

DA Form 1 – Development application details

Approved form (version 1.3 effective 28 September 2020) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) and parts 4 to 6 of *DA Form 2 – Building work details*.

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	Benjamin James Lightfoot
Contact name (only applicable for companies)	Ben
Postal address (P.O. Box or street address)	11 Dellwood Street
Suburb	Nathan
State	QLD
Postcode	4111
Country	Australia
Contact number	+61456815609
Email address (non-mandatory)	Benjamin.lightfoot@uqconnect.edu.au
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

2) Owner's consent	
2.1) Is written consent of the owner required for this development application?	
<input type="checkbox"/> Yes – the written consent of the owner(s) is attached to this development application	
<input checked="" type="checkbox"/> No – proceed to 3)	

PART 2 – LOCATION DETAILS

3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable)

Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans.

3.1) Street address and lot on plan

☒ Street address **AND** lot on plan (all lots must be listed), **or**

☐ Street address **AND** lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).

a)	Unit No.	Street No.	Street Name and Type	Suburb
			Cape Tribulation Rd	Kimberley
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
		31	RP740682	Douglas Shire
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

Note: Place each set of coordinates in a separate row.

☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

3.3) Additional premises

☐ Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application

☒ Not required

4) Identify any of the following that apply to the premises and provide any relevant details

☐ In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

☐ On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

☐ In a tidal area

Name of local government for the tidal area (if applicable):

Name of port authority for tidal area (if applicable):

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:

<input type="checkbox"/> Listed on the Environmental Management Register (EMR) under the <i>Environmental Protection Act 1994</i>
EMR site identification: <input type="text"/>
<input type="checkbox"/> Listed on the Contaminated Land Register (CLR) under the <i>Environmental Protection Act 1994</i>
CLR site identification: <input type="text"/>

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see [DA Forms Guide](#).

- ☐ Yes – All easement locations, types and dimensions are included in plans submitted with this development application
- ☒ No

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

- ☒ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work

b) What is the approval type? *(tick only one box)*

- ☒ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

- ☒ Code assessment ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

Development Application for a Material Change of Use for a Dwelling House

e) Relevant plans

Note: *Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms guide: Relevant plans](#).*

- ☒ Relevant plans of the proposed development are attached to the development application

6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

- ☐ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work

b) What is the approval type? *(tick only one box)*

- ☐ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

- ☐ Code assessment ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal *(e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):*

e) Relevant plans

Note: *Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).*

- ☐ Relevant plans of the proposed development are attached to the development application

6.3) Additional aspects of development

- ☐ Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application

- ☒ Not required

Section 2 – Further development details

7) Does the proposed development application involve any of the following?	
Material change of use	<input checked="" type="checkbox"/> Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	<input type="checkbox"/> Yes – complete division 2
Operational work	<input type="checkbox"/> Yes – complete division 3
Building work	<input type="checkbox"/> Yes – complete DA Form 2 – Building work details

Division 1 – Material change of use

Note: This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.

8.1) Describe the proposed material change of use			
Provide a general description of the proposed use	Provide the planning scheme definition (include each definition in a new row)	Number of dwelling units (if applicable)	Gross floor area (m ²) (if applicable)
Single Residential Dwelling	Dwelling House	1	108
8.2) Does the proposed use involve the use of existing buildings on the premises?			
<input type="checkbox"/> Yes			
<input checked="" type="checkbox"/> No			

Division 2 – Reconfiguring a lot

Note: This division is only required to be completed if any part of the development application involves reconfiguring a lot.

9.1) What is the total number of existing lots making up the premises?	
9.2) What is the nature of the lot reconfiguration? (tick all applicable boxes)	
<input type="checkbox"/> Subdivision (complete 10))	<input type="checkbox"/> Dividing land into parts by agreement (complete 11))
<input type="checkbox"/> Boundary realignment (complete 12))	<input type="checkbox"/> Creating or changing an easement giving access to a lot from a constructed road (complete 13))

10) Subdivision				
10.1) For this development, how many lots are being created and what is the intended use of those lots:				
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				
10.2) Will the subdivision be staged?				
<input type="checkbox"/> Yes – provide additional details below				
<input type="checkbox"/> No				
How many stages will the works include?				
What stage(s) will this development application apply to?				

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?

Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment

12.1) What are the current and proposed areas for each lot comprising the premises?

Current lot		Proposed lot	
Lot on plan description	Area (m ²)	Lot on plan description	Area (m ²)

12.2) What is the reason for the boundary realignment?

--

13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? (attach schedule if there are more than two easements)

Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

Note: This division is only required to be completed if any part of the development application involves operational work.

14.1) What is the nature of the operational work?

- | | | |
|--|-------------------------------------|--|
| <input type="checkbox"/> Road work | <input type="checkbox"/> Stormwater | <input type="checkbox"/> Water infrastructure |
| <input type="checkbox"/> Drainage work | <input type="checkbox"/> Earthworks | <input type="checkbox"/> Sewage infrastructure |
| <input type="checkbox"/> Landscaping | <input type="checkbox"/> Signage | <input type="checkbox"/> Clearing vegetation |
| <input type="checkbox"/> Other – please specify: <table border="1" style="display: inline-table; width: 400px; height: 20px;"></table> | | |

14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)

☐ Yes – specify number of new lots:

☐ No

14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)

\$

PART 4 – ASSESSMENT MANAGER DETAILS

15) Identify the assessment manager(s) who will be assessing this development application

Douglas Shire Council

16) Has the local government agreed to apply a superseded planning scheme for this development application?

- ☐ Yes – a copy of the decision notice is attached to this development application
- ☐ The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
- ☒ No

PART 5 – REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements?

Note: A development application will require referral if prescribed by the Planning Regulation 2017.

☒ No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **Chief Executive of the Planning Act 2016**:

- ☐ Clearing native vegetation
- ☐ Contaminated land (*unexploded ordnance*)
- ☐ Environmentally relevant activities (ERA) (*only if the ERA has not been devolved to a local government*)
- ☐ Fisheries – aquaculture
- ☐ Fisheries – declared fish habitat area
- ☐ Fisheries – marine plants
- ☐ Fisheries – waterway barrier works
- ☐ Hazardous chemical facilities
- ☐ Heritage places – Queensland heritage place (*on or near a Queensland heritage place*)
- ☐ Infrastructure-related referrals – designated premises
- ☐ Infrastructure-related referrals – state transport infrastructure
- ☐ Infrastructure-related referrals – State transport corridor and future State transport corridor
- ☐ Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
- ☐ Infrastructure-related referrals – near a state-controlled road intersection
- ☐ Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
- ☐ Koala habitat in SEQ region – key resource areas
- ☐ Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
- ☐ Ports – Brisbane core port land – environmentally relevant activity (ERA)
- ☐ Ports – Brisbane core port land – tidal works or work in a coastal management district
- ☐ Ports – Brisbane core port land – hazardous chemical facility
- ☐ Ports – Brisbane core port land – taking or interfering with water
- ☐ Ports – Brisbane core port land – referable dams
- ☐ Ports – Brisbane core port land – fisheries
- ☐ Ports – Land within Port of Brisbane's port limits (*below high-water mark*)
- ☐ SEQ development area
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – community activity
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – urban activity
- ☐ SEQ regional landscape and rural production area or SEQ rural living area – combined use
- ☐ Tidal works or works in a coastal management district
- ☐ Reconfiguring a lot in a coastal management district or for a canal
- ☐ Erosion prone area in a coastal management district
- ☐ Urban design
- ☐ Water-related development – taking or interfering with water
- ☐ Water-related development – removing quarry material (*from a watercourse or lake*)
- ☐ Water-related development – referable dams
- ☐ Water-related development – levees (*category 3 levees only*)
- ☐ Wetland protection area

Matters requiring referral to the **local government**:

- ☐ Airport land
- ☐ Environmentally relevant activities (ERA) (*only if the ERA has been devolved to local government*)

<input type="checkbox"/> Heritage places – Local heritage places
Matters requiring referral to the Chief Executive of the distribution entity or transmission entity: <input type="checkbox"/> Infrastructure-related referrals – Electricity infrastructure
Matters requiring referral to: <ul style="list-style-type: none"> The Chief Executive of the holder of the licence, if not an individual The holder of the licence, if the holder of the licence is an individual <input type="checkbox"/> Infrastructure-related referrals – Oil and gas infrastructure
Matters requiring referral to the Brisbane City Council: <input type="checkbox"/> Ports – Brisbane core port land
Matters requiring referral to the Minister responsible for administering the Transport Infrastructure Act 1994: <input type="checkbox"/> Ports – Brisbane core port land <i>(where inconsistent with the Brisbane port LUP for transport reasons)</i> <input type="checkbox"/> Ports – Strategic port land
Matters requiring referral to the relevant port operator , if applicant is not port operator: <input type="checkbox"/> Ports – Land within Port of Brisbane's port limits <i>(below high-water mark)</i>
Matters requiring referral to the Chief Executive of the relevant port authority: <input type="checkbox"/> Ports – Land within limits of another port <i>(below high-water mark)</i>
Matters requiring referral to the Gold Coast Waterways Authority: <input type="checkbox"/> Tidal works or work in a coastal management district <i>(in Gold Coast waters)</i>
Matters requiring referral to the Queensland Fire and Emergency Service: <input type="checkbox"/> Tidal works or work in a coastal management district <i>(involving a marina (more than six vessel berths))</i>

18) Has any referral agency provided a referral response for this development application?		
<input type="checkbox"/> Yes – referral response(s) received and listed below are attached to this development application		
<input checked="" type="checkbox"/> No		
Referral requirement	Referral agency	Date of referral response
Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application <i>(if applicable)</i> .		

PART 6 – INFORMATION REQUEST

19) Information request under Part 3 of the DA Rules
<input checked="" type="checkbox"/> I agree to receive an information request if determined necessary for this development application
<input type="checkbox"/> I do not agree to accept an information request for this development application
Note: By not agreeing to accept an information request I, the applicant, acknowledge: <ul style="list-style-type: none"> that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules. Further advice about information requests is contained in the DA Forms Guide .

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)

- ☐ Yes – provide details below or include details in a schedule to this development application
☒ No

List of approval/development application references	Reference number	Date	Assessment manager
<input type="checkbox"/> Approval <input type="checkbox"/> Development application			
<input type="checkbox"/> Approval <input type="checkbox"/> Development application			

21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)

- ☐ Yes – a copy of the receipted QLeave form is attached to this development application
☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
☒ Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

- ☐ Yes – show cause or enforcement notice is attached
☒ No

23) Further legislative requirements

Environmentally relevant activities

23.1) Is this development application also taken to be an application for an environmental authority for an **Environmentally Relevant Activity (ERA)** under section 115 of the *Environmental Protection Act 1994*?

- ☐ Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below
☒ No

Note: Application for an environmental authority can be found by searching “ESR/2015/1791” as a search term at www.qld.gov.au. An ERA requires an environmental authority to operate. See www.business.qld.gov.au for further information.

Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			

- ☐ Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

Hazardous chemical facilities

23.2) Is this development application for a **hazardous chemical facility**?

- ☐ Yes – Form 69: Notification of a facility exceeding 10% of schedule 15 threshold is attached to this development application
☒ No

Note: See www.business.qld.gov.au for further information about hazardous chemical notifications.

Clearing native vegetation

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

☐ Yes – this development application includes written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)

☒ No

Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.
2. See <https://www.qld.gov.au/environment/land/vegetation/applying> for further information on how to obtain a s22A determination.

Environmental offsets

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

☐ Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter

☒ No

Note: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.

Koala habitat in SEQ Region

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?

☐ Yes – the development application involves premises in the koala habitat area in the koala priority area

☐ Yes – the development application involves premises in the koala habitat area outside the koala priority area

☒ No

Note: If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at www.des.qld.gov.au for further information.

Water resources

23.6) Does this development application involve **taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the Water Act 2000**?

☐ Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the *Water Act 2000* may be required prior to commencing development

☒ No

Note: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.qld.gov.au for further information.

DA templates are available from <https://planning.dsdmip.qld.gov.au/>. If the development application involves:

- Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1
- Taking or interfering with water in a watercourse, lake or spring: complete DA Form 1 Template 2
- Taking overland flow water: complete DA Form 1 Template 3.

Waterway barrier works

23.7) Does this application involve **waterway barrier works**?

☐ Yes – the relevant template is completed and attached to this development application

☒ No

DA templates are available from <https://planning.dsdmip.qld.gov.au/>. For a development application involving waterway barrier works, complete DA Form 1 Template 4.

Marine activities

23.8) Does this development application involve **aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants**?

☐ Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*

☒ No

Note: See guidance materials at www.daf.qld.gov.au for further information.

Quarry materials from a watercourse or lake

23.9) Does this development application involve the **removal of quarry materials from a watercourse or lake** under the *Water Act 2000*?

- ☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development
☒ No

Note: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.qld.gov.au and www.business.qld.gov.au for further information.

Quarry materials from land under tidal waters

23.10) Does this development application involve the **removal of quarry materials from land under tidal water** under the *Coastal Protection and Management Act 1995*?

- ☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development
☒ No

Note: Contact the Department of Environment and Science at www.des.qld.gov.au for further information.

Referable dams

23.11) Does this development application involve a **referable dam** required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the *Water Supply Act*)?

- ☐ Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the *Water Supply Act* is attached to this development application
☒ No

Note: See guidance materials at www.dnrme.qld.gov.au for further information.

Tidal work or development within a coastal management district

23.12) Does this development application involve **tidal work or development in a coastal management district**?

- ☐ Yes – the following is included with this development application:
- ☐ Evidence the proposal meets the code for assessable development that is prescribed tidal work (*only required if application involves prescribed tidal work*)
 - ☐ A certificate of title
- ☒ No

Note: See guidance materials at www.des.qld.gov.au for further information.

Queensland and local heritage places

23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?

- ☐ Yes – details of the heritage place are provided in the table below
☒ No

Note: See guidance materials at www.des.qld.gov.au for information requirements regarding development of Queensland heritage places.

Name of the heritage place:		Place ID:	
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Brothels

23.14) Does this development application involve a **material change of use for a brothel**?

- ☐ Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*
☒ No

Decision under section 62 of the Transport Infrastructure Act 1994

23.15) Does this development application involve new or changed access to a state-controlled road?

- ☐ Yes – this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)
☒ No

Walkable neighbourhoods assessment benchmarks under Schedule 12A of the Planning Regulation

23.16) Does this development application involve reconfiguring a lot into 2 or more lots in certain residential zones (except rural residential zones), where at least one road is created or extended?

☐ Yes – Schedule 12A is applicable to the development application and the assessment benchmarks contained in schedule 12A have been considered

☒ No

Note: See guidance materials at www.planning.dsdmp.qld.gov.au for further information.

PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17

☒ Yes

Note: See the *Planning Regulation 2017* for referral requirements

If building work is associated with the proposed development, Parts 4 to 6 of [DA Form 2 – Building work details](#) have been completed and attached to this development application

☐ Yes

☒ Not applicable

Supporting information addressing any applicable assessment benchmarks is with the development application

Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see [DA Forms Guide: Planning Report Template](#).

☒ Yes

Relevant plans of the development are attached to this development application

Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).

☒ Yes

The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)

☐ Yes

☒ Not applicable

25) Applicant declaration

☒ By making this development application, I declare that all information in this development application is true and correct

☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*

Note: It is unlawful to intentionally provide false or misleading information.

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, *Planning Regulation 2017* and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the *Planning Regulation 2017*, and the access rules made under the *Planning Act 2016* and *Planning Regulation 2017*; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received:

Reference number(s):

Notification of engagement of alternative assessment manager

Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment

Note: For completion by assessment manager if applicable

Description of the work			
QLeave project number			
Amount paid (\$)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

20/02/2023

Development Application

Lot 31 Cape Tribulation Road
Kimberley QLD 4873

Prepared by Benjamin Lightfoot

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1.0 Introduction

Thank you for taking the time to consider my development application for Lot 31 Cape Tribulation Road, Kimberley.

The application site is a rectangular shaped lot that has a total area of 10,950m² with a frontage of 70.91 metres and side boundaries of 154.84 metres and 183.57 metres. The site is currently vacant and is covered by vegetation. It has a topography that slopes up from the front boundary to a flat area located in the front third of the block. The topography then slopes down and then back up again towards the back of the site. The site is located north of the Daintree River with properties in the area consisting of rural lots that have been developed for Dwelling Houses or vacant land.

It is proposed to develop the site for a Dwelling House. The single dwelling would be located in the relatively flat area and would have a total area of 108m². It will be a small dwelling consisting of one bedroom with a living/dining area and verandah. The proposed design has considerations in place for parking and is accessible via a single driveway. The dwelling will be setback at least 14 metres from the closest boundary.

The application is identified as being code assessable with consideration to be given to the applicable Planning Assessment requirements. The proposed development is considered to be consistent with the assessment requirements and as a suitable use for development of the site. The proposal is considered similar to properties in its locality in terms of size and development and is designed in keeping with the amenity of the area.

The application is submitted for approval and is subject to any relevant and reasonable conditions.

2.0 Compliance Tables

2.1 Environment management zone code

6.2.4 Environmental management zone code

6.2.4.1 Application

- (1) This code applies to assessing development in the Environmental management zone.
- (2) When using this code, reference should be made to Part 5.

6.2.4.2 Purpose

- (1) The purpose of the Environmental management zone code is to recognise environmentally sensitive areas and provide for houses on lots and other low impact activities where suitable.

These areas are protected from intrusion of any urban, suburban, centre or industrial land use.

- (2) The local government purpose of the code is to:
 - (a) implement the policy direction set in the Strategic Framework, in particular:
 - (i) Theme 2 : Environment and landscape values, Element 3.5.3 – Biodiversity, Element 3.5.5 – Scenic amenity.
 - (b) protect and buffer areas of environmental significance from inappropriate development.
- (3) The purpose of the code will be achieved through the following overall outcomes:
 - (a) Development is generally restricted to a dwelling house;
 - (b) Adverse impacts on natural systems, both on-site and on adjoining land are minimised through the location, design and management of development;
 - (c) Development reflects and responds to the natural features and environmental values of the area;
 - (d) Visual impacts are minimised through the location and design of development;
 - (e) Development does not adversely affect water quality;
 - (f) Development responds to land constraints, including but not limited to topography, vegetation, bushfire, landslide and flooding.

