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APPENDICES

Appendix A: DA form 1

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1.0 INTRODUCTION

This town planning report has been prepared on behalf of the Applicants, F.R. Coulthard & C.A Coulthard, in support of a development application seeking a Development Permit for Reconfiguring a Lot (1 Lot into 22 Lots & New Road) on land at described as Lot 51 on SP168537.

To assist in Council's determination of this development application, this planning report covers the following matters:

Section 2:- A site description including the site characteristics and its immediate surrounds.

Section 3:- A detailed description of the development proposal.

Section 4:- A review of the relevant legislative provisions.

Section 5:- An assessment of the proposal against the relevant code provisions of the Douglas

Shire Planning Scheme 2018 v1.0.

The development application is made in accordance with section 51 of the Planning Act 2016 and contains the mandatory supporting information specified in the applicable DA Form 1, included in *Appendix A*. The application is subject to code assessment and therefore public notification is not required.

The facts and circumstances relied upon in the preparation of this report are current and relevant as at May 2021.



2.0 THE SITE

2.1 SITE DESCRIPTION

The land subject to this application is summarised in the following table:

Site Address	2 Andrews Street, Newell Beach
Property Description	Lot 51 on SP168537
Site Area	37.927ha
Easement and Encumbrances	 Emt's C & D on RP890698: In gross to Council for drainage purposes Emt A on SP174877: In gross to Council for drainage purposed
Registered Land Owner	F.R. Coulthard & C.B. Coulthard

The subject land is located within the Newell Beach Locality. Newell consists predominantly of older-stock detached residential housing. *Figure 1* below shows depicts the site and the surrounding locality, while *Figure 2* depicts the area of the site subject to the application.



Figure 1: Queensland Globe Aerial image



Figure 2: Queensland Globe Aerial image

2.2 SITE CHARACTERISTICS AND SURROUNDS

The site is clear of vegetation and is utilised for sugarcane production. Land adjoining the existing residential development is suitable for residential development. The area of land subject to the residential development adjoins existing residential development that fronts Coulthard Close to the north and Andrews Street to the east.

Basic infrastructure such as water, electricity and telecommunications are located within close proximity of the site being readily available as detailed in the engineering investigation undertaken by Civil Walker contained with Appendix D. Connection to the required services will be detailed in the subsequent Operational Works Application.

Having regard to the above features of the surrounding locality, it is considered that the subject proposal, as outlined in this report, would undoubtedly be in keeping with the local character of the area.

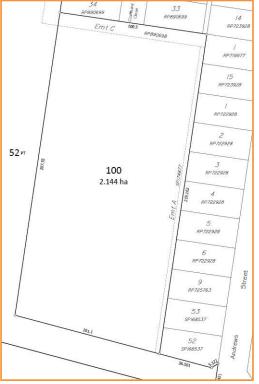


3.0 THE PROPOSAL

Approval of the Development Application will authorise a Development Permit for the Reconfiguration of a Lot, of the existing allotment (Lot 51 on SP168537) to create 22 residential allotments, and new road.

The proposed development will be undertaken in two (2) stages with Stage 1 being for management purposes excising the residential zoned land from the rural land holding as detailed within proposal 34678/003A and as depicted *Figure 3* below. Access to the rural land holding will be continue to be via Andrews Street. No works will be required to be undertaken for Stage 1 of the development.

Stage 2 of the development will be for the further reconfiguration of the residential zoned land into 21 lots and new road as detailed in proposal plan 34678/004B contained within *Appendix F* and as depicted in *Figure 4* below. The proposed reconfiguration essentially duplicates the previously developed land within the northern region of Coulthard Close.



21 1194m² 1281m² 20 813m² 872m² 19 14.5m Wide 813m² RP722928 872m² 18 813m² 4 872m² 52 PT Road 17 813m² 16 813m² 15 813m² 872m² 14 840m² 8 865m² 13 9 RP725763 10 965m² 53 SP168537

Figure 3: Extract from Proposal Plan 34678/003A

Figure 4: Extract from Proposal Plan 34678/004B

The proposed Reconfiguring of a Lot is considered to be the most practical configuration given the characteristics of the site and surrounding development. The proposed reconfiguration creates lots of regular shape with areas ranging from 813m^2 to $1,281\text{m}^2$. While the proposed lots have areas less than that specified for that of the land contained within Low Density Residential Zone not serviced by reticulated sewer, the proposed lots have sufficient area and dimensions to accommodate a suitable building envelope and onsite septic disposal systems. The onsite disposal assessment prepared by the Dirt Professionals included within *Appendix C*, confirms that the proposed lots are of sufficient area to accommodate onsite disposal systems treating to advanced secondary standard utilising a trench system.



The proposed allotments will be provided connections to the required amenities and utilities, including electricity, telecommunications, town water supply and legal points of stormwater discharge as required by Council and the FNQROC Development Manual. The Engineering Report prepared by Civil Walker included within *Appendix D* provides an initial assessment demonstrating that the proposed development can be appropriately serviced. Connection to the required services will be detailed in the subsequent Operational Works Application.

Each of the proposed allotments will incorporate direct road frontage and access onto the proposed new internal road. Overall a high standard of residential amenity is anticipated, characterised by convenience, accessibility, safety, privacy, quality design and integration with surrounds.

The proposed reconfiguration layout allows for the efficient expansion of urban development within the area. In general, the proposed development is compatible with the surrounding land uses and natural features located on and adjacent to the subject site. It is anticipated that approval of the proposed subdivision will not impact upon the environmental, human or social aspects of the surrounding area.



4.0 RELEVANT LEGISLATION

4.1 THE PLANNING ACT 2016

The *Planning Act 2016* provides the framework for coordinating local, regional and state planning. Given the nature of the development, the application requires assessment against this legislation.

4.2 STATE ASSESSMENT AND REFERRALS

Schedule 10 of the Planning Regulation 2017 outlines the triggers for the referral of the development application to other agencies.

A review of the Development Assessment Mapping System (DAMS) and other matters has confirmed that the proposed development does not trigger referral under Schedule 10 of the Planning Regulation 2017.

4.3 STATE PLANNING POLICY

In accordance with section 2.1 – State Planning Policy of the planning scheme, the Minister has identified that identified aspects of the SPP have been integrated into the planning scheme. The Douglas Shire Planning Scheme 2018 incorporates all aspects of the 2017 SPP.

4.4 ASSESSMENT AGAINST SCHEDULE 12A OF THE PLANNING REGULATION 2017

Assessment against Schedule 12A of the Planning Regulation 2017 is applicable to the development, with an assessment against the applicable benchmarks provided below.

Connectivity

The development area is part of an existing residential development that involves the extension of an access street.

The new internal road servicing the proposed lots is classified as an Access Place. In accordance with Table D1.1 of the FNQROC Development Manual – Design Manual D1, the provision of a footpath is not required and would not improve the connectivity of the locality via a no through road.

Furthermore, there is no footpath network within the Newell Beach locality. The provision of a footpath within the new road, would have no benefit the locality.

Maximum length of particular blocks

The proposed development is for the creation of 21 lots with the requirement for the construction of a single internal road with an approximate length of 175m. The length of the block does not exceed 250m.

Street trees

Street trees will be provided in accordance with the FNQROC Development Manual - Design Manual D9 Landscaping. The existing benchmarks are considered appropriate for the locality.



Footpaths

There is no footpath network within the Newell Beach locality. The provision of a footpath within the new road, would not benefit the locality. The new internal road servicing the proposed lots is classified as an Access Place. In accordance with Table D1.1 of the FNQROC Development Manual — Design Manual D1, the provision of a footpath is not required.

Parks and other areas of open space

The site is within proximity to Newell Beach Park and the Newell Beach Esplanade. The proposed development has access to the appropriate level of open space.

4.5 ASSESSMENT MANAGER AND PLANNING SCHEME

Douglas Shire Council is nominated as the assessment manager for the application. The applicable planning scheme is the *Douglas Shire Planning Scheme v1.0*

4.6 PUBLIC NOTIFICATION

The proposed development on the subject site **does not require** public notification under the provisions of the Planning Act 2016.



5.0 THE PLANNING FRAMEWORK

5.1 DOUGLAS SHIRE PLANNING SCHEME 2018

The Douglas Shire Planning Scheme is the current planning scheme for the Douglas region. The planning scheme commenced on and from 2 January 2018. The Douglas Shire Planning Scheme sets a clear direction for future development and sustainable growth.

The following sections of this report provide an assessment of the proposed development against the relevant provisions of the Planning Scheme.

5.2 PLANNING SCHEME DESIGNATIONS

In accordance with the Douglas Shire Planning Scheme 2018, the subject site is subject to the designations listed in Table 2 below. These designations will assist in determining which Tables of Assessment are applicable to the proposed development on the subject site and therefore assist in the determination of the category of assessment and the codes applicable to the proposed development.

Table 2: Planning Scheme Designation

Type of Designation	DESIGNATION			
ZONE	Rural Zone; and			
ZUNE	Low Density Residential Zone.			
LOCAL PLANS	Coastal Community Local Plan			
	Acid Sulphate Soils Overlay;			
OVERLAYS	Flood and Storm Tide Hazard Overlay;			
OVERLATS	Landscape Values Overlay;			
	Transport Network Overlay			

The land subject to the application is located within both the Rural and Low Density Residential Zones as depicted in *Figure 5* below. Stage 2 of the development is fully contained within the Low Density Residential Zone.

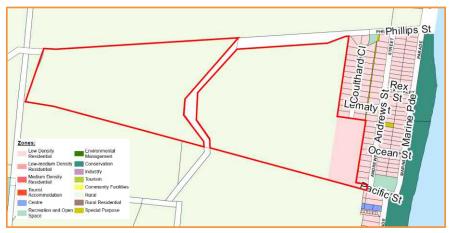


Figure 5: Extract from Planning Scheme Zone Map Sheet ZM-015



5.3 LEVEL OF ASSESSMENT, ASSESSABLE BENCHMARKS & APPLICABLE CODES

The subject site is designated within the *Rural and Low Density Residential Zones*. The relevant tables of assessment for the Zones, identifies that Reconfiguring a Lot is Code Assessable.

It is considered appropriate to specifically assess the proposed development against the following planning scheme codes:

- Rural Zone Code;
- Low Density Residential Zone Code;
- Coastal Community Local Plan Code
- Acid Sulphate Soils Overlay Code;
- Flood and Tide Hazards Overlay Code;
- Landscape Values Overlay Code;
- Transport Network Overlay Code;
- Filling and Excavation Code;
- Infrastructure Works Code;
- Landscaping Code;
- Reconfiguring a Lot Code;
- Vegetation Management Code.

An assessment of the proposal against the relevant provisions of the applicable Codes is discussed below.

5.4 ZONE CODE PROVISIONS

5.4.1 Rural Zone Code

The proposed development will be undertaken in two (2) stages with Stage 1 excising the low density residential zoned land from the rural land holding with Stage 2 being for the further reconfiguration of the low density residential zoned land into 21 lots and new road.

Taking in consideration of the characteristics and outcomes of the proposed reconfiguration it is considered appropriate that Stage 1 of the development assessed against the Rural Zone Code and Stage 2 assessed the Low Density Residential Zone Code.

Stage 1 of the development achieves the purpose of the Rural Zone Code through the following outcomes:

- Stage 1 of the development is for management purposes only, by virtue of placing the different zoned land within separate land holdings;
- Areas used for primary production are conserved and fragmentation is avoided as the residential development is contained within the low density residential zone land;
- The rural land holding will continue to operate as it did previous to the proposed reconfiguration.

Overall it is considered that the proposed development is consistent with the relevant performance outcomes and achieves the desired development outcomes for the Rural Zone.



5.4.2 Low-Density Residential Zone Code

The purpose of the Low Density Residential Zone Code is to provide for predominantly dwelling houses supported by community uses and small-scale services and facilities that cater for local residents.

As previously stated, it is considered appropriate that the Stage 1 of the development assessed against the Rural Zone Code and Stage 2 assessed the Low Density Residential Zone Code. The proposed development of the Low Density Residential Zoned land allows for the efficient expansion of existing urban development within the area.

The proposal is of a scale and nature that contributes to the proper and orderly development of the locality, achieving a high level of internal amenity by accommodating the existing natural and built environment. Development will consolidate urban development in proximity to available urban services, infrastructure and established transport systems and deliver a pattern of development that is cohesive and sustainable.

The proposed development will not diminish the existing character of the area in which it is located nor will it impact upon the strategic intent for the area.

Overall it is considered that the proposed development is consistent with the relevant performance outcomes and achieves the desired development outcomes for the Low Density Residential Zone.

5.5 LOCAL PLAN CODE

5.5.1 Coastal Communities Local Plan Code

The purpose of the Coastal Communities Local Plan Code is to provide for attractive residential areas in the Shire as an alternative to Mossman and Port Douglas.

The proposal is of a scale and nature that contributes to the proper and orderly development of the locality, while achieving a high level of internal amenity by accommodating the existing natural and built environment. Development will consolidate urban development in proximity to available urban services, infrastructure and established transport systems and deliver a pattern of development that is cohesive and sustainable.

The proposed reconfiguration follows the existing pattern of the approved development within the balance of the site. The proposed development is limited to that of the appropriately zoned land. The Engineering Report prepared by Civil Walker, contained within *Appendix E*, confirms that that there are no significant constraints preventing the development in its current format. The development has been designed to provide access from the lower order road being Coulthard Close. The extension of Coulthard Close will be designed and constructed in accordance with the FNQROC Development Manual.

Landscaping within the development will be undertaken in accordance with the FNQROC Development Manual. The detailed design for landscaping works will be included within the subsequent submission for Operational Works.



The development is considered consistent with the overall outcomes, performance outcomes and acceptable outcomes of the Coastal Communities Local Plan Code.

5.6 OVERLAY CODES

5.6.1 Acid Sulphate Soils Overlay Code

The purpose of the Acid sulphate soils overlay code is to ensure that development which occurs on a site containing or potentially containing acid sulphate soils is undertaken so that the potential risks to the natural and built environment or human health associated with disturbing acid sulphate soils are identified and addressed through avoidance or mitigation.

The overlay mapping identifies the natural ground level of the site being above five (5) metres AHD but below 20 metres AHD. Accordingly, assessment against the Acid Sulphate Soils Overlay Code is applicable.

The proposed development will require filling of the site to achieve flood immunity. Disturbance of potential acid sulphate soils will be addressed in the subsequent application for Operational Works. The proposed development can be conditioned appropriately to achieve compliance with the Acid Sulphate Soils Overlay Code.

Overall, it is considered that the proposed development achieves general consistency with the applicable Acceptable Outcomes and Performance Outcomes of the Acid Sulphate Soils Overlay Code.

5.6.2 Flood and Tide Hazards Overlay Code

The overlay mapping identifies that the western region of subject land is within the 100 year ARI flood inundation area. Accordingly, assessment against the Flood and Storm Tide Inundation Overlay Code is applicable.

The proposed development has been designed to achieve the required level of immunity to an inundation event. The Engineering Report prepared by Civil Walker, contained within Appendix E, details the works required to achieve the level of immunity. The proposed development can be conditioned appropriately to achieve the required level of immunity.

Overall, it is considered that the proposed development achieves general consistency with the applicable Acceptable Outcomes and Performance Outcomes of the Flood and Storm Tide Inundation Overlay Code.

5.6.3 Landscape Values Overlay Code

The overlay mapping identifies that that part of the subject land where the proposed development is as having a Medium Landscape Value. Accordingly, assessment against the Landscape Values Overlay Code is applicable.



The proposed development allows for the efficient expansion of existing urban development in accordance with the Low Density Residential Zone. The site is clear of vegetation and has been previously utilised for agricultural purposes.

The proposal is of a scale and nature that contributes to the proper and orderly development of the locality. Accordingly, it is considered that the location and scale of the proposed development is compatible with the landscape values of the locality. Overall, it is considered that the proposed development achieves general consistency with the applicable Acceptable Outcomes and Performance Outcomes of the Landscape Values Overlay Code.

5.6.4 Transport Network Overlay

The overlay mapping identifies that the subject land has frontage to Coulthard Close (Access Place) and Andrew Street (Collector Road). Accordingly, assessment against the Transport Network Overlay Code is applicable.

As detailed in the plans for the proposed development, the proposed lots will have direct road frontage and access onto the proposed new internal road that will access onto Andrew Street. The development has been designed to provide access from the lower order road being Coulthard Close. The extension of Coulthard Close will be designed and constructed in accordance with the FNQROC Development Manual.

Overall, the proposed development provides transport infrastructure that supports a safe, efficient transport network, including the active transport network. It is considered that the proposed development achieves consistency with the applicable Acceptable Outcomes and Performance Outcomes of the Transport Network Overlay Code.

5.7 DEVELOPMENT CODES

5.7.1 Filling and Excavation Code

The Filling and Excavation Code seeks to ensure that filling and excavation limits the impacts to the site, adjoining properties and the locality.

Filling of the western region of the site will be required to achieve flood immunity. The engineering investigation undertaken by Civil Walker included within *Appendix E* provides a preliminary assessment of the required earthworks.

