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).

1) Applicant details	
Applicant name(s) (individual or company full name)	Port Douglas Developments by Gurner P/L
Contact name (only applicable for companies)	C/- Greg Applin – Applin Consulting
Postal address (P.O. Box or street address)	19 Mullins Street
Suburb	Whitfiled
State	QLD
Postcode	4870
Country	Australia
Contact number	0414 768 109
Email address (non-mandatory)	greg@applinconsulting.com.au
Mobile number (non-mandatory)	0414 768 109
Fax number (non-mandatory)	n/a
Applicant's reference number(s) (if applicable)	22010 Gurner Murphy St

PART 1 – APPLICANT DETAILS

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

 \boxtimes No – proceed to 3)



PART 2 – LOCATION DETAILS

3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable) Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see <u>DA</u> Forms Guide: Relevant plans.									
3.1) Si	treet addres	s and lo	t on pla	an					
🛛 Str	eet address	AND lo	t on pla	IN (a <i>ll l</i> e	ots must be liste	ed), or			
Str	eet address ter but adjoining	AND lo	t on pla ent to lan	n for a d e.g. je	an adjoining etty, pontoon. A	or adja Il lots mu	cent pi ist be lis	operty of the	premises (appropriate for development in
	Unit No.	Street	No.	Stree	t Name and	Туре			Suburb
2)		69-73		Murp	hy Street				Port Douglas
a)	Postcode	Lot No).	Plan	Type and Nu	umber (e.g. RF	P, SP)	Local Government Area(s)
	4877	516 &	2	PTD2	2094 & RP37	24386			Douglas Shire Council
	Unit No.	Street	No.	Stree	t Name and	Туре			Suburb
L)									
D)	Postcode	Lot No).	Plan	Type and Nu	umber (e.g. RF	P, SP)	Local Government Area(s)
3.2) C e. Note : P	oordinates o g. channel drec Vace each set o	of premi lging in M of coordina	SES (app loreton Ba ates in a s	oropriat ay) separat	e for developme e row.	ent in ren	note area	as, over part of a	a lot or in water not adjoining or adjacent to land
🗌 Co	ordinates of	premise	es by lo	ngituc	le and latitud	le			
Longit	ude(s)		Latitud	le(s)		Datur	n		Local Government Area(s) (if applicable)
						W	GS84		
						G	DA94		
							ther:		
Co	ordinates of	premise	es by ea	asting	and northing	9			
Eastin	g(s)	Northi	ing(s)		Zone Ref.	Datur	n		Local Government Area(s) (if applicable)
					54		GS84		
					55		DA94		
					56		ther:		
3.3) A	dditional pre	mises							
Ad	ditional prem	nises ar	e releva	ant to	this develop	ment ap	oplicati	on and the de	etails of these premises have been
	t required	Inequie		ueven	opment appli	cation			
	roquiou								
4) Ider	ntify any of th	he follov	wing tha	at app	ly to the prer	nises a	nd pro	vide any rele	vant details
In o	or adjacent t	o a wate	er body	or wa	tercourse or	in or a	bove a	n aquifer	
Name	of water boo	dy, wate	ercourse	e or ad	quifer:			•	
On strategic port land under the Transport Infrastructure Act 1994									
Lot on	plan descrip	otion of	strategi	ic port	land:				
Name	of port auth	ority for	the lot:						
🗌 In a	a tidal area								
Name	of local gove	ernmen	t for the	e tidal	area (if applica	able):			
Name	of port auth	ority for	tidal ar	ea (if a	applicable):	,			
□ On	airport land	under t	he Airn	ort As	sets (Restru	cturina	and D	isposal) Act 2	2008
Name	Name of airport:								

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

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see <u>DA Forms Guide</u>.

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

🗌 No

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the	e first development aspect			
a) What is the type of develop	pment? (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 assess	sment?			
Code assessment	Impact assessment (requir	res public notification)		
d) Provide a brief description <i>lots)</i> :	of the proposal (e.g. 6 unit apart	ment building defined as multi-unit d	welling, reconfiguration of 1 lot into 3	
MCU - 4 DWELLING HOUSE	ES & RECONFIGURING A LC	OT (2 LOTS INTO 4 LOTS)		
e) Relevant plans Note: Relevant plans are required to <u>Relevant plans.</u>	o be submitted for all aspects of this o	development application. For further i	information, see <u>DA Forms guide:</u>	
\boxtimes Relevant plans of the prop	posed development are attach	ned to the development applic	ation	
6.2) Provide details about the	e second development aspect			
a) What is the type of develop	pment? (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	t includes a variation approval	
c) What is the level of assess	sment?			
Code assessment	Impact assessment (requir	res public notification)		
d) Provide a brief description <i>lots</i>):	of the proposal (e.g. 6 unit apart	ment building defined as multi-unit d	welling, reconfiguration of 1 lot into 3	
e) Relevant plans Note: Relevant plans are required to <u>Relevant plans.</u>	be submitted for all aspects of this a	levelopment application. For further in	nformation, see <u>DA Forms Guide:</u>	
Relevant plans of the proposed development are attached to the development application				
6.3) Additional aspects of dev	velopment			
 Additional aspects of deverthat would be required un Not required 	elopment are relevant to this o der Part 3 Section 1 of this fo	development application and t rm have been attached to this	he details for these aspects development application	

Section 2 – Further development details

7) Does the proposed development application involve any of the following?			
Material change of use	Yes – complete division 1 if assessable against a local planning instrument		
Reconfiguring a lot	Yes – complete division 2		
Operational work	\boxtimes Yes – complete division 3		
Building work	Yes – complete DA Form 2 – Building work details		

Division 1 - Material change of use

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

8.1) Describe the proposed material change of use					
Provide a general description of the proposed use	Provide the planning scheme definition (include each definition in a new row)	Number of dwelling units (if applicable)	Gross floor area (m ²) (<i>if applicable</i>)		
8.2) Does the proposed use involve the use of existing buildings on the premises?					
Yes					
No					

Division 2 – Reconfiguring a lot

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

9.1) What is the total number of existing lots making up the premises?

9.2) What is the nature of the lot reconfiguration? (tick all applicable boxes)			
Subdivision (complete 10))	Dividing land into parts by agreement (complete 11))		
Boundary realignment (complete 12))	Creating or changing an easement giving access to a lot from a constructed road (complete 13))		

10) Subdivision				
10.1) For this development, how	many lots are being	g created and what	is the intended use	of those lots:
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				
10.2) Will the subdivision be stag	ged?			
Yes – provide additional deta	Yes – provide additional details below			
No				
How many stages will the works include?				
What stage(s) will this developm apply to?				

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?				
Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment				
12.1) What are the current a	nd proposed areas for each lo	t comprising the premises?		
Current lot Proposed lot				
Lot on plan description	Area (m ²)	Lot on plan description	Area (m ²)	
12.2) What is the reason for the boundary realignment?				

13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? (attach schedule if there are more than two easements)				
Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

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

14.1) What is the nature of the operational work?					
Road work	Stormwater	Water infrastructure			
⊠ Drainage work	Earthworks	Sewage infrastructure			
🖾 Landscaping	Signage	Clearing vegetation			
Other – please specify:					
14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)					
Yes – specify number of new lots:	2				
No					
14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)					
\$800,000 (approx.)					