Criteria for assessment

Table 6.2.4.3.a – Environmental management zone – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
PO1 The height of all buildings and structures is in keeping with the natural characteristics of the site. Buildings and structures are low-rise and not unduly visible from external sites.	AO1.1 Buildings and structures are not more than 8.5 metres and two storeys in height. Note – Height is inclusive of the roof height. AO1.2 Buildings have a roof height not less than 2 metres.	Complies with AO1 The proposed building is single storey and less than 8.5 metres in height. Complies with AO1.2 The roof height is not less than 2 metres
PO2 Buildings and structures are set back to: (a) maintain the natural character of the area; (b) achieve separation from neighbouring buildings and from road frontages.	AO2 Buildings and structures are set back not less than: (a) 40 metres from the frontage of a state controlled road; (b) 25 metres from the frontage to Cape Tribulation Road; (c) 6 metres from any other road; (d) 6 metres from the side and rear boundaries of the site.	Complies with AO2 The proposed building is set back greater than 40 Metres from Cape Tribulation Road and more than 6 metres from side and rear boundaries.
For assessable development		
PO3 Development is consistent with the purpose of the Environmental management zone and protects the zone from the intrusion of inconsistent uses.	AO3 Inconsistent uses as identified in Table 6.2.4.3.b are not established in the Environmental management zone.	Complies with AO3 The development is not identified as an inconsistent use.
PO4 The site coverage of all buildings and structures and associated services do not have an adverse effect on the environmental or scenic values of the site.	PO4 No acceptable outcomes are prescribed.	Complies with PO4 The dwelling would have a total site cover of approximately 100m ² or <1.00%
PO5 Development is located, designed, operated and managed to respond to the characteristics, features and constraints of the site and its surrounds. Note - Planning scheme policy – Site assessments provides guidance on identifying the characteristics, features and constraints of a site and its surrounds.	AO5.1 Buildings, structures and associated access, infrastructure and private open space are sited: (a) within areas of the site which are already cleared; or (b) within areas of the site which are environmentally degraded; (c) to minimise additional vegetation clearing.	Complies with PO5 The site is forested with no existing cleared areas. The placement and design of the dwelling have been selected to require minimal change to the environment. The development would be sited in a location on the most level part of the site and clearing would be limited to that necessary to

Performance outcomes	Acceptable outcomes	Applicant response
		provide for the development.
	A05.2 Buildings and structures and associated infrastructure are not located on slopes greater than 1 in 6 (16.6%) or on a ridgeline.	Complies with PO5 The dwelling is located in the flattest area of the block. The area of the site selected for the dwelling is the least sloping part of the site and provides for the development to be undertaken with the least disturbance. The proposed development is designed to respond to the characteristics and features of the site and surrounds.
PO6 Buildings and structures are responsive to steep slope through innovative construction techniques so as to: (a) maintain the geotechnical stability of slopes; (b) minimise cut and/or fill; (c) minimise the overall height of development.	A06.1 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the land and single plane concrete slab on-ground methods of construction are not utilised. A06.2 Access and vehicle manoeuvring and parking areas are constructed and maintained to: (a) minimise erosion; (b) minimise cut and fill; (c) follow the natural contours of the site.	Complies with PO6 The dwelling is located in the flattest area of the block and is built to minimise disturbance. Access is designed to minimise erosion, minimise cut and fill and achieve the least gradient.
PO7 The exterior finishes of buildings and structures are consistent with the surrounding natural environment.	PO7 The exterior finishes and colours of buildings and structures are non-reflective and are moderately dark to darker shades of grey, green, blue and brown or the development is not visible external to the site.	Able to comply with PO7 The colours have not yet been selected; however the site is not visible externally and non-reflective colours will be used. Any further conditions from Council are welcomed.
PO8 Development does not adversely affect the amenity of the zone and adjoining land uses in terms of traffic, noise, dust, odour, lighting or other physical or environmental impacts.	A08 No acceptable outcomes are prescribed.	Complies with PO8 The proposal is for a dwelling house which will not adversely affect the amenity of the zone and adjoining land uses.

Performance outcomes	Acceptable outcomes	Applicant response
PO9 The density of development ensures that the environmental and scenic amenity values of the site and surrounding area are not adversely affected.	AO9 The maximum residential density is one dwelling house per lot.	Complies with AO9 The proposal is for a single dwelling house.
PO10 Lot reconfiguration results in no additional lots. Note - Boundary realignments to resolve encroachments and lot amalgamation are considered appropriate.	AO10 No acceptable outcomes are prescribed.	Complies with PO10 The proposal does not involve lot reconfiguration.

Table 6.2.4.3.b – Inconsistent uses within the Environmental management zone

Inconsistent uses		
<ul style="list-style-type: none"> • Adult store • Agricultural supplies store • Air services • Aquaculture • Bar • Brothel • Bulk landscape supplies • Car wash • Caretaker's accommodation • Cemetery • Child care centre • Club • Community care centre • Community residence • Community use • Crematorium • Cropping • Detention facility • Dual occupancy • Dwelling unit • Educational establishment • Food and drink outlet • Function facility • Garden centre 	<ul style="list-style-type: none"> • Hardware and trade supplies • Health care services • High impact industry • Hospital • Hotel • Indoor sport and entertainment • Intensive animal industry • Intensive horticulture • Landing • Low impact industry • Major electricity infrastructure • Major sport, recreation and entertainment facility • Marine industry • Market • Motor sport facility • Multiple dwelling • Nightclub entertainment facility • Office • Outdoor sales • Outstation • Parking station • Place of worship • Port services 	<ul style="list-style-type: none"> • Renewable energy facility • Relocatable home park • Research and technology industry • Residential care facility • Resort complex • Retirement facility • Rooming accommodation • Rural industry • Rural workers accommodation • Sales office • Service Station • Shop • Shopping centre • Short-term accommodation • Showroom • Special industry • Substation • Theatre • Transport depot • Utility installation • Veterinary services • Warehouse • Wholesale nursery • Winery

Note – This table does not imply that all other uses not listed in the table are automatically consistent uses within the zone. Assessable development must still demonstrate consistency through the assessment process.

2.2 Hillslopes overlay code

8.2.5 Hillslopes overlay code

8.2.5.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Hillslopes overlay, if:
 - (a) self assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
 - (b) impact assessable development.
- (2) Land in the Hillslopes overlay is identified on the Hillslopes overlay map in Schedule 2 and includes the following sub-categories:
 - (a) Hillslopes constraint sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.5.2 Purpose

- (1) The purpose of the Hillslopes overlay code is to:
 - (a) implement the policy direction in the Strategic Framework, in particular:
 - (i) Theme 1 - Settlement pattern: Element 3.4.7 Mitigation of hazards;
 - (ii) Theme 2 – Environment and landscape values: Element 3.5.5 Scenic amenity.
 - (b) enable an assessment of whether development is suitable on land within the Hillslopes sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development on hillslopes is safe, serviceable and accessible;
 - (b) the ecological values, landscape character and visual quality of the hillslopes are protected from development so as to retain the scenic backdrop to the region;
 - (c) Development on hillslopes is appropriate, having regard to the topographic constraints and environmental characteristics of the land;
 - (d) Development responds to the constraints of the site including gradient and slope stability;
 - (e) Works do not involve complex engineering solutions.

Criteria for assessment

Table 8.2.5.3.a – Hillslopes overlay code –assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable development		
PO1 The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	AO1.1 Development is located on parts of the site that are not within the Hillslopes constraint sub-category as shown on the Hillslopes overlay Maps contained in schedule 2.	Complies with PO1 The dwelling is located in the flat area of the site and is out of view from external areas. The development is designed to maintain the natural backdrop of the region
For assessable development		
PO2	AO2.1	Complies with PO2

Performance outcomes	Acceptable outcomes	Applicant response
The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	<p>Development does not occur on land with a gradient in excess of 1 in 6 (16.6%)</p> <p>or</p> <p>AO2.2 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the site.</p> <p>AO2.3 Access ways and driveways are:</p> <ul style="list-style-type: none"> (a) constructed with surface materials that blend with the surrounding environment; (b) landscaped with dense planting to minimise the visual impact of the construction; (c) provided with erosion control measures immediately after construction. <p>AO2.4 The clearing or disturbance of vegetation is limited to clearing and disturbance that:</p> <ul style="list-style-type: none"> (a) is necessary for the construction of driveways; (b) is necessary to contain the proposed development; (c) minimises canopy clearing or disturbance; (d) minimises riparian clearing or disturbance. <p>AO2.5 On land with slopes greater than 1 in 6 (16.6%) or greater, alternative construction methods to concrete slab on ground are utilised (i.e. split level or post and beam constructed buildings that minimise modification to the natural terrain of the land).</p> <p>AO2.6 Development does not alter the sky line.</p> <p>AO2.7 Buildings and structures:</p> <ul style="list-style-type: none"> (a) are finished predominantly in the following exterior colours or surfaces: 	<p>The dwelling is not visible from external areas including from Cape Tribulation Rd Frontage.</p> <p>Access ways are constructed with materials that blend with the surrounding environment and protect the scenic backdrop of the region. Measures are put in place for erosion control.</p> <p>Clearing of vegetation is limited to the extent necessary for the development.</p> <p>The dwelling is designed to protect the natural terrain</p> <p>The dwelling will blend with the scenic backdrop and not alter the skyline beyond that necessary for the development.</p> <p>Building colours will blend with the environment and will be non-reflective. Colours are yet to be finalised and any provisions from Council are welcomed.</p> <p>No recreational or ornamental features (e.g Tennis courts or swimming pools) are part of the development.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(b) moderately dark to darker shades of olive green, brown, green, blue, or charcoal; or</p> <p>(c) moderately dark to darker wood stains that blend with the colour and hues of the surrounding vegetation and landscape;</p> <p>(d) are not finished in the following exterior colours or surfaces:</p> <p>(e) pastel or terracotta colours, reds, yellows, shades of white or beige, or other bright colours that do not blend with the surrounding vegetation and landscape;</p> <p>(f) reflective surfaces.</p> <p>AO2.8 Exterior colour schemes limit the use of white or other light colours to exterior trim and highlighting of architectural features</p> <p>AO2.9 Areas between the first floor (including outdoor deck areas) and ground level are screened from view.</p> <p>AO2.10 Recreational or ornamental features (including tennis courts, ponds or swimming pools) do not occur on land:</p> <p>(a) with a gradient of 1 in 6 (16.6%) or more;</p> <p>(b) are designed to be sited and respond to the natural constraints of the land and require minimal earthworks</p>	
<p>PO3 Excavation or filling does not have an adverse impact on the amenity, safety, stability or function of the site or adjoining premises through:</p> <p>(a) loss of privacy;</p> <p>(b) loss of access to sunlight;</p> <p>(c) intrusion of visual or overbearing impacts;</p> <p>(d) complex engineering solutions.</p>	<p>AO3 Excavation or fill:</p> <p>(a) is not more than 1.2 metres in height for each batter or retaining wall;</p> <p>(b) is setback a minimum of 2 metres from property boundaries;</p> <p>(c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping;</p> <p>(d) does not exceed a maximum of 3 batters and 3 berms (i.e. not greater than 3.6 metres in height) on any one lot.</p>	<p>Complies with AO3</p> <p>The dwelling is designed to have the least disturbance possible for the development.</p> <p>Development is set back more than 2 metres from property boundaries.</p> <p>(c) and (d) not applicable</p>

Performance outcomes	Acceptable outcomes	Applicant response
Lot reconfiguration		
<p>P04 For development that involves reconfiguring a lot, lot layout and design is responsive to the natural constraints of the land and each lot is capable of being used for its intended purpose.</p>	<p>AO4.1 The frontage and depth of all lots is of sufficient width to:</p> <ul style="list-style-type: none"> (a) allow driveways to follow the natural contours of the site and not exceed a gradient of 1 in 6 (16.6%); (b) accommodate any changes in gradient between the road and lot within the lot boundary and not within the road reserve. <p>AO4.2 Development does not create new lots containing land of greater than 1 in 6 (16.6%), except where a rectangular area of land of lesser grade is contained within the new lots to accommodate the intended land use, with the balance left in its natural state to the greatest extent possible.</p> <p>Note – The size of rectangular areas is outlined within each zone code.</p> <p>AO4.3 Development does not alter ridgelines.</p> <p>AO4.4 Lots are designed to ensure rooflines of future buildings and structures do not protrude above a ridgeline.</p>	<p>Not Applicable This development does not require reconfiguring a lot.</p>

2.3 Natural areas overlay code

8.2.7 Natural areas overlay code

8.2.7.1 Application

(1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Natural areas overlay, if:

- (a) self-assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
- (b) impact assessable development.

(2) Land in the Natural areas overlay is identified on the Natural areas overlay map in Schedule 2 and includes the following sub-categories:

- (a) MSES – Protected area;
- (b) MSES – Marine park;
- (c) MSES – Wildlife habitat;
- (d) MSES – Regulated vegetation;
- (e) MSES – Regulated vegetation (intersecting a Watercourse);
- (f) MSES – High ecological significance wetlands;
- (g) MSES – High ecological value waters (wetlands);
- (h) MSES – High ecological value waters (watercourse);
- (i) MSES – Legally secured off set area.

Note – MSES = Matters of State Environmental Significance.

(3) When using this code, reference should be made to Part 5.

8.2.7.2 Purpose

(1) The purpose of the Natural areas overlay code is to:

- (a) implement the policy direction in the Strategic Framework, in particular:
 - (i) Theme 2: Environment and landscape values, Element 3.5.3 Biodiversity, Element 3.5.4 Coastal zones;
 - (ii) Theme 3: Natural resource management Element 3.6.2 Land and catchment management, Element 3.6.3 Primary production, forestry and fisheries.
- (b) enable an assessment of whether development is suitable on land within the Biodiversity area overlay sub-categories.

(2) The purpose of the code will be achieved through the following overall outcomes:

- (a) development is avoided within:
 - (i) areas containing matters of state environmental significance (MSES);
 - (ii) other natural areas;
 - (iii) wetlands and wetland buffers;
 - (iv) waterways and waterway corridors.
- (b) where development cannot be avoided, development:
 - (i) protects and enhances areas containing matters of state environmental significance;
 - (ii) provides appropriate buffers;
 - (iii) protects the known populations and supporting habitat of rare and threatened flora and fauna species, as listed in the relevant State and Commonwealth legislation;

- (iv) ensures that adverse direct or indirect impacts on areas of environmental significance are minimised through design, siting, operation, management and mitigation measures;
 - (v) does not cause adverse impacts on the integrity and quality of water in upstream or downstream catchments, including the Great Barrier Reef World Heritage Area;
 - (vi) protects and maintains ecological and hydrological functions of wetlands, waterways and waterway corridors;
 - (vii) enhances connectivity across barriers for aquatic species and habitats;
 - (viii) rehabilitates degraded areas to provide improved habitat condition, connectivity, function and extent;
 - (ix) protects areas of environmental significance from weeds, pests and invasive species.
- (c) strategic rehabilitation is directed to areas on or off site, where it is possible to achieve expanded habitats and increased connectivity.

Criteria for assessment

Table 8.2.7.3.a - Natural areas overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
Protection of matters of environmental significance		
PO1 Development protects matters of environmental significance.	AO1.1 Development avoids significant impact on the relevant environmental values. or AO1.2 A report is prepared by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, that the development site does not contain any matters of state and local environmental significance. or AO1.3 Development is located, designed and operated to mitigate significant impacts on environmental values. For example, a report certified by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, how the proposed development mitigates impacts, including on water quality, hydrology and biological processes.	Complies with PO1 The site is identified on the overlay map as containing MSES Regulated Vegetation intersecting a watercourse. This is not reflected on the State Planning Policy Maps. To the extent of any inconsistency the State Planning Policy Maps prevail. Nevertheless the development is designed to have the least impact on the environmental values of the site and surrounds and vegetation clearing would be limited to that necessary to facilitate the development The development is designed and located so that any impacts on matters of environmental significance are minimised.

Performance outcomes	Acceptable outcomes	Applicant response
Management of impacts on matters of environmental significance		
PO2 Development is located, designed and constructed to avoid significant impacts on matters of environmental significance.	AO2 The design and layout of development minimises adverse impacts on ecologically important areas by: <ul style="list-style-type: none"> (a) focusing development in cleared areas to protect existing habitat; (b) utilising design to consolidate density and preserve existing habitat and native vegetation; (c) aligning new property boundaries to maintain ecologically important areas; (d) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not negatively affect ecologically important areas; (e) ensuring that significant fauna habitats are protected in their environmental context; and (f) incorporating measures that allow for the safe movement of fauna through the site. 	Complies with PO2 The development is designed and located so that any impacts on matters of environmental significance are minimised. The dwelling is placed so that disturbance is kept to a minimum and as much vegetation will be preserved as possible to ensure free fauna movement through the site.
PO3 An adequate buffer to areas of state environmental significance is provided and maintained.	AO3.1 A buffer for an area of state environmental significance (Wetland protection area) has a minimum width of: <ul style="list-style-type: none"> (a) 100 metres where the area is located outside Urban areas; or (b) 50 metres where the area is located within a Urban areas. or AO3.2 A buffer for an area of state environmental significance is applied and maintained, the width of which is supported by an evaluation of environmental values, including the function and threats to matters of environmental significance.	Complies with AO3.1 The development would be located more than 100 metres from any wetland.
PO4 Wetland and wetland buffer areas are maintained, protected and restored. Note – Wetland buffer areas are identified in AO3.1.	AO4.1 Native vegetation within wetlands and wetland buffer areas is retained. AO4.2 Degraded sections of wetlands and wetland buffer areas are revegetated with endemic native plants in patterns and densities which emulate the relevant regional ecosystem.	Complies with AO4.1 Vegetation will not be removed within the wetland buffer zone. Not Applicable There is no wetland buffer zone on site.