It can be appropriately conditioned that Earthworks will be designed and constructed during the operational works phase in accordance with the requirements of the FNQROC Regional Development Manual and Australian Standard AS3798 – 2007 (as amended) "Guidelines on Earthworks for Commercial and Residential Developments".

Overall it is considered that the proposed development achieves consistency with the applicable Acceptable Outcomes and Performance Outcomes of the Filling and Excavation Code.



5.7.2 Infrastructure Works Code

The Infrastructure Works Code seeks to ensure that development provides infrastructure designed and constructed to meet the needs of development are area safe and efficient.

The engineering investigation undertaken by Civil Walker included within *Appendix E* details the level of infrastructure required to service the development. Connections to any required infrastructure services will be undertaken in accordance with the specifications of the FNQROC Development Manual. Conditions of approval requiring connections to the required infrastructure services are expected.

The detailed design for all civil works will be included within the subsequent submission for Operational Works.

Overall it is considered that the proposed development can be appropriately conditioned achieve consistency with the applicable acceptable outcomes and performance outcomes of the Infrastructure Works Code.

5.7.3 Landscaping Code

The Landscaping Code seeks to ensure that landscaping is provided to enhance the tropical amenity and character of the region.

The subject land is located within an existing residential development. Landscaping within the development will be undertaken in accordance with the FNQROC Development Manual. The detailed design for landscaping works will be included within the subsequent submission for Operational Works.

Overall it is considered that the proposed development can be appropriately conditioned to achieve consistency with the applicable acceptable measures and performance criteria of the Landscaping Code

5.7.4 Reconfiguring a Lot Code

The Reconfiguring a Lot Code seeks to ensure development results in lots that are suitable for their intended use, locality, are of a high standard of amenity and provide all necessary infrastructure and services.

The preferred minimum allotment size in the Low Density Residential Zone when the site is not connected to Council reticulated sewerage networks is 1,000m². With areas ranging from 813m² to 1,281m² the proposed lots have sufficient area and dimensions to accommodate a suitable building envelope and onsite septic disposal systems. The onsite disposal assessment prepared by the Dirt Professionals included within *Appendix C*, confirms that the proposed lots are of sufficient area to accommodate onsite disposal systems treating to advanced secondary standard utilising a trench system.

The size and dimensions of the proposed lots are comparable to that of the adjoining residential development. The engineering investigation undertaken by Civil Walker included within *Appendix E* confirms that the proposed development has access to the appropriate level of infrastructure.



The proposal is of a scale and nature that contributes to the proper and orderly development of the locality, achieving a high level of internal amenity by accommodating the existing natural and built environment. Development will consolidate urban development in proximity to available urban services, infrastructure and established transport systems and deliver a pattern of development that is cohesive and sustainable.

The proposed reconfiguration follows the existing pattern of the approved development within the balance of the site. The proposed development is consistent with the overall outcomes for the Reconfiguring a Lot Code as the proposed development complies with each of the acceptable measures or performance criteria.

5.7.5 Vegetation Management Code

The Vegetation Code seeks to ensure that vegetation is protected from inappropriate damage.

The site is clear of vegetation. No further vegetation could occur as a result of the proposed development.

Overall it is considered that the proposed development can be appropriately conditioned to achieve consistency with the applicable acceptable measures and performance criteria of the Landscaping Code.



6.0 CONCLUSION

This report has been prepared on behalf of the Applicants, F.R. Coulthard & C.B Coulthard in support of an application to Douglas Shire Council seeking approval for Reconfiguring a Lot (1 lot into 22 lots and new road) over land described as Lot 51 on SP168537.

The abovementioned has demonstrated that the proposal responds to expressed planning outcomes and will deliver enhanced residential development to meet emergent community needs.

The proposal is generally in accordance with the provisions of the Douglas Shire Planning Scheme 2018 and complements the existing pattern of development located in adjoining areas. Site treatments are able to be managed by conditions.

The following conclusions can be drawn from the above referenced planning aspects of the proposal:-

- The proposal consists of creating future residential allotments and is a logical development for the site and locality;
- The proposed allotments are of sufficient area and dimension to site a dwelling and onsite septic disposal;
- The proposed development is of a scale and nature that contributes to the proper and orderly development of the locality while respecting the character of the locality.
- The proposed development addresses the elements of and is considered to be generally consistent with performance criteria and/or acceptable measures of the applicable planning scheme codes;
- The subject site is located within an urban area that can be adequately serviced with all capacity
 of essential infrastructure services including water supply, stormwater drainage system, electricity
 and telecommunications;
- The proposed development is not expected to have an impact upon the character and visual amenity throughout the area.

Overall, it is considered that the proposed development is an appropriate response to the site and, subject to the imposition of reasonable and relevant conditions, Council will be able to issue a Development Permit for Reconfiguring a Lot.

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)	F. R. Coulthard & C. B. Coulthard c/- Brazier Motti Pty Ltd
Contact name (only applicable for companies)	
Postal address (P.O. Box or street address)	Po Box 1185
Suburb	Cairns
State	QLD
Postcode	4870
Country	Australia
Contact number	4054 0400
Email address (non-mandatory)	cns.planning@braziermotti.com.au
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	34678-001-01

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

Note: P		elow and) or 3.2), and 3. n for any or all p			he development	application. For further information, see <u>DA</u>		
3.1) St	reet addres	s and lo	ot on pla	an							
Str	eet address	AND k	ot on pla	an (a <i>ll l</i> e	ots must be liste	ed), or					
					an adjoining (etty, pontoon. A				premises (appropriate for development in		
	Unit No.	Stree	t No.	Stree	t Name and	Туре		Suburb			
2)	2 Andrews Street						Newell Beach				
a)	Postcode	Lot No.		Plan Type and Number (e.g. RF	P, SP)	Local Government Area(s)		
	4873	51		SP16	8537				Douglas Shire Council		
	Unit No.	Stree	t No.	Stree	t Name and	Туре			Suburb		
L											
b)	Postcode	Lot N	0.	Plan	Type and Nu	ımber (e.g. RF	P, SP)	Local Government Area(s)		
3.2) C	oordinates o	of prem	ises (ap	propriat	e for developme	ent in ren	note area	as, over part of a	a lot or in water not adjoining or adjacent to land		
	g. channel dred lace each set d				e row.						
					le and latitud	e					
Longit		<u>.</u>	Latitud			Datur	n		Local Government Area(s) (if applicable)		
	. ,			,		□W	GS84		, , , , , ,		
						GI	DA94				
						☐ Ot	ther:				
☐ Co	ordinates of	premis	es by e	asting	and northing)					
Eastin	g(s)	North	ning(s)		Zone Ref.	Datur	m		Local Government Area(s) (if applicable)		
	□ 54 □ W				GS84						
					<u></u> 55		DA94				
					□ 56		ther:				
	dditional pre										
Add	ditional pren	nises a	re releva	ant to	this developr	nent ap	oplicati	on and the d	etails of these premises have been		
	t required	riedule) to this	deveid	opment appli	callon					
	roquirou										
4) Ider	ntify any of t	he follo	wing th	at app	ly to the pren	nises a	nd pro	vide any rele	vant details		
					tercourse or						
Name	of water boo	dy, wat	ercours	e or ac	quifer:			·			
On	strategic po	rt land	under t	he <i>Tra</i>	nsport Infras	tructur	e Act 1	994			
Lot on plan description of strategic port land:											
Name of port authority for the lot:											
☐ In a	a tidal area										
Name	of local gov	ernmer	nt for the	e tidal	area (if applica	able):					
Name	of port auth	ority fo	r tidal aı	rea (if a	applicable):						
On	airport land	under	the Airp	ort As	sets (Restru	cturing	and D	isposal) Act 2	2008		
	of airport:							-			

Listed on the Environmental Management Register (EN	IR) 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 how they may affect the proposed development, see <u>DA Forms Guide</u> .	ed correctly and accurately. For further information on easements and
	e included in plans submitted with this development
□ No	

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about th	e first development aspect		
a) What is the type of develo	opment? (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 asses	sment?		
□ Code assessment	Impact assessment (requir	es public notification)	
d) Provide a brief description lots):	n of the proposal (e.g. 6 unit apart	ment building defined as multi-unit dv	velling, reconfiguration of 1 lot into 3
ROL – 1 lot into 22 over 2 S	tages		
e) Relevant plans Note: Relevant plans are required Relevant plans.	to be submitted for all aspects of this o	development application. For further in	nformation, see <u>DA Forms guide:</u>
Relevant plans of the pro	posed development are attach	ned to the development application	ation
6.2) Provide details about th	e second development aspect		
a) What is the type of develo	opment? (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 asses	sment?		
Code assessment	Impact assessment (requir	res public notification)	
d) Provide a brief description lots):	n of the proposal (e.g. 6 unit apart	ment building defined as multi-unit dv	welling, reconfiguration of 1 lot into 3
e) Relevant plans Note: Relevant plans are required to Relevant plans.	o be submitted for all aspects of this d	evelopment application. For further in	oformation, see <u>DA Forms Guide:</u>
Relevant plans of the pro	posed development are attach	ned to the development applica	ation
6.3) Additional aspects of de	evelopment		
	relopment are relevant to this onder Part 3 Section 1 of this fo		

Section 2 – Further develo	opment a	etalis						
7) Does the proposed develo	pment appl	ication invol	lve any of the follow	wing?				
Material change of use	Yes -	- complete	division 1 if assess	able agains	t a local	planning instru	ument	
Reconfiguring a lot								
Operational work	Yes – complete division 3							
Building work	☐ Yes -	- complete	DA Form 2 – Build	ing work de	tails			
Division 1 – Material change Note: This division is only required to l local planning instrument.	be completed i		e development applicat	ion involves a	material cl	nange of use asse	essable against a	
8.1) Describe the proposed no Provide a general description proposed use		Provide th	ne planning scheme th definition in a new rot			er of dwelling f applicable)	Gross floor area (m²) (if applicable)	
8.2) Does the proposed use i	nvolve the	ise of existi	na huildinas on the	nremises2				
Yes	involve the t	use of existi	ing buildings on the	premises :				
□ No								
Division 2 – Reconfiguring a Note: This division is only required to be 9.1) What is the total number 1 9.2) What is the nature of the Subdivision (complete 10))	oe completed in of existing	lots making	up the premises?				1))	
Boundary realignment (col	mplete 12))		☐ Creating or changing an easement giving access to a lot					
			from a constructed road (complete 13))					
10) Subdivision								
10.1) For this development, h	now many lo	ots are being	g created and what	is the inten	ided use	of those lots:		
Intended use of lots created	Residential		Commercial	Industrial		Other, please specify:		
						Rural		
Number of lots created	21					1		
10.2) Will the subdivision be	staged?							
✓ Yes – provide additional of☐ No	letails belov	V						
How many stages will the wo	rks include	?	2 Stages					
What stage(s) will this develo	Stages 1 & 2							

11) Dividing land int parts?	o parts by	y agreement – h	ow many par	ts are being o	created and what	t is the intended use of the
Intended use of par	d Residential	Com	nmercial	Industrial	Other, please specify:	
Number of parts cre	Number of parts created					
Trained of parts of	Jaioa					
12) Boundary realig						
12.1) What are the			as for each lo	ot comprising		
	Curre					posed lot
Lot on plan descript	tion	Area (m²)		Lot on plan	description	Area (m ²)
12.2) What is the re	ason for	the boundary rea	alignment?			
, , , , , , , , , , , , , , , , , , ,			ag			
13) What are the di			ny existing e	asements bei	ng changed and	or any proposed easement?
Existing or proposed?	Width (r	· ·	Purpose of pedestrian a	of the easeme	ent? <i>(e.g.</i>	Identify the land/lot(s) benefitted by the easement
Division 3 – Operati	ional wo	rl				
Note : This division is only i			part of the devel	opment applicati	ion involves operation	nal work.
14.1) What is the na						
Road work			Stormwat			frastructure
☐ Drainage work☐ Landscaping			☐ Earthworl☐ Signage	KS		infrastructure vegetation
Other – please s	enecify:		□ Signage			vegetation
14.2) Is the operation		necessary to fac	cilitate the cre	eation of new	lots? (e.a. subdivis	sion)
Yes – specify nu		•				,
□ No		<u> </u>				
14.3) What is the m	onetary v	alue of the prop	osed operation	onal work? (in	clude GST, material	s and labour)
\$						
PART 4 – ASSI	ESSIM		∩ED DEI	711 6		
PART 4 – ASSI		EINT WAINA	GER DE I	AILS		
15) Identify the asso	essment	manager(s) who	will be asses	sing this dev	elopment applica	ation
Douglas Shire Cour		5 ()			•	
16) Has the local go	overnmer	nt agreed to appl	y a supersed	ed planning s	scheme for this d	evelopment application?
Yes – a copy of	the decis	ion notice is atta	ched to this o	development	application	
	nment is t	aken to have ag	reed to the s	uperseded pla	anning scheme r	equest – relevant documents
attached ⊠ No						

PART 5 - REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements? Note: A development application will require referral if prescribed by the Planning Regulation 2017.
No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6
Matters requiring referral to the Chief Executive of the Planning Act 2016:
☐ Clearing native vegetation
Contaminated land (unexploded ordnance)
Environmentally relevant activities (ERA) (only if the ERA has not been devolved to a local government)
Fisheries – aquaculture
Fisheries – declared fish habitat area
Fisheries – marine plants
☐ Fisheries – waterway barrier works
Hazardous chemical facilities
☐ Heritage places – Queensland heritage place (on or near a Queensland heritage place)
☐ Infrastructure-related referrals – designated premises
☐ Infrastructure-related referrals – state transport infrastructure
☐ Infrastructure-related referrals – State transport corridor and future State transport corridor
☐ Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
☐ Infrastructure-related referrals – near a state-controlled road intersection
☐ Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
☐ Koala habitat in SEQ region – key resource areas
☐ Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
Ports – Brisbane core port land – environmentally relevant activity (ERA)
Ports – Brisbane core port land – tidal works or work in a coastal management district
☐ Ports – Brisbane core port land – hazardous chemical facility
Ports – Brisbane core port land – taking or interfering with water
Ports – Brisbane core port land – referable dams
Ports – Brisbane core port land – fisheries
Ports – Land within Port of Brisbane's port limits (below high-water mark)
SEQ development area
☐ SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
SEQ regional landscape and rural production area or SEQ rural living area – community activity
SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
SEQ regional landscape and rural production area or SEQ rural living area – urban activity
SEQ regional landscape and rural production area or SEQ rural living area – combined use
☐ Tidal works or works in a coastal management district
Reconfiguring a lot in a coastal management district or for a canal
Erosion prone area in a coastal management district
Urban design
Water-related development – taking or interfering with water
Water-related development – removing quarry material (from a watercourse or lake)
Water-related development – referable dams
Water-related development –levees (category 3 levees only)
Wetland protection area
Matters requiring referral to the local government:
☐ Airport land
Environmentally relevant activities (ERA) (only if the ERA has been devolved to local government)

☐ Heritage places – Local heritage places		
Matters requiring referral to the Chief Executive of the di	stribution entity or transmissi	on entity:
☐ Infrastructure-related referrals – Electricity infrastructure	·e	
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	e is an individual	
☐ Infrastructure-related referrals – Oil and gas infrastruct	ure	
Matters requiring referral to the Brisbane City Council:		
Ports – Brisbane core port land		
Matters requiring referral to the Minister responsible for	administering the Transport I	nfrastructure Act 1994:
Ports – Brisbane core port land (where inconsistent with the	Brisbane port LUP for transport reasons	5)
Ports – Strategic port land		
Matters requiring referral to the relevant port operator , if		
Ports – Land within Port of Brisbane's port limits (below	high-water mark)	
Matters requiring referral to the Chief Executive of the re	elevant port authority:	
Ports – Land within limits of another port (below high-water	er mark)	
Matters requiring referral to the Gold Coast Waterways A	Authority:	
☐ Tidal works or work in a coastal management district (i	n Gold Coast waters)	
Matters requiring referral to the Queensland Fire and Em	nergency Service:	
☐ Tidal works or work in a coastal management district (i	nvolving 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 a	re 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 wa	s the subject of the
referral response and this development application, or inc		
(if applicable).		
DADT C INCODMATION DECLICAT		
PART 6 – INFORMATION REQUEST		
19) Information request under Part 3 of the DA Rules		
I agree to receive an information request if determined		application
I do not agree to accept an information request for this		
Note: By not agreeing to accept an information request I, the applicant, a that this development application will be assessed and decided ba		naking this development
application and the assessment manager and any referral agencie Rules to accept any additional information provided by the applica	es relevant to the development applicatio	n are not obligated under the DA

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 Yes – provide details below	development applications or o			
⊠ No				
List of approval/development application references	Reference number	Date		Assessment manager
Approval Development application				
Approval				
Development application				
21) Has the portable long ser operational work)				
☐ No – I, the applicant will prassessment manager deci	ted QLeave form is attached rovide evidence that the portaides the development applicated only if I provide evidence to the contract of the co	able long servition. I acknow	rice leave levy ha vledge that the as	s been paid before the ssessment manager may
Not applicable (e.g. buildir	• •	•	_	-
Amount paid	Date paid (dd/mm/yy)		QLeave levy nur	mber (A, B or E)
\$				
22) Is this development applic notice?	cation in response to a show o	cause notice	or required as a r	result of an enforcement
☐ Yes – show cause or enfor ☐ No	rcement notice is attached			
23) Further legislative require	ments			
Environmentally relevant ac				
23.1) Is this development app Environmentally Relevant A	olication also taken to be an a			
Yes – the required attachn	nent (form ESR/2015/1791) forment application, and details	or an applicat	ion for an enviror	nmental authority
Note : Application for an environment requires an environmental authority t				at <u>www.qld.gov.au</u> . An ERA
Proposed ERA number:			RA threshold:	
Proposed ERA name:		·		
Multiple ERAs are applical this development applicati	ble to this development applic on.	ation and the	details have bee	en attached in a schedule to
Hazardous chemical facilitie	<u>es</u>			
23.2) Is this development app	olication for a hazardous che	mical facility	1?	
	n of a facility exceeding 10%			ached to this development
application				
Note: See your business ald gov au	for further information about hazard	ous chamical so	tifications	
THE SEE WORDS DISTURES OUT ON ALL	for further information about hazardo	us criennicai noi	แบนแบบเง.	

