordance with BASIX in this instance. Site topography necessitates overflow from the rainwater tank directed to the infiltration trench.

2.7.17 Bushfire

The proposed land is classified as "Bushfire Prone Land" under Council's bushfire maps. The proposal requires assessment under Section 4.13 of the Environmental Planning and Assessment Act 1979 and Planning for Bushfire Protection 2019.

Apex Intelligent Design 38 Ligar Street Fairfield Heights 2165 NSW

20

The application is accompanied by a Bushfire Hazard Assessment Report, prepared by Building Code & Bushfire Hazard Solutions Pty Limited, Ref No 151190, dated 9 November 2020. The report determined the Bushfire Attack Level BAL-40 for north, east/south, southwest and west aspect of the proposal.

Asset Protection Zones are to be maintained as an Inner Protection Area from the proposed dwelling to the east/south and southwest boundary to a distance of 36m and 14m to the north and 23m to the west as outlined in section 7.2 'Planning for Bush Fire Protection 2019' and NSW Rural Fire Services document "Standards for Asset Protection Zones". A 20,000 litre static water supply is required for firefighting purposes.

Appropriate conditions of consent are included in the recommendation for bushfire requirements.

2.8 Natural Environment

2.8.1 Flora and Fauna

The accompanying Flora and Fauna assessment compiled by Fraser Ecological Consulting concludes the following:

- No endangered populations, threatened flora or endangered ecological communities were identified within the study area during the current surveys that would be directly or indirectly affected by the proposal.
- Habitats within the study area are considered likely to support twenty-two threatened species of animal including eleven species of bird, two reptile & nine mammals.
- Significance assessments in accordance with section 1.7 of the *Environmental Planning and Assessment Act 1979* and *EPBC Act - Principal Significant Impact Guidelines 1.1. Matters of National Environmental Significance* (Department of Environment 2013) determined that the project was unlikely to result in a significant impact to any threatened biodiversity listed under the *Biodiversity Conservation Act 2016* or *Environment Protection and Biodiversity Conservation Act 1999*
- Potential impacts to biodiversity associated with the proposed action have been largely avoided through the construction footprint selection process avoiding sensitive habitats e.g. intermittent watercourse vegetation, hollow-bearing trees, significant mature canopy trees, feed trees, ground habitat (logs for small mammals).

2.8.2 Tree Removal

A detailed arboricultural impact assessment report has been prepared by Mr Stephen McKay (Appendix G). of the one hundred & nineteen (119) trees that were assessed within the proposal area seventy-nine (79) have been identified as a priority for retention with three (3) of these nominated as priority for protection by tree protection fencing.

In addition to the above, forty (40) trees have been identified as recommended for removal, due to declining health, structural issues or unsuitability to the site.

The proposed dwelling footprint will result in the direct removal of fourteen (14) trees with a further two (2) trees to be removed due to major encroachments within the TPZ.

Fifteen (15) trees have been either nominated for removal in order to establish the APZ with an additional nine (9) trees identified for removal within the APZ due to being hazardous due to structural defects resulting in these trees being unsafe or were in poor health and therefore prioritised for removal over healthy trees.

General protection measures are recommended in Section 4 of this report to minimise potential impacts to the trees to be retained.

Inspections of retained trees should be conducted at 3, 6, 9, and 12 months and annually for 3 years after development completion. Other maintenance activities deemed necessary are to be undertaken over the same time period, and undertake management of trees (predominantly pruning following *Australian Standard (AS 4373)* by a suitably qualified person when required.

2.8.3 Water Management

Proposed drainage design and relevant impacts associated with the development are contained in the Site Stormwater Drainage measures and are indicated on the plans that are included with this development application.

2.8.4 Noise

The proposed works have been assessed against criteria for resultant noise from construction which are aimed at maintaining comfort levels within the surrounding residential dwellings. The construction site will adhere to the noise control and regulation measures in accordance with AS 2436:2010 "*Guide to noise control on construction, maintenance and demolition sites*." Furthermore, the works will adhere to the EPA Construction Noise Guidelines which require the proponent to take into consideration and employ all reasonable and feasible measures to ensure that the impact on noise receivers is minimised.

2.8.5 Waste

Construction Waste

During construction works there will be a range of waste products associated with the building activities. Arrangements will be made for these products to be collected by a recognised building waste product recycler for subsequent sorting and recycling in order to minimise the amount of waste products going to Council's landfill operation. A detailed waste management plan (Appendix D) has been included as part of the development application.

Operational waste

Wastes generated by the residents of the dwelling are likely to fall within the two main categories of:

- Solid recyclable products, such as glass plastics and newsprint;
- Other wastes.

Such wastes will be sorted by residents into the waste bins provided by Council for collection by Council's contractor.

2.9 Site Suitability

2.9.1 Bushfire

The site is identified by Gosford City Council as being 'Bushfire Prone'. The accompanying Bushfire Threat and Protection Assessment prepared by Building Code Bushfire Hazard Solutions concludes that the proposed dwelling will be subject to a BAL 40 rating and the proposal will comply with the requirements of *Planning for Bushfire Protection 2019*. The required APZ's are as follows:

- 36m to the East/South
- 36m to the South-west
- 23m to the West

The Flora and Fauna assessment concludes that there will be no significant impact to the threatened species, endangered populations or endangered ecological communities as a result of implementation of the prescribed bushfire APZ's.

2.9.2 Flooding

The site is not flood affected.

2.9.3 Acid Sulphate Soils

The property is not affected by Acid Sulfate Soils

2.9.4 Hazards (Other)

Natural Hazards

The subject site has not been identified as being subject to land slip and as such only a Site Classification and On-Site Effluent Disposal Assessment was undertaken by Douglas Partners in accordance with Table 1-2 above and Chapter 6.4 and 6.5 of the Gosford DCP 2013. Recommendations for footings for the proposed residence have been included within the report. An effluent disposal area of 396m² is required, and this area has been marked on the accompanying site plan.

2.9.5 Social and Economic Effects

The proposed development will have neither positive or negative impacts on the social and economic environment of the locality. This occurs through the growth of the population at a rate and scale that is in keeping with the desired character of the area. The site and locality have adequate infrastructure and services in place and the zoning controls permit the proposed land use. The proposed development falls within the social, environmental and economic capacity of the land.

2.9.6 Conclusion

The suitability of the land to accommodate a development of this type and scale has been established by the above analysis. The subject site is not affected by any policy that restricts development because of the likelihood of tidal inundation or subsidence. The accompanying Bushfire Threat and Protection Assessment concludes that the proposed dwelling will be subject to a BAL 40 rating and the proposal may comply with the requirements of *Planning for Bushfire Protection 2019* should the recommended APZ's and construction standards be considered. The accompanying Flora and Fauna Assessment (Appendix F) concludes that the proposal is unlikely to have any significant impacts on the environmental values of the area and no threatened species, endangered populations or endangered species will be significantly affected by the proposal. The Geotechnical investigation also concluded that the site is capable of supporting this proposal and on-site effluent disposal can be accommodated by the site in accordance with Council's preferences for shallow sub-surface irrigation. The site is appropriate for this form of land use.

The proposal is considered to be consistent with the objectives of the 7(a) zone and is generally compliant with the relevant provisions of IDO 122 and Gosford DCP 2013 relating to requirements for dwelling houses on land zoned for conservation purposes. Despite reduced building line, the proposal raises no significant visual or amenity impacts. The proposal will not detract from the character or scenic qualities of the area or have unreasonable impacts on the environment.

All relevant matters under Section 4.15 of the Environmental Planning and Assessment Act 1979, section 89 of the Local Government Act 1993, the objectives of the zone and the principles of ecologically sustainable development have been considered and the proposal is recommended for **approval** subject to conditions.

Figure 0-1 Proposed development

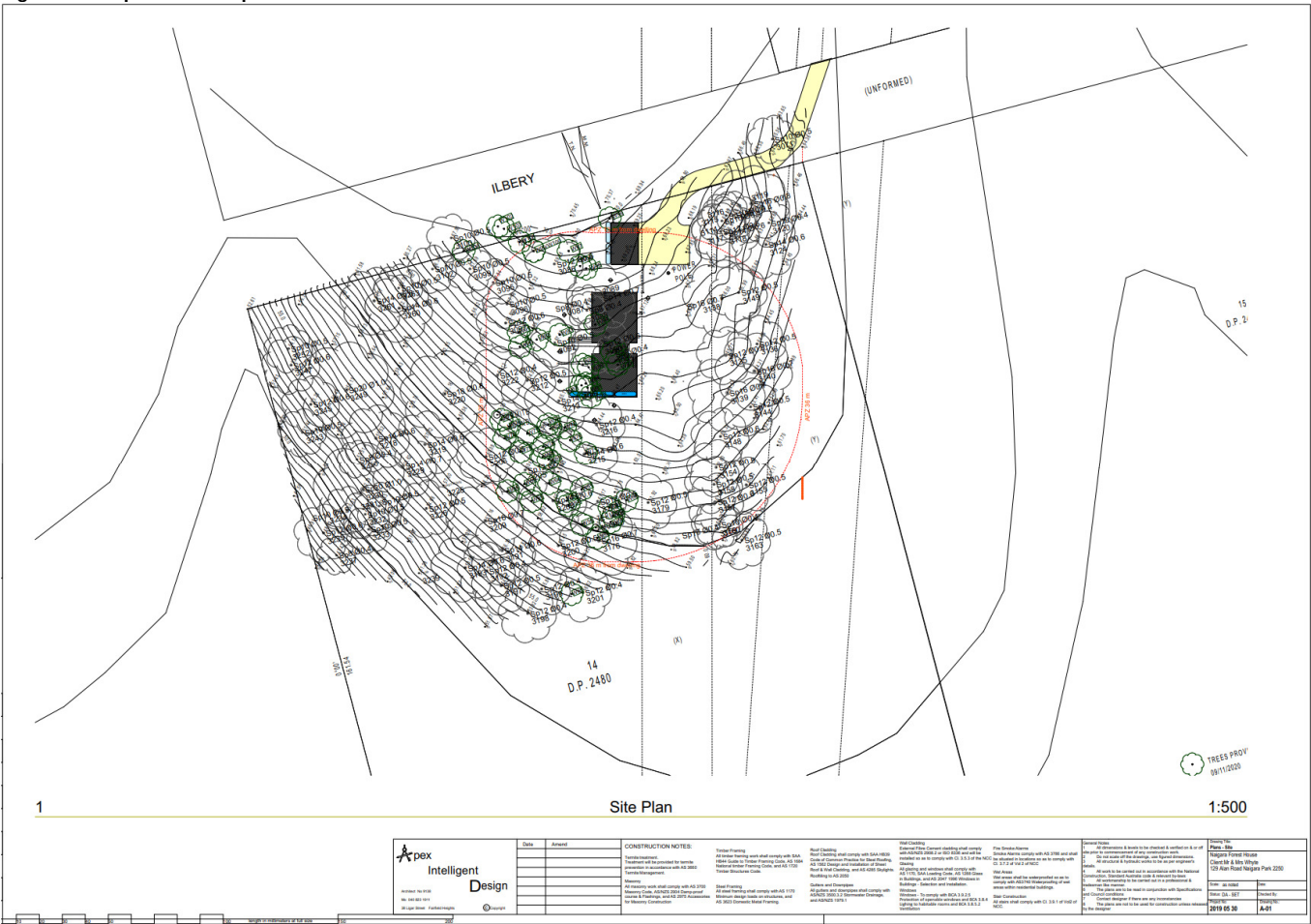
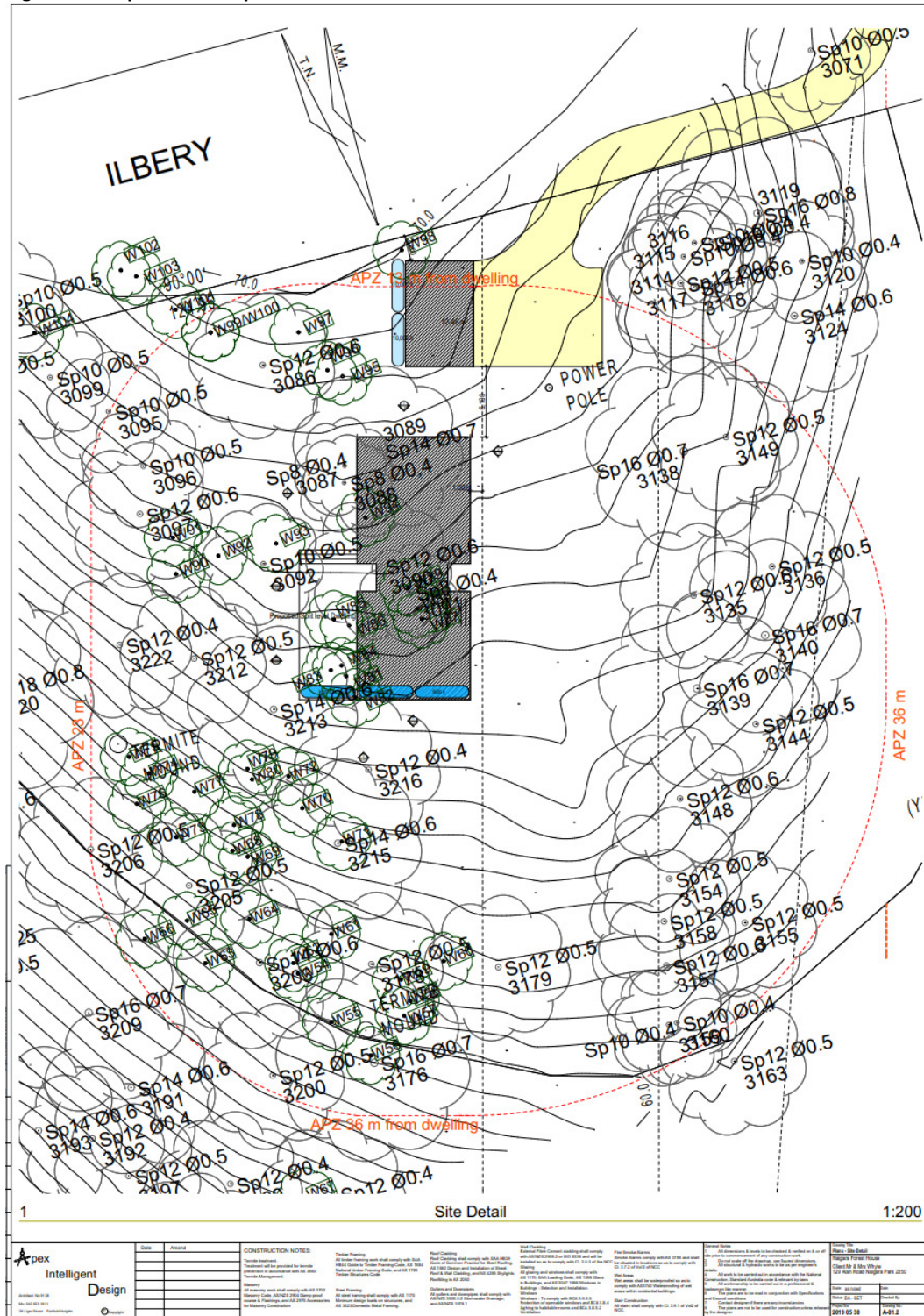
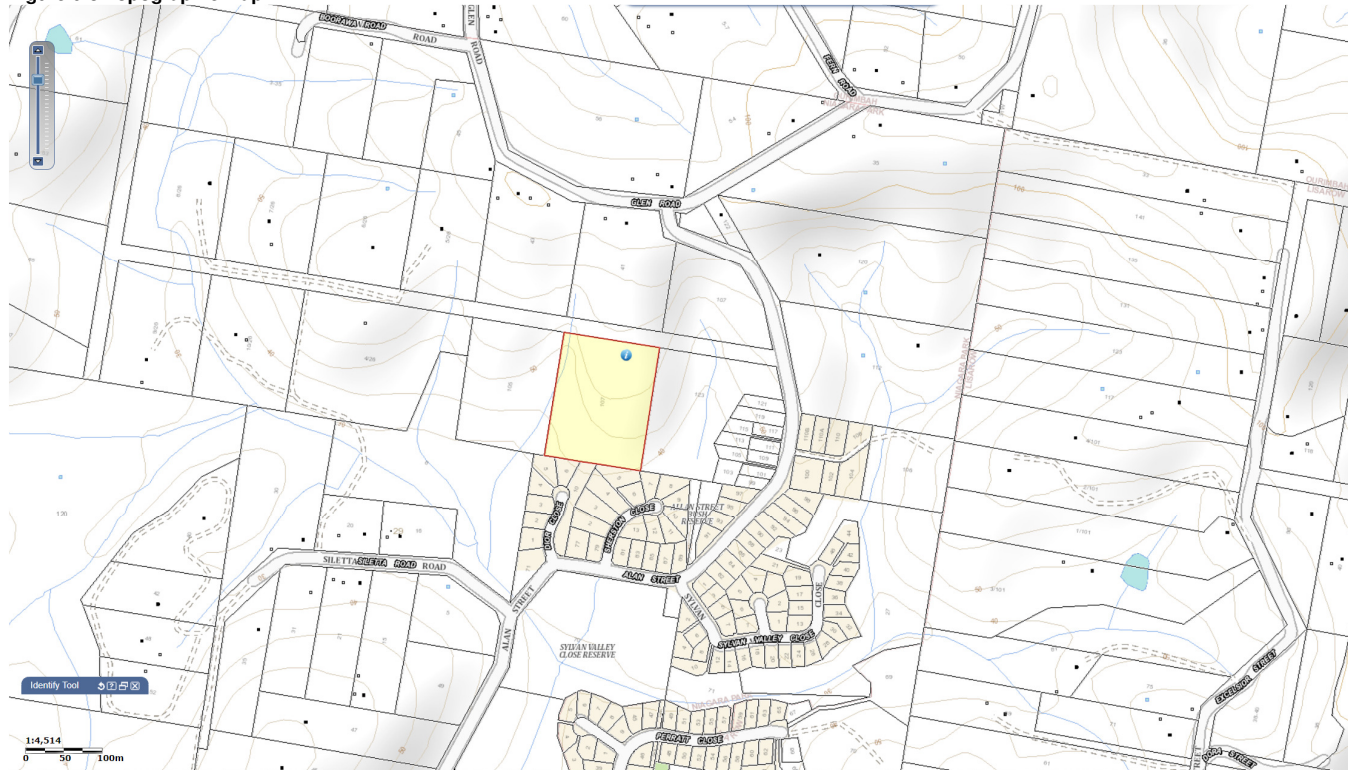


Figure 0-2 Proposed development



Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Figure 0-3 Topographic Map



3 Description of the environment

This should provide details of the environment in the vicinity of the development site and also of affected by aspects of the environment likely to be a facet of the proposal. In this regard, physical, natural, social, heritage and economic aspects of the environment should be described to the extent necessary for assessment of the environmental impact of the proposed development.

3.1 Physical, Environment

3.1.1 Topography-

- Aspect
- Steepness of slopes
- Relationship of site to its natural water catchment
- Identification of previously cleared or disturbed areas

A Geotechnical Assessment that was prepared by Douglas Partners (Appendix I). This reporting remains current and addresses the aforementioned points.

3.1.2 Geology/ Hydrology

- Soil geology
- Soil morphology
- Site drainage (including aquifers, water table and surface water etc)

A Site Classification and On-Site Effluent Disposal Assessment that was prepared by Douglas Partners (Appendix I). This reporting remains current and addresses the aforementioned points.

3.1.3 Geotechnical

- Geotechnical assessment of site stability
- Capacity of soil to absorb liquid and solid Wastes
- Erodibility of the site

A Site Classification and On-Site Effluent Disposal Assessment that was prepared by Douglas Partners (Appendix I). This reporting remains current and addresses the aforementioned points.

The Douglas Partners report identified technical parameters associated with excavations, Site Preparation, Engineered Filling, Material Quality and Compaction Requirements and sub grade preparation.

3.1.4 Infrastructure

Vehicular access to the site is made via Alan Street. Alan Street is quiet and is free of congestion.

Alan Street is a 50km an hour & existing road conditions are good.

Niagara Park Station is located 1.7km to the south and takes approximately 19 mins to walk from the subject property and 3mins via car. The Bus station is located at Niagara Park (Narooma Rd & Narara Valley Dr).

There is no town water or sewer services to the subject property, town water and sewer is located 200m to the south (Dior Close). Onsite effluent and reticulated water is proposed to supply dwelling.

Electricity mains are located within the site frontage with the subject property with a power pole located 10m from the proposed dwelling.

Telstra line is located within the frontage of Alan Street.

The site drains to the south and south-west. The house is proposed on poles so no drainage issues are considered to arise. No site specific drainage measures/recommendations were considered to be relevant.

to the proposed development as noted in the Geotechnical Assessment that was prepared by Douglas Partners (Appendix I).

Garbage collection is proposed from Alan Street.

3.1.5 Aesthetics/Scenic Visual

Appearance of the land and subject development site when viewed from any waterway road, railway, public area or reserved or zoned land and any nearby development

The proposal is for a single dwelling. The dwelling has been set back off the road in a north-westerly direction to address environmental site constraints. Notwithstanding the development follows the existing contours of the site in a north-westerly direction and is situated below the scarp of the ridgeline. The dwelling is considered to be in keeping with the existing dwelling character within the streetscape and will be less prominent than other houses due to its slender form that moves away from Alan Street. The Bushland Management Plan which has been prepared ensures the retention of numerous trees and vegetation which will buffer the visual bulk and scale of the development proposed.

3.1.6 Natural Hazards

Bushfire hazard

The site is mapped as bushfire prone land. A Bushfire Assessment that was prepared by Building Code Bushfire Solutions (Appendix E). This reporting remains current and addresses fire related issues with development of the site.

Flood liability

N/A The subject property is not susceptible to flooding nor has it been mapped as flood affected.

Slip areas

N/A The subject property has not been identified as being a slip area. A Site Classification and On-Site Effluent Disposal Assessment that was prepared by Douglas Partners (Appendix I) which has identified that there are no site stability issues with the site.

Further consideration to site stability has been made in Section 1.6 above.

Coastal erosion or inundation zones

N/A The subject property is not affected by Coastal erosion or Inundation zones.

3.1.7 Climate meteorology

Table 3-1 Regional temperature ranges

Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Lowest	27.8	26.6	26.3	23.5	22.4	17.7	18.4	17.7	21.3	24.8	24.3	26.6	
Highest	27.8	27.0	26.5	23.5	22.4	18.8	18.8	20.9	25.0	26.4	26.4	27.1	

Table 3-2 Precipitation data Niagara Park

Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean	137.0	190.3	165.1	118.4	113.0	127.8	63.0	75.8	64.3	91.2	110.7	106.2	1399.8
Lowest	9.2	17.8	4.6	6.0	3.6	0.8	0.0	1.2	0.0	0.0	10.7	6.0	838.3
5th %ile	23.0	36.6	30.1	12.8	12.1	11.8	8.3	4.2	4.9	10.9	16.2	16.4	884.1
10th %ile	36.5	44.4	42.5	21.9	19.5	22.7	9.6	6.5	13.4	19.7	28.2	24.9	921.6
Median	119.8	154.3	159.0	84.7	90.2	88.2	44.8	41.0	48.4	75.4	99.8	87.8	1366.7

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Statistic	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
90th %ile	273.1	398.6	321.9	253.4	252.9	287.8	127.9	210.6	161.8	192.6	218.1	217.0	1925.3
95th %ile	345.0	545.5	345.1	302.3	318.7	344.7	166.0	222.3	181.4	237.0	280.0	251.5	1999.7
Highest	414.2	671.0	385.8	609.4	356.0	624.9	207.2	357.6	201.4	343.0	330.0	300.2	2163.6

Data within the table which are in *italics* represent observations which have not been fully quality controlled, a process which may take a number of months to complete. While these data may be correct, you should exercise caution in their use.

Table 3-3 Wind direction, wind speed, mean rainfall & temperature

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	Plot	Map
Temperature																
Mean maximum temperature (°C)	27.0	26.4	24.6	22.0	19.1	16.4	15.8	17.7	20.5	22.8	24.1	25.8	21.8	31	1981 2012	
Mean minimum temperature (°C)	16.3	16.4	14.6	12.0	9.5	7.2	6.1	6.6	8.7	10.9	13.0	14.8	11.3	31	1981 2012	
Rainfall																
Mean rainfall (mm)	117.0	159.3	140.3	127.0	95.9	105.9	66.7	78.8	73.6	90.6	107.0	95.2	1256.7	31	1981 2012	
Decile 5 (median) rainfall (mm)	103.6	129.4	132.4	118.2	85.2	74.2	46.0	44.4	57.2	62.8	97.6	87.5	1226.4	31	1981 2012	
Mean number of days of rain ≥ 1 mm	10.7	11.1	10.7	9.1	8.7	8.3	7.2	6.4	6.4	8.3	10.0	9.7	106.6	31	1981 2012	
Other daily elements																
Mean daily sunshine (hours)																
Mean number of clear days	6.0	5.2	6.3	7.6	8.2	9.0	10.0	12.4	10.2	7.8	5.3	4.8	92.8	29	1981 2011	
Mean number of cloudy days	11.4	11.9	10.4	8.7	8.9	8.0	6.9	5.8	6.3	8.4	11.1	10.6	108.4	29	1981 2011	
9 am conditions																
Mean 9am temperature (°C)	21.1	20.5	19.0	17.2	14.1	11.3	10.5	12.1	15.2	17.6	18.4	20.2	16.4	29	1981 2011	
Mean 9am relative humidity (%)	78	82	82	78	79	78	75	69	65	65	72	74	75	29	1981 2010	
Mean 9am wind speed (km/h)	4.9	4.6	5.0	5.3	5.8	6.3	6.6	7.3	7.1	6.8	6.0	5.2	5.9	28	1981 2011	
9am wind speed vs direction plot																
3 pm conditions																

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	Plot	Map
Mean 3pm temperature (°C)	25.3	24.8	23.1	20.4	17.5	15.0	14.4	16.3	18.7	20.8	22.1	24.1	20.2	29	1981 2011	
Mean 3pm relative humidity (%)	64	66	66	66	67	66	60	55	54	58	61	63	62	29	1981 2010	
Mean 3pm wind speed (km/h)	7.3	6.8	6.2	5.6	5.5	5.8	6.6	7.1	8.0	7.7	7.8	7.3	6.8	25	1981 2011	
3pm wind speed vs direction plot																

3.2 Natural Environment

3.2.1 Flora & Fauna

A detailed Flora and Fauna assessment has been prepared by Alex Fraser Consulting (Appendix F).

3.3 Social Environment

Population

Narara - Niagara Park	2011			2006			Change 2006 to 2011
	Number	%	Gosford City %	Number	%	Gosford City %	
Population (excluding O/S visitors)	10,592	100.0	100.0	10,536	100.0	100.0	+56
Males	5,210	49.2	48.2	5,144	48.8	48.3	+66
Females	5,382	50.8	51.8	5,392	51.2	51.7	-10
Australian citizens	9,656	91.2	89.1	9,530	90.5	87.8	+126
Eligible voters (citizens aged 18+)	7,055	66.6	68.3	6,817	64.7	66.3	+238
Overseas visitors	--			--			--

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011. Compiled and presented in profile.id by .id, the population experts. (Usual residence data).

Community facilities, (schools, child care centre etc)

Communities facilities of the area include Niagara Park Shopping Centre, Strickland State Forest, Central Coast Youth Club, Canning Park, Carrington Street Oval, Gavenlock Oval, Karina Drive Playground, Mitchell Park, Narara Crescent Playground, Paddy Clifton Oval, The Duck Pond, Treeline Park, Washington Avenue Playground, Willari Avenue Playground, Wyunda Court Playground, Narara Community Centre and a number of schools.

3.4 Aboriginal/European Heritage

Aboriginal - identify any sites or relics

European - identify any items on the property or land which have historic, social, archaeological architectural or aesthetic values.

An AHIMS Web Service search was conducted for the following area at Lot 14 DP2480 with a Buffer of 1000 meters, conducted on 12th of November 2020 to identify any known aboriginal sites, no results were returned.

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0 Aboriginal sites are recorded in or near the above location.

0 Aboriginal places have been declared in or near the above location.

AHIMS Report Attached (Appendix H)

The site is vacant bushland with cleared areas associated with the existing power supply easements to the west. There are no items on the property or the subject land that have historic, social, archaeological architectural or aesthetic value.

Figure 3-1 AHIMS Web Service 1000 metres

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

No European Heritage has been identified from a search of historical land uses and walk over of the site.

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

3.5 Economic Environment

Land values

The Land & Property Information NSW was consulted to determine current land values with data presented below.

11/11/2020



**Valuer
General**

NEW SOUTH WALES VALUER GENERAL - LAND VALUE SEARCH

PROPERTY NO: 4005283

LGA: CENTRAL COAST

ADDRESS OF PROPERTY: 107 ALAN ST,
NIAGARA PARK NSW 2250

DESCRIPTION OF LAND: 14/2480

PROPERTY AREA: 2.016 HECTARES (FROM PLAN)

PROPERTY DIMENSIONS: NOT AVAILABLE

VALUING YEAR: 01/07/2019 DATE VALUATION WAS MADE: 07/08/2019

ZONING USED FOR VALUATION: PROTECTION

LAND VALUE AUTHORITY: 14A(1) - ANNUAL REVALUATION

GROSS LAND VALUE: \$273,000

DIVISION 3 AND 4 ALLOWANCES: NOT APPLICABLE

NET LAND VALUE: \$273,000

LAND VALUE BASIS: 6A(1) - THE LAND VALUE IS THE FREEHOLD VALUE OF
THE LAND EXCLUDING ANY STRUCTURAL IMPROVEMENTS

OTHER ALLOWANCES/CONCESSIONS: NOT APPLICABLE

THE CURRENT LAND VALUE FOR RATING PURPOSES IN THE LOCAL GOVERNMENT AREA
OF CENTRAL COAST IS THE VALUE AT 1 JULY 2019.

PRODUCED: 11 NOVEMBER 2020 16:42:16 PROPERTY STATUS AT THIS DATE: CURRENT

THIS LAND VALUE SEARCH DOES NOT CONVEY A RIGHT OF OBJECTION TO THE LAND VALUE.

THE VALUES SHOWN ARE CURRENT FOR THE VALUING YEAR AS AT TODAY'S DATE.
THE VALUER GENERAL CONDUCTS ONGOING REVIEWS OF LAND VALUES
AND THEREFORE THE VALUES SHOWN MAY CHANGE.

THE LAND VALUE RECORDED ON THIS LAND VALUE SEARCH HAS BEEN DETERMINED
UNDER THE VALUATION OF LAND ACT 1916 (AND THE HERITAGE ACT 1977, WHERE
APPLICABLE) FOR RATING AND TAXING PURPOSES. LAND VALUES HAVE REGARD TO
THE REQUIREMENTS OF RATING AND TAXING LEGISLATION AND SHOULD NOT BE USED
FOR ANY OTHER PURPOSE WITHOUT THE SPECIFIC AGREEMENT OF THE VALUER GENERAL.

*** END OF SEARCH ***

Councils use the Valuer General's land values in setting their rates. Land values are issued to
councils for rating at least every three years.

Properties that are subject to Land Tax are generally taxed based on the average of the last
three years' land valuation.

1/1

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Other proposed developments

Developments surrounding the subject property include rural residential dwelling within Dior Close 168m to the south and rural residential dwelling located 165m to the north. 12 Residential vacant lots are located within 200m of the proposed dwelling footprint.

Industries within the area

Located within the central area of Niagara Park are the following industries Manufacturing, Electricity, gas, water and waste services, Construction, Wholesale trade, Retail trade, Accommodation and food services, Transport, postal and warehousing, Information media and telecommunications, Financial and insurance services, Rental, hiring and real estate services, Professional, scientific and technical Services, Administrative and support services, Public administration and safety, Education and training, Health care and social assistance & Arts and recreation services.

Commercial facilities; shops etc

The subject property is located within 2km of SPAR store, Family Deli & Takeaway, Sara Lee Bakery Shop and the Niagara Valley Tavern. Niagara Park sports and recreation & community centre.

Resources, eg extractive industries, mining leases etc (See Table 2-4 below)

Agricultural ratings (See Table 2-4 below)

Table 3-4 Industry

	2014	2015	2016	2017	2018	2019
Number of Businesses - As at 30 June						
Number of non-employing businesses (no.)	--	276	256	255	246	266
Number of employing businesses: 1-4 employees (no.)	--	156	161	180	184	164
Number of employing businesses: 5-19 employees (no.)	--	37	41	36	34	39
Number of employing businesses: 20 or more employees (no.)	--	8	5	8	5	7
Total number of businesses (no.)	--	477	463	478	474	482
Business Entries - Year ended 30 June						
Number of non employing business entries (no.)	--	--	33	39	46	54
Number of employing business entries: 1-4 employees (no.)	--	--	21	27	18	18
Number of employing business entries: 5-19 employees (no.)	--	--	--	5	3	--
Total number of business entries (no.)	--	--	52	68	64	67
Business Exits - Year ended 30 June						
Number of non employing business exits (no.)	--	--	50	38	40	39
Number of employing business exits: 1-4 employees (no.)	--	--	14	11	11	25
Number of employing business exits: 5-19 employees (no.)	--	--	3	--	--	3
Total number of business exits (no.)	--	--	66	48	51	66
Number of Businesses by Industry - As at 30 June						
Agriculture, forestry and fishing (no.)	--	5	3	3	3	3
Mining (no.)	--	--	3	--	--	--
Manufacturing (no.)	--	21	17	14	19	20
Electricity, gas water and waste services (no.)	--	--	--	3	--	--

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Construction (no.)	--	114	115	124	131	132
Wholesale trade (no.)	--	17	21	24	21	26
Retail trade (no.)	--	24	28	25	18	22
Accommodation and food services (no.)	--	7	9	17	11	11
Transport, postal and warehousing (no.)	--	22	24	27	29	30
Information media and telecommunications (no.)	--	12	7	8	8	11
Financial and insurance services (no.)	--	29	34	39	37	31
Rental, hiring and real estate services (no.)	--	42	42	39	38	34
Professional, scientific and technical services (no.)	--	75	68	75	69	68
Administrative and support services (no.)	--	28	25	26	25	28
Public administration and safety (no.)	--	--	--	3	3	3
Education and training (no.)	--	16	11	10	4	10
Health care and social assistance (no.)	--	31	29	22	27	25
Arts and recreation services (no.)	--	5	5	3	3	3
Other services (no.)	--	26	20	23	19	18
Currently unknown (no.)	--	5	3	3	--	--
Number of Businesses by Industry - Total (no.)	--	477	463	478	474	482

Building Approvals - Year ended 30 June

Private sector houses (no.)	6	10	13	11	28	11
Private sector dwellings excluding houses (no.)	--	2	1	--	--	--
Total private sector dwelling units (no.)	6	12	14	11	28	11
Total dwelling units (no.)	6	12	14	11	28	11
Value of private sector houses (\$m)	2	3	6	5	12	4
Total value of private sector dwelling units (\$m)	2	3	6	5	12	4
Value of residential building (\$m)	2	3	6	5	12	4
Value of non-residential building (\$m)	5	1	14	--	1	3
Value of total building (\$m)	7	4	20	6	13	7

Residential Property Prices - Year ended 30 June

Houses - number of transfers (no.)	--	--	--	127	111	84
Houses - median sale price (\$)	--	--	--	656 000	687 000	695 000
Attached Dwellings - number of transfers (no.)	--	--	--	17	19	29
Attached Dwellings - median sale price (\$)	--	--	--	459 500	492 500	500 000

Registered Motor Vehicles - Type of vehicle - As at 31 January

Passenger vehicles (no.)	5 003	5 148	5 227	5 243	5 141	5 215
Campervans (no.)	14	15	18	18	18	20
Light commercial vehicles (no.)	808	856	893	930	951	1 059
Light rigid trucks (no.)	58	61	61	62	64	79
Heavy rigid trucks (no.)	101	106	110	116	121	165
Articulated trucks (no.)	15	18	19	20	21	25
Non-freight carrying trucks (no.)	4	4	--	--	--	4
Buses (no.)	24	24	27	25	25	30
Motorcycles (no.)	263	289	296	312	316	325
Total Registered Motor Vehicles (no.)	6 159	6 385	6 512	6 590	6 657	6 921

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34

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Registered Motor Vehicles - Type of fuel - As at 31 January

Petrol (no.)	5 084	5 208	5 229	5 197	5 142	5 191
Diesel (no.)	911	1 024	1 143	1 266	1 400	1 609
LPG/Dual/Other (no.)	163	152	136	124	111	112

Registered Motor Vehicles - Year of Manufacture - As at 31 January

Less than 5 years (no.)	1 975	2 118	2 177	2 212	2 199	2 391
5 to 10 years (no.)	1 719	1 726	1 736	1 746	1 785	1 836
Over 10 years (no.)	2 465	2 540	2 598	2 632	2 673	2 694
	2011	2016				

Industry of Employment - Proportion of Employed Persons - Census

Agriculture, forestry and fishing (%)	0.5	0.6
Mining (%)	0.4	0.3
Manufacturing (%)	10.1	7
Electricity, gas water and waste services (%)	1.5	1.3
Construction (%)	7.6	9
Wholesale trade (%)	4.2	2.8
Retail trade (%)	11.2	10.8
Accommodation and food services (%)	5.5	7.5
Transport, postal and warehousing (%)	4	3.1
Information media and telecommunications (%)	2.6	2.6
Financial and insurance services (%)	4.3	3.6
Rental, hiring and real estate services (%)	1.5	1.2
Professional, scientific and technical services (%)	6.9	6.6
Administrative and support services (%)	3.3	2.9
Public administration and safety (%)	7.3	6.8
Education and training (%)	7.4	9
Health care and social assistance (%)	14.1	15
Arts and recreation services (%)	1.3	1.4
Other services (%)	4.6	4.5
Total persons employed (no.)	3 926	3 910
Industry of Employment - Inadequately described or not stated (%)	2	3.7

* Agricultural commodities and value of production data is subject to relative standard error (RSE) - for further information see ABS cat no. 7125.0

https://itt.abs.gov.au/itt/r.jsp?RegionSummary®ion=102011036&geoconcept=ASGS_2016&dataset=ABS_REGIONAL_ASGS2016&datasetLGA=ABS_REGIONAL_LGA2019&datasetASGS=ABS_REGIONAL_ASGS2016®ionLGA=LGA_2019®ionASGS=ASGS_2016

4 Analysis of environmental impacts

Environmental impacts usually associated with a dwelling house in a 7(a) zone are listed below. Where relevant to the specific proposal, these should be addressed in the EIS, taking into account the adequacy of safeguards proposed; to minimise them.