Performance outcomes	Acceptable outcomes	Applicant response
P05 Development avoids the introduction of non-native pest species (plant or animal), that pose a risk to ecological integrity.	AO5.1 Development avoids the introduction of non-native pest species. AO5.2 The threat of existing pest species is controlled by adopting pest management practices for long-term ecological integrity.	Complies with AO5.1 It is not intended that pest species are introduced on site. Complies with AO5.2 Any pest species that may be found will be controlled by adopting best practices for ecological integrity.
Ecological connectivity		
P06 Development protects and enhances ecological connectivity and/or habitat extent.	AO6.1 Development retains native vegetation in areas large enough to maintain ecological values, functions and processes. and AO6.2 Development within an ecological corridor rehabilitates native vegetation. and AO6.3 Development within a conservation corridor mitigates adverse impacts on native fauna, feeding, nesting, breeding and roosting sites and native fauna movements.	Complies with AO6.1 Vegetation will only be cleared to facilitate the development. All other vegetation will be preserved to maintain ecological values, functions and processes. Not Applicable Site is not identified as within an ecological corridor. Not Applicable Site is not identified as within an ecological corridor.
P07 Development minimises disturbance to matters of state environmental significance (including existing ecological corridors).	AO7.1 Development avoids shading of vegetation by setting back buildings by a distance equivalent to the height of the native vegetation. and AO7.2 Development does not encroach within 10 metres of existing riparian vegetation and watercourses.	Complies with P07 The proposed development will limit clearing to the minimum necessary. Not Applicable The development is not located within 10 metres of any watercourse.
Waterways in an urban area		
P08 Development is set back from waterways to protect and maintain: (a) water quality; (b) hydrological functions; (c) ecological processes; (d) biodiversity values; (e) riparian and in-stream habitat values and connectivity;	AO8.1 Where a waterway is contained within an easement or a reserve required for that purpose, development does not occur within the easement or reserve; or AO8.2	Not Applicable This site is not an urban area. Not Applicable This site is not an urban area.

Performance outcomes	Acceptable outcomes	Applicant response
(f) in-stream migration	Development does not occur on the part of the site affected by the waterway corridor. Note – Waterway corridors are identified within Table 8.2.7.3.b.	
Waterways in a non-urban area		
PO9 Development is set back from waterways to protect and maintain: (a) water quality; (b) hydrological functions; (c) ecological processes; (d) biodiversity values; (e) riparian and in-stream habitat values and connectivity; (f) in-stream migration.	AO9 Development does not occur on that part of the site affected by a waterway corridor. Note – Waterway corridors are identified within Table 8.2.7.3.b.	Not Applicable This site is not affected by a waterway corridor.

Table 8.2.7.3.b — Widths of waterway corridors for waterways

Waterways classification	Waterway corridor width
Waterways in Urban areas	10 metres measured perpendicular from the top of the high bank.
Waterways in Other areas	For a dwelling house, 10 metres measured perpendicular from the top of the high bank. For all other development, 20 metres measured perpendicular from the top of the high bank.

2.4 Potential landslide hazard overlay code

8.2.9 Potential landslide hazard overlay code

8.2.9.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Potential landslide hazard overlay; if
 - (a) self-assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
 - (b) impact assessable development.
- (2) Land in the Potential landslip hazard overlay is identified on the Potential landslide hazard overlay maps in Schedule 2 and includes the following sub-categories:
 - (a) Places of potential landslide hazard sub-category.
- (3) When using this code, reference should be made to Part 5.

Note – The Potential landslide hazard overlay shows modelled areas where the factors contributing to landslip potential accumulate to provide a moderate or higher risk if certain factors are exacerbated (e.g. factors include significant vegetation clearing, filling and excavation, changes to soil characteristics, changes to overland water flow, or changes to sub-surface water flow). It shows areas that the Council has identified where landslides may occur and where land may be impacted by a landslide, but does not mean that landslides will occur or that the land will be impacted by a landslide. Other areas not contained within the potential landslide hazard overlay may sustain landslides or be impacted by landslides and consideration should be given to this issue, where appropriate.

8.2.5.2 Purpose

- (1) The purpose of the Potential landslide hazard overlay code is:
 - (a) implement the policy direction of the Strategic Framework, in particular:
 - (i) Theme 1: Settlement pattern Element 3.4.7 Mitigation of hazards.
 - (b) enable an assessment of whether development is suitable on land within the Potential landslip hazard overlay.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development is located, designed and constructed to not put at risk the safety of people, property and the environment;
 - (b) development is not at risk from and does not pose a risk to adjacent and nearby sites from landslides;
 - (c) ensures that community infrastructure is protected from the effects of potential landslides;
 - (d) ensures that vegetation clearing, stormwater management and filling and/or excavation does not create a landslide hazard and/or rectifies potential pre-existing landslide risks;
 - (e) development does not occur where works to provide a solution for safety of people, property or the environment involves complex engineering solutions to overcome the risk, or would result in a built form or outcome that causes an adverse visual impact on the Hillslopes or Landscape values of Douglas Shire.

Criteria for assessment

Table 8.2.9.20a – Potential landslide hazard overlay code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		
PO1 The siting and design of development does not involve complex engineering solutions and does not create or increase the potential landslide hazard risk	AO1.1 Development is located on that part of the site not affected by the Potential landslide hazard overlay. or AO1.2	Complies with PO1 Dwelling is located on the flattest area of the site and is partially within the area not affected by the landslide overlay The dwelling is

Performance outcomes	Acceptable outcomes	Applicant response
<p>to the site or adjoining premises through:</p> <ul style="list-style-type: none"> (a) building design; (b) increased slope; (c) removal of vegetation; (d) stability of soil; (e) earthworks; (f) alteration of existing ground water or surface water paths; (g) waste disposal areas. 	<p>Development is on an existing stable, benched site and requires no further earthworks</p> <p>or</p> <p>AO1.3 A competent person certifies that:</p> <ul style="list-style-type: none"> (a) the stability of the site, including associated buildings and infrastructure, will be maintained during the course of the development and will remain stable for the life of the development; (b) development of the site will not increase the risk of landslide hazard activity on other land, including land above the site; (c) the site is not subject to the risk of landslide activity on other land; (d) any measures identified in a site-specific geotechnical report for stabilising the site or development have been fully implemented; (e) development does not concentrate existing ground water and surface water paths; (f) development does not incorporate on-site waste water disposal. 	<p>designed to minimise any disturbance.</p> <p>Associated infrastructure is designed to follow the terrain and minimise disturbance and erosion.</p>
	<p>Note – Planning scheme policy SC6.9 – Natural hazards provides guidance on preparing a site specific geo-technical assessment.</p> <p>Note – Development may alter the conditions of ground water and surface water paths in accordance with a site-specific geotechnical report, but should ensure that its final disbursement is as-per pre-developed conditions. Consideration for location, velocity, volume and quality should be given</p>	
<p>P02 The siting and design of necessary retaining structures does not cause an adverse visual impact on landscape character or scenic amenity quality of the area.</p>	<p>AO2 Excavation or fill:</p> <ul style="list-style-type: none"> (a) is not more than 1.2 metres in height for each batter or retaining wall; (b) is setback a minimum of 2 metres from property boundaries; (c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping; (d) does not exceed a maximum of 3 batters and 3 berms (i.e. 	<p>Complies with AO2</p> <p>The dwelling is designed to minimise disturbance and will not require excavation or fill including 1.2 metres.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	Not greater than 3.6 metres in height) on any one lot.	
Additional requirements for Community infrastructure		
PO3 Development for community infrastructure: (a) is not at risk from the potential landslide hazard areas; (b) will function without impediment from a landslide; (c) provides access to the infrastructure without impediment from the effects of a landslide; (d) does not contribute to an elevated risk of a landslide to adjoining properties.	AO3 Development is designed in accordance with the recommendations of a site-specific geotechnical assessment which makes reference to the community infrastructure and its needs and function. Note - A site specific geotechnical assessment will detail requirements that will address the Acceptable Outcomes of this Performance Outcome. Planning scheme policy SC6.9 – Natural hazards provides guidance on preparing a site specific geotechnical assessment.	Not Applicable No community infrastructure is proposed.

2.5 Dwelling house code

9.3.8 Dwelling house code

9.3.8.1 Application

- (1) This code applies to assessing development for a dwelling house if:
 - (a) self-assessable development or assessable development where this code identified in the assessment criteria column of a table of assessment; or
 - (b) impact assessable development.

- (2) When using this code, reference should be made to Part 5.

Note—Where the land is identified in an overlay map, additional provisions relating to that overlay also apply. For example, minimum floor levels for a dwelling house on a site subject to certain types of flooding are identified in the Flood and storm tide inundation overlay code.

Note – For a proposal to be self-assessable, it must meet all of the self-assessable outcomes of this code and any other applicable code. Where it does not meet all the self-assessable outcomes, the proposal becomes assessable development and a development application is required. Where a development application is triggered, only the specific acceptable outcomes that the proposal fails to meet need to be assessed against the corresponding performance outcomes. Other self-assessable outcomes that are met are not assessed as part of the development application.

9.3.8.2 Purpose

- (1) The purpose of the Dwelling house code is to assess the suitability of development to which this code applies.

- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) The dwelling house, including all habitable buildings on site, is occupied by a single household;
 - (b) A dwelling house, including a secondary dwelling or domestic out-buildings; ensures that the secondary dwelling is sub-ordinate to the primary dwelling house;
 - (c) Development of a dwelling house provides sufficient and safe vehicle access and parking for residents;
 - (d) The built form, siting, design and use of each dwelling is consistent with the desired neighbourhood character and streetscape elements of the area.

Criteria for assessment

Table 9.3.8.3.a – Dwelling house code –assessable development

Performance outcomes	Acceptable outcomes	Applicant Response
For self-assessable and assessable development		

<p>P01 Secondary dwellings:</p> <ul style="list-style-type: none"> (a) are subordinate, small-scaled dwellings; (b) contribute to a safe and pleasant living environment; (c) are established on appropriate sized lots; (d) do not cause adverse impacts on adjoining properties. 	<p>AO1 The secondary dwelling:</p> <ul style="list-style-type: none"> (a) has a total gross floor area of not more than 80m², excluding a single carport or garage; (b) is occupied by 1 or more members of the same household as the dwelling house. 	<p>Not Applicable</p> <p>No secondary dwelling is proposed.</p>
<p>P02 Resident's vehicles are accommodated on- site.</p>	<p>AO2 Development provides a minimum number of on- site car parking spaces comprising:</p> <ul style="list-style-type: none"> (a) 2 car parking spaces which may be in tandem for the dwelling house; (b) 1 car parking space for any secondary dwelling on the same site. 	<p>Complies with AO2</p> <p>2 Car Parking spaces will be available for the dwelling house</p>

Performance outcomes	Acceptable outcomes	Applicant Response
PO3 Development is of a bulk and scale that: <ul style="list-style-type: none"> (a) is consistent with and complements the built form and front boundary setbacks prevailing in the street and local area; (b) does not create an overbearing development for adjoining dwelling houses and their private open space; (c) does not impact on the amenity and privacy of residents in adjoining dwelling houses; (d) ensures that garages do not dominate the appearance of the street. 	AO3 Development meets the acceptable outcome for building height in the applicable Zone code associated with the site.	Complies with AO3 Building height does not exceed that prescribed in the Environmental Management Zone Code

2.6 Access, parking and servicing code

9.4.1 Access, parking and servicing code

9.4.1.1 Application

- (1) This code applies to assessing:
 - (a) operational work which requires a compliance assessment as a condition of a development permit; or
 - (b) a material change of use or reconfiguring a lot if:
 - (i) self-assessable or assessable development where this code is identified in the assessment criteria column of the table of assessment;
 - (ii) impact assessable development, to the extent relevant.
- (2) When using this code, reference should be made to Part 5.

9.4.1.2 Purpose

- (1) The purpose of the Access, parking and servicing code is to assess the suitability of access, parking and associated servicing aspects of a development.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) sufficient vehicle parking is provided on-site to cater for all types of vehicular traffic accessing and parking on-site, including staff, guests, patrons, residents and short term delivery vehicles;
 - (b) sufficient bicycle parking and end of trip facilities are provided on-site to cater for customer and service staff;
 - (c) on-site parking is provided so as to be accessible and convenient, particularly for any short term uses;
 - (d) development provides walking and cycle routes through the site which link the development to the external walking and cycling network;
 - (e) the provision of on-site parking, loading / unloading facilities and the provision of access to the site do not impact on the efficient function of street network or on the area in which the development is located;
 - (f) new vehicular access points are safely located and are not in conflict with the preferred ultimate streetscape character and local character and do not unduly disrupt any current or future on-street parking arrangements.

9.4.1.3 Criteria for assessment

Table 9.4.1.3.a – Access, parking and servicing code – assessable development

Performance outcomes	Acceptable outcomes	Applicant Response
For self-assessable and assessable development		
PO1 Sufficient on-site car parking is provided to cater for the amount and type of vehicle traffic expected to be generated by the use or uses of the site, having particular regard to: <ol style="list-style-type: none"> (a) the desired character of the area; (b) the nature of the particular use and its specific characteristics and scale; 	AO1.1 The minimum number of on-site vehicle parking spaces is not less than the number prescribed in Table 9.4.1.3.b for that particular use or uses. Note - Where the number of spaces calculated from the table is not a whole number, the number of spaces provided is the next highest whole number. AO1.2 Car parking spaces are freely available for the parking of vehicles at all times and are not used for external storage	Complies with AO1.1 A minimum of two car parking spaces will be available for the dwelling house. Complies with AO1.2 Car Parking spaces will remain available for vehicles at all times and

<p>(c) the number of employees and the likely number of visitors to the site;</p> <p>(d) the level of local accessibility;</p> <p>(e) the nature and frequency of any public transport serving the area;</p> <p>(f) whether or not the use involves the retention</p>	<p>purposes, the display of products or rented/sub-leased.</p>	<p>not used for other uses.</p>
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Performance outcomes	Acceptable outcomes	Applicant Response
<p>of an existing building and the previous requirements for car parking for the building</p> <p>(g) whether or not the use involves a heritage building or place of local significance;</p> <p>(h) whether or not the proposed use involves the retention of significant vegetation.</p>	<p>AO1.3 Parking for motorcycles is substituted for ordinary vehicle parking to a maximum level of 2% of total ordinary vehicle parking.</p> <p>AO1.4 For parking areas exceeding 50 spaces parking, is provided for recreational vehicles as a substitute for ordinary vehicle parking to a maximum of 5% of total ordinary vehicle parking rate.</p>	<p>Not applicable</p> <p>No motor cycle parking is proposed.</p> <p>Not applicable Less than 50 parking spaces would be provided.</p>
<p>PO2 Vehicle parking areas are designed and constructed in accordance with relevant standards.</p>	<p>AO2 Vehicle parking areas are designed and constructed in accordance with Australian Standard: (a) AS2890.1; (b) AS2890.3; (c) AS2890.6.</p>	<p>Complies with AO2</p> <p>Parking spaces satisfy the Australian Standards</p>
<p>PO3 Access points are designed and constructed:</p> <p>(a) to operate safely and efficiently;</p> <p>(b) to accommodate the anticipated type and volume of vehicles</p> <p>(c) to provide for shared vehicle (including cyclists) and pedestrian use, where appropriate;</p> <p>(d) so that they do not impede traffic or pedestrian movement on the adjacent road area;</p> <p>(e) so that they do not adversely impact upon existing intersections or future road or intersection improvements;</p> <p>(f) so that they do not adversely impact current and future on-street parking arrangements;</p> <p>(g) so that they do not adversely impact on existing services within the road reserve adjacent to the site;</p> <p>(h) so that they do not involve ramping, cutting of the adjoining road reserve or any built structures (other than what may be necessary to cross over a stormwater channel).</p>	<p>AO3.1 Access is limited to one access cross over per site and is an access point located, designed and constructed in accordance with: (a) Australian Standard AS2890.1; (b) Planning scheme policy SC6.5 – FNQROC Regional Development Manual - access crossovers.</p> <p>AO3.2 Access, including driveways or access crossovers: (a) are not placed over an existing: (i) telecommunications pit; (ii) stormwater kerb inlet; (iii) sewer utility hole; (iv) water valve or hydrant. (b) are designed to accommodate any adjacent footpath; (c) adhere to minimum sight distance requirements in accordance with AS2980.1.</p> <p>AO3.3 Driveways are: (a) designed to follow as closely as possible to the existing contours, but are no steeper than the gradients outlined in Planning scheme policy SC6.5 – FNQROC Regional Development Manual; (b) constructed such that where there is a grade shift to 1 in 4 (25%), there is an area with a grade of no more than 1 in 6 (16.6%) prior to this area, for a</p>	<p>Complies with PO3</p> <p>Only one access crossover is proposed and is in accordance with Australian standards and Planning scheme policy SC6.5 – FNQROC Regional Development Manual – Access Crossovers</p> <p>Access is not placed over any existing telecommunications pit, stormwater kerb inlet, sewer utility hole, water valve or hydrant. No adjacent footpath Adheres to minimum sight distance requirements.</p> <p>The proposed vehicle access to the dwelling house is via one access and driveway. It will be constructed and maintained to comply with the relevant requirements of Planning Scheme Policy SC6.5 – FNQROC Development Manual. The proposed driveway will also be constructed and maintained to minimise erosion and disturbance.</p>

