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)	Karen Jane Mcgill
	Mervyn Ross Mcgill
Contact name (only applicable for companies)	Merv Mcgill
Postal address (P.O. Box or street address)	9 Bronzewing Avenue
Suburb	Buderim
State	QLD
Postcode	4556
Country	Australia
Contact number	0418779706
Email address (non-mandatory)	mmcgill@live.com.au
Mobile number (non-mandatory)	As above
Fax number (non-mandatory)	N/A
Applicant's reference number(s) (if applicable)	N/A

2) Owner's consent

2.1) Is written consent of the owner required for this development application?

Yes - the written consent of the owner(s) is attached to this development application

× No – proceed to 3)



PART 2 – LOCATION DETAILS

3) Loc Note: P Forms (ation of the rovide details b Guide: Relevan	premiso below and t plans.	es (comple d attach a si	ete 3.1) or 3.2), an ite plan for any or	d 3.3) as a all premise	pplicable) es part of t	he development	t application. For further information, see <u>DA</u>
3.1) St	3.1) Street address and lot on plan							
Str	eet address	AND lo	ot on plan	(all lots must be	listed), or			
Str wat	eet address	AND lo	ot on plan cent to land	n for an adjoini e.g. jetty, pontool	ng or adj n. All lots n	acent pi	roperty of the ted).	premises (appropriate for development in
	Unit No.	Stree	t No. S	Street Name a	nd Type			Suburb
		Lot 4	E	Buchanan Cre	ek Road			Cow Bay
a)	Postcode	Lot N	0. F	Plan Type and	Number	(e.g. RF	P, SP)	Local Government Area(s)
	4873	4	7	739768				Douglas Shire
	Unit No.	Street	t No. S	Street Name a	nd Type			Suburb
h)								
D)	Postcode	Lot N	o. F	Plan Type and	Number	(e.g. RF	P, SP)	Local Government Area(s)
3.2) C e. <u>;</u> Note: P	oordinates o g. channel drec lace each set c	of prem Iging in N of coordin	ises (appr /loreton Bay pates in a se	opriate for develo /) eparate row.	pment in re	emote area	as, over part of a	a lot or in water not adjoining or adjacent to land
Co	ordinates of	premis	es by lon	gitude and lati	itude			
Longit	ude(s)		Latitude	e(s)	Dati	um		Local Government Area(s) (if applicable)
						VGS84		
						GDA94		
						Other:		
Co	ordinates of	premis	es by eas	sting and north	ning			
Eastin	g(s)	North	ning(s)	Zone Re	ef. Datu	um		Local Government Area(s) (if applicable)
				54		VGS84		
				55		GDA94		•
	_			□ 56		Other:	_	
3.3) A	dditional pre	mises						
Ad	ditional pren	nises a	re relevar	nt to this devel	lopment a	applicati	on and the d	etails of these premises have been
× Not	required	chequie		evelopment a	ppiicatio	1		
	loquiloa							
4) Ider	<u>ntify any of t</u>	<u>he follo</u>	wing that	<u>apply</u> to the p	oremises	<u>and</u> pro	<u>vide any rele</u>	vant details
🗌 In d	or adjacent t	o a wat	ter body o	or watercourse	e or in or	above a	n aquifer	
Name	Name of water body, watercourse or aquifer:							
On strategic port land under the <i>Transport Infrastructure Act 1994</i>								
Lot on	plan descri	otion of	strategic	port land:				
Name	of port auth	ority for	r the lot:					
🗌 In a	a tidal area	-						
Name	of local gov	ernmer	nt for the	tidal area <i>(if ap</i> ,	plicable):			
Name	of port auth	ority fo	r tidal are	a (if applicable):				
☐ On	airport land	under	the Airpo	ort Assets (Res	structurin	a and D	isposal) Act 2	2008
Name	of airport:			·	·		. ,	

Listed on the Environmental Management Register (EMR) under the Environmental Protection Act 1994		
EMR site identification:		
Listed on the Contaminated Land Register (CLR) under the Environmental Protection Act 1994		
CLR site identification:		

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 <u>DA Forms Guide</u>.

Yes – All easement locations, types and dimensions are included in plans submitted with this development application

X 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):
Material change of use – Dwelling House
e) Relevant plans Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms quide:</u> <u>Relevant plans.</u>
× 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 <u>DA Forms Guide:</u> <u>Relevant plans.</u>
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	X Yes – complete division 1 if assessable against a local planning instrument		
Reconfiguring a lot	Yes – complete division 2		
Operational work	Yes – complete division 3		
Building work	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 <i>(if applicable)</i>	Gross floor area (m ²) (<i>if applicable</i>)		
Establishment of a Dwelling House on the subject premises	Dwelling House	1	~200m2		
8.2) Does the proposed use involve the use of existing buildings on the premises?					
☐ Yes					
× 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)			
Subdivision (complete 10))			
Boundary realignment (complete 12))	Creating or changing an easement giving access to a lot from a constructed road <i>(complete 13))</i>		

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 sta	10.2) Will the subdivision be staged?			
Yes – provide additional deta	Yes – provide additional details below			
No				
How many stages will the works				
What stage(s) will this developm 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?				
Curre	ent 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?					
Road work	Stormwater	Water infrastructure			
Drainage work	Earthworks	Sewage infrastructure			
Landscaping	Signage	Clearing vegetation			
Other – please specify:					
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			
Eisheries – waterway barrier works			
\square Hazardous chemical facilities			
Heritage places – Queensland heritage place (on or near a Queensland heritage place)			
Infrastructure-related referrals - designated premises			
\Box Infrastructure-related referrals – state transport infrastructure			
Infrastructure related referrals – State transport corridor and future State transport corridor			
\Box Infrastructure-related referrals – State transport control and future state transport control			
Keele hebitet in SEO region interfering with keele hebitet in keele hebitet erees outside keele priority erees			
Roala 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 guarry 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)			

Heritage places – Local beritage places
Matters requiring referral to the Chief Executive of the distribution entity or transmission entity:
 Matters requiring referral to: 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 Infrastructure-related referrals – Oil and gas infrastructure
Matters requiring referral to the Brisbane City Council:
Matters requiring referral to the Minister responsible for administering the <i>Transport Infrastructure Act</i> 1994 : Ports – Brisbane core port land (where inconsistent with the Brisbane port LUP for transport reasons) Ports – Strategic port land
Matters requiring referral to the relevant port operator , if applicant is not port operator:
Matters requiring referral to the Chief Executive of the relevant port authority: Ports – Land within limits of another port (below high-water mark)
Matters requiring referral to the Gold Coast Waterways Authority: 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: Image: Tidal works or work in a coastal management district (involving a marina (more than six vessel berths))

18) Has any referral agency provided a referral response for this development application?

Yes – referral response(s) received and listed below are attached to this development application
 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.		

PART 6 - INFORMATION REQUEST

(if applicable).

19) Information request under Part 3 of the DA Rules

× I agree to receive an information request if determined necessary for this development application

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:

- 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 <u>DA Forms Guide</u>.

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			
List of approval/development application references	Reference number	Date	Assessment manager
Approval Development application			
Approval 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 <u>www.gld.gov.au</u> . An ERA requires an environmental authority to operate. See <u>www.business.gld.gov.au</u> 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.ald.gov.au.for further information about bazardous 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 <i>Vegetation Management Act 1999</i> is satisfied the clearing is for a relevant purpose under section 22A of the <i>Vegetation Management Act 1999</i> ?
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 <i>Environmental Offsets Act</i> 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 <u>www.gld.gov.au</u> 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 <u>www.des.gld.gov.au</u> 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 <i>Water Act 2000</i> ?
Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the <i>Water Act 2000</i> may be required prior to commencing development
× No
Note: Contact the Department of Natural Resources, Mines and Energy at <u>www.dnrme.qld.gov.au</u> for further information.
 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 Form1 Template 2 Taking or interfering with water in a watercourse, lake or spring: complete DA Form1 Template 2
Taking ovenand now 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 <u>https://planning.dsdmip.qld.gov.au/</u> . 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 <i>resource</i> allocation authority is attached to this development application, if required under the <i>Fisheries Act 1994</i>
× No

Note: See guidance materials at <u>www.daf.qld.gov.au</u> 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 <i>Water Act 2000?</i>				
☐ Yes – I acknowledge that a × No	☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development × No			
Note : Contact the Department of Nation	ural Resources, Mines and Energy	at <u>www.dnrme.qld.gov.au</u> and <u>www.k</u>	<u>pusiness.qld.gov.au</u> for further	
Quarry materials from land	under tidal waters			
23.10) Does this developmen under the <i>Coastal Protection</i>	t application involve the rem and Management Act 1995?	oval of quarry materials from	m land under tidal water	
Yes – I acknowledge that a × No	a quarry material allocation n	otice must be obtained prior t	o commencing development	
Note: Contact the Department of En	vironment and Science at <u>www.des.</u>	<u>qld.gov.au</u> for further information.		
Referable dams				
23.11) Does this developmen section 343 of the <i>Water Sup</i>	t application involve a refera oly (Safety and Reliability) Ad	ble dam required to be failure <i>ct 2008</i> (the Water Supply Act	e impact assessed under t)?	
Yes – the 'Notice Acceptin Supply Act is attached to t	g a Failure Impact Assessme his development application	ent' from the chief executive a	idministering the Water	
Note: See guidance materials at www	w.dnrme.gld.gov.au for further inform	nation.		
Tidal work or development	within a coastal manageme	ent district		
23.12) Does this developmen	t application involve tidal wo	ork or development in a coas	stal 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) 				
× No	u des ald acu au for further informa	tion		
Queensland and local herit	ne places			
23.13) Does this developmen heritage register or on a place	t application propose develop ce entered in a local governn	oment on or adjoining a place nent's Local Heritage Regist	entered in the Queensland er?	
Yes – details of the heritad	e place are provided in the t	able below		
× No				
Note: See guidance materials at www	<u>v.des.qld.gov.au</u> for information req	uirements regarding development of	Queensland heritage places.	
Name of the heritage place:		Place ID:		
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 <i>Prostitution Regulation 2014</i>				
× No				
Decision under section 62 of	of the <i>Transport Infrastruct</i>	<u>ure Act 1994</u>		
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 <i>Transport Infrastructure Act 1994</i> (subject to the conditions in section 75 of the <i>Transport Infrastructure Act 1994</i> being satisfied)				

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 <u>www.planning.dsdmip.qld.gov.au</u> 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 <i>Note</i> : See the Planning Regulation 2017 for referral requirements	× Yes		
If building work is associated with the proposed development, Parts 4 to 6 of <u>DA Form 2 –</u> <u>Building work details</u> 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 <u>DA</u>	× 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 <u>DA Forms Guide: Relevant plans.</u>	× 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 numb	per(s):
Notification of engagement of alternative assessment manager		
Prescribed asses	sment 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		

TOWN PLANNING REPORT – DEVELOPMENT APPLICATION FOR A MATERIAL CHANGE OF USE FOR A DWELLING HOUSE LOCATED AT LOT 4 BUCHANAN CREEK ROAD, COW BAY ON LOT 4 RP739768.

The below is a town planning report to accompany the Development Application seeking a Development Permit for a Material Change of Use for a Dwelling House located at Lot 4 Buchanan Creek Road, Cow Bay on Lot 4 RP739768.

Under the *Planning Act 2016*, the Development Application is required to be made to the Douglas Shire Council for a Material Change of Use for a Dwelling House.

The proposed development (Dwelling House) is development made assessable under a local categorising instrument (Code Assessment).

The proposed development does not require public notification or trigger referral to any referral agency.

The Assessment Manager for this development application is Douglas Shire Council as determined by Schedule 8 of the *Planning Regulation 2017*.

THE PROPOSED DEVELOPEMNT

The Development Application seeks a Development Permit for a Material Change of Use for a Dwelling House located at Lot 4 Buchanan Creek Road, Cow Bay on Lot 4 RP739768.

The proposed development is shown on the plans contained in Attachment 1 attached to this application.

The proposed development involves the construction of a single storey (5.5m in height measured from ground level) above ground (raised approximately 500mm above ground), two-bedroom, 3-bathroom, living area, deck and carport residential dwelling house with separate shed.

The proposed dwelling is to be centrally located on the premises, setback approximately 80m from the front boundary, approximately 50m from the eastern and 20m from the western side boundaries and greater than 600m from the rear boundary.

Access to the dwelling is to be provided from the street frontage (Buchannan Creek Road) via an unsealed driveway, approximately 80m in length.

The proposed development includes onsite water storage and wastewater treatment and disposal systems. Onsite water storage is via rainwater collection to storage tanks. The onsite wastewater treatment and disposal system has been designed by Earth Test in accordance with the requirements of the Douglas Shire Planning Scheme 2018. The onsite wastewater treatment and disposal system report and design is contained in Attachment 5.

There will be some vegetation clearing required to facilitate the construction of the proposed Dwelling House. The building footprint of the dwelling, shed and on-site wastewater treatment system is approximately 200m2. The extent of clearing is expected to be greater than the footprint; however, it will be kept to the minimum amount required and will not exceed 700m2 (as provided for under the provisions of the Douglas Shire Planning Scheme 2018 and indicatively shown on the site plan attached). It is noted that the existing vegetation over the balance of the site (greater than 8Ha) is retained.

THE PREMSIES

The subject premises is located at Lot 4 Buchanan Creek Road, Cow Bay described as Lot 4 RP739768 (Attachment 2 contains a copy of the survey plan), as shown below:



The applicant is the registered owner of the premises (a current title search is contained in Attachment 3).

The premises has a land area of 83,130m2, with frontage to Buchanan Creek Road. The premises are currently vacant and unimproved and unencumbered by any easements or covenants.

The site is relatively flat (located within the 10m contour). The site primarily drains towards the rear premises. Mclean Creek traverses the north western part of the premises. There is an area of wetland to the mid-western part of the premises (in the general location as shown on the SPP MSES wetland mapping).

THE PLANNING FRAMEWORK

As stated above the, under the Planning Act 2016, the Development Application is required to be made to the Douglas Shire Council for a Material Change of Use for a Dwelling House.

The proposed development (Dwelling House) is development made assessable under a local categorising instrument (Code Assessment).

The proposed development does not require public notification or trigger referral to any referral agency.

The Assessment Manager for this development application is Douglas Shire Council as determined by Schedule 8 of the Planning Regulation 2017.

State Planning Framework

State Planning Policies likely to be applicable to the proposed development are indicated to have been appropriately incorporated into the current Douglas Shire Planning Scheme and therefore it is considered that an assessment against the Planning Scheme will appropriately respond to any State Planning Policy matters.

Local Planning Framework - Douglas Shire Planning Scheme 2018

The following are the aspects of the Douglas Shire Planning Scheme 2018 relevant to the assessment of the proposed development:

Zone - the proposed development is located on a premises within the Conservation Zone.

<u>Local Plan</u> - the proposed development is located on a premises within the **Cape Tribulation and Daintree Coast local plan - Diwan - Cow Bay - Precinct 2 – Low impact residential precinct**.

<u>Level of assessment</u> - The level of assessment specified in Part 5 – Tables of Assessment for the proposed development of a Dwelling House in the Conservation Zone within Precinct 2 of the Cape Tribulation and Daintree Local Plan is **Code Assessment**.