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 <i>Vegetation Management Act 1999</i> (s22A determination)
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 2014</i> ?
 Yes − I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter No
Note: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.
Koala habitat in SEQ Region
23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?
 ☐ Yes – the development application involves premises in the koala habitat area in the koala priority area ☐ Yes – the development application involves premises in the koala habitat area outside the koala priority area
No Note: If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at www.des.qld.gov.au for further information.
<u>Water resources</u> 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 www.dnrme.gld.gov.au for further information.
DA templates are available from https://planning.dsdmip.qld.gov.au/ . If the development application involves:
 Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1 Taking or interfering with water in a watercourse, lake or spring: complete DA Form1 Template 2 Taking overland flow water: complete DA Form 1 Template 3.
Waterway barrier works 23.7) Does this application involve waterway barrier works?
 ☐ Yes – the relevant template is completed and attached to this development application ☒ No
DA templates are available from https://planning.dsdmip.qld.gov.au/ . For a development application involving waterway barrier works, complete DA Form 1 Template 4.
Marine activities
23.8) Does this development application involve aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?
Yes – an associated <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 www.daf.qld.gov.au for further information.

Quarry materials from a watercourse or lake	
23.9) Does this development application involve the removal of quarry materials from a watercourse under the <i>Water Act 2000?</i>	or lake
☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing de ☐ No	evelopment
Note : Contact the Department of Natural Resources, Mines and Energy at www.business.qld.gov.au for information.	or further
Quarry materials from land under tidal waters	
23.10) Does this development application involve the removal of quarry materials from land under tid under the <i>Coastal Protection and Management Act 1995?</i>	al water
☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing de ☐ No	evelopment
Note : Contact the Department of Environment and Science at www.des.qld.gov.au for further information.	
Referable dams	
23.11) Does this development application involve a referable dam required to be failure impact assessed section 343 of the <i>Water Supply (Safety and Reliability) Act 2008</i> (the Water Supply Act)?	d under
Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the Supply Act is attached to this development application	Nater
No Note: See guidance materials at <u>www.dnrme.qld.gov.au</u> for further information.	
Tidal work or development within a coastal management district	
23.12) Does this development application involve tidal work or development in a coastal management	t district?
Yes – the following is included with this development application:	
 Evidence the proposal meets the code for assessable development that is prescribed tidal work if application involves prescribed tidal work) 	(only required
A certificate of title	
No Note: See guidance materials at www.des.gld.gov.au for further information.	
Queensland and local heritage places	
23.13) Does this development application propose development on or adjoining a place entered in the Quentiage register or on a place entered in a local government's Local Heritage Register?	ueensland
Yes – details of the heritage place are provided in the table below	
⊠ No	
Note : See guidance materials at www.des.qld.gov.au for information requirements regarding development of Queensland heritage	places.
Name of the heritage place: Place ID:	
<u>Brothels</u>	
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 developmen	t
application for a brothel under Schedule 3 of the <i>Prostitution Regulation 2014</i> ⊠ No	
Decision under section 62 of the Transport Infrastructure Act 1994	
23.15) Does this development application involve new or changed access to a state-controlled road?	
Yes – this application will be taken to be an application for a decision under section 62 of the <i>Transpol Infrastructure Act 1994</i> (subject to the conditions in section 75 of the <i>Transport Infrastructure Act 1994</i>)	
satisfied) ☑ No	Ü

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 No
Note : See guidance materials at www.planning.dsdmip.qld.gov.au for further information.

PART 8 - CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist	
I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17 Note: 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 – 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 DAForms Guide: Planning Report Template .	⊠ Yes
Relevant plans of the development are attached to this development application Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <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 correct	application is true and
Where an email address is provided in Part 1 of this form, I consent to receive future electrom the assessment manager and any referral agency for the development application was required or permitted pursuant to sections 11 and 12 of the <i>Electronic Transactions Actions It is unlawful to intentionally provide false or misleading information.</i>	here written information
Privacy – Personal information collected in this form will be used by the assessment manage assessment manager, any relevant referral agency and/or building certifier (including any prowhich may be engaged by those entities) while processing, assessing and deciding the deverall information relating to this development application may be available for inspection and published on the assessment manager's and/or referral agency's website. Personal information will not be disclosed for a purpose unrelated to the <i>Planning Act 2016</i> , Regulation 2017 and the DA Rules except where:	ofessional advisers elopment application. urchase, and/or Planning
 such disclosure is in accordance with the provisions about public access to documents of Act 2016 and the Planning Regulation 2017, and the access rules made under the Plann 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 retain <i>Public Records Act 2002</i> .	ned as required by the

PART 9 - FOR COMPLETION OF THE ASSESSMENT MANAGER - FOR OFFICE **USE ONLY**

Date received:	Reference numb	per(s):	
	<u>.</u>		
Notification of engagement of	of alternative assessment mar	nager	
Prescribed assessment man	ager		
Name of chosen assessmen	ıt manager		
Date chosen assessment m	anager engaged		
Contact number of chosen a	ssessment manager		
Relevant licence number(s)	of chosen assessment		
manager			
QLeave notification and pay	ment		
Note: For completion by assessme	nt 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



TITLES REGISTRY

Current Title Search

Department of Resources ABN 59 020 847 551

Title Reference:	50517738
Date Title Created:	22/09/2004
Previous Title:	50003975

ESTATE AND LAND

Estate in Fee Simple

LOT 51 SURVEY PLAN 168537

Local Government: DOUGLAS

REGISTERED OWNER INTEREST

Dealing No: 714239997 03/01/2012

FRANCIS RONALD COULTHARD 1/2 CAVILL BRETT COULTHARD 1/2

AS TENANTS IN COMMON

EASEMENTS, ENCUMBRANCES AND INTERESTS

Rights and interests reserved to the Crown by Deed of Grant No. 20654064 (POR 69)

2. EASEMENT IN GROSS No 700652063 16/05/1995 at 12:44

burdening the land to

COUNCIL OF THE SHIRE OF DOUGLAS

over

EASEMENTS C & D ON RP 890698.

EASEMENT IN GROSS No 709238085 21/12/2005 at 10:08

burdening the land

DOUGLAS SHIRE COUNCIL

over

EASEMENT A ON SP174877

MORTGAGE No 714239999 03/01/2012 at 09:36 4. AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED A.B.N. 11

005 357 522

ADMINISTRATIVE ADVICES

NII

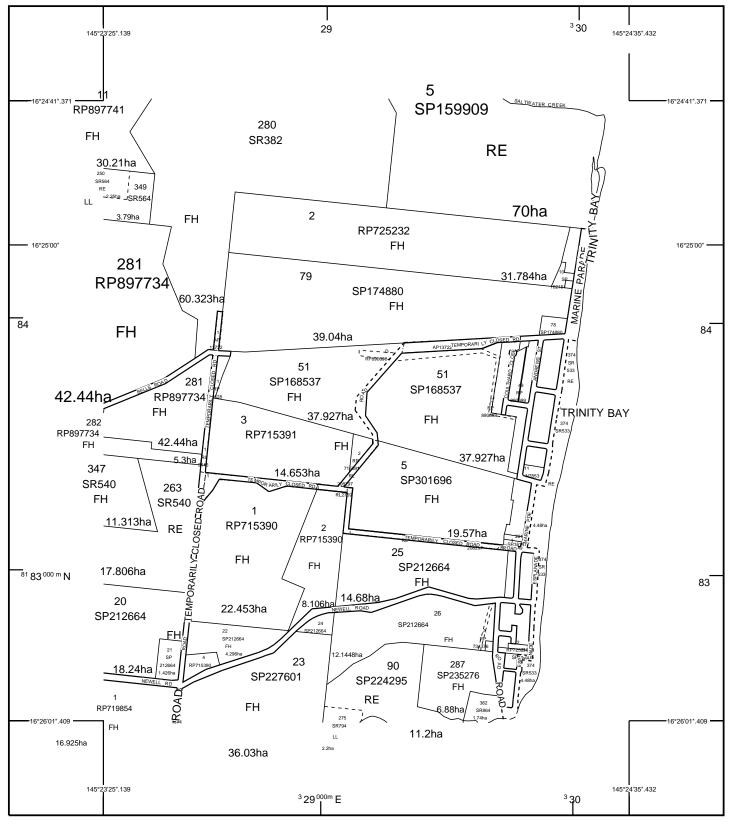
UNREGISTERED DEALINGS

NIL

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

COPYRIGHT THE STATE OF QUEENSLAND (DEPARTMENT OF RESOURCES) [2021] Requested by: D-ENQ GLOBALX





MAP WINDOW POSITION & NEAREST LOCATION

45°24'00".286

SUBJECT PARCEL DESCRIPTION

DCDB Lot/Plan 51/SP168537 Area/Volume 37.927ha FREEHOLD Local Government DOUGLAS SHIRE NEWELL Locality Segment/Parcel

CLIENT SERVICE STANDARDS

PRINTED (dd/mm/yyyy) 23/11/2020

22/11/2020 (Lots with an area less than 1500m² are not shown)

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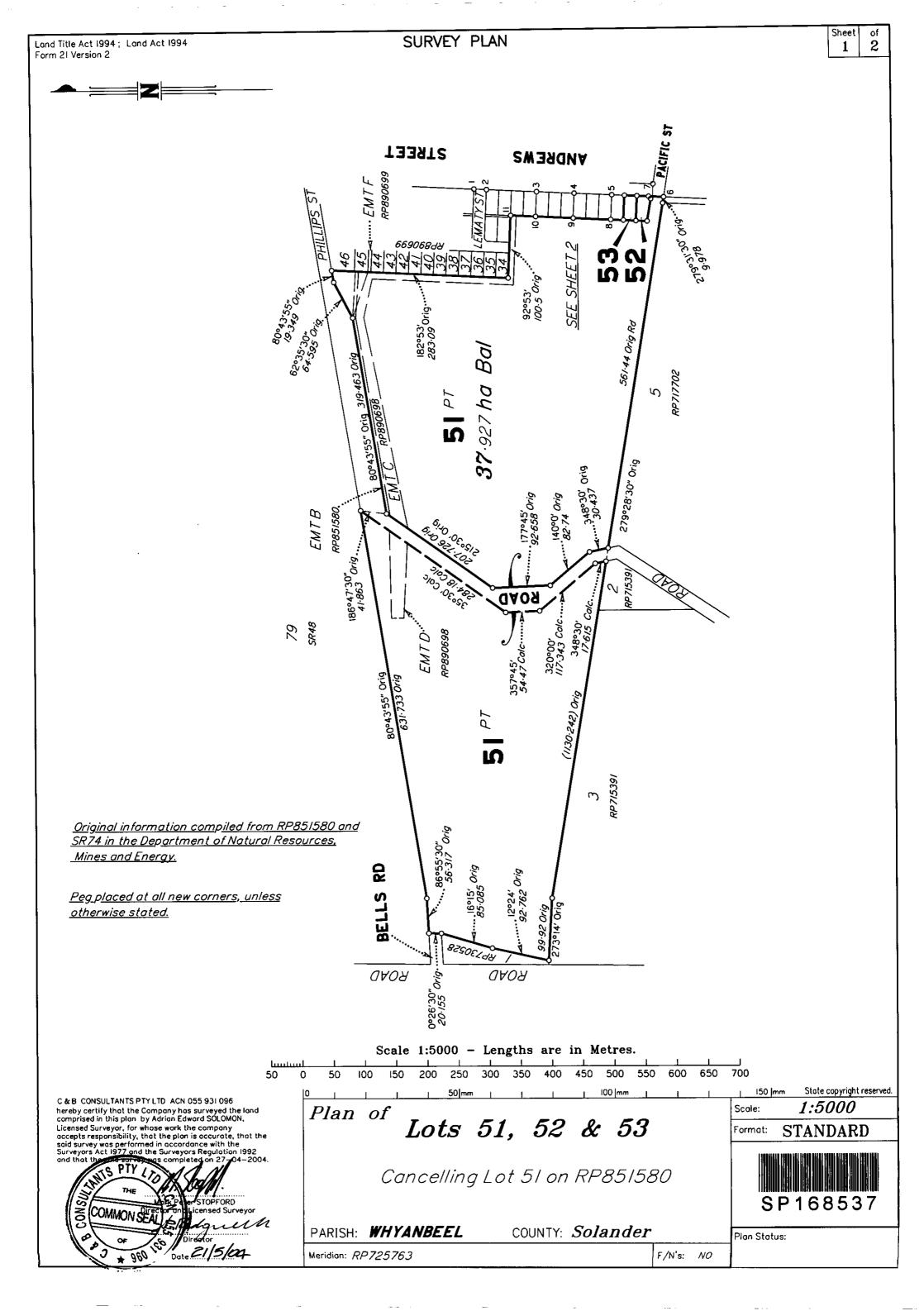
An External Product of SmartMap Information Services

Based upon an extraction from the Digital Cadastral Data Base



Queensland Government
(c) The State of Queensland, (Department of Natural Resources. Mines and Energy) 2020.





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\$407.55

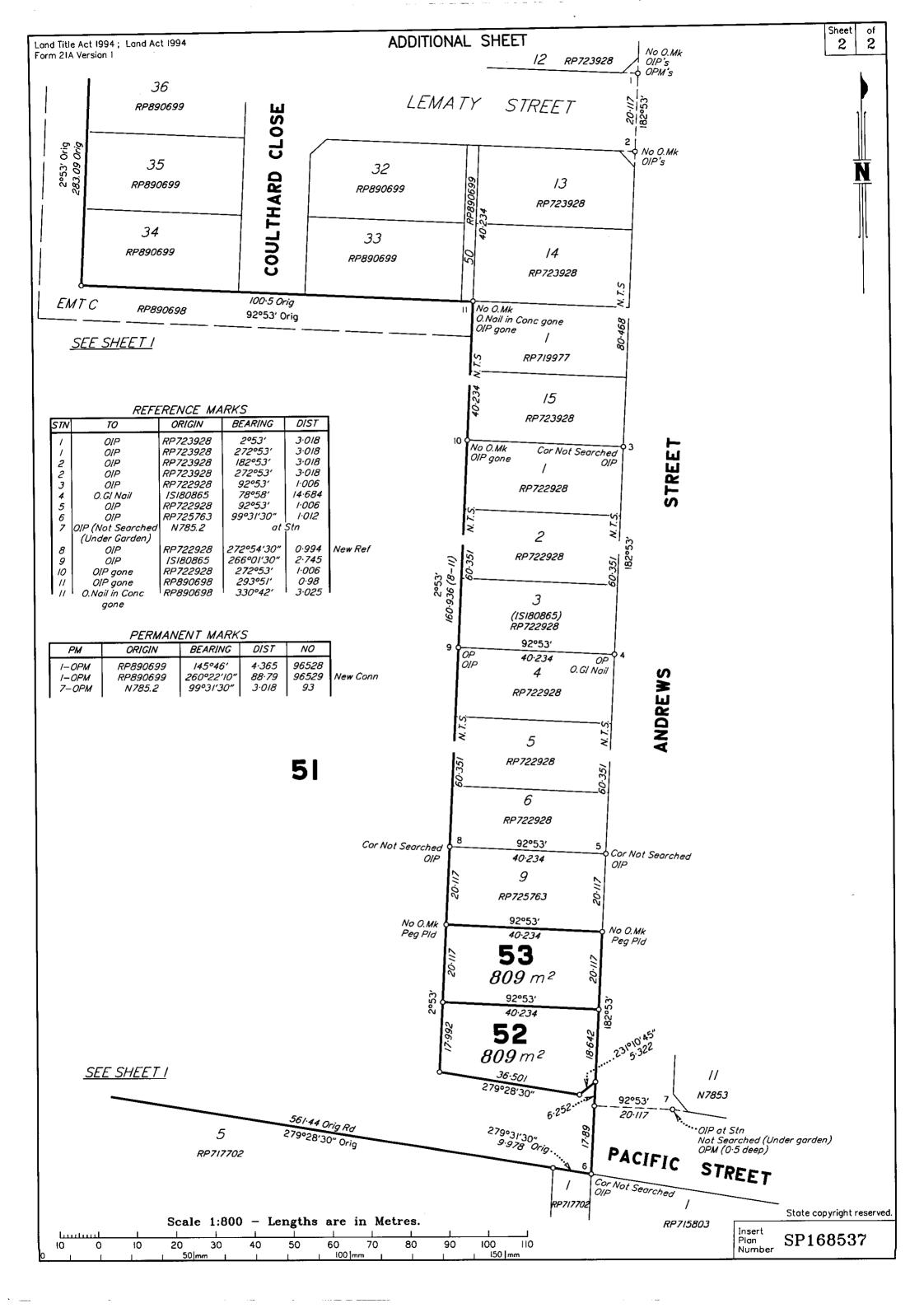
WARNING: Folded or Mutilated Plans will not be accepted. Plans may be rolled. Information may not be placed in the outer margins.