Water management: including water requirements and the effects on the existing water supply system, proposals for separating clean and contaminated runoff before discharge, water treatment, quality and Quantity of effluent for disposal; effects on groundwater supplies.

Management and disposal of wastes.

A Site Classification and On-Site Effluent Disposal Assessment was prepared by Douglas Partners (Appendix I). This report advises that appropriate effluent disposal can be carried out on the site. Solid waste associated with the use of the proposed dwelling will be disposed of in the Council provided waste bins.

Effect on native vegetation and details of measures proposed to preserve trees and prevent the introduction of or invasion by exotic vegetation.

A Flora and Fauna Assessment was prepared by Alex Fraser Consulting (Appendix F). The effect of the proposal upon native vegetation is considered to be minimal. Detailed of measures proposed to preserve trees and prevent the introduction of or invasion by exotic vegetation are to be detailed in a Bushland Management Plan to be prepared as a condition of consent.

Impact on fauna including details of wildlife corridors and effect on animal movements effect on the habitat of native fauna, effect of any domestic animals and measures proposed to prevent them from becoming feral.

A Flora and Fauna Assessment was prepared by Alex Fraser Consulting (Appendix F). The report concludes that the proposal will have minimal impact on locally occurring upon fauna. The report has considered the presence of wildlife corridors and effect on animal movements, habitat of native fauna, the effect of any domestic animals and measures proposed to prevent them from becoming feral.

Measures to Preserve/retain/replant/recreate native fauna habitats

A Bushland Management Plan is to be prepared as a condition of consent to ensure that the property is maintained in a manner suitable to its natural setting. This plan remains current and provides measures to preserve/retain/replant/recreate native fauna habitats.

An assessment of the impact of the development on waterways, creeks, wetlands and the vegetation and fauna of those areas.

A Flora and Fauna Assessment was prepared by Alex Fraser Consulting (Appendix F). This reporting considers the effect of the proposed development upon on waterways, creeks, wetlands and the vegetation and fauna of those areas. A water cycle management plan has been prepared (Appendix J).

Visual Impact of the proposed development having regard to the character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of the proposed development.

Table 1-1 Section 1.6 above addresses the developments compliance with the prevailing LEP and DCP controls. The proposed development has been designed and sited to ensure that it does not have a negative effect upon the visual character of the area. The dwelling is sited in a location that ensures adequate setback from the primary street (Alan) while also reducing the impact of the developments footprint within the natural vegetation onsite. Siting of the development and its design will ensure that it does not present as a bulky structure in terms of its scale, shape, size, height and density.

In addition, any proposals to monitor and reduce environmental impacts should be included and the following assessments, if relevant, included

Apex Intelligent Design 38 Ligar Street Fairfield Heights 2165 NSW

36

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

Assessment of the likelihood and severity of bushfires and their impact on the natural environment and assessment of measures proposed to reduce the bushfire hazard and to minimise demand on emergency services

The accompanying Bushfire Threat and Protection Assessment prepared by Building Code Bushfire Hazard Solutions (Appendix E) concludes that the proposed dwelling will be subject to a BAL 40 rating and the proposal will comply with the requirements of *Planning for Bushfire Protection 2019*.

Assessment of measure proposed to preserve items of European or Aboriginal Heritage

Relevant searches with respect to Aboriginal and European heritage indicate that there is no known artefacts that would be impacted by the proposed development.

Impact on service and physical infrastructure and identification of costs to parties other than the proponent associated with the demands placed on infrastructure by the proposed development

A single dwelling is not considered to impact upon service and physical infrastructure. Costs associated with the connection of electricity to the new dwelling are borne by the property owner. Costs for connection to electrical and phone services are likely to be minimal due to the close proximity of mains services. No town water/sewer connections are proposed.

Assessment of measures proposed to conserve energy including discussion of dwelling orientation, relationship and use of glass, mass and insulation in the construction are considered in the BASIX assessment.

Assessment of the impact on the environment of any infrastructure Supplied to the site eg gas, water, roads, electricity or telephone lines

The proposed dwelling will connect to existing electricity infrastructure (Power Pole) located within the existing easement within 10-15 of the proposed dwelling. Alan Street provides direct access to the site via an existing Right of Way.

An assessment of the impact of the proposal on adjoining land including identification of the loss off any environmental values

Provided in Appendix F of this EIS is a Flora and Fauna Assessment. This reporting remains current and addresses the proposal on adjoining land including identification of the loss off any environmental values. The proposed development will not significantly affect threatened species of flora and fauna, endangered populations or endangered ecological communities listed under the *Biodiversity Conservation Act 2016* or under the *Environmental Protection & Biodiversity Conservation Act 1999*.

An assessment of the effectiveness of measures proposed to prevent erosion.

A site sedimentation control plan has been prepared and is included in the Architectural Plan set (Appendix K)

5 Contact with relevant Government authorities

In preparing the EIS all relevant government authorities should be consulted and their comments taken into account in the EIS, where advice from such authority is relevant to the application.

The Department of Water 'Resources where proposed development is either directly or indirectly affecting wetlands areas, non-tidal dams, bores and wells, streams, ground water, water quality or involves construction of pumping water and clearing of vegetation within 40m of streams or rivers (as provided for under the Rivers Improvement Act, 1948).

The proposed development has been sited to avoid impacting directly or indirectly upon wetlands areas, non-tidal dams, bores and wells, streams, ground water, water quality or involves construction of pumping water and clearing of vegetation within 40m of streams or rivers.

The proposed development has considered the Water Management Act 2000 more specifically the NSW Office of Water Guidelines. A 1st order stream has been mapped within the western portion of the subject property (Figure 1-3). A detailed survey was undertaken by Beveridge Williams to the western boundary from the proposed building footprint, the 1st order watercourse is inaccurately mapped and is not located within the subject property it is located within Lot 15 DP 2480.

In accordance with the NSW Office of Water (NOW) guidelines and Water Management Regulation (2010) more specifically the Strahler System the watercourse has been classified as a 1st order watercourse. In accordance with setback is detailed in the regulation a 10m setback from the top of the bank has been given. The proposed development has been sited greater than 40m from the TOB.

No fire asset protection zones (APZ) associated with the development occur within the NOW watercourse setbacks.

A vegetation management plan is proposed as a condition of consent for the subject property which will ensure that the vegetation within the subject property will be managed via weed removal and enhancement of the vegetation through assisted regeneration to enhance the ecological attributes.

7. Ecological Sustainable Development (Environmental Planning and Assessment Regulation 2000)

7.1 Principles of ecological sustainable development (section 7(4) of part 3 of schedule 2)

The proposal is consistent with section 7(4) of part 3 of schedule 2 of the regulation. The dwelling has been sited to avoid serious and irreversible environmental damage. The dwelling footprint has been sited within an area of the site that was previously disturbed through land clearing for the establishment of an orchard. The proposed asset protection zone overlaps with land that is subject to regular slashing maintenance by the utility providers within the power easement. The bushfire attack level (BAL) has been increased to 40 to reduce the extent of asset protection zone thus reducing the extent of native vegetation clearing. The relocation of the dwelling footprint would result in the removal of more native vegetation and habitat for native flora and fauna. The proposal is supported with a vegetation management plan (VMP) that seeks to retain and enhance the onsite vegetation via targeted weed removal program which will remove "high threat weeds". The proposal is consistent with principles of ESD and should be supported with the conditions.

Alternatives to the proposed development footprint are limited, relocation of the dwelling to other areas of the site would result in greater environmental impact due. Relocation of the dwelling to the south would result in larger impacts upon native vegetation to establish access within the lot. Moving the dwelling downslope would result increased APZ's which in turn would remove more native vegetation. The dwelling has been strategically placed within the disturbed section of the lot, relocation of the dwelling footprint would impact upon a greater diversity of native flora. The dwelling has been sited within an area of the site that has the highest level of weed occurrence thus avoiding the removal of better-quality habitat for native fauna.

7.1.1 Precautionary principle

As this principle is relevant to "serious or irreversible damage" it would not appear to have a strong application to this particular development "a dwelling house". As discussed above the development has been specifically located within a former disturbed area of the site which was previously occupied by an orchard. The rehabilitation measures identified in the vegetation management plan specifically aim to mitigate environmental damage. The cooperation between the proponent and the Council will be important in achieving successful retention and protection of the onsite biodiversity values within the site.

7.1.2 Inter-generational equity

As this principle is relevant to "serious or irreversible damage" it would not appear to have a strong application to this particular development "a dwelling house". As discussed above the development has been specifically located within a former disturbed area of the site which was previously occupied by an orchard. The rehabilitation measures identified in the vegetation management plan specifically aim to mitigate environmental damage. The cooperation between the proponent and the Council will be important in achieving successful retention and protection of the onsite biodiversity values within the site.

Under the EP&A Regulation, the principle of intergenerational equity requires:

- that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

The principle of intergenerational equity identifies a need to ensure that the requirements of the present generation can be met without precluding options for future generations. The proposal will not prejudice future development or local planning in the area.

Mitigation measures are proposed under the flora and fauna assessment report to ensure that the environmental impacts associated with the development are minimised consistent with the principle of intergenerational equity. Protection of the air, water, biological and noise environment of the area will contribute to meeting the requirements of intergenerational equity, protecting the quality of the environment for both the existing and future generations. Such mitigation measures will help ensure that the land following development will be left in a manner that enables other land uses to be carried out. In terms of the natural environment, future generations are expected to benefit from the conserved areas of bushland which are to be retained and protected under the vegetation management plan. These benefits include the retention of majority of the onsite site vegetation which is contiguous with surrounding bushland which provides habitat for native flora and fauna.

7.1.3 Conservation of Biological Diversity and Ecological Integrity

Although the proposed dwelling will result in disturbance of the biophysical environment (top soil and vegetation), the proposed measures, described in the vegetation management plan aim to conserve the biological diversity of the site.

There is a need to maintain the biological diversity and ecological integrity of the region within which the development is located. Conservation of ecological integrity requires that natural processes in the area continue to function. The proposed development incorporates measures under the vegetation management plan to minimise potential impacts on vegetation communities and habitat value. Rehabilitation initiatives under the VMP which form part of the project will also assist in maintaining the biological diversity and ecological integrity of the area. A range of specific management actions have been proposed to minimise the disturbance to existing natural resources of the site. These and other measures discussed in the EIS will assist in conservation of ecological integrity.

7.1.4 Improved valuation and pricing

Given the nature of the proposal "dwelling house", the minor impacts arising from the proposal and the low level of community concern about the project, it was not considered appropriate to carry out a valuation of physical impacts.

8 Environmental Impact Mitigation Measures

The EIS should also include the consideration of the type and extent of any impacts that will occur as a result of the analysis of these in terms of:-

- The application documentation as prepared has considered the immediate, short term and long term impacts of developing the site.
- An arbicultural impact assessment was carried out to assess the impact of the proposed development on trees located on the site. Consideration was given to the location of the house site to reduce its impact on locally occurring trees.
- A Bushfire assessment was carried out to establish where asset protection zones are required to be located to ensure the long term protection of the dwelling house and its occupants.
- A fauna and flora assessment was carried out and provides mitigation measures to ensure the protection of locally occurring fauna / flora species and their habitats.
- An erosion sedimentation control plan has been prepared to reduce impacts of receiving waters from sediment during the construction phase of the development.
- A water cycle management plan is provided detailing the appropriate management stormwater onsite.
- A BASIX Certificate is provided detailing the building improvements required to ensure that the dwelling house is sustainable with respect to energy consumption.
- A bushland management plan is to be prepared as a condition of consent to ensure that appropriate management of the sites vegetation is undertaken to ensure that the development remains environmentally sustainable.

9 Justification

The justification for the proposed development in terms of the alternatives should include:

*the "do nothing" Option;
Other locations within the site;
other feasible locations.
other feasible uses Of the land.
Leave the site undeveloped (option 1)*

9.1 The "do nothing" Option

Should the proposed development not proceed the site will remain as vacant bushland. In the absence of weed management, existing weed of national significance *Lanata camara* (Lantana) will continue to spread and environmental weeds such as , *Ligustrum sinense* (Small-leaved Privet), *Ochna serrulate* (Mickey Mouse Plan), *Nephrolepis cordifolia* (Fish-bone Fern) & *Cinnamom camphora* (Camphor Laurel) will become more prevalent. In the absence of weed management floral species will continue to decline

which in turn will decrease the quality of fauna habitats within the subject property for fauna species to utilise.

9.2 Other locations within the site;

The proposed development has been sited with the following environmental considerations;

- The development footprint has been sited within the area of the site which was previously cleared for an old orchard and is now occupied by regrowth and weed species as detailed above
- Contains low species ground and shrub understorey species diversity
- NSW Office of Water setback requirement of 10m from the TOB for the 1st order watercourse located within the western portion of the subject property.
- Dwelling sited to avoid fauna habitats logs & deep leaf litter and naturally hollow-bearing trees
- The Rural Fire Service (RFS) Planning for Bushfire Protection 2019 requires fire protection asset protection zones (APZ) to be provide a separation between the dwelling and vegetation. In order to safely place a dwelling within the subject property, the dwelling was sited to avoid clearing steep land which increases the likelihood of erosion and reduces fire intensity in the event of a bushfire. The dwelling was also sited adjacent to the existing easement to avoid clearing of native bushland by overlapping proposed APZ within the existing managed land.
- The placement of the dwelling within the northern portion of the subject property also facilitated the retention of large intact stands of trees and vegetation ensuring habitats for flora and species were not detrimentally affected.
- Dwelling placement within the northern portion of the subject property also ensured that wildlife corridors were maintained across the subject property to facilitate the movement of wildlife.

9.3 Other feasible locations

Other feasible locations were considered but resulted in conflicts with NSW Office of Water setbacks from the 1st order watercourse and non-compliances with the Rural Fire Services APZ requirements.

For example the placement of the dwelling to the west of that which is proposed would result in APZ's encroaching towards the 1st order watercourse and result in a greater area of vegetation clearing surrounding the dwelling.

9.4 Leave the site undeveloped (option 1)

There will be no economic or social merit to leaving the site undeveloped. Given the moderate condition of the ecological communities on the site, the presence of weed of national significance Lantana will reduce the quality of habitats for flora and fauna. The proposed development allows the opportunity to manage all weeds within the subject property and facilitate the spread and control of environmental weeds into other bushland areas.

10 Conclusion

The site is not just bushland. It is traversed by 2 easements. The power Easement and the rail easement. These have the effect of bringing light into the area of tree canopy. The area adjacent to the power easement having been previously an orchard has had introduced plant species that now generate a weed problem. The site needs to be occupied to manage the species of plants. Without management the infestation of weeds will spread into the forested areas.

The proposal of introducing a modest dwelling into this site on the part that is disturbed and sited to minimise effects deep into the tree canopy area, while being supported by a WMP would have the effect of eliminating the weeds from this site. All this while having minimal effect on the part of the site that has significant ecological values, that is the temperate rain forest in the gullies to the south side of the site.

The proposal will result in the removal of weeds and the protection of ecologically significant species. The servicing of the site is designed so that the waste water ends up on the easement and the stormwater flows are only marginally affected by the proposal. The dwelling is sited so that only marginal clearing is required to create an APZ and no clearing is required for site access.

The proposal has minimal environmental impact and many positive outcomes.

EXTRACT FROM ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 (AS AMENDED)

Statutory requirements for Environmental Impact Statements

In accordance with Part IV of the Environmental Planning and Assessment Act, 1979, an environmental impact statement: (EIS) must meet the following requirements.

Pursuant to clause 34 of the Environmental Planning & Assessment Act Regulation 1980, as amended, the contents of an EIS *shall* include the following matters:-

- a. full description of the designated development proposed by the development application;
- b. a statement of the objectives of the proposed designated development;
- c. a full description of the existing environment likely to be affected by the proposed designated development, if carried out;
- d. identification and analysis of the likely environmental interactions between, the proposed designated development and the environment;
- e. analysis of the likely environmental impacts or consequences of carrying out the proposed designated development (including implications for use and conservation of energy);
- f. of the proposed designated development in terms of environmental, economic and social considerations;
- g. measures to be taken in conjunction with the proposed designated development to protect the environment and an assessment of the likely effectiveness of those measures;
- h. details of energy requirements of the proposed development and
- i. measures to be taken to conserve energy;
- j. any feasible alternatives to the carrying out of the proposed designated development and reason for choosing the latter; and consequences of not carrying the proposed development

The EIS must take into account any matters required by the Director of Planning pursuant to Clause 35 of the Regulation.

This document has been prepared in accordance with the requirements of Clause 29 of the EP&A Act as reproduced above. All reports prepared conclude that minimal environmental impact is likely to occur from the development proceeding in accordance to the requirements and recommendations contained within each report. The proposed development is considered to meet the objectives of the EP&A Act and is considered to constitute ecological sustainable development.

Appendix A

EIS Requirements

Appendix B

Site Survey

Appendix C

BASIX Report

Appendix D

Waste Management Plan

Appendix E

Bushfire Assessment

Appendix F

Flora & Fauna Assessment

Appendix G

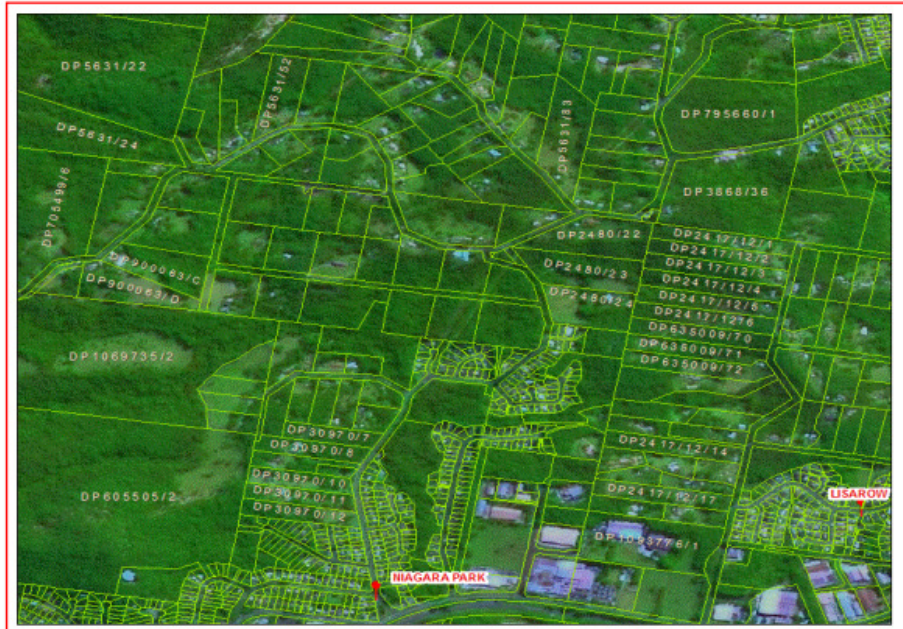
Arboricultural Impact Assessment

Appendix H

Aboriginal AHIMS Web Services (AWS)

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

<input type="checkbox"/>	Aboriginal sites are recorded in or near the above location.
<input type="checkbox"/>	Aboriginal places have been declared in or near the above location. *

Environmental Impact Statement for No 129 (Lot 14 DP 2480) Alan Street, Niagara Park

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](http://www.nsw.gov.au/gazette) (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

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Locked Bag 5020 Parramatta NSW 2220
Tel: (02) 9585 6380 Fax: (02) 9873 8599

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

Appendix I

Site Classification and On-Site Effluent Disposal Assessment

Appendix J

Water Cycle Management Plan

Appendix K

Architectural Plans

Appendix L

Schedule of External Finishes

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK



Flora and Fauna Assessment

129 Alan Street

NIAGARA PARK



8th September 2021

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

SUMMARY

Fraser Ecological Consulting has been contracted by the property owner to prepare an impact assessment of the proposed residential development on the terrestrial ecology located at 129 Alan Street Niagara Park in the Central Coast Council local government area.

This amendment addresses issues raised in Council's letter dated 8th July 2021 regarding:

- *Rhodamnia rubescens* targeted surveys
- Further inspection and assessment of hollow-bearing tree stag No. 3092 and others
- Targeted fauna survey effort and overall compliance with the Central Coast Council Flora and Fauna Survey Guidelines
- Updated Figure 12 to include to show surveys undertaken in 2017 and 2019
- References to the impact area (confirmed as 0.42ha)
- Updated 5 Part Tests of Significance
- Compliance with Council's Rainforest Policy (June 2020 Policy No. CCC083) - refer to Section 4.5 of this assessment

An Integrated Bushfire & Vegetation Management Plan (IBVMP) has also been recently submitted with the application. It includes the installation and monitoring of six (6) nest boxes.

This assessment has been conducted in accordance with Commonwealth and State legislation.

Commonwealth legislation (*Environment Protection and Biodiversity Conservation (EPBC) Act 1999*) requires that actions judged to significantly impact upon matters of National Environmental Significance are to be assessed via a formal referral process. This assessment report determines whether a referral to be made to the Department of the Environment, Water, Heritage and the Arts for further assessment is required.

State legislation (*Environmental Planning and Assessment Act 1979*) requires that actions judged to significantly impact upon threatened species, populations or ecological communities, or their habitats listed under the *Biodiversity Conservation Act (2016)* trigger the preparation of a Species Impact Statement. This assessment report applies considerations under Section 5A of the EPA Act (1979) and determines whether a significant impact is likely to occur and, correspondingly, whether a Species Impact Statement is required.

The proposal will modify the structure of approximately 0.42ha of Coastal Narrabeen Moist Forest (CNMF) which provides known or potential habitat for twenty-two threatened fauna species; despite this 1.67ha of habitat will be retained within the study area with a further 2500+ha remaining connected to the study area. The impact to habitats for threatened species, endangered populations & endangered ecological communities from the locality is not considered to be significant.

Targeted surveys for listed *Rhodamnia rubescens* were undertaken on the 8th April 2021. A location map and impact assessment been provided. No specimens of this threatened species will be removed for the proposal.

The building footprint will occur within an area that contains some introduced environmental weed species including Fishbone Fern (*Nephrolepis cordifolia*), Cassia (*Senna pendula* var. *glabrata*), Small-leaved Privet (*Ligustrum sinense*) and Lantana (*Lantana camara*) amongst Coastal Narrabeen Moist Forest.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

The proposed development is fully compliant with the NOW requirements. No asset protection zones (APZ) associated with the development is within the 1st order watercourse setbacks. The watercourse will not be impacted upon as a result of the proposed development.

The position of the dwelling and associated APZ has been specifically sited to avoid impacts upon Lowland Rainforest Endangered Ecological Community that has been mapped by Council and field validated during surveys. All wastewater disposal will occur within an existing cleared area under the electricity transmission easement.

Section 4.2 of the Arboricultural Impact Assessment Report prepared by Stephen Mackay dated November 2020 identifies exactly what tagged/numbered trees will require removal to achieve the APZ requirements to survey level of detail.

To mitigate the loss of habitat as a result of the proposed clearing works the IBVMP has been prepared specifically for vegetation to be retained within the subject property. Management of the vegetation under the VMP area via targeted weed management control will promote the establishment and regeneration of native flora species and enhance flora & fauna habitats within the subject property. It will also guide the selective retention of canopy trees to be retained as part of the APZ in compliance with the approved bushfire report and *Planning for Bushfire Protection 2019*. It will ensure the protection and retention of all *Rhodamnia rubescens* trees with tree protection fencing in accordance with *AS4970 Protection of Trees on Development Sites*. The delineation of the APZ boundaries will be permanently delineated via metal markers installed by a registered surveyor. Council can ensure compliance by requiring the production of the plan prior to the issue of the Construction Certificate. It can be implemented during the construction process and signed off by Council prior to the release of the Occupation Certificate.

The major conclusion arising from this Flora and Fauna Impact Assessment is that the proposed works are unlikely to result in a significant impact on any listed species or communities providing that the applicant actively implements the recommendations from this assessment. Therefore, in accordance with the EPA Act (1979), BC Act (2016) and FM Act (1994), a Biodiversity development assessment report (BDAR) is not required.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

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When conducting flora and fauna surveys, consultants are required to possess licences to ensure that works are completed in an appropriate manner. Fraser Ecological Consulting is licensed under s.132c and s.91 of the NSW National Parks and Wildlife Act (1974) from the NSW Office of Environment & Heritage. This allows Alex Fraser to undertake scientific investigations, collect specimens of protected flora and fauna across NSW in service and non-service areas and undertake bushland restoration works in EECs. This licence requires that all survey results are reported to the NSW NPWS for inclusion into the Atlas of NSW Wildlife.

Alex Fraser also holds an Animal Research Authority under the Animal Research Act (1995), as administered by NSW Agriculture. Surveys are approved and supervised by an Animal Care and Ethics Committee, applying the standards as detailed in the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (NHMRC 1997).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Contents

1. Introduction	1-7
1.1. Introduction	1-7
1.1 Terminology	1-7
1.2 Site characteristics	1-9
1.3 Soils and Geology	1-12
1.4 Climate	1-14
1.5 Proposed development	1-15
2. Statutory Framework	2-18
2.1. Commonwealth	2-18
2.2. State	2-19
3. Methodology	3-23
3.1 Existing records	3-23
3.2. Literature review	3-23
3.3 Desktop survey	3-23
3.4 Field Surveys	3-24
3.4.1 Vegetation surveys	3-25
3.4.2 Fauna surveys	3-28
3.5 Assessment of conservation value	3-1
3.6 Significant Assessments	3-1
4. Results	4-2
4.1. Vegetation mapping	4-2
4.2 Vegetation strata and species recorded on-site	4-5
4.3 Species of animal	4-8
4.4 Central Coast Council Rainforest Policy June 2020 (CCC083)	4-19
4.5 State Environmental Planning Policy (Koala Habitat Protection) 2019	4-24
4.6 Threatened biodiversity	4-25
4.7 Threatened ecological communities	4-26
4.8 Endangered populations	4-26
4.9 Threatened Flora	4-26
4.10 Threatened fauna	4-30
4.11 Migratory species	4-30
5. Assessment of Ecological Impacts	5-31
6. Significance Assessments	6-35
7. Environmental Protection Measures	7-36
8. Conclusion	8-39
9. References	9-40

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX A: FLORA SPECIES RECORDED ON-SITE	45
APPENDIX B: FAUNA SPECIES RECORDED ON-SITE.....	57
APPENDIX C: THREATENED FLORA PREVIOUSLY RECORDED WITHIN 10KM OF THE SITE	63
APPENDIX D: THREATENED FAUNA PREVIOUSLY RECORDED WITHIN 10KM OF THE SITE	64
APPENDIX E: EPBC PROTECTED MATTERS SEARCH TOOL DATABASE RESULTS...	65
APPENDIX F: ASSESSMENTS OF SIGNIFICANCE	66
APPENDIX G: BOSET REPORT.....	10-90
APPENDIX H: RELEVANT QUALIFICATIONS & EXPERIENCE OF THE AUTHOR..	10-91

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

1. Introduction

1.1. Introduction

Fraser Ecological Consulting has been contracted by the property owner to prepare an impact assessment of the proposed residential development on the terrestrial ecology located at 129 (Lot 14 DP 2480) Alan Street Niagara Park in the Central Coast Council local government area.

This terrestrial ecological assessment:

- Identifies key flora and fauna habitats within the subject site;
- Reviews literature and databases relevant to the subject site;
- Describes the methodology and results of the survey;
- Addresses potential impacts on flora and fauna and their habitats resulting from the proposed development;
- Proposes appropriate mitigation measures; and
- Provides an assessment of the likelihood of significant impacts on threatened species and populations, and endangered ecological communities, according to Section 5A of the NSW EPA Act, BC ACT, Commonwealth EPBC Act. This was done to determine the need for an SIS or an application under the EPBC Act.

Activities specifically related to the preparation of this report included:

- Identification of weed and indigenous native species recorded from the subject site
- Assessment of impacts of the proposed development
- Outlining the applicant's responsibilities including weed control and environmental safeguards before, during and post construction.

1.1 Terminology

This report uses the following terminology:

- Study area is defined as the red boundary on the aerial photograph see (Figure 1-1)
- Subject site defined as the area subject to the removal/modification of vegetation for the proposed development (Figure 1-1);
- EIS abbreviates Environmental Impact Statement
- APZ abbreviates Asset Protection Zone;

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

- BC Act abbreviates the Biodiversity Conservation Act 2016;
- EPBC Act abbreviates the Environment Protection and Biodiversity Conservation Act 1999;
- EP&A Act abbreviates the Environmental Planning and Assessment Act 1979;
- OEH abbreviates Office of Environment & Heritage (NSW);
- LGA abbreviates Local Government Area;
- Threatened species refers to those flora and fauna species listed as vulnerable, endangered or critically endangered under the BC Act or EPBC Act
- NOW abbreviates NSW Office of Water;
- EEC abbreviates Endangered Ecological Community;
- TEC abbreviates Threatened Ecological Community; and
- BOSET Report abbreviates Biodiversity Offset Scheme (BOS) Entry Threshold Map

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

1.2 Site characteristics

The study site is located approximately 8km north of the Gosford City centre CBD situated in the Central Coast Council LGA (Figure 1 and 2).

The site is identified as Lot 14 in DP 2480, 129 Alan Street, Niagara Park and has a rectangular shape of approximately 2 ha. The site is bound to the north by Ilbery Road (unformed), to the east and west by undeveloped woodland and to the south by residential allotments (Figure 3).

Two overhead power cable easements are noted aligned north-south through the eastern half of the site.

The planning and cadastral details of the study area are provided in (Table 1). The property is bordered by unformed Ilbery Road to the north, rural residential property to the west, south by residential and to the east by Bushland/Rural Residential.

Table 1: Site details

Location	No 129 (Lot 14 DP 2480) Alan Street, Niagara Park NSW
Property Size	Approximately 2.096ha
Study area	Approximately 2.096ha
Impact Area (subject site)	2668 sqm of Coastal Narrabeen Moist Forest proposed for removal (dwelling construction) or modification (APZ) 1532 sqm of the existing cleared electricity transmission easement forms part of the APZ and wastewater disposal area A total of 4200 sqm (0.42ha) is to be impacted
Topographic Map	Gosford 1:25000
LGA	Central Coast
Elevation	34-57m AHD
Aspect	Northerly
Vegetation (Subject site)	Map unit E6ai Coastal Narrabeen Moist Forest & XS Disturbed Regrowth

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

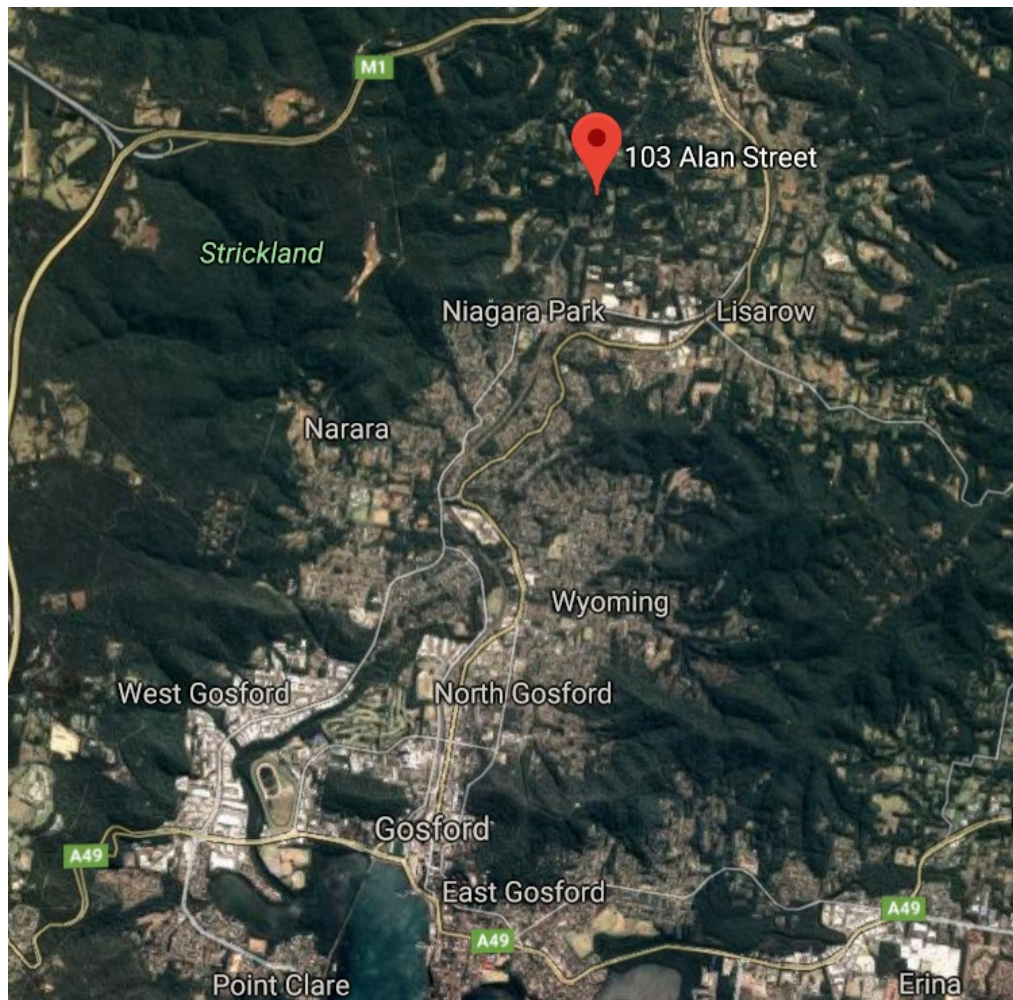


Figure 1: Site in context to the LGA (Aerial Source: Google Maps.com)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

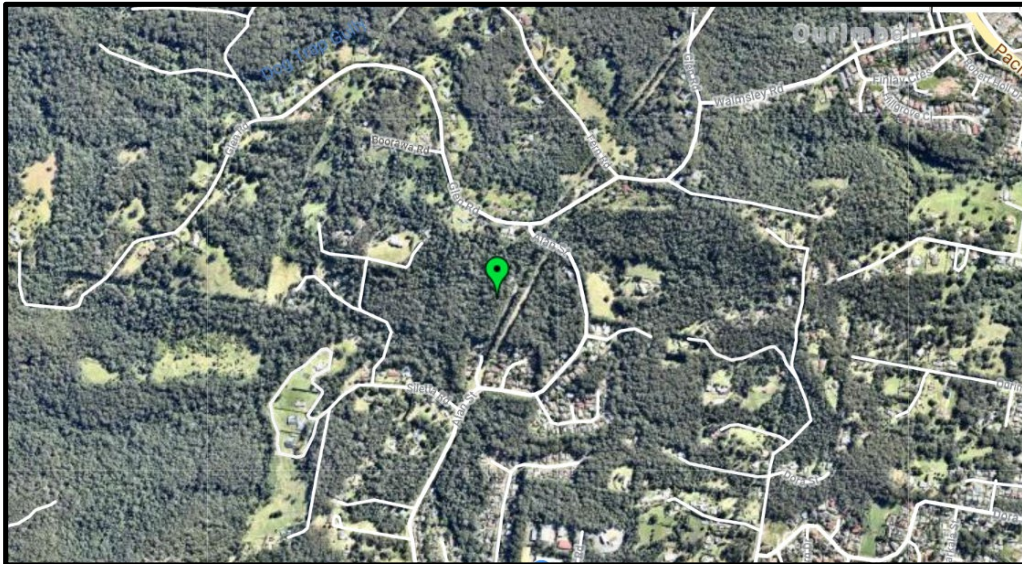


Figure 2: Map of site in context of the local catchment (Aerial Source: Near Map.com)



Figure 3: Aerial map of property boundaries shown in red (Source: Near Map.com)

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***1.3 Soils and Geology**

The site is located within the 'Erina Soils Landscape' No. 9131er (Figure 4 & 5) as defined by Hazerton and Tile (1990). The soil landscape influences the types of vegetation historically located in the area.

It occurs on the rolling hills and footslopes of the Erina Hills. It includes Gosford, Erina and parts of Kincumber, Lisarow, Copacabana, Terrigal, Ourimbah, Killarney Vale, Berkeley Vale and Foresters Beach. Also occurs on the footslopes of Wyong and Jiliby Creeks and as broad (>300 m) crests and ridges in Ourimbah and Wyong State Forests.

Typical topography

Undulating to rolling rises and low hills with local relief <60 m and slopes <25%. Ridges and crests are moderately broad (100–300 m) and valleys moderately narrow (300–800 m). Slopes are gently to moderately inclined. Rock outcrop is rarely present. This landscape also occurs as footslopes and gently inclined crests and ridges closely associated with the steep hills of the Watagan (wn) soil landscape.

Typical geology

Terrigal Formation of the Narrabeen Group—lithic and quartz sandstone and siltstone, minor sedimentary breccia, claystone and conglomerate. Some sandstones are highly weathered and friable.

Typical soils

Moderately deep to deep (100–>200 cm) Yellow Podzolic Soils (Dy2.11, Dy3.11, Dy5.11) on fine-grained bedrock with Yellow Podzolic Soils (Dy3.21) in poorly drained areas; moderately deep to deep (50–>150 cm) Yellow Podzolic Soils (Dy2.21, Dy3.21, Dy2.51) and Yellow Earths (Gn2.21) on coarse-grained parent material with Yellow Earths (Gn2.44, Gn2.21, Gn2.24) on footslopes and deep (>300 cm) Structured Loams (Um6.11) and Yellow Earths (Gn2.24) along drainage lines.