<u>Assessment benchmarks</u> - Part 5 - Tables of Assessment (Conservation Zone) identify that the following codes are applicable assessment benchmarks for the proposed development:

Conservation Zone Code Cape Tribulation and Daintree Coast Local Plan Code Acid Sulfate Soils Overlay Code Bushfire Overlay Code Flood and Storm Tide Hazard Overlay Code Landscape Values Overlay Code Natural Areas Overlay Code Transport Network Overlay Code Dwelling House Code Access, Parking and Servicing Code Infrastructure works code Filling and Excavation Code Landscaping Code

Overlays - The premises are identified within the extents of the following overlays:

Acid Sulfate Soils	Acid Sulfate Soils (5-20m AHD)
	Acid Sulfate Soils (< 5m AHD)*
Bushfire	Potential Impact Buffer
Flood and Storm Tide Hazard	Medium Storm Tide Hazard
	High Storm Tide Hazard
	Floodplain Assessment Overlay (Daintree River)*
Landscape Values	High landscape values*
Natural Areas	MSES - Regulated Vegetation (Intersecting a Watercourse)

	MSES - High Ecological Value Waters (Watercourse)
	MSES - Wildlife Habitat*
	MSES - Regulated Vegetation*
	MSES - High Ecological Value Waters (Wetland)
	MSES - High Ecological Significance Wetlands
Transport Network	Road Hierarchy *
	Pedestrian and Cycle Network *

* the overlay (/ category) applicable to the area of the premises where the proposed development is located.

PLANNING ASSESSMENT OF THE PROPOSED DEVELOPMENT

Summary

The proposed development has been assessed against the relevant provisions of the Douglas Shire Planning Scheme 2018. This application and attached material demonstrate that the proposed development complies with the applicable provisions of the Douglas Shire Planning Scheme 2018. As such, it is considered appropriate that Council favourably consider the proposed development and approve the Development Application, subject to reasonable and relevant conditions.

The full assessment of the proposed development against the relevant provisions of the Douglas Shire Planning Scheme 2018 is attached to this application. The discussion below highlights the key matters in the consideration of this application.

Zone and Local plan planning intent

The proposed development is consistent with the consistent uses and outcomes sought for the Conservation zone.

The proposed development is also consistent with the planning intent for the low impact residential precinct as allows for the construction of a single detached dwelling and necessarily associated infrastructure and outbuildings only.

The proposed development is of a minor scale and is designed and located so that any impacts on conservation, biological, ecological and scenic amenity values are mitigated through the minimisation of excavation, fill and vegetation removal, to the greatest extent possible, ensuring that the proposed development is visually non-obtrusive.

The proposed dwelling house complies with the required design requirements contained in the applicable codes. The maximum building height is 5.5m, setback approximately 80m from the front boundary, approximately 50m and 20m from the eastern and western side boundaries and greater than 600m from the rear boundary. Exterior finishes and colours complement the colours of the surrounding vegetation and view shed.

No bulk excavation or fill will be required to prepare the site for the construction of the proposed dwelling house, shed, onsite wastewater treatment system or access. The raised light-weight construction requires minimal excavation or fill (no greater than 2m in height). It is anticipated that the site preparation works will include clearing a level area for the proposed buildings and structures, including minor footing and onsite wastewater treatment system excavations.

The extent of the proposed vegetation clearing is required to facilitate the construction of the proposed Dwelling House will be kept to the minimum extent possible and will not exceed 700m2, to ensure that any impacts on matters of environmental significance are minimised. The proposed clearing is sited clear of any watercourses and will avoid any large tree specimens and/or significant vegetation. It is noted that the existing vegetation over the balance of the site (greater than 8Ha) is retained ensuring the character of the area remains predominantly natural in appearance.

Consideration of constraints

Natural Areas

The location of the proposed development is only located within the extent of the mapped MSES -Regulated Vegetation and MSES - Wildlife Habitat areas of the Natural Areas Overlay mapping present over the premises, as shown below:



The establishment of a dwelling house on the premises is consistent with the zone and local plan planning intent for the premises. The minor scale, design and siting of the proposed development further minimises any adverse direct or indirect impacts on areas of environmental significance.

Vegetation will need to be cleared to facilitate the establishment of the proposed dwelling house. As noted above, the extent of vegetation clearing will be kept to the minimum extent possible and will not exceed 700m2 (as provided for under the requirements of the Zone and Local Plan codes). Any clearing will attempt to avoid any large tree specimens and/or significant vegetation. It is noted that the existing vegetation (and associated matters of environmental significance) over the balance of the site (greater than 8Ha) is unaffected by the proposed development.

In addition, the proposed development (and any clearing) is setback more than 150m from the area of MSES - High ecological significance wetlands of the Natural Areas Overlay mapping present over the premises and does not occur on the part of the site affected by a waterway corridor (being McLean Creek). McLean Creek is the only formal watercourse that traverses the north western part of the premises and is greater than 500m from the location of the proposed development.

Flood Overlay Code

The location of the proposed development is solely located in Floodplain Assessment area of the Flood and Storm Tide Hazard Overlay mapping present over the premises, as shown below:



The premises are not known to be significantly impacted by flood. The site is relatively flat (within the 10m contour) and primarily drains towards the rear premises. Mclean Creek is the only formal watercourse that traverses the premises (to the north west) and is greater than 500m from the location of the proposed development. There is an area of wetland to the mid-western part of the premises and is over 150m from the proposed development.

The proposed dwelling is raised above the ground by 500mm which is considered to ensure the proposed dwelling is not impacted by or will interfere with any floodwaters across the premises. It is noted that the overlay code states that development within the Flood plain assessment sub-category need not be designed to provide immunity to the Defined Inundation Event (AO1.2 of the Flood and Storm Tide Hazard Overlay Code).

Acid Sulfate Soils

The proposed development is located within the Acid Sulfate Soils (5-20m AHD) area of the Acid Sulfate Soils Overlay mapping present over the premises, as shown below:



No bulk excavation or fill will be required to prepare the site for the construction of the proposed dwelling house, shed, onsite wastewater treatment system or access, therefore avoiding the disturbance of any potential acid sulfate soils or actual acid sulfate soils present on the premises.

It is noted that, the site classification report undertaken by Earth test in relation to the onsite wastewater treatment and disposal system did not encounter any acid sulfate soils in soil testing.

Landscape Values Overlay Code

The proposed development is located within the High landscape values overlay area of the Landscape Values Overlay mapping present over the premises.

The proposed development is of a scale, is designed and located so that any impacts on the landscape values are limited and the landscape character remains predominantly natural in appearance.

Transport Network planning

The proposed development is consistent with the road hierarchy (Access Road) and pedestrian and cycle network (neighbourhood route) for the road to the front of the subject premises (Buchannan Creek Road) as identified in the Transport Network Overlay mapping.

Bushfire

The proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises, as shown below:



Access, parking and infrastructure

The proposed vehicle access to the dwelling house is via one access and driveway (approximately 80m in length). It will be constructed and maintained to comply with the relevant requirements of Planning Scheme Policy 5 – FNQROC Development Manual. The proposed driveway will be also constructed and maintained to minimise erosion, particularly in the wet season, minimise cut and fill, follow the natural contours of the site.

The proposed development provides the required number car parking spaces (2 spaces) in accordance with the requirements of the Access, parking and servicing code.

The proposed development includes onsite water storage and wastewater treatment and disposal systems. Onsite water storage is via rainwater collection to storage tanks. The onsite wastewater treatment and disposal system has been designed by Earth Test in accordance with the requirements of the Local Plan and Infrastructure works code. The onsite wastewater treatment and disposal system report and design is contained in Attachment 5.

Landscaping

Any landscaping associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.

ATTACHMENTS

Attachment 1 - Proposed site and design plans Attachment 2 - A copy of the Survey Plan for Lot 4 RP739768 Attachment 3 - A copy of the current title search for the premises Attachment 4 - Code assessment Attachment 5 - Site Classification and Wastewater Management System report prepared by Consoil Solutions Pty. Ltd. T/A Earth Test QBCC #. 15092731 Attachment 1 - Proposed site and design plans



Buchanan Creek Road

A00 Site Plan

20105

Sheet Number		Sheet Name	Issue
A00	Site Plan		4
A01	Floor Plans		2
A03	Roof Plans		2
A04	Elevations		3
A05	Sections		3
A10	3D Views		2

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Buchanan Creek Road

A03 Roof Plans

20105





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3D View 1



3D View 2

Buchanan Creek Road

A10 3D Views

20105



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Attachment 2 - A copy of the Survey Plan for Lot 4 RP739768



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Attachment 3 - A copy of the current title search for the premises

CURRENT TITLE SEARCH

NATURAL RESOURCES, MINES AND ENERGY, QUEENSLAND

Request No: 35305136 Search Date: 23/10/2020 15:15

Title Reference: 21274115 Date Created: 25/01/1985

Previous Title: 20366159 20518215

REGISTERED OWNER

Dealing No: 716813861 13/10/2015

KAREN JANE MCGILL JOINT TENANTS

ESTATE AND LAND

Estate in Fee Simple

LOT 4 REGISTERED PLAN 739768 Local Government: DOUGLAS

EASEMENTS, ENCUMBRANCES AND INTERESTS

- Rights and interests reserved to the Crown by Deed of Grant No. 20118153 (POR 3V) Deed of Grant No. 20183214 (POR 9V)
- 2. MORTGAGE No 716813862 13/10/2015 at 10:40 COMMONWEALTH BANK OF AUSTRALIA A.B.N. 48 123 123 124

ADMINISTRATIVE ADVICES - NIL UNREGISTERED DEALINGS - NIL

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

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Attachment 4 - Code assessment



6.2.3 Conservation zone code

6.2.3.1 Application

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

6.2.3.2 Purpose

- (1) The purpose of the Conservation zone code is to provide for the protection, restoration and management of areas identified as supporting significant biological diversity and ecological integrity.
- (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 : Environmental and landscape values, Element 3.5.2 Aboriginal cultural heritage values, Element 3.5.3 Biodiversity, Element 3.5.3 Coastal zones.
 - (ii) Theme 3 Natural resource management, Element 3.6.2 Land and catchment management.
 - (iii) Theme 4 Strong communities and identity, Element 3.7.8 Strengthening indigenous communities.
 - (b) conserve and maintain the integrity of biodiversity values, wildlife, habitats and other significant ecological assets and processes over time, across public and private lands.
- (3) The purpose of the code will be achieved through the following overall outcomes:
 - (a) Biological diversity, ecological integrity and scenic amenity are protected;
 - (b) Any recreational or other uses of areas that are in the control of the Crown, or the Council, such as reserves, national parks and the Wet Tropics World Heritage Area or areas adjacent to these areas, are consistent with the management plans of the controlling authority so that conservation and scenic values of these areas are not adversely affected;
 - (c) Any use of land in private ownership does not affect the environmental, habitat, conservation or scenic values of that land or surrounding area;
 - (d) Any low intensity facilities based on the appreciation of the natural environment or nature based recreation only establish where there is a demonstrated need and provided they have a minimal impact on the environmental and scenic amenity values of the site or surrounding area.
 - (e) The provisions of the Return to Country Local Plan facilitate economic and social opportunities on traditional Indigenous lands;
 - (f) Further lot reconfigurations other than amalgamations, boundary realignments to resolve encroachments, or for the practical needs of essential community infrastructure, or to facilitate Return to Country outcomes do not occur.





6.2.3.3 Criteria for assessment

Table 6.2.3.3.a – Conservation zone – assessable development

Performance outcomes	Acceptable outcomes	Applicant response	
For assessable development			
PO1 The establishment of uses is consistent with the outcomes sought for the Conservation zone and protects the zone from the intrusion of inconsistent uses.	AO1 Uses identified in Table 6.2.3.3.b are not established in the Conservation zone.	Complies. The use (Dwelling House) is not identified in Table 6.2.3.3.b.	
PO2 The height of buildings is compatible with the character of the area and does not adversely affect the amenity of the area.	AO2 Buildings and structures are not more than 8.5 metres in height and two storeys. Note - Height is inclusive of roof height.	Complies. No buildings and structures are more than 8.5 metres in height. Maximum proposed building height is one storey and 5.5m in height measured from ground level.	
P03 Development is setback from site boundaries so they are screened from view from the boundaries of adjoining properties and adjoining roads to maintain the scenic values of the area.	 AO3 Buildings and structures are setback not less than: (a) 40 metres from the frontage of a State-controlled road, existing or proposed arterial road, existing or proposed arterial road, existing or proposed sub-arterial road, as identified on the Transport network overlay maps contained in Schedule 2; (b) 25 metres from Cape Tribulation Road frontage; (c) 20 metres from any other road frontage (d) 10 metres from side and rear boundaries. 	Complies. The proposed dwelling is to be centrally located on the premises, setback approximately 80m from the front boundary, approximately 50m from the eastern and 20m from the western side boundaries and greater than 600m from the rear boundary.	
PO4 The site coverage of all buildings and structures does not have an adverse effect on the conservation or scenic amenity values of the site and surrounding area and buildings are subservient to the natural environment.	A04 Development is sited in an existing cleared area or an area approved for clearing, but which is not yet cleared until a development permit to carry out Building Works is issued. Any clearing is limited to a maximum area of 700m ² and is sited clear of the high bank of any watercourse. Note – The 700m ² area of clearing does not include an access driveway.	Complies. Proposed clearing will be kept to the minimum amount required and will not exceed 700m2.	
P05 Development is consistent with the overall outcomes sought for the Conservation zone.	AO5 No acceptable outcomes are prescribed.	Complies. The proposed development of a scale, is designed and located so that it is consistent	



Douglas Shire Planning Scheme 2018 Version 1.0 Part 6: Zones Code Compliance Table – 6.2.3 Conservation zone code Page 2 of 7



Performance outcomes	Acceptable outcomes	Applicant response
		with the overall outcomes sought for the Conservation zone.

Performance outcomes	Acceptable outcomes	Applicant response
PO6 Development complements, and is subservient to the surrounding environment and is in keeping with the ecological, landscape and scenic values of the area.	AO6 The exterior finishes and colours of all development are non-reflective and consist of colours that blend easily with surrounding native vegetation and view-shed.	Complies. The proposed colours (as shown on the plans contained in Attachment 1) are non- reflective and consist of colours that blend easily with surrounding native vegetation and view-shed.
 PO7 Development is screened from view from adjoining roads and properties with a dense screen of endemic/native landscape which: (a) is informal in character and complementary to the existing natural environment; (b) provides screening; (c) enhances the visual appearance of the development. Note – Planning scheme policy – Landscaping provides further guidance on meeting the performance outcome. 	 A07.1 For any development, the balance area of the site not built upon, including all setback areas must be landscaped/revegetated with dense three tier, endemic planting which is maintained to ensure successful screening is achieved. A07.2 Endemic palm species, where used, are planted as informal accent features and not as avenues and not in a regular pattern. 	Complies. Existing vegetation over the balance of the site (greater than 8Ha) will be retained and will act to provide the required screening.
P08 Development is complementary to the surrounding environment.	AO8.1 Development harmonises with the surrounding environment, for example, through suspended, light-weight construction on sloping sites, which requires minimal excavation or fill.	Complies. The proposed development is complementary to the surrounding environment and is located on land that does not exceed a maximum gradient of 1 in 6 (16.6%). No bulk excavation or fill is also required.
	 AO8.2 A driveway or parking areas are constructed and maintained to: (a) minimise erosion, particularly in the wet season; (b) minimise cut and fill; (c) follow the natural contours of the site; (d) minimise vegetation clearing. 	The driveway will be constructed and maintained to: minimise erosion, particularly in the wet season, minimise cut and fill, follow the natural contours of the site and minimise vegetation clearing.
	AO8.3	


Performance outcomes	Acceptable outcomes	Applicant response
	Buildings and structures are erected on land not exceeding a maximum gradient of 1 in 6 (16.6%).	
	or	

Performance outcomes	Acceptable outcomes	Applicant response
	 On land steeper than 1 in 6 (16.6%) gradient: (a) A split level building form is utilised; (b) A single plane concrete slab is not utilised; (c) Any voids between building and ground level, or between outdoor decks and ground level are screened from view using lattice/battens and/or landscaping. and (d) is accompanied by a Geotechnical Report prepared by a qualified engineer at development application stage which includes certification that the site can be stabilised, followed by a certificate upon completion of works. AO8.4 Buildings and structures are sited below any ridgelines and are sited to avoid protrusion above the surrounding tree-level canopy. 	N/A. The proposed development is located on land that does not exceed a maximum gradient of 1 in 6 (16.6%).
 PO9 Development is located to: (a) protect the ecological values of the site and surrounding land; (b) maintain the scenic values of the area; (c) maintain appropriate setbacks to waterways, watercourses, wetlands, tidal areas and overland flow paths; (d) avoid areas that are vulnerable to natural hazards; (e) minimise to the greatest extent possible on site excavation and filling; 	AO9 No acceptable outcomes are prescribed.	Complies. The development of a scale, is designed and located so that it is consistent with the outcomes sought by PO9.