Registered

CS 400 NT

5. Lodged by BUT BURCHILL TRANTER PORT DOUGLAS OF 4871

4099 5570. (Include address, phone number, reference, and Lodger Code) 1. Certificate of Registered Owners or Lessees. 6. Existing Created 1/We WILLIAM KIRKBY COULTHARD Title Reference Lot Plan Lots **Emts** Road FRANCIS RONALD COULTHARD 50003975 51 RP851580 51, 52 & 53 CAVILL BRETT COULTHARD ANDREW JOHN COULTHARD WAYNE COULTHARD (Names in full) * as Registered Owners of this land agree to this plan and dedicate the Public Use Land as shown hereon in accordance with Section 50 of the Land Title Act 1994. MORTGAGE ALLOCATIONS * as Lessees of this land agree to this plan. Lots Fully Encumbered Lots Partially Encumbered Mortgage 707527494 51, 52 & 53 Signature of *Registered Owners *Lessees ENCUMBRANCE EASEMENT ALLOCATIONS Easement Lots to be Encumbered FRANCIS RONALD COULTHARD 700652063 51 CS. Gouttland CAVILL BRETT COULTHARD * Rule out whichever is inapplicable 2. Local Government Approval. DOUGLAS SHIRE COUNCIL hereby approves this plan in accordance with the: % Integrated Planning Act 1997 12. Building Format Plans only. I certify that : POR 69 51, 52 & 53 * As far as it is practical to determine, no part of the building shown on this plan encroaches onto adjoining lots or road * Part of the building shown on this plan 7. Portion Allocation: encroaches onto adjoining * lots and road 8. Map Reference: Dated this Ninth day of September 2004 Licensed Surveyor/Director * 7965-22432 *delete words not required 9. Locality: 13. Lodgement Fees: for and on behalf of DOUGLAS SHIRE COUNCIL **NEWELL BEACH** Survey Deposit Lodgement MAYOR 10. Local Government:New Titles CHIEF EXECUTIVE OFFICER DOUGLAS SHIRE COUNCIL Photocopy % Insert Integrated Planning Act 1997 or * Insert the name of the Local Government. II. Passed & Endorsed: # Insert designation of signatory or delegation Local Government (Planning & Environment) Act 1990 Postage 3. Plans with Community Management Statement: 4. References: By: C & B CONSULTANTS PTY LTD TOTAL 25/5/04 Dept File: CMS Number: Bolomon Local Govt: 14. Insert Plan SP168537 Name: 62212-1 Designation: LICENSED SURVEYOR Surveyor: Number



DIRT PROFESSIONALS

Email: dirtprofessionals@bigpond.com MOBILE 0417 647 477

Brazier Motti Pty Ltd michael.tessaro@braziremotti.com.au

Site Assessment
Part of Lot 51 SP 168537
Newell Beach QLD

16 December 2020

Job No 22242

INTRODUCTION

This report presents the results of a preliminary site assessment performed at Lot 51 SP 168537 Newell Beach. The purpose of the assessment is to determine an acceptable solution for the treatment of wastewater as per the guidelines of the Code of Practise for On-Site Sewerage and the AS/AZS 1547 2012.

The Scope of the works comprised of a series of test bores, followed by laboratory testing.

EXISTING CONDITIONS

At the time of the assessment the site consisted of a portion of land to the Southeast corner of the above address. The land was rectangular in shape, with an approximate total area of approximately 2.33 ha. The allotment is to be subdivided into 18-20 allotments.

At the time of the assessment the proposed allotment was grassed with a slope descending to the South/Southeast. The site had a drain located to the North and East boundary.

Adjacent properties consist of residential land which are serviced with secondary treatment plants and standard septic systems (primary treatment).

FIELD WORK

The field work was undertaken on the 16 December 2020 and comprised of mechanical boring of 9 bore holes. The bores were located at various locations over the proposed allotment (see map).

FIELD WORK RESULTS

Details of the subsurface conditions encountered at the test locations are attached on the bore log forms attached.

The subsurface conditions encountered at the location of the bores were uniform. The materials comprised of mainly sandy loams to the depth of holes.

Water was encountered at a depth of 1200 mm the time of the assessment. Test holes carried out on previous jobs during seasonal rains found water at 600 mm below ground level, during seasonal rains.

LABORATORY TESTING

Laboratory Testing Comprised of dispersion testing.

The testing indicated that the materials tested in the area are of a non-dispersion nature.

EFFLUENT DISPOSAL

Based on the results of the assessment, and on visual assessment of samples from the site, it is concluded that the soils are of a well drained material with a weak structure and should be categorised as and a Category 2, in accordance with the AS/NZS 1547:2012.

It is considered that the indicative permeability of the site soils are likely to be 1.4 - 3.0 m/day, with no special measures to be taken for dispersive soils.

Effluent must be treated as **Advanced Secondary Treatment**, due to the watertable. The wastewater will require a separation distances maintained from drains of 10m.

It is estimated that the water table will rise to 600 mm below ground level during seasonal rains.

For subsurface irrigation a design irrigation rate (DIR) of 35 mm/week be adopted, as indicated by the AS/NZS 1547:2012. The irrigation area which is based on a 4 bedroom dwelling at 6 persons at 200 litres per day. This will require a minimum of 240 square metres of irrigation area with the same for a reserve area.

If a trenches are to be used a design loading rate (DLR) of 50 mm/d be adopted, as indicated by the AS/NZS 1547:2012. The trenches required based on a 4 bedroom dwelling at 6 persons at 200 litres per day. This will require approximately 24 square metres which can be utilized as 1 x 2m wide x 12m long Bed with the same for a reserve area. Theses trenches will need to consist of a mound allowing for a minimum of 300 mm vertical separation from watertable.

It should be noted that the DLR and DIR values provided are based on soil infiltration rates only. These may require to be altered following a water balance analysis with consideration given to the published rainfall and evaporation data from the nearest meteorological station.

It should be noted that application and maintenance of appropriate vegetation cover is essential for effective disposal relying upon evapo - transpiration. It would be advantageous to duplicate disposal areas and alternate areas.

For the calculation of disposal area, it is suggested that a daily effluent flow of 150 litres per/person/day be used for households with a reticulated town water supply.

RECOMMENDATIONS

Further testing will be required prior to construction as this is only a preliminary report and allotments have not been determined.

This can be determined when the location of the building is located on the allotment.

BUFFER DISTANCES

Minimum horizontal buffer distances are to be maintained. A table is attached.

VALIDITY

The excavation of a limited number of holes does not preclude the possibility of some conditions on the site being different from those encountered in the holes. Should conditions be found which differ from those described in this report, then the recommendations are not valid and this organisation should be contacted.

Yours faithfull

Tandel Investments Pty Ltd T/as DIRT PROFESSIONALS

Angelo Tudini Director

Attached

- -Site plan of proposed subdivision
- -Guides for effluent quality
- -Guidelines for vertical and horizontal separation distances

BORE HOLE LOG

HOLE 1

0.0 - 1.2m

Sandy Loams - Brown

1.2m

Water at this depth

HOLE 2

0.0 - 0.8m

Sandy Loams - Brown

HOLE 3

0.0 - 1.2m

Sandy Loams - Brown

1.2m

Water at this depth

HOLE 4

0.0 - 1.8m

Sandy Loams - Brown

HOLE 5

0.0 - 1.5m

Sandy Loams - Brown

HOLE 6

0.0 - 1.2m

Sandy Loams - Brown

HOLE 7

0.0 - 2.0 m

Sandy Loam - Brown

HOLE 8

0.0 - 1.2m

Sandy Loams - Brown

HOLE 9

0.0 - 1.5m

Sandy Loams - Brown



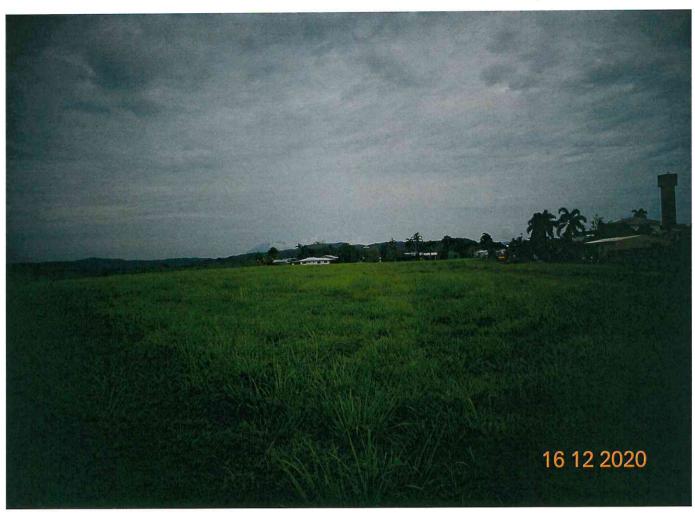


Michael Tessaro Senior Planner

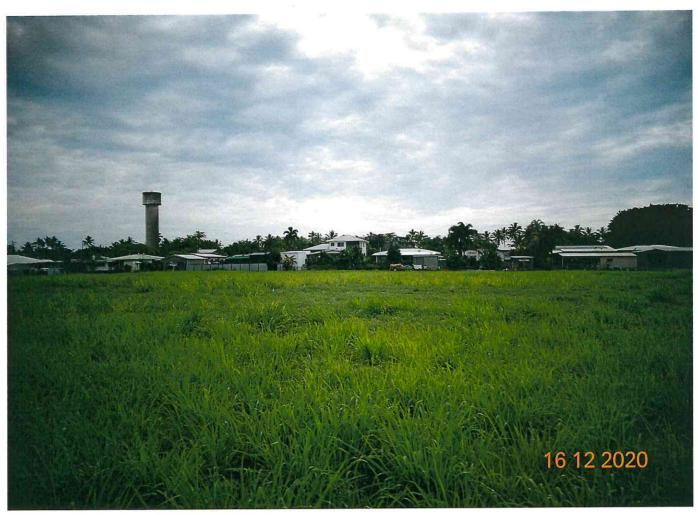
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Ground Floor, Woree Plaza 12-20 Toogood Road Woree QLD 4868

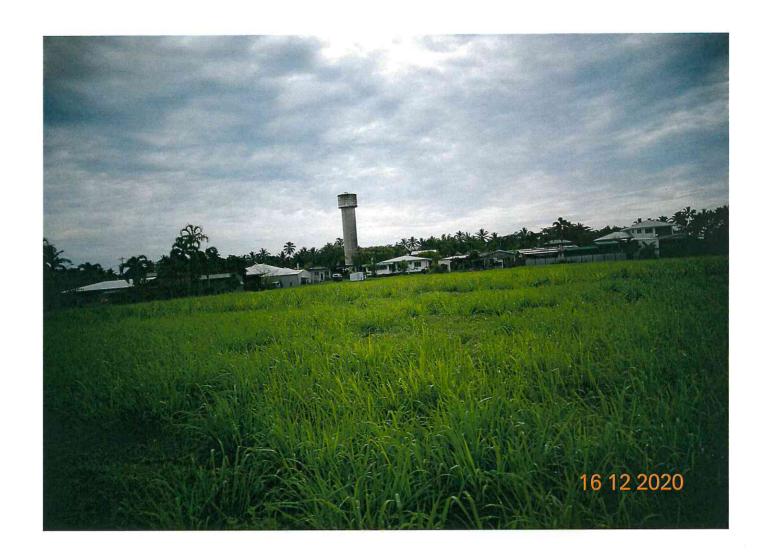
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APPENDIX R

RECOMMENDED SETBACK DISTANCES FOR LAND APPLICATION SYSTEMS

(Informative)

R1 SCOPE

This Appendix provides a summary of information on setback distances compiled from a literature review. Local conditions and sensitive receiving environments may require different setback distances. The tables in this Appendix provide a guide on the setback distances that may be applied to land application areas, based on site constraints identified during the site-and-soil evaluation.

R2 APPLICATION

Table R1 is to be used in conjunction with Table R2 in determining the appropriate setback distances when siting a system. If the site has high constraints for any site feature, then the maximum values indicated in Table R1 should be considered. In practice, the overall setback distance should be based on an evaluation of the items and corresponding sensitive features and how these interact to provide a pathway or barrier to the movement of wastewater to the site feature. The regulatory authority may reduce or increase setback distances at their discretion. Where setback distances cannot be achieved, regulators may consider specific management practices to address potential for off-site export of effluent such as monitoring downstream waters and approved modifications to on-site system design.

The tables provide a guideline for designers and site-and-soil evaluators. Adequate site-and-soil assessment leading to the correct system selection and design sizing procedures in this Standard may reduce the need for the maximum setback distances provided in these guidelines. In some cases the regulatory authority will have policy or guidelines that will override the guideline distances below for their area.

There are a number of minimum setback distances that should be taken into account when siting an on-site land application system. These include necessary clearances from buildings, site boundaries, surface water, water supply bores, water tables, and embankment walls. The minimum distances also depend on potential for adverse health and environmental effects, which specifically impacts on water quality, and therefore vary depending on the site constraints and the quality of the treated wastewater.

Figures R1 and R2 provide examples of on-site system design boundaries and possible site constraints.

TABLE R1 GUIDELINES FOR HORIZONTAL AND VERTICAL SETBACK DISTANCES

(to be used in conjunction with Table R2)

Site feature	Setback distance range (m) (See Note 1)	Site constraint items of specific concern (from Table R2) (see Note 1)
	Horizontal setback distance (m)	
Property boundary	1.5 – 50 (see Note 2)	A, D, J
Buildings/houses	2.0 - > 6 (see Note 3)	A, D, J
Surface water (see Note 4)	15 – 100	A, B, D, E, F, G, J
Bore, well (see Notes 5 and 6)	15 – 50	A, C, H, J
Recreational areas (Children's play areas, swimming pools and so on) (see Note 7)	3 – 15 (see Notes 8 and 9)	A, E, J
In-ground water tank	4 – 15 (see Note 10)	A, E, J
Retaining wall and Embankments, escarpments, cuttings (see Note 11)	3.0 m or 45° angle from toe of wall (whichever is greatest)	D, G, H
	Vertical setback distance (m)	
Groundwater (see Notes 5, 6, and 12)	0.6 - > 1.5	A, C, F, H, I, J
Hardpan or bedrock	0.5 - ≥ 1.5	A, C, J

NOTES:

- The overall setback distance should be commensurate with the level of risk to public health and the environment. For example, the maximum setback distance should be adopted where site/system features are on the high end of the constraint scale. The setback distance should be based on an evaluation of the constraint items and corresponding sensitive features in Table R2 and how these interact to provide a pathway or barrier for wastewater movement.
- Subject to local regulatory rules and design by a suitably qualified and experienced person, the separation of a drip line system from an upslope boundary, for slopes greater than 5%, may be reduced to 0.5 m.