PART 4 – ASSESSMENT MANAGER DETAILS

15) Identify the assessment manager(s) who will be assessing this development application
Tablelands Regional Council
16) Has the local government agreed to apply a superseded planning scheme for this development application?
Yes – a copy of the decision notice is attached to this development application
L The local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
No

PART 5 – REFERRAL DETAILS

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

Heritage places – Local heritage places

Matters requiring referral to the Chief Executive of the distribution entity or transmission entity:

Infrastructure-related referrals – Electricity infrastructure

Matters requiring referral to:

• The Chief Executive of the holder of the licence, if not an individual

• The holder of the licence, if the holder of the licence is an individual

Infrastructure-related referrals - Oil and gas infrastructure

Matters requiring referral to the Brisbane City Council:

Ports – Brisbane core port land

Matters requiring referral to the Minister responsible for administering the Transport Infrastructure Act 1994:

Ports – Brisbane core port land (where inconsistent with the Brisbane port LUP for transport reasons)

Ports – Strategic port land

Matters requiring referral to the relevant port operator, if applicant is not port operator:

Ports - Land within Port of Brisbane's port limits (below high-water mark)

Matters requiring referral to the **Chief Executive of the relevant port authority**:

Ports - Land within limits of another port (below high-water mark)

Matters requiring referral to the **Gold Coast Waterways Authority:**

Tidal works or work in a coastal management district (in Gold Coast waters)

Matters requiring referral to the Queensland Fire and Emergency Service:

Tidal works or work in a coastal management district (involving a marina (more than six vessel berths))

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

☐ Yes – referral response(s) received and listed below are attached to this development application ⊠ No

Referral requirement	Referral agency	Date of referral response		

Identify and describe any changes made to the proposed development application that was the subject of the referral response and this development application, or include details in a schedule to this development application *(if applicable)*.

PART 6 – INFORMATION REQUEST

19) Information request under Part 3 of the DA Rules

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

I do not agree to accept an information request for this development application

Note: By not agreeing to accept an information request I, the applicant, acknowledge:

 that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties

• Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.

Further advice about information requests is contained in the <u>DA Forms Guide</u>.

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)						
\boxtimes Yes – provide details below or include details in a schedule to this development application \square No						
List of approval/development application references	Date	Assessment manager				
Approval	CA 2023_5316/1	01.06.2023	Douglas Shire Council			
Approval Development application						

21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)
□ Yes – a copy of the receipted QLeave form is attached to this development application
○ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
○ Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)
Amount paid
○ Date paid (dd/mm/yy)
○ QLeave levy number (A, B or E)

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

 \Box Yes – show cause or enforcement notice is attached \boxtimes No

23) Further legislative requirements

Environmentally relevant activities

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

Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority						
No	No					
Note : Application for an environmental authority can be found by searching "ESR/2015/1791" as a search term at <u>www.gld.gov.au</u> . An ERA requires an environmental authority to operate. See <u>www.business.gld.gov.au</u> for further information.						
Proposed ERA number: Proposed ERA threshold:						
Proposed ERA name:						
Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.						
Hazardous chemical facilities						
23.2) Is this development application for a hazardous chemical facility?						
 Yes – Form 69: Notification of a facility exceeding 10% of schedule 15 threshold is attached to this development application No 						

Note: See <u>www.business.gld.gov.au</u> for further information about hazardous chemical notifications.

Clearing native vegetation
23.3) Does this development application involve clearing native vegetation that requires written confirmation that the chief executive of the <i>Vegetation Management Act 1999</i> is satisfied the clearing is for a relevant purpose under section 22A of the <i>Vegetation Management Act 1999</i> ?
 Yes – this development application includes written confirmation from the chief executive of the Vegetation Management Act 1999 (s22A determination)
 No Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development. 2. See <u>https://www.qld.gov.au/environment/land/vegetation/applying</u> 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
Note : The environmental offset section of the Queensland Government's website can be accessed at <u>www.qld.gov.au</u> for further information on environmental offsets.
Koala habitat in SEQ Region
23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?
Yes – the development application involves premises in the koala habitat area in the koala priority area Yes – the development application involves premises in the koala habitat area outside the koala priority area
⊠ No
Note : If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at <u>www.des.qld.gov.au</u> for further information.
Water resources
23.6) Does this development application involve taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the <i>Water Act 2000</i> ?
Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the <i>Water Act 2000</i> may be required prior to commencing development
No
DA templates are available from <u>https://planning.dsdmip.gld.gov.au</u> /. 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?
Vac. the relevant template is completed and attached to this development application
\square The relevant template is completed and attached to this development application \square No
A templates are available from https://planning.dsdmip.qld.gov.au/ . For a development application involving waterway barrier works, complete DA Form 1 Template 4.
A res – the relevant template is completed and attached to this development application No DA templates are available from https://planning.dsdmip.gld.gov.au/ . For a development application involving waterway barrier works, complete DA Form 1 Template 4. Marine activities
 No DA templates are available from <u>https://planning.dsdmip.qld.gov.au/</u>. For a development application involving waterway barrier works, complete DA Form 1 Template 4. Marine activities 23.8) Does this development application involve aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?
 Tes – the relevant template is completed and attached to this development application No DA templates are available from https://planning.dsdmip.gld.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>

Quarry materials from a watercourse or lake					
23.9) Does this development application involve the removal of quarry materials from a watercourse or lake under the <i>Water Act 2000?</i>					
Yes – I acknowledge that a	☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development No				
information.	urar nesources, mines and Energy	at <u>www.unme.qld.gov.au</u> and <u>www.r</u>	Jusiness.qid.gov.au ioi iuriner		
Quarry materials from land	under tidal waters				
23.10) Does this development under the <i>Coastal Protection</i>	application involve the rem and Management Act 1995?	oval of quarry materials from	m land under tidal water		
 ☐ Yes – I acknowledge that a ☑ No 	a quarry material allocation n	otice must be obtained prior t	o commencing development		
Note: Contact the Department of Env	vironment and Science at <u>www.des.</u>	<u>qld.gov.au</u> for further information.			
<u>Referable dams</u>					
23.11) Does this developmen section 343 of the <i>Water Sup</i>	application involve a refera bly (Safety and Reliability) Ad	ble dam required to be failure <i>ct 2008</i> (the Water Supply Act	e impact assessed under t)?		
Yes – the 'Notice Acceptin Supply Act is attached to the ⊠ No	g a Failure Impact Assessme nis development application	ent' from the chief executive a	dministering the Water		
Note: See guidance materials at www	<u>v.dnrme.qld.gov.au</u> for further inforr	nation.			
Tidal work or development	within a coastal manageme	ent district			
23.12) Does this development	t application involve tidal wo	ork or development in a coas	stal management district?		
 Yes – the following is inclu Evidence the propositive proposition involves proposition A certificate of title 	ded with this development a al meets the code for assess escribed tidal work)	pplication: sable development that is pre	scribed tidal work (only required		
Note: See quidence meteriale et unu	u des ald acu ou for further informe	tion			
Queensland and local herita	age places	ion.			
23.13) Does this developmen heritage register or on a place	application propose develor ce entered in a local governn	oment on or adjoining a place nent's Local Heritage Regist	entered in the Queensland er?		
Yes – details of the heritag	e place are provided in the t	able below	Queensland heritage places		
Name of the heritage place:	v.des.qid.gov.ad for information req	Place ID:	Queensiand hemage places.		
Brothels					
23.14) Does this development application involve a material change of use for a brothel?					
 Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the <i>Prostitution Regulation 2014</i> No 					
Decision under section 62 of the Transport Infrastructure Act 1994					
23.15) Does this development	application involve new or o	changed access to a state-cor	htrolled road?		
 Yes – this application will be taken to be an application for a decision under section 62 of the <i>Transport</i> Infrastructure Act 1994 (subject to the conditions in section 75 of the <i>Transport Infrastructure Act 1994</i> being satisfied) No 					