Perfo	rmance outcomes	Acceptable outcomes	Applicant response
(f)	provide buffers to cultural, historical or ecological features;		
(g)	minimise visibility from external sites or public viewing points;		
(h)	minimises to the greatest extent possible the loss of native vegetation and fauna habitat.		





Performance outcomes	Acceptable outcomes	Applicant response
 PO10 Development does not result in adverse impacts on: (a) ecological function or features; (b) on-site or surrounding waterways and wetlands. 	AO10 No acceptable outcomes are prescribed.	Complies. The development of a scale, is designed and located so that it is consistent with the outcomes sought by the PO10.
PO11 Rehabilitation of natural processes on disturbed sites is undertaken to improve the environmental integrity of the area.	AO11 No acceptable outcomes are prescribed	Complies. Proposed clearing will be kept to the minimum amount required and will not exceed 700m2. Existing vegetation over the balance of the site (greater than 8Ha) will be retained and will act to provide the required screening.
PO12 Fencing is designed to not impede the free movement of native fauna through the site.	AO12 No acceptable outcomes are prescribed.	Complies. Any fencing proposed will meet the requirements of the PO.
 PO13 New lots contain a minimum lot size of 200 hectares, unless: (a) the lot reconfiguration results in no additional lots (e.g. amalgamation, boundary realignments); (b) the reconfiguration is limited to one additional lot to accommodate an existing or approved: (i) Telecommunications facility; (ii) Utility installation; (c) the lot reconfiguration facilitates and outcome consistent with the Return to Country local plan. Note – Boundary realignments must result in an improved environmental outcome or resolve encroachments.	AO13 No acceptable outcomes are prescribed.	N/A.





Table 6.2.3.3.b - Inconsistent uses within the Conservation zone

Resort complex Retirement facility Roadside stall
tooming accommodation tural activities (unless in accordance with the exceptions nominated in the Table of Assessment or the Conservation Zone in Part 5) tural workers accommodation ales office service Station shop shopping centre showroom special industry substation sheatre fourist attraction fourist park fransport depot Itility installation deterinary services Varehouse Vholesale nursery Vinery
222222222222222222222222222222222222222

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.





7.2.1 Cape Tribulation and Daintree Coast local plan code

All development in the Cape Tribulation and Dai	intree Coast local plan area	Comment
 PO1 Development does not result in a demand which exceeds the capacity of: (a) the Daintree River ferry crossing; (b) Alexandra Range Road; (c) the local road network. 	AO1 No acceptable outcomes are prescribed.	Complies. The proposed development does not result in a demand which exceeds the capacity of the Cape Tribulation and Daintree Coast area.
 PO2 Development provides a suitable standard of self-sufficient service for: (a) potable water; (b) water for fire fighting purposes; (c) electricity supply. 	 AO2.1 Water storage is provided in tank/s with a minimum capacity to service the proposed use, including fire fighting capacity, and access to the tank/s for fire trucks. Tank/s are to be: (a) fitted with a 50mm ball valve and camlock fitting; (b) installed and connected prior to occupation; (c) sited so as to be visually unobtrusive. AO2.2 Water storage tanks are to be fitted with screening at their inlets to prevent the intrusion of leaves and insects. AO2.3 An environmentally acceptable and energy efficient power supply is constructed, installed and connected prior to occupation and sited so as to be screened from the road. 	Complies. The onsite wastewater treatment and disposal system has been designed by Earth Test in accordance with the requirements of the AO. The report and design is contained in Attachment 5.
PO3 On-site waste water does not adversely impact on the environmental quality of the water and soil resources or amenity of residents, through the implementation of best environmental practice.	AO3 No acceptable outcomes are prescribed.	Complies. The onsite wastewater treatment and disposal system has been designed by Earth Test in accordance with the requirements of the AO. The report and design is contained in Attachment 5.



PO4 The sustainability of the natural water resources of the area is protected for ecological and domestic consumption purposes.	AO4.1 If groundwater is to be used, development is limited to one bore per site and the bore is: not located within 100 metres of a septic disposal trench (on the site or adjoining sites); not located within 100 metres of another bore.	N/A. Onsite water storage is via rainwater collection to storage tanks.

All development in the Cape Tribulation and Daintree Coast local plan area		
	AO4.2 Surface water is to be used for domestic purposes only.	
PO5 Development does not adversely impact on areas of sensitive natural vegetation, foreshore areas, watercourses and/or areas of tidal inundation.	AO5 No acceptable outcomes are prescribed.	Complies. The proposed development of a scale, is designed and located so that it does not adversely impact on areas of sensitive natural vegetation. Clearing will be kept to the minimum amount required and will not exceed 700m2 (as provided for under the requirements of the Zone and Local Plan codes).
P06 Development is subservient to the surrounding natural environment in scale and intensity and is designed to be functional in a humid tropical rainforest environment.	 AO6.1 The exterior finishes and colours of buildings are non-reflective and complement the colours of the surrounding vegetation and view shed. AO6.2 The noise of generators is controlled by design, or the generator is enclosed within a sound insulated building with a residential approved muffler. The noise level generated is less than 65 dBA when measured from a distance of 7 metres. AO6.3 Any fuel storage associated with an on-site generator, with storage of 20 litres or more of fuel, is enclosed with a building and provided with a bund. 	Complies. The exterior finishes and colours of buildings are non-reflective and complement the colours of the surrounding vegetation and view shed. Any generator requirements will comply with AO6.2 and 6.3.



PO7 Landscaping of the development ensures that the endemic character of the local area is dominant.	 A07.1 Landscaping complies with the requirements of Planning Scheme Policy 7 – Landscaping; A07.2 All of the existing landscaping to be retained and all of the proposed landscaping is 100% endemic or native species and the details are provided on a landscape plan. 	Complies. Any proposed landscaping complies with the requirements of Planning Scheme Policy 7 – Landscaping.
P08 Site access driveways and roads within the local plan area are retained as safe, slow speed, scenic drives.	 AO8.1 Site access driveways and existing or proposed roads comply with the relevant requirements of Planning Scheme Policy 5 – FNQROC Development Manual and are maintained as low speed gravel roads to maintain the scenic drive experience and to discourage the use of roads by through-traffic; AO8.2 Where existing roads/tracks are 4-wheel drive only, upgrading to facilitate conventional vehicles and an increase in through traffic does not occur. 	Complies. Proposed site access driveway comply with the relevant requirements of Planning Scheme Policy 5 – FNQROC Development Manual (rural standard). The proposed site access and driveway will be constructed and maintained to: minimise erosion, particularly in the wet season, minimise cut and fill, follow the natural contours of the site and minimise vegetation clearing.
PO9 The on-site impacts on natural flow regimes and erosion and sedimentation are minimised.	 AO9.1 Filling and excavation is kept to a minimum and involves not more than 5% of the cleared area of the lot. AO9.2 All exposed surfaces must incorporate erosion and sediment controls during construction and must be maintained until revegetation, or other permanent stabilisation, has occurred. 	Complies. No bulk excavation or fill is required. Appropriate erosion and sediment control will be provided in accordance with AO9.2. The proposed development will not impact existing drainage across the premises.

All development in the Cape Tribulation and Daintree Coast local plan area



	 AO9.3 This is no disturbance to tree roots and trenching does not involve any damage to tree roots. AO9.4 On-site drainage and stormwater management: (a) maintains natural flow regimes; (b) minimises impervious surfaces; (c) avoids concentration of flows, but where there is any form of concentration of flow, energy dissipation measures are installed at the outlet to avoid erosion (e.g. rock rip rap, gravel beds, diffusers etc.) 	
General requirements – Dwelling house		
PO10 Development minimises the loss of vegetation and habitat connectivity on site and is sited to protect the environmental values of the site.	 AO10.1 The elements of development and access to the site are included in a Designated Development Area (DDA). AO10.2 Development is sited in an existing cleared area or in an area approved for vegetation clearing. AO10.3 Any new clearing is limited to a maximum area of 700m2 and is sited to be clear of the high bank of any watercourse. Note – The 700m² of clearing does not include an access driveway. 	Complies. The extent of clearing associated with the proposed development will be kept to the minimum amount required and will be no greater than 700m2. The existing vegetation over the balance of the site (greater than 8Ha) is retained.
PO11 All existing native vegetation on a house site, other than that required and approved to be cleared for the construction of a house and access thereto, is protected to ensure the environmental integrity of the local plan area.	AO11 No acceptable solutions are prescribed.	Complies. The extent of clearing associated with the proposed development will be kept to the minimum amount required and will be no greater than 700m2. The existing vegetation over the balance of the site (greater than 8Ha) is retained.



PO12 Wildlife movement, fauna habitat and habitat corridors are protected and domestic impacts are minimised.	AO12.1 Fences are limited in extent to the confines of the cleared area around the house and any associated gates are self-closing.	Complies. Any proposed fencing or external lighting will comply with the requirements of AO12.1 and 12.2.
	AO12.2 External lighting is to be kept to the minimum necessary for orientation, safety and security. Flood lights must not point up, and areas of retained vegetation should, in general, not be illuminated. Where appropriate, outdoor lights are controlled by movement detectors and/or timers.	
PO13 House sites have efficient and safe vehicle access and manoeuvring areas on site, and to the site, to an acceptable standard for the local plan area.	 AO13.1 Vehicle access is limited to one access per lot and sited in an approved location, clear of any watercourses. AO13.2 Vehicular access is a maximum width of 4 metres, avoids large tree specimens and/or significant vegetation and habitat corridors and is 	Complies. Proposed vehicle access is limited to one access per lot and is sited clear of any watercourses and avoids large tree specimens and/or significant vegetation and habitat corridors. It is constructed and maintained to the standard contained in the AO.
All development in the Cape Tribulation and Dai	ntree Coast local plan area	
	constructed and maintained to a minimum gravel standard of 75mm of road base on a compacted soil surface.	
	AO13.3 Vehicular access is constructed prior to house construction.	
Additional requirements for Nature based touris	m, being Forest stay accommodation	



 those parts of the Shire which are isolated and constrained by a lack of urban services and facilities. (i) Precinct 2 – Low impact residential precinct; (ii) Precinct 5 – Low impact rural and tourism enterprise precinct; (iii) Precinct 6 – Low impact tourism accommodation precinct. (b) does not occur above the 60 metre contour; (c) is located on lots of 10 bectares or greater 	PO14 Forest stay accommodation provides a local economic opportunity for permanent residents of those parts of the Shire which are isolated and constrained by a lack of urban services and facilities.	 A014 Forest stay accommodation: (a) is confined to: (i) Precinct 2 – Low impact residential precinct; (ii) Precinct 5 – Low impact rural and tourism enterprise precinct; (iii) Precinct 6 – Low impact tourism accommodation precinct. (b) does not occur above the 60 metre contour; (c) is located on lots of 10 bectares or greater 	N/A
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P015 Forest stay accommodation remains ancillary to the primary residential use and the natural values of the land and the use is compatible with the character and amenity of the locality.	AO15.1 The maximum number of gusts is 10 (10 bed spaces) with up to a maximum of 4 staff (4 bed spaces);	N/A
	AO15.2 None of the accommodation, whether for guests or staff, is self-contained as the use operates only in association with an existing dwelling on the	
	site. AO15.3 Forest stay accommodation is located on a site which has an existing cleared area.	
	AO15.4 The natural values of the balance area of the site are protected and enhanced with organised tours being conducted for visiting guests.	
	 AO15.5 If forest stay accommodation is provided in buildings which are separate from the dwelling: (a) the maximum number of separate building/s is determined based on each building containing a minimum of 2 bed spaces each, provided that each building has a maximum area of 50m² (inclusive of verandahs/patios etc.); or 	
	 (b) a maximum of one communal bunkhouse is provided with a maximum area of 150m2 to accommodate 10 guests (10 bed spaces) (inclusive of verandahs/patios etc.); 	



	or (c) a maximum of two communal bunkhouses are provided with a maximum area of 150m ² each to accommodate a maximum of 20 guests (20 bed spaces) (inclusive of verandahs/patios etc).	
	AO15.6 No kitchen or cooking facilities, with the exception of those located within the existing dwelling on the site are provided in association with the forest stay accommodation.	
PO16 Development ensures guests are accommodated for short-stay and the dwelling is not the usual residence of the guest.	AO16 Development involves guests staying a maximum of 14 consecutive nights.	N/A
PO17 Development ensures that effluent disposal and treatment minimise odour and impacts on the natural environment.	AO17 Development provides an on-site effluent treatment system that is adequately sized to effectively treat effluent from the dwelling house and any additional persons occupying the premises as guests.	N/A
Additional requirements for Precinct 1 – Conser	vation precinct	



PO18 The biodiversity value of the area and the habitat of endemic species is protected on land included in the Rainforest Conservation precinct.	 AO18 No new development occurs whether on undeveloped or developed land except for: Undeveloped land that meets one or more of the following criteria: Land which has been previously been lawfully cleared and currently remains cleared; (a) Land which is the subject of a current Clearing Permit, but has yet to be cleared; (b) Land which is subject of a current Operational Works Permit, can be developed for a house subject to compliance with all relevant codes. In addition, minor extensions can be undertaken to an existing development, provided: (a) The extensions are limited to 30% of the existing gross floor area of the house at the commencement date of the planning scheme. or (b) The extent of extensions are determined on a site specific/use specific basis for other land uses, and (c) No further clearing is required to accommodate the extensions for either a house or any other land use development. 	N/A
Additional requirements for Precinct 2– Low im	pact residential precinct	

All development in the Cape Tribulation and Daintree Coast local plan area



 PO19 Development is for; (a) a detached dwelling of limited size and scale and necessary outbuildings and infrastructure; (b) home occupations, including bed and breakfast accommodation, where it can be demonstrated that the bed and breakfast accommodation can establish on the site and not detrimentally impact on the scenic values of the site and surrounding areas; (c) Nature based tourism, being Forest stay accommodation where in compliance with other requirements contained within this code. 	 AO19.1 Development is limited to one dwelling house per lot. AO19.2 Establishment of bed and breakfast accommodation only occurs on land on which a dwelling house has been approved and constructed. AO19.3 Bed and breakfast accommodation is limited to cleared areas on the land; or AO19.4 Bed and breakfast accommodation is established within an existing house, where there is no additional vegetation clearing required to accommodate the use; AO19.5 Bed and breakfast accommodation occurs on a site with a minimum area of 1 hectare, and thereafter occurs at a rate of 1 bedroom (2 beds) per hectare, up to a maximum of 4 bedrooms (8) beds per site. AO19.6 Development is setback a minimum of 100 metres to an Esplanade or a foreshore frontage. 	Complies. The proposed development is limited to one dwelling house per lot.
Additional requirements for Precinct 3 – Low im	pact commercial precinct	
PO20 Commercial development is located in a convenient location and meets the requirements of the local community and visitors to the area.	AO20 Commercial development is located within Precinct 3 and has frontage to Cape Tribulation Road.	N/A



PO21 Development is small scale and provides a necessary service to the surrounding community.	AO21 No acceptable outcomes are prescribed.	N/A
PO22 Development is carried out in accordance with a site-specific, and development specific Environmental Management Plan. Note – Planning scheme policy SC6.4 – Environmental management plans provides further guidance on meeting the performance outcome.	AO22 No acceptable outcomes are prescribed.	N/A
Additional requirements for Precinct 4 – Low im	pact community purpose precinct	
PO23 Development results in a small scale expansion of an existing use which provides a necessary service to the surrounding community; or	AO23 No acceptable outcomes are prescribed.	N/A