	<p>distance of at least 5 metres;</p> <p>(c) on gradients greater than 1 in 6 (16.6%) driveways are constructed to ensure the cross-fall of the driveway is one way and directed into the hill, for vehicle safety and drainage purposes;</p>	<p>Driveway will be constructed to suit the terrain and minimise erosion and disturbance. Materials used will blend with the environment and not breach any footpaths.</p> <p>Provisions can be made to have driveway inspected to ensure compliance before construction of dwelling begins, as per correspondence with council and engineer Peter Lennox, cited in Appendix.</p>
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Performance outcomes	Acceptable outcomes	Applicant Response
	<p>(d) constructed such that the transitional change in grade from the road to the lot is fully contained within the lot and not within the road reserve;</p> <p>(e) designed to include all necessary associated drainage that intercepts and directs storm water runoff to the storm water drainage system.</p> <p>A03.4 Surface construction materials are consistent with the current or intended future streetscape or character of the area and contrast with the surface construction materials of any adjacent footpath.</p>	
<p>PO4 Sufficient on-site wheel chair accessible car parking spaces are provided and are identified and reserved for such purposes.</p>	<p>A04 The number of on-site wheel chair accessible car parking spaces complies with the rates specified in AS2890 Parking Facilities.</p>	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>
<p>PO5 Access for people with disabilities is provided to the building from the parking area and from the street.</p>	<p>A05 Access for people with disabilities is provided in accordance with the relevant Australian Standard.</p>	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>
<p>PO6 Sufficient on-site bicycle parking is provided to cater for the anticipated demand generated by the development.</p>	<p>A06 The number of on-site bicycle parking spaces complies with the rates specified in Table 9.4.1.3.b.</p>	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>
<p>PO7 Development provides secure and convenient bicycle parking which:</p> <p>(a) for visitors is obvious and located close to the building's main entrance;</p> <p>(b) for employees is conveniently located to provide secure and convenient access between the bicycle storage area, end-of-trip facilities and the main area of the building;</p> <p>(c) is easily and safely accessible from outside the site.</p>	<p>A07.1 Development provides bicycle parking spaces for employees which are co-located with end-of-trip facilities (shower cubicles and lockers);</p> <p>A07.2 Development ensures that the location of visitor bicycle parking is discernible either by direct view or using signs from the street.</p> <p>A07.3 Development provides visitor bicycle parking which does not impede pedestrian movement.</p>	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>

<p>PO8 Development provides walking and cycle routes through the site which:</p> <ul style="list-style-type: none"> (a) link to the external network and pedestrian and cyclist destinations such as schools, shopping centres, open space, public transport stations, shops and local activity centres along the safest, most direct and convenient routes; (b) encourage walking and cycling; (c) ensure pedestrian and cyclist safety. 	<p>AO8 Development provides walking and cycle routes which are constructed on the carriageway or through the site to:</p> <ul style="list-style-type: none"> (a) create a walking or cycle route along the full frontage of the site; (b) connect to public transport and existing cycle and walking routes at the frontage or boundary of the site. 	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>
<p>PO9 Access, internal circulation and on-site parking for service vehicles are designed and constructed:</p> <ul style="list-style-type: none"> (a) in accordance with relevant standards; 	<p>AO9.1 Access driveways, vehicle manoeuvring and on- site parking for service vehicles are designed and constructed in accordance with AS2890.1 and</p>	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>

Performance outcomes	Acceptable outcomes	Applicant Response
<p>(b) so that they do not interfere with the amenity of the surrounding area;</p> <p>(c) so that they allow for the safe and convenient movement of pedestrians, cyclists and other vehicles.</p>	<p>AS2890.2.</p> <p>AO9.2 Service and loading areas are contained fully within the site.</p> <p>AO9.3 The movement of service vehicles and service operations are designed so they:</p> <p>(a) do not impede access to parking spaces;</p> <p>(b) do not impede vehicle or pedestrian traffic movement.</p>	
<p>PO10 Sufficient queuing and set down areas are provided to accommodate the demand generated by the development.</p>	<p>AO10.1 Development provides adequate area on-site for vehicle queuing to accommodate the demand generated by the development where drive through facilities or drop-off/pick-up services are proposed as part of the use, including, but not limited to, the following land uses:</p> <p>(a) car wash;</p> <p>(b) child care centre;</p> <p>(c) educational establishment where for a school;</p> <p>(d) food and drink outlet, where including a drive-through facility;</p> <p>(e) hardware and trade supplies, where including a drive-through facility;</p> <p>(f) hotel, where including a drive-through facility;</p> <p>(g) service station.</p> <p>AO10.2 Queuing and set-down areas are designed and constructed in accordance with AS2890.1.</p>	<p>Not Applicable</p> <p>Not applicable to Dwelling House</p>

Table 9.4.1.3.b – Access, parking and servicing requirements

Note – Where the number of spaces is not a whole number, the number of spaces to be provided is the next highest whole number.

Note – Where the proposed development involves one or more land use, the minimum number of spaces for the proposed development will be calculated using the minimum number of spaces specified for each land use component.

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
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Development Application: Lot 31 Cape Tribulation Road, Kimberley

Agricultural supplies store	1 space per 50m ² of GFA and outdoor display area.	1 space per 200m ² of GFA.	n/a	LRV
Air services	1 car space per 20m ² of covered reception area, plus 1 car space per 2 staff, plus a covered bus set down area adjacent to the entry of the reception area and 2 bus parking spaces.	n/a	n/a	LRV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
Bulk landscape supplies	1 space per 50m ² GFA and outdoor display area.	1 space per 200m ² of GFA.	n/a	MRV
Caretaker's accommodation	A minimum of 1 space	n/a	n/a	n/a
Child care centre	1 space per 10 children to be used for setting down and picking up of children, with a minimum of 3 car spaces to be provided for set down and collection; plus 1 space per employee. Any drive-through facility can provide tandem short term parking for 3 car spaces for setting down/picking up of children, on the basis that a passing lane is provided and line-marked to be kept clear of standing vehicles at all times.	n/a	n/a	VAN
Club	Unlicensed clubrooms: 1 space per 45m ² of GFA. Licensed clubrooms: 1 space per 15m ² of GFA.	1 space per 4 employees.	n/a	Licensed and equal or greater than 1500m ² : RCV Other: VAN
Community care centre	1 space per 20m ² of GFA.	A minimum of 1 space.	n/a	RCV
Community residence	A minimum of 2 spaces.	A minimum of 1 space.	n/a	VAN
Community use	1 space per 15m ² GFA.	1 space per 100m ² of GFA.	n/a	RCV
Dual occupancy	A minimum of 2 spaces per dwelling unit which may be in tandem with a minimum of 1 covered space per dwelling unit.	n/a	n/a	n/a
Dwelling house	A minimum of 2 spaces which may be in tandem plus 1 space for a secondary dwelling	n/a	n/a	n/a
Dwelling unit	1.5 spaces per one or two bedroom unit; or 2 spaces per three bedroom unit.	n/a	n/a	n/a
Educational establishment	Primary school or secondary schools: 1 car space per 2 staff members, plus provision of space to be used	Primary school or secondary schools: 1 space per 5	Required for all educational establishments with a GFA	RCV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	for setting down and picking up of students. Tertiary and further education: 1 car space per 2 staff members, plus 1 car space per 10 students, plus provision of space to be used for setting down and picking up of students.	students over year 4. Tertiary and further education: 2 spaces per 50 full time students.	greater than 2000m ² .	
Food and drink outlet	1 space per 25m ² GFA and outdoor dining area. or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m ² of GFA, and outdoor dining area.	1 space per 100m ² of GFA, and outdoor dining area.	n/a	See Table 9.4.1.3.d
Function facility	1 space per 15m ² GFA.	1 space per 100m ² of GFA.	n/a	RCV
Funeral parlour	1 space per 15m ² GFA.	n/a	n/a	RCV
Garden centre	1 space per 50m ² GFA and outdoor display area	1 space per 200m ² of GFA.	n/a	AV
Hardware and trade supplies	1 space per 50m ² GFA and outdoor display area	1 space per 200m ² of GFA.	n/a	AV
Health care services	1 space per 20m ² of GFA.	1 space per 100m ² of GFA.	Required for all health care services with a GFA greater than 2000m ² .	VAN
High impact industry	1 space per 90m ² of GFA.	n/a	n/a	AV
Home based business	The parking required for the dwelling house, plus 1 space per bedroom where the Home based business involves the provision of accommodation; or 1 space per 25m ² GFA for any other Home Based Business.	n/a	n/a	n/a
Hospital	The greater of 1 space per 2 bedrooms or 1 space per 4 beds; plus 1 car space for ambulance parking, designated accordingly.	1 space per 100m ² of GFA.	Required for all hospitals with a GFA greater than 2000m ² .	RCV
Hotel	1 space per 10m ² GFA and	1 space per	n/a	LRV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	licensed outdoor area; plus For 1 space per 50m ² GFA of floor area of liquor barn or bulk liquor sales area; plus, if a drive in bottle shop is provided, queuing lane/s on site for 12 vehicles. Note - Use standard for any Short Term Accommodation for hotel accommodation use.	100m ² of GFA.		
Indoor sport and recreation	Squash court or another court game: 4 spaces per court. Basketball, netball, soccer, cricket: 25 spaces per court / pitch. Ten pin bowling: 3 spaces per bowling lane. Gymnasium: 1 space per 15m ² of GFA.	1 space per 4 employees.	n/a	RCV
Low impact industry	1 space per 90m ² of GFA.	n/a	n/a	AV
Marine industry	1 space per 90m ² of GFA.	n/a	n/a	AV
Medium impact industry	1 space per 90m ² of GFA.	n/a	n/a	AV
Multiple dwelling	If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie Local plan: 1 car space per dwelling unit. If outside Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie Local plan: 1.5 car spaces per dwelling unit In all cases 60% of the car parking area is to be covered.	1 bicycle space per 3 units and 1 visitor bicycle space per 12 units.	n/a	RCV (over 10 units)
Office	1 space per 25m ² of GFA or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m ² of GFA	1 space per 200m ² GFA	Required for all office development with a GFA greater than 2000m ² .	See Table 9.4.1.3.e
Outdoor sales	1 space per 50m ² GFA and outdoor display area	1 space per 200m ² of GFA.	n/a	AV
Outdoor sport and recreation	Coursing, horse racing, pacing, trotting: 1 space per 5 seated spectators,	Football: 5 space per field.	n/a	RCV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	<p>plus 1 space per 5m² of other spectator areas.</p> <p>Football: 50 spaces per field.</p> <p>Lawn bowls: 30 spaces per green.</p> <p>Swimming pool: 15 spaces; plus 1 space per 100m² of useable site area.</p> <p>Tennis court or other court game: 4 spaces per court.</p> <p>Golf course: 4 spaces per tee on the course.</p> <p>Note - Use standard for Club for clubhouse component.</p>	<p>Lawn bowls: 5 spaces per green.</p> <p>Swimming pool: 1 space per swimming lane.</p> <p>Tennis court or other court game: 4 space per court.</p> <p>Golf course: 1 space per 15m² of GFA for clubhouse component.</p>		
Place of worship	1 space per 15m ² of GFA.	1 space per 100m ² of GFA.	n/a	LRV
Relocatable home park	1 space per relocatable home site; plus 0.1 space per relocatable home site for visitor parking; plus 1 space for an on-site manager	n/a	n/a	LRV
Research and technology industry	1 space per 90m ² of GFA.	n/a	n/a	MRV
Residential care facility	1 visitor car space per 5 bedroom units; plus 1 car space per 2 staff members	n/a	n/a	LRV
Resort complex	<p>Use standard for relevant standard for each component.</p> <p>For example: Use Short Term Accommodation standard for accommodation component and Food and Drink Outlet for restaurant component.</p>	<p>Use standard for relevant standard for each component.</p> <p>For example: Use Short Term Accommodation standard for accommodation component and Food and</p>	n/a	RCV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
		Drink Outlet for restaurant component.		
Retirement facility	1 space per dwelling unit; plus 1 visitor space per 5 dwelling units; plus 1 visitor car space per 10 hostel units, nursing home or similar beds, plus 1 car space per 2 staff members; plus 1 car parking space for ambulance parking.	n/a	n/a	LRV
Sales office	A minimum of 1 space.	n/a	n/a	n/a
Service industry	1 space per 90m ² of GFA.	n/a	n/a	SRV
Service station	1 space per 25m ² of GFA	n/a	n/a	AV
Shop	1 space per 25m ² of GFA. or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m ² of GFA.	1 space per 100m ² of GFA.	Required for all shops with a GFA greater than 2000m ² .	See Table 9.4.1.3.d
Shopping centre	1 space per 25m ² of GFA. or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m ² of GFA.	1 space per 200m ² GFA.	Required for all shopping centres with a GFA greater than 2000m ² .	See Table 9.4.1.3.d
Short term accommodation	If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan: 0.5 car spaces per dwelling unit. If outside Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan: For up to 5 units: 1 car space per dwelling unit, plus 1 space for visitors and 1 service/staff spaces. For 5 – 10 units: 1 car space per dwelling unit, plus 2 spaces for visitors and 1 service/staff spaces.	1 space per 10 rooms	n/a	SRV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	<p>For over 10 units: 0.75 car spaces per dwelling unit, plus 3 spaces for visitors and 2 service/staff parking for the first 10 units and 0.5 additional service/staff space per 10 units, there-above.</p> <p>In all cases 60% of the car parking area is to be covered.</p> <p>Note: Where Short term accommodation is to be inter-changeable with a Multiple dwelling land use, multiple dwelling parking rates apply.</p>			
Showroom	1 space per 50m ² GFA.	1 space per 200m ² GFA.	n/a	AV
Special industry	1 space per 90m ² of GFA.	n/a	n/a	AV
Tourist park	1 car space per caravan site, tent site or cabin; plus 1 visitor car space per 10 caravan sites, tent sites or cabins; plus 1 car space for an on-site manager.	n/a	n/a	LRV
Theatre	<p>Indoor: 1 space per 15m² of GFA.</p> <p>Outdoor cinema: 1 space per 5m² of designated viewing area, plus 1 car space per 2 employees.</p>	1 space per 200m ² GFA.	n/a	VAN
Veterinary services	1 space per 50m ² of GFA.	n/a	n/a	VAN
Warehouse	1 space per 90m ² of GFA.	n/a	n/a	Where self-storage: RCV Other: AV
Any use not otherwise specified in this table.	Sufficient spaces to accommodate number of vehicles likely to be parked at any one time.	Sufficient spaces to accommodate number of vehicles likely to be parked at any one time.		To be determined

Table 9.4.1.3.c – Design vehicles

VAN	A 99.8th percentile vehicle equivalent to a large car.
SRV	Small rigid vehicle as in AS2890.2-2002 parking facilities – Off-street commercial vehicle facilities, but incorporating a body width of 2.33m
MRV	Medium rigid vehicle equivalent to an 8-tonne truck.
LRV	Large rigid vehicle described by AS2890.2-2002 parking facilities – Off-street commercial vehicle facilities as heavy rigid vehicle.
RCV	Industrial refuse collection vehicle
AV	19 metre articulated vehicle from AUSTROADS

Table 9.4.1.3.d – Standard number of service bays required for Food and drink outlet, Shop or Shopping centre

Gross floor area (m ²)	Service bays required			
	VAN	SRV	MRV	LRV
0-199	-	1	-	-
200 – 599	1	-	1	-
600 – 999	1	1	1	-
1000 – 1499	2	1	1	-
1500 – 1999	2	2	1	-
2000 – 2799	2	2	2	-
2800 – 3599	2	2	2	1
3600 and over	To be determined via a parking study.			

Table 9.4.1.3.e – Standard number of service bays required for Office

Gross floor area (m ²)	Service bays required			
	VAN	SRV	MRV	LRV
0-999	-	1	-	-
1000 – 2499	1	-	1	-
2500 – 3999	2	1	1	-
4000 – 5999	3	1	1	-
6000 – 7999	4	1	1	-
8000 – 9999	4	2	1	-
10000 and over	To be determined via a parking study.			

2.7 Infrastructure works code

9.4.5 Infrastructure works code

9.4.5.1 Application

- (1) This code applies to assessing:
 - (a) operational work which requires an assessment as a condition of a development permit or is assessable development if this code is identified in the assessment criteria column of a table of assessment;
 - (b) a material change of use or reconfiguring a lot if:
 - (i) assessable development where this code is identified in the assessment criteria column of the table of assessment;
 - (ii) impact assessable development, to the extent relevant.

Note – The Filling and excavation code applies to operational work for filling and excavation.

- (2) When using this code, reference should be made to Part 5.

9.4.5.2 Purpose

- (1) The purpose of the Infrastructure works code is to ensure that development is safely and efficiently serviced by, and connected to, infrastructure.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) the standards of water supply, waste water treatment and disposal, stormwater drainage, local electricity supply, telecommunications, footpaths and road construction meet the needs of development and are safe and efficient;
 - (b) development maintains high environmental standards;
 - (c) development is located, designed, constructed and managed to avoid or minimise impacts arising from altered stormwater quality or flow, wastewater discharge, and the creation of non-tidal artificial waterways;
 - (d) the integrity of existing infrastructure is maintained;
 - (e) development does not detract from environmental values or the desired character and amenity of an area.

9.4.5.3 Criteria for assessment

Table 9.4.5.3.a – Infrastructure works code –assessable development

Performance outcomes	Acceptable outcomes	Applicant Response
For self-assessable and assessable development		
Works on a local government road		
PO1 Works on a local government road do not adversely impact on footpaths or existing infrastructure within the road verge and maintain the flow, safety and efficiency of pedestrians, cyclists and vehicles.	AO1.1 Footpaths/pathways are located in the road verge and are provided for the hierarchy of the road and located and designed and constructed in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual. AO1.2 Kerb ramp crossovers are constructed in accordance with Planning scheme policy SC 5 – FNQROC Regional Development Manual. AO1.3 New pipes, cables, conduits or other similar infrastructure required to cross existing footpaths: (a) are installed via trenchless methods; or (b) where footpath infrastructure is removed to install infrastructure, the new section of footpath is installed to the standard detailed	Complies with PO1 No works are proposed that could adversely impact footpaths, existing infrastructure or the flow, safety and efficiency of pedestrians, cyclists and vehicles.