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

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

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

🛛 No

Note: See guidance materials at <u>www.planning.dsdmip.qld.gov.au</u> for further information.

PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist				
I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17 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 –</u> <u>Building work details</u> have been completed and attached to this development application	☐ Yes ⊠ Not applicable			
Supporting information addressing any applicable assessment benchmarks is with the development application Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see <u>DA</u> Forms Guide: Planning Report Template.	⊠ Yes			
Relevant plans of the development are attached to this development application Note : Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms Guide: Relevant plans</u> .	⊠ Yes			
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)	☐ Yes ☐ Not applicable			

25) Applicant declaration

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

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

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

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

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

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

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

Date received: Reference	number(s):
Notification of engagement of alternative assessment	t manager
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment	

manager

QLeave notification and payment Note: For completion by assessment manager if applicable				
Description of the work				
QLeave project number				
Amount paid (\$)		Date paid (dd/mm/yy)		
Date receipted form sighted by assessment manager				
Name of officer who sighted the form				

Our Ref: 22010 OW Submission Murphy St

20 June 2023

The Chief Executive Officer Douglas Shire Council Po Box 723 MOSSMAN QLD 4873

Attention: Neil Beck

Dear Neil,

OPERATIONAL WORKS SUBMISSION (CIVIL) MCU - 3 DWELLING HOUSES & RECONFIGURING A LOT (2 LOTS INTO 3 LOTS) CA 2023_5316/1 69-73 MURPHY STREET, PORT DOUGLAS (L516 PTD2094 & L2 RP724386)

We refer to Douglas Shire Council's (Council) Decision Notice CA 2023_5316/1 (DN) dated 1 June 2023. Applin Consulting has been engaged to document the civil Operational Works (OW) plans associated with the development and to submit and compile a response to Council's conditions which are relevant to the OW application.

Attached for your information and action are the following:

- Compliance Assessment fees to be invoiced amounting to \$4,648 (\$4,100 base fee for the first 2 lots, plus \$548 per lot)
- Civil Construction Drawings (1 x A3 PDF set: 22031-C001-1 to C015-1)
- Landscape Plans (1 x A3 PDF set: 511_OPW_01A to 04A, 10A to 15A, 35A, 36A and 50A)
- Road Pavement Dilapidation Report
- GEO design letter (Ref:22090AA-D-L02-v1)
- Certified Statement of Compliances
- Local Stormwater Report
- DA Form 1.

Also find below our responses to the relevant conditions, which are repeated below in the order in which it appeared in the DN.

Condition 4 – Road Closure

The Applicant must make application to Department of Resources to permanently close that area of the Murphy Street road reserve that has been reprofiled and stabilised as detailed in the civil design drawings prepared by Progression Design & Development.

The road closure application must be submitted to Department of Resources following the commencement of site works.

Noted and not part of this application.

Condition 5 – Amended Plan

The access driveway design is to be revised to comply with the FNQROC Development Manual and good engineering design. The following design parameters must be addressed:

a. The width of the driveway must be sufficient for one-way traffic movement, provided a Traffic Management Plan for managing right of way for the driveway is prepared and approved by the Chief Executive Officer;

Complies - A one-way signalised lighting system has been proposed by Hunt Design and will be installed.

b. The horizontal geometry must be designed based on the swept path turn templates for the B99 vehicle and must also demonstrate practical access for a medium rigid vehicle per the dimensions in AS2890.1;

A B99 vehicle can easily traverse the driveway. Refer below:



A MRV will not access the private houses. The driveway has been designed to accommodate SRV access as per the original application condition 3(c) and the swept path provided by Traffix Group. Refer below:



c. The inside gradient of any bends must not exceed 20%; The driveway surface must include suitable roughening treatment determined by the certifying engineer for any sections of the driveway with a gradient above 16%. The surface roughening is to be to the satisfaction of the Chief Executive Officer;

AS 2890.1 section 2.6.2 allows for domestic driveway gradients of 25% as per below (*in fact, steeper gradients are allowed when safe and reviewed by qualified professionals, such as a civil RPEQ*):



We confirm the inside radius, where the wheel path does not travel, is at a maximum of 22.5%, which complies with AS 2890.1 and has been reviewed by a civil RPEQ as acceptable.

A roughened finish, as determined with the architect, has been specified.

d. The roadside safety barriers and retaining wall treatments are to be detailed and approved by Council with consideration to be given to visual impact. Council's approval may require additional visual amelioration treatments to address visual impact;

No safety barriers are proposed.

The small section requiring a small vertical retaining wall is setback 1m from the driveway edge and considered safe.

e. The southern most projection of the driveway must not extend further than the limit shown on the Progression Design and Documentation Drawing 22031-C007.

Noted.

The revised plans must be certified by an RPEQ as part of Operational Works application for the driveway, earthworks and retaining walls in the road reserve.

Plans have been reviewed and certified by a RPEQ.

The section of private access driveway and landscaping treatments within the unconstructed road reserve will not become a Council asset and will never be maintained by Council. The ongoing maintenance obligation of the driveway in the road reserve remains with the property owner/s.

Noted.

Condition 6 – Operational Works

An Operational Works Approval is required for the water, sewer, stormwater, earthworks and driveway associated with the development. The application for Operational Works must include, but not be limited to, the following:

a. Decommissioning of the existing services within the site including demolition and removal of redundant services;

Complied – only sewer is applicable and removal of redundant sewers are shown on the plans.

b. Drainage works nominated as detailed in conditions of approval and any additional works confirmed by the local drainage study;

Complied – refer drainage plans and study attached.

c. Earthworks internal and external to the site;

Complied – earthworks have been coordinated with the geotechnical engineer given the complexity of the site works.

d. Required external works within the road reserve for the driveway and retaining walls and Murphy Street;

Complied – all external works are documented on the civil plans.

e. Water and sewerage works required to provide additional capacity (where required) to enable connectivity of the site to Council's system without impacting existing levels of service.

Complied – water and sewer supplies have been documented following extensive communications with Council.

Such works must be completed in accordance with approved plans and to the satisfaction of the Chief Executive Officer prior to Commencement of Use.