All development in the Cape Tribulation and Daintree Coast local plan area		
Development results in a new community use or public purpose use for which there is an identified need within the surrounding community.		N/A
PO24 Development is carried out in accordance with a site specific and development specific Environmental Management Plan. Note – Planning scheme policy SC6.4 – Environmental management plans provides further guidance on meeting the performance outcome.	AO24 No acceptable outcomes are prescribed.	N/A
Additional requirements for Precinct 5 – Low im precinct	pact rural production and tourism enterprise	



PO25 Development complements, protects and enhances the environmental and scenic values of the site.	 AO25.1 One dwelling house establishes per lot. AO25.2 Any other development is limited to existing cleared areas on the site. AO25.3 No development is to occur above the 60 metre contour line. AO25.4 Any new primary production activity or a change to a primary production activity has minimal impact on the existing natural values of the site and surrounding area. 	N/A
PO26 Large cleared or partially cleared sites are revegetated and rehabilitated in association with suitably small scale environmentally sustainable development.	AO26 The balance area of the development, including any existing area/s not identified for development is/are revegetated / rehabilitated in accordance with a landscape plan.	N/A
PO27 Development is carried out in accordance with a site specific and development specific Environmental Management Plan. Note – Planning scheme policy SC6.4 – Environmental management plans provides further guidance on meeting the performance outcome.	AO27 No acceptable outcomes are prescribed.	N/A
Additional requirements for Precinct 6 - Low im	pact tourist accommodation precinct	



PO28 Development complements, protects and enhances the environmental and scenic values of the site.	AO28.1 One dwelling house establishes per lot. AO28.2 Any other development is limited to existing cleared areas on the site. AO28.3 No development is to occur above the 60 metre contour line.	N/A
PO29 Development results in a small scale expansion	AO29 No acceptable outcomes are prescribed.	N/A
All development in the Cape Tribulation and Daintree Coast local plan area		
of existing tourist accommodation and any associated activities, based on the appreciation of the natural environment.		N/A
of existing tourist accommodation and any associated activities, based on the appreciation of the natural environment. PO30 Development is carried out in accordance with a site specific and development specific Environmental Management Plan. Note – Planning scheme policy – Environmental management plans SC6.4 provides further guidance on meeting the	AO30 No acceptable outcomes are prescribed.	N/A N/A



8.2 **Overlay codes**

8.2.1 Acid sulfate soils overlay code

8.2.1.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Acid sulfate soils 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 Acid sulphate soils overlay is identified on the Acid sulfate soils overlay map in Schedule 2 and includes the following sub-categories:
 - (a) Land at or below the 5m AHD sub-category;
 - (b) Land above the 5m AHD and below the 20m AHD sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.1.2 Purpose

- (1) The purpose of the acid sulfate soils overlay code is to:
 - (a) implement the policy direction in the Strategic Framework, in particular:
 - (i) Theme 2: Environment and landscape values, Element 3.5.4 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.
- (2) enable an assessment of whether development is suitable on land within the Acid sulfate soils overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) Development ensures that the release of any acid and associated metal contaminant is avoided by not disturbing acid sulfate soils when excavating, removing soil or extracting ground water or filling land;
 - (b) Development ensures that disturbed acid sulfate soils, or drainage waters, are treated and, if required, on-going management practices are adopted that minimise the potential for environmental harm from acid sulfate soil and protect corrodible assets from acid sulfate soil.

8.2.1.3 Criteria for assessment

Table 8.2.1.3.a – Acid sulfate soils overlay code – assessable development

Performance outcomes	Acceptable outcomes	
For assessable development		Comment



PO1 The extent and location of potential or actual acid sulfate soils is accurately identified.	 AO1.1 No excavation or filling occurs on the site. or AO1.2 An acid sulfate soils investigation is undertaken. 	Complies. No bulk excavation or fill will be required to prepare the site for the construction of the proposed dwelling house, therefore avoiding the disturbance of any potential acid sulfate soils or actual acid sulfate soils present on the premises.
	Note - Planning scheme policy SC 6.12– Potential and actual acid sulfate soils provides guidance on preparing an acid sulfate soils investigation.	It is noted that, the site classification report undertaken by Earth test in relation to the onsite wastewater treatment and disposal system did not encounter any acid sulfate soils in soil testing.
PO2 Development avoids disturbing potential acid sulfate soils or actual acid sulfate soils, or is managed to avoid or minimise the release of acid and metal contaminants.	 AO2.1 The disturbance of potential acid sulfate soils or actual acid sulfate soils is avoided by: (a) not excavating, or otherwise removing, soil or sediment identified as containing potential or actual acid sulfate soils; (b) not permanently or temporarily extracting groundwater that results in the aeration of previously saturated acid sulfate soils; (c) not undertaking filling that results in: (d) actual acid sulfate soils being moved below the water table; (e) previously saturated acid sulfate soils being aerated. or AO2.2 The disturbance of potential acid sulfate soils or actual acid sulfate soils is undertaken in accordance with an acid sulfate soils management plan and avoids the release of metal contaminants; (b) preventing the release of surface or 	Complies. No bulk excavation or fill will be required to prepare the site for the construction of the proposed dwelling house, therefore avoiding the disturbance of any potential acid sulfate soils or actual acid sulfate soils present on the premises. It is noted that, the site classification report undertaken by Earth test in relation to the onsite wastewater treatment and disposal system did not encounter any acid sulfate soils in soil testing.



	 groundwater flows containing acid and metal contaminants into the environment; (c) preventing the in situ oxidisation of potential acid sulfate soils and actual acid sulfate soils through ground water level management; (d) appropriately treating acid sulfate soils before disposal occurs on or off site; (e) documenting strategies and reporting requirements in an acid sulfate soils environmental management plan. Note - Planning scheme policy SC 6.12 – Acid sulfate soils provides guidance on preparing an 	
PO3		Complies No bulk excavation or fill will be
No environmental harm is caused as a result of exposure to potential acid sulfate soils or actual acid sulfate soils.	No acceptable outcomes are prescribed.	required to prepare the site for the construction of the proposed dwelling house, therefore avoiding the disturbance of any potential acid sulfate soils or actual acid sulfate soils present on the premises. It is noted that, the site classification report undertaken by Earth test in relation to the apoite
		undertaken by Earth test in relation to the onsite wastewater treatment and disposal system did not encounter any acid sulfate soils in soil testing.



Figure 8.2.1.3.a – Acid sulfate soils (SPP triggers)





8.2.2 Bushfire hazard overlay code

Note - Land shown on the bushfire hazard overlay map is designated as the bushfire prone area for the purposes of section 12 of the Building Regulations 2006. The bushfire hazard area (bushfire prone area) includes land covered by the high and medium hazard areas as well as the buffer area category on the overlay map.

8.2.2.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational works or building work in the Bushfire hazard overlay, if:
 - (a) self-assessable or assessable 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 Bushfire hazard overlay is identified on the Bushfire hazard overlay map in Schedule 2 and includes the following sub-categories:
 - (a) Medium bushfire risk sub-category;
 - (b) High bushfire risk sub-category;
 - (c) Very high bushfire risk sub-category;
 - (d) Potential impact buffer sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.2.2 Purpose

- (1) The purpose of the Bushfire 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 6 Infrastructure and transport: Element 3.9.2 Energy.
 - (b) enable an assessment of whether development is suitable on land within the Bushfire risk overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development avoids the establishment or intensification of vulnerable activities within or near areas that are subject to bushfire hazard;
 - (b) development is designed and located to minimise risks to people and property from bushfires;
 - (c) bushfire risk mitigation treatments are accommodated in a manner that avoids or minimises impacts on the natural environment and ecological processes;
 - (d) development involving the manufacture or storage of hazardous materials does not increase the risk to public safety or the environment in a bushfire event;
 - (e) development contributes to effective and efficient disaster management response and recovery capabilities.



Note - A site based assessment may ground-truth the extent of hazardous vegetation and extent and nature of the bushfire hazard area (bushfire prone area). Such assessments should be undertaken using the methodology set out in Planning scheme policy SC6.9 - Natural Hazards.



8.2.2.3 Criteria for assessment

Table 8.2.2.3.a - Bushfire hazard overlay code -assessable development

Performance outcomes	Acceptable outcomes	
For self-assessable and assessable development		Comment
Compatible development		
PO1 A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances. Note - See the end of this code for examples of vulnerable uses.	AO1 Vulnerable uses are not established or expanded. Note – Where, following site inspection and consultation with Council, it is clear that the mapping is in error in identifying a premises as being subject to a medium, high, very high bushfire hazard or potential impact buffer sub-category, Council may supply a letter exempting the need for a Bushfire Management Plan. Note – Where the assessment manager has not previously approved a Bushfire Management Plan (either by condition of a previous development approval), the development proponent will be expected to prepare such a plan. Note – Planning scheme policy SC6.9 - Natural hazards, provides a guide to the preparation of a Bushfire Management Plan.	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.
PO2 Emergency services and uses providing community support services are able to function effectively during and immediately after a bushfire hazard event.	AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.
PO3 Development involving hazardous materials manufactured or stored in bulk is not located in bushfire hazard sub-category.	AO3 The manufacture or storage of hazardous material in bulk does not occur within bushfire hazard sub-category.	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.
Development design and separation from bush	fire hazard – reconfiguration of lots	



PO4.1 Where reconfiguration is undertaken in an urban	AO4.1 No new lots are created within a bushfire hazard	N/A
area or is for urban purposes or smaller scale	sub-category.	
from hazardous vegetation is provided to achieve	or	
a radiant heat flux level of 29kW/m ² at the edge of the proposed lot(s).	AO4.2	
Note - "I Irban nurnoses" and "urban area" are defined in the	Lots are separated from hazardous vegetation by	N/A
Sustainable Planning Regulations 2009. Reconfiguration will be taken to be for rural residential purposes where proposed	(a) achieves radiant heat flux level of	
lots are between 2000m ² and 2ha in area. "Smaller scale" rural residential purposes will be taken to be where the	29kW/m ² at all boundaries; and (b) is contained wholly within the	
average proposed lot size is 6000m2 or less.	development site.	
Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.	Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through	N/A
PO4.2	tenure or other means) that the land will remain cleared of hazardous vegetation.	N/A
Where reconfiguration is undertaken for other purposes, a building envelope of reasonable	For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.	
achieves radiant heat flux level of 29kW/m ² at any	Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning achieve require restortion of particip acalegical along visual	
point.	or character features or functions.	



Performance outcomes	Acceptable outcomes	
PO5 Where reconfiguration is undertaken in an urban area or is for urban purposes, a constructed perimeter road with reticulated water supply is established between the lots and the hazardous vegetation and is readily accessible at all times for urban fire fighting vehicles. The access is available for both fire fighting and maintenance/defensive works.	 AO5.1 Lot boundaries are separated from hazardous vegetation by a public road which: (a) has a two lane sealed carriageway; (b) contains a reticulated water supply; (c) is connected to other public roads at both ends and at intervals of no more than 500m; (d) accommodates geometry and turning radii in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (e) has a minimum of 4.8m vertical clearance above the road; (f) is designed to ensure hydrants and water access points are not located within parking bay allocations; and (g) incorporates roll-over kerbing. AO5.2 Fire hydrants are designed and installed in accordance with AS2419.1 2005, unless otherwise specified by the relevant water entity. Note - Applicants should have regard to the relevant standards set out in the reconfiguration of a lot code and works codes in this planning scheme.	Ν/Α



PO6 Where reconfiguration is undertaken for smaller scale rural residential purposes, either a constructed perimeter road or a formed, all weather fire trail is established between the lots and the hazardous vegetation and is readily accessible at all times for the type of fire fighting vehicles servicing the area. The access is available for both fire fighting and maintenance/hazard reduction works.	 AO6 Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	Ν/Α
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Performance outcomes	Acceptable outcomes	
PO7 Where reconfiguration is undertaken for other purposes, a formed, all weather fire trail is provided between the hazardous vegetation and either the lot boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area. However, a fire trail will not be required where it would not serve a practical fire management purpose.	 AO7 Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	N/A



P08 The development design responds to the potential threat of bushfire and establishes clear evacuation routes which demonstrate an acceptable or tolerable risk to people.	 AO8 The lot layout: (a) minimises the length of the development perimeter exposed to, or adjoining hazardous vegetation; (b) avoids the creation of potential bottle-neck points in the movement network; (c) establishes direct access to a safe assembly /evacuation area in the event of an approaching bushfire; and (d) ensures roads likely to be used in the event of a fire are designed to minimise traffic congestion. Note - For example, developments should avoid finger-like or hour-glass subdivision patterns or substantive vegetated corridors between lots. In order to demonstrate compliance with the performance outcome, a bushfire management plan prepared by a suitably qualified person may be required. The bushfire management plan should be developed in accordance with the Public Safety Business Agency (PSBA) guideline entitled "Undertaking a Bushfire Protection Plan. Advice from the Queensland Fire and Emergency Services (QFES) should be source as a propertiate.	N/A
PO9 Critical infrastructure does not increase the potential bushfire hazard.	AO9 Critical or potentially hazardous infrastructure such as water supply, electricity, gas and telecommunications are placed underground.	N/A
potentiai pusntire nazaro.	telecommunications are placed underground.	



Performance outcomes	Acceptable outcomes	
Development design and separation from bushfire hazard – material change of use		
 PO10 Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of: (a) 10kW/m² where involving a vulnerable use; or (b) 29kW/m² otherwise. The radiant heat flux level is achieved by separation unless this is not practically achievable. Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009. 	 AO10 Buildings or building envelopes are separated from hazardous vegetation by a distance that: (a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and (b) is contained wholly within the development site. Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation. For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages. Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions. 	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.



 PO11 A formed, all weather fire trail is provided between the hazardous vegetation and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area. However, a fire trail will not be required where it would not serve a practical fire management purpose. Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha	 AO11 Development sites are separated from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.
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Performance outcomes	Acceptable outcomes	
All development		
PO12 All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.	 AO12 Private driveways: (a) do not exceed a length of 60m from the street to the building; (b) do not exceed a gradient of 12.5%; (c) have a minimum width of 3.5m; (d) have a minimum of 4.8m vertical clearance; (e) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and (f) serve no more than 3 dwellings or buildings. 	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.



PO13 Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.	 AO13 A water tank is provided within 10m of each building (other than a class 10 building) which: (a) is either below ground level or of nonflammable construction; (b) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (i) 10,000l for residential buildings Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams. (ii) 45,000l for industrial buildings; and (iii) 20,000l for other buildings; (c) includes shielding of tanks and pumps in accordance with the relevant standards; (d) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank; (e) is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and (f) is clearly identified by directional signage provided at the street frontage. 	Complies. The proposed development provides on- site water storage in accordance with the requirements of the AO.
PO14 Landscaping does not increase the potential bushfire risk.	AO14 Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.	Complies. Landscaping will not increase the potential bushfire risk.
PO15 The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).	AO15 Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.	Complies. The location of the proposed development is not located within the Potential Impact Buffer area of the Bushfire Overlay mapping present on the premises.

Note – 'Vulnerable activities' are those involving:

(1) the accommodation or congregation of vulnerable sectors of the community such as child care centres, community care centre, educational establishments, detention facilities, hospitals, rooming accommodation, retirement facilities or residential care facilities; or



(2) the provision of essential services including community uses, emergency services, utility installation, telecommunications facility, substations and major electricity infrastructure.



8.2.4 Flood and storm tide hazard overlay code

8.2.4.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Flood and storm tide 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 Flood and storm tide hazard overlay is identified on the Flood and storm tide hazard overlay map in Schedule 2 and includes the:
 - (a) Storm tide high hazard sub-category;
 - (b) Storm tide medium hazard sub-category;
 - (c) Flood plain assessment sub-category;
 - (d) 100 ARI Mossman, Port Douglas and Daintree Township Flood Studies sub-category.
- (3) When using this code, reference should be made to Part 5.

Note - The Flood and storm tide hazards overlay maps contained in Schedule 2 identify areas (Flood and storm tide inundation areas) where flood and storm tide inundation modelling has been undertaken by the Council. Other areas not identified by the Flood and inundation hazards overlay maps contained in Schedule 2 may also be subject to the defined flood event or defined storm tide event.