Typical vegetation

Extensively cleared tall open-forest with open-heath in exposed coastal locations. Common species of the open forest include Blackbutt (*Eucalyptus pilularis*), Forest Oak (*Allocasuarina torulosa*), Turpentine (*Syncarpia glomulifera*), Spotted Gum (*E. maculata*), Smooth-barked Apple (*Angophora costata*), Grey Ironbark (*E. paniculata*) and Sydney Blue Gum (*E. saligna*). Swamp Mahogany (*E. robusta*) and Swamp Oak (*Casuarina glauca*) occur in poorly drained areas such as those around the edge of Brisbane Water.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

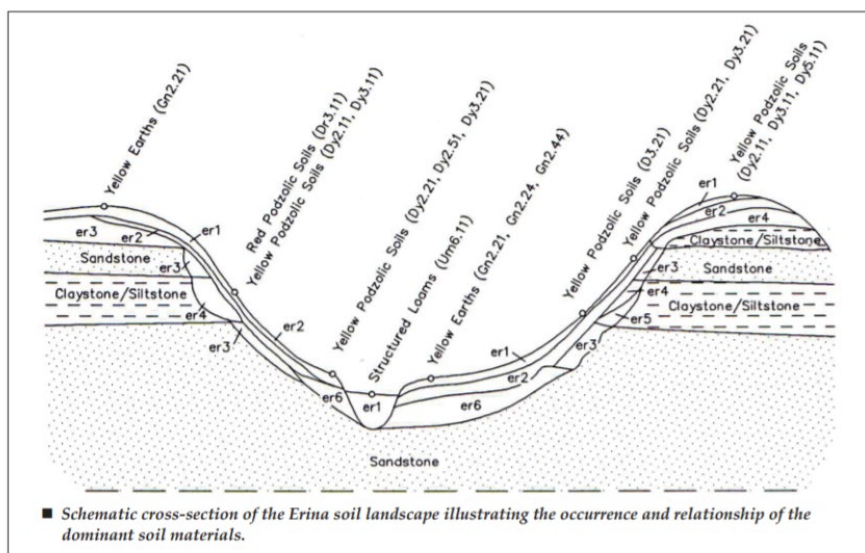


Figure 4: Erina soil landscape of the locality as depicted by Hazerton and Tile (1990)

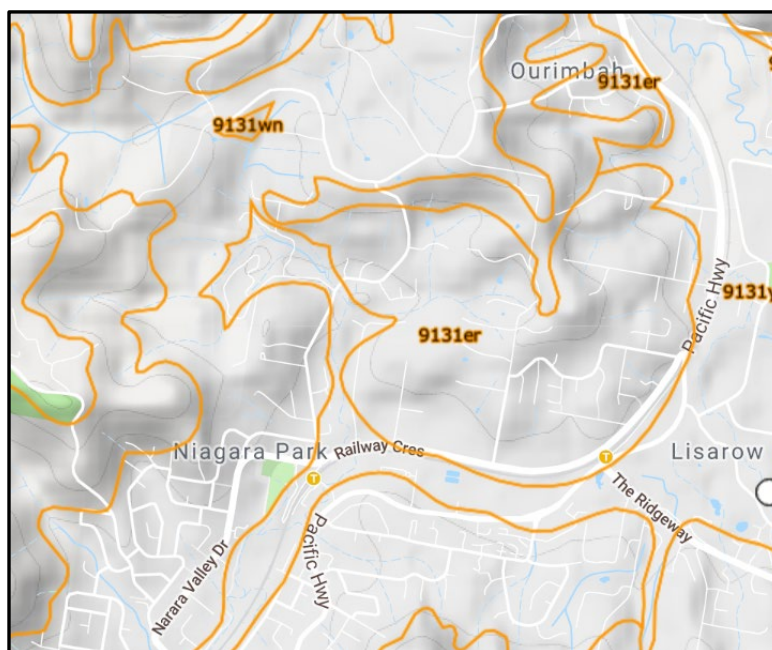


Figure 5: Soil landscape mapping of the locality (Source: www.espade.com)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

1.4 Climate

The climate of the area is temperate and influenced by coastal sea breezes with mild to hot summers and cool to cold winters. The Gosford station data for 2019 is provided below in Figure 6 (Source: Bureau of Meteorology 2019).

Highest Daily	18.2	84.6	23.0	40.6	6.2	61.0	6.6	14.8	27.0	56.8	17.6	25.4
Monthly Total	26.6	163.2	102.8	73.0	17.8	213.6	12.0	17.6	58.2	258.0		

Figure 6: The Gosford weather station monthly rainfall statistics 2018 (mm)

(Source: www.bom.gov.au)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

1.5 Proposed development

The proposed development is to construct a single dwelling (plans provided on following pages).

Access to the site is via an easement over No 107 (Lot 16 DP 2480) which will include update of the existing gravel driveway which is already in place.

Surface levels within the northern part of the site, within the area of the proposed residence and effluent application area, generally fall to the south-west from approximately RL 70 m AHD to approximately RL 60 m AHD with a surface gradient ranging between 10% to 15%°.

It is understood that the client preferred wastewater application area is within the centrally located overhead power cable easement whilst the proposed residence is to be located within the west of the easement (refer to On-site Effluent Disposal Assessment prepared by Douglas Partners dated 6th November 2020).

The bushfire report by Building Code and Bushfire Hazard Solutions dated 9th November 2020 provided the following APZ compliance specifications in accordance with AS3959-2009 and PBP 2006 for a BAL 40 construction:

	North	East / South	Southwest	West
Vegetation Structure	Forest	Forest	Forest	Rainforest
Slope	>10 degrees up	10 - 15 degrees down	10 - 15 degrees down	15 - 20 degrees down
Asset Protection Zone	14 metres	36 metres	36 metres	23 metres
Significant Environmental Features	Unformed Ilbery Road reserve	Electrical transmission lines / Neighbouring private allotments	Existing watercourse	Existing watercourse
Threatened Species	Not Known By Others	Not Known By Others	Not Known By Others	Not Known By Others
Aboriginal Relics	Not Known By Others	Not Known By Others	Not Known By Others	Not Known By Others
Bushfire Attack Level	BAL 40*	BAL 40	BAL 40	BAL 40
Required Construction Level	BAL 40	BAL 40	BAL 40	BAL 40

The Impact area assumed for this proposal is 4200 square metres (0.42ha) for the proposed residence, driveway, APZ and wastewater disposal area. The transmission easement that occurs within the APZ and wastewater disposal area is already cleared and routinely slashed by the electricity provider that maintains the power easement.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

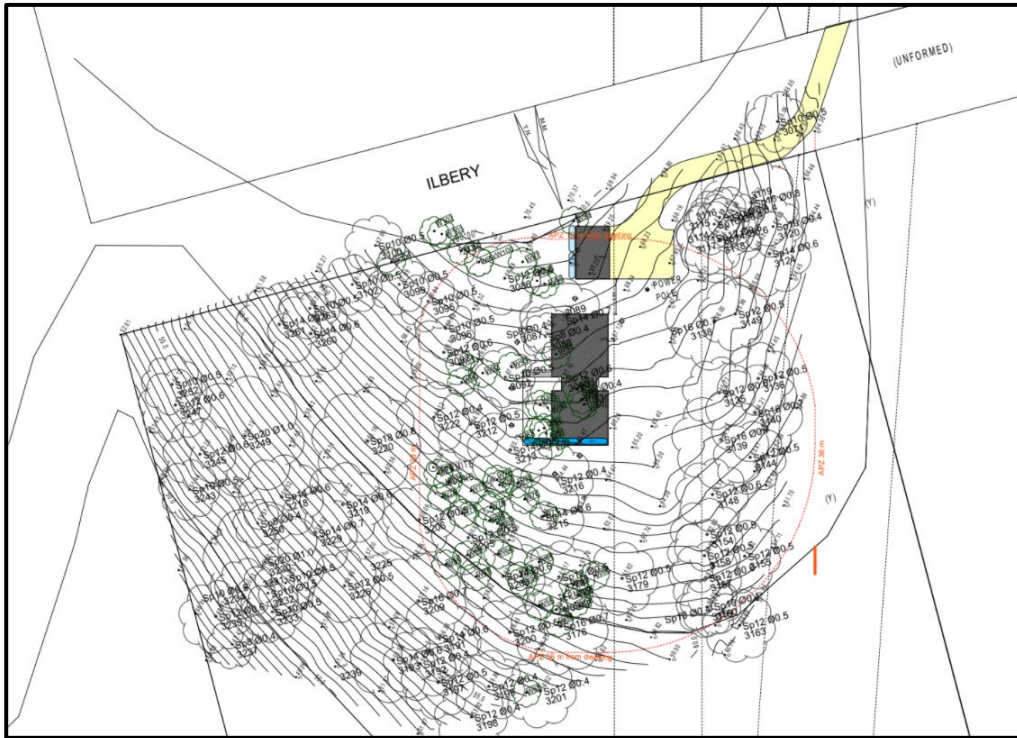


Figure 7: Proposed plans showing tree locations (Source: Apex Intelligent Design) Note: Red line shows the extent of the proposed APZ

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

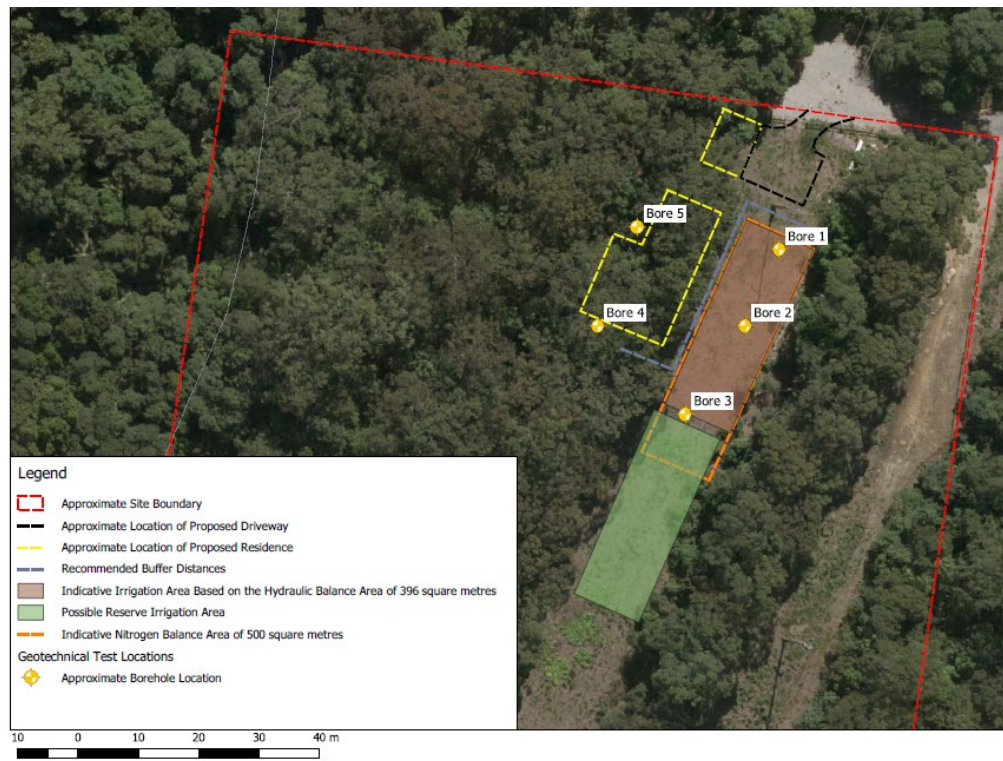


Figure 8: ETA wastewater disposal option within the transmission easement (Source: Douglas Partners 2020)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

2. Statutory Framework

The criteria used to assess likely impacts upon threatened species, populations or endangered ecological communities vary between Commonwealth and State jurisdictions. The following describes the legislative requirements for each level.

2.1. Commonwealth

The *Environment Protection and Biodiversity Conservation Act (1999)* (EPBC Act) is a nationally applicable Act that is administered by the Department of the Environment, Water, Heritage and the Arts. This Act requires approval for actions that are likely to have a significant impact on matters of National Environmental Significance (NES).

There are seven matters of NES that are triggers for Commonwealth assessment and approval. These are:

1. World Heritage properties;
2. National Heritage places;
3. Ramsar wetlands of international importance;
4. Nationally threatened species and communities;
5. Migratory species;
6. Nuclear actions; and
7. Commonwealth marine environment.

Threatened species and ecological communities are listed under Part 13, Division 1, Subdivision A of the EPBC Act 1999. Migratory species are listed under part 13, Division2, Subdivision A of the Act.

The Department of the Environment and Water Resources identifies the following:

“Under the EPBC Act a person must not take an action that has, will have or is likely to have significant impact on any of these matter of NES without approval from the Commonwealth Environment Minister. There are penalties for taking such an action without approval.

In general, an action that may need approval under the Act will involve some physical interaction with the environment, such as clearing native vegetation, building a new road, discharging pollutants into the environment, or offshore seismic survey.

If, following a referral, it is determined that that an action is likely to have a significant impact, and approval is therefore required, the action is called a 'controlled action'. The proposal will then undergo a formal assessment and approval process, and cannot proceed unless approval is granted.

If it is determined that an action is not likely to have a significant impact, then the action is not a controlled action. Approval under the EPBC Act is not required and the action may proceed, subject to obtaining any other necessary permits or approvals.”

2-18

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

2.2. State

Local Government Act 1993

The Act sets out the responsibilities of Councils including public land management, activity approvals, corporate and operation planning, orders and enforcement powers, setting rates and charges (LGSA 2009). Section 7(e) of the Act requires Councils, Councillors and Council employees to have regard to the principles of ecologically sustainable development in carrying out their responsibilities. The Charter (Section 8) also requires Councils to properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development. Under this Act, Councils are required to have Plans of Management for all Council owned land.

Water Management Act 2000

Under Part 3 (Approvals), Division 1, Section 91 (2), a controlled activity approval confers a rights on its holder to carry out a specified controlled activity at a specified location in, on or under waterfront land. Waterfont land is defined as:

- a) the bed of any river or lake, and any land lying between the bed of the river or lake and in a line drawn parallel to, and the prescribed distance inland of:
 - in the case of non-tidal waters, the highest bank or shore above the river or lake, and
 - in the case of tidal waters, the mean high water mark of the river or lake, and
- b) if the regulations so provide, the bed of the coastal waters of the State, and any land lying between the shoreline of the coastal waters and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the coastal waters, where the prescribed distance is 40 metres of (if the regulations prescribe a lesser distance, either generally or in relation to a particular location or class of locations) that lesser distance.

Under the WM Act, a controlled activity is defined as:

- a) the erection of a building or the carrying out of work (within the meaning of the EPA&A Act), or
- b) the removal of material (whither or not extractive material) or vegetation from land, whether by way of excavation or other wise, or
- c) the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

- d) the carrying out of any other activity that affects the quantity of or flow of water in a waters sources.

A controlled activity approval will not be granted unless the Minister is satisfied that adequate arrangements are in force to ensure that minimal harm will be done to any waterfront land as a consequence of carrying out the proposed controlled activity.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***Biodiversity Conservation Act 2016**

The BC Act sets out the biodiversity assessment requirement for any development or activity that requires assessment or approval under the EP&A Act. The main elements of the Act:

- New Biodiversity Offsets Scheme (BOS)
- New assessment methodology - Biodiversity Assessment Method (BAM)
- Establishment of a Biodiversity Conservation Fund (collects and directs spending of offset monies throughout the state)
- Expansion of Biodiversity Certification for large rezoning proposal and masterplan 'green field' type developments (streamlined assessment at strategic planning stage)

It also consolidates:

- existing wildlife licensing requirements
- nominations of areas of outstanding biodiversity values
- updated criteria for listing threatened species and communities
- biodiversity offsets scheme
- Biocertification (large scale master planning development)
- Biodiversity stewardship agreements (where offset credits are created)

Note: The BOS area clearing threshold in this Act is also applied within the new SEPP and LLS Act. If the amount of native vegetation clearing application is below the threshold it is optional if the applicant wants to submit a Biodiversity Assessment Report (BAR). In relation to Council DAs assessments, Part 4 local development requires application of the BAM to determine whether an offset obligation if it either:

- 1) Exceeds the BOS threshold (also referred to as 'area trigger')
- 2) Located in an area of 'Sensitive Biodiversity Values'

The Act sets out the Biodiversity Assessment Methodology (BAM) which directs the methodology to be undertaken by accredited assessors (consultants) to produce a Biodiversity Assessment Report (BAR) submitted with a development application. The BAM sets out a detailed, complex and quantitative assessment methodology for producing the assessment report (BAR).

The methodology sets a framework for decision makers (Council assessment officers) to determine whether or not the proposal will have '**Serious and Irreversible Impact (SII)**' for certain threatened species and communities (referred to as 'candidate entities').

For local developments, the new regulations make the new Offset Scheme **mandatory** for applications assessed under part of the Act that exceed the BOS thresholds. Under the Act, and offsets calculator will be used by accredited and appropriately trained assessors. Please refer to the BOSET report in

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Appendix G. It concludes that a BDAR is not required. The proposal is under the clearing threshold and not mapped under the Biodiversity Values Map.

Please note: The BOSET online area calculation is coarse however we have equated the impact area to be exact same extent as the development proposal (0.42ha).

This report complies with Section 7.3 of the BC Act which refers to requirement of a test of significance for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats (Appendix F).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

3. Methodology

This chapter presents the methods used in conducting the ecological survey and assessment of the conservation importance of the study area.

3.1 Existing records

Records of threatened flora and fauna species and populations, listed in the schedule of the BC and EPBC Acts, were obtained and reviewed to document known locations threatened and regionally significant fauna within the locality.

The source of these records was the NSW DPIE (BIONET) and the Department of Environment, Water, Heritage and the Arts online Protected Matters Search Tool database (Appendix E) for an area covering approximately 10km radius of the subject site (searches updated 8th April 2021).

3.2. Literature review

A literature review was carried out. Of particular importance were those containing records of species, populations and communities of conservation significance. This background information informed the impact assessment.

3.3 Desktop survey

A desktop survey was performed to ensure all relevant documentation is considered when preparing the plan. Documents and other information resources utilised include:

- Aerial photographs (Google Maps, NearMaps & DPI Land Information)
- Soil Landscapes of the Sydney 1:100,000 Sheet (Hazerton and Tile 1990)
- E-spade Online Soil Mapping Tool (NSW DPI)
- Topographic maps & Aerial photographs
- Vegetation Mapping of the area (Bell 2004), The natural vegetation of the Gosford Local Government Area, Central Coast, New South Wales Unpublished report to Gosford City Council, East Coast Flora Survey and the Lower Hunter Central Coast Extant Vegetation Community Map (Lower Hunter and Central Coast Regional Environmental Management Strategy 2003).
- Flora and fauna assessment prepared by Enviro Ecology (2015) over No 107 Alan Street, Niagara Park NSW
- Flora and fauna assessment prepared by Enviro Ecology (2017) over No 101 Alan Street, Niagara Park NSW

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

- Flora and fauna assessment prepared over No 101 Alan Street, Niagara Park by Peak Land Management (October 2013)
- Ecological Assessment Addendum for 101 Alan Road Niagara Park prepared by Peak Land Management September 2016
- Ecological Assessment 101 Alan Road Niagara Park prepared by Peak Land Management October 2013
- On-site Effluent Disposal Assessment prepared by Douglas Partners dated November 2020
- Bushfire Assessment Report by Building Code and Bushfire Hazard Solutions dated November 2020
- Arboricultural Impact Assessment Report prepared by Stephen Mackay dated November 2020

3.4 Field Surveys

A visual inspection was undertaken on the 18th April -30th April 2019, 10th - 12th November 2020, Aug-Oct 2020, 17th-18th March 2021, 25th - 27th March 2021, 8th April 2021 & on the 27th of July 2021 to identify and evaluate the current vegetation community occurring on the subject site, undertake targeted surveys, identify any threatened flora and fauna species and assess the current nature and extent of fauna habitats. The main focus of the site survey was the building footprint, wastewater treatment area and the asset protection zone.

Previous surveys were undertaken on the site by Enviro Ecology on the 31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th and 13th of August 2017 as part of the original Flora and Fauna Assessments undertaken on the site and immediate vicinity. Some data obtained from monitoring works were incorporated into this report.

Additional surveys were undertaken in March, April & July 2021 to address Council's recent round of comments. Therefore, a very comprehensive survey effort has been contributed towards the findings of this report.

This assessment included the following survey effort:

- Four quadrats & a random meander survey recording all species of plant encountered within the study area
- 3 BAM plots
- Searching for specialised fauna habitat resources such as roosting/nesting hollows, foraging resources e.g. feed trees
- Targeted surveys for flora and fauna
- Opportunistic fauna surveys during the flora survey

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***3.4.1 Vegetation surveys**

Features of the vegetation including floristics, structure, extent, type and projective foliage cover, presence of weed species and other significant features were noted and recorded). All flora recorded were predominantly identified to family, genus and species level with confirmation according to *Field Guide to the Native Plants of Sydney* (Robinson, 2003), *Weeds of the south-east: an identification guide for Australia* (Richardson, 2006), *Tree & Shrubs in Rainforest of New South Wales and Southern QLD* (Williams et al 1984), *Native Plants of the Sydney District* (Fairly and Moore 2000) and the Botanic Gardens Trust (2009) *PlantNET* flora database.

A combination of quadrat and traverse flora surveys was used to assess native floral diversity, dominant species, condition of vegetation communities and search for Threatened species within the study area. The flora survey effort was determined to exceed the suggested minimum survey requirements of the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities (Working Draft) (Department of Environment and Conservation 2004).

Quadrat surveys

Quadrat surveys were completed to provide a quantitative examination of species abundance in each vegetation community. Quadrat surveys are also likely to detect inconspicuous species that may be missed by random meander or transect surveys (Department of Environment and Conservation 2004).

Four vegetation quadrats were placed randomly within the vegetation within the study area in a south-northerly direction to sample vegetation (refer to Figure 13). Vegetation quadrats were 400 m² (20 x 20 m) within which all floral species were identified and assigned a vegetative cover abundance rating based on a modified Braun-Blanquet scale.

BAM Plot

As per the Central Coast Flora and Fauna Survey Guidelines (2019) plot-based floristic vegetation surveys were conducted, in accordance with s.5.2.1.9 of the BAM, by Alex Fraser on the 8/04/21 & 27th of July 2021.

Three 20 m x 20 m quadrat plot was sampled for the presence of flora species. **The plot for the vegetation zone was undertaken within the proposed building footprint. Two additional plots were placed to identify the location of the Rainforest vegetation within and adjacent to the subject site.**

The plots were carefully examined to identify all flora species present. Searches continued until it was confident that all flora species within a plot were detected. Data collected for each species included:

- Stratum and layers in which each species occurs
- Growth form for each species
- Scientific and common name for each species
- Percentage foliage cover (PFC) across the plot, of each species rooted in or overhanging the plot

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

- Abundance rating for each species

***Rhodamnia rubescens* surveys**

Additional targeted surveys were undertaken for *Rhodamnia rubescens* which was overlooked due to its cryptic nature and detected by Council officers. A targeted surveys across the entire subject was subsequently undertaken on the 17th and 18th March 2021. The location of the identified individual were mapped using hand held GPS and field verified in relation to their proximity tagged trees and the survey plan.

The tracking log data of surveyed areas are shown in Figure 11 (below).

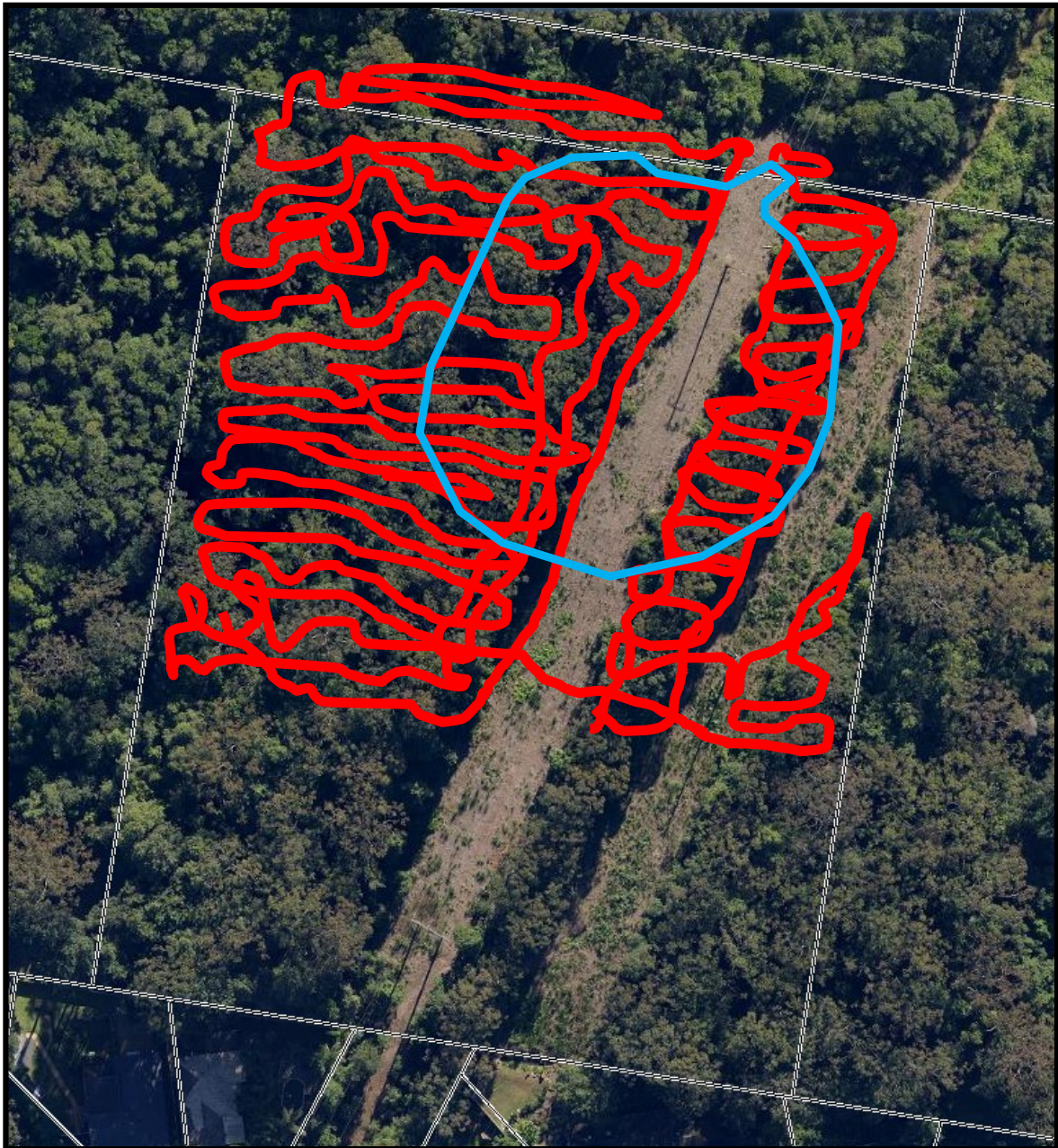


Figure 11: Track logs of random meander searches for threatened *Rhodamnia rubescens* (blue line indicates extent of APZ)

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***3.4.2 Fauna surveys**

It is not always possible to determine with certainty all the fauna that utilise habitats in the subject site. This is because of the likely seasonal occurrences of some fauna species, the occasional occurrence of vagrant species, and because some species are difficult to detect because of their timid or cryptic behaviour. Therefore, fauna investigations comprised an assessment of fauna habitats present on site and an indication of their potential to support native wildlife populations and, in particular, threatened species.

In addition to habitat assessment, targeted fauna surveys that complied with NSW Office of Environment & Heritage Survey requirements (draft 2004) were employed to ascertain impacts of the proposed development on threatened fauna. These requirements can be viewed at:

<http://www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf>

<http://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf>

We have also undertaken surveys in accordance with the **Central Coast Flora and Fauna Survey Guidelines (2019)** as per Figure 12 (below). The area of impact is below 0.5ha, and therefore, the survey effort undertaken as part of this assessment complies with the guidelines.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

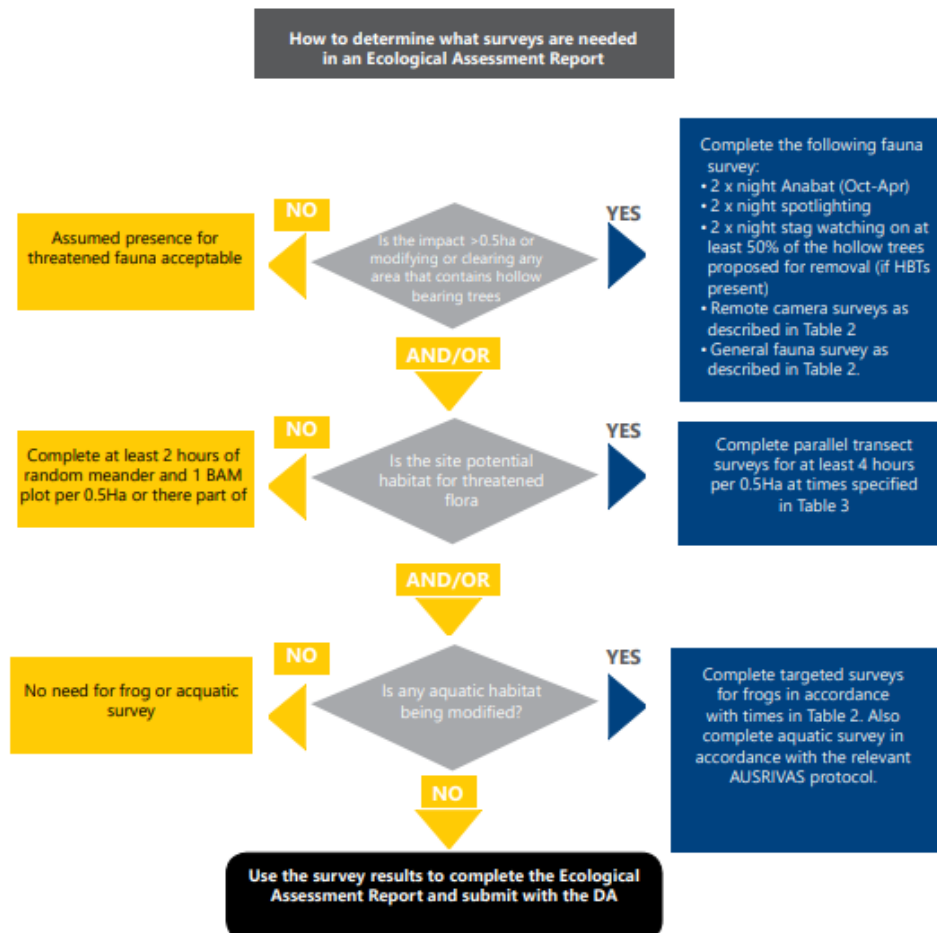


Figure 12: Page 26 of the Central Coast Flora and Fauna Survey Guidelines (2019)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

In addition to targeted fauna surveys undertaken between the 26-30th April 2019, this assessment considered previous observations made from Flora and Fauna Assessments previously undertaken by Enviro Ecology (dated 2017). The total survey effort and their compliance with the Central Coast Survey Guidelines for the current assessment are provided in Table 2 (below).

Table 2: Fauna survey effort

Technique employed	Species targeted	2017 surveys Enviro Ecology – for DAS2743/2017 Surveyors: John Whyte and Dr. Gilbert Whyte	2019 surveys Fraser Ecological - for current DA Surveyors: Alex Fraser and Elizabeth Macdonald	2021 surveys to address Council's letter dated 8 th March 2021	Central Coast minimum survey requirements for impact area less than 0.5ha
Call playback	Large Forest Owls, Gliders and Koala	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	26-30 th April 2019 (Fraser Ecological) for current DA 4 consecutive nights	Not undertaken Previous survey effort sufficient	Not required
Spotlighting	All nocturnal fauna species including amphibians	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	26-30 th April 2019 (Fraser Ecological) for current DA - 4 consecutive nights	25 th – 27 th March 2021	Minimum 2 nights spotlighting required for frog and stag watching surveys (see below)
Diurnal survey methods	Birds	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	26-30 th April 2019 4 consecutive days	Not undertaken Previous survey effort sufficient	Not required
Elliott A trapping	Small ground dwelling animals – also target threatened Squirrel Glider &	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	Not undertaken	Not undertaken Previous survey effort sufficient and not required	Not required

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Technique employed	Species targeted	2017 surveys Enviro Ecology – for DA52743/2017 Surveyors: John Whyte and Dr. Gilbert Whyte	2019 surveys Fraser Ecological - for current DA Surveyors: Alex Fraser and Elizabeth Macdonald	2021 surveys to address Council's letter dated 8 th March 2021	Central Coast minimum survey requirements for impact area less than 0.5ha
	Eastern Pygmy Possum.			under Council's guidelines	
Elliott B trapping	Arboreal mammals - target threatened Squirrel Glider & Eastern Pygmy Possum.	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	Not undertaken	Not undertaken Previous survey effort sufficient and not required under Council's guidelines	Not required
Song-meter recording device	Variety of fauna vocalisations	Not undertaken	26-30 th April 2019 4 consecutive nights	Not undertaken Previous survey effort sufficient	Not required
Anabat	Microchiropteran bats	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	26-30 th April 2019 4 consecutive nights	Not undertaken Previous survey effort sufficient	At least 2 hours for 2 consecutive nights
Targeted frog survey	Frogs	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017	26 th - 30 th April 2019 Over 5 hours	25 th – 27 th March 2021 Over 3 hours	One hour over 2 nights
General habitat searches	All fauna	31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th &	April 2019 Over 5 hours	March 2021 Over 2 hours	Minimum 2hrs

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Technique employed	Species targeted	2017 surveys Enviro Ecology – for DA52743/2017 Surveyors: John Whyte and Dr. Gilbert Whyte	2019 surveys Fraser Ecological - for current DA Surveyors: Alex Fraser and Elizabeth Macdonald	2021 surveys to address Council's letter dated 8 th March 2021	Central Coast minimum survey requirements for impact area less than 0.5ha
(parallel transects)		13 th August 2017 Over 30 hours			
Stagwatching	All fauna that potential use hollows	11 trees were stag-watched 21 st -26 th July	26 th - 30 th April 2019	25 th – 27 th March 2021 in conjunction with spotlighting 3 consecutive nights	50% of HBTs proposed for removal for 2 nights (at dusk)
Remote camera	Arboreal fauna	31 st of May, 2 nd , 5 th , 9 th , 21-26 th of July, 7 th , 12 th & 13 th August 2017 Feb – June 2018 (as part of monitoring works) Jan 2018 (as part of monitoring works) 4 terrestrial cameras	Aug – Oct 2020 4 terrestrial cameras (as part of monitoring works)	Significant HBTs were not present that justified camera trapping for another 14 nights in the 2021 report update. A detailed visual inspection was provided for the hollow-bearing stag (refer to Section 4.3.6) and stag watching & was considered sufficient to detect the potential presence of any fauna.	One arboreal mounted (>3m) and one terrestrial camera (0.5-1m) in place for at least 14 consecutive nights

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Technique employed	Species targeted	2017 surveys Enviro Ecology – for DA52743/2017 Surveyors: John Whyte and Dr. Gilbert Whyte	2019 surveys Fraser Ecological - for current DA Surveyors: Alex and Elizabeth Macdonald	2021 surveys to address Council's letter dated 8 th March 2021	Central Coast minimum survey requirements for impact area less than 0.5ha

The fauna habitat assessment criteria included:

Mammals: extent of ground cover, shrub layer and tree canopy, hollow-bearing trees, substrate type (for burrowing etc), evidence such as droppings, diggings, footprints, scratches on trees, nests, burrow paths and runways.

Birds: structural; features such as the extent and nature of the canopy, understorey and ground strata and flowering character

Reptiles and amphibians: cover shelter, suitable substrate, basking and breeding site availability, reptiles and frogs sought in likely sheltering places

Invertebrates: logs and other debris, leaf and bark accumulations around base of trees, grass clumps, loose soil for burrowing

Wildlife corridor values: Importance of the creek systems and riparian vegetation as movement corridors for fauna, especially birds, aquatic fauna, mammals (e.g. microchiropteran bats) & amphibians

The location of targeted surveys is provided within Figure 13.

Targeted surveys

A full description of these survey methods are described as follows:

Call playback (Large Forest Owls)

The focus of the call playback survey was on Barking Owl, Masked Owl, Sooty Owl and Powerful Owl. At various locations of the site on different nights, a five minute listening period was conducted in order to detect 'voluntary' calling of resident birds. This was followed by a call playback session consisting of five minutes of intermittent calls for each of the three targeted species, with listening periods interspersed between calls. Calls of the Powerful Owl were played first to accommodate their

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

slower response time (T Soderquist pers. comm.), followed by the Masked Owl, Sooty Owl and finally the Barking Owl. The call playback sessions were then followed by a 20-minute period of listening during which spotlighting was conducted on a 1 ha circular plot (i.e. approx. 57 m radius). Therefore, between 40 and 50 minutes was spent at each site.

Other information recorded, particularly for the target species included: species detected, number of individuals, response intensity, initial distance and direction of responses, and also additional vertebrates responding or otherwise detected.

Spotlighting (All nocturnal fauna species)

Spotlight searches were mainly at targeting Large Forest Owls and Petaurus gliders. The smaller Petaurus gliders are often difficult to detect by spotlight as their eyes do not reflect brightly, and often remain stationary when in the spotlight beam (Menkhorst et al., 1988). Larger gliders such as Yellow-bellied Glider and Greater Glider, and possums such as Common Brushtail Possum and Common Ringtail Possum are more easily detected by spotlight.

Vocalisations by the Sugar Glider, Yellow-bellied Glider, Common Ringtail Possum, Common Brushtail Possum, Koala, and very rarely the Squirrel Glider, will also indicate their presence.

During these surveys, spotlighting (using 100 watt hand held spotlights) was undertaken by 2-3 surveyors per spotlight session. The spotlighting transects were all walked on foot, these transects being chosen as they sampled all of the vegetation present. The spotlighting sessions commenced on either dusk or after 9pm and lasted between 30-45 minutes. During the spotlighting sessions, efforts were made to target those habitats considered suitable for nocturnal animals, particularly those of conservation significance identified during the literature review process.

Diurnal survey methods (birds)

Systematic surveys designed to capture peak activity (dawn chorus and prior to 10 am) were undertaken on five mornings and afternoons. Any birds sighted or heard calling during other survey activities were recorded.

Bird surveys, generally lasting for twenty minutes, were undertaken during the early morning and dusk periods. During this time, the principal investigator and assistant ecologist traversed those all portions of the study area observing and identifying by call recognition any birds present. Whilst traversing the site, any evidence that indicated the presence of a fauna species (i.e. characteristic tracks, diggings, scats, crushed cones and so forth) was identified. Carnivore scats were also sought in an attempt to identify predator and prey species.

Song-meter recording device

The Song Meter SM2+ is a digital audio / ultrasonic recorder specifically designed for scheduled recording of wildlife vocalisations. The one device can be employed to remotely monitor and record ultrasonic bat calls, bird song and frog calls. All amplitude and harmonic information is preserved onto

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

a SD card. It is capable of 740 hours of highest sample rate audio recordings, or over 17000 hours at the lowest setting. It is also capable of recording frogs/birds on one channel and bats on the other simultaneously. SM2+ automatically adjusts for changing dawn and dusk times. The device recorded sounds as WAV files which were analysed after the field survey period.

Two song-meters were simultaneously deployed for 5 days and 4 nights at a time for a total of 5 different locations across the site. Each device recorded for one hour at 8am (one hour after sunrise), 4pm (one hour before sunrise) and 9pm to optimise detection of birds (diurnal and nocturnal as well as other potential fauna species).

The devices were used for a total of five nights and six days. This equated to a total of 54 hours of recorded survey data.

The main focus of the recordings were to identify the presence of threatened species.