Noted.

Condition 7 – Road Condition Survey

Prior to any works occurring on the site, the applicant is to prepare a road condition report of the proposed road haulage route(s) from the site to the approved disposal site(s). The report is to identify relevant existing defects or problems with the roadway along the identified route. On completion of the works, the haul route(s) shall be subject to a joint inspection by the applicant and Council Officers to identify any further damage that has occurred. Where additional damage has occurred, all rectification works shall be at the applicant's expense, to the satisfaction of the Chief Executive Officer.

Complied – refer attached Road Dilapidation Report.

Condition 9 – Water Supply and Sewerage Internal

Undertake the following water supply and sewerage works external to the site to connect the site to existing water supply and sewerage infrastructure:

a. Augment existing water supply infrastructure to the extent necessary such that the development does not adversely affect the water supply to adjacent properties and such that a water service connection can be provided at the lot frontage;

Complied – the water network has been augmented to include a new 100mm main loop from the Esplanade to Murphy Street. Refer engineering plan 22031-C011.

b. Augment existing sewers or construct new sewer to accommodate the development. If connection is proposed to the existing sewer on the north western boundary, detailed plans are to be provided showing levels, capacity and existing sewerage demands through to the pump station downstream of the site. Alternatively, a new sewer connection will need to be designed through to the pump station. The connection point is to be into the existing incoming sewer and not into the pump station. The design is to be in accordance with the FNQROC Development Manual and submitted for Operational Works approval;

The proposed 3 new houses are detailed to connect to the existing sewer on the north-western boundary.

The demands on the existing sewer infrastructure have now decreased from the previous Tourist Accommodation Zone demands and equate to only 3 residential lots (Lot 1 = 1,014m2 or 3.4EP, Lot 2 = 507m2 or 2.8EP and Lot 3 = 1,312m2 or 3.4EP).

Demand now equates 9.6EPs as per FNQROC Design Manual D7 Sewerage System - Table 7.1 and this represents a significant decrease from the previous Tourist Accommodation Zoning.

c. Design and Construct the external water main within the Esplanade road reserve from Macrossan Street to Murphy Street, generally in accordance with the concept shown on the Progression Design and Documentation Drawing 22031-C011, except that the water main must be realigned to be outside the footprint of the driveway cut batter; Complied – the design has been completed and submitted herein for approval, works will be constructed as per the approved plans.

The external works outlined above require Operational Works approval from Council.

Noted and submitted herein.

All works must be carried out in accordance with the approved plans, to the requirements and satisfaction of the Chief Executive Officer prior to Commencement of Use.

Noted.

Condition 10 – Water Supply and Sewerage Works Internal

Undertake the following water supply and sewerage works internal to the subject land:

a. Provide a single internal sewer connection to each lot which must be clear of any buildings or structures. The sewer within Lot 2 must be contained within an easement in favour of Douglas Shire Council in accordance with the requirements of the FNQROC Development Manual or realigned to be within proposed Lot 3.

Complied – refer engineering plan 22031-C011

b. Provide a water connection and water meter to each lot with the water meters to be in a common area within the site near the top of the driveway with suitable access for Council. The applicant will need to provide to separate bypass main with capacity for firefighting. The bypass arrangements are to be nominated for approval by Council.

Complied – refer engineering plan 22031-C011

Note: Council does not guarantee the pressure in its external water network beyond the minimum pressures nominated under FNQROC Development Manual. Where the building classification or use require greater pressures, these must be addressed by on-site measures as required to suit the building approval requirements.

Noted.

All the above works must be designed and constructed in accordance with the FNQROC Development Manual.

Complied - plans have been detailed as per FNQROC.

All works must be carried out in accordance with the approved plans, to the requirements and satisfaction of the Chief Executive Officer prior to the Application for survey plan endorsement or Commencement of Use whichever is the sooner.

Noted.

Condition 11 – Sewerage Decommissioning

At the time of demolition, any redundant sewer connections must be capped. Council must be provided with written notice of the relevant affected connections within 20 business days of the capping of such connection(s) occurring.

Noted.

Condition 12 – Sewerage Decommissioning

Where altering existing sewer mains or construction of new sewer main, provide CCTV inspections of sewers both prior to commencement of works on site and at works completion where works have been undertaken over or to sewers. Defects must be rectified to the satisfaction of the Chief Executive Officer at no cost to Council prior to Commencement of Use.

Noted.

Condition 13 – Damage to Council Infrastructure

In the event that any part of Council's existing sewer, water or road infrastructure is damaged as a result of construction activities occurring on the site including but not limited to; mobilisation of heavy construction equipment; stripping; and grubbing, the applicant/owner must notify Council immediately of the affected infrastructure and have it repaired or replaced at the developer's/owners/builders cost, prior to the Commencement of Use.

Noted.

Condition 14 – General External Works

Undertake the following external works:-

a. Provide a full detail design for the driveway and reprofiling works in the verge including landscaping treatments and pedestrian access. No part of the driveway must be steeper than 20% grading. The current concept designs will need to be amended to comply with this requirement on the inside of the bends;

AS 2890.1 section 2.6.2 allows for domestic driveway gradients of 25% (*in fact, steeper gradients are allowed when safe and reviewed by qualified professionals such as a civil RPEQ*).

b. The detail design in a. above must include sufficient details on the local drainage, verge grading, concrete pathway grades and crossfall. The applicant is to ensure that the development complies with the requirements of AS2890.6, and other all- abilities access provisions to the extent applicable for this development.

Complied

The plan of the works must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Works. All works must be carried out in accordance with the approved plan prior to the issue of a Commencement of the Use.

Noted. Engineering plans included herein for OPW Approval.

Condition 15 – Esplanade Impact

The applicant is to prepare a landscaping and rehabilitation plan to manage the significant impact on the safety, utility and condition of the Esplanade during construction and at completion of the works. At a minimum, the Esplanade Road and car park area must be resurfaced with an AC overlay and the verges are to be reinstated to a full grass cover. This will include levelling, topsoiling and turfing all disturbed areas outside the roadway. The applicant must also nominate new and replacement planting to ameliorate the impacts of the construction and the development in consultation with Open Spaces.

Landscape plans for the entire development are to be updated and resubmitted for approval at the time of seeking a Development Permit for Operational Works.

Complies. Refer Landscape plans submitted herein.

Condition 16 – Drainage Study of Site

Undertake a local drainage study of the site to provide the drainage calculations to support the proposed pipe system included in the Progression Design and Documentation Drawing 22031-C007.

The study is to verify:

- a. The contributing catchment boundaries for the existing stormwater pipe system;
- b. The conveyance path and flow characteristics for the 100 year ARI flood event in relation to the site both pre- and post-development;
- c. Primary and secondary peak flow volumes for the 5, 10 and 100 year ARI rainfall events;
- d. Proposed pipe infrastructure sizes and capacity compared with the peak flows.
- e. Identify any requirement for amendments to the drainage easements;
- f. Information on the proposed works and any impacts proposed at the drainage outlet from the proposed development.
- g. Lawful point of discharge.

The study must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Works.

Complied – Refer attached Local Drainage Study.