8.2.4.2 Purpose

- (1) The purpose of the Flood and storm tide hazard 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 6 Infrastructure and transport: Element 3.9.2 Energy.
 - (b) enable an assessment of whether development is suitable on land within the Flood and storm tide hazard sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development siting, layout and access responds to the risk of the natural hazard and minimises risk to personal safety;
 - (b) development achieves an acceptable or tolerable risk level, based on a fit for purpose risk assessment;
 - (c) the development is resilient to natural hazard events by ensuring siting and design accounts for the potential risks of natural hazards to property;
 - (d) the development supports, and does not unduly burden disaster management response or recovery capacity and capabilities;
 - (e) the development directly, indirectly and cumulatively avoids an unacceptable increase in severity of the natural hazards and does not significantly increase the potential for damage on site or to other properties;



- the development avoids the release of hazardous materials as a result of a natural hazard event; (f)
- (g)
- natural processes and the protective function of landforms and/or vegetation are maintained in natural hazard areas; community infrastructure is located and designed to maintain the required level of functionality during and immediately after a hazard (h) event.


8.2.4.3 Criteria for assessment

Table 8.2.4.3.a - Flood and storm tide hazards overlay code -assessable development

Performance outcomes	Acceptable outcomes	
For assessable and self assessable development	nt	Comment
PO1 Development is located and designed to: ensure the safety of all persons; minimise damage to the development and contents of buildings; provide suitable amenity; minimise disruption to residents, recovery time, and rebuilding or restoration costs after inundation events. Note – For assessable development within the flood plain assessment sub-category, a flood study by a suitably qualified professional is required to identify compliance with the intent of the acceptable outcome.	 AO1.1 Development is sited on parts of the land that is not within the Flood and Storm tide hazards overlay maps contained in Schedule 2; or For dwelling houses, AO1.2 Development within the Flood and Storm Tide hazards overlay maps (excluding the Flood plain assessment sub-category) is designed to provide immunity to the Defined Inundation Event as outlined within Table 8.2.4.3.b plus a freeboard of 300mm. AO1.3 New buildings are: (a) not located within the overlay area; (b) located on the highest part of the site to minimise entrance of flood waters; (c) provided with clear and direct pedestrian and vehicle evacuation routes off the site. AO1.4 In non urban areas, buildings and infrastructure are set back 50 metres from natural riparian corridors to maintain their natural function of reducing velocity of floodwaters. 	Complies. The location of the proposed development is located within the Flood plain assessment sub- category. Whilst the proposed development need not be designed to a Defined Inundation Event as outlined within AO1.2. It is noted that the premises are not known to be significantly impacted by flood. The site is relatively flat (within the 10m contour) and primarily drains towards the rear premises. The proposed dwelling is raised above the ground by 500mm which is considered to ensure the proposed dwelling is not impacted by or will interfere with any floodwaters across the premises. Clear and direct pedestrian and vehicle access and is provided via the driveway off the site. Mclean Creek is the only formal watercourse that traverses the premises (to the north west) and is greater than 500m from the location of the proposed development. There is an area of wetland to the mid- western part of the premises and is over 150m from the proposed development.
For assessable development		



PO2 The development is compatible with the level of risk associated with the natural hazard.	 AO2 The following uses are not located in land inundated by the Defined Flood Event (DFE) / Storm tide: (a) Retirement facility; (b) Community care facility; (c) Child care centre. 	N/A
PO3 Development siting and layout responds to flooding potential and maintains personal safety	 For Material change of use AO3.1 New buildings are: (d) not located within the overlay area; (e) located on the highest part of the site to minimise entrance of flood waters; (f) provided with clear and direct pedestrian and vehicle evacuation routes off the site. or 	Complies. The location of the proposed development is located within the Flood plain assessment sub- category. Whilst the proposed development need not be designed to a Defined Inundation Event as outlined within AO1.2. It is noted that the premises are not known to be significantly impacted by flood. The site is relatively flat (within the 10m contour) and primarily drains towards the rear premises. The proposed dwelling is raised above the ground by 500mm which is considered to ensure the proposed dwelling is not impacted by or will interfere with any floodwaters across the premises. Clear and direct pedestrian and vehicle access and is provided via the driveway off the site.
	AO3.2 The development incorporates an area on site that is at least 300mm above the highest known flood inundation level with sufficient space to accommodate the likely population of the development safely for a relatively short time until flash flooding subsides or people can be evacuated. or	Complies. The location of the proposed development is located within the Flood plain assessment sub- category. Whilst the proposed development need not be designed to a Defined Inundation Event as outlined within AO1.2. It is noted that the premises are not known to be significantly impacted by flood. The site is relatively flat (within the 10m contour) and primarily drains towards the rear premises. The proposed dwelling is raised above the ground by 500mm which is considered to ensure the proposed dwelling is not impacted by or will



AO3.3	interfere with any floodwaters across the premises.
Where involving an extension to an existing	
dwelling house that is situated below DFE /Storm	
tide, the maximum size of the extension does not	
exceed 70112 gross 1001 area.	
Note If part of the site is outside the Hazard	
Overlay area this is the preferred location of all	
buildings.	
, i i i i i i i i i i i i i i i i i i i	
For Reconfiguring a lot	
A03.4	
Additional lots:	
(a) are not located in the hazard overlay area;	
or	
(b) are demonstrated to be above the flood	
level identified for the site.	
Note - If part of the site is outside the Hazard	
Overlay area, this is the preferred location for all	
recreation lots)	
Note - Buildings subsequently developed on the	
lots will need to comply with the relevant building	
assessment provisions under the Building Act	
1975.	



AO3.5

Road and/or pathway layout ensures residents are not physically isolated from adjacent flood free urban areas and provides a safe and clear evacuation route path:

(a) by locating entry points into the reconfiguration above the flood level and avoiding culs-de-sac or other non-permeable layouts; and

(b) by direct and simple routes to main carriageways.

AO3.6

Signage is provided on site (regardless of whether the land is in public or private ownership) indicating the position and path of all safe evacuation routes off the site and if the site contains, or is within 100m of a floodable waterway, hazard warning signage and depth indicators are also provided at key hazard points, such as at floodway crossings or entrances to lowlying reserves.

Or

AO3.7

There is no intensification of residential uses within the flood affected areas on land situated below the DFE/Storm tide.

For Material change of use (Residential uses) AO3.1

The design and layout of buildings used for residential purposes minimise risk from flooding by providing:

(a) parking and other low intensive, non- habitable uses at ground level;



	Note - The high-set 'Queenslander' style house is a resilient low-density housing solution in floodplain areas. Higher density residential development should ensure only non- habitable rooms (e.g. garages, laundries) are located on the ground floor.	
PO4 Development is resilient to flood events by	For Material change of use (Non-residential uses) AO4.2	N/A
ensuring design and built form account for the		
potential risks of flooding.	Non residential buildings and structures allow for	
	the flow through of flood waters on the ground	
	floor.	
	Note - Businesses should ensure that they have the necessary contingency plans in place to account for the potential need to relocate property prior to a flood event (e.g. Allow enough time to transfer stock to the upstairs level of a building or off site).	
	Note - The relevant building assessment provisions under the Building Act 1975 apply to all building work within the Hazard Area and need to take into account the flood potential within	
	the area.	
	AO4.3	
	Materials are stored on-site:	
	(a) are those that are readily able to be moved in	
	a flood event;	



	 (b) where capable of creating a safety hazard by being shifted by flood waters, are contained in order to minimise movement in times of flood. Notes - (a) Businesses should ensure that they have the necessary contingency plans in place to account for the potential need to relocate property prior to a flood event (e.g. allow enough time to transfe stock to the upstairs level of a building or off site). (b) Queensland Government Fact Sheet 'Repairing your House after a Flood' provides information about water resilient products and building techniques. 	
PO5 Development directly, indirectly and cumulatively avoids any increase in water flow velocity or flood level and does not increase the potential flood damage either on site or on other properties. Note – Berms and mounds are considered to be an undesirable built form outcome and are not supported.	For Operational works AO5.1 Works in urban areas associated with the proposed development do not involve: (a) any physical alteration to a watercourse or floodway including vegetation clearing; or (b) a net increase in filling (including berms and mounds).	N/A. The proposed development is not located in an area affected by DFE/Storm tide.
	AO5.2 Works (including buildings and earthworks) in non urban areas either: (a) do not involve a net increase in filling greater than 50m3 ; or (b) do not result in any reductions of on-site flood storage capacity and contain within the subject site any changes to depth/duration/velocity of flood waters; or (c) do not change flood characteristics outside	



the subject site in ways that result in:	
(i) loss of flood storage;	
(ii) loss of/changes to flow paths;	
(iii) acceleration or retardation of flows or any	
reduction in flood warning times	
elsewhere on the flood plain.	
·	
For Material change of use	
A05.3	
Where development is located in an area affected	
by DFE/Storm tide, a hydraulic and hydrology	
report, prepared by a suitably qualified	
professional, demonstrates that the development	
maintains the flood storage capacity on the	
subject site; and	
(a) does not increase the volume, velocity,	
concentration of flow path alignment of	
stormwater flow across sites upstream,	
downstream or in the general vicinity of the	
subject site; and	
(b) does not increase ponding on sites upstream,	
downstream or in the general vicinity of the	
subject site.	
For Material change of use and Reconfiguring a	
Lot	
AO5.4	
In non urban areas, buildings and infrastructure	
are set back 50 metres from natural riparian	
corridors to maintain their natural function of	
reducing velocity of floodwaters.	
Note – Fences and irrigation infrastructure (e.g.	
irrigation tape)	



	in rural areas should be managed to minimise adverse the impacts that they may have on downstream properties in the event of a flood.	
PO6	For Material change of use	N/A.
Development avoids the release of hazardous	AO6.1	
materials into floodwaters.	Materials manufactured or stored on site are not	
	hazardous or noxious, or comprise materials that	
	may cause a detrimental effect on the	
	environment if discharged in a flood event; or	
	AO6.2	
	If a DFE level is adopted, structures used for the	
	manufacture of storage of nazardous materials	
	ale.	
	(b) designed to prevent the intrusion of	
	floodwaters.	
	AO6.3	
	Infrastructure is designed and constructed to	
	resist hydrostatic and hydrodynamic forces as a	
	result of inundation by the DFE.	
	AO6.4	
	If a flood level is not adopted, hazardous	
	materials and their manufacturing equipment are	
	located on the highest part of the site to enhance	
	flood immunity and designed to prevent the	



	intrusion of floodwaters. Note – Refer to Work Health and Safety Act 2011 and associated Regulation and Guidelines, the Environmental Protection Act 1994 and the relevant building assessment provisions under the Building Act 1975 for requirements related to the manufacture and storage of hazardous materials.	
PO7 The development supports, and does not unduly burden, disaster management response or recovery capacity and capabilities.	 A07 Development does not: (a) increase the number of people calculated to be at risk of flooding; (b) increase the number of people likely to need evacuation; (c) shorten flood warning times; and (d) impact on the ability of traffic to use evacuation routes, or unreasonably increase traffic volumes on evacuation routes 	N/A. The proposed development does not increase the number of people calculated to be at risk of flooding.
 PO8 Development involving community infrastructure: (a) remains functional to serve community need during and immediately after a flood event; (b) is designed, sited and operated to avoid adverse impacts on the community or environment due to impacts of flooding on infrastructure, facilities or access and egress routes; (c) retains essential site access during a flood event; (d) is able to remain functional even when other 	AO8.1 The following uses are not located on land inundated during a DFE/Storm tide: (a) community residence; and (b) emergency services; and (c) residential care facility; and (d) utility installations involving water and sewerage treatment plants; and (e) storage of valuable records or items of historic or cultural significance (e.g. archives, museums, galleries, libraries).	N/A.



infrastructure or services may be	or	
compromised in a flood event.	AO8.2	
	The following uses are not located on land	
	inundated during a 1% AEP flood event:	
	(a) community and cultural facilities, including	
	facilities where an education and care service	
	under the Education and care Services	
	National law (Queensland) is operated or	
	child care service under the Child Care Act	
	2002 is conducted,	
	(b) community centres;	
	(c) meeting halls;	
	(d) galleries;	
	(e) libraries.	
	The following uses are not located on land	
	inundated during a 0.5% AEP flood event.	
	(a) emergency shelters;	
	(b) police facilities;	
	(c) sub stations;	
	(d) water treatment plant	
	The following uses are not located on land	
	inundated during a 0.2% AEP flood event:	
	(a) correctional facilities;	
	(b) emergency services;	
	(c) power stations;	
	(d) major switch yards.	
	and/or	
	AO8.3	
	The following uses have direct access to low	
	hazard evacuation routes as defined in Table	
	8.2.4.3.c:	
	(a) community residence; and	



 (b) emergency services; and (c) hospitals; and (d) residential care facility; and (e) sub stations; and (f) utility installations involving water and 	
 (c) hospitals; and (d) residential care facility; and (e) sub stations; and (f) utility installations involving water and 	
(d) residential care facility; and(e) sub stations; and(f) utility installations involving water and	
(e) sub stations; and(f) utility installations involving water and	
(f) utility installations involving water and	
sewerage treatment plants.	
AO8.4	
Any components of infrastructure that are likely to	
fail to function or may result in contamination	
when inundated by flood, such as electrical	
switch gear and motors, telecommunications	
connections, or water supply pipeline air valves	
are:	
(a) located above DFE/Storm tide or the highest	
known flood level for the site;	
(b) designed and constructed to exclude	
floodwater intrusion / infiltration.	
AO8.5	
Infrastructure is designed and constructed to	
resist hydrostatic and hydrodynamic forces as a	
result of inundation by a flood.	



Table 8.2.4.3.b - Minimum immunity (floor levels) for development

Minimum immunity to be achieved (floor levels)	Uses and elements of activities acceptable in the event	
20% AEP level	Parks and open space.	
5% AEP level	 Car parking facilities (including car parking associated with use of land). 	
1% AEP level	 All development (where not otherwise requiring an alternative level of minimum immunity). 	
0.5% AEP level	 Emergency services (if for a police station); Industry activities (if including components which store, treat or use hazardous materials); Substation; Utility installation. 	
0.2% AEP level	 Emergency services; Hospital; Major electricity infrastructure; Special industry. 	

Table 8.2.4.3.c - Degree of flood

Criteria	Low	Medium	High	Extreme
Wading ability	If necessary children and the elderly could wade. (Generally, safe wading velocity depth product is less than 0.25)	Fit adults can wade. (Generally, safe wading velocity depth product is less than 0.4)	Fit adults would have difficulty wading. (Generally, safe wading velocity depth product is less than 0.6)	Wading is not an option.
Evacuation distances	< 200 metres	200-400 metres	400-600 metres	600 metres
Maximum flood depths	< 0.3 metre	< 0.6 metre	< 1.2 metres	1.2 metres



Maximum flood velocity	< 0.4 metres per second	< 0.8 metres per second	< 1.5 metres per second	1.5 metres per second
Typical means of egress	Sedan	Sedan early, but 4WD or trucks later	4WD or trucks only in early stages, boats or helicopters	Large trucks, boats or helicopters
Timing Note: This category cannot be implemented until evacuation times have been established in the Counter Disaster Plan (Flooding)	Ample flood forecasting. Warning and evacuation routes remain passable for twice as long as evacuation time.	Evacuation routes remain trafficable for 1.5 times as long as the evacuation.	Evacuation routes remain trafficable for only up to minimum evacuation time.	There is insufficient evacuation time.

Note: The evacuation times for various facilities or areas would (but not necessarily) be included in the Counter Disaster Plan. Generally safe wading conditions assume even walking surfaces and no obstructions, steps, soft underfoot etc.