Microchiropteran bat surveys

During the nocturnal surveys, the identification of microchiropteran bats, using two (2) Anabat ZCAIM echolocation detectors was undertaken. The detectors used to identify the presence of these species were placed at a number of locations within the study area. These detectors were established prior to dusk and were left in place for the entire duration of the evening. Refer to Figure 12 for locations of this survey.

Any calls recorded were uploaded onto Analook W Software by Fraser Ecological using reference call guide in accordance with:

- Pennay, M., Law, B., Reinhold, L. (2004). Bat calls of New South Wales: Region based guide to the echolocation calls of Microchiropteran bats. NSW Department of Environment and Conservation, Hurstville.

Amphibians

Frog searches were completed at all locations where frogs were heard vocalising to confirm species identification. Species were recorded by sightings, captures and call characteristics.

Amphibians were surveyed by vocal call identification, by using a recorder to record male calls in suitable places and then comparing these to known calls. Amphibians were also surveyed by habitat searches.

Any amphibians found are visually identified and when required to be examined are handled with Latex gloves and kept moist until release. Spotlighting for nocturnal mammalian fauna was carried out using a 220 Lumens LED head torch and a 100W halogen hand held lamp. This technique involved walking amongst the open forest and along the creekline within the south-western portion of the study area.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Species of herpetofauna were also opportunistically recorded whilst completing vegetation surveys and habitat assessments.

Remote sensing cameras

Four remote sensor cameras (RSC) were deployed in fixed positions throughout the study area (Figure 13). Baits such as honey was sprayed onto the trunks of trees to encourage foraging behaviour in front of the RS, as well as honey sardines, bananas and apples were thrown onto the ground to encourage foraging activity.

Reptiles

Searches for reptiles in likely localities such as under logs, sandstone, sandstone cliffs, ground debris and leaf litter throughout the study area. Surveys were undertaken during diurnal visits to the site. Spotlighting of terrestrial habitats suitable for reptiles also occurred during the nocturnal amphibian surveys.

Koala habitat assessment

In order to identify Koala habitat and activity levels, the 'spot assessment technique' was used to determine the significance of Koala habitat. This involved sampling a minimum of 20 trees within a circle radiating from a central point. Searches for Koala scats or faecal pellets were conducted at the base of each tree for a maximum of two to three person minutes.

Minimum sampling density is one plot per 1,000 m² of potential development areas that contain native trees (Phillips and Callaghan, 1995). The validation of this technique is based on the occurrence of high quality habitat on medium to high-fertility soils, and is indicated as under evaluation on low fertility soils (Phillips and Callaghan, 1995).

Environmental conditions during survey

Weather conditions for the survey period were cold to mild with average temperature between 14 - 21 degrees Celsius. During the spotlighting and call playback nights there was minimal wind (average 5km NE winds) and no rainfall. Cloud cover was moderate (50%) and the moon phase range was a waxing crescent (19% full) with the new moon to occur on 4th May 2019. These were ideal conditions for nocturnal surveys over the survey period.

Amphibian searches were undertaken on the 19th and 20th March when there were significant rainfall events (average conditions during survey were 70mm rainfall, 80% relative humidity, 22 degrees Celsius with 4 knot Easterly winds and full cloud cover). The moon phase was in a waxing crescent with 30% illumination which obstructed by full cloud cover.

The 2019 spotlighting surveys were repeated again on the 25th – 27th March 2021 once heavy rain events had eased. The average conditions during survey were no rainfall, 60% relative humidity, 25 degrees Celsius with 8 knot westerly winds and with no cloud cover). The moon phase was in a waxing

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

gibbous with 98% illumination which was not obstructed (and totally visible) due to lack of any cloud cover.

Flora Survey Limitations

The data collected is relatively reliable for the majority of the species, especially those for which there was considered potential for significant impacts to occur. The flora survey for this assessment were conducted in 26-30th April 2019 and 31st of May, 2nd, 5th, 9th, 21-26th of July, 7th, 12th & 13th August 2017 as part of the original Flora and Fauna Assessments undertaken on the site and immediate vicinity. Additional targeted surveys were undertaken on the 12th November 2020, 8th April 2021 (*Rhodamnia* surveys and BAM plot) and 27th of July 2021 two 20x20m plots.

At the time of the survey the weather conditions had been favourable for plant growth and production of features required for the identification of most species. It is probable that the vast majority of species have been recorded and that issues including conservation significance of the flora, condition and viability of bushland and likely impact on native vegetation have been satisfactorily assessed.

Sufficient plant material was present to identify key subject species. Generally due to the number of person hours spent on flora surveys that have been conducted and the methods used for detection of species, it is likely that an adequate intensity of survey has been carried out to verify the presence of threatened flora within the study area.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Fauna survey limitations

The surveys are limited to being snap shot investigations and so present a view of the fauna that were active during the time of the surveys. The data produced by the surveys is intended to be indicative of the types of species that could occur and not an absolute census of all vertebrate species of the site.

Several species are cryptic and difficult to detect or migratory and not all surveys in the ecological consulting industry are always conducted at the appropriate time of year. However, it was considered that surveys conducted provided a sufficient window period to determine what threatened species are likely to occur on-site.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

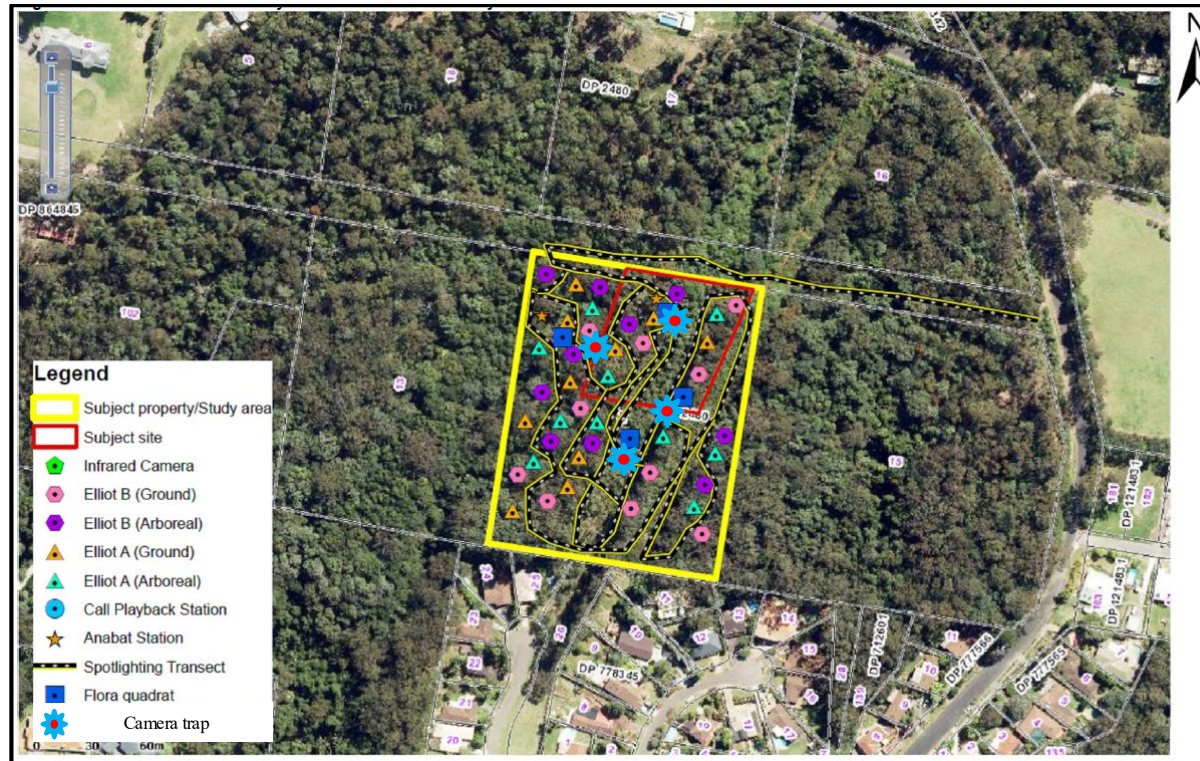


Figure 13: Location of targeted surveys previously undertaken by Fraser Ecological May 2019, 2020 and 2021

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***3.5 Assessment of conservation value****Conservation value parameters**

The conservation value of flora and fauna habitats on the subject site was determined by reference to the following criteria:

- Representativeness - whether the vegetation communities of the site are unique, typical or common in the bioregion. In addition the criteria takes into account whether or not such vegetation units are presently held in conservation reserves;
- the presence of threatened or regionally significant species on the site;
- the extent of human influence on the natural environment of the site and the condition of habitats (e.g. the presence of weeds, fire frequency, etc.);
- the uniqueness of the natural values of the site;
- the amount of native vegetation to be cleared or modified by the proposed development in relation to what remnant vegetation will remain in the locality; and
- the relative importance of the site as a corridor for the movement of wildlife.

3.6 Significant Assessments

Significance assessments were carried out for threatened species, populations or communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* that were known or predicted to occur in the project locality (10 kilometres from the study area) and that had a moderate to high likelihood of occurring within the study site based on suitable habitat or observation in the field.

For species, populations and communities listed under the *Biodiversity Conservation Act 2016* significance assessments were completed in accordance with threatened species assessment guidelines.

For species or communities listed under the *Environment Protection and Biodiversity Conservation Act 1999*, significance assessments were completed in accordance with the EPBC Act Policy Statement 1.1 Significant Impact Guidelines (Department of the Environment and Heritage 2019).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

4. Results

4.1. Vegetation mapping

Two vegetation mapping projects have mapped the vegetation within the Gosford LGA, these are: The natural vegetation of the Gosford Local Government Area, Central Coast, New South Wales (Bell 2004) and the Lower Hunter Central Coast Extant Vegetation Community Map (Lower Hunter and Central Coast Regional Environmental Management Strategy 2003) both vegetation maps cover the study area. The natural vegetation of the Gosford Local Government Area, Central Coast, New South Wales (Bell 2004) was found to be the more accurate of two vegetation mapping projects.

The subject site was historically cleared as part of an orchard (refer to 1943 aerial map shown in Figure 15) and comprises of regrowth **Coastal Narrabeen Moist Forest (Bell 2004)** which is also known as **PCT 1568 Blackbutt - Turpentine - Sydney Blue Gum mesic tall open forest on ranges of the Central Coast in accordance with the Bionet Vegetation Classification System.**

A review of (Bell 2004) vegetation mapping has identified two vegetation communities within the study area Map Unit E6ai Coastal Narrabeen Moist Forest (Bell 2004) & XS Disturbed Regrowth (Figure 14).

Extract from (Bell 2009), Coastal Narrabeen Moist Forest can be difficult to separate from Coastal Warm Temperate Rainforest (Unit E1a), with which broad ecotonal zones exist in lower slope and gully positions. In general, the prominence of *Eucalyptus saligna* and *Syncarpia glomulifera* in the canopy of Unit E6a, together with the scarcity of true rainforest tree species (such as *Doryphora sassafras*, *Ceratopetalum apetalum*, *Claoxylon australe*, *Cryptocarya microneura*) can distinguish the two.

Coastal Wet Gully Forest is essentially more of a rainforest-dominated community, while the Coastal Narrabeen Moist Forest tends to structurally form an open forest. There may also be some confusion between this sub-community and the Coastal Narrabeen Ironbark Forest (Unit E6b) as several understorey species are shared. However, that sub-community supports *Eucalyptus paniculata* subsp. *paniculata*, *Eucalyptus punctata* and *Eucalyptus acmenioides* prominently in the canopy, which are otherwise rare or absent from Unit E6a.

Despite the creekline and the western slope having a more closed sub-canopy dominated by soft-leaved species the positive indicator species for classification as Map unit E1A Coastal Warm Temperate Rainforest (Lowland Rainforest EEC) were absent as such the vegetation within the study area is therefore considered to be most consistent with Council vegetation mapping as Map unit E6a Coastal Narrabeen Moist Forest.

The vegetation community within the building footprint is considered to be in good condition and contains intact canopy, shrub and groundcover layer with low weed invasion despite the presence of some environmental weed species.

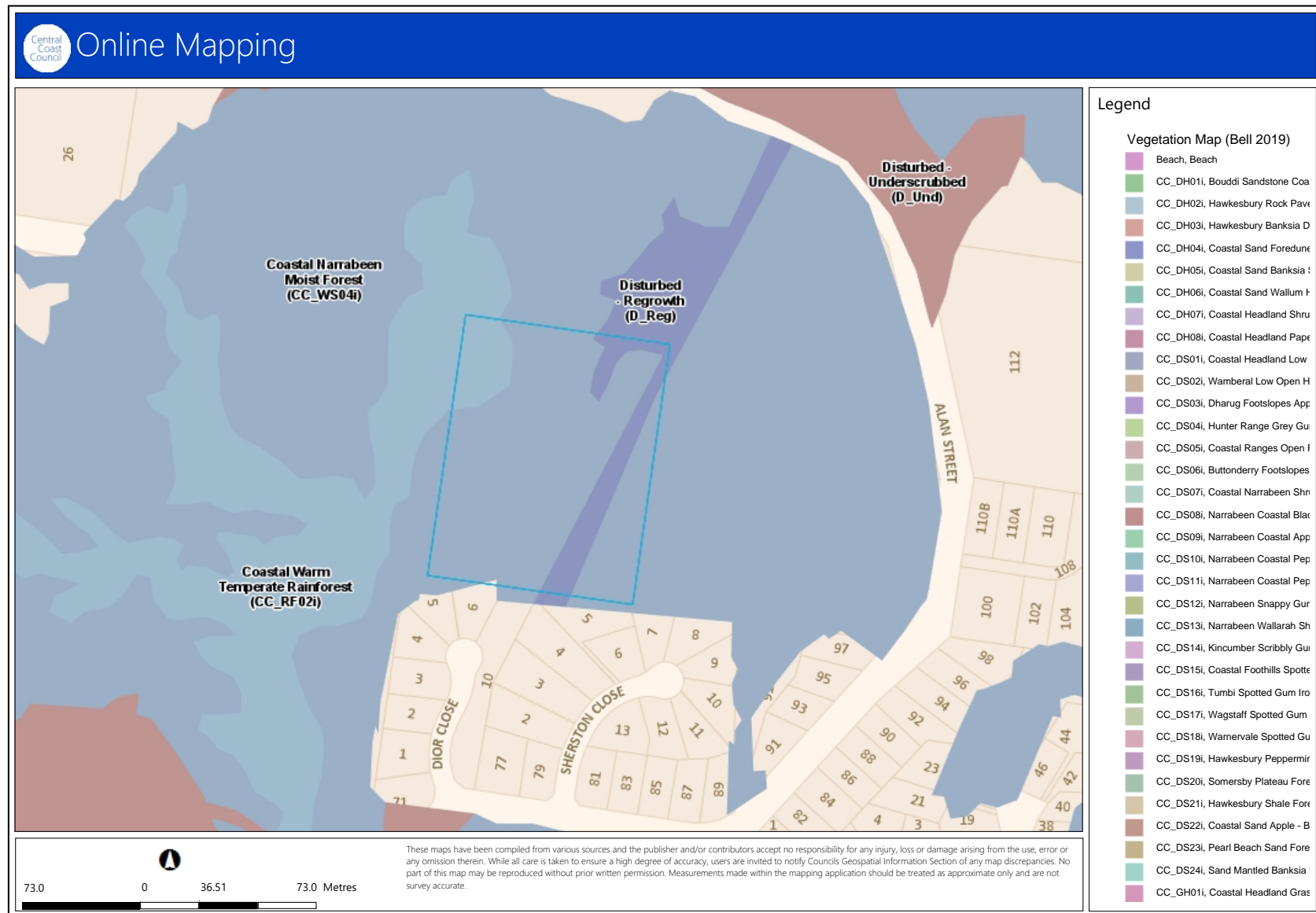
The native vegetation within the powerline transmission easement (that forms part of the proposed APZ and waste-water disposal area) has been cleared and is regularly slashed and is considered to be in low condition. It does contain some native regrowth grass and sedge species including *Gahnia* and *Lomandra*

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

species, however, there is also an abundance of environmental weeds along the northern extent of the easement that includes *Lantana camara* (Lantana), *Senna pendula* var. *glabrata* (Cassia) and *Ligustrum sinense* (Small-leaved Privet). The vegetation within the easement has been impacted upon from ongoing management and has resulted in the introduction of weeds.

The native vegetation beyond the existing easements and proposed development area is in good condition. It includes a combination of locally common Coastal Narrabeen Moist Forest and Lowland Rainforest Endangered Ecological Community. Lowland Rainforest Endangered Ecological Community (EEC) occurs outside the development footprint. It has been field validated and all impacts to this community avoided (refer to Section 4.9 and Figure 19). Therefore, a significant area of mapped good quality native vegetation will be retained within the subject property.

The photographic profile on the following pages shows the various areas of native vegetation on-site.



Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

4.2 Vegetation strata and species recorded on-site

A total of 109 species of plant was recorded from the study area, of which 97 species (89%) were native. The most diverse families recorded from the study area were Poaceae and Myrtaceae (Appendix A).

The BAM plot was undertaken within the proposed dwelling area (Zone 56: 347164 (E)(6306296 (N)) and plot data sheet is provided on the following pages in accordance with Council's Flora and Fauna Guidelines. The vegetation class and PCT is as follows:

Vegetation Class	North Coast Wet Sclerophyll Forests
Plant Community Type	1568: Blackbutt - Turpentine - Sydney Blue Gum mesic tall open forest on ranges of the Central Coast

Twelve species of weed were recorded from the study area. This includes Lantana (*Lantana camara*) which is listed as a Weed of National Significance (Thorp and Lynch 2000). These weeds occur along the northern edge of the site where previous clearing has occurred for power transmission easement access.

The building footprint will occur within an area that contains some introduced environmental weed species including Fishbone Fern (*Nephrolepis cordifolia*), Cassia (*Senna pendula* var. *glabrata*), Small-leaved Privet (*Ligustrum sinense*) and Lantana (*Lantana camara*). *Lantana camara* is listed in the 'Greater Sydney Regional Strategic Weed Management Plan 2017' as a 'Priority weed for the Greater Sydney Local Land Services region (Appendix A)'. Fishbone Fern (*Nephrolepis cordifolia*) and Small-leaved Privet (*Ligustrum sinense*) are listed as 'Other weeds of regional concern' in the 'Greater Sydney Regional Strategic Weed Management Plan 2017' (Appendix A).

As reiterated above, Coastal Narrabeen Moist Forest community was the dominant vegetation community identified from within the study area and occupied the entire study area. The canopy was dominated by *Eucalyptus saligna* (Blue Gum), *Syncarpia glomulifera* (Turpentine) & *Eucalyptus paniculata* (Grey Ironbark). Differences in species abundance and composition were noted to occur within the western portion of the study area and within the watercourse (riparian area).

Canopy trees were emergent within and adjacent to the watercourse and upon the western slope which contained a greater abundance of soft-leaved sub- canopy trees (closed forest).

Canopy trees ranged in height from approximately 7-25m. The projected foliage cover of the canopy within the subject site ranged from 25-60%. The projective foliage cover of the canopy within the watercourse and western slope was much less >15-25% and times completely absent due to the abundance of *Cryptocarya glaucescens* (Jackwood) and *Livistona australis* (Cabbage Gum).

The sub-canopy was dominated by *Cryptocarya glaucescens* (Jackwood) and *Livistona australis* (Cabbage Gum) within the lower south-western portion of the study area. Sub-canopy trees were to a height of 6-15m with a PFC of >5%- 25%.

A native shrub layer were sparse to absent with only *Notelaea longifolia* being recorded. The shrub layer was 0.5m-1.6m tall with a projected foliage cover of 5-10%.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Forty-nine (49) individuals of *Rhodamnia rubescens*, which is listed as critically endangered under the BC Act, but is not listed under the EPBC Act, were located within and adjacent to the study area none were recorded within the dwelling footprint or the proposed garage (Figure 19). Please refer to Section 4.9 for further information regarding the distribution, abundance and potential impacts to this species.

The ground layer was dominated by the following native species: *Lepidosperma laterale* (Variable Sword Sedge), *Gymnostachys anceps* (Settlers Flax), *Entolasia stricta*, *Dianella caerulea* & *Pseuderanthemum variable*. The ground cover ranged in height from approximately 0.1-1m tall with a projected foliage cover of 5-15%.

Climbing species recorded within the study area were: *Smilax australis* (Sarsaparilla), *Marsdenia suaveolens*, *Pandorea panarana* & *Cissus hypoglauca* (Giant Water Vine).

Weeds were recorded from this community were in moderate-high occurrence adjacent to Alan Street, electricity easement and within the development area. The following weed species were most frequently recorded: *Lantana camara* (Lantana), *Senna pendula* (Senna) & the occasional occurrence of *Ligustrum sinense* (Small-leaved Privet).

Disturbance: The vegetation within the subject site has been subject to past clearing associated with an old Orchard. The vegetation within the subject site presents as regrowth. There are two easements within the subject property which have been recently cleared by electricity provider as part of routine /maintenance slashing (2019 reporting period).

Please refer to the 1943 aerial that shows the previous clearing of the site for the orchards (Figure 15 below).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK



Figure 15: 1943 aerial mapping of the subject site (red arrow) showing location of the former orchards and the existing power easement (Source:SIXmaps.com)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

4.3 Species of animal

The full list of fauna recorded during the surveys are provided within Appendix B.

The same species recorded in the survey for DA52743/2017 were recorded for this DA60589/2021. Council's letter dated 8th March 2021 raised concerns directly transcribing results from the former DA to the current one. However, this is simply as result of the exact same habitat being surveyed revealing the same species lists. Section 3.4 describes the survey effort undertaken for this particular study in accordance with Council's guidelines.

4.3.1 Amphibians

Five common species of frog were identified during targeted surveys these were the Dusky Toadlet (*Uperoleia fusca*), Pearson's Tree Frog (*Litoria peronii*), Striped-marsh Frog (*Limnodynastes peronii*), Red-eye Tree Frog (*Litoria chloris*) and the Common Eastern Froglet (*Crinia signifera*).

All frogs were heard calling within and around intermittent watercourse within the south-western portion of the study area (Figure 16). No amphibious breeding habitats were identified within the area subject to development at the time of the survey.

Additional frog surveys were undertaken on the 25th – 27th March 2021.

No threatened frogs listed under the BC or EPBC Acts were identified within the study area despite the presence of suitable habitat and targeted surveys being conducted. All suitable breeding habitats for amphibious species are to be retained within the study area.

4.3.2 Reptiles

Six common species of lizard were identified within the study area these were the Garden Skink (*Lampropholis guichenoti*), Lace Monitor (*Varanus varius*), Southern Forest Dragon (*Lophosaurus spinipes*), Land Mullet (*Egernia major*), Eastern Water Skink (*Eulamprus quoyii*) and the Three-toed Skink (*Saiphos equalis*).

4.3.3 Birds

Twenty-four species of bird were identified within the study area (Appendix B).

The vegetation within the study area provides a range of foraging opportunities for birds.

The diversity of tree and shrub species within the Coastal Narrabeen Moist Forest ensures that nectar resources are available throughout much of the year as different species flower at different times. Large foraging areas for bird species occur within the study area and are connected to the study area to north-east, south-east and south.

One Powerful Owl was recorded calling during the targeted survey to the south- west outside of the study area during the targeted surveys (Figure 17).

No suitable nesting sites for threatened forest owls were recorded within the study area.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Intensive targeted searches have been undertaken throughout the study area and were also undertaken during targeted surveys, despite this no Large Forest Owl adults or fledglings were recorded from the study area. It is considered that the subject site provides potential foraging habitat only for this species.

The Coastal Narrabeen Moist Forest community (Closed Canopy) which adjoins the study area contains intermittent watercourse (Figure 16) provides suitable roosting habitat for Powerful Owls despite this no roosting perches or Powerful Owls were identified.

A Powerful Owl was recorded approximately on three occasions calling within the subject property as part of a flora and fauna assessment over No 107 Alan Street, during nocturnal surveys on the 13th & 14th of November 2016 (Enviro Ecology 2016); and during the more recent fauna surveys (Figure 17). Potential roosting habitat for this species is to be retained in its entirety and will not be impacted upon as result of the proposed development.

A threatened Sooty Owl (*Tyto tenebricosa*) was recorded by the neighbour on the adjacent property at 107 Alan Street.

No Glossy Black-cockatoo (*Calyptorhynchus lathami*) or Gang-gang Cockatoo (*Callocephalon fimbriatum*) chew sites were identified despite the presence of *Allocasuarina torulosa* (Forest She-Oak) within the study area.

4.3.4 Mammals

The targeted surveys resulted in the identification of sixteen species of mammal within the study area (Appendix B), with a number of species opportunistically identified e.g. Brush-tailed Possum & Common Ringtail Possum during surveys. Native floral diversity was moderate across the study area which would provide seasonally foraging opportunities for native mammals.

The Coastal Narrabeen Moist Forest provide various foraging opportunities e.g. flowering trees, shrubs and groundcovers which would provide suitable habitats for arboreal mammals.

The following fourteen (14) native species listed in Table 3-2 below were identified during surveys within the study area for further information on method of detection see (Appendix B).

Table 3: Native mammals identified from within the study area

Common Name	Scientific Name
Brown Antechinus	<i>Antechinus stuartii</i>
Long-nosed Bandicoot	<i>Perameles nasuta</i>
Swamp Wallaby	<i>Wallabia bicolor</i>
White-striped freetail bat	<i>Auromus australis</i>
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>
Common Brushtail Possum	<i>Trichosurus vulpecula</i>
Grey-headed Flying Fox	<i>Pteropus poliocephalus</i>
Eastern Horseshoe-bat	<i>Rhinolophus megaphyllus</i>
Chocolate Wattled Bat	<i>Chalinolobus morio</i>

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Eastern Broad-nosed Bat	<i>Scotorepens orion</i>
Little Forest Bat	<i>Vespadelus vulturnus</i>
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>
Feathertail Glider	<i>Acrobates pygmaeus</i> *
Sugar Glider	<i>Petaurus breviceps</i> *

*Also recorded within nest boxes as part of monitoring works on adjacent property

The blossoms of the canopy trees within the study area provide suitable foraging resources for the Grey-headed Flying-fox (*Pteropus poliocephalus*), this species was recorded flying over the study area (Figure 17) during the nocturnal surveys however not recorded foraging within the study area.

The following introduced species were recorded on-site:

Red Fox	<i>Vulpes vulpes</i>
Cat	<i>Felis catus</i>
Dog	<i>Canis lupus familiaris</i>
Black Rat	<i>Rattus rattus</i>

No suitable cave sites were identified from the study area which would provide suitable roosting site for threatened cave dwelling bats. No Threatened microbats were recorded within the study area despite targeted surveys being conducted.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***4.3.5 Fauna habitat types**

The suitability, size and configuration of the terrestrial fauna habitats were found to correlate broadly with the structure, floristics, connectivity and quality of the local vegetation community described above. These habitats mostly comprised the Coastal Narrabeen Moist Forest community.

The condition class of the habitats within the Coastal Narrabeen Moist Forest community was assessed as being in a moderate-good condition and provided a full range of fauna habitat components e.g. old growth trees, fallen timber, feeding and roosting resources and habitat linkages to other vegetation. The Coastal Narrabeen Moist Forest contained a thick leaf litter and woody debris, with the fauna habitats being in a good condition in terms of their overall structure and the presence of microhabitat features.

4.3.6 Hollow-bearing trees

Hollows develop in Eucalypts when the tree is under some form of stress, heartwood decay is present and the tree is sufficiently large to persist when decayed (Gibbons and Lindenmayer 2002). As such, hollows are more likely to occur in older and larger trees; however the abundance and size of hollows may vary within and between species.

Tree hollows typically provide den and nesting habitat for a range of common birds and arboreal mammal species (Gibbons and Lindenmayer 2002), including providing potential habitat for a number of Threatened species including microchiropteran bats and large forest owls. Whether or not tree hollows are used by animals, and which species use them, depends on a number of factors, including hollow characteristics (diameter, height, depth), the number of hollows in a tree, tree health, size, location and spacing (Gibbons and Lindenmayer 2002).

Nest boxes have been proposed to be installed as part of the Integrated Bushfire & Vegetation Management Plan (IBVMP) to mitigate impacts upon fauna species as a precautionary measure.

We have provided further investigation into hollow-bearing tree stag No. 3092 (and others) in response to Council's letter (dated 8th March 2021) on the following pages. We also undertook 3 consecutive nights of stag-watching on the 25th – 27th March 2021. No arboreal fauna were observed during these surveys.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Tree No. W90:

No suitable hollows for hollow-dependent species were recorded from this species (Photograph A & B).



Photograph A: Tree No. W90

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK



Photograph B: Close up of W90 decayed cavity

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Tree No. W91:

The open cavity from side to the bottom inspection revealed no fauna present or past occupation (Photograph C & D). The stag has fallen and is resting to the adjoining tree. The stag will be relocated as ground habitat as part of the Integrated Bushfire & Vegetation Management Plan (IBVMP).



Photograph C: Tree No. W91



Photograph D: Cavity inside Tree No. W91

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Tree No. 3092 (dead stag):

An aerial inspection was undertaken of the tree using a ladder to a height of 6m no hollows observed. Investigation from ground-level revealed no hollows present. Branch stub well round no hollows (Photograph E, F & G). Nest boxes have been proposed to be installed as part of the Integrated Bushfire & Vegetation Management Plan (IBVMP) to mitigate impacts upon fauna species as a precautionary.



Photograph E: Overall view of Tree No. 3092

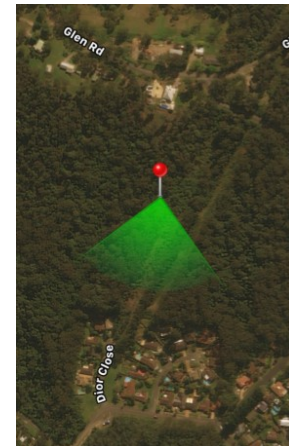
Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK



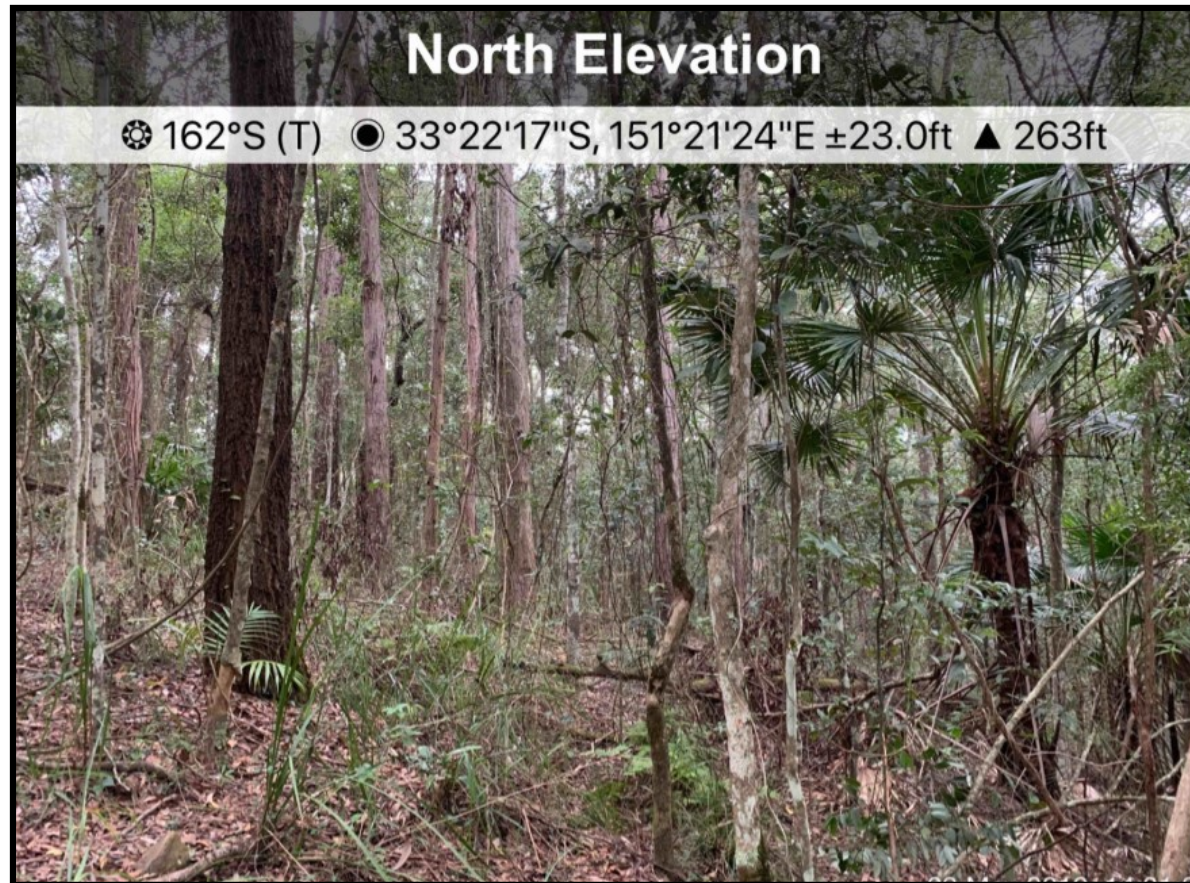
Photograph F: Solid branch stub tree No. 3092



Photograph G: Close up ground/aerial view of Tree No. 3092















*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***4.3.7 Fauna Feeding Resources**

Fauna occurring in the project locality are likely to use a range of foraging resources including both native and exotic species. A number of floral feeding resources were found to be available that would provide important foraging resources for a range of fauna including many of the species of bird recorded and the Threatened Grey-headed Flying-fox.

Flora feeding resources can be divided into blossoms, fruits (casuals, berries and drupes) and seeds. The dominant families providing these resources within the study area include:

- Blossoms (nectar and pollen): Myrtaceae, Proteaceae and Fabaceae (Mimosoideae).
- Fruits: Araliaceae, Euphorbiaceae, Oleaceae, Pittosporaceae, Solanaceae, Rosaceae, Verbenaceae.
- Seed: Poaceae, Lomandraceae, Casuarinaceae, Myrtaceae, Fabaceae (Faboideae and Mimosoideae).

The diversity of species (Appendix A) across these families ensures that floral feeding resources would be available throughout each season for sedentary species. During spring and summer when floral resource availability peaks, it is likely that other migratory and more transient species also frequent the locality for foraging.

The floral resources within the study area (including vegetative matter) are also likely to support a diverse community of invertebrates, which in-turn provide an additional foraging resource for insectivorous fauna (e.g. birds, small mammals and microbats).

4.3.8 Dense understorey vegetation

Areas of dense understorey and shrub vegetation provide important habitat for small birds (e.g. Fairywrens), ground-dwelling mammals (e.g. Bandicoots and rodents) and reptiles. Dense native understorey vegetation was found to occur particularly within a dense pocket of Map unit E6ai - Coastal Narrabeen Moist Forest located.

4.3.9 Fallen timber, bark and Rock

Fallen branches and bark occurred throughout Coastal Narrabeen Moist Forest community and provides refuge and nesting habitat for a range of terrestrial animals. The dwelling has been sited to avoid the removal of large logs and areas dense in fallen timber, bark and rock.

All rock outcrops are to be retained within the subject property. Many invertebrates rely on these moisture-retaining micro-habitats. Similarly, many reptiles rely on ground litter and debris for shelter and foraging. The subject site contained limited ground woody material or leaf litter that would support species.

Large hollow logs which provide suitable denning and habitat for reptiles and small to medium sized ground-dwelling mammals such as Brown Antechinus (*Antechinus stuartii*) are to be retained within the subject property.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

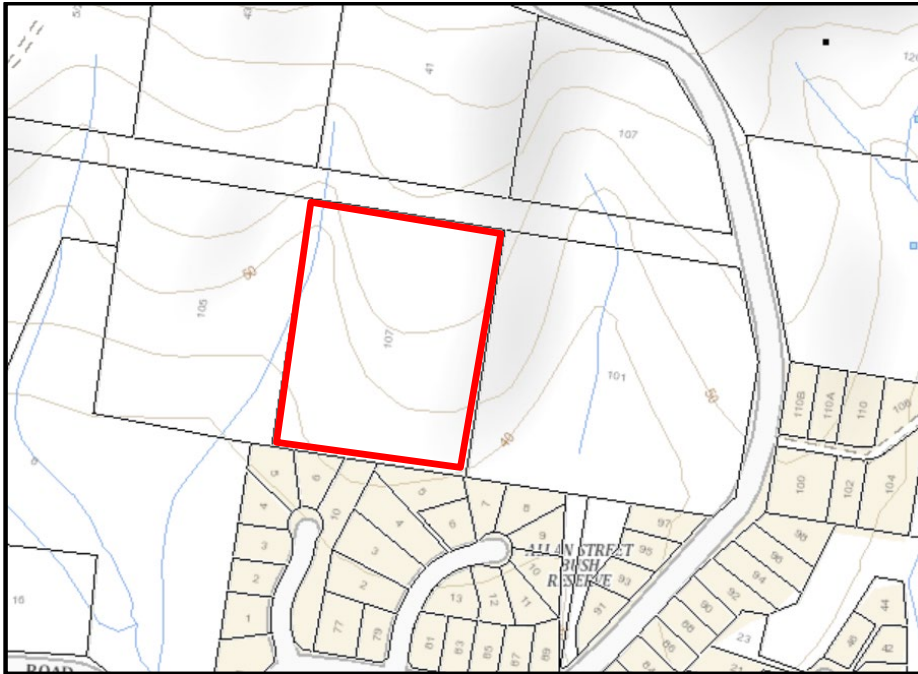


Figure 16: Location of intermittent watercourses in relation to the site (Source: SIX Maps.com)



Figure 17: Location of threatened fauna previously recorded by Enviro Ecology (2015 & 2017) and more recently by Fraser Ecological (April 2019)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

4.4 Central Coast Council Rainforest Policy June 2020 (CCC083)

Purpose of the policy is as follows:

To recognise the particular value of rainforests as a natural biological system and recognise the suites (dry, gallery, gully and littoral) that occur with them.

- a) To identify, conserve and protect rainforest communities in the Central Coast for their ecological, educational and passive recreational values
- b) To provide detailed vegetation mapping and assessment criteria for development assessment and re-zonings
- c) To increase public awareness of the importance of rainforest areas and support their protection, and where required rehabilitation
- d) To increase the level of protection for all rainforest areas, and where appropriate bring them into public ownership
- e) To identify priority sites for regeneration and rehabilitation of rainforest areas under the care and control of Central Coast Council.

The policy directs Council to identify rainforest areas which can be managed and preserved on both public and private lands.