Performance outcomes	Acceptable outcomes	Applicant Response
	<p>in the Planning scheme policy SC5 – FNQROC Regional Development Manual, and is not less than a 1.2 metre section.</p> <p>AO1.4 Where existing footpaths are damaged as a result of development, footpaths are reinstated ensuring:</p> <ul style="list-style-type: none"> (a) similar surface finishes are used; (b) there is no change in level at joins of new and existing sections; (c) new sections are matched to existing in terms of dimension and reinforcement. <p>Note – Figure 9.4.5.3.a provides guidance on meeting the outcomes.</p> <p>AO1.5 Decks, verandahs, stairs, posts and other structures located in the road reserve do not restrict or impede pedestrian movement on footpaths or change the level of the road verges.</p>	
Accessibility structures		
<p>P02 Development is designed to ensure it is accessible for people of all abilities and accessibility features do not impact on the efficient and safe use of footpaths.</p> <p>Note – Accessibility features are those features required to ensure access to premises is provided for people of all abilities and include ramps and lifts.</p>	<p>AO2.1 Accessibility structures are not located within the road reserve.</p> <p>AO2.2 Accessibility structures are designed in accordance with AS1428.3.</p> <p>AO2.3 When retrofitting accessibility features in existing buildings, all structures and changes in grade are contained within the boundaries of the lot and not within the road reserve.</p>	<p>Not Applicable</p> <p>No accessibility structures are proposed.</p>
Water supply		

<p>P03 An adequate, safe and reliable supply of potable, fire fighting and general use water is provided.</p>	<p>AO3.1 The premises is connected to Council's reticulated water supply system in accordance with the Design Guidelines set out in Section D6 of the Planning scheme policy SC5 – FNQROC Regional Development Manual;</p> <p>or</p> <p>AO3.2 Where a reticulated water supply system is not available to the premises, on site water storage tank/s with a minimum capacity of 10,000 litres of stored water, with a minimum 7,500 litre tank, with the balance from other sources (e.g. accessible swimming pool, dam etc.) and access to the tank/s for fire trucks is provided for each new house or other development. Tank/s are to be fitted with a 50mm ball valve with a camlock fitting and installed and connected prior to</p>	<p>Able to comply with AO3.1</p> <p>An on-site water storage tank will be provided in accordance with AO3.1. Council are welcomed to attach a condition to any approval granted if considered necessary.</p>
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Performance outcomes	Acceptable outcomes	Applicant Response
	occupation of the house and sited to be visually unobtrusive.	
Treatment and disposal of effluent		
PO4 Provision is made for the treatment and disposal of effluent to ensure that there are no adverse impacts on water quality and no adverse ecological impacts as a result of the system or as a result of increasing the cumulative effect of systems in the locality.	AO4.1 The site is connected to Council's sewerage system and the extension of or connection to the sewerage system is designed and constructed in accordance with the Design Guidelines set out in Section D7 of the Planning scheme policy SC5 – FNQROC Regional Development Manual; or AO4.2 Where not in a sewerage scheme area, the proposed disposal system meets the requirements of Section 33 of the <i>Environmental Protection Policy (Water) 1997</i> and the proposed on site effluent disposal system is designed in accordance with the <i>Plumbing and Drainage Act (2002)</i> .	Complies with AO4.2 The development will have an on-site effluent disposal system which is attached in the Appendix. The system is designed so that there are no adverse impacts on water quality and no ecological impacts.
Stormwater quality		

<p>PO5 Development is planned, designed, constructed and operated to avoid or minimise adverse impacts on stormwater quality in natural and developed catchments by:</p> <ul style="list-style-type: none"> (a) achieving stormwater quality objectives; (b) protecting water environmental values; (c) maintaining waterway hydrology. 	<p>A05.1 A connection is provided from the premises to Council's drainage system;</p> <p>or</p> <p>A05.2 An underground drainage system is constructed to convey stormwater from the premises to Council's drainage system in accordance with the Design Guidelines set out in Sections D4 and D5 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p>A05.3 A stormwater quality management plan is prepared, and provides for achievable stormwater quality treatment measures meeting design objectives listed in Table 9.4.5.3.b and Table 9.4.5.3.c, reflecting land use constraints, such as:</p> <ul style="list-style-type: none"> (a) erosive, dispersive and/or saline soil types; (b) landscape features (including landform); (c) acid sulfate soil and management of nutrients of concern; (d) rainfall erosivity. <p>A05.4 Erosion and sediment control practices are designed, installed, constructed, monitored, maintained, and carried out in accordance with an erosion and sediment control plan.</p> <p>A05.5 Development incorporates stormwater flow</p>	<p>Complies with PO5</p> <p>There is no council drainage system on the site and stormwater drainage would be managed to retain natural processes with stormwater discharged to ground, away from buildings and allowed to dissipate across the site.</p> <p>Not applicable</p> <p>This is not considered applicable to a development of this minor scale.</p>
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Performance outcomes	Acceptable outcomes	Applicant Response
	<p>control measures to achieve the design objectives set out in Table 9.4.5.3.b and Table 9.4.5.3.c, including management of frequent flows, peak flows, and construction phase hydrological impacts.</p> <p>Note – Planning scheme policy SC5 – FNQROC Regional Development Manual provides guidance on soil and water control measures to meet the requirements of the <i>Environmental Protection Act 1994</i>.</p> <p>Note – During construction phases of development, contractors and builders are to have consideration in their work methods and site preparation for their environmental duty to protect stormwater quality.</p>	
Non-tidal artificial waterways		
<p>PO6 Development involving non-tidal artificial waterways is planned, designed, constructed and operated to:</p> <ul style="list-style-type: none"> (a) protect water environmental values; (b) be compatible with the land use constraints for the site for protecting water environmental values; (c) be compatible with existing tidal and non-tidal waterways; (d) perform a function in addition to stormwater management; (e) achieve water quality objectives. 	<p>AO6.1 Development involving non-tidal artificial waterways ensures:</p> <ul style="list-style-type: none"> (a) environmental values in downstream waterways are protected; (b) any ground water recharge areas are not affected; (c) the location of the waterway incorporates low lying areas of the catchment connected to an existing waterway; (d) existing areas of ponded water are included. <p>AO6.2 Non-tidal artificial waterways are located:</p> <ul style="list-style-type: none"> (a) outside natural wetlands and any associated buffer areas; (b) to minimise disturbing soils or sediments; (c) to avoid altering the natural hydrologic regime in acid sulfate soil and nutrient hazardous areas. <p>AO6.3 Non-tidal artificial waterways located adjacent to, or connected to a tidal waterway by means of a weir, lock, pumping system or similar ensures:</p> <ul style="list-style-type: none"> (a) there is sufficient flushing or a tidal range of >0.3 m; or (b) any tidal flow alteration does not adversely impact on the tidal waterway; or (c) there is no introduction of salt water into freshwater environments. <p>AO6.4 Non-tidal artificial waterways are designed and managed for any of the following end-use purposes:</p> <ul style="list-style-type: none"> (a) amenity (including aesthetics), landscaping or recreation; or (b) flood management, in accordance with a drainage catchment management plan; or (c) stormwater harvesting plan as part of an integrated water cycle management plan; or (d) aquatic habitat. 	<p>Not Applicable</p> <p>No waterways are proposed</p>

Performance outcomes	Acceptable outcomes	Applicant Response
	<p>AO6.5 The end-use purpose of the non-tidal artificial waterway is designed and operated in a way that protects water environmental values.</p> <p>AO6.6 Monitoring and maintenance programs adaptively manage water quality to achieve relevant water quality objectives downstream of the waterway.</p> <p>AO6.7 Aquatic weeds are managed to achieve a low percentage of coverage of the water surface area, and pests and vectors are managed through design and maintenance.</p>	
Wastewater discharge		
<p>P07 Discharge of wastewater to waterways, or off site:</p> <p>(a) meets best practice environmental management;</p> <p>(b) is treated to:</p> <p>(i) meet water quality objectives for its receiving waters;</p> <p>(ii) avoid adverse impact on ecosystem health or waterway health;</p> <p>(iii) maintain ecological processes, riparian vegetation and waterway integrity;</p> <p>(iv) offset impacts on high ecological value waters.</p>	<p>AO7.1 A wastewater management plan is prepared and addresses:</p> <p>(a) wastewater type;</p> <p>(b) climatic conditions;</p> <p>(c) water quality objectives;</p> <p>(d) best practice environmental management.</p> <p>AO7.2 The waste water management plan is managed in accordance with a waste management hierarchy that:</p> <p>(a) avoids wastewater discharge to waterways; or</p> <p>(b) if wastewater discharge cannot practicably be avoided, minimises wastewater discharge to waterways by re-use, recycling, recovery and treatment for disposal to sewer, surface water and ground water.</p> <p>AO7.3 Wastewater discharge is managed to avoid or minimise the release of nutrients of concern so as to minimise the occurrence, frequency and intensity of algal blooms.</p> <p>AO7.4 Development in coastal catchments avoids or minimises and appropriately manages soil disturbance or altering natural hydrology and:</p> <p>(a) avoids lowering ground water levels where potential or actual acid sulfate soils are present;</p> <p>(b) manages wastewater so that:</p> <p>(i) the pH of any wastewater discharges is maintained between 6.5 and 8.5 to avoid mobilisation of acid, iron, aluminium and other metals;</p> <p>(ii) holding times of neutralised wastewater ensures the flocculation and removal of any dissolved iron prior to release;</p> <p>(iii) visible iron floc is not present in any</p>	<p>Not Applicable</p> <p>No wastewater would be discharged off-site</p>

Performance outcomes	Acceptable outcomes	Applicant Response
	<p>discharge;</p> <p>(iv) precipitated iron floc is contained and disposed of;</p> <p>(v) wastewater and precipitates that cannot be contained and treated for discharge on site are removed and disposed of through trade waste or another lawful method.</p>	
Electricity supply		
<p>PO8 Development is provided with a source of power that will meet its energy needs.</p>	<p>AO8.1 A connection is provided from the premises to the electricity distribution network;</p> <p>or</p> <p>AO8.2 The premises is connected to the electricity distribution network in accordance with the Design Guidelines set out in Section D8 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p>Note - Areas north of the Daintree River have a different standard.</p>	<p>Not Applicable</p> <p>The site is located north of the Daintree River.</p>
<p>PO9 Development incorporating pad-mount electricity infrastructure does not cause an adverse impact on amenity.</p>	<p>AO9.1 Pad-mount electricity infrastructure is:</p> <p>(a) not located in land for open space or sport and recreation purposes;</p> <p>(b) screened from view by landscaping or fencing;</p> <p>(c) accessible for maintenance.</p> <p>AO9.2 Pad-mount electricity infrastructure within a building, in a Town Centre is designed and located to enable an active street frontage.</p> <p>Note – Pad-mounts in buildings in activity centres should not be located on the street frontage.</p>	<p>Not Applicable</p> <p>No padmount infrastructure is proposed.</p>
Telecommunications		
<p>PO10 Development is connected to a telecommunications service approved by the relevant telecommunication regulatory authority.</p>	<p>AO10 The development is connected to telecommunications infrastructure in accordance with the standards of the relevant regulatory authority.</p>	<p>Not Applicable</p> <p>There is no standard for telecommunications provision north of the Daintree river.</p>
<p>PO11 Provision is made for future telecommunications services (e.g. fibre optic cable).</p>	<p>AO11 Conduits are provided in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual.</p>	<p>Not applicable</p> <p>This is not required north of the Daintree River</p>
Road construction		
<p>PO12 The road to the frontage of the premises is constructed to provide for the safe and efficient movement of:</p> <p>(a) pedestrians and cyclists to</p>	<p>AO12.1 The road to the frontage of the site is constructed in accordance with the Design Guidelines set out in Sections D1 and D3 of the Planning scheme policy SC5 – FNQROC Regional Development</p>	<p>Complies with PO12</p> <p>The Road frontage to the premises is to be constructed so that it is safe for pedestrians, vehicles and emergency vehicles to enter and exit</p>

and from the site;		the site.
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Performance outcomes	Acceptable outcomes	Applicant Response
<p>(b) pedestrians and cyclists adjacent to the site;</p> <p>(c) vehicles on the road adjacent to the site;</p> <p>(d) vehicles to and from the site;</p> <p>(e) emergency vehicles.</p>	<p>Manual, for the particular class of road, as identified in the road hierarchy.</p> <p>AO12.2 There is existing road, kerb and channel for the full road frontage of the site.</p> <p>AO12.3 Road access minimum clearances of 3.5 metres wide and 4.8 metres high are provided for the safe passage of emergency vehicles.</p>	
Alterations and repairs to public utility services		
<p>PO13 Infrastructure is integrated with, and efficiently extends, existing networks.</p>	<p>AO13 Development is designed to allow for efficient connection to existing infrastructure networks.</p>	<p>Not Applicable</p> <p>There are no public utility services near the site.</p>
<p>PO14 Development and works do not affect the efficient functioning of public utility mains, services or installations.</p>	<p>AO14.1 Public utility mains, services and installations are not required to be altered or repaired as a result of the development;</p> <p>or</p> <p>AO14.2 Public utility mains, services and installations are altered or repaired in association with the works so that they continue to function and satisfy the relevant Design Guidelines set out in Section D8 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.</p>	<p>Not Applicable</p> <p>There are no public utility services near the site.</p>
Construction management		
<p>PO15 Work is undertaken in a manner which minimises adverse impacts on vegetation that is to be retained.</p>	<p>AO15 Works include, at a minimum:</p> <ul style="list-style-type: none"> (a) installation of protective fencing around retained vegetation during construction; (b) erection of advisory signage; (c) no disturbance, due to earthworks or storage of plant, materials and equipment, of ground level and soils below the canopy of any retained vegetation; (d) removal from the site of all declared noxious weeds. 	<p>Complies with PO15</p> <p>Works to be completed in a manner that minimises any disturbance and impact on retained vegetation.</p>

PO16 Existing infrastructure is not damaged by construction activities.	AO16 Construction, alterations and any repairs to infrastructure is undertaken in accordance with the Planning scheme policy SC5 – FNQROC Regional Development Manual. Note - Construction, alterations and any repairs to State- controlled roads and rail corridors are undertaken in accordance with the Transport Infrastructure Act 1994.	Not applicable There are no public utility services near the site
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Performance outcomes		Acceptable outcomes	Applicant Response
For assessable development			
High speed telecommunication infrastructure			
PO17 Development provides infrastructure to facilitate the roll out of high speed telecommunications infrastructure.	AO17 No acceptable outcomes are prescribed.	Not applicable The site is north of the Daintree River and infrastructure provision is not required.	
Trade waste			
PO18 Where relevant, the development is capable of providing for the storage, collection treatment and disposal of trade waste such that: (a) off-site releases of contaminants do not occur; (b) the health and safety of people and the environment are protected; (c) the performance of the wastewater system is not put at risk.	AO18 No acceptable outcomes are prescribed.	Not applicable No trade waste would be generated by the development	
Fire services in developments accessed by common private title			
PO19 Hydrants are located in positions that will enable fire services to access water safely, effectively and efficiently.	AO19.1 Residential streets and common access ways within a common private title places hydrants at intervals of no more than 120 metres and at each intersection. Hydrants may have a single outlet and be situated above or below ground. AO19.2 Commercial and industrial streets and access ways within a common private title serving commercial properties such as factories and warehouses and offices are provided with above or below ground fire hydrants located at not more than 90 metre intervals and at each intersection. Above ground fire hydrants have dual-valved outlets.	Not applicable No common property is proposed.	
PO20 Hydrants are suitable identified so that fire services can locate them at all hours. Note – Hydrants are identified as specified in the Department of Transport and Main Roads Technical Note: 'Identification of street hydrants for fire fighting purposes' available under 'Publications'.	AO20 No acceptable outcomes are prescribed.	Not applicable No common property is proposed.	

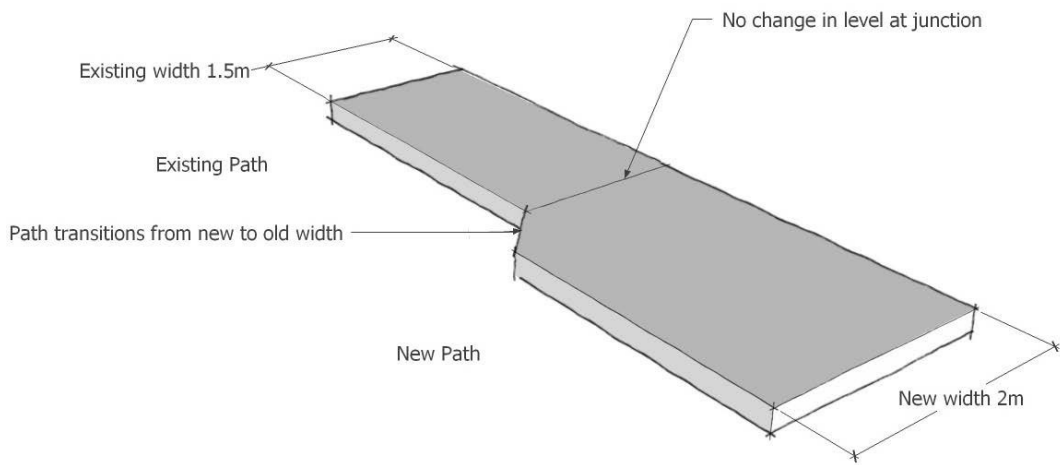
Table 9.4.5.3.b – Stormwater management design objectives (Construction phase).