8.2.6 Landscape values overlay code

8.2.6.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Landscape values 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 Landscape values overlay is identified on the Landscape values overlay map in Schedule 2 and includes in following sub-categories:
 - (a) High landscape value sub-category;
 - (b) Medium landscape value sub-category;
 - (c) Scenic route buffer / view corridor area sub-category;
 - (d) Coastal scenery area sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.6.2 Purpose

- (1) The purpose of the Landscape values overlay code is to:
 - (a) implement the policy direction of the Strategic Framework, in particular:
 - (i) Theme 2: Environment and landscape values Element 3.5.5 Scenic amenity;
 - (ii) Theme 3: Natural resource management Element 3.6.4 Resource extraction.
 - (b) enable an assessment of whether development is suitable on land within the Landscape values overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) areas of High landscape value are protected, retained and enhanced;
 - (b) areas of Medium landscape value are managed to integrate and limit the visual impact of development;
 - (c) the landscape values of the Coastal scenery area are managed to integrate and limit the visual impact of development;
 - (d) development maintains and enhances the significant landscape elements and features which contribute to the distinctive character and identity of Douglas Shire;
 - (e) ridges and vegetated hillslopes are not developed in a way that adversely impacts on landscape values;
 - (f) watercourses, forested mountains and coastal landscape character types remain predominantly natural in appearance in order to maintain the region's diverse character and distinctive tropical image, in particular:
 - (i) areas in the coastal landscape character type which are predominantly natural and undeveloped in appearance retain this natural landscape character;
 - (ii) watercourses which are predominantly natural and undeveloped in appearance retain this natural landscape character;



- (iii) the rural character of cane fields and lowlands landscape character types which are predominantly rural or natural in appearance are maintained;
- (iv) landscape values are maintained when viewed from lookouts, scenic routes, gateways and public places.
- (g) views towards High landscape value areas and the Coral Sea are not diminished;
- (h) development is consistent with the prevailing landscape character of its setting, and is neither visually dominant nor visually intrusive;
- (i) advertising devices do not detract from the landscape values, character types or amenity of an area.



8.2.6.3 Criteria for assessment

Table 8.2.6.3.a – Landscape values overlay code – assessable development

Performance outcomes	Acceptable outcomes	
For assessable development		Comment
Development in a High landscape value area		



P01	AO1.1	Complies. No buildings and structures are more than
Development within High landscape value areas	Buildings and structures are not more than 8.5	8.5metres in height. Maximum proposed building height
identified on the Landscape values overlav maps	metres and two storevs in height.	is one storey and 5.5m in height measured from ground
contained in Schedule 2:	, 5	level.
(a) avoids detrimental impacts on the landscape	Note - Height is inclusive of roof height.	
values of forested skylines, visible hillslopes.		Descend buildings and structures are not leasted as an
ridgelines, the coastal foreshore or the	AO1.2	Proposed buildings and structures are not located hear
shoreline of other water bodies through the	Buildings and structures are setback not less than	any ridgelines or peaks.
loss of vegetation.	50 metres from ridgelines or peaks.	
(b) is effectively screened from view from a road	- · ·	The proposed development is screened from view by an
lookout or other public place by an existing	AO1.3	existing native vegetation buffer.
natural landform or native vegetation or will	Development is screened from view from roads or	
be effectively screened by native vegetation	other public places by an existing natural	The subject promises is not on land steeper than 1 in 6
within 3 years of construction.	landform or an existing native vegetation buffer.	
(c) retains existing vegetation and incorporates	5 5	(10.0%).
new landscaping to enhance existing	A01.4	
vegetation and visually soften built form	Where development on land steeper than 1 in 6	The proposed external features, walls and roofs of
elemente:	(16.6%) cannot be avoided:	buildings and structures have a subdued and non-
(d) incorporates development of a scale design	(a) development follows the natural; contours of	reflective palette.
(d) incorporates development of a scale, design, height position on site construction materials	the site:	
and external finishes that are compatible with	(b) buildings are split level or suspended floor	
the landscape values of the locality:	construction, or a combination of the two:	
(e) avoids detrimental impacts on landscape	(c) lightweight materials are used to areas with	
values and excessive changes to the natural	suspended floors.	
landform as a result of the logation, position		
an aita apple design extent and alignment of	Note - Examples of suitable lightweight materials include	
on site, scale, design, extent and alignment of	timber or fibre cement boards or sheeting for walls and factory	
earthworks, roads, unveways, retaining waits	treated metal sheeting for walls and roofs.	
and other on-ground or m-ground		
(f) evoide detrimental impacts on landesone	AO1.5	
(i) avoids detrimental impacts on landscape	The external features, walls and roots of buildings	
values and views as a result of the location,	and structures have a subdued and non-reflective	
position on site, scale, design and alignment	palette.	
of telecommunications facilities, electricity		
towers, poles and lines and other tail	Note - Examples of suitable colours include shades of green,	
inirastructure;	blue arev, and areen vellow	
(g) extractive industry operations are avoided.	sido groy, and groon yonow.	
Note A visual impact accomment is undertaken in	AO1.6	
accordance with Planning scheme policy SC6.6 – Landscape	No clearing of native vegetation occurs on land	
values in order to satisfy performance outcomes.	with a slope greater than 1 in 6 (16.5%).	



AO1.7 Where for accommodation activities or reconfiguration of a lot in a High landscape value area, development demonstrates that the height, design, scale, positioning on-site, proposed construction materials and external finishes are compatible with the landscape values. Note - A visual impact assessment undertaken in accordance with Planning scheme policy SC6.6 – Landscape values may be required.	



Performance outcomes	Acceptable outcomes	
	AO1.8 Advertising devices do not occur.	
Development within the Medium landscape value area		



PO2	۵۵۶۱	N/A		
Development within Medium landscape value	Buildings and structures are not more than 8.5			
areas identified on the Landscape values overlay	metres and two storeys in height.			
maps contained in Schedule 2:				
(a) avoids detrimental impacts on the landscape	Note - Height is inclusive of the roof height.			
values of forested skylines, visible hillslopes,				
ridgelines, the coastal foreshore or the	AO2.2			
shoreline of other water bodies through the	Development is screened from view from roads or			
loss of vegetation;	other public places by an existing natural			
(b) is effectively screened from view from a road,	landform or an existing native vegetation buffer.			
lookout or other public place by an existing	A O 2 2			
natural landform or native vegetation, or will	AU2.3 Where development on land steeper than 1 in 6			
be effectively screened by native vegetation	(16.6%) cappot be avoided:			
Within 5 years of construction;	(a) development follows the natural: contours of			
(c) retains existing vegetation and incorporates	the site.			
vegetation and visually soften built form	(b) buildings are split level or suspended floor			
elements.	construction, or a combination of the two;			
(d) incorporates development of a scale design	(c) lightweight materials are used to areas with			
height, position on site, construction materials	suspended floors.			
and external finishes that are compatible with				
the landscape values of the locality;	Note - Examples of suitable lightweight materials include			
(e) avoids detrimental impacts on landscape	timber or fibre cement boards or sheeting for walls and factory treated metal sheeting for walls and roofs			
values and excessive changes to the natural				
landform as a result of the location, position	AO2.4			
on site, scale, design and alignment of	The external features, walls and roofs of buildings			
earthworks, roads, driveways, retaining walls	and structures have a subdued and non-reflective			
and other on-ground or in-ground	palette.			
Intrastructure;				
(f) avoids detrimental impacts on landscape	Note - Examples of suitable colours include shades of green,			
values and views as a result of the location,	blue grey, and green yellow.			
of telecommunications facilities electricity				
towers poles and lines and other tall	AO2.5			
infrastructure.	No clearing of native vegetation occurs on land			
(g) extractive industry operations are avoided, or	with a slope greater than 1 in 6 (16.6%).			
where they cannot be avoided, are screened	100.0			
from view.	AU2.6			
	Aaverusing aevices ao not occur.			
Note - A visual impact assessment is undertaken in				



accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.	



Development within a Scenic route buffer / view		
 PO3 Development within a Scenic route buffer / view corridor area as identified on the Landscape values overlay maps contained in Schedule 2: (a) retains visual access to views of the surrounding landscape, the sea and other water bodies; (b) retains existing vegetation and incorporates landscaping to visually screen and soften built form elements whilst not impeding distant views or view corridors; 	 AO3.1 Where within a Scenic route buffer / view corridor area, the height of buildings and structures is not more than identified within the acceptable outcomes of the applicable zone code. AO3.2 No clearing of native vegetation is undertaken within a Scenic route buffer area. AO3.3 Where within a Scenic route buffer / view corridor 	N/A



Performance outcomes	Acceptable outcomes	
 (c) incorporates building materials and external finishes that are compatible with the visual amenity and the landscape character; (d) minimises visual impacts on the setting and views in terms of: (i) the scale, height and setback of buildings; (ii) the extent of earthworks and impacts on the landform including the location and configuration of access roads and driveways; (iii) the scale, extent and visual prominence of advertising devices. Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes. 	area development is set back and screened from view from a scenic route by existing native vegetation with a width of at least 10 metres and landscaped in accordance with the requirements of the landscaping code. AO3.4 Development does not result in the replacement of, or creation of new, additional, or enlarged advertising devices.	N/A
Development within the Coastal scenery area		



r			
	PO4 The landscape values of the Coastal scenery zone as identified on the Landscape values overlay maps contained in Schedule 2 are managed to integrated and limit the visual impact of development. Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.	 A04.1 The dominance of the natural character of the coast is maintained or enhanced when viewed from the foreshore. A04.2 Where located adjacent to the foreshore buildings and structures are setback: (a) Where no adjoining development, a minimum of 50 metres from the coastal high water mark and the setback area is landscaped with a native vegetation buffer that has a minimum width of 25 metres; or (b) Where there is adjoining development, setbacks will be consistent with that of adjoining buildings and structures, but not less than 10 metres from the coastal high water mark. The setback area is landscaped in accordance with the requirements of the Landscaping code. A04.3 Where no adjoining development, a minimum of 6 metres from the coastar is landscaped in accordance with the requirements of the Landscaping code. 	N/A
		 (b) where there is adjoining development, setbacks will be consistent with that of adjoining buildings and structures. The setback area is landscaped in accordance with the requirements of the Landscaping code. (c) 	



Performance outcomes	Acceptable outcomes	
PO5 Development is to maximise opportunities to maintain and/or enhance natural landscape values through the maintenance and restoration of vegetated buffers between development and coastal waters, where practical.	AO5 No clearing of native vegetation is undertaken within a Coastal scenery area zone, except for exempt vegetation damage undertaken in accordance with the Vegetation management code	N/A
Note – A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in satisfaction of a performance outcome.		



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.



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- (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.



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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 significant	ce			
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. The development of a scale, is designed and located so that any impacts on matters of environmental significance are minimised. The extent of clearing is within the 700m2 afforded under the Conservation Zone and Cape Tribulation / Daintree Coast Local Plan Codes.		



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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: (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. The development of a scale, is designed and located so that any impacts on matters of environmental significance are minimised, by complying with the requirements of the AO (a-f). The extent of clearing is within the 700m2 afforded under the Conservation Zone and Cape Tribulation / Daintree Coast Local Plan Codes. The existing vegetation over the balance of the site (greater than 8Ha) is retained.
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: (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. The proposed development is setback more than 150m from the area of MSES - High ecological significance wetlands located on the site.





Performance outcomes	Acceptable outcomes	Applicant response
PO4 Wetland and wetland buffer areas are maintained, protected and restored.	AO4.1 Native vegetation within wetlands and wetland buffer areas is retained.	Complies. The development is setback more than 150m from the area of MSES - High ecological significance wetlands located on the site.
Note – Wetland buffer areas are identified in AO3.1.	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.	
PO5 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	Complies. The proposed development does not involve the introduction of non-native pest species.
	ecological integrity.	
Ecological connectivity		
PO6 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. The development of a scale, is designed and located so that any impacts on matters of environmental significance are minimised. The extent of clearing is within the 700m2 afforded under the Conservation Zone and Cape Tribulation / Daintree Coast Local Plan Codes. The existing vegetation over the balance of the site (greater than 8Ha) is retained.





Performance outcomes	Acceptable outcomes	Applicant response
PO7 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.	Complies. The development of a scale, is designed and located so that any impacts on matters of environmental significance are minimised.
	and AO7.2 Development does not encroach within 10 metres of existing riparian vegetation and watercourses.	The extent of clearing is within the 700m2 afforded under the Conservation Zone and Cape Tribulation / Daintree Coast Local Plan Codes. The existing vegetation over the balance of the site (greater than 8Ha) is retained.
Waterways in an urban area		
 PO8 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 	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 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.	N/A.
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.	Complies. Development does not occur on that part of the site 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.



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8.2.10 Transport network overlay code

8.2.10.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Transport network 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 within the Transport network overlay is identified on the Transport network (Road Hierarchy) overlay map and the Transport network (Pedestrian and Cycle) overlay map in Schedule 2 and includes the following sub-categories:
 - (a) Transport network (Road Hierarchy) overlay sub-categories:
 - (i) State controlled road sub-category;
 - (ii) Sub-arterial road sub-category;
 - (iii) Collector road sub-category;
 - (iv) Access road sub-category;
 - (v) Industrial road sub-category;
 - (vi) Major rural road sub-category;
 - (vii) Minor rural road sub-category;
 - (viii) Unformed road sub-category;
 - (ix) Major transport corridor buffer area sub-category.
 - (b) Transport network (Pedestrian and Cycle) overlay sub-categories:
 - (i) Principal route;
 - (ii) Future principal route;
 - (iii) District route;
 - (iv) Neighbourhood route;
 - (v) Strategic investigation route.



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8.2.10.2 Purpose

- (1) The purpose of the Transport network overlay code is to:
 - (a) implement the policy direction of the Strategic Framework, in particular:
 - (i) Theme 1: Settlement pattern Element 3.4.2 Urban settlement, Element 3.4.3 Activity centres;
 - (ii) Theme 6: Infrastructure and transport Element 3.9.4 Transport;
 - (b) enable an assessment of whether development is suitable on land within the Transport network overlay.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development provides for transport infrastructure (including active transport infrastructure);
 - (b) development contributes to a safe and efficient transport network;
 - (c) development supports the existing and future role and function of the transport network;
 - (d) development does not compromise the safety and efficiency of major transport infrastructure and facilities.

Criteria for assessment

Table 8.2.10.3 a - Transport network overlay code - assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		
PO1 Development supports the road hierarchy for the region. Note -A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	 AO1.1 Development is compatible with the intended role and function of the transport network as identified on the Transport network overlay maps contained in Schedule 2. AO1.2 Development does not compromise the safety and 	Complies. The proposed development is consistent with the road hierarchy (Access Road) for the road to the front of the subject premises (Buchannan Creek Road) as identified in the Transport Network Overlay mapping.



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Performance outcomes	Acceptable outcomes	Applicant response
	AO1.3 Development is designed to provide access via the lowest order road, where legal and practicable access can be provided to that road.	Complies. The site has one street frontage and access and that is to Buchannan Creek Road.
PO2 Transport infrastructure is provided in an integrated and timely manner. Note - A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	 AO2 Development provides infrastructure (including improvements to existing infrastructure) in accordance with: (a) the Transport network overlay maps contained in Schedule 2; (b) any relevant Local Plan. Note – The Translink Public Transport Infrastructure Manual provides guidance on the design of public transport facilities.	N/A
PO3 Development involving sensitive land uses within a major transport corridor buffer area is located, designed and maintained to avoid or mitigate adverse impacts on amenity for the sensitive land use.	AO3 No acceptable outcomes are prescribed. Note – Part 4.4 of the Queensland Development Code provides requirements for residential building design in a designated transport noise corridor.	N/A
PO4 Development does not compromise the intended role and function or safety and efficiency of major transport corridors. Note - A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	 AO4.1 Development is compatible with the role and function (including the future role and function) of major transport corridors. AO4.2 Direct access is not provided to a major transport corridor where legal and practical access from another road is available. 	N/A



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Performance outcomes	Acceptable outcomes	Applicant response
	 AO4.3 Intersection and access points associated with major transport corridors are located in accordance with: (a) the Transport network overlay maps contained in Schedule 2; and (b) any relevant Local Plan. AO4.4 The layout of development and the design of the associated access is compatible with existing and future boundaries of the major transport corridor or major transport facility. 	N/A
PO5 Development retains and enhances existing vegetation between a development and a major transport corridor, so as to provide screening to potential noise, dust, odour and visual impacts emanating from the corridor.	AO5 No acceptable outcomes are prescribed.	N/A
Pedestrian and cycle network		
PO6 Lot reconfiguration assists in the implementation of the pedestrian and cycle movement network to achieve safe, attractive and efficient pedestrian and cycle networks	 AO6.1 Where a lot is subject to, or adjacent to an element of the pedestrian and cycle Movement network (identified on the Transport network overlay maps contained in Schedule 2) the specific location of this element of the pedestrian and cycle network is incorporated in the design of the lot layout. AO6.2 The element of the pedestrian and cycle network is constructed in accordance with the Design Guidelines set out in Sections D4 and D5 of the Planning scheme policy SC6.5 – FNQROC Regional Development 	N/A. The proposed development is consistent with the pedestrian and cycle network (neighbourhood route) for the road to the front of the subject premises (Buchannan Creek Road) as identified in the Transport Network Overlay mapping.