Condition 17 – Drainage Easements (General Drains)

A Drainage Easement having a minimum width of 3 metres along the entire length of north western boundary must be granted in favour of Council. A copy of the easement documents must be submitted to Council for the approval of Council's solicitors at no cost to Council. The approved easement documents must be lodged and registered with the Department of Resources prior to the Commencement of Use.

Noted and shown on the plans.

Condition 18 – Plan of Drainage Works

The subject land must be drained generally in accordance with Progression Design and Documentation Drawing 22031-C007 to the satisfaction of the Chief Executive Officer. In particular,

- a. Provision of Stormwater line 1/EX1 to 2/3 along the western boundary;
- b. Connection of existing western drainage pipe into new pit 2/3;
- c. Provision of sufficient pipe and overland flow capacity to convey the 1%AEP event from the south-west corner of the site (Pit 2/3) through to Julan Park.
- d. Overland swale drain along the south western boundary and connecting to the Esplanade road reserve.
- e. Unless otherwise approved by Council, the drainage system from the development must incorporate a stormwater quality improvement devices (SQID) internal to the site. The design of the SQID shall not compromise the hydraulic performance of the overall drainage system and be positioned to provide appropriate access for maintenance equipment.

Complied – Engineering plans included herein for OPW Approval.

Please note a SQID has not been provided given the minor domestic nature of the proposed development. First flush devices can be fitted to the roof water system to accommodate Best Practice measures.

Condition 19 – Geotechnical Investigation / Design

An updated geotechnical assessment by a qualified and experienced geotechnical consultant must be submitted with the application for Operational Works, with a final geotechnical report to be endorsed by the Chief Executive Officer prior to the Commencement of Use.

- a. The updated geotechnical assessment must address the recommendations In the Geo Design letter dated 5 October 2021 and the Geo Design Report dated 29 October 2020 including but not limited to:
 - A revised and updated geotechnical report should be prepared based on the final architectural designs and consider footings, stability and construction recommendations;
 - The updated geotechnical report may require the completion of additional fieldwork;
 - A detailed slope stabilisation design should be adopted for the Murphy Street batter that decreases the risk to the proposed development and Murphy Street;
 - Retaining works or slope retention systems may be required on other batters or natural slopes subject to a review of the final design;
 - Drainage works are considered essential to the successful completion of the works to minimise potential sediment and erosion issues together with decreasing the risks of instability.
- b. The updated geotechnical assessment must address the cut batter along the northern boundary, and provide specific details on the staging of work and control measures required on this batter to maintain the safety of the site to enable work activities to be undertaken within the site;
- c. Geotechnical details to be submitted include, but are not limited to, the following:

• Details of the specific means of supporting or retaining to be used. This must include geotechnical specifications identifying the required treatments at specific

times, heights on the batter and the location within the site;

- Drawings (plans, longitudinal and cross sections) clearly showing the extent of the proposed treatments at each location;
- Methods to be used to minimise the visual impact (where not included within the building); and
- Elevations showing the visual impact when viewed from vantage points and duration that the treatment is expected to be exposed to public view.

All works identified must be supervised by the geotechnical consultant to ensure that the site works are undertaken in a manner that maintains a low to very low risk rating in accordance with AGS Guidelines. The supervising geotechnical assessment must provide a final geotechnical report confirming that the constructed works comply with the approved designs. The final report must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Works

Complied - Refer GEO design letter (Ref:22090AA-D-L02-v1) addressing DN Conditions

Condition 20 – Geotechnical Investigation / Design

The geotechnical report must include designs and treatments for the site for temporary works and for the staging of construction. The temporary works are to be certified by a suitably qualified RPEQ and must be supervised by the geotechnical consultant to ensure that the siteworks are undertaken in a manner that maintains a low to very low risk rating in accordance with AGS Guidelines.

Where the proposed temporary or permanent geotechnical design solution requires soil nails, the extent of the nails must not extend beyond the property boundary without written consent from the adjacent landowner. The design must fully disclose the extent, depth and potential impact on future development of adjoining land so that the owner provides informed consent to any encroachment. As-constructed details of the geotechnical solution are to be provided to Council and records must be kept by the applicant/land owner and provided to future owners/body corporate. Certification from the RPEQ that the works have been undertaken in accordance with the approved plans and recommendations of the geotechnical investigation and compliance with the conditions is required prior to the Commencement of Use

Complied - Refer GEO design letter (Ref:22090AA-D-L02-v1) addressing DN Conditions

Condition 21 – Construction Management Plan for Earthworks

The site development requires excavation and earthworks and will require material to be imported and exported from the site with access through the Esplanade road and car park area.

The applicant is to prepare a traffic management plan and detail the controls necessary to manage the impacts for movement of materials to and from the site. The plan must nominate the type and number of truck movements required including total truck movements, daily truck movements and management of movements throughout the day.

The construction management plan must also identify the access construction at the earthworks stage and confirm the pavement material and sealing requirements for a safe and serviceable access into the construction site without impacting neighbouring properties.

The final earthworks design is to be lodged with the application for a Development Permit for Operational Works. Such earthworks must be completed in accordance with the approved plans prior to the Commencement of Use.

Noted – Will be supplied before a site pre-start once the contractor has been appointed.

Condition 23 – Sequencing Plan for Earthworks

The site work requires geotechnical stabilisation and heavy earthworks. The applicant is to provide a work sequencing plan including temporary access construction to demonstrate how the site will be accessed without creating an unacceptable safety and public nuisance issue in the Esplanade road reserve and Jalun Park area.

The sequencing plan must demonstrate the scope of works at each work stage and the type of equipment that will be required to access the site including the mobilistion and demobilization of that equipment.

The temporary access will need to be suitably designed and constructed including surfacing, to provide an acceptable controlled access point to the site.

The sequencing plan must be integrated with the construction management plan and the traffic impact assessment. A draft of the sequencing plan must be included with the operational works application and will be a requirement of any future approvals that the contractor finalises the plan based on the approved draft plan.

Noted – Will be supplied before a site pre-start once the contractor has been appointed.

Condition 27 – Landscape Plan

The site and external areas must be landscaped generally in accordance with the previously approved Landscape Plans prepared by Myles Baldwin Design dated 12 July 2022 subject to the following requirements. An amended landscape plan/s must be provided which shows:-

- a. The retention of the Calophyllum tree located in the unconstructed road reserve which is earmarked for removal unless otherwise approved at the time of assessing the Landscape Plans;
- b. The Landscape Plan is to detail protection measures to be installed for vegetation to be retained. Protection measures are to be in accordance with AS 4970-2009;
- c. Further detail on the proposed refuse facility located in the unconstructed road reserve in terms of building material, finishes and screening. The refuse facility is to be of a high quality and be appropriately screened;
- d. Landscaping and deep planting of cut and fill areas and other disturbed areas as a consequence of installing services and construction works external to site;
- e. Undertaking deep planting of building setback areas and areas adjacent the driveway to soften the appearance of the driveway and provide visual relief of the building when viewed from foreshore and park areas;
- f. Deep landscaping of the setback area adjacent Dwelling 3 & Dwelling 4 to screen the building piers overtime. Landscaping is also permitted within Lot 1 on RP724386 following the installation of the new stormwater pipe to create an effective buffer between the development and the existing buildings.