Table R1 continued on next page

TABLE R1

GUIDELINES FOR HORIZONTAL AND VERTICAL SETBACK DISTANCES

(to be used in conjunction with Table R2) (continued)

- 3 Setback distances of less than 3 m from houses are appropriate only where a drip irrigation land application system is being used with low design irrigation rates, where shallow subsurface systems are being used with equivalent low areal loading rates, where the risk of reducing the bearing capacity of the foundation or damaging the structure is low, or where an effective barrier (designed by a suitably qualified and experienced person) can be installed. This may require consent from the regulatory authority.
- 4 Setback distance from surface water is defined as the areal edge of the land application system to the edge of the water. Where land application areas are planned in a water supply catchment, advice on adequate buffer distances should be sought from the relevant water authority and a hydrogeologist. Surface water, in this case, refers to any fresh water or geothermal water in a river, lake, stream, or wetland that may be permanently or intermittently flowing. Surface water also includes water in the coastal marine area and water in man-made drains, channels, and dams unless these are to specifically divert surface water away from the land application area. Surface water excludes any water in a pipe or tank.
- Highly permeable stony soils and gravel aquifers potentially allow microorganisms to be readily transported up to hundreds of metres down the gradient of an on-site system (see R3, Table 1 in Pang et al. 2005). Maximum setback distances are recommended where site constraints are identified at the high scale for items A, C, and H. For reading and guidance on setback distances in highly permeable soils and coarse-grained aquifers see R3. As microbial removal is not linear with distance, data extrapolation of experiments should not be relied upon unless the data has been verified in the field. Advice on adequate buffer distances should be sought from the relevant water authority and a hydrogeologist.
- Setback distances from water supply bores should be reviewed on a case-by-case basis. Distances can depend on many factors including soil type, rainfall, depth and casing of bore, direction of groundwater flow, type of microorganisms, existing quality of receiving waters, and resource value of waters.
- 7 Where effluent is applied to the surface by covered drip or spray irrigation, the maximum value is recommended.
- 8 In the case of subsurface application of primary treated effluent by LPED irrigation, the upper value is recommended.
- In the case of surface spray, the setback distances are based on a spray plume with a diameter not exceeding 2 m or a plume height not exceeding 0.5 m above finished surface level. The potential for aerosols being carried by the wind also needs to be taken into account.
- 10 It is recommended that land application of primary treated effluent be down gradient of in-ground water
- 11 When determining minimum distances from retaining walls, embankments, or cut slopes, the type of land application system, soil types, and soil layering should also be taken into account to avoid wastewater collecting in the subsoil drains or seepage through cuts and embankments. Where these situations occur setback clearances may need to be increased. In areas where slope stability is of concern, advice from a suitably qualified and experienced person may be required.
- 12 Groundwater setback distance (depth) assumes unsaturated flow and is defined as the vertical distance from the base of the land application systems to the highest seasonal water table level. To minimise potential for adverse impacts on groundwater quality, minimum setback distances should ensure unsaturated, aerobic conditions in the soil. These minimum depths will vary depending on the scale of site constraints identified in Table R2. Where groundwater setback is insufficient, the ground level can be raised by importing suitable topsoil and improving effluent treatment. The regulatory authority should make the final decision in this instance. (See also the guidance on soil depth and groundwater clearance in Tables K1 and K2.)

TABLE R2 SITE CONSTRAINT SCALE FOR DEVELOPMENT OF SETBACK DISTANCES

(used as a guide in determining appropriate setback distances from ranges given in Table R1)

Item	Site/system	Constraint scale (see Note 1) LOWER HIGHER		Sensitive features
feature		Examples of constrain	nt factors (see Note 2)	
Α	Microbial quality of effluent (see Note 3)	Effluent quality consistently producing ≤ 10 cfu/100 mL E. coli (secondary treated effluent with disinfection)	Effluent quality consistently producing ≥ 10 ⁶ cfu/100 mL E. coli (for example, primary treated effluent)	Groundwater and surface pollution hazard, public health hazard
В	Surface water (see Note 4)	Category 1 to 3 soils (see Note 5) no surface water down gradient within > 100 m, low rainfall area	Category 4 to 6 soils, permanent surface water <50 m down gradient, high rainfall area, high resource/environmental value (see Note 6)	Surface water pollution hazard for low permeable soils, low lying or poorly draining areas
С	Groundwater	Category 5 and 6 soils, low resource/environmental value	Category 1 and 2 soils, gravel aquifers, high resource/environmental value	Groundwater pollution hazard
D	Slope	0 – 6% (surface effluent application) 0 – 10% (subsurface effluent application)	> 10% (surface effluent application), > 30% subsurface effluent application	Off-site export of effluent, erosion
E	Position of land application area in landscape (see Note 6).	Downgradient of surface water, property boundary, recreational area	Upgradient of surface water, property boundary, recreational area	Surface water pollution hazard, off-site export of effluent
F	Drainage	Category 1 and 2 soils, gently sloping area	Category 6 soils, sites with visible seepage, moisture tolerant vegetation, low lying area	Groundwater pollution hazard
G	Flood potential	Above 1 in 20 year flood contour	Below 1 in 20 year flood contour	Off-site export of effluent, system failure, mechanical faults
Н	Geology and soils	Category 3 and 4 soils, low porous regolith, deep, uniform soils	Category 1 and 6 soils, fractured rock, gravel aquifers, highly porous regolith	Groundwater pollution hazard for porous regolith and permeable soils
41	Landform	Hill crests, convex side slopes, and plains	Drainage plains and incise channels	Groundwater pollution hazard, resurfacing hazard
J	Application method	Drip irrigation or subsurface application of effluent	Surface/above ground application of effluent	Off-site export of effluent, surface water pollution

NOTES:

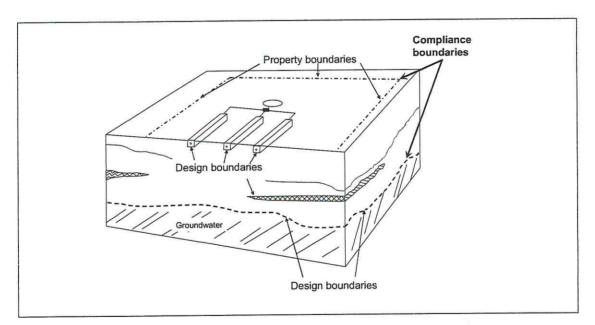
- Scale shows the level of constraint to siting an on-site system due to the constraints identified by SSE evaluator or regulatory authority. See Figures R1 and R2 for examples of on-site system design boundaries and possible site constraints.
- Examples of typical siting constraint factors that may be identified either by SSE evaluator or regulatory authority. Site constraints are not limited to this table. Other site constraints may be identified and taken into consideration when determining setback distances.

Table R2 continued on next page ➤

TABLE R2 SITE CONSTRAINT SCALE FOR DEVELOPMENT OF SETBACK DISTANCES

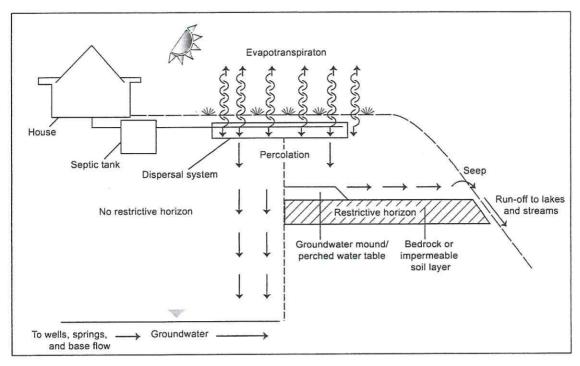
(used as a guide in determining appropriate setback distances from ranges given in Table R1) (continued)

- The level of microbial removal for any on-site treatment system needs to be determined and it should be assumed that unless disinfection is reliably used then the microbial concentrations will be similar to primary treatment. Low risk microbial quality value is based on the values given in ARC (2004), ANZECC and ARMCANZ (2000), and EPA Victoria (Guidelines for environmental management: Use of reclaimed water 2003).
- Surface water, in this case, refers to any fresh water or geothermal water in a river, lake, stream, or wetland that may be permanently or intermittently flowing. Surface water also includes water in the coastal marine area and water in man-made drains, channels, and dams unless these are to specifically divert surface water away from the land application area. Surface water excludes any water in a pipe or tank.
- The soil categories 1 to 6 are described in Table 5.1. Surface water or groundwater that has high resource value may include potable (human or animal) water supplies, bores, wells, and water used for recreational purposes. Surface water or groundwater of high environmental value include undisturbed or slightly disturbed aquatic ecosystems as described in ANZECC and ARMCANZ (2000).
- The regulatory authority may reduce or increase setback distances at their discretion based on the distances of the land application up or downgradient of sensitive receptors.



(Adapted from USEPA 2002)

FIGURE R1 EXAMPLE OF DESIGN AND COMPLIANCE BOUNDARIES FOR APPLICATION OF SETBACK DISTANCES FOR A SOIL ABSORPTION SYSTEM



(Adapted from Venhuizen 1995)

FIGURE R2 EXAMPLE OF WASTEWATER PATHWAYS AND SITE CONSTRAINTS FOR APPLICATION OF SETBACK DISTANCES FOR A SOIL ABSORPTION SYSTEM

R3 REFERENCES/GUIDELINES USED IN THE DEVELOPMENT OF THESE SETBACK DISTANCES

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CB & FR Coulthard

Proposed Residential Development
Coulthard Close, Lot 100 SP168537
Engineering Report

214-001-001R Revision A May 2021

Prepared by:



GLF Developments Pty Ltd t/a CivilWalker Consulting Engineers

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Document Control

Revision	Date	Reason	Author
Α	18.05.21	Initial Issue	DJW

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1. Introduction

CivilWalker Consulting Engineers have been commissioned by CB & FR Coulthard to prepare an engineering report in support of an application for a proposed residential subdivision on Coulthard Close, Newell Beach. The subject site is located at the southern end of Coulthard Close and is more formally described as Lot 100 on SP168537. The site is identified in **Figure 1.1** below and shown on Brazier Motti drawing 34678/003 attached as **Appendix A**.

The purpose of this report is to describe the following engineering aspects with regard to the proposed development:

- Flooding and Site Levels.
- Access Road.
- Stormwater Drainage.
- Water Supply.
- Sewerage.



Figure 1.1 - Site Location (courtesy of Qld Globe)



2. Existing Conditions

The subject site is 2.144 hectares in size and has access from both Coulthard Close and Andrews Street. It is in an area in which the surrounding land uses are primarily residential. The site is vacant of any improvements however it is encumbered by drainage easements to facilitate conveyance of stormwater run-off in the area. Open drainage channels run along the eastern and northern boundaries draining stormwater to the north-west.

The site generally falls from the south-west to north-east, with most of the site draining to the above-mentioned drainage channel. Existing site levels vary from 4.1m AHD to 3.0m AHD, excluding the drainage channel, which varies from 3.96m AHD to 2.3m AHD.

The site is surrounded by the following infrastructure:

- 17m wide road reserve on Coulthard Close, with 7.7m wide sealed carriageway (invert to invert of kerb).
- 20m wide road reserve on Andrews Street, with a varying with carriageway (6.5m wide at site location), no kerb & channel.
- Water reticulation pipes.
- Limited stormwater drainage pits / pipes.
- Street lighting.
- Underground electrical / telecommunications.

Photographs of the site and surrounding area are provided below.



Photograph 2.1 – Site From Coulthard Close Looking South





Photograph 2.2 – Site Looking West From End Of Coulthard Close



Photograph 2.3 – Site Looking East From End Of Coulthard Close





Photograph 2.4 – Site Looking South From North East Corner



Photograph 2.5 – Looking At Site To The South From Coulthard Close / Lematy Street Intersection



3. Proposed Development

The proposed development is a residential subdivision as described on Brazier Motti drawing 34678/004 (**Appendix B**) and can be summarised as follows:

Lot 1	- Freehold Land	1,281m²
Lot 2	- Freehold Land	872m²
Lot 3	- Freehold Land	872m²
Lot 4	- Freehold Land	872m²
Lot 5	- Freehold Land	872m²
Lot 6	- Freehold Land	872m²
Lot 7	- Freehold Land	872m²
Lot 8	- Freehold Land	865m²
Lot 9	- Freehold Land	965m²
Lot 10	- Freehold Land	825m²
Lot 11	- Freehold Land	806m²
Lot 12	- Freehold Land	838m²
Lot 13	- Freehold Land	840m²
Lot 14	- Freehold Land	840m²
Lot 15	- Freehold Land	813m²
Lot 16	- Freehold Land	813m²
Lot 17	- Freehold Land	813m²
Lot 18	- Freehold Land	813m²
Lot 19	- Freehold Land	813m²
Lot 20	- Freehold Land	813m²
Lot 21	- Freehold Land	1,194m²

It is proposed that the internal road will be dedicated as road reserve and that the water / stormwater reticulation infrastructure be handed over to Council. Other utility services, such as electrical and telecommunications will be handed over to the appropriate authorities.



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4. Flooding and Site Levels

4.1 Flooding

Review of the Douglas Shire Council "Flood and Storm Tide Inundation Overlay Map – Sheet FST-016" (**Appendix C**) was undertaken to determine flood impact on the site. Council's overlay map identifies that the site is not inundated within the 100-year ARI flood event. However, the site is located within the floodplain assessment overlay area and is straddled by the medium hazard storm tide area. Earthwork will therefore be required to elevate the site to levels suitable for residential purposes.

4.2 Building Immunity Requirements

In accordance with the requirements of Douglas Shire Council's planning scheme policy, flood immunity is required for the proposed habitable floor levels against the 100-year flood event. Building levels are to be set to achieve this immunity, plus a 300mm freeboard.

4.3 Existing Site Levels

As noted in **Section 2**, existing site levels vary from 4.10m AHD to 3.0m AHD, excluding the drainage channel which varies from 3.96m AHD to 2.3m AHD.

4.4 Habitable Floor Level

As noted in **Section 4.2**, habitable floor levels for house sites are required to have a minimum 300mm freeboard above the 100 year ARI flood level. Based on the information provided on the Flood and Storm Tide Inundation Overlay Map, the 100-year flood level is no greater than 3.0m and therefore a minimum habitable floor level of 3.3m AHD should be adopted.

4.5 Proposed Earthwork

Earthworks will be required to achieve appropriate habitable floor levels. Other criteria considered in determining proposed site levels for the site relate to tying into existing road levels at the northern boundary of the site and applying compliant road horizontal / vertical geometry parameters to meet the requirements of FNQROC, whilst also considering an efficient earthwork cut / fill arrangement.

As a result of the above considerations, a preliminary site grading has been developed, which is provided on drawing 214-001-SK01 (**Appendix E**).

Detailed design of earthworks will be undertaken during the operational works phase in accordance with the requirements of FNQROC and Australian Standard AS3798 – 2007 (as amended) "Guidelines on Earthworks for Commercial and Residential Developments". On site testing during construction shall be carried out by a NATA Registered Laboratory and submitted to Council as part of the as-constructed submission associated with an Operational Works approval.



5. Stormwater Drainage

5.1 Existing Drainage Regime

Existing stormwater drainage infrastructure in the vicinity of the site identified from site investigation and is shown on CivilWalker drawing 214-001-SK02 within **Appendix E**. Commentary is provided below.

- Kerb and channel on northern side of the Coulthard Close / Lematy Street intersection drains northward toward the Coulthard Close cul-de-sac head.
- Stormwater drainage pits are located just prior to the cul-de-sac head, which drain into an
 underground pipe system that outlets via an easement through number 31 Coulthard
 Close (Lot 44 on RP890699) into an open drainage channel.
- The channel drains westward to Saltwater Creek, approximately 1,050m away.
- Kerb and channel on the southern side of the Coulthard Close / Lematy Street intersection drains southward toward the subject site, where it outlets from the kerb and channel directly into the above mentioned drain on the northern site boundary.



Photograph 5.1 - Coulthard Close Kerb That Drains North From Lematy Street Intersection





Photograph 5.2 – Coulthard Close Kerb That Drains South From Lematy Street Intersection



Photograph 5.3 – Open Drainage Channel Drains North From Site (Looking South)





Photograph 5.4 – Stormwater Pipe Outletting From Easement Within 31 Coulthard Close



Photograph 5.5 – Open Drainage Channel Drains West Towards Saltwater Creek



5.2 Proposed Drainage Regime

Under the proposed development, the current drainage regime will generally be maintained for the area, with drainage being directed to the existing drainage channel and being conveyed to the north west toward Saltwater Creek. The drainage philosophy will generally be based on the following:

- Run-off from western allotments will be directed to the new road.
- Flow within road will be conveyed to inlet pits.
- Inlet pits will capture the flow and direct it to an underground drainage network.
- The underground drainage network will direct flow northward to the existing drain at the end of existing Coulthard Close.
- A culvert will be installed under the road within the existing drain so that the existing channel flow will be maintained.
- Run-off from the eastern allotments will be directed to the existing drainage channel.

Stormwater design will be undertaken using the Rational Method in accordance with FNQROC and the Queensland Urban Drainage Manual (QUDM). In accordance with FNQROC, the major system design shall be calculated based on a 100-year average recurrence interval. Minor flows will be designed for a two (2) year average recurrence interval. Consideration will also be given to impacts of severe storms in accordance with the requirements of the Queensland Urban Drainage Manual.



6. Access Road

6.1 Road Geometry

Concept horizontal road geometry is shown on drawing 214-001-SK01 "General Arrangement" (**Appendix E**). In accordance with FNQROC Table D1.1 "Street and Road Hierarchy – Deemed to Comply Requirements", the internal road is proposed to be an Access Place because the catchment size is less than 25 allotments. Key characteristics of the geometry are as follows:

- Road Reserve Width = 14.5m
- Carriageway Width = 5.5m
- Verge Width = 4.5m
- Cul-de-Sac Turning Circle Radius = 10.0m
- Cul-de-Sac approach / departure curves = 15.0m
- Kerb and Channel Both Sides

A typical road section is provided on drawing 214-001-SK01 (Appendix E).