9.3.8 Dwelling house code

Performance outcomes	Acceptable outcomes	Comment
For self-assessable and assessable development		
 PO1 Secondary dwellings: (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. 	 AO1 The secondary dwelling: (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. 	N/A
PO2 Resident's vehicles are accommodated on- site.	 AO2 Development provides a minimum number of onsite car parking spaces comprising: (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. 	Complies. The proposed development provides the required number of spaces (2).
Performance outcomes	Acceptable outcomes	
 PO3 Development is of a bulk and scale that: (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. The proposed development meets the acceptable outcome for building height in the applicable Zone code associated with the site. No buildings and structures are more than 8.5 metres in height and two storeys.



9.4.1 Access, parking and servicing code

Performance outcomes	Acceptable outcomes		
For self-assessable and assessable development	nt		
 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: (a) the desired character of the area; (b) the nature of the particular use and its specific characteristics and scale; (c) the number of employees and the likely number of visitors to the site; (d) the level of local accessibility; (e) the nature and frequency of any public transport serving the area; 	 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 purposes, the display of products or rented/sub-leased.	Complies. The proposed development provides the required number of car parking spaces – Dwelling house – 2 spaces.	
Performance outcomes	Acceptable outcomes		
 of an existing building and the previous requirements for car parking for the building (g) whether or not the use involves a heritage building or place of local significance; (h) whether or not the proposed use involves the retention of significant vegetation. 	 AO1.3 Parking for motorcycles is substituted for ordinary vehicle parking to a maximum level of 2% of total ordinary vehicle parking. 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. 	N/A	



|--|



PO3

Access points are designed and constructed:

- (a) to operate safely and efficiently;
- (b) to accommodate the anticipated type and volume of vehicles
- (c) to provide for shared vehicle (including cyclists) and pedestrian use, where appropriate;
- (d) so that they do not impede traffic or pedestrian movement on the adjacent road area;
- (e) so that they do not adversely impact upon existing intersections or future road or intersection improvements;
- (f) so that they do not adversely impact current and future on-street parking arrangements;
- (g) so that they do not adversely impact on existing services within the road reserve adjacent to the site:
- (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).

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.

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.

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 in 6 (16.6%) prior to this area, for a distance of at least 5 metres;
- (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;

Performance outcomes

Acceptable outcomes

Compiles. The proposed vehicle access to the dwelling house is via one access and driveway (approximately 80m in length). It will be constructed and maintained to comply with the relevant requirements of Planning Scheme Policy 5 – FNQROC Development Manual. The proposed driveway will be also constructed and maintained to minimise erosion, particularly in the wet season, minimise cut and fill, follow the natural contours of the site.

DOUGLAS SHIRE PLANNING SCHEME		
	 (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; (e) designed to include all necessary associated drainage that intercepts and directs storm water runoff to the storm water drainage system. 	
	AO3.4 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.	
PO4 Sufficient on-site wheel chair accessible car parking spaces are provided and are identified and reserved for such purposes.	AO4 The number of on-site wheel chair accessible car parking spaces complies with the rates specified in AS2890 Parking Facilities.	N/A
PO5 Access for people with disabilities is provided to the building from the parking area and from the street.	AO5 Access for people with disabilities is provided in accordance with the relevant Australian Standard.	N/A
PO6 Sufficient on-site bicycle parking is provided to cater for the anticipated demand generated by the development.	AO6 The number of on-site bicycle parking spaces complies with the rates specified in Table 9.4.1.3.b.	N/A



 PO7 Development provides secure and convenient bicycle parking which: (a) for visitors is obvious and located close to the building's main entrance; (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; (c) is easily and safely accessible from outside the site. 	 AO7.1 Development provides bicycle parking spaces for employees which are co-located with end-of-trip facilities (shower cubicles and lockers); AO7.2 Development ensures that the location of visitor bicycle parking is discernible either by direct view or using signs from the street. AO7.3 Development provides visitor bicycle parking which does not impede pedestrian movement 	N/A	
 PO8 Development provides walking and cycle routes through the site which: (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. 	 AO8 Development provides walking and cycle routes which are constructed on the carriageway or through the site to: (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. 	N/A	
PO9 Access, internal circulation and on-site parking for service vehicles are designed and constructed: (a) in accordance with relevant standards;	AO9.1 Access driveways, vehicle manoeuvring and on- site parking for service vehicles are designed and constructed in accordance with AS2890.1 and	N/A	
Performance outcomes	Acceptable outcomes		



(b) so that they do not interfere with the amenity of the surrounding area;(c) so that they allow for the safe and convenient movement of pedestrians, cyclists and other vehicles.	AS2890.2. AO9.2 Service and loading areas are contained fully within the site. AO9.3 The movement of service vehicles and service operations are designed so they: (a) do not impede access to parking spaces; (b) do not impede vehicle or pedestrian traffic movement.	
PO10 Sufficient queuing and set down areas are provided to accommodate the demand generated by the development.	 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: (a) car wash; (b) child care centre; (c) educational establishment where for a school; (d) food and drink outlet, where including a drive-through facility; (e) hardware and trade supplies, where including a drive-through facility; (f) hotel, where including a drive-through facility; (g) service station. AO10.2 Queuing and set-down areas are designed and constructed in accordance with AS2890.1.	N/A

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)
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



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	
For self-assessable and assessable development		Comment
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.	N/A. No works on a local government road are proposed.
	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 	



Performance outcomes	Acceptable outcomes	
	in the Planning scheme policy SC5 – FNQROC Regional Development Manual, and is not less than a 1.2 metre section.	
	 AO1.4 Where existing footpaths are damaged as a result of development, footpaths are reinstated ensuring: (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. Note - Figure 9.4.5.3.a provides guidance on meeting the outcomes. AO1.5 Decks, verandahs, stairs, posts and other structures located in the road reserve do not restrict or impede pedestrian movement on 	
Accessibility structures	toopauls of change the level of the load verges.	
	4004	
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. Note – Accessibility features are those features required to ensure access to premises is provided for people of all abilities and include ramps and lifts.	AC2.1 Accessibility structures are not located within the road reserve. AC2.2 Accessibility structures are designed in accordance with AS1428.3. AC2.3 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.	
Water supply		



PO3 An adequate, safe and reliable supply of potable, fire fighting and general use water is provided.	A03.1 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; or	Complies. On site water storage tank/s are proposed to be provided to service the dwelling house in accordance with the requirements of AO3.2.
	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	



Performance outcomes	Acceptable outcomes	
	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</i> <i>Protection Policy (Water) 1997</i> and the proposed on site effluent disposal system is designed in accordance with the <i>Plumbing and Drainage Act</i> <i>(2002).</i>	Complies. The onsite wastewater treatment and disposal system has been designed by Earth Test in accordance with the requirements of AO4.2. The onsite wastewater treatment and disposal system report and design is contained in Attachment 5.
Stormwater quality		



PO5 Development is planned, designed, constructed and operated to avoid or minimise adverse impacts on stormwater quality in natural and developed catchments by: (a) achieving stormwater quality objectives; (b) protecting water environmental values; (c) maintaining waterway hydrology. (c) maintaining waterway hydrology.	 AO5.1 A connection is provided from the premises to Council's drainage system; or AO5.2 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. AO5.3 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: (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. AO5.4 Erosion and sediment control practices are designed, installed, constructed, monitored, maintained, and carried out in accordance with an 	Complies. The proposed development is designed and located to ensure the proposed dwelling is not impacted by or will interfere with any drainage across the premises. It is noted, no Council drainage system exists to the road to front of the site.
	 maintained, and carried out in accordance with an erosion and sediment control plan. AO5.5 Development incorporates stormwater flow 	



Performance outcomes	Acceptable outcomes	
	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.	
	Development Manual provides guidance on soil and water control measures to meet the requirements of the <i>Environmental Protection Act 1994.</i>	
	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.	
Non-tidal artificial waterways	·	



 PO6 Development involving non-tidal artificial waterways is planned, designed, constructed and operated to: (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. 	 AO6.1 Development involving non-tidal artificial waterways ensures: (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. AO6.2 Non-tidal artificial waterways are located: (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. 	N/A
	 or connected to a tidal waterway by means of a weir, lock, pumping system or similar ensures: (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. 	
	 AO6.4 Non-tidal artificial waterways are designed and managed for any of the following end-use purposes: (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	
(b) stormwater harvesting plan as part of an	
integrated water cycle management plan, or	
(d) aquatic habitat.	



Performance outcomes	Acceptable outcomes	
	 AO6.5 The end-use purpose of the non-tidal artificial waterway is designed and operated in a way that protects water environmental values. AO6.6 Monitoring and maintenance programs adaptively manage water quality to achieve relevant water quality objectives downstream of the waterway. AO6.7 Aquatic weeds are managed to achieve a low percentage of coverage of the water surface and posts and posts and posts are managed. 	N/A
	through design and maintenance.	
Wastewater discharge		



 PO7 Discharge of wastewater to waterways, or off site: (a) meets best practice environmental management; (b) is treated to: (i) meet water quality objectives for its receiving waters; (ii) avoid adverse impact on ecosystem health or waterway health; (iii) maintain ecological processes, riparian vegetation and waterway integrity; (iv) offset impacts on high ecological value waters. 	 AO7.1 A wastewater management plan is prepared and addresses: (a) wastewater type; (b) climatic conditions; (c) water quality objectives; (d) best practice environmental management. AO7.2 The waste water management plan is managed in accordance with a waste management hierarchy that: (a) avoids wastewater discharge to waterways; or (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. 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. AO7.4 Development in coastal catchments avoids or minimises and appropriately manages soil disturbance or altering natural hydrology and: (a) avoids lowering ground water levels where potential or actual acid sulfate soils are present; (b) manages wastewater so that: (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; (ii) holding times of neutralised wastewater ensures the flocculation and removal of 	N/A
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(iii)	visible iron floc is not present in any	



Performance outcomes	Acceptable outcomes	
	 discharge; (iv) precipitated iron floc is contained and disposed of; (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. 	
Electricity supply		
PO8 Development is provided with a source of power that will meet its energy needs.	AO8.1 A connection is provided from the premises to the electricity distribution network; or 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. Note - Areas north of the Daintree River have a different standard.	Complies. A connection is provided from the premises 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.



PO9 Development incorporating pad-mount electricity infrastructure does not cause an adverse impact on amenity.	 AO9.1 Pad-mount electricity infrastructure is: (a) not located in land for open space or sport and recreation purposes; (b) screened from view by landscaping or fencing; (c) accessible for maintenance. AO9.2 Pad-mount electricity infrastructure within a building, in a Town Centre is designed and located to enable an active street frontage. Note – Pad-mounts in buildings in activity centres should not be located on the street frontage. 	
Telecommunications		
PO10 Development is connected to a telecommunications service approved by the relevant telecommunication regulatory authority.	AO10 The development is connected to telecommunications infrastructure in accordance with the standards of the relevant regulatory authority.	Complies. The development is connected to telecommunications infrastructure in accordance with the standards of the relevant regulatory authority.
PO11 Provision is made for future telecommunications services (e.g. fibre optic cable).	AO11 Conduits are provided in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual.	N/A
Road construction		
PO12 The road to the frontage of the premises is constructed to provide for the safe and efficient movement of: (a) pedestrians and cyclists to and from the site;	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	N/A



Performance outcomes	Acceptable outcomes	
 (b) pedestrians and cyclists adjacent to the site; (c) vehicles on the road adjacent to the site; (d) vehicles to and from the site; (e) emergency vehicles. 	Manual, for the particular class of road, as identified in the road hierarchy. AO12.2 There is existing road, kerb and channel for the full road frontage of the site.	
	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.	
Alterations and repairs to public utility services		
PO13 Infrastructure is integrated with, and efficiently extends, existing networks.	AO13 Development is designed to allow for efficient connection to existing infrastructure networks.	Complies. The proposed development is designed to allow for efficient connection to existing infrastructure networks.
PO14 Development and works do not affect the efficient functioning of public utility mains, services or installations.	 AO14.1 Public utility mains, services and installations are not required to be altered or repaired as a result of the development; or 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.	N/A. Any public utility mains, services and installations are not required to be altered or repaired as a result of the development.
Construction management		



PO15 Work is undertaken in a manner which minimises adverse impacts on vegetation that is to be retained.	 AO15 Works include, at a minimum: (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. 	Complies. Work will be undertaken in a manner which minimises adverse impacts on vegetation that is to be retained in accordance with the requirements of the AO.
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.	N/A Existing infrastructure is not damaged by construction activities.



Performance outcomes	Acceptable outcomes	
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.	N/A
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.	N/A
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. 	N/A



PO20 Hydrants are suitable identified so that fire services can locate them at all hours.	AO20 No acceptable outcomes are prescribed.	N/A
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'.		



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

Issue	Design objectives
Drainage control (Temporary drainage works)	 (a) Design life and design storm for temporary drainage works: (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)	 (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)	 (a) Determine appropriate sediment control measures using: (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: (i) design storm for sediment basin sizing is 80th% five-day event or similar. (c) Site discharge during sediment basin dewatering: (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)	 (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)	(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 obje	ctives			Application
Minimum rec unmitigated	ductions in me development (an annual Ic (%)	oad from	
Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5mm	
				Development for urban purposes
80 60	60	40	90	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







9.4.4 Filling and excavation code

9.4.4.1 Application

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

Note—This code does not apply to building work that is regulated under the Building Code of Australia.

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

9.4.4.2 Purpose

- (1) The purpose of the Filling and excavation code is to assess the suitability of development for filling or excavation.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) filling or excavation does not impact on the character or amenity of the site and surrounding areas;
 - (b) filling and excavation does not adversely impact on the environment;
 - (c) filling and excavation does not impact on water quality or drainage of upstream, downstream or adjoining properties;
 - (d) filling and excavation is designed to be fit for purpose and does not create land stability issues;
 - (e) filling and excavation works do not involve complex engineering solutions.