Issue	Design objectives
Drainage control (Temporary drainage works)	<ul style="list-style-type: none"> (a) Design life and design storm for temporary drainage works: <ul style="list-style-type: none"> (i) Disturbed open area for <12 months – 1 in 2 year ARI event; (ii) Disturbed open area for 12-24 months – 1 in 5 year ARI event; (iii) Disturbed open area for >24 months – 1 in 10 year ARI event. (b) Design capacity excludes minimum 150mm freeboard. (c) Temporary culvert crossing – minimum of 1 in 1-year ARI hydraulic capacity.
Erosion control (Erosion control measures)	<ul style="list-style-type: none"> (a) Minimise exposure of disturbed soils at any time. (b) Divert water run-off from undisturbed areas around disturbed areas. (c) Determine erosion risk rating using local rainfall erosivity, rainfall depth, soil loss rate or other acceptable methods. (d) Implement erosion control methods corresponding to identified erosion risk rating.
Sediment control measures (sediment control measures, design storm for sediment control basins, Sediment basin dewatering)	<ul style="list-style-type: none"> (a) Determine appropriate sediment control measures using: <ul style="list-style-type: none"> (i) potential soil loss rate; or (ii) monthly erosivity; or (iii) average monthly rainfall. (b) Collect and drain stormwater from disturbed soils to sediment basin for design storm event: <ul style="list-style-type: none"> (i) design storm for sediment basin sizing is 80th% five-day event or similar. (c) Site discharge during sediment basin dewatering: <ul style="list-style-type: none"> (i) TSS < 50mg/L TSS; (ii) Turbidity not > 10% receiving water's turbidity; (iii) pH 6.5-8.5.
Water quality (Litter and other waste, hydrocarbons and other contaminants)	<ul style="list-style-type: none"> (a) Avoid wind-blown litter; remove grass pollutants. (b) Ensure there is no visible oil or grease sheen on released waters. (c) Dispose of waste containing contaminants at authorised facilities.
Waterway stability and flood flow management (Changes to the natural hydraulics and hydrology)	<ul style="list-style-type: none"> (a) For peak flow for the 100% AEP event and 1% AEP event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site.

Table 9.4.5.3.c – Stormwater management design objectives (post-construction phase)

Design objectives				Application
Minimum reductions in mean annual load from unmitigated development (%)				
Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5mm	
80	60	40	90	Development for urban purposes Excludes development that is less than 25% pervious. In lieu of modelling, the default bio-retention treatment area to comply with load reduction targets of 1.5% of contributing catchment area.
Water stability management (a) Limit peak 100% AEP event discharge within the receiving waterway to the pre-development peak 100% AEP event discharge.				Catchments contributing to un-lined receiving waterway. Degraded waterways may seek alternative discharge management objectives to achieve waterway stability. For peak flow for the 100% AEP event, use co-located storages to attenuate site discharge rate of stormwater.

Figure 9.4.5.3.a – New footpath sections



2.8 Vegetation management code

9.4.9 Vegetation management code

9.4.9.1 Application

- (1) This code applies to assessing operational works for vegetation damage if:
 - (a) assessable development where the code is an applicable code identified in the assessment criteria column of a table of assessment;
 - (b) impact assessable development, to the extent relevant.
- (2) When using this code, reference should be made to Part 5.

9.4.9.2 Purpose

- (1) The purpose of the Vegetation management code is achieved through the overall outcomes.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) vegetation is protected from inappropriate damage;
 - (b) where vegetation damage does occur it is undertaken in a sustainable manner;
 - (c) significant trees are maintained and protected;
 - (d) biodiversity and ecological values are protected and maintained;
 - (e) habitats for rare, threatened and endemic species of flora and fauna are protected and maintained;
 - (f) landscape character and scenic amenity is protected and maintained;
 - (g) heritage values are protected and maintained.

9.4.9.3 Criteria for assessment

Table 9.4.9.3.a – Vegetation management –assessable development

Note – All vegetation damage is to have regard to the provisions of AS4373-2009 Pruning of Amenity Trees

Performance outcomes	Acceptable outcomes	Applicant Response
For self-assessable and assessable development		
PO1 Vegetation is protected to ensure that: (a) the character and amenity of the local area is maintained; (b) vegetation damage does not result in fragmentation of habitats; (c) vegetation damage is undertaken in a sustainable manner; (d) the Shire's biodiversity and ecological values are maintained and protected; (e) vegetation of historical, cultural and / or visual significance is retained; (f) vegetation is retained for erosion prevention and slope stabilisation.	AO1.1 Vegetation damage is undertaken by a statutory authority on land other than freehold land that the statutory authority has control over; or AO1.2 Vegetation damage is undertaken by or on behalf of the local government on land controlled, owned or operated by the local government; or AO1.3 Vegetation damage, other than referenced in AO1.1 or AO1.2 is the damage of: (a) vegetation declared as a pest pursuant to the <i>Land Protection (Pest and Stock Route Management) Act 2002</i> ; or (b) vegetation identified within the local government's register of declared plants pursuant to the local government's local laws; or (c) vegetation is located within a Rural zone and the trunk is located within ten metres of an existing building; or (d) vegetation is located within the Conservation zone or Environmental management zone	Complies with AO1.5 Vegetation damage would be undertaken to give effect to any development approval granted as a result of this application. Extent of vegetation will be kept to the minimum required for the development. Dwelling is not visible from external areas including not visible from Cape Tribulation Rd.

Performance outcomes	Acceptable outcomes	Applicant Response
	<p>and the trunk is located within three metres of an existing or approved structure, not including a boundary fence;.</p> <p>or</p> <p>AO1.4 Vegetation damage that is reasonably necessary for carrying out work that is: (a) authorised or required under legislation or a local law; (b) specified in a notice served by the local government or another regulatory authority;</p> <p>or</p> <p>AO1.5 Vegetation damage for development where the damage is on land the subject of a valid development approval and is necessary to give effect to the development approval;</p> <p>or</p> <p>AO1.6 Vegetation damage is in accordance with an approved Property Map of Assessable Vegetation issued under the <i>Vegetation Management Act 1999</i>;</p> <p>or</p> <p>AO1.7 Vegetation damage is essential to the maintenance of an existing fire break;</p> <p>or</p> <p>AO1.8 Vegetation damage is essential to prevent interference to overhead service cabling;</p> <p>or</p> <p>AO1.9 Vegetation damage is for an approved Forest practice, where the lot is subject to a scheme approved under the <i>Vegetation Management Act 1999</i>;</p> <p>or</p> <p>AO1.10 Vegetation damage is undertaken in accordance with section 584 of the <i>Sustainable Planning Act 2009</i>.</p> <p>AO1.11 Vegetation damage where it is necessary to</p>	

Performance outcomes	Acceptable outcomes	Applicant Response
	<p>remove one tree in order to protect an adjacent more significant tree (where they are growing close to one another).</p> <p>AO1.12 Private property owners may only remove dead, dying, structurally unsound vegetation following receipt of written advice from, at minimum, a fully qualified Certificate V Arborist. A copy of the written advice is to be submitted to Council for its records, a minimum of seven business days prior to the vegetation damage work commencing.</p>	
<p>PO2 Vegetation damaged on a lot does not result in a nuisance</p>	<p>AO2.1 Damaged vegetation is removed and disposed of at an approved site; or</p> <p>AO2.2 Damaged vegetation is mulched or chipped if used onsite.</p>	<p>Complies with AO2.1</p> <p>Vegetation clearing will be kept to the minimum required for development and be disposed of at an approved site or alternatively mulched or chipped if used on site.</p>
For assessable development		
<p>PO3 Vegetation damage identified on the Places of significance overlay lot does not result in a negative impact on the site's heritage values.</p>	<p>AO3 No acceptable outcomes are prescribed.</p>	<p>Not applicable</p> <p>The site is not identified in the place of significance overlay</p>

3.0 Summary and Conclusion

This report has been prepared in support of a development application to Douglas Shire Council for a Material Change of Use for the purpose of a dwelling house to be located at Lot 31 Cape Tribulation Road, Kimberley with RP number 31RP740682. Through best efforts and guidance from council this development application and appendix has been compiled to be considered sufficient to meet the relevant planning assessment requirements. The proposal is deemed consistent with other developments in the area and is designed to ensure that it is without adverse impact on the amenity of the area.

This application is submitted for approval subject to relevant and reasonable conditions.

Thank you for your consideration.

4.0 Appendix

4.1 Site classification and waste management system



Site Classification & Wastewater Management System For Ben Lightfoot At Lot 31 Cape Tribulation Road Kimberley

Postal address: Earth Test, PO Box 1042, Tolga, Qld 4882. Phone: 4095
4734 e-mail: info@earthtest.com.au

INTRODUCTION:

Earth Test has been engaged by Ben Lightfoot to assess, design and report on Site Classification and a Domestic Wastewater Management System at Lot 31 Cape Tribulation Road, Kimberley.

Real Property Description:-

Lot 31, on RP 740682

Local Authority: Douglas Shire Council.

It is understood the intention is to construct a new dwelling at the site.
A site and soil evaluation was carried out in August 2022.

SITE FACTORS:

The site was identified during a meeting with the owner on-site.

The lot has an area of 10950 square metres and is covered with rainforest.

The location of the proposed dwelling was identified by the client.

The water supply for the dwelling will be onsite roof rain water

There were no water bores on the Lot.

Three Dynamic Cone Penetrometer tests were performed at locations DCP1, DCP2 and DCP3, two boreholes BH1 and BH2, and one constant head soil permeability test P1 as shown on the site plan.

Atterberg Limits tests were performed on a disturbed sample from Borehole1.



Site testing at Lot 31 Cape Tribulation Road, Kimberley

SITE INVESTIGATION REPORT

BOREHOLE LOG

CLIENT: Ben Lightfoot.		DATE SAMPLED: 4/08/2022
PROJECT: Lot 31 Cape Tribulation Road, Kimberley.		Sampled by: G. Negri
REPORT DATE: 08/08/2022		
BOREHOLE No: BH1		
DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.1	Yellow-Brown Sandy Clay-Silt	Disturbed sample 0.6-0.7m. Watertable not encountered.
0.1-0.9	Orange-Brown Sandy Clay-Silt with Gravel	
BOREHOLE No: BH2		
DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.1	Yellow-Brown Sandy Clay-Silt	Watertable not encountered.
0.1-0.9	Pink-Brown Sandy Clay-Silt with Gravel	

ATTERBERG LIMITS TEST REPORT

CLIENT: Ben Lightfoot

SAMPLE No: SI 535-22

PROJECT: Lot 31 Cape Tribulation Road,
Kimberley.

DATE SAMPLED:
4/08/2022

SAMPLE DETAILS: BH1 0.6-0.9m

Sampled by: G. Negri

REPORT DATE: 08/08/2022

Tested By: PW

TEST METHOD	RESULT
Liquid Limit: AS 1289.3.1.2	54%
Plastic Limit: AS 1289.3.2.1	31%
Plasticity Index: AS 1289.3.3.1	13%
Linear Shrinkage: AS 1289.3.4.1	9.5%
Length Of Mould:	125m
Cracking, Crumbling, Curling, Number Of Breaks:	m Nil
Sample History:	Oven
Preparation Method:	Dried Dry
Insitu Moisture Content:	Sieved
	26.3%
% Passing 0.075mm:	

DYNAMIC CONE PENETROMETER REPORT

AS 1289.6.3.2

CLIENT: Ben Lightfoot.

SAMPLE No: SI 535-22

PROJECT: Lot 31 Cape Tribulation Road,
Kimberley.

DATE SAMPLED:
4/08/2022

SAMPLE DETAILS: Sites "DCP1 & DCP2." as per site
plan.

Tested By: G. Negri

REPORT DATE: 08/08/2022

DEPTH (Metres)	Site: DCP1	Site: DCP2	Site: DCP3
	No Blows	No Blows	No Blows
0.0 – 0.1	1	1	1
0.1 – 0.2	3	1	3
0.2 – 0.3	3	4	3
0.3 – 0.4	3	4	3
0.4 – 0.5	4	3	4
0.5 – 0.6	5	5	5
0.6 – 0.7	5	12	8
0.7 – 0.8	5		9
0.8 – 0.9	4		12
0.9 – 1.0	4		
1.0 – 1.1	5		
1.1 – 1.2	5		
1.2 – 1.3			
1.3 – 1.4			
1.4 – 1.5			
1.5 – 1.6			
1.6 – 1.7			
1.7 – 1.8			
1.8 – 1.9			
1.9 – 2.0			

SITE CLASSIFICATION

Lot 31 Cape Tribulation Road, Kimberley.

The Dynamic Cone Penetrometer test results indicate adequate allowable bearing pressure to 1.2m.

The Atterberg Limits test results indicate a moderately reactive soil.

The characteristic surface movement (y_s) is estimated to be in the $20 < y_s \leq 40\text{mm}$ range. According to TABLE 2.3 of AS 2870-2011 the site must be classified **CLASS-"M"**.

To comply with the "Building Services Board Subsidence Policy" advice should be sought from a Registered Professional Engineer for footing design.

All site works must be carried out in accordance with AS 3798-2007 "Guidelines on earthworks for commercial and residential developments"

If the depth of any cut exceeds 0.5m or uncontrolled fill exceeds 0.4m the classification shall be reconsidered.

Because this investigation is limited in scope and extent, it is possible that areas may exist which differ from those shown on the test hole records and used in the site classification. Should any variation from the reported conditions be encountered during excavation work, this office must be notified immediately so that reappraisal of the classification can be made.



Gavin Negri
Earth Test

SITE AND SOIL EVALUATION

Lot 31 Cape Tribulation Road, Kimberley.

The site and soil evaluation carried out on 4/08/2022 provided the following results.

Site Assessment

Site Factor	Result
Slope	9 Degrees in LAA
Shape	Waxing Divergent
Aspect	North North-East
Exposure	Limited
Erosion/land slip	Not noted.
Boulders/rock outcrop	Not noted.
Vegetation	Regrowth rainforest
Watercourse	Not in area affected by Land Application Area.
Water table	Not encountered during investigation.
Fill	None.
Flooding	Not likely.
Channelled run-off	Not found
Soil surface conditions	Firm, Moist.
Other site specific factors	Not noted

Soil Assessment

Soil Property	Result
Colour	Brown
Texture	Sandy Clay-Loam
Structure	Moderately structured
Coarse Fragments	<10%
Measured Permeability Ksat (m/d)	P1= Indicative Permeability 0.5-1.5
Dispersion	Slakes
Soil Category	4
Resultant Design Load Rating, DLR (mm/d)	15

WASTEWATER MANAGEMENT SYSTEM

An “All-Waste” septic tank discharging into an “Advanced Enviro-Septic” bed is considered suitable for this site.

This system has been designed to conform to the requirements of the following codes, acts, regulations and standards. All work to be carried out in accordance with the following codes.

- AS/NZ 1547:2012 On-site domestic-wastewater management.
- Queensland PLUMBING AND DRAINAGE ACT 2018.
- Queensland STANDARD PLUMBING AND DRAINAGE REGULATION 2019.
- Queensland PLUMBING AND WASTEWATER CODE.

SYSTEM SIZING FACTORS.

A population equivalent of three (3) persons has been chosen for the proposed one bedroom dwelling.

The residence is connected to a onsite roof rain water supply system.

Standard water-reduction fixtures must be used to ensure the integrity of the system. They shall include:-

- Dual flush 6/3 Litre water closets.
- Shower-flow restrictors.
- Aerator faucets (taps).
- Water-conserving automatic washing machines. Note: - Garbage grinders are not permitted.

As per AS/NZ 1547:2012 Appendix H, Table H1 the “Typical wastewater design flow” for a “Reticulated water supply” gives a flow allowance of 150 L/Person/day.

The daily flow for the dwelling (3 persons @ 150 L/person/day) will be 450 L/day.

From AS/NZ 1547:2012 Table J1 the minimum capacity of the All-Waste septic tank required is 3000 L.

The tank must NOT be fitted with an outlet filter.

LAND-APPLICATION SYSTEM

DISPOSAL AREA SIZING

From AS/NZ 1547:2012 APPENDIX L, L4 DESIGN AREA SIZING, L4.2 Sizing $L =$

$$Q / (DLR \times W)$$

Where:

L = length in m

Q = design daily flow in L/day

DLR = Design Loading Rate in mm/d

W = Width in m

$$L = 450/15 \times 3.00$$

$$= 10.0\text{m.}$$

Use one 10.0m long by 3.0m wide advanced enviro septic bed.

See site plan and detail cross-section.

Its recommended that 1kg gypsum per m² be applied to the scarified base before laying the sand

SYSTEM SAND

All Advanced Enviro-Septic systems require the use of “system sand” surrounding the pipe. This sand, typically washed coarse sand, must adhere to the following specification.

AS Sieve Size (mm)	Percent Passing %
9.50	100
4.75	95-100
2.36	80-100
1.18	50-85
0.600	25-60
0.300	5-30
0.150	0-10
0.075	0-2

If there is any doubt if the sand media proposed for use will meet the requirements please contact Earth Test for further advice.

SYSTEM INSTALLATION

The entire bottom of the bed should be scarified a minimum of 200mm deep parallel to the AES pipes.

Avoid compaction by keeping people and machinery off the finished trench or bed floor.
The system shall be installed by a licensed plumber in accordance with the manufacturer's recommendations and the relevant Australian Standards.