Rainforest mapping is available as a data layer on Council's Geographic Information System in order to ensure that development assessments and rezonings take into consideration this policy. This mapping is based on the Central Coast Vegetation Map 2019, produced by Stephen Bell.

Central Coast Council aims to conserve and protect rainforest areas by adopting the following measures:

- a) A minimum of a 50 metre development exclusion zone (i.e. fringe buffer zone) surrounding any rainforest area
- b) A prohibition on any industrial development and/or extractive industry operations within rainforest catchments
- c) Identified areas of rainforest be noted on the relevant Section 10.7 Certificates
- d) Rainforest mapping shall be provided to the Rural Fire Service for use in developing Bush Fire Risk Management Plans and for consideration for responsibilities as authorised under the Rural Fires Act 1997
- e) Central Coast Council's Environment Assessment Officer/ Ecologist is to be consulted regarding development applications and re-zonings that have the potential to impact on rainforest areas.

Where a Development Application falls within, or adjacent to the mapped area a Statement of Environmental Effects is required to be prepared by the applicant to determine the impact of the proposal upon that rainforest area. Similarly, if an area contains any of the key rainforest species listed in the policy statement above, a Statement of Environmental Effects is required.

Development Applications and re-zonings that apply to sites mapped or identified as containing the listed key rainforest species, must include a Statement of Environmental Effects.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

The Statement of Environmental Effects shall include a detailed flora and fauna survey in accordance with Council's adopted flora and fauna survey guidelines, an identification of any threatened species known or likely to occur in the area and must address of the impact of increased nutrients upon the rainforest ecosystem. The report shall accompany that application prior to any further consideration by Central Coast Council.

Lowland Rainforest Endangered Ecological Community has been field validated within the study area (refer to Figure 18, the extent is mostly consistent with Council mapping. Two plots 2 & 3 (20x20m) as depicted in Figure 18 were placed to undertake analysis of the composition of the flora to determine the transition. A comparison was undertaken between positive diagnostic species between Map unit Unit E1a Coastal Warm Temperate Rainforest which is representative of Lowland Rainforest and Map unit E6a Coastal Narrabeen Moist Forest a non-threatened vegetation type (Appendix F).

Plot 2 is located within the core of Map unit E1a is located within the Gully to the west/north-west of the subject property. Plot 3 was placed outside of the transition and shows more diagnostic species for Map unit E6a Coastal Narrabeen Moist Forest.

Other considerations to map the extent were the presence/absence of Eucalypts which are emergent within Rainforest "Map unit E1a".

Bell 2009 describes map unit E1a as follows: *(a) Type variant (mapped as E1ai) – the majority of sheltered gullies and lower slopes on Narrabeen Sandstone soils support the type variant. It is likely that floristic gradients exist between those sites where warm temperate rainforest elements overshadow sub-tropical ones, but these have not been delineated here.*

Relationship to Other Communities:

Structurally, Coastal Warm Temperate Rainforest is most similar to the Sandstone Ranges Warm Temperate Rainforest (Unit E2) in the western parts of the LGA. However, that community is less diverse and tends to be dominated by species such as Doryphora sassafras, Ceratopetalum apetalum, Backhousia myrtifolia, and Acmena smithii, generally under a eucalypt canopy. Coastal Warm Temperate Rainforest is better developed, has a lower dominance of eucalypt species, and includes palms (Livistona australis, Archontophoenix cunninghamiana) and epiphytes.

The extent that has been mapped on Figure 18 within the subject property is the eastern most extent of the transition of map unit E1a the core is of this community is located within the drainage gully line within the adjoining property to the west.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK



Photograph H: Plot 2 Located within Ilbery Road frontage

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Photograph I: Plot 3 located within Map unit E6a Coastal Narrabeen Moist Forest

The proposed development has specifically sited to avoid impacts to this community. The proposed development dwelling and garage achieves a setback 50m from the Lowland Rainforest community (Figure 14) and is consistent with the 50m development exclusion zone (i.e fringe buffer zone) surrounding the rainforest. The proposed Asset Protection Zone achieves at a minimum a 30m setback at the closest point.

An integrated bushfire/vegetation management plan has been prepared which identifies specific management actions e.g. fencing, tree retention and protection, weeding ongoing monitoring and maintenance throughout the subject property. Implementation of specific management action “fencing” ensures that the Rainforest vegetation is retained and protected.

The Lowland Rainforest extent to the east could not be field validated due to private property notwithstanding aerial photographic interpretation as well as observations were made adjacent to the eastern boundary to define the likely boundary extent (Figure 18).

Note: Fringe buffer is not defined under the Central Coast Rainforest Policy, IDO 122 or the Gosford LEP.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

It is considered that the proposal has achieved the objectives of the Central Coast Council Rainforest Policy June 2020 (CCC083) in that it identifies, conserves and protects the onsite Lowland Rainforest community.

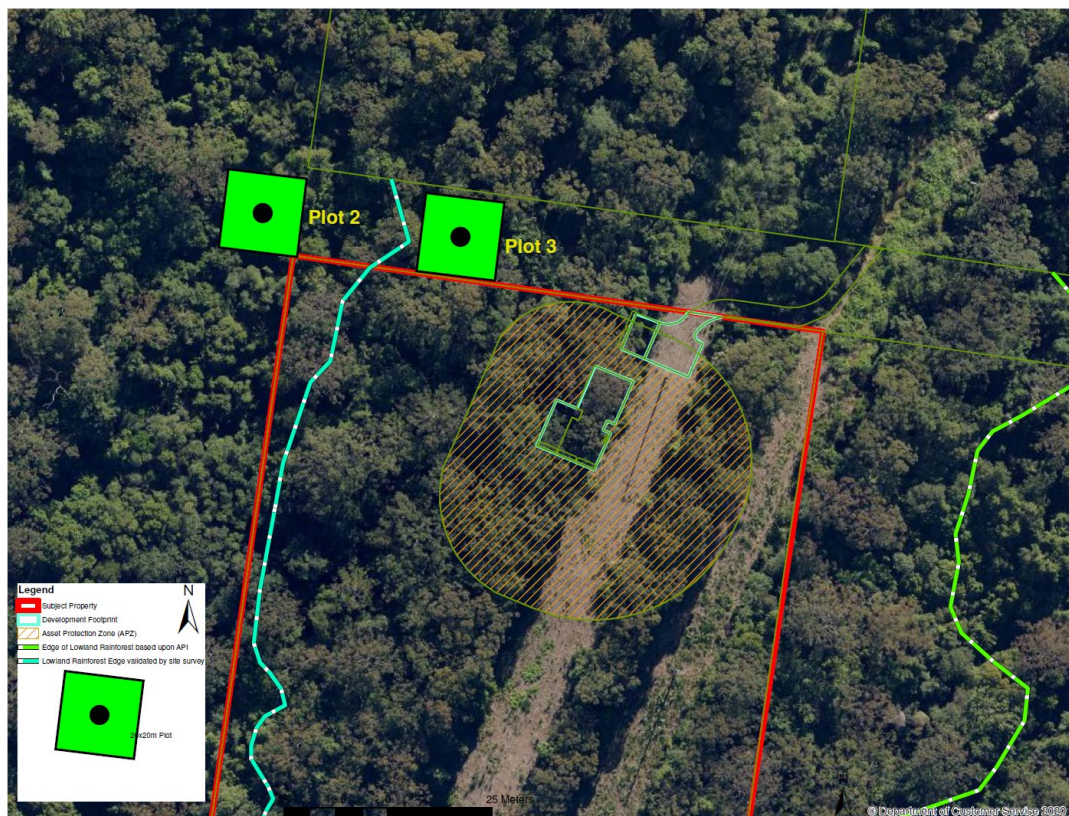
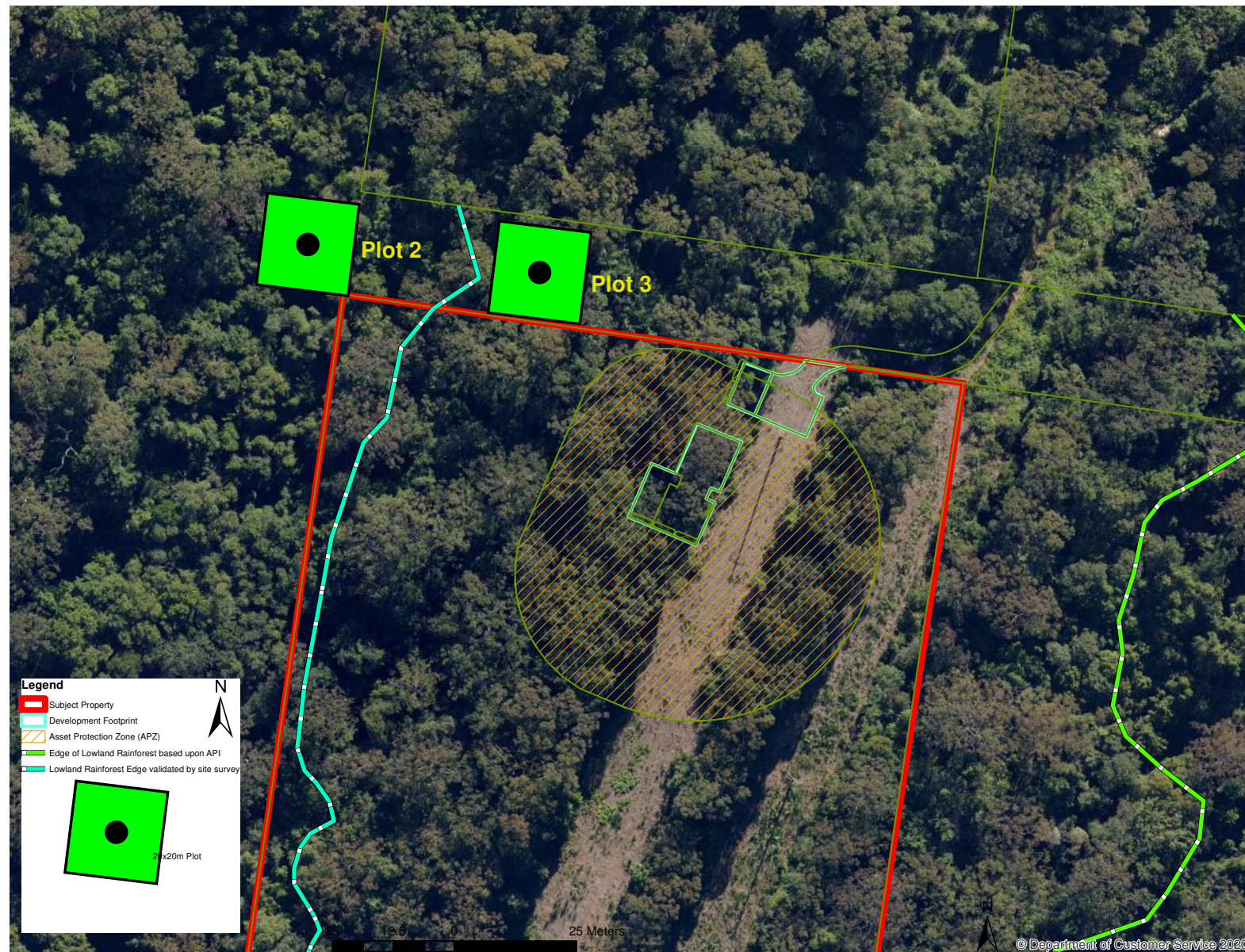


Figure 18: Setback from Lowland Rainforest (replicated in larger scale on following page)



*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***4.5 State Environmental Planning Policy (Koala Habitat Protection) 2019**

The site is located in the Central Coast Local Government Area, which is listed under Schedule 1 of State Environmental Planning Policy (Koala Habitat Protection) 2019.

The likelihood of the site to be 'potential koala habitat' or 'core koala habitat' as defined under the SEPP was assessed.

The subject property is mapped on the Koala Development Application Map. The subject property does not form part of an approved Koala plan of management.

PCT 168 Blackbutt - Turpentine - Sydney Blue Gum mesic tall open forest on ranges of the Central Coast contains three Koala feed tree species *Eucalyptus acmenoides* (Broad-leaved Mahogany), *Syncarpia glomulifera* (Sydney Turpentine) & *Eucalyptus paniculata* (Grey Ironbark) listed on Schedule 2 of State Environmental Planning Policy (Koala Habitat Protection) 2019.

Koala habitat was assessed by inspecting all feed trees to identify indicative scratches on the trunk and droppings around the bases of feed trees.

No Koalas were observed during the fauna survey and there was no evidence (scats or scratches) of previous Koala habitation in the area. The study area is also not considered to be 'Core Koala Habitat' as defined by State Environmental Planning Policy (Koala Habitat Protection) 2019.

As no Koalas or evidence of Koalas were detected within the study area no further assessment under this Policy is required.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***4.6 Threatened biodiversity**

This section details the threatened biodiversity recorded or likely to occur within the study area. This is based on those species recorded or predicted to occur within the locality from database searches and the nature of the habitats observed within the vicinity of the proposed works during field surveys (Appendices C and D).

For those species, populations and communities with a low/medium, medium or high likelihood of occurrence within the study area, an impact of significance assessment has been prepared (Appendix F).

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***4.7 Threatened ecological communities**

Ten endangered ecological communities were identified from desktop review to occur within the locality of the study area.

Lowland Rainforest Endangered Ecological Community (EEC) occurs on the margins of the property and was field validated according to the Figure 18.

All impacts to this EEC have been avoided.

All Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions Endangered Ecological Community (EEC) occurring on the margins of the property will be protected and enhanced through the IBVMP.

4.8 Endangered populations

Two threatened populations were identified from the desktop review to occur within the locality of the site:

- *Eucalyptus oblonga* (Narrow-leaved Stringybark) population at Bateau Bay; and
- *Eucalyptus parramattensis* subsp. *parramattensis* population in the Wyong and Lake Macquarie LGAs

No endangered populations were identified nor were the habitats which were identified within the study area considered to be suitable for the aforementioned populations.

4.9 Threatened Flora

The location of targeted searches for *Rhodamnia rubescens* and other threatened flora species are shown in Figure 19.

Forty-nine (49) individuals of *Rhodamnia rubescens*, which is listed as critically endangered under the BC Act, but is not listed under the EPBC Act, were located within and adjacent to the study area none were recorded within the dwelling footprint or the proposed garage (Figure 19).

Fifteen (15) individuals were recorded within the proposed Asset Protection Zone (APZ) with twelve (12) of these plants located between the existing power easements and three (3) individuals located within the western APZ extent (Figure 19).

Rhodamnia rubescens is a shrub to small tree size species which occurs along the east coast of Australia, from as far south as Batemans Bay, to inland of Bundaberg in Queensland to the north. The species typically occurs in coastal areas, occasionally extending inland onto escarpments up to 600 m above sea level in areas with 1000 to 1600 mm of rainfall (OEH 2019). The species occupies soils derived from volcanic and sedimentary sources and is associated generally with rainforests and wet sclerophyll forests, although can occur in adjacent areas of dry sclerophyll forest as a pioneer (NSW Scientific Committee 2019).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

The species was common and has a large geographic range, with an extent of occurrence within NSW of 123 459km². However, the species has been listed as critically endangered due to its extreme susceptibility to the introduced pathogen Myrtle Rust (*Austropuccinia psidii*).

Myrtle Rust was introduced in Australia in 2010 and has since established throughout ecosystems in coastal areas of eastern Australia. All parts of *Rhodamnia rubescens* are affected by the rust, including stems, leaves, and flowers. The rust is known to kill flowers, and infect fruit preventing the fruit maturing. Mortality of the species has been recorded at over 50% in studied populations and it is estimated that within three generations over 80% of plants across its range will be deceased. As a rainforest species, seed dormancy is not expected to be long lived and the soil seed bank is therefore readily extinguished over a short period of time. Seedlings are also highly susceptible to infection by the rust which is widespread and persistent in the environment due to many host species in the Myrtaceae family (NSW Scientific Committee 2019).

All individuals are sub-maturity between the heights of 2-6m tall no juvenile *Rhodamnia rubescens* were recorded at the time of the surveys. It should also be noted that numerous dead individuals were recorded throughout the subject property with a number of plants still persisting only as upper leaves due to Myrtle Rust dieback.

The closest individual *Rhodamnia rubescens* to the dwelling was located at a distance of approximately 5m from the edge of deck and 10m from the dwelling wall this individual is located on the south-western side of W93 - *Cryptocarya glaucescens* (Jackwood) which is to be retained and protected by 3m tree protection fencing to be installed prior to the commencement of construction works (MacTrees 2020).

An Integrated Bushfire & Vegetation Management Plan (IBVMP) has been prepared that details the retention and protection of all *Rhodamnia rubescens* within the proposed Asset Protection Zone (Management Zone 2) and within the remaining vegetated areas of the subject property (Management Zone 3). The threatened plants will be surrounded with tree protection fencing in accordance with AS4970 *Protection of Trees on Development Sites*.

All individuals are proposed for retention and protection an Assessment of Significance has been prepared for the species (Appendix E) which indicates that as all individuals within the site are to be retained along with suitable areas of habitat within the subject property and locality a significant impact is not expected to occur to the local population of the species.

Despite efforts to retain the individuals of the species within the subject property, in the short- midterm, there is a high likelihood they will succumb to the Myrtle Rust infection as all plants are infected.

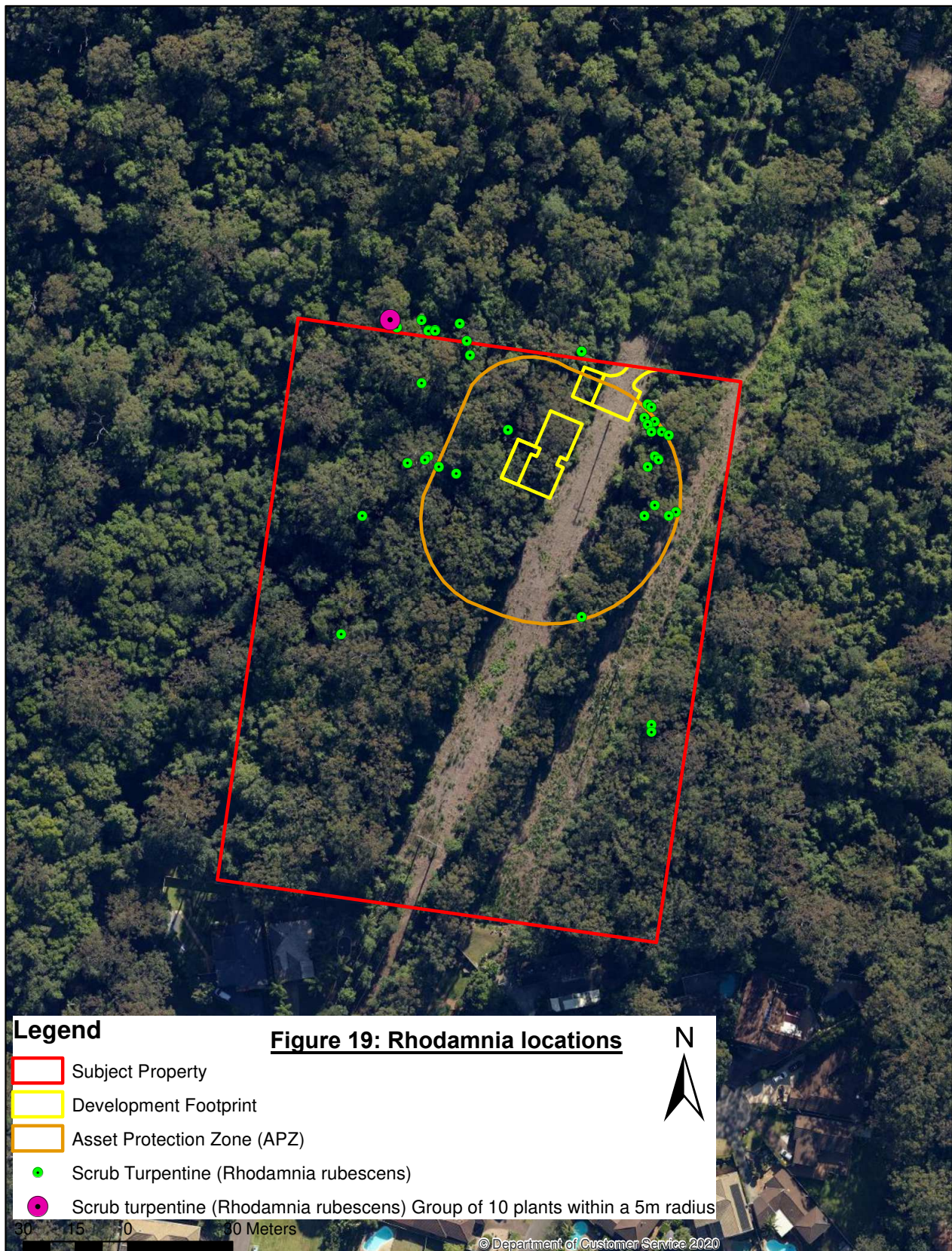
No other threatened species of plant was recorded in the study area during this investigation, despite seventeen threatened flora species having been identified as a result of the database searches within the locality (Appendix C).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Seventeen Rare or Threatened Australian Plants (ROTAP) species were identified within a 10km locality of the study area (Royal Botanic Gardens 2021). One ROTAP species *Callistemon shiressi* was identified within the study area and two others were identified as containing suitable habitat (Table 4).

Table 4: ROTAP species recorded within a 10km locality of the study area

Family Name	Species Name	Suitable Habitat within the study area
Euphorbiaceae	<i>Bertya brownii</i>	Yes
Haloragaceae	<i>Gonocarpus salsoloides</i>	No
Lamiaceae	<i>Prostanthera askania</i>	No
Myrtaceae	<i>Callistemon shiressi</i>	Yes
	<i>Darwinia glaucophylla</i>	No
	<i>Eucalyptus camfieldii</i>	No
	<i>Eucalyptus glaucina</i>	No
	<i>Leptospermum luehmannii</i>	No
	<i>Syzygium paniculatum</i>	Yes
Orchidaceae	<i>Arthrochilus prolixus</i>	No
	<i>Cryptostylis hunteriana</i>	No
	<i>Diuris praecox</i>	No
Proteaceae	<i>Grevillea oldei</i>	No
	<i>Grevillea steiglitziana</i>	No
	<i>Persoonia hirsuta</i> subsp. <i>Hirsuta</i>	No
Rutaceae	<i>Boronia fraseri</i>	No
	<i>Boronia serrulata</i>	No



Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

4.10 Threatened fauna

Sixty-eight threatened fauna species were identified as a result of the database searches as occurring or having potential to occur within the locality of the study area (Appendix D).

Based on the habitat assessment and targeted surveys there is potential habitat within the study area for twenty-two threatened fauna species which may be impacted through the removal of foraging habitat (Appendix D). Impact assessments have been prepared for these species (Appendix F).

4.11 Migratory species

Migratory species are protected under the international agreement to which Australia is a signatory, including the Japan-Australia Migratory Bird Agreement, the China-Australia Migratory Bird Agreement and the Bonn Convention on the Conservation of Migratory Species of Wild Animals. Migratory species are considered Matters of National Environmental Significance and are protected under the *Environment Protection and Biodiversity Conservation Act 1999*.

Twenty migratory species were identified from the Department of Sustainability, Environment, Water, Population and Communities (Department of Sustainability, Environment, Water, Population and Communities 2021) within the locality (Appendix D). None were recorded during the site inspections. Three migratory species were considered to have suitable habitat within the study area (Table 6).

Table 6: Migratory Species considered to have suitable habitat within the study area

Scientific Name	Common Name	bC Act	EPBC Act
Birds			
<i>Lathamus discolor</i>	Swift Parrot	E1	EM
<i>Myiagra cyano-leuca</i>	Satin Flycatcher		M
<i>Rhipidura rufifrons</i>	Rufous Fantail		M

The study area is not considered to be important habitat for any Migratory species in accordance with the EPBC Act.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

5. Assessment of Ecological Impacts

This chapter evaluates if the proposed development will significantly impact on ecological processes and the conservation value of the subject site and neighbouring bushland areas, especially with respect to threatened biota and migratory fauna species, and their habitats, and on the ecological integrity of the landscape. It also recommends ways in which impacts can be minimised or avoided.

The proposal will modify the structure of approximately 0.42ha of Coastal Narrabeen Moist Forest (CNMF). A total of 1.67ha of habitat will be retained within the study area with a further 2500+ha remaining connected to the study area.

Impacts arising from the upgrade of the existing driveway

An inspection was undertaken along the length of the existing driveway on the 27th of July 2021. It is understood that the existing driveway is required to be upgraded in part to achieve compliance with access provisions of the general terms of approval issued by the Rural Fire Service (RFS). The existing track is already 4m wide and compliant with the requirements of the GTA.

It is understood that the existing track is to be sealed in some short sections as per the preliminary engineering plans prepared by Beveridge Williams (BW). Short sections which exceed 10 degrees are to be sealed. No widening is required to the existing track to achieve compliance with the RFS GTA see engineering cross sections prepared by BW.

The entire access was investigated and measured during the site inspection and found to be absent of threatened flora species and threatened fauna habitats. The proposed driveway upgrade works involves grading a short length over the existing and sealing parts of the existing driveway no direct or indirect impacts are likely to occur upon listed threatened species, endangered population or endangered ecological communities as none were encountered within or adjacent to the existing track.

Further maintenance to the existing easement over Lot 17 DP 2480 is exempt work. Section 600 (p) Clearing authorised under other legislation states as (p) Other legislative authorisation. *The clearing was authorised by or under any other Act that has effect despite this Part.* The maintenance of the existing driveway/track that falls within Lot 17 DP 2480 falls under schedule 8 of the *Conveyancing Act 1919* and is therefore exempt to consideration under section 60 of the local land services Act. See legal letter prepared by Direct 2 U law dated 9th of March 2021 for further information.

Notwithstanding the upgrade to the existing driveway/track will not result in impacts upon listed threatened species, endangered population or endangered ecological communities as none were encountered within or adjacent to the existing track. The upgrade works will not result in adverse impacts upon surrounding trees as the works are over the existing compacted ground.

Impacts to Ecological Communities

The vegetation community proposed for removal is not an endangered ecological community.

5-31

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

All Lowland Rainforest Endangered Ecological Community (EEC) has been field validated and all impacts to this community have been avoided (refer to Figure 18).

Impacts to Flora

The subject site was historically cleared as part of an orchard (refer to 1943 aerial map shown in Figure 15) and comprises of regrowth Coastal Narrabeen Moist Forest (Bell 2004) which is also known as PCT 1568 Blackbutt - Turpentine - Sydney Blue Gum mesic tall open forest on ranges of the Central Coast.

One threatened flora species known as *Rhodamnia rubescens* listed as critically endangered under the BC Act was recorded from the subject property. No flora species listed under the EPBC Act were recorded on the subject land. It is not considered likely that the proposed development would have a significant detrimental impact upon any listed threatened species of plants and no Assessments of Significance are considered necessary. No species that are considered to have conservation significance according to Briggs & Leigh (1995) or Benson & Howell (1994) were recorded on the subject land.

The building footprint will occur within an area that contains some introduced environmental weed species including Fishbone Fern (*Nephrolepis cordifolia*), Cassia (*Senna pendula* var. *glabrata*), Small-leaved Privet (*Ligustrum sinense*) and Lantana (*Lantana camara*).

Impacts to Fauna**Fauna Habitat**

Due to the retention of large areas of potential fauna habitats within the subject land, as well as the maintenance of habitat connectivity throughout the subject land, the proposed development is not likely to have a significant impact on native fauna species.

Fauna species

Several threatened fauna species have been recorded in the locality (10km of the site) including Powerful Owl, Grey-headed Flying Fox, microbats and birds. However, the habitat proposed for removal on-site is considered to provide minimal fauna habitat value. It is not likely that these species will be significantly impacted by the proposed development.

Overall loss of terrestrial flora and fauna habitat

Biodiversity is the diversity and richness of living things. This includes the variety of plant communities and animal habitats, and the number of different species. Most natural areas support a complex mixture of different species and plant communities. Biodiversity in disturbed areas is generally lower than in more pristine areas. An awareness on native biodiversity emphasises the conservation of the variety of native life, rather just rare or threatened species.

There are three important principles associated with ESD. These are:

- maintenance of native biodiversity

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

- erring on the side of caution when assessing and taking risks with the biological environment; and
- passing on to future generations a natural environment that is at least as good and enjoyable as our own.
- many species of forest flora and fauna are threatened both nationally and within NSW. This is largely a result of the clearing of this native habitat.

The proposed development is unlikely to result in the loss of biodiversity at a local, regional, state or national level. This is because of the small area of bushland to be removed from the site, the highly degraded or modified habitat area to be developed, the unlikelihood of the status of threatened or regionally significant species being significantly placed at risk, and the broader distribution of other fauna and flora species.

Impacts on wildlife corridor

The native vegetation present on the subject site is likely to function as a stepping stone for the movement of mobile fauna such as birds, microchiropteran bats and megachiropteran bats, through the presence of inter connecting canopy connectivity of trees.

The proposal will entail the modification of 0.42ha of habitat for aforementioned threatened species. The proposal will retain approximately 1.61ha of habitat for the aforementioned threatened species within the study area with a further 2500+ha (Forest) remaining connected to the subject lot, as such it is considered that the proposal is unlikely to create an important impact on the long-term survival of threatened species in the locality and is not considered to be significant.

The proposal will have a minor interruption of upper canopy connectivity but this would not significantly impact upon the movement of wildlife and genetic exchange and dispersal of plant pollen in the local ecosystem.

Impacts on migratory species

Under the EPBC Act, a migratory species is significantly impacted on if a proposal will or is likely to:

- substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycle), destroy or isolate an area of important habitat of the migratory species; or
- result in invasive species that are harmful to the migratory species becoming established in an area of important habitat of the migratory species; or
- seriously disrupt the life cycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species.

Significant habitat for migratory species does not exist on site.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***Impacts on threatened species**

One species known as *Rhodamnia rubescens* listed under the NSW *Biodiversity Conservation Act 2016* was recorded within the subject property. No species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* were recorded on site. Threatened flora and fauna previous recorded within 10km of the site (OEH 2019) and have the potential to occur site have been considered in the table provided in Appendix C and D.

This report complies with Section 7.3 of the BC Act which refers to requirement of a test of significance for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats (Appendix F).

The proposal will **not** have a significant impact upon the local population of threatened species that may use the site a marginal foraging area.

Key threatening processes

Key Threatening Process under the *Biodiversity Conservation Act 2016* (NSW National Parks and Wildlife Service 2003) that are likely to further increase within the study area are:

- Clearing of native vegetation.
- Invasion of native plant communities by exotic perennial grasses.
- Removal of Dead Wood.
- Infection of native plants by *Phytophthora cinnamomi* - key threatening process listing. The proposal has potential to introduce or spread *Phytophthora cinnamomi* within the development area and into adjacent bushland. Mitigation measures are to be implemented to prevent spread of *Phytophthora cinnamomi*. Mitigation measures have been put in place to reduce the chance of infection of *Phytophthora cinnamomi* into the study area.
- Human Caused Climate Change.
- Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae

Riparian Impacts

In accordance with the NSW Office of Water (NOW) guidelines and Water Management Regulation (2010) more specifically the Strahler System the watercourse located upon the adjoining allotment to the west of the subject property has been classified as a 1st order watercourse. In accordance with setback is detailed in the regulation a 10m setback from the top of the bank has been given (Figure 16).

The proposed development is fully compliant with the NOW requirements. No asset protection zones (APZ) associated with the development is within the 1st order watercourse setbacks. The watercourse will not be impacted upon as a result of the proposed development.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

6. Significance Assessments

Projects assessed under the *Environmental Planning and Assessment Act 1979* should consider the significance of impacts and the Department of Environment and Climate Change's Threatened species assessment guidelines- The assessment of significance (2007). The factors for consideration under this assessment address the likelihood and significance of the impacts on threatened species life cycle, habitat and recovery.

Threatened biodiversity listed under the *Environment Protection and Biodiversity Conservation Act 1999* are required to be assessed following the Principal Significant Impact Guidelines (Department of the Environment and Heritage 2005). The factors for consideration under this assessment include considerable overlap with the state significance assessments.

This assessment however also addresses conservation status, population size and area of occupancy, likelihood of the establishment of invasive species of introduction of disease in addition to species life cycle, habitat and recovery.

No endangered populations or endangered ecological communities were identified within the study area during the current surveys that would be directly or indirectly affected by the proposal.

An updated Assessment of Significance was recently undertaken for *Rhodamnia rubescens* (Appendix F).

Twenty-two threatened species of animal are considered to occur likely to occur or utilise the foraging habitat intermediately within the study area (Appendices C & D).

This report complies with Section 7.3 of the BC Act which refers to requirement of a test of significance for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats (Appendix F).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

7. Environmental Protection Measures

The current proposal is to be carried out in accordance with all policies, operational procedures and guidelines in place as part of consent conditions issued by Council relating to environmental management or impact minimisation for construction projects.

The following environmental safeguard measures have been recommended for all phases of the proposed development:

1) Erosion and Sediment Control

All erosion and sediment controls (i.e. geotextile sediment fence and straw bales) shall be in place before any works begin so as to protect the remnant bushland and native fauna habitat. Techniques used for erosion and sediment control on building sites are to be adequately maintained at all times and must be installed in accordance with Council and DPIE guidelines. All techniques shall remain in proper operation until all development activities have been completed and the site fully stabilised. This condition must be complied with during building work.

2) Prevent Spread of Weed and Pathogens

To prevent the spread of weeds and fungal pathogens such as Cinnamon Fungus (*Phytophthora cinnamomi*) and Chytrid Fungus (*Batrachochytrium dendrobatidis*), all machinery shall be cleaned of soil and debris before entering the subject site. Hygiene protocols (Myrtle Rust) to be implemented during clearing works as part of the IBVMP (to be done in accordance with the DPIE (2020) *Hygiene guidelines: Protocols to protect priority biodiversity areas in NSW from Phytophthora cinnamomi, myrtle rust, amphibian chytrid fungus and invasive plants*).

3) Fencing of the construction zone

When accessing construction sites, contractors are to use only the designated access sealed driveway. Upon commencing of clearing of vegetation machinery are to enter vegetation at right angles to the access track to avoid impacts upon retained vegetation. Suitable fixed fencing (e.g. three strand stock fencing) and colour tape or Para-webbing should be used to delineate the maximum allowable extent of the construction zone. If any tape is disturbed, it is to be immediately replaced along the appropriate alignment. Construction work outside this area will constitute a non-conformance with the contract terms.

Fences and Para-webbing delineating the construction zone are to remain intact during construction period. If any of these barriers are disturbed, it is to be repaired or replaced as soon as practicable.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***4) Animal welfare**

Animal injury has potential to occur throughout various construction operations. In the event that any sick, injured or orphaned native animals are located during construction, WIRES should be contacted to assist in capture, handling and welfare of the animal (contact No: 13000 WIRES or 1300 094 737).

A suitably qualified ecologist or wildlife handler should be on site during the felling of trees. The qualified Ecologist is to hold a Section 132 licence issued by the Office of Environment & Heritage and a current Animal Ethics licence issued by the Department of Industries and Investment.

5) Truck and machine wash down areas

Vehicles and other equipment to be used in clearing within the construction zone and general construction equipment (such as excavators etc) are to be received completely free of soil, seeds and plant material before entering the site to prevent the introduction of exotic plant species and pathogens. Equipment failing inspection should be sent away for cleaning. Appropriate records of inspections shall be maintained.

Build ups of mud, soil and organic matter present on vehicles during wet and muddy conditions shall be manually removed prior to vehicles entering/leaving the construction site. It is recommended that rumble bars be installed at the entry to the site to assist with soil removal.

Works and vehicular movements shall cease if wet and muddy conditions develop/persist during construction zone clearing to limit the movement of soil and organic matter onto, through and from the construction zones, minimising the potential for the spread of weeds.

6) Permanent delineation of the Asset Protection Zone (APZ)

The APZ boundaries will be permanently delineated via metal markers installed by a registered surveyor.

This will ensure that APZ treatment will occur within the approved areas only. This will assist Council with compliance matters if any unauthorised clearing occurs outside these areas.

Section 4.2 of the Arboricultural Impact Assessment Report prepared by Stephen Mackay dated November 2020 identifies exactly what tagged/numbered trees will require removal to achieve the APZ requirements.

7) Implementation of Integrated Bushfire and Vegetation Management Plan

To mitigate the loss of habitat as a result of the proposed clearing works an **Integrated Bushfire and Vegetation Management Plan (IBVMP)** has been prepared and lodged with the application.

Management of the vegetation under the IBVMP area via targeted weed management control will promote the establishment and regeneration of native flora species and enhance flora & fauna habitats within the subject property.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

It will also guide the selective retention of canopy trees to be retained as part of the APZ in compliance with the approved bushfire report and *Planning for Bushfire Protection 2006*.

It includes careful protection and management of the threatened *Rhodamnia* population that includes tree protection fencing in accordance with *AS4970 Protection of Trees on Development Sites* as part of the IBVMP.

It includes the installation and monitoring of six (6) nest boxes.

Council can ensure compliance by requiring the production of the plan prior to the issue of the Construction Certificate. It can be implemented during the construction process and signed off by Council prior to the release of the Occupation Certificate.

8) General Environmental Management

The site must be managed in accordance with the *Protection of the Environment Operations Act 1997* by way of implementing appropriate measures to prevent sediment run-off, excessive dust, noise or odour emanating from the site during the construction of the development.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

8. Conclusion

The proposed works are unlikely to result in a significant impact upon species, populations and communities listed under the *Biodiversity Conservation Act 2016* and a Species Impact Statement is not required.

No endangered populations were identified within the study area during the current surveys that would be directly or indirectly affected by the proposal.

Habitats within the study area are considered likely to support twenty-two threatened species of animal including eleven species of bird, two reptile & nine mammals.

Significance assessments in accordance with section 5A of the Environmental Planning and Assessment Act 1979 and EPBC Act - Principal Significant Impact Guidelines 1.1. Matters of National Environmental Significance (Department of the Environment and Heritage 2005) determined that the project was unlikely to result in a significant impact to any threatened biodiversity listed under the *Biodiversity Conservation Act 2016* or *Environment Protection and Biodiversity Conservation Act 1999*.

Potential impacts to biodiversity associated with the proposed action have been largely avoided through the construction footprint selection process avoiding sensitive habitats e.g. intermittent watercourse vegetation, hollow-bearing trees, significant mature canopy trees, feed trees, ground habitat (logs for small mammals).

Management of the vegetation under the IBVMP area via targeted weed management control will promote the establishment and regeneration of native flora species and enhance flora & fauna habitats within the subject property. It will also guide the selective retention of canopy trees to be retained as part of the APZ in compliance with the approved bushfire report and *Planning for Bushfire Protection 2019*. It will ensure the protection and retention of all *Rhodamnia rubescens* trees via tree protection fencing in accordance with *AS4970 Protection of Trees on Development Sites* as part of the IBVMP. It includes the installation and monitoring of six (6) nest boxes.