9.4.4.3 Criteria for assessment

Table 9.4.4.3.a - Filling and excavation code - for self-assessable and assessable development

Performance outcomes	Acceptable outcomes	
For self-assessable and assessable development		Comment
Filling and excavation - General		





Performance outcomes	Acceptable outcomes	
	 AO1.4 Topsoil from the site is retained from cuttings and reused on benches/terraces. AO1.5 No crest of any cut or toe of any fill, or any part of any retaining wall or structure is closer than 600mm to any boundary of the property, unless the prior written approval of the adjoining landowner has been obtained. AO1.6 Non-retained cut and/or fill on slopes are stabilised and protected against scour and erosion by suitable measures, such as grassing, landscaping or other protective/aesthetic measures. 	N/A
Visual Impact and Site Stability		
PO2 Filling and excavation are carried out in such a manner that the visual/scenic amenity of the area and the privacy and stability of adjoining properties is not compromised.	 AO2.1 The extent of filling and excavation does not exceed 40% of the site area, or 500m² whichever is the lesser, except that AO2.1 does not apply to reconfiguration of 5 lots or more. AO2.2 Filling and excavation does not occur within 2 metres of the site boundary. 	Complies. Some vegetation clearing is required to facilitate the construction of the proposed Dwelling House will be kept to the minimum extent possible and will not exceed 700m2 (afforded under the Zone and Local Plan Codes), to ensure that any impacts on matters of environmental significance are minimised. No extent of minor filling and excavation occur within 2 metres of the site boundary.
Flooding and drainage		



PO3 Filling and excavation does not result in a change to the run off characteristics of a site which then have a detrimental impact on the site or nearby land or adjacent road reserves.	 AO3.1 Filling and excavation does not result in the ponding of water on a site or adjacent land or road reserves. AO3.2 Filling and excavation does not result in an increase in the flow of water across a site or any other land or road reserves. AO3.3 Filling and excavation does not result in an increase in the volume of water or concentration of water in a watercourse and overland flow paths. AO3.4 Filling and excavation complies with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.	Complies. Any minor filling and excavation required will meet the requirements of AO3.1-3.4.
Water quality		
PO4 Filling and excavation does not result in a reduction of the water quality of receiving waters.	AO4 Water quality is maintained to comply with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.	Complies. Ant minor filling and excavation required will not result in a reduction of the water quality of receiving waters.



Performance outcomes	Acceptable outcomes		
Infrastructure			
PO5 Excavation and filling does not impact on Public Utilities.	AO5 Excavation and filling is clear of the zone of influence of public utilities.	Complies. No excavation and filling is required within the zone of influence of public utilities.	



9.4.6 Landscaping code

9.4.6.1 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) 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.

9.4.6.2 Purpose

- (1) The purpose of the Landscaping code is to assess the landscaping aspects of a development.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) The tropical, lush landscape character of the region is retained, promoted and enhanced through high quality landscape works;
 - (b) The natural environment of the region is enhanced;
 - (c) The visual quality, amenity and identity of the region is enhanced;
 - (d) Attractive streetscapes and public places are created through landscape design;
 - (e) As far as practical, existing vegetation on site is retained, and protected during works and integrated with the built environment;
 - (f) Landscaping is provided to enhance the tropical landscape character of development and the region;
 - (g) Landscaping is functional, durable, contributes to passive energy conservation and provides for the efficient use of water and ease of ongoing maintenance;
 - (h) Landscaping takes into account utility service protection;
 - (i) Weed species and invasive species are eliminated from development sites;
 - (j) Landscape design enhances personal safety and incorporates CPTED principles.

9.4.6.3 Criteria for assessment

Table 9.4.6.3.a - Landscaping code -assessable development

Performance outcomes	Acceptable outcomes	
For self-assessable and assessable development		Comment
Landscape design		



 PO1 Development provides landscaping that contributes to and creates a high quality landscape character for the site, street and local areas of the Shire by: (a) promoting the Shire's character as a tropical environment; (b) softening the built form of development; (c) enhancing the appearance of the development from within and outside the development and makes a positive contribution to the streetscape; (d) screening the view of buildings, structures, open storage areas, service equipment, machinery plant and the like from public places, residences and other sensitive development; (e) where necessary, ensuring the privacy of 	 AO1 Development provides landscaping: (a) in accordance with the minimum area, dimensions and other requirements of applicable development codes; (b) that is designed and planned in a way that meets the guidelines for landscaping outlined in Planning Scheme Policy SC6.7 – Landscaping; (c) that is carried out and maintained in accordance with a landscaping plan that meets the guidelines for landscaping outlined in Planning Scheme Policy SC6.7 – Landscaping. Note - Planning scheme policy SC6.7 – Landscaping. Note - Planning scheme policy SC6.7 – Landscaping provides guidance on meeting the outcomes of this code. A landscape plan submitted for approval in accordance with the Planning policy is one way to achieve this outcome.	Complies. Any landscaping associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.
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Performance outcomes	Acceptable outcomes	
 habitable rooms and private outdoor recreation areas; (f) contributing to a comfortable living environment and improved energy efficiency, by providing shade to reduce glare and heat absorption and re-radiation from buildings, parking areas and other hard surfaces; (g) ensuring private outdoor recreation space is useable; (h) providing long term soil erosion protection; (i) providing a safe environment; (j) integrating existing vegetation and other natural features of the premises into the development; (k) not adversely affecting vehicular and pedestrian sightlines and road safety. 		
For assessable development		
PO2 Landscaping contributes to a sense of place, is functional to the surroundings and enhances the streetscape and visual appearance of the development.	 AO2.1 No acceptable outcomes are specified. Note - Landscaping is in accordance with the requirements specified in Planning scheme policy SC6.7 – Landscaping. AO2.2 Tropical urbanism is incorporated into building design. Note – 'Tropical urbanism' includes many things such as green walls, green roofs, podium planting and vegetation incorporated into the design of a building. 	Complies. Any landscaping associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.



PO3 Development provides landscaping that is , as far as practical, consistent with the existing desirable landscape character of the area and protects trees, vegetation and other features of ecological, recreational, aesthetic and cultural value.	 AO3.1 Existing vegetation on site is retained and incorporated into the site design, wherever possible, utilising the methodologies and principles outline in AS4970-2009 Protection of Trees on Development Sites. AO3.2 Mature vegetation on the site that is removed or damaged during development is replaced with advanced species. AO3.3 Where there is an existing landscape character in a street or locality which results from existing vegetation, similar species are incorporated into new development. AO3.4 Street trees are species which enhance the landscape character of the streetscape, with species chosen from the Planning scheme policy	Complies. Existing vegetation (greater than 8Ha) is proposed to be retained in the proposed development.
P04	SC6.7 – Landscaping.	
PO4 Plant species are selected with consideration to the scale and form of development, screening, buffering, streetscape, shading and the locality of	Species are selected in accordance with Planning scheme policy SC6.7 – Landscaping.	complies. Any landscaping (including species) associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.



Performance outcomes	Acceptable outcomes	
the area.		
PO5 Shade planting is provided in car parking areas where uncovered or open, and adjacent to driveways and internal roadways.	AO5 Species are selected in accordance with Planning scheme policy SC6.7 – Landscaping.	Complies. Any landscaping (including species) associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.
PO6 Landscaped areas are designed in order to allow for efficient maintenance.	AO6.1 A maintenance program is undertaken in accordance with Planning scheme policy SC6.7 – Landscaping.	Complies. Any landscaping (including maintenance) associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.
	AO6.2 Tree maintenance is to have regard to the 'Safe Useful Life Expectancy of Trees (SULE). Note – It may be more appropriate to replace trees with a SULE of less than 20 years (as an example), and replant with younger healthy species.	
PO7 Podium planting is provided with appropriate species for long term survival and ease of maintenance, with beds capable of proper drainage.	 AO7.1 Podium planting beds are provided with irrigation and are connected to stormwater infrastructure to permit flush out. AO7.2 Species of plants are selected for long term performance designed to suit the degree of access to podiums and roof tops for maintenance. 	N/A
PO8 Development provides for the removal of all weed and invasive species and implement on-going measures to ensure that weeds and invasive species do not reinfest the site and nearby premises.	AO8 Weed and invasive species detected on a development site are removed in accordance with a management plan prepared by an appropriately qualified person.	Complies. Any weed and invasive species detected on the premises will be removed.



PO9 The landscape design enhances personal safety and reduces the potential for crime and vandalism.	AO9 No acceptable outcomes are specified. Note - Planning scheme policy SC6.3 – Crime prevention through environmental design (CPTED) provides guidance on meeting this outcome.	N/A.
PO10 The location and type of plant species does not adversely affect the function and accessibility of services and facilities and service areas.	AO10 Species are selected in accordance with Planning scheme policy SC6.7 – Landscaping.	Complies. Any landscaping (including species) associated with the proposed development will comprise of species selected in accordance with Planning scheme policy SC6.7 – Landscaping.

Attachment 5 - Site Classification and Wastewater Management System report prepared by Consoil Solutions Pty. Ltd. T/A Earth Test QBCC #. 15092731



Site Classification

And

Wastewater Management System

For

M&K McGill

At

Lot 4 Buchanan Creek Road

Cow Bay

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 M&K McGill to assess, design and report on Site Classification and a Domestic Wastewater Management System at Lot 4 Buchanan Creek Road, Cow Bay.

Real Property Description:-

Lot 4, on RP739768

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 October 2020.

SITE FACTORS:

The site was identified by its site address a photo was taken to confirm the sites identity. The Lot has an area of 8.313 hectares and is predominantly covered with extensive rainforest. The water supply to the site onsite roof rainwater.

No rock outcrops where noted at the site. An intermittent watercourse flows on the eastern side of the property.

Two Dynamic Cone Penetrometer tests were performed at locations DCP1 & DCP2, one borehole BH1 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.



BH1 being sampled at Lot 4 Buchanan Creek Road, Cow Bay



SITE INVESTIGATION REPORT

BOREHOLE LOG

CLIENT: M&K M	ſcGill.	DAT	E SAMPLED: 19/10/2020
PROJECT: Lot 4 H Bay.	Buchanan Creek Road, Cow	Sam	pled by: G. Negri
REPORT DATE:	28/10/2020		
BOREHOLE No:	BH1		
DEPTH (m)	DESCRIPTION		COMMENTS
0.0-1.5	Red-Brown Silty-Clay		Disturbed sample 0.6- 0.9m. Watertable not encountered



ATTERBERG LIMITS TEST REPORT

CLIENT: M&K McGill	SAMPLE No: SI 678-20
PROJECT: Lot 4 Buchanan Creek Road, Cow Bay	DATE SAMPLED: 19/10/2020
SAMPLE DETAILS: BH1 0.6-0.9m	Sampled by: G. Negri
REPORT DATE: 28/10/2020	Tested By: P. Weigand

TEST METHOD	RESULT
Liquid Limit: AS 1289.3.9.2	50%
Plastic Limit: AS 1289.3.2.1	28%
Plasticity Index: AS 1289.3.3.1	22%
Linear Shrinkage: AS 1289.3.4.1	12.0%
Length Of Mould:	250.2mm
Cracking, Crumbling, Curling, Number Of Breaks:	One Break
Sample History:	Oven Dried <50C
Preparation Method:	Dry Sieved
Insitu Moisture Content:	22.3%
% Passing 0.075mm:	



DYNAMIC CONE PENETROMETER REPORT AS 1289.6.3.2

CLIENT: M&K McGill

SAMPLE No: SI 678-20

PROJECT: Lot 4 Buchanan Creek Road, Cow Bay.

Tested By: G. Negri

DATE SAMPLED: 19/10/2020

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

REPORT DATE: 28/10/2020

DFPTH	Site: DCP1	Site: DCP2
(Metres)	No Blows	No Blows
0.0 - 0.1	4	4
0.1 - 0.2	5	5
0.2 - 0.3	4	4
0.2 - 0.4	3	4
0.4 - 0.5	3	3
0.4 0.0	4	3
0.0 = 0.0	4	3
0.0 = 0.7	4	3
	5	4
0.8 = 0.9	4	4
10 - 11		
1.0 = 1.1 1.1 = 1.2		
1.1 = 1.2 1.2 = 1.3		
1.2 = 1.3 1.3 = 1.4		
1.0 = 1.4 1.4 - 1.5		
15 - 16		
1.3 - 1.0		
1.0 - 1.7 17 19		
1.7 - 1.8		
1.0 - 1.9 19 - 2.0		



SITE CLASSIFICATION

Lot 4 Buchanan Creek Road, Cow Bay.

"Abnormal moisture conditions (AS2870-2011 Clause 1.3.3)" will exist at the site due to the future removal of trees

The Dynamic Cone Penetrometer test results indicate adequate allowable bearing pressure to 1.5m.

The Atterberg Limits test results indicate a moderately reactive soil.

Due to the presence of "Abnormal moisture conditions", the site must be classified <u>CLASS-</u> <u>"P</u>".

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.

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SITE AND SOIL EVALUATION

Lot 4 Buchanan Creek Road, Cow Bay.

The site and soil evaluation carried out on 19/10/2020 provided the following results.

Site Assessment

Result
<1 degree
Linear-Planar
East
Limited – Rainforest
Not noted.
Extensive
Extensive forest.
As shown on site plan.
Not encountered during investigation.
Not encountered during investigation.
Not likely.
Not found
Firm, Dry

Soil Assessment

Soil Property	<u>Result</u>
Colour	Red-Brown
Texture	Clay-Loam
Structure	Moderate
Coarse Fragments	Nil
Measured Permeability Ksat (m/d)	Indicative permeability 0.5-1.5
Dispersion	Slakes
Soil Category	4
Resultant Design Load Rate, DLR (mm/day)	20



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 four (4) persons has been chosen for the proposed two bedroom dwelling.

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

Standard water-reduction fixtures <u>must</u> 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 (4 persons @ 150 L/person/day) will be 600 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 / (DLRxW)

Where:

L = length in m Q = design daily flow in L/day DLR = Design Loading Rate in mm/d W = Width in m

L = 600/(20*2.35)

= 12.6m.

<u>Use one 12.6m long by 2.35m wide Advanced Enviro-Septic bed.</u> 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 configurations of Advanced Enviro-Septic® require a minimum of 150mm of system sand surrounding the circumference of the pipe. This sand, typically gravelly coarse sand, must adhere to the following percentage and quality restrictions.

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 will pass requirements please contact Earth Test for further advice.



SYSTEM INSTALLATION

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.

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Consoil Solutions Pty. Ltd. T/A Earth Test QBCC #. 15092731 <u>SITE PLAN</u> <u>Lot 4 Buchanan Creek Road, Cow Bay.</u> <u>NOT TO SCALE</u>











ADVANCED ENVIRO-SEPTIC[™]

Advanced Enviro-septic Design Calculator V8.5

Site Address Lo	ot 4 Buchanan Creek Road, Cow Bay			State	QLD	Post Code	
Client Name Mo	&K McGill						
Designers Nomo Ea	urth Test	Designers Ph	1	409547	34	Number	15092731
Plumber		Plumber Ph				Plumb / Drainer	
Council D		Number Designers AE	s			Lic Number	20/10/20
Area	ouglas Shire Council	Cert Number	:			Date	28/10/20
This	Calculator is a guide only, receiving soil classification, surface	water, water t	ables a	nd all other s	ite constraints	s addressed by the	qualified design
meter loadin	System Designers site and soil calculation data entry	20	~	This design	IMPOR	TANT NOTES	
incici ioaum	ig rate, 50 for Advanced Secondary of 50 Secondary	30		This design	is joi un A	DVANCED SE	CONDART Sy
	Is this a new installation Y or N	У	>>	Minimun si	ngle vent size	is 80mm or 2 x 50	mm house vents
	Number of person	4		a septic tan	x outlet filter i	is NOT RECOMM	IENDED
	Daily Design Flow Allowance Litre/Person/Day	150			14 6 .	1 150 :	
	Number of rows required to suit site constrants	2	>>	The maximum	n lth of a sing	gie AES pipe run	is 50 meters
Soil Categor	ry as established by site and soil evaluation. CATEGORY	4	>>	Catagory mag	y require desi	gn considerations.	Ref AS1547
Design Loa	ading Rate based on site & soil evaluation DLR (mm/day)	20	>>	Soil condition	ning may be r	necessary. Ref AS1	547 & Comment
	Bore log depth below system Basel area	1400	>> 1	Min depth be	low basel area	a is 600 mm to esta	blish water table
Enter Sys	tem footprint Slope in % for standard AES systems to calculat	1	>>	Some Counc	ils have minii	mum falls to Land	application are
Is t	this design a gravity system with no outlet filter? Y or N	у	>>	A House Ve	nt & LOW V	ENT required on	this system
P	LEASE CHECK YOU HAVE FALL FROM TANK TO AES	SYSTEM PIP	ES				
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