- g. Detail ground preparation and removal of any unsuitable material. The soil must be well prepared (not compacted) and fertilized with organic fertilizers to encourage strong growth;
- h. Reinstatement works external to the site as required by conditions of this approval;
- i. Species to have regard to Council's Planning Scheme Policy SC6.7 Landscaping;
- j. Inclusion of any other relevant conditions included in this Development Permit. A copy of this Development Approval must be given to the applicant's Landscape Architect/Designer.

The Landscape Plan must be endorsed by the Chief Executive Officer at the time of seeking a Development Permit for Operational Works. All landscaping works must be undertaken in accordance with the endorsed plan prior to the Commencement of Use and maintained at all times to the satisfaction of the Chief Executive Officer.

Complies. Refer Landscape plans submitted herein.

Condition 27 – Refuse Bin Enclosure

Any required refuse bin enclosure or bin hardstand is to be documented on the operational works plans. The bins must not be placed in front of the existing units on the Esplanade and must be positioned to not detract from the appearance of the streetscape. Details of the refuse storage must be endorsed by the Chief Executive Officer prior to the issue of Development Permit for Operational Works.

A concrete bin slab and enclosure has been added to the bottom of the driveway and details are provided on the landscape plans submitted herein.

We trust the above and attached is sufficient for Council's purposes and allows Council to finalise the Operational Works Approval for the civil and landscaping components.

Please do not hesitate to contact the undersigned should you have any further questions in relation to this matter.

Yours faithfully APPLIN CONSULTING

GREG APPLIN B Eng (Civil) RPEQ 6073

GEO design

12 June 2023

GEO Ref: 22090AA-D-L02-v1 Client Ref: TBA

Gary Hunt Hunt Design PO Box 170 Port Douglas QLD 4877

Transmission via email: gary@huntdesign.com.au

PROPOSED RESIDENTIAL DEVELOPMENT DOUGLAS SHIRE COUNCIL APPLICATION NUMBER CA 2023_5316/1 69-73 MURPHY STREET PORT DOUGLAS QLD 4877

Dear Gary,

Further to your request, GEO Design has reviewed Douglas Shire Council's (DSC) response to the proposed residential development at 69-73 Murphy Street, Port Douglas outlined in their Decision Notice CA 2023_5316/1 (1160590) dated 1 June 2023. Our review concentrated on the Geotechnical Investigation and Design comments outlined in Points 19 and 20 of the decision notice.

It is noted that GEO Design has carried out a number of geotechnical investigations at the site for the proposed development. An initial investigation and design based on a preliminary development plan was carried out in 2020 and was updated again in 2021. The results of the investigations and details of proposed stabilisation works at the site were presented in our reports 20039AA-D-R01-v2 dated 6 November 2020 and 20039AA-D-R02-v1 dated 27 January 2021.

Following revisions to the proposed development to the current proposed design, an additional geotechnical investigation was carried out in 2022 and 2023. The results of the additional investigation together with comments on footings, retaining walls, slope stability, earthworks and the design and construction of the proposed batter treatment along the Murphy Street frontage of the development site were presented in our report 22090AA-D-R01-v2 dated 12 April 2023.

Based on our review of the provided documents and reference to the above geotechnical reports, we are able to provide the following comments.

1. It appears that the requirements of the DSC decision notice (Points 19 and 20) are the same as previous decision notice provided by DSC prior to the completion of the additional geotechnical investigation (22090AA-D-R01-v2 dated 12 April 2023). The decision notice directly refers to the 2020 and 2021 geotechnical reports.

ABN: 61 130 974 604 14 Danbulan Street I PO Box 808, Smithfield QLD 4878 T: (07) 4038 2702 E: office@geo-group.com.au

- 2. The requirements outlined in Point 19a. are presented in the updated geotechnical report (22090AA-D-R01-v2 dated 12 April 2023).
- 3. The requirements of Point 19b. are presented in Section 8.0 of the recent geotechnical report (22090AA-D-R01-v2 dated 12 April 2023). The requirements of Point 19c. are also presented in our report (22090AA-D-R01-v2 dated 12 April 2023) including design drawings, specifications and details of the of the support to be adopted as part of the works.
- 4. The visual impact requirements of Point 19c. were not addressed in our report as it is considered these are architectural and façade design issues. The visual impacts are therefore addressed by others as part of the architectural works.
- 5. The requirements for on-site supervision and certification of the works by GEO Design to ensure compliance with DSC guidelines are noted within the geotechnical report and design drawings.
- 6. The requirements of Point 20 in terms of retention of temporary cut batters was outlined in Section 6.0 of the recent geotechnical report (22090AA-D-R01-v2 dated 12 April 2023).
- 7. The installation of soil nails and other stabilisation measures have been limited to the Murphy Street road parcel only. No temporary or permanent stabilisation measures installed as part of the proposed works should encroach on other adjacent private property.
- 8. As constructed details including certification of the works will be provided by GEO Design at the completion of all works.

Further to the above, we believe all requirements, where applicable, outlined in the DSC decision notice have been addressed in the recent geotechnical report (22090AA-D-R01-v2 dated 12 April 2023) and through other correspondence. However, we would be pleased to answer any further questions regarding this matter if required.

Yours sincerely,

Steve Ford Managing Director/ Principal Engineering Geologist BSc (Geo) BSc (Geo) Hons MEngSc (Geotechnical) MMinEng (Geomechanics) RPEQ 25762



GURNER TM NOMINEES PTY. LTD. CIVIL WORKS PACKAGE

DRAWING SCHEDULE					
DRAWING NUMBER	DESCRIPTION				
22031-C001	COVER PAGE & LOCALITY PLAN				
22031-C002	PROJECT NOTES				
22031-C003	DEMOLITION & VEGETATION CLEARING EXTENTS PLAN				
22031-C004	GENERAL ARRANGEMENT PLAN				
22031-C005	BULK EARTHWORKS PLAN				
22031-C006	SITE SECTIONS				
22031-C007	DRIVEWAY & DRAINAGE PLAN				
22031-C008	DRIVEWAY SECTIONS & DETAILS				
22031-C009	DRAINAGE LONGSECTIONS				
22031-C010	DRAINAGE DETAILS				
22031-C011	WATER & SEWER SERVICE PLAN				
22031-C012	WATER & SEWER LONGSECTIONS				
22031-C013	WATER & SEWER DETAILS				
22031-C014	EROSION & SEDIMENTATION CONTROL STRATEGY				
22031-C015	EROSION & SEDIMENTATION CONTROL DETAILS				

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AND









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1. TICKNER				
PPROVED . APPLIN	DATE	19.06.2023	TITLE	CIVIL WOR
PEQ 6073				