All *Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions Endangered Ecological Community (EEC)* occurring on the margins of the property will be protected and enhanced through the IBVMP.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

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9-40

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Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX A: FLORA SPECIES RECORDED ON-SITE

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native
Acanthaceae			
	<i>Pseuderanthemum variabile</i>	Pastel Flower	Y
Adiantaceae			
	<i>Adiantum aethiopicum</i>	Common Maidenhair	Y
	<i>Adiantum hispidulum</i>	Rough Maidenhair	Y
Apocynaceae			
	<i>Parsonsia straminea</i>	Common Silkpod	Y
Apocynaceae	<i>Tylophora barbata</i>	Bearded Tylophora	Y
Araceae			
	<i>Gymnostachys anceps</i>	Settler's Flax	Y
Araliaceae			
	<i>Polyscias elegans</i>	Celery Wood	Y
	<i>Polyscias sambucifolia</i>	Elderberry Panax	Y
Areaceae			
	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	Y
	<i>Livistona australis</i>	Cabbage Palm	Y
Asclepiadaceae			
	<i>Marsdenia suaveolens</i>	Scented Marsdenia	Y
	<i>Tylophora barbata</i>	Bearded Tylophora	Y
Aspleniaceae			
	<i>Asplenium aethiopicum</i>		Y
	<i>Asplenium australasicum</i>		Y
	<i>Asplenium flabellifolium</i>	Necklace Fern	Y
Asteraceae			
	<i>Bidens pilosa</i>	Cobbler's Pegs	N
	<i>Conyza albida</i>	Tall Fleabane	N
	<i>Delairea odorata</i>	Cape Ivy	N
	<i>Ozothamnus diosmifolius</i>	White Dogwood	Y
Bignoniaceae			
	<i>Pandorea pandorana</i>	Wonga Wonga Vine	Y
Blechnaceae			
	<i>Blechnum ambiguum</i>		Y
	<i>Blechnum cartilagineum</i>	Gristle Fern	Y
	<i>Doodia aspera</i>	Prickly Rasp Fern	Y
Casuarinaceae			
	<i>Allocasuarina torulosa</i>	Forest Oak	Y
Celastraceae			
	<i>Maytenus silvestris</i>	Narrow-leaved Orangebark	Y
Commelinaceae			
	<i>Commelina cyanea</i>	Native Wandering Jew	Y
Convolvulaceae			
	<i>Dichondra repens</i>	Kidney Weed	Y
Cucurbitaceae			
	<i>Mukia maderaspatana</i>		Y
Cyatheaceae			
	<i>Cyathea australis</i>	Rough Treefern	Y
Cyperaceae			
	<i>Carex brunnea</i>		Y

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native
	<i>Gahnia clarkei</i>		Y
	<i>Gahnia melanocarpa</i>		Y
	<i>Lepidosperma laterale</i>		Y
Dennstaedtiaceae			
	<i>Pteridium esculentum</i>	Bracken	Y
Dicksoniaceae			
	<i>Calochlaena dubia</i>	Common Ground Fern	Y
Dilleniaceae			
	<i>Hibbertia dentata</i>	Twining Guinea Flower	Y
	<i>Hibbertia scandens</i>	Climbing Guinea Flower	Y
Dioscoreaceae			
	<i>Dioscorea transversa</i>	Native Yam	Y
Ebenaceae	<i>Diospyros australis</i>	Black Plum	Y
Elaeocarpaceae			
	<i>Elaeocarpus reticulatus</i>	Blueberry Ash	Y
Epacridaceae			
	<i>Trochocarpa laurina</i>	Tree Heath	Y
Escalloniaceae			
	<i>Polyosma cunninghamii</i>	Featherwood	Y
Euphorbiaceae			
	<i>Breynia oblongifolia</i>	Coffee Bush	Y
Eupomatiaceae	<i>Eupomatia laurina</i>	Bolwarra	Y
Fabaceae (Caesalpinioideae)			
	<i>Senna pendula</i>		N
Fabaceae (Faboideae)			
	<i>Erythrina crista-galli</i>	Cockspur Coral Tree	N
	<i>Glycine clandestina</i>		Y
	<i>Kennedia rubicunda</i>	Red Kennedy Pea	Y
Fabaceae (Mimosoideae)			
	<i>Acacia floribunda</i>	White Sally	Y
	<i>Acacia longifolia</i>	Sydney Golden Wattle	Y
	<i>Acacia prominens</i>	Gosford Wattle	Y
Flagellariaceae			
	<i>Flagellaria indica</i>	Whip Vine	Y
Gleicheniaceae			
	<i>Sticherus flabellatus</i>	Umbrella Fern	Y
Goodeniaceae	<i>Goodenia ovata</i>	Hop Goodenia	Y
Lauraceae			
	<i>Cassytha pubescens</i>		Y
	<i>Cryptocarya glaucescens</i>	Jackwood	Y
	<i>Endiandra sieberi</i>	Hard Corkwood	Y
Lindsaeaceae			
	<i>Lindsaea linearis</i>	Screw Fern	Y
	<i>Lindsaea microphylla</i>	Lacy Wedge Fern	Y
Lobeliaceae			
	<i>Pratia purpurascens</i>	Whiteroot	Y
Lomandraceae			
	<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	Y

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native
Luzuriagaceae			
	<i>Eustrephus latifolius</i>	Wombat Berry	Y
	<i>Geitonoplesium cymosum</i>	Scrambling Lily	Y
Meliaceae			
	<i>Synoum glandulosum</i>	Scentless Rosewood	Y
	<i>Toona ciliata</i>	Red Cedar	Y
Menispermaceae	<i>Sarcopetalum harveyanum</i>	Pearl Vine	Y
Monimiaceae			
	<i>Wilkiea huegeliana</i>	Veiny Wilkiea	Y
Moraceae			
	<i>Ficus rubiginosa</i>	"Port Jackson Fig, Rusty Fig"	Y
	<i>Trophis scandens</i>	Burny Vine	Y
Myrsinaceae			
	<i>Rapanea variabilis</i>	Muttonwood	Y
Myrtaceae			
	<i>Acmena smithii</i>	Lilly Pilly	Y
	<i>Backhousia myrtifolia</i>	Grey Myrtle	Y
	<i>Callistemon salignus</i>	Willow Bottlebrush	Y
	<i>Callistemon shiressii</i>		Y
	<i>Eucalyptus paniculata</i>	Grey Ironbark	Y
	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Y
	<i>Leptospermum polygalifolium</i>		Y
	<i>Rhodamnia rubescens</i>	Scrub Turpentine	Y*
	<i>Syncarpia glomulifera</i>	Turpentine	Y
	<i>Syzygium oleosum</i>	Blue Lilly Pilly	Y
Ochnaceae			
	<i>Ochna serrulata</i>	Mickey Mouse Plant	N
Oleaceae			
	<i>Ligustrum lucidum</i>	Large-leaved Privet	N
	<i>Ligustrum sinense</i>	Small-leaved Privet	N
	<i>Notelaea longifolia</i>	Large Mock-olive	Y
Orchidaceae			
	<i>Cymbidium suave</i>	Snake Orchid	Y
Phormiaceae			
	<i>Dianella caerulea</i>		Y
Pittosporaceae			
	<i>Billardiera scandens</i>	Appleberry	Y
	<i>Citriobatus</i> sp.		Y
Plantaginaceae			
	<i>Plantago lanceolata</i>	Lamb's Tongues	N
Poaceae			
	<i>Echinopogon caespitosus</i>		Y
	<i>Entolasia marginata</i>	Bordered Panic	Y
	<i>Entolasia stricta</i>	Wiry Panic	Y
	<i>Imperata cylindrica</i>	Bladey Grass	Y
	<i>Microlaena stipoides</i>		Y
	<i>Oplismenus aemulus</i>		Y
	<i>Panicum simile</i>	Two-colour Panic	Y
	<i>Paspalum dilatatum</i>	Paspalum	N

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native
	<i>Phyllostachys aurea</i>	Fishpole Bamboo	N
	<i>Themeda australis</i>	Kangaroo Grass	Y
Polygonaceae			
	<i>Muehlenbeckia gracillima</i>		Y
Polypodiaceae			
	<i>Platyserium bifurcatum</i>	Elkhorn	Y
Ranunculaceae			
	<i>Clematis aristata</i>		Y
	<i>Clematis glycinoides</i>	Headache Vine	Y
Rhamnaceae			
	<i>Alphitonia excelsa</i>	Red Ash	Y
	<i>Pomaderris</i> sp.		Y
Rubiaceae			
	<i>Morinda jasminoides</i>		Y
	<i>Morinka jasminoides</i>		Y
Rutaceae			
	<i>Melicope micrococca</i>	Hairy-leaved Doughwood	Y
Rosaceae	<i>Rubus moluccanus</i> var. <i>trilobus</i>	Molucca Bramble	Y
	<i>Cayratia clematidea</i>	Slender Grape	Y
Sambucaceae			
	<i>Sambucus australasica</i>	Native Elderberry	Y
Smilacaceae			
	<i>Smilax australis</i>	Sarsaparilla	Y
	<i>Smilax glyciphylla</i>	Sweet Sarsaparilla	Y
Verbenaceae			
	<i>Clerodendrum tomentosum</i>		Y
	<i>Lantana camara</i>	Lantana	N
Vitaceae			
	<i>Cissus antarctica</i>	Water Vine	Y
	<i>Cissus hypoglauca</i>	Giant Water Vine	Y

*listed as critically endangered under the BC Act

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX A-01: Plot data “2 & 3”

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native	Plot 2	Map unit E1a Coastal Warm Temperate Rainforest	Map unit E6a Coastal Narrabeen Moist Forest
Acanthaceae						
	<i>Pseuderanthemum variable</i>	Pastel Flower	Y	1	Uninformative	Positive
Adiantaceae						
	<i>Adiantum hispidulum</i>	Common Maidenhair	Y	2	Uninformative	Uninformative
Araceae						
	<i>Gymnostachys anceps</i>	Settler's Flax	Y	1	Positive	Positive
Arecaceae						
	<i>Archontophoenix cunninghamiana</i>	Bangalow Palm	Y	20	Positive	Uninformative
	<i>Livistona australis</i>	Cabbage Palm	Y	1	Positive	Uninformative
Asclepiadaceae						
	<i>Marsdenia rostrata</i>	Common Milk Vine	Y	1	Uninformative	Uninformative
	<i>Marsdenia suaveolens</i>	Scented Marsdenia	Y	1		
Aspleniaceae						
	<i>Asplenium australasicum</i>		Y	1	Unique	
Bignoniaceae						
	<i>Pandorea pandorana</i>	Wonga Wonga Vine	Y	1	Uninformative	Uninformative
Blechnaceae						
	<i>Blechnum cartilagineum</i>	Gristle Fern	Y	2	Positive	Positive
	<i>Doodia aspera</i>	Prickly Rasp Fern	Y	2	Positive	Positive
Casuarinaceae						
	<i>Allocasuarina torulosa</i>	Forest Oak	Y	2	Uninformative	Positive
Cunoniaceae						
	<i>Ceratopetalum apetalum</i>	Coachwood	Y	25	Uninformative	
Dicksoniaceae						
	<i>Calochlaena dubia</i>	Common Ground Fern	Y	5	Positive	Positive
Dioscoreaceae						
	<i>Dioscorea transversa</i>	Native Yam	Y	1	Uninformative	Positive
Ebenaceae						
	<i>Diospyros australis</i>	Black Plum	Y	1	Uninformative	Uninformative

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native	Plot 2	Map unit Unit E1a Coastal Warm Temperate Rainforest	Map unit E6a Coastal Narrabeen Moist Forest
Elaeocarpaceae						
	<i>Sloanea australis</i>	Maiden's blush	Y	5	Unique	
Escalloniaceae						
	<i>Polyosma cunninghamii</i>	Featherwood	Y	5	Unique	
Flagellariaceae						
	<i>Flagellaria indica</i>	Whip Vine	Y	1	Uninformative	
Lauraceae						
	<i>Cryptocarya glaucescens</i>	Jackwood	Y	2	Uninformative	Uninformative
	<i>Cryptocarya microneura</i>	Murrogun	Y	5	Uninformative	Positive
Lomandraceae						
	<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	Y	1	Negative	Constant
Meliaceae						
	<i>Synoum glandulosum</i>	Scentless Rosewood	Y	1	Positive	Positive
Monimiaceae						
	<i>Doryphora sassafras</i>	Sassafras	Y	5	Uninformative	
	<i>Palmeria scandens</i>	Anchor Vine	Y	2	Uninformative	
	<i>Wilkiea huegeliana</i>	Veiny Wilkiea	Y	1	Uninformative	Uninformative
Myrtaceae						
	<i>Acmena smithii</i>	Lilly Pilly	Y	10	Positive	Uninformative
	<i>Callistemon shiressii</i>		Y	1		
Pittosporaceae						
	<i>Pittosporum multiflorum</i>		Y	1	Uninformative	Uninformative
Ripogonaceae						
	<i>Ripogonum fawcettianum</i>	White Supplejack	Y	5	Positive	Uninformative
Rubiaceae						
	<i>Cyclophyllum longipetalum</i>	Coast Canthium	Y	1		
Rubiaceae						
	<i>Morinda jasminoides</i>		Y	2	Uninformative	
Smilacaceae						

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native	Plot 2	Map unit Unit E1a Coastal Warm Temperate Rainforest	Map unit E6a Coastal Narrabeen Moist Forest
	<i>Smilax australis</i>	Sarsaparilla	Y	1	Uninformative	Positive
Vitaceae						
	<i>Cissus hypoglauca</i>	Giant Water Vine	Y	1	Uninformative	Uninformative
Winteraceae						
	<i>Tasmannia insipida</i>	Brush Pepperwood	Y	1	Uninformative	
					9 Positive, 19 uninformative, 3 unique & one negative	10 Positive, 12 uninformative & one constant

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native	Plot 3	Map unit Unit E1a Coastal Warm Temperate Rainforest	Map unit E6a Coastal Narrabeen Moist Forest
Araceae						
	<i>Gymnostachys anceps</i>	Settler's Flax	Y	2	Positive	Positive
Arecaceae						
	<i>Livistona australis</i>	Cabbage Palm	Y	10	Positive	Uninformative
Bignoniaceae						
	<i>Pandorea pandorana</i>	Wonga Wonga Vine	Y	1	Uninformative	Uninformative
Blechnaceae						
	<i>Blechnum cartilagineum</i>	Gristle Fern	Y	2	Positive	Positive
Casuarinaceae						
	<i>Allocasuarina torulosa</i>	Forest Oak	Y	10	Uninformative	Positive
Cunoniaceae						
	<i>Ceratopetalum apetalum</i>	Coachwood	Y	1	Uninformative	Noted as being scarce in Bell relationship discussion within this map unit
	<i>Schizomeria ovata</i>	Crabapple	Y	2	Uninformative	
Cyperaceae						
	<i>Gahnia melanocarpa</i>		Y	1		Uninformative
Dicksoniaceae						
	<i>Calochlaena dubia</i>	Common Ground Fern	Y	10	Positive	Positive
Dioscoreaceae						
	<i>Dioscorea transversa</i>	Native Yam	Y	1	Uninformative	Positive
Epacridaceae						
	<i>Trochocarpa laurina</i>	Tree Heath	Y	2	Uninformative	Uninformative
Euphorbiaceae						
	<i>Breynia oblongifolia</i>	Coffee Bush	Y	1	Uninformative	Positive
Fabaceae (Caesalpinioideae)						
	<i>Senna pendula</i>		N	0.5		
Lauraceae						

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native	Plot 3	Map unit Unit E1a Coastal Warm Temperate Rainforest	Map unit E6a Coastal Narrabeen Moist Forest
	<i>Cryptocarya glaucescens</i>	Jackwood	Y	2	Uninformative	Uninformative
	<i>Cryptocarya microneura</i>	Murrogun	Y	2	Uninformative	Positive
Menispermaceae						
	<i>Sarcopetalum harveyanum</i>	Pearl Vine	Y	1	Uninformative	Uninformative
Myrtaceae						
	<i>Callistemon shiressii</i>		Y	2		
	<i>Eucalyptus acmenoides</i>	Mahogany	Y	10	Uninformative	Positive
	<i>Eucalyptus paniculata</i>	Grey Ironbark	Y	20	Uninformative	Uninformative
	<i>Rhodamnia rubescens</i>	Scrub Turpentine	Y	2	Uninformative	Positive
	<i>Syncarpia glomulifera</i>	Turpentine	Y	10	Positive	Positive
Ochnaceae						
	<i>Ochna serrulata</i>	Mickey Mouse Plant	N	1		
Oleaceae						
	<i>Ligustrum sinense</i>	Small-leaved Privet	N	1		
	<i>Notelaea longifolia</i>	Large Mock-olive	Y	2	Uninformative	Uninformative
Pittosporaceae						
	<i>Pittosporum multiflorum</i>		Y	1	Uninformative	Uninformative
Poaceae						
	<i>Oplismenus imbecillis</i>		Y	1	Uninformative	Positive
Ranunculaceae						
	<i>Clematis aristata</i>		Y	1		Uninformative
Ripogonaceae						
	<i>Ripogonum fawcettianum</i>	White Supplejack	Y	2	Positive	Uninformative
Rubiaceae						
	<i>Morinda jasminoides</i>		Y	1	Uninformative	
	<i>Psychotria loniceroides</i>	Hairy Psychotria	Y	1	Uninformative	Uninformative
Rubiaceae						
	<i>Cyclophyllum longipetalum</i>	Coast Canthium	Y	0.5		

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Scientific Name	Common Name	Native	Plot 3	Map unit Unit E1a Coastal Warm Temperate Rainforest	Map unit E6a Coastal Narrabeen Moist Forest
Rutaceae						
	<i>Asterolasia correifolia</i>		Y	1		Uninformative
Smilacaceae						
	<i>Smilax australis</i>	Sarsaparilla	Y	5	Positive	Positive
Verbenaceae						
	<i>Clerodendrum tomentosum</i>		Y	1	Uninformative	Uninformative
	<i>Lantana camara</i>	Lantana	N	0.5		
Vitaceae						
	<i>Cissus antarctica</i>	Water Vine	Y	1	Uninformative	Positive
				Total	7 Positive & 20 uninformative	13 Positive & 14 uninformative

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX B: FAUNA SPECIES RECORDED ON-SITE

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Common Name	Scientific Name	Observation Type Fraser Ecological 2019	Observation Type Enviro Ecology 2018	Observation Type Peak Ecology 2013	Observation Type Fraser Ecological 2021	Observed local bird observation group
Amphibians							
Hylidae	Peron's Tree Frog	<i>Litoria peronii</i>	C, O	C, O		C, O	
Hylidae	Dusky Toadlet	<i>Uperoleia fusca</i>		Sp, O, C		C, Sp	
Myobatrachidae	Brown-striped Frog	<i>Limnodynastes peronii</i>	C, Sp	C, Sp		C	
Myobatrachidae	Common Eastern Froglet	<i>Crinia signifera</i>	C	C		C	
Hylidae	Red-eye Tree Frog	<i>Litoria chloris</i>		C, O			
Reptiles							
Agamidae	Southern Angle-headed Dragon	<i>Hypsilurus spinipes</i>		O			
Scincidae	Land Mullet	<i>Egernia major</i>		O			
Varanidae	Lace Monitor	<i>Varanus varius</i>	O	O			
Scincidae	Eastern Water Skink	<i>Eulamprus quoyii</i>	O	O			
Scincidae	Garden Skink	<i>Lampropholis guichenoti</i>	O	O			
Scincidae	Three-toed Skink	<i>Saiphos equalis</i>		S			
Scincidae	Blue-tongue Lizard	<i>Tiliqua scincoides</i>		O			
Varanidae	Lace Monitor	<i>Varanus varius</i>		O			
Pythonidae	Diamond Python	<i>Morelia spilota</i>		O			
Birds							
Cacatuidae	Sulphur-crested Cockatoo	<i>Cacatua galerita</i>	C	O, C		C	Yes
Cacatuidae	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	C	O, C, FI		C	Yes
Campephagidae	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	O, C	O, C			Yes
Cinclosomatidae	Eastern Whipbird	<i>Psophodes olivaceus</i>	C	C		C	Yes
Columbidae	Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	O	O			Yes
Columbidae	White-headed Pigeon	<i>Columba leucomela</i>	O	O			Yes
Columbidae	Wonga Pigeon	<i>Leucosarcia melanoleuca</i>	O	O			Yes
Halcyonidae	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	O, C	O, C		C	Yes
Maluridae	Superb Fairy-wren	<i>Malurus cyaneus</i>	O, C	O, C			Yes
Megapodidae	Australian Brush-turkey	<i>Alectura lathamii</i>	O	O		C	Yes
Meliphagidae	Bell Miner	<i>Manorina melanophrys</i>	C	C		C	Yes

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Common Name	Scientific Name	Observation Type Fraser Ecological 2019	Observation Type Enviro Ecology 2018	Observation Type Peak Ecology 2013	Observation Type Fraser Ecological 2021	Observed local bird observation group
		ys					
Meliphagidae	Red Wattlebird	<i>Anthochaera carunculata</i>	O	O			Yes
Meliphagidae	White-eared Honeyeater	<i>Lichenostomus leucotis</i>	O	O			Yes
Menuridae	Superb Lyrebird	<i>Menura novaeollandiae</i>	O	O			Yes
Muscicapidae	Bassian Thrush	<i>Zoothera lunulata</i>		O			Yes
Pachycephalidae	Crested Shrike-tit	<i>Falcunculus frontatus</i>		O			Yes
Pachycephalidae	Golden Whistler	<i>Pachycephala pectoralis</i>	O, C	O, C		C	Yes
Pardalotidae	White-browed Scrubwren	<i>Sericornis frontalis</i>	O	O			Yes
Pardalotidae	Yellow Thornbill	<i>Acanthiza nana</i>	O	O			Yes
	Brown Gerygone				O		Yes
Petroicidae	Eastern Yellow Robin	<i>Eopsaltria australis</i>	O	O			Yes
Podargidae	Tawny Frogmouth	<i>Podargus strigoides</i>	O, C	O, C		C	Yes
Psittacidae	Australian King-Parrot	<i>Alisterus scapularis</i>	C	O			Yes
Psittacidae	Crimson Rosella	<i>Platycercus elegans</i>	C	O		C	Yes
Psittacidae	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	C	O, C		C	Yes
Strigidae	Powerful Owl	<i>Ninox strenua</i>	C	C			Yes
Strigidae	Southern Boobook	<i>Ninox novaeseelandiae</i>		C			Yes
Alcedinidae	Azure Kingfisher	<i>Ceyx azureus</i>					Yes
Tytonidae	Barn Owl	<i>Tyto javanica</i>					Yes
Columbidae	Brown Cuckoo Dove	<i>Macropygia amboinensis</i>	O				Yes
Meliphagidae	Brown Honeyeater	<i>Meliphaga brevirostris</i>					Yes
Pycnonotidae	Bul Bul (introduced)	<i>Pycnonotus jocosus</i>					Yes
Columbidae	Crested Pigeon	<i>Ocyphaps lophotes</i>					Yes
Coraciidae	Dollar Bird	<i>Eurystomus orientalis</i>					Yes
Petroicidae	Easter Yellow Robin	<i>Eopsaltria australis</i>	C			C	Yes
Meliphagidae	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	C			C	Yes

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Common Name	Scientific Name	Observation Type Fraser Ecological 2019	Observation Type Enviro Ecology 2018	Observation Type Peak Ecology 2013	Observation Type Fraser Ecological 2021	Observed local bird observation group
Ptilonorchidae	Green Cat Bird	Ailuroedus crassirostris	C			O	Yes
Pachycephalidae	Grey Shrike Thrush	Colluricincla harmonica					Yes
Cuculidae	Common Koel	Eudynamis orientalis					Yes
Meliphagidae	Lewin's Honeyeater	Meliphaga lewinii	C				Yes
Monarchidae	Magpie Lark	Grallina cyanoleuca					Yes
Artamidae	Magpie	Cracticus tibicen	O				Yes
Columbidae	Peaceful Dove	Geopelia striata					Yes
Estrildidae	Red Browed Firetail (grass finch)	Neochmia temporalis	O				Yes
Ptilonorchidae	Regent Bower Bird	Sericulus chrysocephalus					Yes
Ptilonorchidae	Satin Bower Bird	Ptilonorchus violaceus	C	O			Yes
Meliphagidae	Scarlet Honeyeater	Myzomela sanguinolenta					Yes
Tytonidae	Sooty Owl	Tyto tenebrosus					Yes
Strigidae	Barking Owl	Ninox connivens					Yes
Maluridae	Superb Fairy Wren	Malurus cyaneus	O	O			Yes
Maluridae	Variegated Fairy Wren		Malurus lamberti		O		Yes
Meliphagidae	Noisy Friarbird	Philemon corniculatus					Yes
Cuculidae	Fan tail Cuckoo	Cacomantis flabelliformis	O				Yes
Hirundinidae	Welcome Swallow	Hirundo neoxena	O				Yes
Pardalotidae	Striated Pardalote	Pardalotus striatus					Yes
Anatidae	Pacific Black Duck	Anas superciliosa	O	O			Yes
Podargidae	Tawny Frogmouth	Podargus strigoides	C	O	O		Yes
Meliphagidae	Red Wattlebird	Anthochaera carunculata	O	O			Yes

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Family Name	Common Name	Scientific Name	Observation Type Fraser Ecological 2019	Observation Type Enviro Ecology 2018	Observation Type Peak Ecology 2013	Observation Type Fraser Ecological 2021	Observed local bird observation group
Columbidae	White Headed Pigeon	Columba leucomela	O	O			Yes
Rhipiduridae	Willy Wagtail	Rhipidura leucophrys	O	O			Yes
Columbidae	Wonga Pigeon	Leucosarcia melanoleuca	O	O			Yes
Meliphagidae	Yellow Faced Honeyeater	Caligavis chrysops	O	O			Yes
Rhipiduridae	Rufous Fantail	Rhipidura rufifrons				O	
Mammals							
Canidae	Red Fox	Vulpes vulpes	Sc	Sc, C			
Canidae	Domestic Dog	Canis lupus familiaris		Sp, EBG, EAG, EAT		O	
Dasyuridae	Brown Antechinus	Antechinus stuartii		CA (day)			
Felidae	Cat (feral)	Felis catus		O, Sc			
Macropodidae	Swamp Wallaby	Wallabia bicolor	O, Sc	Sc		O	
Molossidae	White-striped freetail bat	Australomus australis	A	A, C			
Muridae	Bush Rat	Rattus fuscipes		O, Sp, EBG, EAG			
Muridae	Black Rat	Rattus rattus		O, Sp, EBG, EAG			
Petauridae	Common Ringtail Possum	Pseudochirus peregrinus	O	O, Sp, EAT, EBT			
Phalangeridae	Common Brushtail Possum	Trichosurus vulpecula	O	O, Sp, EBT			
Rhinolophidae	Eastern Horseshoe-bat	Rhinolophus megaphyllus	A	A			
Vespertilionidae	Chocolate Wattled Bat	Chalinolobus morio	A	A			
Vespertilionidae	Eastern Broad-nosed Bat	Scotorepens orion	A	A			
Vespertilionidae	Little Forest Bat	Vespertillio vulturinus	A	A			
Vespertilionidae	Gould's Wattled Bat	Chalinolobus gouldii	A	A			
Pteropodidae	Grey Headed Flying Fox	Pteropus poliocephalus	O				
Tachyglossidae	Short-beaked Echidna	Tachyglossus aculeatus		O			
Peramelidae	Long-nosed Bandicoot	Perameles nasuta	O				
Acrobatidae	Feathertail Glider	Acrobates pygmaeus	O				
Acrobatidae	Sugar Glider	Petaurus breviceps	O				

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Key:	
A=Anabat II	P=Call Playback Response
D= Diggings	F= Feather
C=Call Identification	S= Habitat Search
CA = Camera	Sc=Scat, Track
Fl=Flying over study area	Sp=Spotlight
O= Observation	Elliot A Ground = EAG
FS= Feed scar	Elliot B Ground = EAG
Elliot A Tree = EAT	
Elliot B Ground = EAB	

** Elliott trap results were from previous survey undertaken by Enviro Ecology (2017)*

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

**APPENDIX C: THREATENED FLORA PREVIOUSLY
RECORDED WITHIN 10KM OF THE SITE**

Threatened Flora species recorded in the locality

This appendix details the Threatened species of plant that have either been recorded in the local area based on records the Bionet database (data received 12th April 2021) and records from the Royal Botanical Gardens. Threatened species with habitat likely to occur in the locality were also considered based on records from the *EPBC Protected Matters Search Tool* Department of Sustainability, Environment, Water, Population and Communities.

Table 7-3 Threatened flora species recorded in the locality

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Epacridaceae	<i>Epacris purpurascens</i> var. <i>purpurascens</i>		V		2K	Occurs in Gosford and Sydney districts where it grows in sclerophyll forest, scrub and swamps (Harden 1992). Usually found in sites with a strong shale influence (NSW National Parks and Wildlife Service 2002).	Low Targeted searches were conducted for this species despite this no individuals were recorded from the study area.	1
Fabaceae (Mimosoideae)	<i>Acacia bynoeana</i>	Bynoe's Wattle	E1	V	3V	Occurs south of Dora Creek-Morisset area to Berrima and the Illawarra region and west to the Blue Mountains. It grows mainly in heath and dry sclerophyll forest on sandy soils (Harden, 2002 #5). Seems to prefer open, sometimes disturbed sites such as trail margins and recently burnt areas. Typically occurs in association with <i>Corymbia gummifera</i> , <i>Eucalyptus haemastoma</i> , <i>E. gummifera</i> , <i>E. parramattensis</i> , <i>E. sclerophylla</i> , <i>Banksia serrata</i> and <i>Angophora bakeri</i> (NSW National Parks and Wildlife Service, 1999 #61).	Low Targeted surveys were undertaken for this species which failed to detect this species within the subject site.	0
Fabaceae (Caesalpinioideae)	<i>Senna acclinis</i>	Rainforest Cassia	E1	3R		Occurs in coastal districts and adjacent tablelands of NSW from the Illawarra to Queensland. It grows in or on the edges of subtropical and dry rainforest (Department of Environment and Conservation, 2005 #762; NSW National Parks and Wildlife Service, 2002 #93).	Low Targeted surveys were undertaken for this species which failed to detect this species within the subject site.	1

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Lamiaceae	<i>Prostanthera askania</i>	Tranquility Mintbush	E1	E	2V	Restricted to the Ourimbah--Narara area where it currently known to exist in five populations. It grows in sclerophyll forest on ridges in or adjacent to rainforest grows in sclerophyll forest on ridges in or adjacent to rainforest (Harden 1992; NSW Scientific Committee 1998).	Low A known population of this species is known to occur to the south & south-west of the study area. Targeted searches were conducted for this species despite this species being in flower at the reference population no individuals were recorded from the study area.	
Lamiaceae	<i>Prostanthera junonis</i>	Somersby Mintbush	E1	E	2E	Grows in sclerophyll forest and woodland, usually near the coast, in sandy loamy soils, overlying sandstone. Occurs in Mangrove Mtn and Sydney districts (Harden 1992).	Low No suitable habitat was recorded from the study area for this species.	0
Lindsaeaceae	<i>Lindsaea fraseri</i>	Fraser's Screw Fern	E1			Occurs upon poorly drained, infertile soils in swamp forest or open eucalypt forest, usually as part of a ferny understorey. Confined to the far north coastal areas (Royal Botanic Gardens, 2009 #2889).	Low Targeted searches were conducted for this species despite this no individuals were recorded from the study area.	1
Myrtaceae	<i>Darwinia glaucophylla</i>		V		2Ra	Restricted to the Gosford LGA where it occurs between Gosford and the Hawkesbury River around Calga, Kariong and Mt Karing. It grows in sandy heath, scrub and woodlands and is often associated with sandstone rock platforms or near hanging swamps and friable sandstone shallow soils. Associated species include: <i>Banksia ericifolia</i> , <i>Acacia terminalis</i> , <i>A. oxycedrus</i> , <i>Angophora hispida</i> , <i>Hakea teretifolia</i> , <i>Bauera rubioides</i> , and in woodland: <i>Corymbia gummifera</i> , <i>C. eximia</i> , <i>Eucalyptus haemastoma</i> and <i>E. punctata</i> (Department of Environment and Climate Change 2009).	Low No suitable habitat was recorded from the study area for this species	4
Myrtaceae	<i>Eucalyptus camfieldii</i>	Heart-leaved Stringybark	V	V	2Vi	Occurs from Tomago to the Royal National Park where it grows in coastal shrub heath in sandy soils on sandstone (Harden 2002).	Low Targeted searches were conducted for this species despite this no individuals were recorded from the study area.	0

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Myrtaceae	<i>Melaleuca biconvexa</i>	Biconvex Paperbark	V	V		Occurs as disjunct populations in coastal New South Wales from Jervis Bay to Port Macquarie, with the main concentration of records is in the Gosford/Wyong area (NSW Scientific Committee 1998). Grows in damp places, often near streams, or low-lying areas on alluvial soils of low slopes or sheltered aspects (Harden 2002; Department of Environment and Climate Change 2008).	Low Targeted searches were conducted for this species despite this no individuals were recorded from the study area.	169
Myrtaceae	<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	V	V	3Ri	Occurs between Buladelah and St Georges Basin where it grows in subtropical and littoral rainforest on sandy soils or stabilized dunes near the sea (Harden 2002). On the south coast the Magenta Lilly Pilly occurs on grey soils over sandstone, restricted mainly to remnant stands of littoral (coastal) rainforest. On the central coast Magenta Lilly Pilly occurs on gravels, sands, silts and clays in riverside gallery rainforests and remnant littoral rainforest communities (Department of Environment and Climate Change 2008).	Low Targeted searches were conducted for this species despite this no individuals were recorded from the study area.	29
Orchidaceae	<i>Cryptostylis hunteriana</i>	Leafless Tongue Orchid	V	V	3V	Occurs south from the Gibraltar Range, chiefly in coastal districts but also extends on to tablelands. Grows in swamp-heath and drier forest on sandy soils on granite & sandstone. Occurs in small, localised colonies most often on the flat plains close to the coast but also known from some mountainous areas growing in moist depressions and swampy habitats (Harden 1993; NSW National Parks and Wildlife Service 1999).	Low No suitable habitat was recorded from the study area for this species.	0

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Orchidaceae	<i>Dendrobium melaleucaphilum</i>	Spider Orchid	E1			Occurs in coastal districts, north from the lower Blue Mountains. It grows frequently on <i>Melaleuca styphelioides</i> , less commonly on rainforest trees or on rocks (Department of Environment and Conservation 2005; Royal Botanic Gardens 2005).	Low No suitable habitat was recorded from the study area for this species.	1
Orchidaceae	<i>Rhizanthella slateri</i>	Eastern Australian Underground Orchid	V	E	3K	Highly cryptic as only the flowers may occur above ground. It is more frequent in areas of soil disturbance, but further habitat characteristics or associated vegetation types are poorly known, possibly occurring in sclerophyll forests (Department of Environment and Climate Change 2008).	Low No suitable habitat was recorded from the study area for this species.	0
Proteaceae	<i>Grevillea parviflora</i> ssp. <i>parviflora</i>	Small-flower Grevillea	V	V		Mainly known from the Prospect area (but now extinct there) and lower Georges River to Camden, Appin and Cordeaux Dam areas, with a disjunct populations near Putty, Cessnock and Cooranbong. Grows in heath or shrubby woodland in sandy or light clay soils usually over thin shales (NSW Scientific Committee, 1998 #78; Harden, 2002 #5). Flowering has been recorded between July to December as well as April-May.	Low No suitable habitat was recorded from the study area for this species.	0

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Thymelaeaceae	<i>Pimelea curviflora</i> var. <i>curviflora</i>		V	V		<p>Confined to coastal areas around Sydney where it grows on sandstone and laterite soils. It is found between South Maroota, Cowan, Narrabeen, Allambie Heights, Northmead and Kellyville, but its former range extended south to the Parramatta River and Port Jackson region including Five Dock, Bellevue Hill and Manly. Usually occurs in woodland in the transition between shale and sandstone, often on Lucas Heights soil landscape (NSW Scientific Committee, 1998 #65; James, 1997 #69; James, 1999 #68; Harden, 2000 #2). Flowers October to May.</p>	<p>Low</p> <p>Targeted surveys were undertaken for this species which failed to detect this species within the subject site.</p>	0

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Tremandraceae	<i>Tetratheca glandulosa</i>		V	V	2V	Occurs from Mangrove Mountain to the Blue Mountains where it grows in sandy or rocky heath or scrub (Harden, 1992 #3). Associated with shale-sandstone transition habitat where shale-cappings occur over sandstone, with associated soil landscapes such as Lucas Heights, Gympie, Lambert and Faulconbridge. Topographically, the plant occupies ridge-tops, upper-slopes and to a lesser extent mid-slope sandstone benches. Soils are generally shallow, consisting of a yellow, clayey/sandy loam. Stony lateritic fragments are also common in the soil profile on many of these ridgetops. Vegetation structure varies from heaths and scrub to woodlands/open woodlands, and open forest. Vegetation communities correspond broadly to Benson & Howell's Sydney Sandstone Ridge-top Woodland (Map Unit 10ar). Common woodland tree species include: <i>Corymbia gummifera</i> , <i>C. eximia</i> , <i>Eucalyptus haemastoma</i> , <i>E. punctata</i> , <i>E. racemosa</i> , and/or <i>E. sparsifolia</i> , with an understorey dominated by species from the families Proteaceae, Fabaceae, and Epacridaceae (Department of Environment and Climate Change, 2008 #1913).	Low Targeted surveys were undertaken for this species which failed to detect this species within the subject site.	