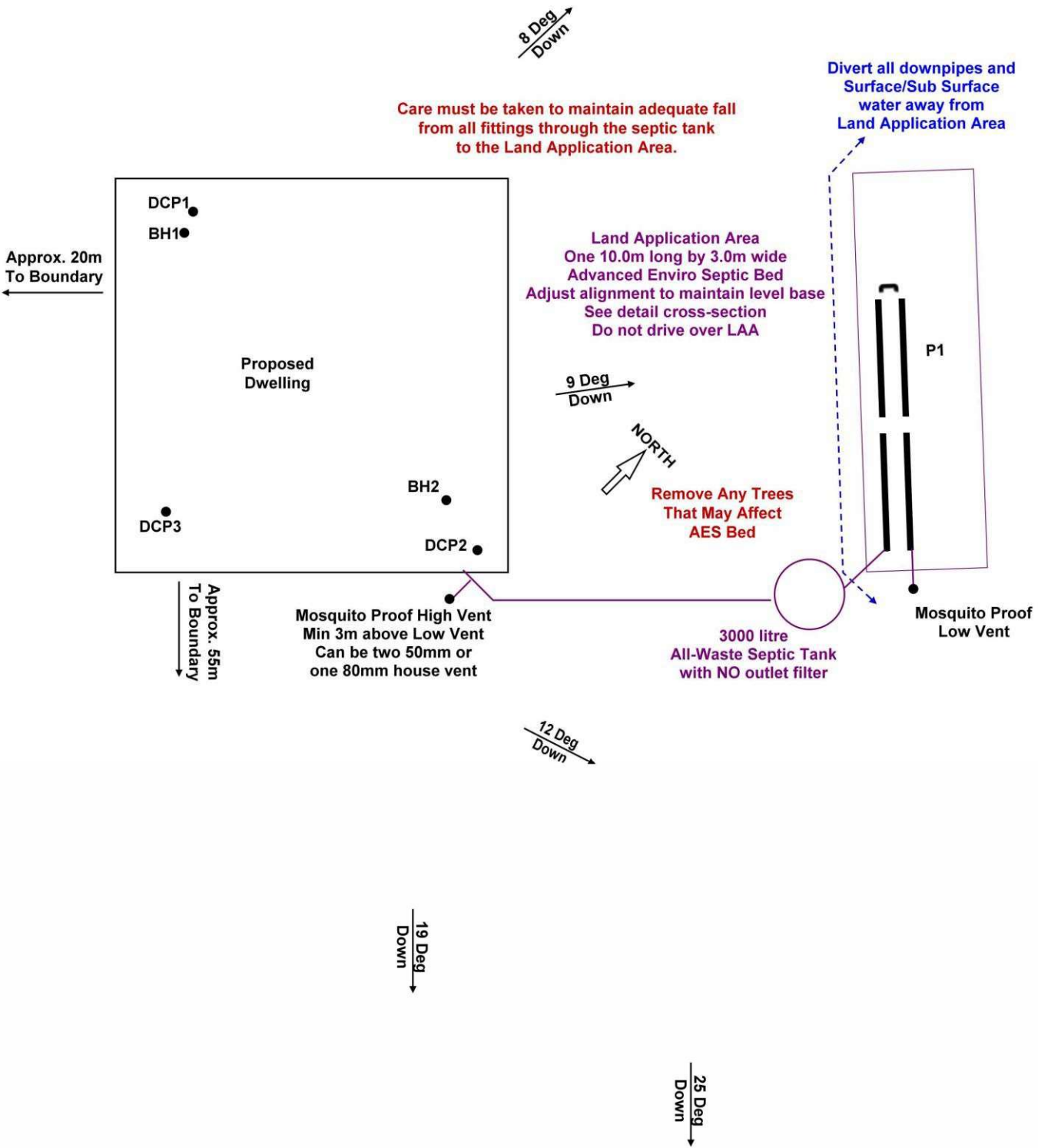
Operation and Maintenance

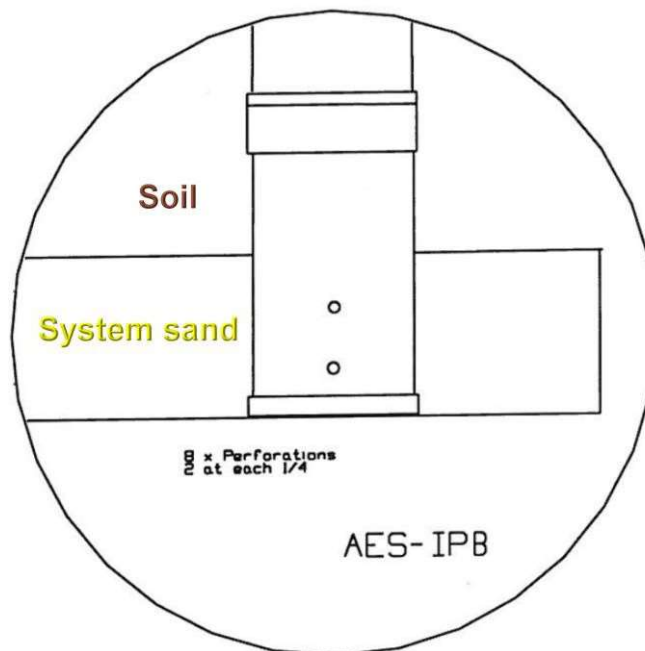
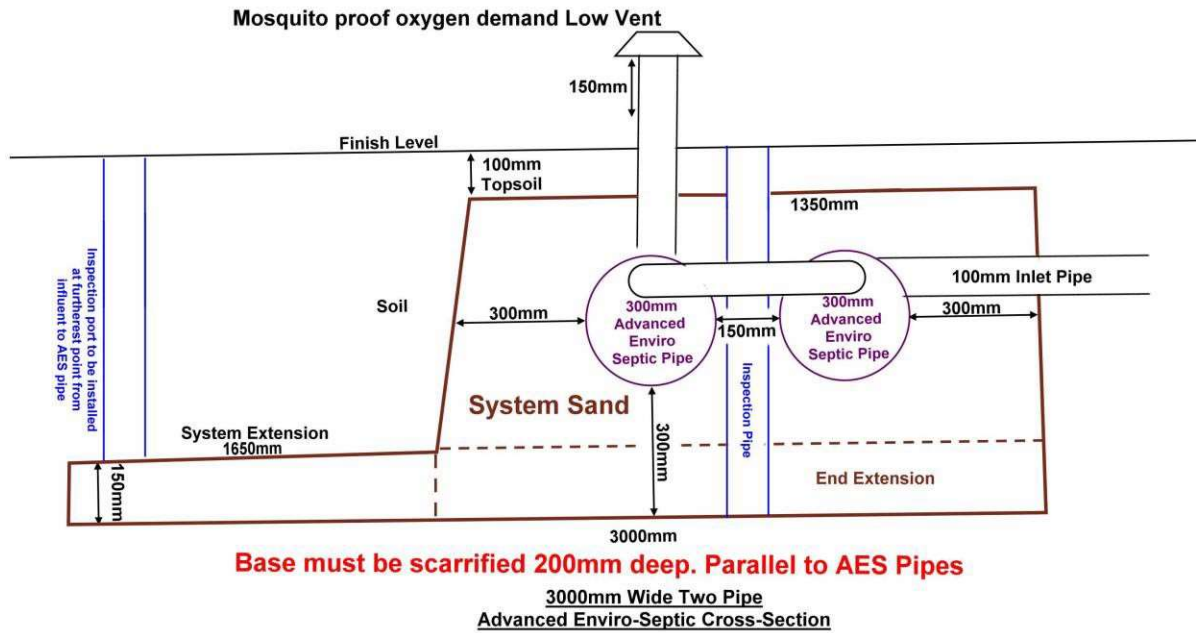
Homeowners should be fully informed of the proper operation and maintenance requirements of the on-site wastewater system.

A handwritten signature in dark ink, appearing to read 'Gavin Negri', is written on a light blue background.

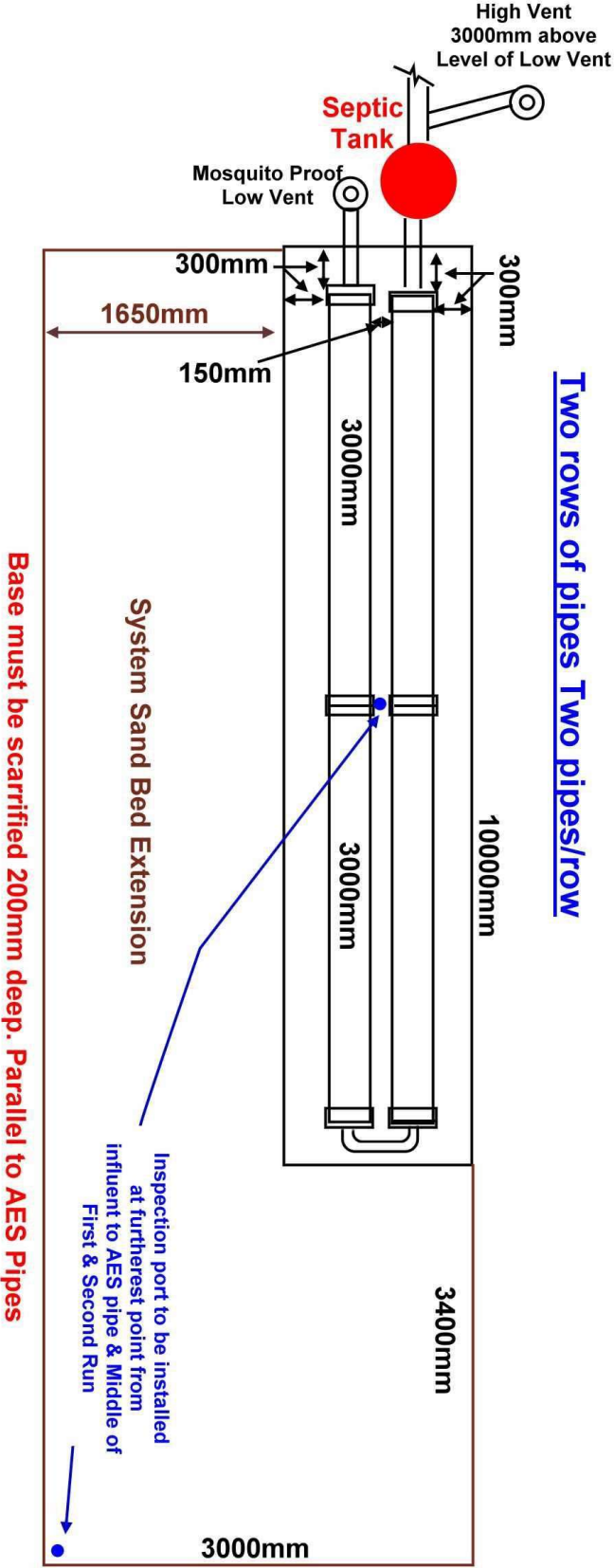
Gavin Negri
Earth Test

SITE PLAN
Lot 31 Cape Tribulation Road, Kimberley.
NOT TO SCALE





AES Inspection point detail





Advanced Enviro-septic Design Calculator v9.0 ©

AES The World Leader in Passive Solutions ©

Site Address	Lot 31 Cape Tribulation Road, Kimberley	State	QLD	Post Code	4873
Client Name	Ben Lightfoot	Date of Site Visit			
Designers Name	Earth Test	Designers Ph Number	07 4095 4734	Designer Lic (e.gQBCC)	15092731
Lic Plumber	TBA	Plumber Ph Number	TBA	Plumb / Drainer Lic Number	TBA
Council Area	Douglas Shire Council	Designers AES Cert Number	1164	Date	8/8/2022

This Calculator is a guide only, receiving soil classification, surface water, water tables and all other site constraints addressed by the qualified designer.

System Designers site and soil calculation data entry

IMPORTANT NOTES

Enter AES L/m loading rate, "30" for ADV Secondary or "38" Secondary	38	>> This design is for a SECONDARY system.
Is this a new installation Y or N	Y	>> Minimum single vent size is 80mm or 2 x 50mm house vents
Number of Bedrooms	1	>> This is not used in ANY Calculation. If not known use N/A or 0.
Number of persons	3	>> A septic tank outlet filter is NOT RECOMMENDED
Daily Design Flow Allowance	150	
Litre/Person/Day Number of rows required	2	>> The maximum length of a single AES pipe run is 30m or 10 PIPES
to suit site constraints	4	>> Catagory may require design considerations. Ref AS1547
Infiltration Soil Category from site/soil evaluation. CATEGORY	15	>> Soil conditioning may be necessary. Ref AS1547 & Comments.
Design Loading Rate based on site & soil evaluation DLR (mm/day)	1.5m	>> Min depth 1.5m. Check water table/restrictive layer
Bore log depth below system Basal area Is this design a GRAVITY system with no outlet filter? Y or N	Y	>> GRAVITY. A House Vent & LOW VENT required on this system
PLEASE CHECK YOU HAVE FALL FROM TANK TO AES SYSTEM PIPES		

COMMENTS :- " The outcome must be important to everyone. "

- Ripping of receiving surface required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate & rip parallel to the site slope/AES pipe.
- Specialist soils advice & special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547
- Designers need to be familiar with special requirements of Local Authorities. ie - Minimum falls from Septic tank outlets to Land application areas etc
- Plumbers are reminded good construction techniques as per AS1547 are especially important in these soil types. Refer AS1547 & AES installation Instructions

AES System Calculator Outcomes			AES dimensions		
Total System load - litres / day (Q).	450	l/d		AES System	Extension Area
Min Length of AES pipe rows to treat	5.92	lm	Length:(L)		
loading	2	lths	Width:(W)		
Number of FULL AES Pipe lengths per row	848	ltr.	Sand Depth	0.75m	0.15m
Total Capacity of AES System pipe in Litres			Area m2	8.9 m^2	21.1 m^2

USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)

>>Slope percentage must be 0% & infiltration footprint must be level for t

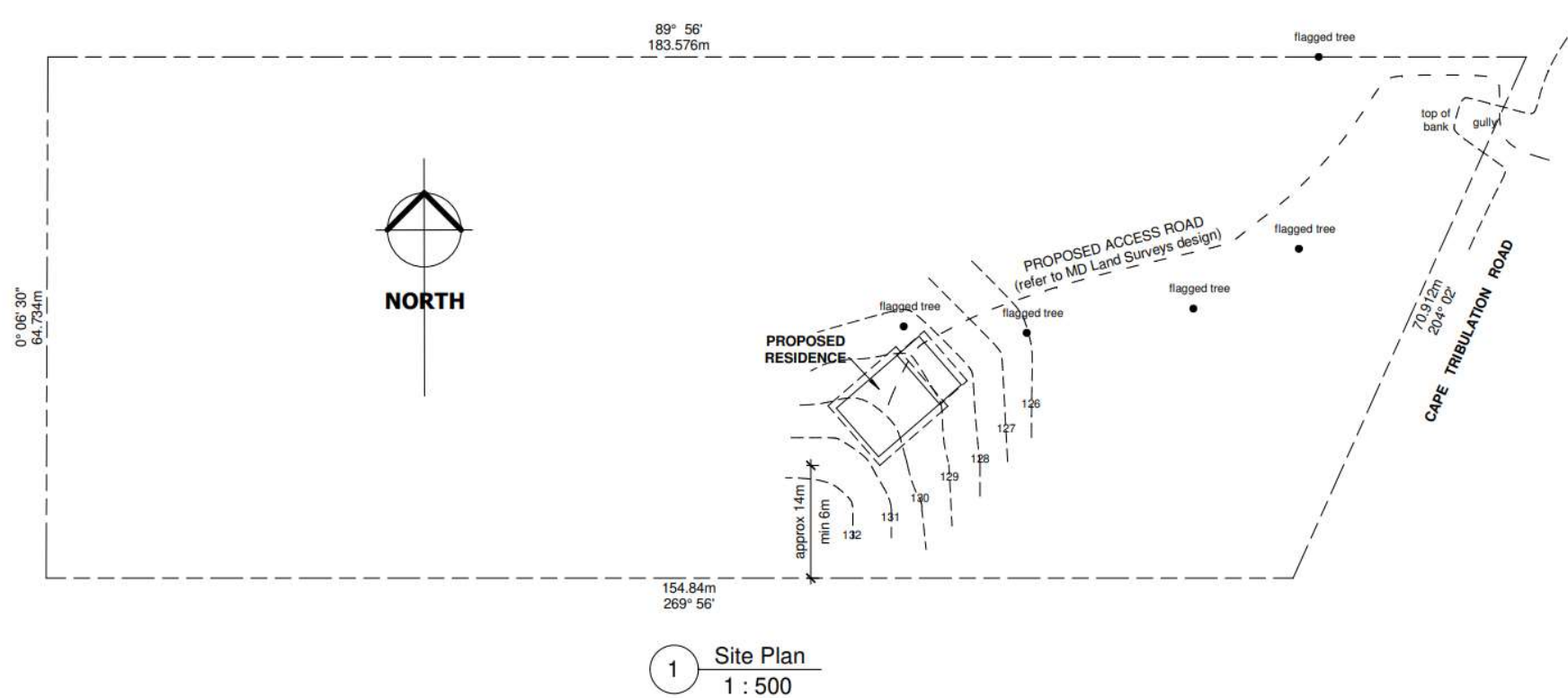
IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y"	y	Enter Custom Width in metre	3
AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR \times W)$	Length	Width	Minimum AES foot print required
The length & width of excavation required for this design is >>	10.00m	x 3.00m	= 30.0 m2 total

AES pipes are best centered in the trench parallel to the site slope

Code	AES System Bill of Materials		Chankar Environmental Use Only
AES-PIPE	AES 3 metre Lengths required	4 lths	
AESC	AES Couplings required	2 ea	
AESO	AES Offset adaptors	4 ea	
AESODV	AES Oxygen demand vent	1 ea	"Nature's Wastewater Solutions"

AES-IPB	AES 100mm Inspection point base	2	ea	Digitally signed by Steve Dennis DN: cn=Steve Dennis, o=Chankar Enviromental, ou=Design Review, email=steve@enviro-septic.com.au, c=US Date: 2022.08.08 09:12:09 +10'00' designreview@enviro-septic.com.au
TD Kit 4	4 Hole Distribution Box Kit		ea	
TD Kit 7	7 Hole Distribution Box Kit		ea	
VS43-4	Sweet Air Filter VS43-4		ea	
AES DESO	Double Offset Adaptors		ea	
TOTAL SYSTEM SAND REQUIRED (Estimate Only)		12	m3	
Please email your AES Calculator (EXCEL FORMAT), Site Layout & AES Design to designreview@enviro-septic.com.au				
<p>> The AES Calculator is a design aid to allow checking of the AES components, configuration and is a guide only. Site and soil conditions referencing AS1547 are calculated and designed by a Qualified Wastewater Designer.</p> <p>> Chankar Environmental accepts no responsibility for the soil evaluation, loading calculations or DLR entered by the designer for this calculator.</p> <p>> AES pipes can be cut to length on site. They are supplied in 3 meter lengths only.</p> <p>> AES ONLY supply AES components as detailed in the Bill of Materials.</p> <p>> SEPTIC Tank & other components including SAND will need to be sourced from other suppliers. Refer to our WEBSITE www.enviro-septic.com.au OR 07 5474 4055</p> <p>AES-Design-V9.0-Calculator © Copy Right - Chankar Environmental Pty Ltd 20/1/2022</p>				