GENERAL

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL INFORMATION ISSUED BY THE SUPERINTENDENT DURING THE COURSE OF THE CONTRACT.
- ALL LEVELS ARE AHD DERIVED. ALL DIMENSIONS AND RADII ARE EXPRESSED IN METRES (UNO).
- DRAWINGS SHALL NOT BE SCALED.
- EXISTING CONTOURS, LEVELS AND FEATURES SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY AND ARE BASED ON SURVEY DRAWINGS AND DATA PROVIDED.
- ALL DIMENSIONS RELEVANT TO SETTING OUT, SURFACE LEVELS AND INVERT LEVELS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE SUPERINTENDENT.
- THE CONTRACTOR SHALL ENSURE THAT ALL WORKS ARE MAINTAINED IN A SAFE AND STABLE CONDITION AND 8 THAT ADEQUATE PROTECTION AGAINST EROSION AND SILTATION IS IN PLACE. GRADE EVENLY BETWEEN LEVELS SHOWN EXCEPT WHERE LEVELS INDICATE VERTICAL CURVES.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION PROTECTION AND SEDIMENT CONTROL FOR THE WORKS AS SPECIFIED AND TO THE SATISFACTION OF THE SUPERINTENDENT. 11. CONFIRM ALL EXISTING LEVELS WHERE APPROPRIATE. IF LEVELS ARE DIFFERENT TO INDICATED CONFIRM
- COURSE OF ACTION WITH ENGINEER. 12. ALL WORKS SHOULD COMPLY WITH AND BE UNDERTAKEN IN ACCORDANCE WITH FNQROC.
- 13. ALL EXISTING SERVICES SHALL BE LOCATED ON SITE AND PROTECTED FOR THE DURATION OF THE WORKS.

SITE PREPARATION AND EARTHWORKS:

- 1. ALL EARTHWORKS MUST BE CARRIED OUT IN ACCORDANCE WITH AS3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS'. GEOTECHNICAL TESTING SERVICES SHALL BE AS DETERMINED BY LEVEL 1 IN ACCORDANCE WITH AS 3798. ALL CERTIFICATION AND TEST RESULTS ARE TO BE
- COMPILED AND PROVIDED TO THE SUPERINTENDENT PRIOR TO WORKS ACCEPTANCE. NO VEGETATION SHALL BE REMOVED WITHOUT PRIOR APPROVAL OF THE SUPERINTENDENT UNLESS NOTED ON THE DRAWINGS.
- FINISHED SURFACE LEVELS SHOWN ON PROJECT DRAWINGS ARE AFTER ALL EARTHWORKS ARE COMPLETE INCLUDING TOPSOILING. ALL AREAS ARE TO BE GRADED EVENLY BETWEEN FINISHED SURFACE LEVELS UNLESS NOTED OTHERWISE.
- DRY DENSITY RATIO AS REFERRED TO IN THESE NOTES IS THE RATIO DETERMINED IN ACCORDANCE WITH AS1289.5.4.1 OF COMPACTED DRY DENSITY IN ACCORDANCE WITH AS1289.5.3.1 OR AS1289.5.8.1 TO THE STANDARD MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1259.5.1.11 (STANDARD COMPACTION).
- STRIP ALL VEGETAL MATTER, TOPSOIL AND OTHER UNSUITABLE MATERIAL FROM AREAS TO BE EXCAVATED OR FILLED AND DISPOSE OFF SITE UNLESS ADVISED OTHERWISE.
- EXCAVATE AS REQUIRED AND DEPOSIT EXCAVATED MATERIAL AS NECESSARY. COMPACT SURFACES EXPOSED BY STRIPPING OR EXCAVATION TO 98% DRY DENSITY RATIO TO A DEPTH OF AT LEAST 250mm, SHOULD ANY SOFT OR UNSUITABLE MATERIAL BE IDENTIFIED SEEK THE ADVICE OF THE SUPERINTENDENT OR GITA.
- COMPACT FILL TO 95% DRY DENSITY RATIO IN LAYERS OF THICKNESS APPROPRIATE TO THE COMPACTION PLANT EMPLOYED BUT NOT EXCEEDING 300mm.
- STOCKPILE SUITABLE TOPSOIL FOR RE-USE TO 1500 mm MAXIMUM HEIGHT.
- 9. DO NOT STOCKPILE MATERIAL AGAINST TREES. DO NOT OBSTRUCT THE FREE FLOW OF WATER.
- 10. NOTIFY DESIGN SUPERINTENDENT ENGINEER IF GROUND WATER ENCOUNTERED. 11. PROVIDE TEMPORARY SUPPORT TO FACES OF EXCAVATIONS AS REQUIRED.

EROSION AND SEDIMENT CONTROL NOTES:

- REFER TO DRG. No. 22031-C014 FOR EROSION & SEDIMENTATION CONTROL STRATEGY PLAN. PRIOR TO CONSTRUCTION COMMENCING, THE CONTRACTOR MUST PREPARE AN EROSION & SEDIMENT
- CONTROL PLAN (ESCP) TO MANAGE THE SITE DURING CONSTRUCTION. THE ESCP MUST BE CONSISTENT WITH THE APPROVED EROSION & SEDIMENT CONTROL STRATEGY (ESCS) AND SHALL TAKE INTO CONSIDERATION THE CONTRACTOR'S PROPOSED CONSTRUCTION METHODOLOGY AND PROGRAM.
- 4. NO EARTHWORKS SHALL COMMENCE ON ANY PART OF THE SITE PRIOR TO INSTALLING APPROPRIATE ESC MEASURES DOWNSTREAM OF THE SITE AND IN ACCORDANCE WITH THE APPROVED ESC.
- AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION.
- 6. THE IMPACT ON THE ENVIRONMENT SHALL BE MINIMISED BY OBSERVING THE FOLLOWING CONSTRUCTION PRACTICES:
 - AREAS DISTURBED BY CONSTRUCTION TRAFFIC AND PROCEDURES SHALL BE MINIMISED.
 - MINIMISE TRAFFIC MOVEMENTS AND SPEEDS ON EXPOSED SURFACES.
 - REVEGETATION OF DISTURBED AREAS SHALL BE CARRIED OUT SOON AFTER THE COMPLETION OF TOPSOIL PLACEMENT.
 - FLOW DIVERSION SHALL BE CARRIED OUT BY EARLY INSTALLATION OF DRAINS ALONG TOPS OF BATTERS WITH APPROPRIATE SILTATION CONTROL DEVICES.
 - SEDIMENT INTERCEPTION BY THE PLACEMENT OF SUITABLE RETENTION SYSTEMS ACROSS DRAINAGE LINES AND AT INTERCEPTION POINTS FOR BOTH THE CONSTRUCTION AND STOCKPILE AREAS.
- ALL PERMANENT AND TEMPORARY UNLINED SWALES AND DRAINS TO HAVE APPROPRIATE TEMPORARY
- EROSION PROTECTION. 8. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DUST EMANATING FROM THE SITE AT ALL TIMES
- FOR THE DURATION OF CONSTRUCTION. 9. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE CHECKED FOR DAMAGE, CLEANED OUT AND
- FULLY REINSTATED AFTER EACH RAINFALL EVENT RESULTING IN RUNOFF. 10. THE INSTALLATION, REMOVAL, RELOCATION OR MODIFICATION TO EROSION AND SEDIMENT CONTROL DEVICES
- MAY BE MADE BY COUNCIL IF DEEMED NECESSARY AND RELEVANT. 11. EROSION AND SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE TREATMENT AREA IS SUITABLY STABILISED/VEGETATED.