Family Name	Scientific Name	Common Name	Conservation Status			Habitat	Likelihood of Occurrence	No. of records in locality
			BC Act ¹	EPBC Act ²	ROTAP ³			
Tremandraceae	<i>Tetraloche juncea</i>	Black-eyed Susan	V	V	3Vi	Occurs in coastal districts from Buladelah to Port Macquarie where it grows in dry sclerophyll forest and occasionally swampy heath in sandy, (Harden 1992) low nutrient soils with a dense understorey of grasses. Specifically it is known to occur within Smooth-barked Apple Woodland and Coastal Foothills Spotted Gum Woodland (NSW National Parks and Wildlife Service, 2000 #392; NSW National Parks and Wildlife Service, 2000 #393; NSW National Parks and Wildlife Service, 2000 #344).	Low No suitable habitat was recorded from the study area for this species.	2
Dilleniaceae	<i>Hibbertia procumbens</i>	Spreading Guinea Flower	E1			Recorded only from Mangrove Mtn and grows in heath on sandy soils (Harden, 2000 #2).	Low No suitable habitat was recorded from the study area for this species.	16
Malvaceae	<i>Rhodomyrtus psidioides</i>	Native Guava	E4A			Pioneer species found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest often near creeks and drainage lines. This species is characterised being extremely susceptible to infection by Myrtle Rust. Myrtle Rust affects all plant parts.	Low Targeted searches were conducted for this species despite this no individuals were recorded from the study area.	8

Myrtaceae	<i>Rhodamnia rubescens</i>	Scrub Turpentine	E4A			Found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest usually on volcanic and sedimentary soils. This species is characterised as highly to extremely susceptible to infection by Myrtle Rust. Myrtle Rust affects all plant parts.	High This species was recorded during recent targeted surveys. An impact assessment has been prepared for this species (Appendix F).	63
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1) V= Vulnerable, E1 = Endangered (BC Act) E2= Endangered Population

2) ROTAP (Rare or Threatened Australian Plants, Briggs and Leigh 1996) is a conservation rating for Australian plants.

1 = Species only known from one collection. 2 = Species with a geographic range of less than 100km in Australia. 3 = Species with a geographic range of more than 100km in Australia,

X = Species presumed extinct; no new collections for at least 50 years. E = Endangered species at risk of disappearing from the wild state if present land use and other causal factors continue to operate, V = Vulnerable species at risk of long-term disappearance through continued depletion. R = Rare, but not currently considered to be endangered. K = Poorly known species that are suspected to be threatened. C = Known to be represented within a conserved area.

a = At least 1,000 plants are known to occur within a conservation reserve(s). i = Less than 1,000 plants are known to occur within a conservation reserve(s). The reserved population size is unknown. t = The total known population is reserved. + = The species has a natural occurrence overseas.

3) V = Vulnerable, E = Endangered (*Environment Protection and Biodiversity Conservation Act 1999*).

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

**APPENDIX D: THREATENED FAUNA PREVIOUSLY
RECORDED WITHIN 10KM OF THE SITE**

Threatened fauna species recorded in the locality

This appendix details the Threatened species of plant that have either been recorded in the local area based on records the BIONET database accessed 12th April 2021 and records from the Royal Botanical Gardens. Threatened species with habitat likely to occur in the locality were also considered based on records from the *EPBC Protected Matters Search Tool* Department of Sustainability, Environment, Water, Population and Communities 2019.

Table 7-4 Threatened fauna species recorded in the locality

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
Amphibians					
<i>Crinia tinnula</i>	Wallum Froglet	V		Occurs along coast from south-eastern Queensland to Sydney. Mostly associated with swamps, dams and flooded roadside ditches, usually in heathland, where it is confined to acid, paperbark swamps and sedge swamps of the 'wallum' country. Males call any time of year. Breed in late winter (Anstis 2002; NSW National Parks and Wildlife Service 2002).	Low No suitable habitat for this species within the study area.
<i>Heleioporus australiacus</i>	Giant Burrowing Frog	V	V	Appears to exist as two distinct populations: a northern population largely confined to the sandstone geology of the Sydney Basin, from Wollemi National Park in the north and extending south to Jervis Bay; and a southern population occurring in disjunct pockets from about Narooma south into eastern Victoria. In the northern population there is a marked preference for sandstone ridge top habitat and broader upland valleys. In these locations the frog is associated with small headwater creek lines and along slow flowing to intermittent creek lines. The vegetation is typically woodland, open woodland and heath and may be associated with 'hanging swamp' seepage lines and where small pools form from the collected water. They have also been observed occupying artificial ponded structures such as fire dams, gravel 'borrows', detention basins and box drains that have naturalised over time and are still surrounded by other undisturbed habitat. In the southern population, records from Narooma, Bega, Bombala and eastern Victoria appear to be associated with Devonian igneous and sedimentary formations and Ordovician metamorphic and are generally from more heavily timbered areas. However, again there appears to be an association with ridge tops, headwaters and slow flowing streams. Do not appear to inhabit areas that have been cleared for agriculture or for urban development. Breed in summer and autumn in burrows in the banks of small creeks. Often spends significant periods of time underground during unfavourable conditions and to avoid detection during the day. (Cogger 2000; NSW National Parks and Wildlife Service 2001).	Low No suitable habitat for this species within the study area.

Scientific Name	Common Name	TSC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Litoria aurea</i>	Green and Golden Bell Frog	E1	V	Has a fragmented distribution of mainly near coastal locations from Lakes Entrance (Victoria) to south of the NSW-Queensland border; as far west as Bathurst in the more elevated southern tablelands and central slopes of NSW. Various types of habitat utilised has been documented. For breeding utilises a wide range of water bodies, including both natural and man-made structures, such as marshes, dams and stream sides, and ephemeral locations that are more often dry than wet. Is found in various small pockets of habitat in otherwise developed areas and has the tendency of often turning up in highly disturbed sites. Lotic situations such as fast flowing streams appear to be one of the few water bodies not utilised, at least for breeding purposes. Habitat attributes associated with the various water bodies occupied by the GGBF, and that appear to make such habitat more likely to be occupied, include that the water body is shallow, still or slow flowing, ephemeral and/or widely fluctuating, unpolluted and without heavy shading. Permanent water bodies are also known to be used and there is historical evidence of occupation of large, often deep and permanent bodies of water. There is a clear preference shown by GGBF for sites with a complexity of vegetation structure and associated terrestrial habitat attributes that appear to favour the species include extensive grassy areas and an abundance of shelter sites such as rocks, logs, tussock forming vegetation and other cover, considered to be used for foraging and shelter. Over-wintering sites may be adjacent to or some distance away from breeding sites; such sites include the bases of dense vegetation tussocks, beneath rocks, timber, within logs or beneath ground debris, including human refuse such as sheet iron, but the full range of possible habitat used for this purpose is not yet well understood (Department of Environment and Conservation 2004; Department of Environment and Conservation 2005).	Low No suitable habitat for this species within the study area.
<i>Litoria brevipalmata</i>	Green Thighed Frog	V		The species inhabits coastal forest and bushland from south-east QLD to Ourimbah NSW and breeding takes place only after heavy summer rains when calling males gather around temporary or semi-permanent ponds and flooded ditches. Egg masses are often laid in temporary ponds and their survival may depend on subsequent rains around grassy semi-permanent ponds in late spring and summer (Cogger 2000).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.
<i>Mixophyes balbus</i>	Stuttering Frog	E1	V	Terrestrial species, found in rainforest, Antarctic beech forest or wet sclerophyll forest. The species depends on freshwater streams and riparian vegetation for breeding and habitation. No records are known from riparian habitat that has been disturbed (Cogger 2000; NSW Scientific Committee 2003).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.
<i>Pseudophryne australis</i>	Red-crowned Toadlet	V		Occurs within 160 km of Sydney where it is restricted to Hawkesbury Sandstone. It breeds in deep grass and debris adjacent to ephemeral drainage lines. When not breeding individuals are found scattered on sandstone ridges under rocks and logs (Cogger 2000).	Low No suitable habitat was recorded from the study area for this species.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Mixophyes iteratus</i>	Giant Barred Frog	E1	E	Terrestrial species which occurs in rainforests, Antarctic beech or wet sclerophyll forests. Feeds on insects and smaller frogs (Cogger 2000). The species is associated with permanent flowing drainages, from shallow rocky rainforest streams to slow-moving rivers in lowland open forest. It is not known to utilise still water areas (NSW Scientific Committee 1999). More prevalent at lower altitudes and in larger streams than its congeners, although has been recorded up to 1000 metres asl. (NSW National Parks and Wildlife Service 1999).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.
Insects					
<i>Petalura gigantea</i>	Giant Dragonfly	E1		Found in permanent wetlands, both coastal and upland from moss Vale northwards to southern Queensland (Department of Environment and Conservation 2005).	Low No suitable habitat was recorded from the study area for this species.
Birds					
<i>Hirundapus caudacutus</i>	White-throated Needletail		M	Occurs in airspace over forests, woodlands, farmlands, plains, lakes, coasts and towns. Breeds in the northern hemisphere and migrates to Australia in October-April (Pizzey and Knight 1997).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Apus pacificus</i>	Fork-tailed Swift		M	Breeds from central Siberia eastwards through Asia, and is migratory, wintering south to Australia. Individuals never settle voluntarily on the ground and spend most of their lives in the air, living on the insects they catch in their beaks (Higgins 1999).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Ardea alba</i>	Great Egret		M	Great Egrets occur throughout most of the world. They are common throughout Australia, with the exception of the most arid areas. Great Egrets prefer shallow water, particularly when flowing, but may be seen on any watered area, including damp grasslands. Great Egrets can be seen alone or in small flocks, often with other egret species, and roost at night in groups. In Australia, the breeding season of the Great Egret is normally October to December in the south and March to May in the north. This species breeds in colonies, and often in association with cormorants, ibises and other egrets. (Australian Museum 2003).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Ardea ibis</i>	Cattle Egret		M	Sub-species <i>A. i. coromanda</i> is found across the Indian subcontinent and Asia as far north as Korea and Japan, and in South-east Asia, Papua New Guinea and Australia (McKillingan 2005).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle		M	Occurs in coastal areas including islands, estuaries, inlets, large rivers, inland lakes and reservoirs. Builds a huge nest of sticks in tall trees near water, on the ground on islands or on remote coastal cliffs (Pizzey and Knight 1997).	Low/Medium Suitable nesting habitat for this species was recorded from the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Merops ornatus</i>	Rainbow Bee-eater		M	Usually occur in open or lightly timbered areas, often near water. Breed in open areas with friable, often sandy soil, good visibility, convenient perches and often near wetlands. Nests in embankments including creeks, rivers and sand dunes. Insectivorous, most foraging is aerial, in clearings (Higgins 1999).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Myiagra cyanoleuca</i>	Satin Flycatcher		M	Occurs in heavily vegetated gullies, in forests and taller woodlands. During migration it is found in coastal forests, woodlands, mangroves, trees in open country and gardens (Pizzey and Knight 1997).	Low/Medium Suitable foraging habitat for this species was recorded from the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Rhipidura rufifrons</i>	Rufous Fantail		M	Occurs in a range of habitats including the undergrowth of rainforests/wetter eucalypt forests/gullies, monsoon forests paperbarks, sub-inland and coastal scrubs, mangroves, watercourses, parks and gardens. When migrating they may also be recorded on farms, streets and buildings. Migrates to SE Australia in October-April to breed, mostly in or on the coastal side of the Great Dividing Range (Pizzey and Knight 1997).	Low/Medium Suitable foraging habitat for this species was recorded from the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Rostratula benghalensis</i>	Painted Snipe	E1	VM	Inhabits shallow, vegetated, temporary or infrequently filled wetlands, including where there are trees such as <i>Eucalyptus camaldulensis</i> (River Red Gum), <i>E. populnea</i> (Poplar Box) or shrubs such as <i>Muehlenbeckia florulenta</i> (Lignum) or <i>Sarcocornia quinqueflora</i> (Samphire). Feeds at the water's edge and on mudflats on seeds and invertebrates, including insects, worms, molluscs and crustaceans. Males incubate eggs in a shallow scrape nest (Garrett and Crowley 2000).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Burhinus grallarius</i>	Bush Stone-curlew	E1		Require sparsely grassed, lightly timbered, open forest of woodland. In southern Australia they often occur where there is a well structured litter layer and fallen timber debris. Feed on a range of invertebrates and small vertebrates, as well as seeds and shoots (NSW National Parks and Wildlife Service 1999; NSW National Parks and Wildlife Service 2003).	Low No suitable habitat was recorded from the study area for this species.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V		Occurs in wetter forests and woodland from sea level to an altitude over 2000 metres, timbered foothills and valleys, coastal scrubs, farmlands and suburban gardens (Pizzey and Knight 1997).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V		Occurs in eucalypt woodland and forest with Casuarina/Allocasuarina spp. Characteristically inhabits forests on sites with low soil nutrient status, reflecting the distribution of key Allocasuarina species. The drier forest types with intact and less rugged landscapes are preferred by the species. Nests in tree hollows (NSW National Parks and Wildlife Service 1999; Garnett and Crowley 2000).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Charadrius mongolus</i>	Lesser Sand Plover	V	M	Migratory bird that migrates from the northern hemisphere to coastal areas of northern and east coast of Australia (Garnett and Crowley 2000).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Diomedea exulans</i>	Wandering Albatross	E1	VM	Nomadic marine species, that breeds in small loose colonies among grass tussocks, using a large mud nets, sometimes off the coast of NSW (Garnett and Crowley 2000).	Low No suitable habitat was recorded from the study area for this species. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E1		Feed in shallow water up to 0.5 m deep on fish, reptiles and frogs. Build nests in trees close to feeding sites (Garnett and Crowley 2000).	Low No suitable habitat was recorded from the study area for this species.
<i>Gygis alba</i>	White Tern	V		Occurs on oceanic islands, tropical and subtropical seas. Eggs are laid and incubated in depression on branch of forest tree or palm frond up to 10 metres above ground (Pizzey and Knight 1997).	Low No suitable habitat was recorded from the study area for this species.
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	V		Found on rocky shorelines where it forages on intertidal flats (Garnett and Crowley 2000).	Low No suitable habitat was recorded from the study area for this species.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Haematopus longirostris</i>	Pied Oystercatcher	V		Occurs in undisturbed beaches, sandpits, sandbars, tidal mudflats, estuaries and coastal islands. Occasionally found on rocky reefs, shores, rock stacks, brackish or saline wetlands and also in grassy paddocks, golf courses or parks near coast. Eggs are laid in shallow scrape in sand on open beach or among low growth behind beach (Pizzey and Knight 1997).	Low No suitable habitat was recorded from the study area for this species.
<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	V		Distributed throughout most of inland Australia and prefers arid scrubland, and open woodlands. Feeds on small mammals and birds (Garnett and Crowley 2000).	Low No suitable habitat was recorded from the study area for this species.
<i>Ixobrychus flavicollis</i>	Black Bittern	V		Usually found in dense vegetation in and fringing streams, swamps, tidal creeks and mudflats, particularly amongst swamp she-oaks and mangroves. Feeds on aquatic fauna along streams, in estuaries and beside billabongs and pools. Breeding occurs in summer in secluded places in densely vegetated wetlands. It nests in trees that overhang the water (Garnett and Crowley 2000; NSW National Parks and Wildlife Service 2002).	Low No suitable habitat was recorded from the study area for this species.
<i>Daphoenositta chrysoptera</i>	Varied Sittella	V		Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland. Feeds on arthropods gleaned from crevices in rough or decorticating bark, dead branches, standing dead trees and small branches and twigs in the tree canopy.	Low/Medium Suitable habitat for this species was recorded from the subject site. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Glossopsitta pusilla</i>	Little Lorikeet	V		Forages primarily in the canopy of open Eucalyptus forest and woodland, yet also finds food in Angophoras, Melaleucas and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity. Isolated flowering trees in open country, e.g. paddocks, roadside remnants and urban trees also help sustain viable populations of the species. Feeds mostly on nectar and pollen, occasionally on native fruits such as mistletoe, and only rarely in orchards. Gregarious, travelling and feeding in small flocks (<10), though often with other lorikeets. Flocks numbering hundreds are still occasionally observed and may have been the norm in past centuries.	Low/Medium Suitable habitat for this species was recorded from the subject site. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Lathamus discolor</i>	Swift Parrot	E1	EM	Breeding occurs in Tasmania, majority migrates to mainland Australia in autumn, over-wintering, particularly in Victoria and central and eastern NSW, but also south-eastern Queensland as far north as Daringa. Until recently it was believed that in New South Wales, swift parrots forage mostly in the western slopes region along the inland slopes of the Great Dividing Range but are patchily distributed along the north and south coast including the Sydney region, but new evidence indicates that the forests on the coastal plains from southern to northern NSW are also extremely important. In mainland Australia is semi-nomadic, foraging in flowering eucalypts in eucalypt associations, particularly box-ironbark forests and woodlands. Preference for sites with highly fertile soils where large trees have high nectar production, including along drainage lines and isolated rural or urban remnants, and for sites with flowering Acacia pycnantha, is indicated. Sites used vary from year to year. (Garnett and Crowley 2000),(Swift Parrot Recovery Team 2001).	Low/Medium Suitable foraging habitat for this species was recorded from the study area. Impact Assessments have been prepared for this (Appendices E & F). No important habitat for this species in the proposal area as defined under the EPBC Act 1999.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Lophoictinia isura</i>	Square-tailed Kite	V		This species hunts primarily over open forest, woodland and mallee communities as well as over adjacent heaths and other low scrubby habitats in wooded towns. It feeds on small birds, their eggs and nestlings as well as insects. Seems to prefer structurally diverse landscapes (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area.
<i>Macronectes giganteus</i>	Southern Giant-Petrel	E1	EM	A partly nomadic marine species that forages off the coast of New South Wales (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the EPBC Act 1999.
<i>Neophema pulchella</i>	Turquoise Parrot	V		Occurs in the foothills of the great dividing range in eucalypt woodlands and forests with a grassy or sparsely shrubby understorey. Nests in hollows in trees, stumps or even fence posts. It feeds on seeds of both native and introduced grass and herb species (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area.
<i>Ninox connivens</i>	Barking Owl	V		Occurs in dry sclerophyll woodland. In the south west it is often associated with riparian vegetation while in the south east it generally occurs on forest edges. It nests in large hollows in live eucalypts, often near open country. It feeds on insects in the non-breeding season and on birds and mammals in the breeding season (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area.
<i>Ninox strenua</i>	Powerful Owl	V		A sedentary species with a home range of approximately 1000 hectares it occurs within open eucalypt, casuarina or callitris pine forest and woodland. It often roosts in dense vegetation including rainforest of exotic pine plantations. Generally feeds on medium-sized mammals such as possums and gliders but will also eat birds, flying-foxes, rats and insects. Prey are generally hollow dwelling and require a shrub layer and owls are more often found in areas with more old trees and hollows than average stands (Garnett and Crowley 2000).	High This species was recorded within the subject property during a flora and fauna investigation of No 107 Alan Street, Niagara Park in 2015 (Figure 3-2). The subject site presents potential foraging habitat for this species only. No suitable nesting/roosting sites were identified within or adjacent to the subject site. An Impact Assessment has been prepared for this species (Appendix E).
<i>Phaethon rubricauda</i>	Red-tailed Tropicbird	V		Tropical and sub-tropical seas (Pizzey and Knight 1997).	Low No suitable habitat for this species within the study area.
<i>Pomatostomus temporalis</i>	Grey-crowned Babbler	V		Found throughout western slopes and plains, southern and central tablelands and occurring in Northern Rivers area, mid-north coast and the Hunter Valley of NSW. Lives in open forest and woodland, acacia shrubland and adjoining farmland. Large stick dome nest with spout-like entrance (Pizzey and Knight 1997).	Low No suitable habitat for this species within the study area.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Pterodroma leucoptera</i>	Gould's Petrel	E1	EM	A marine species, it nests on islands among rocks and debris of Cabbage Tree Palms. It feeds on fish, cephalopods and other marine animals (Garrett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Pterodroma solandri</i>	Providence Petrel	V	M	A marine species that breeds at Norfolk island and breeds within earth burrows often within rainforest. Occurs across the western Tasman Sea and the entire north Pacific Ocean (Garrett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	V		Occurs in subtropical and dry rainforests and occasionally in moist eucalypt forests and swamp forests where fruit is plentiful. They are thought to move locally as they follow the ripening fruit (NSW National Parks and Wildlife Service 2002).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V		Occurs in rainforests and fringes, scrubs, mangroves and wooded stream-margins, lantana thickets, isolated figs, pittosporums, lilly pillies and blackberries (Pizzey and Knight 1997).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Puffinus assimilis</i>	Little Shearwater	V		A marine species that occurs over the Tasman Sea and possibly the Coral Sea. The species breeds on island in burrows dug in soft soil among mats of succulents or among loose rocks and they forage far out to sea (Garrett and Crowley 2000).	Low No suitable habitat for this species within the study area.
<i>Puffinus carneipes</i>	Flesh-footed Shearwater	V	M	An oceanic species that has been recorded off the coast of New South Wales (Garrett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Pyrrholaemus sagittatus</i>	Speckled Warbler	V		Occurs in a wide range of eucalypt dominated vegetation with a grassy understorey and is often found on rocky ridges or in gullies. It feeds on seeds and insects and builds domed nests on the ground (Garrett and Crowley 2000).	Low No suitable habitat for this species within the study area.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Stagonopleura guttata</i>	Diamond Firetail	V		Occurs in a range of eucalypt dominated communities with a grassy understorey including woodland, forest and mallee. Most populations occur on the inland slopes of the dividing range. Feed on seeds, mostly of grasses (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area.
<i>Sterna albifrons</i>	Little Tern	E1	M	A coastal species found along the coast of New South Wales. They nest between the high tide mark and shore vegetation on undisturbed and un-vegetated sites near estuaries and adjacent freshwater lakes. They feed on fish taken from inshore waters (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Sterna fuscata</i>	Sooty Tern	V		Occurs in tropical and subtropical seas, islands and cays. Nests in scrape in sand or coral debris, often in large colonies (Simpson and Day 1996).	Low No suitable habitat for this species within the study area.
<i>Thalassarche melanorhynchus</i>	Black-browed Albatross	V	VM	Nomadic marine species that breeds on subantarctic island outside Australian waters, but moves northwards in non-breeding seasons. The waters off southern Australia between Brisbane and Perth are the principal feeding area of birds (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Ninox connivens</i>	Barking Owl	V		Occurs in dry sclerophyll woodland. In the south west it is often associated with riparian vegetation while in the south east it generally occurs on forest edges. It nests in large hollows in live eucalypts, often near open country. It feeds on insects in the non-breeding season and on birds and mammals in the breeding season (Garnett, 2000 #21).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Tyto novaehollandiae</i>	Masked Owl	V		Occurs within a diverse range of wooded habitats including forests, remnants and almost treeless inland plains. This species requires large-hollow bearing trees for roosting and nesting and nearby open areas for foraging. They typically prey on terrestrial mammals including rodents and marsupials but will also take other species opportunistically. Also known to occasionally roost and nest in caves (Garnett and Crowley 2000).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Tyto tenebricosa</i>	Sooty Owl	V		Occurs in wet eucalypt forest and rainforest on fertile soils with tall emergent trees. Typically found in old growth forest with a dense understorey but also occurs in younger forests if nesting trees are present nearby. It nests in large hollows within eucalypts and occasionally caves. It hunts in open and closed forest for a range of arboreal and terrestrial mammals including introduced species and sometimes birds (Garnett and Crowley 2000).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Xanthomyza phrygia</i>	Regent Honeyeater	E1	EM	Occurs mostly in box-ironbark forests and woodland and prefers the wet, fertile sites such as along creek flats, broad river valleys and foothills. Riparian forests with <i>Casuarina cunninghamiana</i> and <i>Amyema cambagei</i> are important for feeding and breeding. Important food trees include <i>Eucalyptus sideroxylon</i> (Mugga Ironbark), <i>E. albens</i> (White Box), <i>E. melliodora</i> (Yellow Box) and <i>E. leucoxylon</i> (Yellow Gum) (Garnett and Crowley 2000).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
<i>Xenus cinereus</i>	Terek Sandpiper	V	M	Found on tidal mudflats and estuaries and on shores and reefs of offshore islands (Pizzey and Knight 1997).	Low No suitable habitat for this species within the study area. No important habitat for this species in the proposal area as defined under the <i>EPBC Act 1999</i> .
Mammals					
<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V		Found in a range of habitats from rainforest through sclerophyll forest to tree heath. It feeds largely on the nectar and pollen of banksias, eucalypts and bottlebrushes and sometimes soft fruits. It nests in very small tree holes, between the wood and bark of a tree, abandoned birds' nests and shredded bark in the fork of trees (Turner and Ward 1995).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V	V	Occurs in moderately wooded habitats and roosts in caves, mine tunnels and the abandoned, bottle-shaped mud nests of Fairy Martins. Thought to forage below the forest canopy for small flying insects (Churchill 1998).	Low/Medium Suitable foraging habitat only for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. Impact Assessments have been prepared for this species (Appendices E & F).

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Miniopterus australis</i>	Little Bent-wing Bat	V		Feeds on small insects beneath the canopy of well timbered habitats including rainforest, Melaleuca swamps and dry sclerophyll forests. Roosts in caves and tunnels and has specific requirements for nursery sites. Distribution becomes coastal towards the southern limit of its range in NSW. Nesting sites are in areas where limestone mining is preferred (Strahan 1995).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Miniopterus schreibersii</i>	Eastern Bent-wing Bat	V		Usually found in well timbered valleys where it forages on small insects above the canopy. Roosts in caves, old mines, stormwater channels and sometimes buildings and often return to a particular nursery cave each year (Churchill 1998).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	V		Thought to live in sclerophyll forest and woodland. Small colonies have been found in tree hollows or under loose bark. It feeds on insects above the forest canopy or in clearings at the forest edge (Churchill 1998).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Myotis adversus</i>	Large-footed Myotis	V		Colonies occur in caves, mines, tunnels, under bridges and buildings. Colonies always occur close to bodies of water where this species feeds on aquatic insects (Churchill 1998).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this (Appendix E).
<i>Petaurus australis</i>	Yellow-bellied Glider	V		Restricted to tall, mature eucalypt forest in high rainfall areas of temperate to sub-tropical eastern Australia. Feeds on nectar, pollen, the sap of eucalypts and sometimes insects. Preferred habitats are productive, tall open sclerophyll forests where mature trees provide shelter and nesting hollows and year round food resources are available from a mixture of eucalypt species (NSW National Parks and Wildlife Service 1999; NSW National Parks and Wildlife Service 2003).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.
<i>Petaurus norfolcensis</i>	Squirrel Glider	V		Found in dry sclerophyll forest and woodland but not found in dense coastal ranges. Nests in hollows and feeds on gum of acacias, eucalypt sap and invertebrates (NSW National Parks and Wildlife Service 1999).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Phascolarctos cinereus</i>	Koala	V		Found in sclerophyll forest. Throughout New South Wales, Koalas have been observed to feed on the leaves of approximately 70 species of eucalypt and 30 non-eucalypt species. However, in any one area, Koalas will feed almost exclusively on a small number of preferred species. The preferred tree species vary widely on a regional and local basis. Some preferred species in NSW include Forest Red Gum <i>Eucalyptus tereticornis</i> , Grey Gum <i>E. punctata</i> , Monkey Gum <i>E. cypellocarpa</i> and Ribbon Gum <i>E. viminalis</i> . In coastal areas, Tallowwood <i>E. microcorys</i> and Swamp Mahogany <i>E. robusta</i> are important food species, while in inland areas White Box <i>E. albens</i> , Bimble Box <i>E. populnea</i> and River Red Gum <i>E. camaldulensis</i> are favoured (NSW National Parks and Wildlife Service 1999; NSW National Parks and Wildlife Service 2003).	Low No suitable habitat for this species within the study area.
<i>Potorous tridactylus</i>	Long-nosed Potoroo	V	V	Disjunct distribution along coastal south-east Australia from near Gladstone in Queensland, to south-west Victoria and in Tasmania. Found from sea level up to 1500 metres in altitude generally in areas with rainfall greater than 760 millimetres. In NSW, it is found throughout coastal and sub-coastal areas. Occurs in a range of habitats: coastal forest and woodland with a moderately dense heathy understorey, dense coastal scrubs or heath, wet and dry sclerophyll forest and sub-tropical, warm temperate and cool temperate rainforest of the eastern slopes and highlands. Often associated with gullies and forest ecotones. Open areas are used for foraging while areas of dense groundcover or understorey provide areas for shelter and protection from predators. Relatively thick ground cover is a major habitat requirement and it seems to prefer areas with light sandy soils. Feeds at dusk on roots, tubers, fungi, insects and their larvae and other soft bodied animals in the soil. Moves up and down slope as food resources become seasonally available (Johnston 1995; NSW National Parks and Wildlife Service 1999).	Low A targeted survey was undertaken for this species which failed to detect this species within the study area.
<i>Pseudomys gracilicaudatus</i>	Eastern Chestnut Mouse	V		The species is mostly found, in low numbers, in heathland and is most common in dense, wet heath and swamps. In the tropics it is more an animal of grassy woodlands. Optimal habitat appears to be in vigorously regenerating heathland burnt from 18 months to four years previously. By the time the heath is mature, the larger Swamp Rat becomes dominant, and Eastern Chestnut Mouse numbers drop again (Strahan 1995).	Low No suitable habitat for this species within the study area.
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	Occurs in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps. Urban gardens and cultivated fruit crops also provide habitat for this species. Feeds on the flowers and nectar of eucalypts and native fruits including lilly pillies. It roosts in the branches of large trees in forests or mangroves (Churchill 1998; NSW National Parks and Wildlife Service 2001).	High This species was recorded flying over the study area during a flora and fauna assessment of No 107 Alan Street, Niagara Park in 2015 (Figure 3-2). Despite this no individuals were recorded foraging within the subject site at the time of the recent surveys. An Impact Assessment has been prepared for this species (Appendix E).

Scientific Name	Common Name	BC Act ¹	EPBC Act ²	Habitat	Likelihood of occurrence within the study area
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail Bat	V		Occurs in eucalypt forest where it feeds above the canopy and in mallee or open country where it feeds closer to the ground. Generally a solitary species but sometimes found in colonies of up to 10. It roosts in tree hollows. Thought to be a migratory species (Churchill 1998).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this (Appendix E).
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V		The preferred hunting areas of this species include tree-lined creeks and the ecotone of woodlands and cleared paddocks but it may also forage in rainforest. Typically it forages at a height of 3-6 metres but may fly as low as one metre above the surface of a creek. It feeds on beetles, other large, slow-flying insects and small vertebrates. It generally roosts in tree hollows but has also been found in the roof spaces of old buildings (Churchill 1998).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this (Appendix E).
Reptiles					
<i>Hoplocephalus bitorquatus</i>	Pale-headed Snake	V		A partly arboreal, nocturnal species found in a range of habitats from rainforest and wet sclerophyll forest to the drier eucalypt forests of the western slopes. Feeds largely on frogs and lizards (Cogger, 2000 #20).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Hoplocephalus stephensii</i>	Stephen's Banded Snake	V		Found in coastal areas from Gosford district to southern QLD. Arboreal snake usually encountered in the wetter sclerophyll or rainforests which occur within its range (Cogger 2000).	Low/Medium Suitable habitat for this species was recorded from the study area. Despite this no individuals were recorded during targeted surveys. An Impact Assessment has been prepared for this species (Appendix E).
<i>Varanus rosenbergi</i>	Heath Monitor	V		Found in coastal heaths, humid woodlands and wet & dry sclerophyll forests. Mostly a terrestrial species it shelters in burrows, hollow logs and rock crevices (Cogger 2000).	Low No suitable habitat for this species within the study area.

Notes:

1. V= Vulnerable, E1 = Endangered, E2 = Endangered Population (*Threatened Species Conservation Act 1995*) (*Fisheries Management Act 1994*)2. V = Vulnerable, E = Endangered, M = Migratory, C = Conservation Dependent (*Environment Protection and Biodiversity Conservation Act 1999*) (*Fisheries Management Act 1994*)

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX E: EPBC PROTECTED MATTERS SEARCH TOOL DATABASE RESULTS



Australian Government
**Department of Agriculture,
Water and the Environment**

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 13/11/20 13:40:46

[Summary](#)

[Details](#)

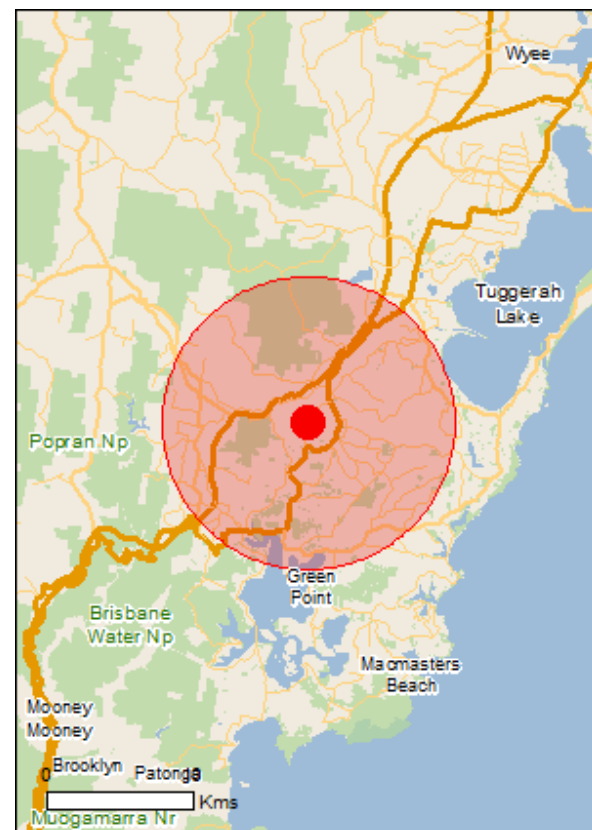
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



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[Coordinates](#)

Buffer: 10.0Kms



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	84
Listed Migratory Species:	63

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	10
Commonwealth Heritage Places:	None
Listed Marine Species:	70
Whales and Other Cetaceans:	1
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	5
Regional Forest Agreements:	1
Invasive Species:	49
Nationally Important Wetlands:	2
Key Ecological Features (Marine):	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area
Coastal Upland Swamps in the Sydney Basin Bioregion	Endangered	Community likely to occur within area
Posidonia australis seagrass meadows of the Manning-Hawkesbury ecoregion	Endangered	Community likely to occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Foraging, feeding or related behaviour known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX F: ASSESSMENTS OF SIGNIFICANCE

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

EPBC Assessment of Significance (Swift Parrot)

Under the *Environment Protection and Biodiversity Conservation Act 1999*, an action is likely to have a significant impact on a vulnerable species if it affects an important population of the species. Under the Principle Significant Impact Guidelines (Department of the Environment and Heritage 2006) an important population is a population that is necessary for a species' long-term survival and recovery. This may include populations identified in recovery plans, and/or that are:

- key source populations either for breeding or dispersal
- populations that are necessary for maintaining genetic diversity
- populations that are near the limit of the species range.

The animals that may use the site are not considered to be part of an important population.

Will the action lead to a long-term decrease in the size of an important population of a species?

Swift Parrots utilising the study area would not constitute an important population. The proposal will modify approximately 0.42ha of foraging habitat for this species. Modification of this small area represents a small loss of the local extent of similar habitat. Approximately 1.61ha of habitat for this species will be retained within the study area. Modification of 0.42ha of habitat represents a small loss of the local extent of similar habitat. No Swift Parrot roost sites are known from the mainland of Australia for this migratory Tasmanian species that are to be affected by the proposal. Swift parrots may utilise *Eucalyptus saligna* (Blue Gum) specimens within the study area and may forage for lerps within Eucalypts as a seasonal foraging resource during their migratory influx to the south-east mainland of Australia. The proposal is unlikely to lead to a long-term decrease in the size of the local population.

Will the action reduce the area of occupancy of an important population?

Swift Parrot utilising the site would not be part of an important population. The proposed development will modify 0.42ha of habitat from within the study area, which contains suitable foraging habitat (lerps on eucalypts) for this species. The Swift Parrot is a highly mobile species that migrates from Tasmania to the south-east mainland of Australia. Therefore, the local population would not be restricted to habitat resources within the site only.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Will the action fragment an existing important population into two or more populations?

Swift Parrots using the site for foraging purposes would not be part of an important population. The proposal to remove/modify a small area 0.42ha of habitat for Swift Parrots is unlikely to fragment an existing population into two or more populations. This species is not dependent upon the vegetation within the study area.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***Will the action adversely affect habitat critical to the survival of a species?**

No critical habitat has been listed for Swift Parrot under the *Environment Protection and Biodiversity Conservation Act 1999*. Known Swift Parrot roost are from known only from Tasmania, these may however be considered critical to the survival of local populations.

Will the action disrupt the breeding cycle of an important population?

No breeding sites of Swift Parrots were identified within the study area during the site surveys, this species breeds in Tasmania therefore it is considered that the action is unlikely to disrupt the breeding cycle of an important population.

Will the action modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?

The study area contains suitable foraging resources for the Swift Parrot. The action is unlikely to significantly decrease the availability of foraging habitat in the locality. The large foraging home range of this species allows offsite foraging resources to be accessed and isolation of habitat would not result from the development.

It is unlikely that the development would isolate and decrease the availability of quality habitat to the extent that the species is likely to decline.

Will the action result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?

It is highly unlikely that invasive species (such as introduced predators) that are harmful to the Swift Parrot would become more established as a result of the action.

Will the action introduce disease that may cause the species to decline?

The proposal would not increase the likelihood of a disease becoming established or proliferating in the local population that would result in a decline of the species.

Will the action interfere with the recovery of the species?

A recovery plan has been prepared for the Swift Parrot; the proposal is consistent with the recovery objectives of the recovery plan. Therefore it is considered that the proposal is unlikely to interfere within the recovery of the Swift Parrot.

Conclusion

The Swift Parrot is unlikely to be significantly affected by the proposal.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

EPBC Assessment of Significance (Grey-headed Flying-fox)

Under the *Environment Protection and Biodiversity Conservation Act 1999*, an action is likely to have a significant impact on a vulnerable species if it affects an important population of the species. Under the Principle Significant Impact Guidelines (Department of the Environment and Heritage 2006) an important population is a population that is necessary for a species' long-term survival and recovery. This may include populations identified in recovery plans, and/or that are:

- key source populations either for breeding or dispersal
- populations that are necessary for maintaining genetic diversity
- populations that are near the limit of the species range.

The animals that may use the site are not considered to be part of an important population.

Will the action lead to a long-term decrease in the size of an important population of a species?

Grey-headed Flying-fox utilising the study area would not constitute an important population. The proposal will modify approximately 0.42ha of foraging habitat for this species. Modification of this small area represents a small loss of the local extent of similar habitat. Approximately 1.61ha of habitat for this species will be retained within the study area. Clearing of this small area of vegetation for the proposal represents a small loss of the local extent of similar habitat. No Grey-headed Flying-fox camps will be affected by the proposal. As such, the proposal is unlikely to lead to a long-term decrease in the size of the local population.

Will the action reduce the area of occupancy of an important population?

Grey-headed Flying-fox utilising the site would not be part of an important population. Proposed development within the study area will modify approximately 0.42ha of suitable foraging habitat for this species. The Grey-headed Flying-fox is a highly mobile and it may travel up to 50 km each night to forage. Therefore, the local population would not be restricted to habitat resources within the site only.