Photograph 6.1 - Proposed Road Connection Point On Coulthard Close

Detailed design of the vertical geometry will be undertaken during the operational works phase; however, concept grading work has been undertaken for the purpose of this report. A minimum longitudinal road grade of 0.5% has been applied to the carriageway, except in the location of the cul-de-sac head where an increased grade has been applied to the road Crown. This is to facilitate a minimum 0.5% grade on the kerb and channel within the cul-de-sac head.



6.2 Allotment Access

Allotment access will be available from the proposed new road to all new lots such that driveways and crossovers can be constructed in accordance with FNQROC requirements.

6.3 Pavement

Road pavements will be designed and constructed in accordance with the design guideline requirements of FNQROC Section D3 "Road Pavements" and standard specification S2 "Road Pavement". In accordance with FNQROC, the minimum pavement thickness will be 200mm of unbound granular pavement with 30mm asphalt surfacing. Pavement design will be undertaken during the operational works phase to confirm the pavement structure.



7. Water Supply

A copy of Council's trunk water supply infrastructure in the vicinity of the site was obtained from their online mapping service and is contained within **Appendix D**. It identifies a reservoir located on Andrews Street approximately 120m from the site (refer **Photograph 7.1**) and a trunk water main that runs along Andrews Street, Marine Parade and then along Newell Road, connecting the reservoir to the trunk main on Mossman Daintree Road.



Photograph 7.1 - Andrews Street Reservoir From Coulthard Close / Lematy Street Intersection

Details on the location of reticulation mains were also received from Council's on-line mapping service and are shown in **Figure 7.1**. A 100mm diameter main was identified on the eastern side of Coulthard Close. This was verified on site based on the presence of a series of valves and hydrants observed during site inspections (refer **Photographs 7.2**, **7.3** and **7.4**).

It is proposed to extend the existing 100mm main into the proposed development to provide service to each of the proposed new allotments. Based on the presence of the existing reservoir within close proximity of the development, it is not expected that water pressures will be problematic however, a water analysis will be undertaken during the operational works phase to confirm that minimum pressures are available for domestic supply and fire-fighting purposes.

In determining demand due to the development on the existing water reticulation network, the equivalent demand was calculated adopting the requirements of Table 6.1 "Equivalent Demands" within FNQROC. For the freehold allotments, a value of 2.8 EP was adopted for lots between 401m² and 900m² in size and a value of 3.4EP was adopted for lots between 1,101m² and 1,500m² in size. Therefore, the total demand due to the proposed development is calculated as:

19 x freehold allotments at 2.8 EP = 53.2 equivalent persons

2 x freehold allotments at 3.4 EP = 6.8 equivalent persons

Total development demand = 60.0 equivalent persons





Figure 7.1 – Existing Water Reticulation



Photograph 7.2 - Fire Hydrant On Coulthard Close North Of Lematy Street





Photograph 7.3 - Water Valve On Coulthard Close North Of Lematy Street



Photograph 7.4 – Water Valve On Coulthard Close South Of Lematy Street



8. Sewerage

There is currently no sewerage network within the Newell Beach area. All existing residential allotments operate with on-site wastewater treatment systems. It is proposed that the new allotments will operate on similar systems that comply with the requirements of AS/NZS 1547:2012 "On Site Domestic Wastewater Management".

An on-site wastewater management report has been commissioned by Brazier Motti and is attached as **Appendix D**. The report notes that the existing subsurface conditions on the site are uniform in nature and comprised of mainly sandy loams. The report further notes that testing undertaken identified that they were of a non-dispersive nature. The report concludes that effluent from the proposed development must be treated to an advanced secondary standard due to the level of water table encountered during the site investigation (1.2m below surface) and that following options are available:

- Trench System 24m² of trench area with 24m of reserve area
- Irrigation System 240m² of irrigation area with 240m² of reserve area

Whilst enough area is available on the proposed allotments for both types of systems, it is likely that a typical trench type system will be adopted.



9. Summary

CivilWalker Consulting Engineers were commissioned by CB & FR Coulthard to prepare an engineering report in support of an application for a proposed residential subdivision (21 allotments) on Coulthard Close, Newell Beach. The subject site is located at the southern end of Coulthard Close and is more formally described as Lot 100 on SP168537.

The purpose of this report is to describe the following engineering aspects regarding the proposed development:

- Flooding and Site Levels.
- Access Road
- Stormwater Drainage.
- Water Supply.
- Sewerage.

The subject site is 2.144 hectares in size and has access from both Coulthard Close and Andrews Street. It is in an area in which the surrounding land uses are primarily residential with existing infrastructure typical of such an area. The site is vacant of any improvements however it is encumbered by drainage easements to facilitate conveyance of stormwater run-off in the area. Open drainage channels run along the eastern and northern boundaries draining stormwater to the north-west. The site generally falls from the south-west to north-east, with most of the site draining to the above-mentioned drainage channel. Existing site levels vary from 4.1m AHD to 3.0m AHD, excluding the drainage channel, which varies from 3.96m AHD to 2.3m AHD.

Access to proposed development is proposed via an extension of Coulthard Close to an access place standard in accordance with FNQROC, providing a road reserve width of 14.5m, carriageway width of 5.5m and 4.5m wide verges. Allotment access is proposed via standard FNQROC vehicle crossover / driveway arrangements. Pavements will be designed for a minimum thickness of 230mm (30mm asphalt and 200mm gravel) as required by FNQROC.

Review of the Douglas Shire Council "Flood and Storm Tide Inundation Overlay Map was undertaken to determine flood impact on the site. Council's overlay map identifies that the site is not inundated within the 100-year ARI flood event. However, the site is located within the floodplain assessment overlay area and is straddled by the medium hazard storm tide area.

Habitable floor levels for house sites have been adopted at a level of 3.3m AHD to provide a minimum of 300mm above the 100-year flood event. Earthwork will be required to achieve development outcomes. This will be designed / constructed during the operational works phase in accordance with the requirements of FNQROC and Australian Standard AS3798 – 2007 "Guidelines on Earthworks for Commercial and Residential Developments". On site testing during construction shall be carried out by a NATA Registered Laboratory and submitted to Council as part of the as-constructed submission associated with an Operational Works approval.

The current drainage regime will generally be maintained for the area, with drainage being directed to the existing drainage channel and being conveyed to the north west toward Saltwater Creek. The drainage philosophy will generally be based on the following:

- Run-off from western allotments will be directed to the new road.
- Flow within road will be conveyed to inlet pits.
- Inlet pits will capture the flow and direct it to an underground drainage network.



- The underground drainage network will direct flow northward to the existing drain at the end of existing Coulthard Close.
- A culvert will be installed under the road within the existing drain so that the existing channel flow will be maintained.
- Run-off from the eastern allotments will be directed to the existing drainage channel.

Stormwater design will be undertaken using the Rational Method in accordance with FNQROC and the Queensland Urban Drainage Manual (QUDM). In accordance with FNQROC, the major system design shall be calculated based on a 100-year average recurrence interval. Minor flows will be designed for a two (2) year average recurrence interval. Consideration will also be given to impacts of severe storms in accordance with the requirements of the Queensland Urban Drainage Manual.

Connection to Council's existing water reticulation network is proposed to be via both the existing 100mm diameter main located on the eastern side of Coulthard Drive.

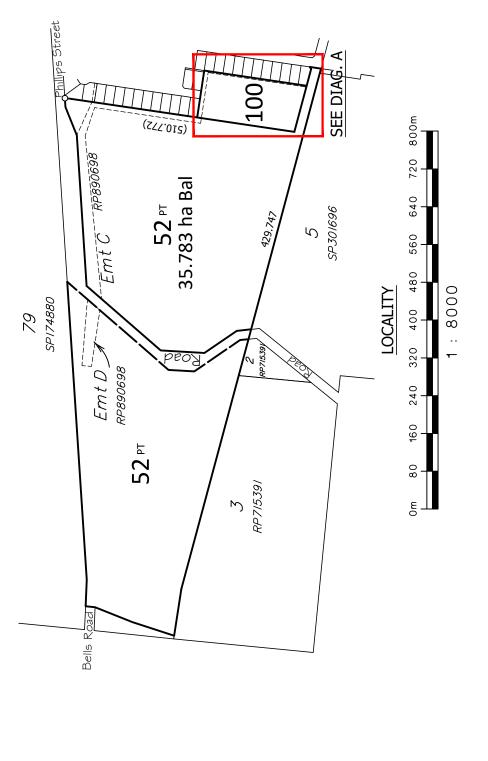
There is no existing sewerage network within Newell Beach and therefore sewerage is proposed to be managed by on-site wastewater management systems that comply with the requirements of AS/NZS 1547:2012 "On Site Domestic Wastewater Management".

In summary, this report determines the following regarding the proposed development:

- Access to the site is available via existing Coulthard Close.
- A proposed new road will be provided to access the new allotments, and this can be provided in accordance with the requirements of FNQROC.
- The required flood immunity level has been assessed based on information contained on Council's Flood and Storm Tide Inundation Overlay Maps, with a minimum habitable floor level being adopted as 3.3m RL.
- A drainage regime has been identified and can be achieved to meet the relevant requirements.
- Earthworks will be undertaken in accordance with the requirements of AS/NZS 3798-2007 (as amended) "Guidelines on Earthworks for Commercial and Residential Developments".
- Water reticulation can be appropriately connected to Council's network.
- Sewerage can be appropriately managed for the development.



Appendix A
Brazier Motti Drawing 34678/003
Lot 100 Reconfiguration



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2.144 ha

100

207.55

52 PT

RECONFIGURATION (STAGE 1) PROPOSED

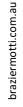
Lots 52 & 100

Cancelling Lot 51 on SP168537 Locality of Newell Douglas Shire Council

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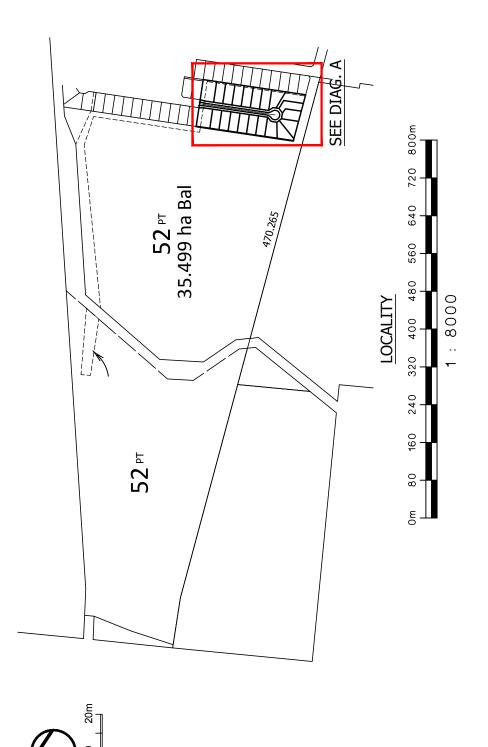




This plan is conceptual and for discussion purposes only. All areas, dimensions and land uses are preliminary, subject to investigation, survey, engineering, and Local Authority and Agency approvals.



Appendix B
Brazier Motti Drawing 34678/004
Proposed Development Layout





Cancelling Lot 100 (Stage 1)

Locality of Newell Douglas Shire Council

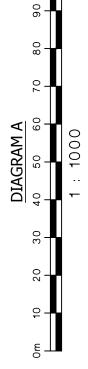
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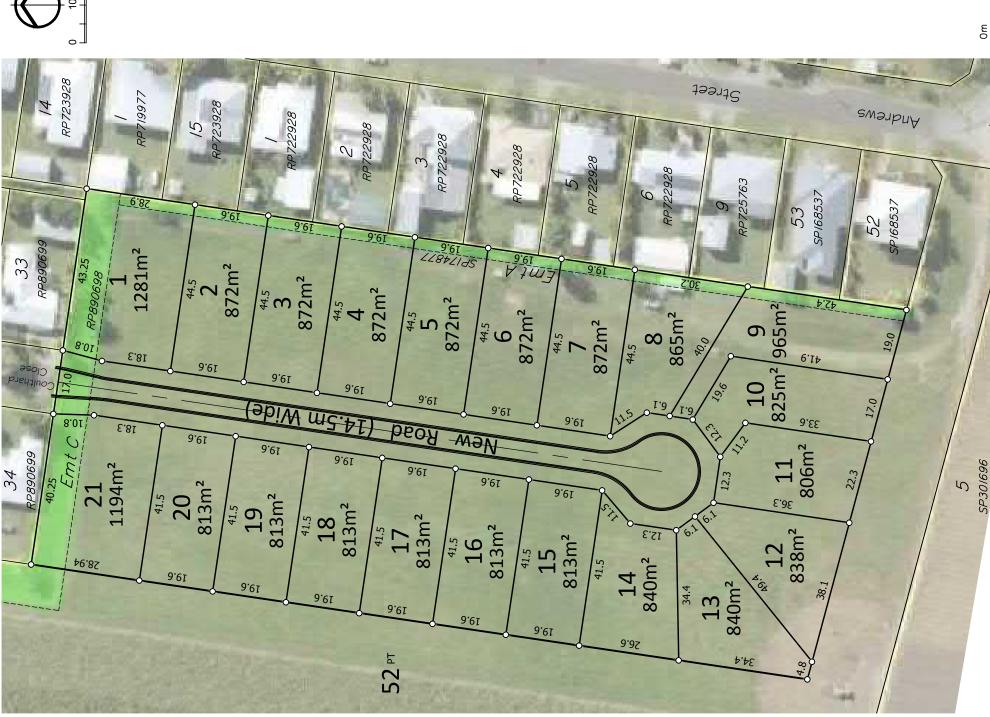
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100m

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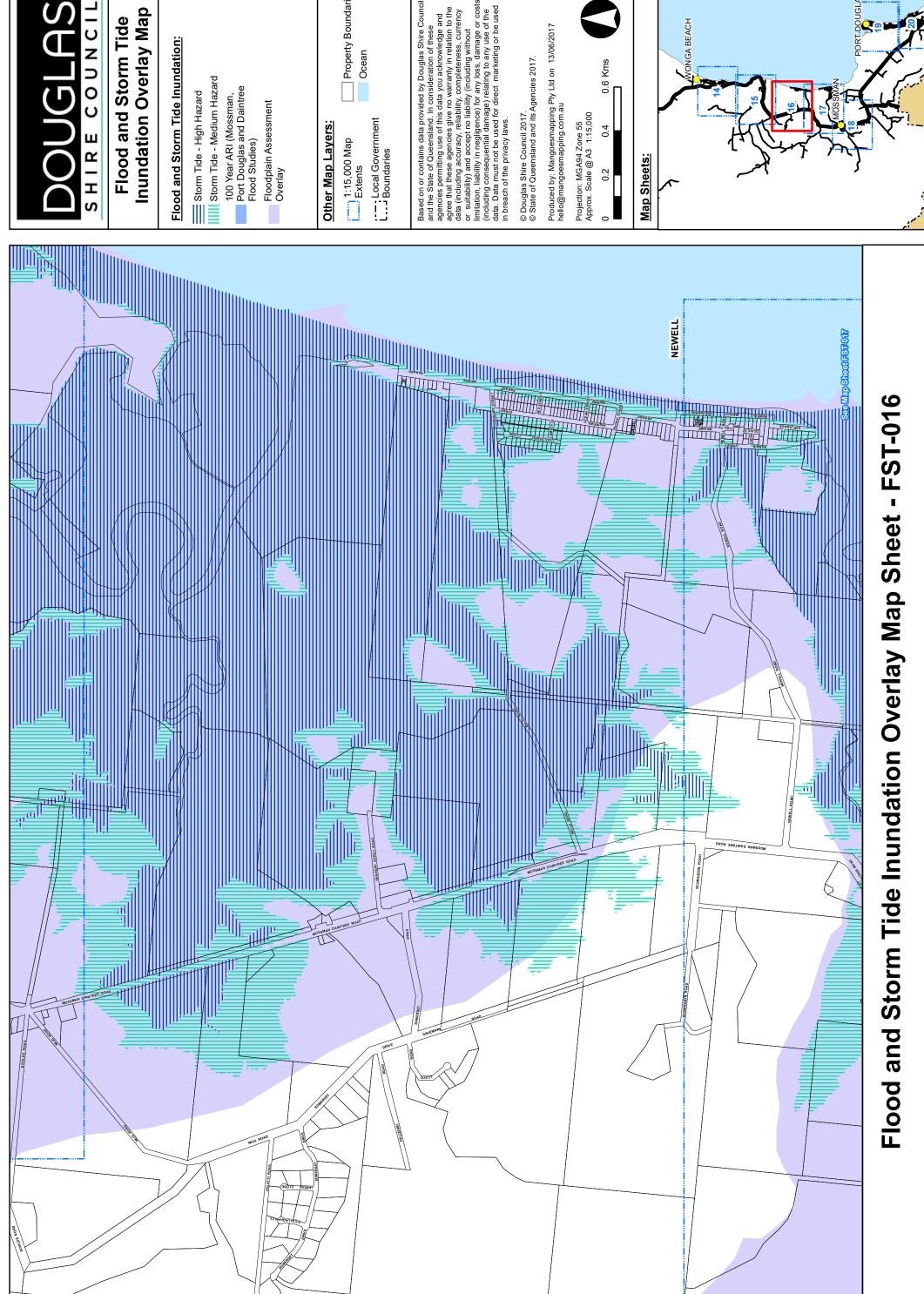
This plan is conceptual and for discussion purposes only. All areas, dimensions and land uses are preliminary, subject to investigation, survey, engineering, and Local Authority and Agency approvals.