4.2 Site Plan and House Design

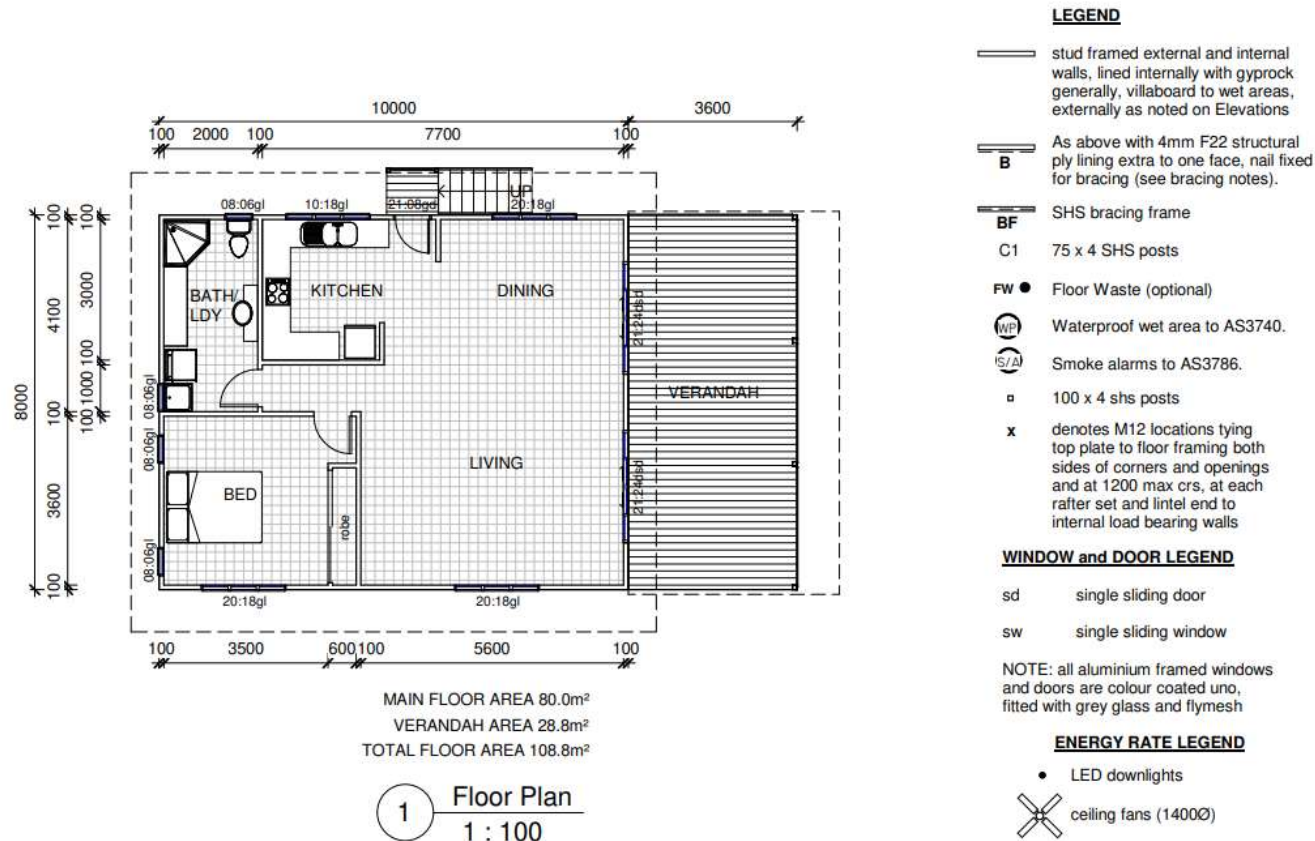


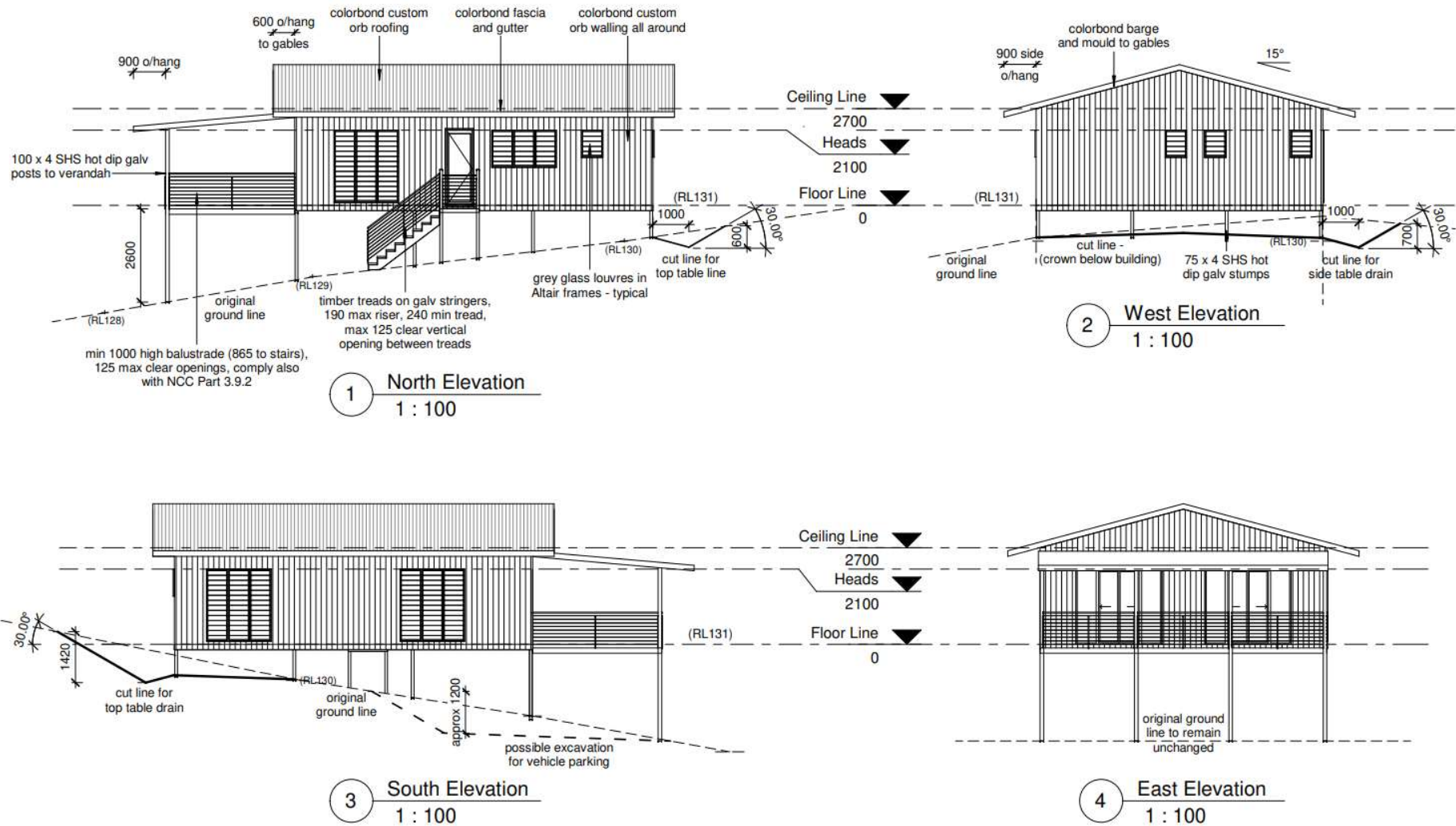
GREG SKYRING
Design and DRAFTING Pty. Ltd.

Lic. Under QBSA Act 1991 - No 1040371
11 Noli Close,
Mossman Q. 4873
Phone/Fax: (07) 40982061
Mobile: 0419212652
Email: greg@skyringdesign.com.au

PROJECT
Proposed Residence,
L31 RP740682,
Cape Tribulation Road,
KIMBERLEY

CLIENT B. Lightfoot		WIND CLASS C2	PLAN NUMBER 101-23	SHEET 1 of 3
SCALES 1 : 500	PLAN TITLE Site Plan	DATE OF ISSUE prelim 20.01.23		REV





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PROJECT

Proposed Residence,
L31 RP740682,
Cape Tribulation Road,
KIMBERLEY

CLIENT

B. Lightfoot

WIND CLASS

C2

PLAN NUMBER

101-23

SHEET

3 of 3

SCALES

1 : 100

PLAN TITLE

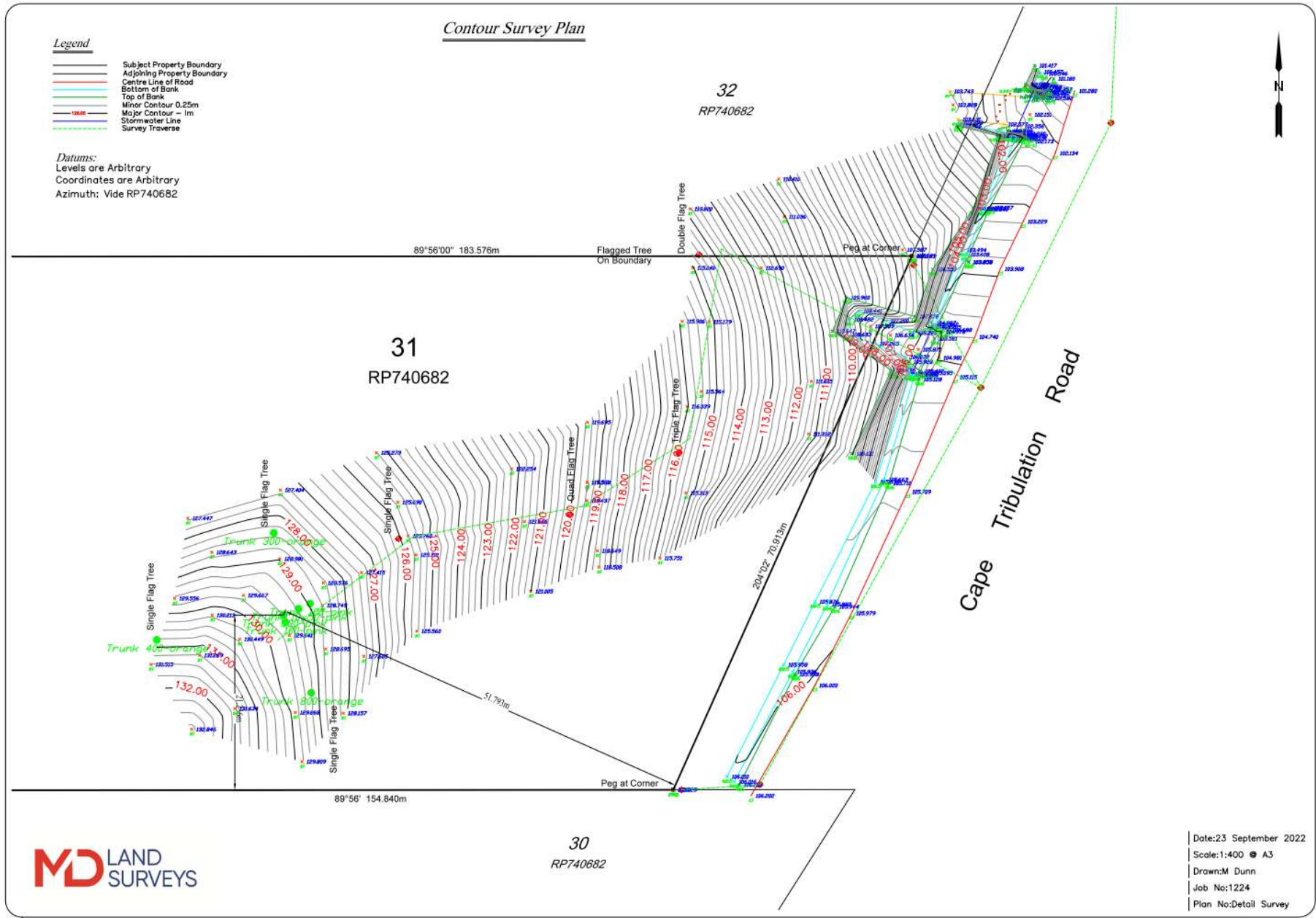
Elevations

DATE OF ISSUE

prelim
20.01.23

REV

4.3 Detailed survey plan



4.4 Engineer preliminary approval for driveway



ref: 16,800 23/11/22

RE:- PROPOSED DRIVEWAY TO HOUSE SITE AT LOT 31 RP 740682 CAPE TRIBULATION ROAD.

The proposed driveway and cross sections as shown on the two plans enclosed. The drive is approximately 1:4 slope longitudinally over its length. This driveway will require either textured concrete or at least minimally cement stabilisation at a rate of approximately 4% in the base course. This is to reduce erosion due to rain.

Along the length of the road will have to be swales cut to prevent erosion along its length. These swales will run out into the bush either side.

The land appears to be suitable for the construction of a residence at the flat spot around RL 129 whereas to build elsewhere along the drive would require the construction of a pole type house or multilevel house.

There will have to be a new entry drive cut in as shown on the plan view as the existing cutting is too steep at the northern end.

The drive width is 3 m and at this point allowing for 2 m verges each side. It should be noted that these verges can be made narrower if required.

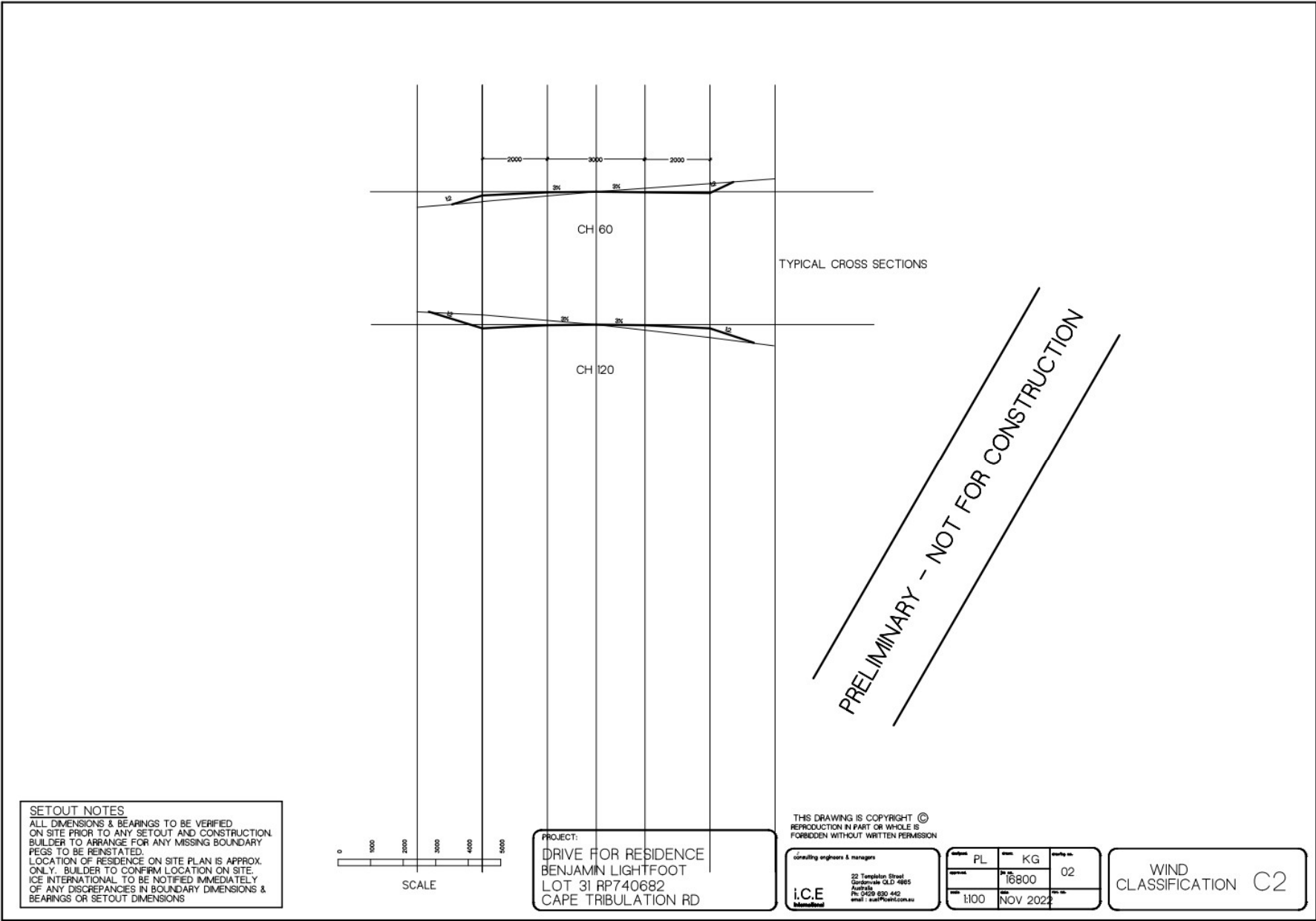
The land in this area would appear to be satisfactory in relation to slope stability at 1:4 over most of the length of the driveway. Having slopes 1:2 either side of the verge would also appear to be satisfactory in terms of slope stability. This will be checked (by us) at a later time just prior to the building application.

At this stage we have not provided drawings for all cross sections along the road, these will be provided at a later time after Council have considered the application.

A handwritten signature in black ink, appearing to be 'Peter Lennox'.

Peter Lennox RPEQ1128

4.5 Engineer cross sections of driveway



4.6 Long section of driveway (In collaboration with Peter Lennox)