Will the action fragment an existing important population into two or more populations?

Grey-headed Flying-foxes using the site for foraging purposes would not be part

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

of an important population.

Will the action adversely affect habitat critical to the survival of a species?

No critical habitat has been listed for Grey-headed Flying-fox under the *Environment Protection and Biodiversity Conservation Act 1999*. Known Grey-headed Flying-fox camps may however be considered critical to the survival of local populations. No camps were identified within or near the study area.

Will the action disrupt the breeding cycle of an important population?

Grey-headed Flying-foxes using the study area would not be part of an important population.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***Will the action modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?**

The study area contains suitable foraging resources for Grey-headed Flying-fox. The action is unlikely to significantly decrease the availability of foraging habitat in the locality. The proposal will modify approximately 0.42ha of foraging habitat for this species. Modification of this small area represents a small loss of the local extent of similar habitat. Approximately 1.61ha of habitat for this species will be retained within the study area. The large home range of this species allows offsite foraging resources to be accessed and isolation of habitat would not result from the development.

It is unlikely that the development would isolate and decrease the availability of quality habitat to the extent that the species is likely to decline.

Will the action result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?

It is highly unlikely that invasive species (such as introduced predators) that are harmful to the Grey-headed Flying-fox would become more established as a result of the action.

Will the action introduce disease that may cause the species to decline?

The proposal would not increase the likelihood of a disease becoming established or proliferating in the local population that would result in a decline of the species.

Will the action interfere with the recovery of the species?

No recovery or threat abatement plans have been prepared for this species. Therefore it is considered that the proposal is unlikely to interfere within the recovery of the Grey-headed Flying-fox.

Conclusion

The Grey-headed Flying-fox is unlikely to be significantly affected by the proposal.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK***EPBC Assessment of Significance (Large-eared Pied Bat)**

Under the *Environment Protection and Biodiversity Conservation Act 1999*, an action is likely to have a significant impact on a vulnerable species if it affects an important population of the species. Under the Principle Significant Impact Guidelines (Department of the Environment and Heritage 2006) an important population is a population that is necessary for a species' long-term survival and recovery. This may include populations identified in recovery plans, and/or that are:

Key source populations either for breeding or dispersal
populations that are necessary for maintaining genetic
diversity populations that are near the limit of the species
range.

The animals that may use the site are not considered to be part of an important population.

Will the action lead to a long-term decrease in the size of an important population of a species?

Large-eared Pied Bats utilising the site would not constitute an important population. The proposal will modify approximately 0.42ha of foraging habitat for this species. Modification of this small area represents a small loss of the local extent of similar habitat. Approximately 1.61ha of habitat for this species will be retained within the study area with a further 2500+ha remaining connected to the subject property. Clearing/modification of 0.42ha of habitat represents a small loss of the local extent of similar habitat. No Large-eared Pied Bat roosting sites will be affected by the proposal. As such, the proposal is unlikely to lead to a long-term decrease in the size of the local population.

Will the action reduce the area of occupancy of an important population?

Large-eared Pied Bats utilising the site would not be part of an important population. Development of the study area will remove suitable foraging habitat for this species. The Large-eared Pied Bat is a highly mobile species. Therefore, the local population would not be restricted to habitat resources within the site only.

Will the action fragment an existing important population into two or more populations?

Large-eared Pied Bat utilising the foraging resources within the study area would

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

not be part of an important population.

Will the action adversely affect habitat critical to the survival of a species?

No critical habitat has been listed for Large-eared Pied Bat under the *Environment Protection and Biodiversity Conservation Act 1999*. Known Large-eared Pied Bat maternity caves may however be considered critical to the survival of local populations. No maternity caves were identified within or near the study area.

Will the action disrupt the breeding cycle of an important population?

Large-eared Pied Bats using the study area would not be part of an important population. The breeding patterns of the Large-eared Pied Bat are not likely to

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

be disrupted as this species breeds within a maternity caves, which were absent from the study area. As such it is considered that the proposal is unlikely to disrupt the breeding cycle of an important population of Large-eared Pied Bats.

Will the action modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?

The study area contains foraging resources for Large-eared Pied Bat. The action is unlikely to significantly decrease the availability of foraging habitat in the locality despite the modification/removal of 0.42ha of habitat from within the study area. The large-eared Pied Bat has a large home range as such this species would not feed exclusively within the study area.

It is unlikely that the development would isolate and decrease the availability of quality habitat to the extent that the species is likely to decline.

Will the action result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat?

It is highly unlikely that invasive species (such as introduced predators) that are harmful to the Large-eared Pied Bat would become more established as a result of the action.

Will the action introduce disease that may cause the species to decline?

The proposal would not increase the likelihood of a disease becoming established or proliferating in the local population that would result in a decline of the species.

Will the action interfere with the recovery of the species?

No recovery or threat abatement plans have been prepared for this species. Therefore it is considered that the proposal is unlikely to interfere within the recovery of the Large-eared Pied Bat.

Conclusion

The Large-eared Pied Bat is unlikely to be significantly affected by the proposal.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

BC Act Assessments of Significance

Council is required to consider the impact upon threatened species from any development or activity via the process of a 5 part test of significance in accordance with Section 7.3 of the *Biodiversity Conservation Act 2016*. The significance of the assessment is then used to determine the need for a more detailed Biodiversity Development Assessment Report (BDAR)

The following 5-part test of significance relies on the ecological assessment provided in Sections above & Appendices A & B above and should be read as such. It is considered that the study area provides potential habitat for the following threatened species and will be assessed accordingly in the following five-part test:

Scientific Name	Common Name	BC Act ¹	EPBC Act ²
FAUNA			
Birds			
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	
<i>Calyptrorhynchus lathamii</i>	Glossy Black-Cockatoo	V	
<i>Lathamus discolor</i>	Swift Parrot	E1	EM
<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	
<i>Glossopsitta pusilla</i>	Little Lorikeet	V	
<i>Ninox strenua</i>	Powerful Owl	V	
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	V	
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V	
<i>Ninox connivens</i>	Barking Owl	V	
<i>Tyto novaehollandiae</i>	Masked Owl	V	
<i>Tyto tenebricosa</i>	Sooty Owl	V	
Mammals			
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V	V
<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	
<i>Miniopterus australis</i>	Little Bent-wing Bat	V	
<i>Miniopterus schreibersii</i>	Eastern Bent-wing Bat	V	
<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	V	
<i>Myotis adversus</i>	Large-footed Myotis	V	
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheathtail Bat	V	
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V	
Reptiles			
<i>Hoplocephalus bitorquatus</i>	Pale-headed Snake	V	
<i>Hoplocephalus stephensii</i>	Stephen Banded Snake	V	
Flora			
<i>Rhodamnia rubescens</i>	Scrub Turpentine	CE	

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

The '5 part-test of significance' is as follows.

- a) **In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,**

Detailed flora investigations of the study area, together with habitat assessments and targeted surveys, have resulted in the identification of potential habitat for a variety of threatened species. An assessment of these species is as follows:

Gang-gang Cockatoo (*Callocephalon fimbriatum*)

The Gang-gang Cockatoo is associated with a variety of woodland and forest habitats, and occasionally more open areas in south-eastern New South Wales and Victoria. This species has been observed in eucalypt forests and exotic trees, and is known to feed on the seeds of native shrubs and trees, in addition to some exotic species such as the Hawthorn and Cupressus species. The Gang-gang Cockatoo nests in hollows in large, dead trees.

The study area contains suitable foraging habitat for this species. This species was not recorded during the site survey. The surrounding area contains extensive amounts of high quality foraging habitat for this species. The foraging habitat will be largely unaffected and will remain within the study area after proposed vegetation clearing works. Therefore, it is considered that the proposal is not likely to have an adverse effect on the life cycle of this species such that a viable local population of the species is likely to be placed at risk of extinction.

***Calyptorhynchus lathami* (Glossy Black-Cockatoo)**

The Glossy Black-cockatoo inhabits mountain forests, coastal woodland, open forest and trees bordering watercourses where there are substantial stands of *Allocasuarina*. They choose trees with larger cone crops but show no sign of selecting trees on the basis of cone size – concentrating foraging in trees with a high ratio of total seed weight to cone weight (Crowley and Garnett 2001). They breed in hollow trees or stumps usually in Eucalypts. It is considered that potential foraging habitat exists from the study area due to the occurrence of *Allocasuarina* sp. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK****Glossopsitta pusilla* (Little Lorikeet)**

Little Lorikeets mostly occur in dry, open eucalypt forests and woodlands. They have been recorded from both old-growth and logged forests in the eastern part of their range, and in remnant woodland patches and roadside vegetation on the western slopes. In south-east Queensland (McAlpine, Heyenga et al. 2007), Little Lorikeets were more likely to occupy forest sites with relatively short to intermediate logging rotations (15–23 years) and sites that have had short intervals (2.5–4 years) between fires. They feed primarily on nectar and pollen in the tree canopy, particularly on profusely-flowering eucalypts, but also on a variety of other species including melaleucas and mistletoes. On the western slopes and tablelands White Box *Eucalyptus albens* and Yellow Box *E. melliodora* are particularly important food sources for pollen and nectar respectively. They are also reported as feeding on fruits, particularly those of mistletoes (Higgins and Peter 2002). Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Lathamus discolor* (Swift Parrot)**

This species feeds mainly on nectar from eucalypt flowers, particularly Blue Gum (*Eucalyptus globulus*). On the mainland, the Swift Parrot congregates where winter flowering species such as Red Ironbark (*Eucalyptus sideroxylon*), White Box (*Eucalyptus albens*), Yellow Gum (*Eucalyptus leucoxylon*) and Swamp Gum (*Eucalyptus ovata*) are present (Saunders and Heinsohn 2008). The Swift Parrot is a migratory species that breeds in Tasmania and its offshore islands in summer (Swift Parrot Recovery Team 2001). In late March almost the entire population migrates to mainland Australia (Swift Parrot Recovery Team 2001). It is considered that the *Eucalyptus saligna* (Blue Gum) specimens within the study area provide a potential foraging resource for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Ninox strenua* (Powerful Owl)**

The Powerful Owl inhabits mature rainforest and wet and dry eucalypt forest utilising Eucalypt forests and woodlands and adjacent cleared areas for foraging. Large trees with hollows at least 0.5m deep are required for shelter and breeding (Department of Environment and Conservation 2005). Mated pairs of Powerful Owl roost together or separately, maintaining several roost sites throughout their territory which are used in rotation shifting with the availability of prey.

One Powerful Owl was recorded calling during a targeted survey over No 107 Alan Street,

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Niagara Park in 2015, the location of the calling Owl is presented within (Figure 14).

None of the hollow-bearing trees proposed for removal are considered to provide suitable nesting sites for Powerful Owls as none were large enough to accommodate these large majestic birds.

Intensive targeted searches have been undertaken throughout the study area, despite this no Powerful Owl adults or fledglings were recorded from the study area during recent surveys. It is considered that the subject site provides potential foraging habitat only for this species.

The closed canopy within Coastal Narrabeen Moist Forest community (Figure 13) contains intermittent watercourse provides roosting habitat for Powerful Owls despite this no roosting perches or Powerful Owls were identified from this area. No suitable nesting/roosting sites are to be removed.

No suitable nesting/roosting sites are to be removed nor are there any hollows for hollow-dependent prey species to be removed as a result of the proposal. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Ptilinopus regina* (Rose-crowned Fruit-Dove)**

This species Occurs in subtropical and dry rainforests and occasionally in moist eucalypt forests and swamp forests where fruit is plentiful. They are thought to move locally as they follow the ripening fruit (NSW National Parks and Wildlife Service 2002). Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Ptilinopus superbus* (Superb Fruit-Dove)**

This species inhabits mostly closed forests, occasionally near streams or lakes within rainforest. Breeding most commonly occurs within dense forests. They are regular autumn and winter migrant to the Hunter, Sydney, Illawarra and South Coast regions. This species is frugivorous, taking fruits of many species of rainforest trees, vines and palms. The foraging habitat (Coastal WarmTemperate Rainforest community) for this species will be largely unaffected and will be retained wholly within the site. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Tyto novaehollandiae* (Masked Owl)**

The Masked Owl is widespread through forests and woodlands, utilising caves for shelter in

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

treeless country. The Masked Owl is known to utilise forest margins and isolated stands of trees within agricultural land (Department of Environment and Conservation 2005). This species is often found in heavily disturbed forest where its prey of small and medium sized mammals can be readily obtained (Department of Environment and Conservation 2005). The Masked Owl requires old mature trees with large hollows for breeding and as diurnal roosting sites, being dependent upon hollow bearing trees all year round rather than only during the breeding season. It is considered that the study area provides potential foraging habitat for this species only no suitable nest sites were identified from within the study area. Despite the presence of potential foraging habitat, this species was not recorded during the fauna survey or within any hollow-bearing trees. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Tyto tenebricosa* (Sooty Owl)**

The Sooty Owl is generally associated with tall, dense, wet closed and open forests ((Department of Environment and Conservation 2005). The Sooty Owl requires old mature trees with very large hollows for breeding. Available evidence indicates narrow habitat requirements for nesting, with very large hollows being essential for nesting (Department of Environment and Conservation 2005). It is considered that the study area provides potential foraging habitat for this species only no suitable nest sites were identified from within the study area. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Chalinolobus dwyeri* (Large-eared Pied Bat)**

It is probable that the Large-eared Pied Bat forages for insects below the forest canopy. During the day these bats may roost in caves, mine tunnels and the abandoned nests of Fairy Martins (Hoye and Dwyer 1998). The Large-eared Pied Bat may also utilise tree hollows (Schultz, Coles et al. 1999). The Large-eared Pied Bat is mainly found in drier habitat including dry sclerophyll and woodland, east and west of the Great Dividing Ranges. However Hoye (Hoye and Dwyer 1998) suggest that from records of the species in subalpine woodland, moist eucalypt forest and near rainforest, it may tolerate a greater range of habitats. The distribution of this bat ranges from inland and south-eastern QLD to central-eastern and north-eastern NSW. It is considered that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

*Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK****Falsistrellus tasmaniensis* (Eastern False Pipistrelle)**

The Eastern False Pipistrelle inhabits warm to cool temperate moist and dry open forests. Little is known about the biology of this species although it has been recorded in logged and un-logged areas, preferring open areas for foraging. The Eastern False Pipistrelle roosts mainly in tree hollows, occasionally utilising caves and abandoned buildings. It is considered that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Miniopterus australis* (Little Bent-wing Bat)**

The Little Bentwing-bat forages below the canopy within open forests and woodlands, feeding on small insects. The Little Bent-wing bat roosts in caves, tunnels, tree hollows and occasionally within old buildings. It is considered that the proposed development is unlikely to disrupt the life cycle of the Little Bentwing-bat species within the local area such that a viable local population will be placed at risk of extinction.

***Miniopterus schreibersii* (Eastern Bent-wing Bat)**

The Eastern Bentwing-bat is confined to areas where there are caves with potential temperature, humidity and physical dimensions to permit breeding. This species occupies a range of habitats, mainly near the coast and utilises caves, old mines, stormwater channels, under bridges and occasionally buildings for roosting. It is considered that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Mormopterus norfolkensis* (Eastern Freetail-bat)**

The Eastern Freetail-bat forages above and within the canopy of open forests and woodlands, feeding on small insects. The Eastern Freetail-bat is thought to roost predominantly in tree hollows and occasionally in buildings. It is considered that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Myotis macropus* (Large-footed Myotis)**

The Large-footed Myotis is found in the coastal band from the north-west of Australia, across the top-end and south to western Victoria. It is rarely found more than 100 km inland, except along major rivers. Generally roost in groups of 10 - 15 close to water in caves, mine shafts, hollow-bearing trees, storm water channels, buildings, under bridges and in dense foliage. Forage over streams and pools catching insects and small fish by raking their feet across the water surface. It is considered

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Pteropus poliocephalus* (Grey-headed Flying-fox)**

The Grey-headed Flying-fox is found in a variety of habitats including rainforest, mangroves, paperbark swamps, wet and dry sclerophyll forests and cultivated areas (Churchill 2008). Grey-headed Flying Foxes congregate in large camps of up to 200,000 individuals, depending on availability of surrounding blossoming plants, from early until late summer (Churchill 2008). Camps are commonly formed in gullies, typically not far from water and in vegetation with a dense canopy. Roost sites are an important resource where mating, birth and rearing of young occurs as well as providing refuge (Strahan 1995). These bats eat the fruit or blossoms of more than 80 species of plants. Their major food source is eucalypt blossom and native fruits from a variety of tree species. Native figs (*Ficus spp*) account for a large percentage of the fruit eaten. They are also known to rain orchids of cultivated fruit. The Grey headed Flying-fox has a nightly feeding range of 20 to 50km from their camp (Churchill 2008).

The proposed development will retain the majority of foraging habitat for this highly mobile species. As such it is considered that the proposal is unlikely to have an adverse effect on the life cycle of this species such that a viable local population of the species is likely to be placed at risk of extinction.

***Saccolaimus flaviventris* (Yellow-bellied Sheathtail Bat)**

The Yellow-bellied Sheathtail-bat inhabits open country, mallee, eucalypt forests, rainforests, heathland and water bodies. The Yellow-bellied Sheathtail-bat roosts in tree hollows and has been found inhabiting the abandoned nests of Sugar Gliders. It is considered that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Scoteanax rueppellii* (Greater Broad-nosed Bat)**

The Greater Broad-nosed Bat inhabits open forests and woodlands, foraging throughout these forest types and also along creeks and small river systems. This species roosts in tree hollows and occasionally old buildings. It is considered that the study area provides potential foraging habitat for this species. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Hoplocephalus bitorquatus* (Pale-Headed Snake)**

10-82

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Pale-Headed Snake Found mainly in dry eucalypt forests and woodlands, cypress woodland and occasionally in rainforest or moist eucalypt forest. It favours streamside areas, particularly in drier habitats. The Pale-Headed Snake shelters during the day between loose bark and tree-trunks, or in hollow trunks and limbs of dead trees. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

***Hoplocephalus stephensii* (Stephen's Banded Snake)**

Stephen's Banded Snake is usually found in coastal areas from Gosford district to southern QLD. Arboreal snake usually encountered in the wetter sclerophyll or rainforests which occur within its range. Despite the presence of potential habitat, this species was not recorded during the fauna survey. It is considered that the proposal is unlikely to disrupt the life cycle of this species such that a viable local population would be placed at risk of extinction.

b) In the case of a critically endangered or endangered ecological community, whether the action proposed:

- I. Is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
- II. Is likely to substantially and adversely modify the composition such that its local occurrence is likely to be placed at risk of extinction,

No endangered ecological communities were recorded from the subject site nor are any threatened communities likely to be impacted upon as a result of the proposal.

c) In relation to the habitat of threatened species, populations or ecological community:

- i. The extent to which habitat is likely to be removed or modified as a result of the action proposed, and
 - ii. Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and
 - iii. The importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality
- i.) The study area is approximately 2.09ha in size. The proposal will entail the disturbance/modification of 0.42 ha of habitat from the Map Unit E6ai Coastal Narrabeen Moist Forest (CNMF) community for the aforementioned twenty-five threatened fauna species. Tree thinning works will thin vegetation from an Open Forest structure to that of Woodland. Approximately 1.67ha of habitat for the aforementioned threatened species will be retained within the study area.
- ii.) The modification of 0.42ha of Coastal Narrabeen Moist Forest (CNMF) community as a result of the proposal will not result in fragmentation of habitat or isolate habitats for threatened species.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

The study area will remain connected to large tracts of native vegetation to the west, south, north-west, and south-west.

The 0.42ha of habitat which is to be modified for the aforementioned threatened species is not considered to be important. The majority of suitable habitat for the aforementioned threatened species is to be retained wholly within the study area. All other threatened fauna species which are potentially to be impacted upon are highly mobile and capable of flight across large distances and would not utilise the habitats within the subject site exclusively.

Large tracts of connected vegetation will remain within the study area and the subject lot despite the removal/modification of approximately 0.42ha of habitat for threatened species.

Therefore, it is considered that known habitat for a threatened species within the local area and the region are unlikely to become isolated or fragmented as a result of the proposal.

iii.) The proposal will entail the modification of 0.42ha of habitat for aforementioned threatened species. The proposal will retain approximately 1.67ha of habitat for the aforementioned threatened species within the study area with a further 2500+ha (Forest) remaining connected to the subject lot, as such it is considered that the proposal is unlikely to create an important impact on the long-term survival of threatened species in the locality and is not considered to be significant.

d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),”

The Study Area is not listed as an area of outstanding biodiversity value.

e) “Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process”.

The proposal is likely to entail or perpetuate the following key threatening process under the *BC Act* within the site.

- Clearing of native vegetation.
- Removal of three hollow-bearing trees
- Removal of Dead Wood and Dead Trees.
- Infection of native plants by *Phytophthora cinnamomi*.
- Human Caused Climate Change.

Conclusion

The proposal will modify the structure of approximately 0.42ha of Coastal Narrabeen Moist Forest (CNMF) which provides known or potential habitat for twenty-two threatened fauna species; despite this 1.67ha of habitat will be retained within the study area with a further 2500+ha remaining connected to the study area. The impact to habitats for threatened species, endangered

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

populations & endangered ecological communities from the locality is not considered to be significant.

Rhodamnia rubescens & lowland Rainforest– Assessment of Significance

7.3 Test for determining whether proposed development or activity likely to significantly affect threatened species or ecological communities, or their habitats

The ‘5 part test of significance’ is as follows.

(1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats:

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

The proposal is not likely to place a viable local population of *Rhodamnia rubescens* at risk of extinction. The species is at risk of becoming extinct due to Myrtle Rust which has decimated local populations. All individuals are to be retained and protected within the proposed asset protection zone “M22” with strict protocols to be implemented during the APZ establishment phase in accordance with the Integrated bushfire/vegetation management plan.

The species has fruit distributed by birds, and individuals within the adjacent subject site are to be retained along with suitable habitat for future individuals to grow from seed, particularly areas of Rainforest located beyond the study area. All Rainforest vegetation will be retained within the subject site.

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

Response:

One endangered ecological community known as Lowland Rainforest was recorded from the subject property. The Lowland Rainforest is situated to the west, north-west and south-west of dwelling footprint and associated asset protection zones (Figure 19 and replicated again on the following pages). The Lowland Rainforest community is to be retained in its entirety and protected under an integrated bushfire/vegetation management plan. Given the retention of 100% of the occurrence of the lowland rainforest EEC within the subject property the proposal is unlikely to

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

result in adverse impacts such that Lowland Rainforest community is placed at risk of extinction.

(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

Response:

One endangered ecological community known as Lowland Rainforest was recorded from the subject property (Figure 19 and replicated again on the following pages). The Lowland Rainforest community is to be retained in its entirety and protected under an integrated bushfire/vegetation management plan. Given the retention of 100% of the local occurrence of the lowland rainforest EEC within the subject property the proposal is unlikely to result in the substantial and adverse impacts upon the Lowland Rainforest such that this community is placed at risk of extinction.

(c) in relation to the habitat of a threatened species or ecological community:

(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and

Response:

i.) The proposal will entail the disturbance/modification of 0.42ha or 4200m² of 0.42 ha of habitat from the Map Unit E6ai Coastal Narrabeen Moist Forest (CNMF) community which supports *Rhodamnia rubescens*.

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and

Response:

ii) The proposal will remove/modify approximately 0.42ha or 4200m² of 0.42 ha of habitat from the Map Unit E6ai Coastal Narrabeen Moist Forest (CNMF) which provides habitat for *Rhodamnia rubescens*. Despite this the proposal will not fragment or isolate currently connected areas of habitat. Connectivity of vegetation across the study area will remain connected to surrounding lands.

Therefore, it is considered that known habitat for a *Rhodamnia rubescens* within the local area and the region are unlikely to become isolated or fragmented as a result of the proposal.

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

Response:

The proposal will result in the modification/removal of 0.42ha ha of habitat for this species.

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Rhodamnia rubescens is known from five vegetation communities (Table 1) within the former Gosford City Council area.

Vegetation Name	Life Form	Cover Abundance	Frequenc y	Fidelity
Coastal Warm Temperate Rainforest Unit E1a	Shrub	2	29%	Uninformativ e
Sandstone Ranges Gully Rainforest Unit E2	Shrub	2	29%	Uninformativ e
Coastal Narrabeen Moist Forest Unit E6a	Shrub	2	73%	Positive
Coastal Narrabeen Ironbark Forest Unit E6b	Shrub	2	30%	Uninformativ e
Tumbi Spotted Gum Ironbark Forest Unit E15a	Shrub	1	39%	Uninformativ e

The vegetation to be impacted upon as a result of the proposal is representative of Coastal Narrabeen Moist Forest Unit E6a. *Rhodamnia rubescens* is positive diagnostic species form of Coastal Narrabeen Moist Forest Unit as such its occurrence within the site is not unique having a frequency of 73% at the time of the mapping project.

Within lower hunter central coast region NPWS have mapped 28434ha of Coastal Narrabeen Moist Forest (Unit 6) is mapped as remaining in the region. Given the extensive areas of habitat (Coastal Narrabeen Moist Forest) remaining within the region which is known to support this species the loss of small area suitable habitat will not result in habitat fragmentation for this species. 1.76ha of suitable habitat is to be retained and protected for this species.

As dispersal of the species is by fauna, particularly birds consuming fruit, the habitat within the managed APZ area and the subject site is not likely to isolated areas from other areas of habitat in the locality, including areas of Rainforest which are to be retained within and adjacent to the subject property.

10-87

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

Therefore, it is considered that known habitat for *Rhodamnia rubescens* within the local area and the region are unlikely to become isolated or fragmented as a result of the proposal, as such it is considered that the proposal is unlikely to create an important impact on the long-term survival of threatened species in the locality and is not considered to be significant.

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

Response:

The proposed development or activity is not likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly) within the provisions of the BC Act (2016).

(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

Response:

The proposal is likely to entail or perpetuate the following key threatening process under the BC Act within the site.

- Introduction and establishment of exotic rust fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae
- Clearing of re-growth native vegetation;
- Invasion and establishment of exotic vines and scramblers;
- Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae and
- Invasion of native plant communities by exotic perennial grasses.

The key threatening process 'Introduction and establishment of exotic rust fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae' is highly relevant to *Rhodamnia rubescens*. The proposed development however is not likely to exacerbate the occurrence of the Myrtle Rust in the locality which is already ubiquitous within the region, is spread by wind amongst other natural factors such as fauna movement and is unlikely to be eradicated due to the large number of less susceptible myrtaceous host species occurring throughout the range of the pathogen.

The key threatening process of 'Clearing of native vegetation', could potentially impact potential habitat for this species. However, the vegetation within the additional managed area is not considered to constitute significant habitat for this species. Potential habitat is widespread in the

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

locality for the formerly common species. As potential habitat will remain within the subject property and in the vicinity, the clearing of native vegetation is not likely to significantly impact habitat for the species.

Exotic species will be controlled within retained areas of vegetation, so the proposed development is likely to mitigate against two key threatening processes related to invasion by weed species, as long as weed material cleared from the impact area is disposed of appropriately, preventing further spread of weed propagules.

Conclusion

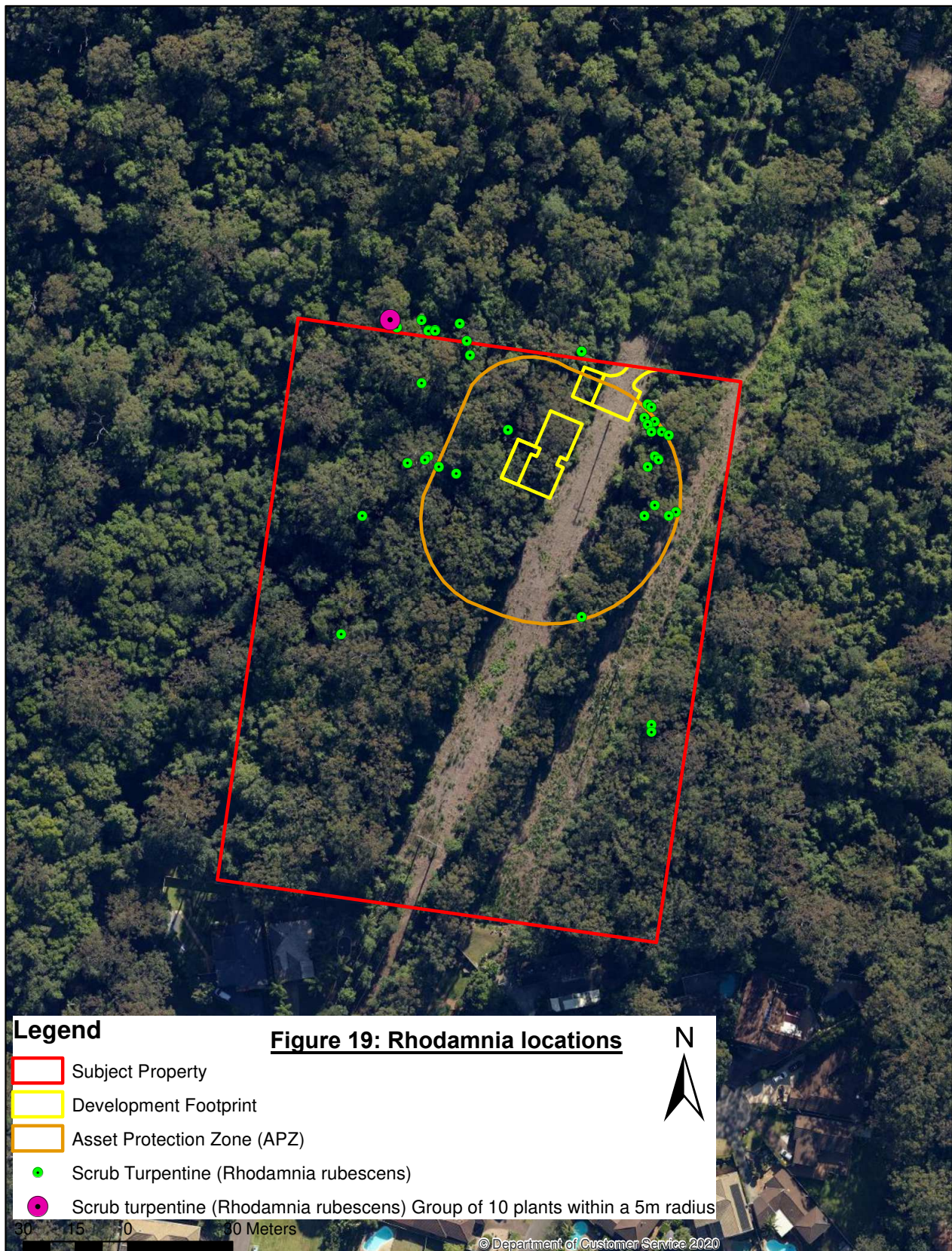
The proposal will entail the modification of 0.42ha or 4200m² of 0.42 ha of habitat from the Map Unit E6ai Coastal Narrabeen Moist Forest (CNMF) which provides (habitat) for *Rhodamnia rubescens*.

Forty-nine individuals of the species were recorded within and adjacent to the subject property all are to be retained and protected. No individuals were recorded within the development area. Habitat for the species is widespread within the locality and clearing for development is not a significant threat to the formerly common species, which as listed is threatened due to its susceptibility to the introduced pathogen Myrtle Rust.

Critical habitat will not be affected and the proposal will not interfere with the recovery actions for threatened species. The impact to habitats for threatened species, endangered populations & endangered ecological communities from the locality is not considered to be significant.

References:

NSW Scientific Committee. 2019. Final Determination - Critically Endangered Species - *Rhodamnia rubescens*



Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX G: BOSET REPORT

10-90



Biodiversity Offset Scheme (BOS) Entry Threshold Map



242.0 0 121.00 242.0 Metres
WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days

Notes

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Biodiversity Values Map and Threshold Report

Results Summary

Date of Calculation	13/11/2020 12:21 PM	BDAR Required*
Total Digitised Area	0.12 ha	
Minimum Lot Size Method	Lot size	
Minimum Lot Size	2.09 ha	
Area Clearing Threshold	0.5 ha	
Area clearing trigger Area of native vegetation cleared	Unknown #	Unknown #
Biodiversity values map trigger Impact on biodiversity values map(not including values added within the last 90 days)?	no	no
Date of the 90 day Expiry	N/A	

*If BDAR required has:

- at least one 'Yes': you have exceeded the BOS threshold. You are now required to submit a Biodiversity Development Assessment Report with your development application. Go to <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor> to access a list of assessors who are accredited to apply the Biodiversity Assessment Method and write a Biodiversity Development Assessment Report
- 'No': you have not exceeded the BOS threshold. You may still require a permit from local council. Review the development control plan and consult with council. You may still be required to assess whether the development is "likely to significantly affect threatened species" as determined under the test in s. 7.3 of the Biodiversity Conservation Act 2016. You may still be required to review the area where no vegetation mapping is available.

Where the area of impact occurs on land with no vegetation mapping available, the tool cannot determine the area of native vegetation cleared and if this exceeds the Area Threshold. You will need to work out the area of native vegetation cleared - refer to the BOSET user guide for how to do this.

On and after the 90 day expiry date a BDAR will be required.

Disclaimer

This results summary and map can be used as guidance material only. This results summary and map is not guaranteed to be free from error or omission. The State of NSW and Office of Environment and Heritage and its employees disclaim liability for any act done on the information in the results summary or map and any consequences of such acts or omissions. It remains the responsibility of the proponent to ensure that their development application complies with all aspects of the *Biodiversity Conservation Act 2016*.

The mapping provided in this tool has been done with the best available mapping and knowledge of species habitat requirements. This map is valid for a period of 30 days from the date of calculation (above).

Acknowledgement

I as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature _____ Date: 13/11/2020 12:21 PM

Flora and Fauna Assessment – 129 Alan Street NIAGARA PARK

APPENDIX H: RELEVANT QUALIFICATIONS & EXPERIENCE OF THE AUTHOR

Alex Fraser (Fraser Ecological Consulting) has over 15 years experience in ecological assessment and on-ground bushland restoration management. Previous work roles include ecological consulting with Parsons Brinckerhoff (large infrastructure), NPWS (regional biodiversity surveys), NSW Department of Environment and Climate Change (SIS DGRs/ breach investigations) and Hornsby Shire Council (residential, rural and industrial DA assessment and bushland project management) have focussed primarily on ecological survey, project work and policy development for consent authorities. Alex also possesses practical experience in bushland restoration and landscape construction.

A full list of flora and fauna assessments previously undertaken can be provided upon request.

Professional Affiliations include the Australian Association of Bush Regenerators, Ecological Society of Australia, Royal Zoological Society of NSW, Birds Australia, Australasian Bat Society, Urban Feral Animal Action Control Group (Sydney North Councils), Surfrider Foundation & Fred Hollows Foundation.

Relevant qualifications and training:

- Bachelor of Applied Science – Coastal Resource Management (Honours)
- Certificate 3 Natural Area Restoration (Ryde Horticultural College)
- Chemcert (Department of Natural Resources)
- Chainsaw Cross Cutting Techniques (Ryde Horticultural College)
- Certificate 3 Vertebrate Animal Pest Control (NSW DPI, Orange)
- OH&S General Induction for Construction Work (Work Cover NSW)
- Senior First Aid (St. Johns Ambulance Australia)
- Project Management 'the hard and soft skills' (NPWS- 2004)
- Frog, Bat and Reptile: species identification and survey skills (Forests NSW)
- Certificate 3&4 Japanese language proficiency (The Japan Foundation)
- Advanced Open Water SCUBA diver (PADI Australia)
- State Rail Contractor Safety Awareness (State Rail Authority)
- NPWS Scientific Licence - S10445
- Accredited under the Biodiversity Assessment Methodology - BAM (Accreditation No. BAAS18156)



Charcol coloured metal framed windows




Subfloor cladding - Cemintel barestone



Walls and roofing woodland grey stading seam cladding

Schedule of External Finishes

<div><div></div><div>Intelligent Design</div></div> <div><div>Architect No 9138</div><div>Mo 040 823 1911</div><div>38 Ligar Street Fairfield Heights</div></div> <div><div>©Copyright</div></div>	Date	Amend	CONSTRUCTION NOTES:				General Notes				Drawing Title: Plans - Schedule of External Finishes Niagara Forest House Client:Mr & Mrs Whyte 129 Alan Road Niagara Park 2250			
			Termite treatment.				1 All dimensions & levels to be checked & verified on & off site prior to commencement of any construction work.				1			
			Treatment will be provided for termite prevention in accordance with AS 3660 Termite Management.				2 Do not scale off the drawings, use figured dimensions.				2			
			Masonry				3 All structural & hydraulic works to be as per engineer's details.				3			
			All masonry work shall comply with AS 3700 Masonry Code, AS/NZS 2904 Damp-proof course & Flashings, and AS 2975 Accessories for Masonry Construction				4 All work to be carried out in accordance with the National Construction, Standard Australia code & relevant by-laws				4			
			Steel Framing				5 All workmanship to be carried out in a professional & tradesman like manner.				5			
			All steel framing shall comply with AS 1170 Minimum design loads on structures, and AS 3623 Domestic Metal Framing.				6 The plans are to be read in conjunction with Specifications and Council conditions				6			
			Roof Cladding				7 Contact designer if there are any inconsistencies				7			
			Roof Cladding shall comply with SAA HB39 Code of Common Practice for Steel Roofing, AS 1562 Design and Installation of Sheet Roof & Wall Cladding, and AS 4285 Skylights. Roofing to AS 2050				8 The plans are not to be used for construction unless released by the designer				8			
			Glazing				9				9			
		All glazing and windows shall comply with AS 1170, SAA Loading Code, AS 1288 Glass in Buildings, and AS 2047 1996 Windows in Buildings - Selection and Installation.				10				10				
		Gutters and Downpipes				11				11				
		All gutters and downpipes shall comply with AS/NZS 3500.3.2 Stormwater Drainage, and AS/NZS 1979.1				12				12				
		Wall Cladding				13				13				
		External Fibre Cement cladding shall comply with AS/NZS 2908.2 or ISO 8336 and will be installed so as to comply with Cl. 3.5.3 of the NCC				14				14				
		Fire Smoke Alarms				15				15				
		Smoke Alarms shall comply with AS 3786 and shall be installed in locations so as to comply with Cl. 3.7.2 of Vol 2 of NCC				16				16				
		Wet Areas				17				17				
		Wet areas shall be waterproofed so as to comply with AS3740 Waterproofing of wet areas within residential buildings.				18				18				
		Stair Construction				19				19				
		All stairs shall comply with Cl. 3.9.1 of Vol2 of NCC.				20				20				