Appendix C

Douglas Shire Council
Flood and Storm Tide Inundation Overlay Map



Inundation Overlay Map Flood and Storm Tide

Flood and Storm Tide Inundation:

Storm Tide - High Hazard

100 Year ARI (Mossman, Port Douglas and Daintree Flood Studies)

Floodplain Assessment Overlay

Other Map Layers:

Property Boundaries

Ocean

Local Government

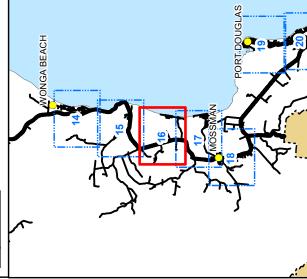
agencies permitting use of this data you acknowledge and agree that these agencies give no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accept no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws. Based on or contains data provided by Douglas Shire Council and the State of Queensland. In consideration of these

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Produced by: Mangoesmapping Pty Ltd on 13/06/2017 hello@mangoesmapping.com.au

Projection: MGA94 Zone 55 Approx. Scale @ A3 1:15,000

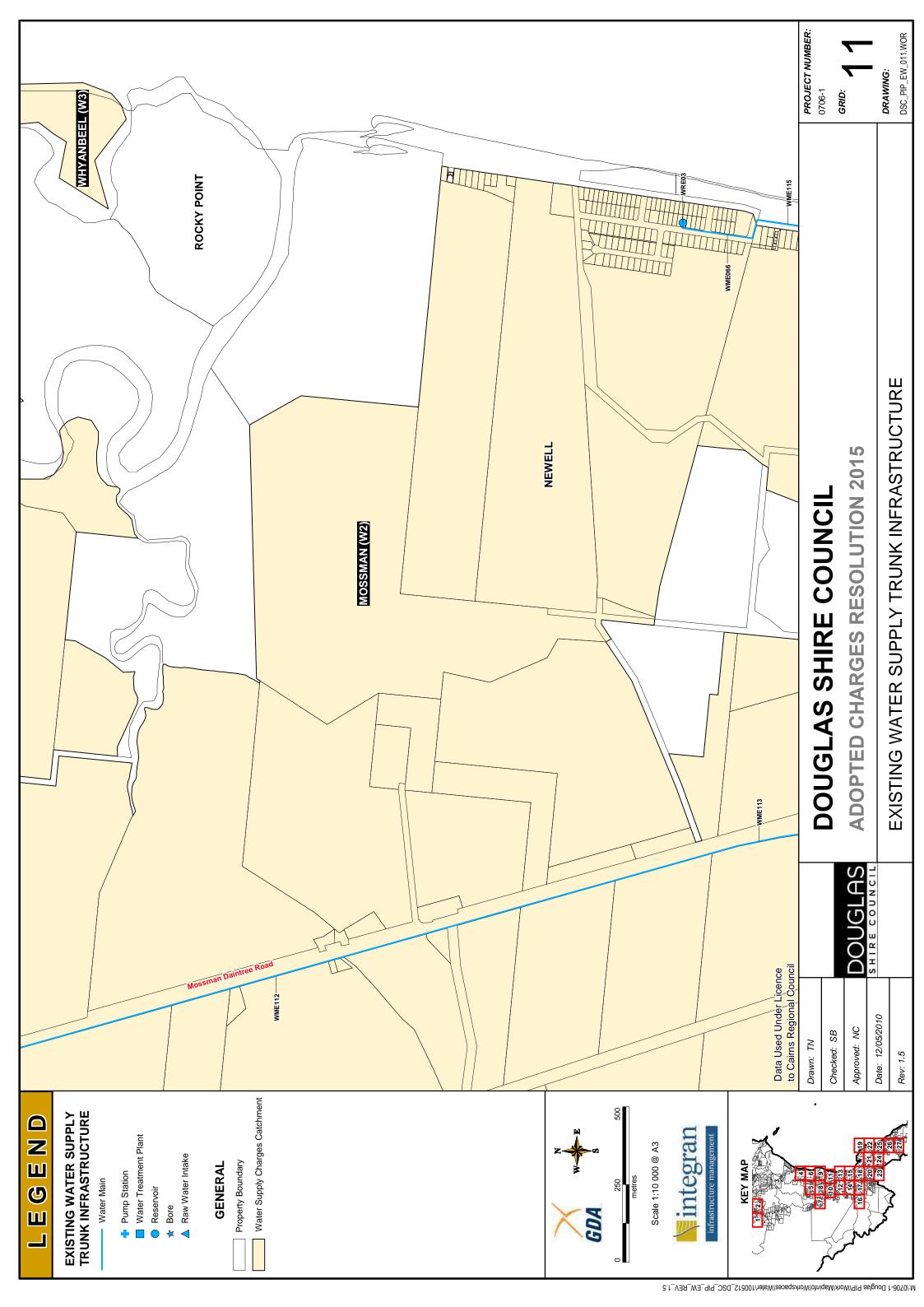
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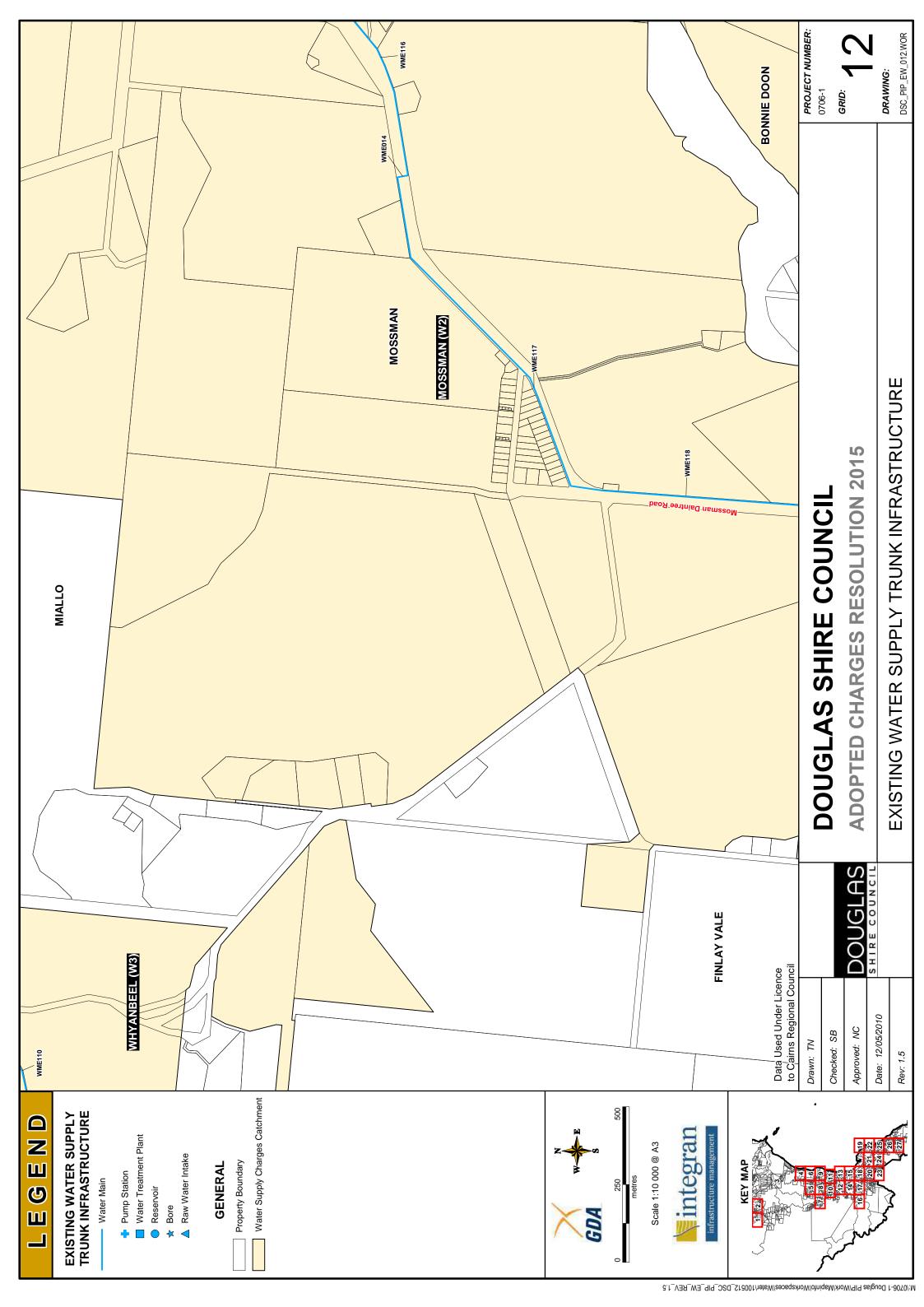


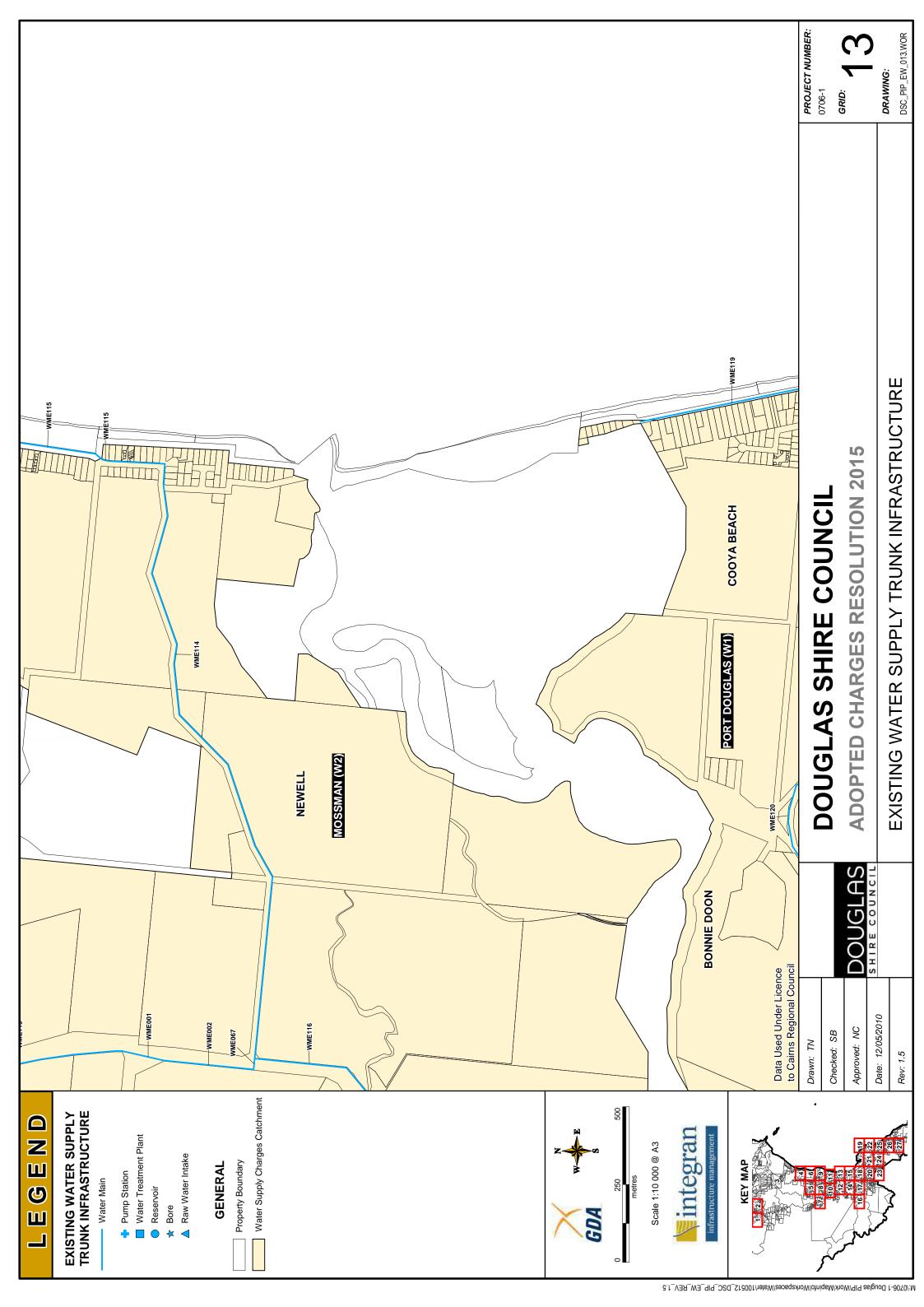


Appendix D

Douglas Shire Council
Existing Water Supply Trunk Infrastructure









Appendix EOn-Site Wastewater Management Report

DIRT PROFESSIONALS

Email: dirtprofessionals@bigpond.com MOBILE 0417 647 477

Brazier Motti Pty Ltd michael.tessaro@braziremotti.com.au

Site Assessment
Part of Lot 51 SP 168537
Newell Beach QLD

16 December 2020

Job No 22242

INTRODUCTION

This report presents the results of a preliminary site assessment performed at Lot 51 SP 168537 Newell Beach. The purpose of the assessment is to determine an acceptable solution for the treatment of wastewater as per the guidelines of the Code of Practise for On-Site Sewerage and the AS/AZS 1547 2012.

The Scope of the works comprised of a series of test bores, followed by laboratory testing.

EXISTING CONDITIONS

At the time of the assessment the site consisted of a portion of land to the Southeast corner of the above address. The land was rectangular in shape, with an approximate total area of approximately 2.33 ha. The allotment is to be subdivided into 18-20 allotments.

At the time of the assessment the proposed allotment was grassed with a slope descending to the South/Southeast. The site had a drain located to the North and East boundary.

Adjacent properties consist of residential land which are serviced with secondary treatment plants and standard septic systems (primary treatment).

FIELD WORK

The field work was undertaken on the 16 December 2020 and comprised of mechanical boring of 9 bore holes. The bores were located at various locations over the proposed allotment (see map).

FIELD WORK RESULTS

Details of the subsurface conditions encountered at the test locations are attached on the bore log forms attached.

The subsurface conditions encountered at the location of the bores were uniform. The materials comprised of mainly sandy loams to the depth of holes.

Water was encountered at a depth of 1200 mm the time of the assessment. Test holes carried out on previous jobs during seasonal rains found water at 600 mm below ground level, during seasonal rains.

LABORATORY TESTING

Laboratory Testing Comprised of dispersion testing.

The testing indicated that the materials tested in the area are of a non-dispersion nature.

EFFLUENT DISPOSAL

Based on the results of the assessment, and on visual assessment of samples from the site, it is concluded that the soils are of a well drained material with a weak structure and should be categorised as and a Category 2, in accordance with the AS/NZS 1547:2012.

It is considered that the indicative permeability of the site soils are likely to be 1.4 - 3.0 m/day, with no special measures to be taken for dispersive soils.

Effluent must be treated as **Advanced Secondary Treatment**, due to the watertable. The wastewater will require a separation distances maintained from drains of 10m.

It is estimated that the water table will rise to 600 mm below ground level during seasonal rains.

For subsurface irrigation a design irrigation rate (DIR) of 35 mm/week be adopted, as indicated by the AS/NZS 1547:2012. The irrigation area which is based on a 4 bedroom dwelling at 6 persons at 200 litres per day. This will require a minimum of 240 square metres of irrigation area with the same for a reserve area.

If a trenches are to be used a design loading rate (DLR) of 50 mm/d be adopted, as indicated by the AS/NZS 1547:2012. The trenches required based on a 4 bedroom dwelling at 6 persons at 200 litres per day. This will require approximately 24 square metres which can be utilized as 1 x 2m wide x 12m long Bed with the same for a reserve area. Theses trenches will need to consist of a mound allowing for a minimum of 300 mm vertical separation from watertable.

It should be noted that the DLR and DIR values provided are based on soil infiltration rates only. These may require to be altered following a water balance analysis with consideration given to the published rainfall and evaporation data from the nearest meteorological station.

It should be noted that application and maintenance of appropriate vegetation cover is essential for effective disposal relying upon evapo - transpiration. It would be advantageous to duplicate disposal areas and alternate areas.

For the calculation of disposal area, it is suggested that a daily effluent flow of 150 litres per/person/day be used for households with a reticulated town water supply.

RECOMMENDATIONS

Further testing will be required prior to construction as this is only a preliminary report and allotments have not been determined.

This can be determined when the location of the building is located on the allotment.

BUFFER DISTANCES

Minimum horizontal buffer distances are to be maintained. A table is attached.

VALIDITY

The excavation of a limited number of holes does not preclude the possibility of some conditions on the site being different from those encountered in the holes. Should conditions be found which differ from those described in this report, then the recommendations are not valid and this organisation should be contacted.

Yours faithfull

Tandel Investments Pty Ltd T/as DIRT PROFESSIONALS

Angelo Tudini Director

Attached

- -Site plan of proposed subdivision
- -Guides for effluent quality
- -Guidelines for vertical and horizontal separation distances

BORE HOLE LOG

HOLE 1

0.0 - 1.2m

Sandy Loams - Brown

1.2m

Water at this depth

HOLE 2

0.0 - 0.8m

Sandy Loams - Brown

HOLE 3

0.0 - 1.2m

Sandy Loams - Brown

1.2m

Water at this depth

HOLE 4

0.0 - 1.8m

Sandy Loams - Brown

HOLE 5

0.0 - 1.5m

Sandy Loams - Brown

HOLE 6

0.0 - 1.2m

Sandy Loams - Brown

HOLE 7

0.0 - 2.0 m

Sandy Loam - Brown

HOLE 8

0.0 - 1.2m

Sandy Loams - Brown

HOLE 9

0.0 - 1.5m

Sandy Loams - Brown



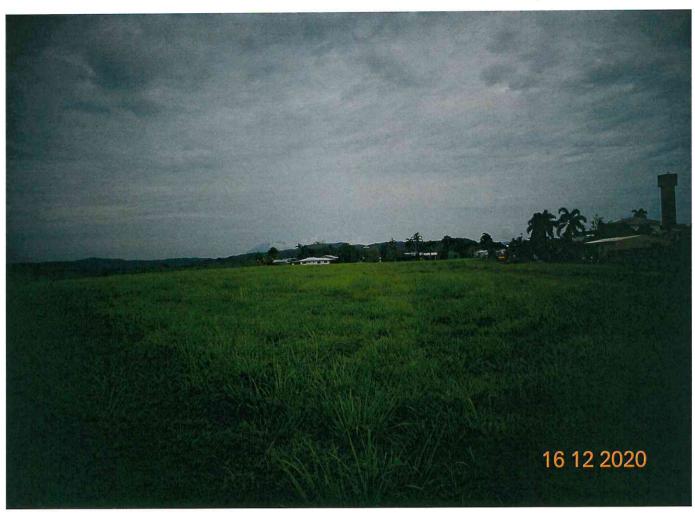


Michael Tessaro Senior Planner

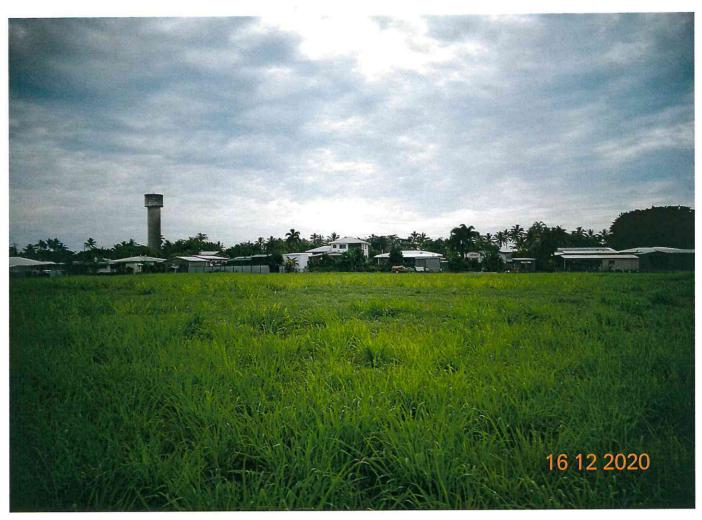
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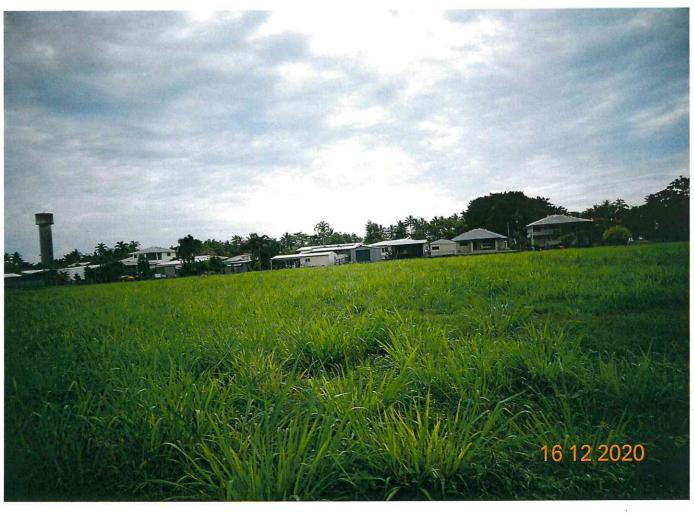
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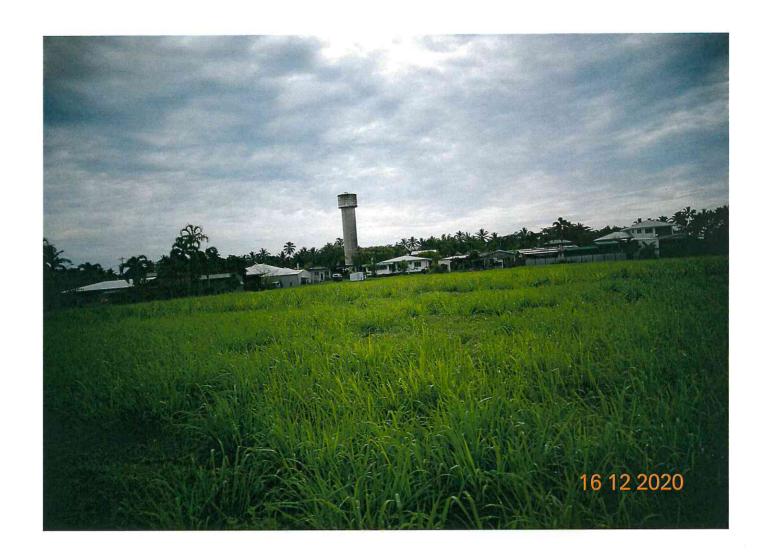
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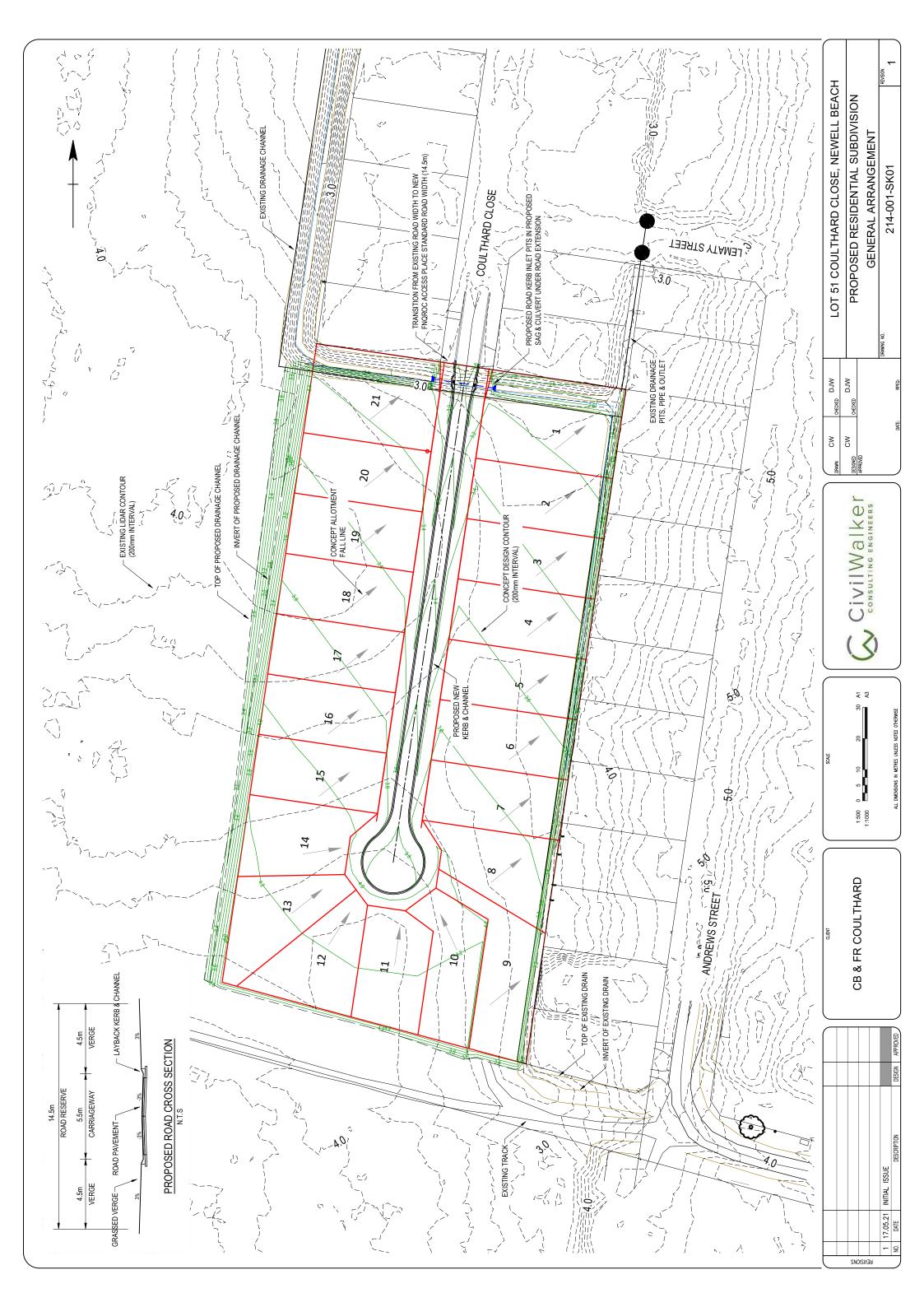


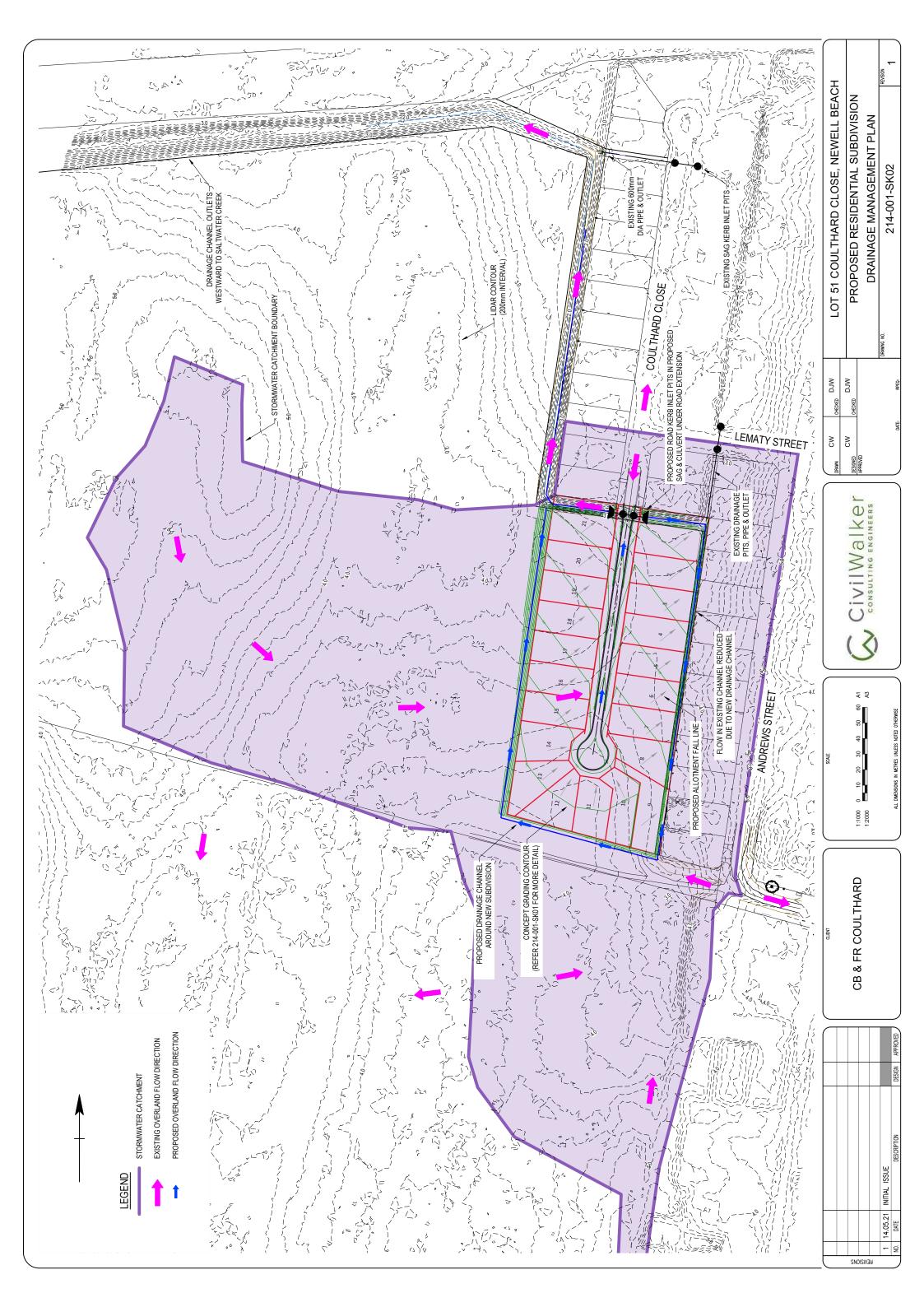




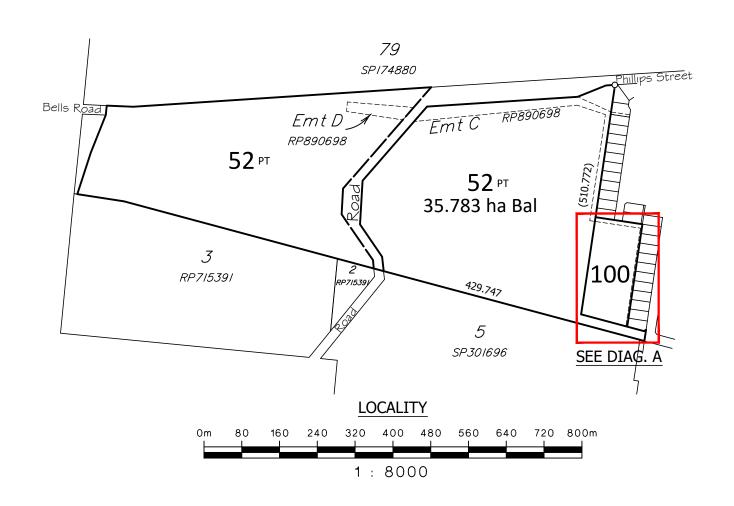


Appendix FCivilWalker Consulting Engineers' Drawings





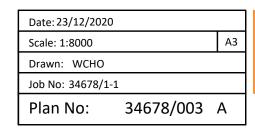




PROPOSED RECONFIGURATION (STAGE 1)

Lots 52 & 100 Cancelling Lot 51 on SP168537

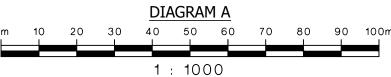
Locality of Newell Douglas Shire Council



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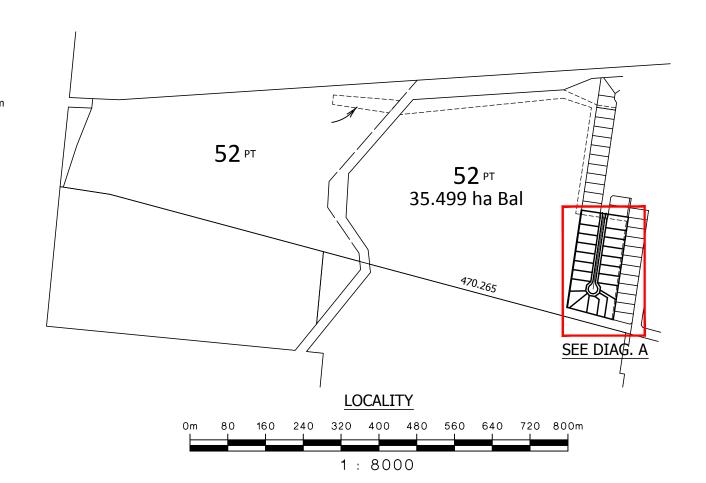


DIAGRAM A

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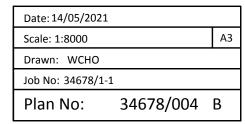
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PROPOSED RECONFIGURATION (STAGE 2)

Lots 1-21

Cancelling Lot 100 (Stage 1)

Locality of Newell Douglas Shire Council



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