ROADS & PATHWAYS NOTES:

- NEW ROADS PATHS AND KERBING SHALL JOIN SMOOTHLY TO EXISTING WORKS. WHERE NECESSARY. EXISTING
- WORKS SHALL BE CUT BACK TO FORM A NEAT JOIN. CONNECTIONS TO EXISTING PATHS SHALL BE SMOOTH AND NEAT. THE MAXIMUM STEP SHALL BE: +3mm ABOVE EXISTING &
- -0mm BELOW EXISTING ALL PATHWAYS SHALL BE 2.0M WIDE (UNLESS NOTED OTHERWISE) IN ACCORDANCE WITH FNQROC STD DRG
- S1035. PATHWAY CROSSFALL MUST NOT EXCEED 2.5%.
- ALL KERB PROFILES TO BE AS PER FNQROC STD DRAWING S1000 UNLESS NOTED OTHERWISE.
- 5. ALL KERB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FNQROC STD DRG S1016. WIDTH OF RAMP
- SHALL MATCH PATHWAY WIDTH. ALL STREET SIGNS AND TRAFFIC SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH FNQROC STD DRGS S1040 6.
- AND S1041 PAVEMENT DESIGN STATED HEREIN IS FOR A RANGE OF SUBGRADE CBR VALUES. THE CONTRACTOR IS TO CONFIRM THE SUBGRADE CBR BY TESTING IN ACCORDANCE WITH THE SPECIFICATION. RESULTS ARE TO BE PROVIDE TO THE SUPERINTENDENT FOR FINAL PAVEMENT SELECTION.

DRAINAGE NOTES

- ALL REINFORCED CONCRETE PIPES SHALL BE CLASS 2 UNLESS NOTED OTHERWISE. ALTERNATIVE MATERIAL TYPES SUCH AS HDPE OR FRC MAYBE USED SUBJECT TO SUPERINTENDENTS APPROVAL.
- 2. EXCAVATION, BEDDING AND BACKFILL FOR CONCRETE PIPES SHALL BE CARRIED OUT IN ACCORDANCE WITH FNQROC STANDARD DRAWING S1046.
- 3. ALL KERB INLET PITS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FNQROC STD DRG'S S1050, S1055, S1060, S1065, S1066 AND S1070.
- 4. ALL CAST-IN-SITU HEADWALLS SHALL BE PROVIDED IN ACCORDANCE WITH FNQROC STD DRG'S S1075, S1080, S1085, AND S1090. ALL PRECAST HEADWALLS SHALL BE PROVIDED WITH CONCRETE CUT-OFF WALL IN ACCORDANCE WITH 5.
- FNQROC STD DRG S1075. WHERE HEADWALL ABUTS CONCRETE LINED CHANNEL. THE CUT-OFF WALL MAYBE OMITTED SUBJECT TO APPROVAL BY THE SUPERINTENDENT. 6. SUBSOIL DRAINAGE SHALL BE PROVIDED WHERE SHOWN ON THE PROJECT DRAWINGS. DRAINS SHALL ACHIEVE
- A MINIMUM 0.5% GRADE. FLUSHING POINTS AND OUTLETS TO BE PROVIDED IN ACCORDANCE WITH FNQROC STD DRAWING S1095.
- 7. ANY STORMWATER QUALITY INTERCEPTION DEVICE SHALL BE CLEANED BY THE CONTRACTOR AND DOCKETS PROVIDED AT TIME OF OFF MAINTENANCE. ALL COSTS TO BE BOURNE BY THE CONTRACTOR.

WATER RETICULATION NOTES

- 1. ALL PVC AND PE PIPES SHALL BE CLASS PN16. PVC PIPES SHALL BE RUBBER RING JOINTED AND DUCTILE IRON COMPATIBLE.
- DICL PIPES SHALL BE CLASS PN35 "TYTON" TYPE RUBBER RING JOINTED. FOR MAIN TRENCHING, BEDDING & ANCHORAGE DETAILS REFER FNQROC STD DRGS S2015 & S2016. ENSURE
- COVER TO WATERMAINS IS 800MM MINIMUM UNDER ROADWAYS AND 600mm MINIMUM ELSEWHERE. FOR MAIN CONNECTION DETAILS, REFER FNQROC STD DRG S2020.
- 5. HYDRANTS OR VALVES CONSTRUCTED IN CONCRETE ARE TO HAVE A COMPRESSIBLE LAYER (ABLEFLEX) INSTALLED ON THE SURROUND. REFER FNQROC STD DRG 2000. ALL WATER MAINS SHALL BE INSTALLED ON A STANDARD 2.8M OFFSET FROM THE PROPERTY BOUNDARY 6
- UNLESS NOTED OTHERWISE ON PLANS.
- CAIRNS REGIONAL COUNCIL MUST BE CONTACTED TO PERFORM ANY DIRECT CONNECTION OR ALTERATION TO LIVE WATER MAINS. THE CONTRACTOR SHALL LODGE WITH COUNCIL THE APPROPRIATE APPLICATION FORMS AND FEES FOR THESE WORKS TO BE COMPLETED. IT MAY BE POSSIBLE FOR SOME WORKS TO BE PERFORMED BY THE CONTRACTOR UNDER SPECIAL CIRCUMSTANCES AND SUBJECT TO APPROPRIATE CONDITIONS AGREED TO WITH COUNCIL.
- 8. ALL HYDRANTS AND VALVES TO BE LOCATED OPPOSITE PROPERTY BOUNDARY TRUNCATIONS AND CORNERS, UNLESS NOTED OTHERWISE ON PLANS. FOR VALVES & HYDRANT BOXES INSTALLATION DETAILS REFER FNQROC STD DRGS S2000 & S2005 ADD TO CURRENT NOTE 5.
- 9. KERB MARKER PLATES SHALL BE PROVIDED TO IDENTIFY THE POSITION OF ALL VALVES AND HYDRANTS IN ACCORDANCE WITH FNQROC STD DRG S2010 VERSION 4-2009. IN ADDITION TO KERB MARKER PLATES, HYDRANTS SHALL ALSO HAVE TEARDROP MARKERS AND BLUE RETRO-REFLECTIVE MARKERS PROVIDED ON THE ROAD PAVEMENT IN ACCORDANCE WITH FNQROC STD DRG 2010 VERSION 4-2009.

SEWER RETICULATION NOTES

- 1. ALL NEW SEWER MAINS SHALL BE UNPLASTICISED PVC (PVC-U) CLASS SN8 SUITABLE FOR RUBBER RING JOINTS, UNLESS NOTED OTHERWISE.
- 2. ALL NEW SEWER MAINS AND MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH FNQROC STD DRG'S S3000 AND S3015.
- 3. ALL SEWER MANHOLE COVERS SHALL BE CIRCULAR UNLESS NOTED OTHERWISE ON SEWER LONG SECTIONS. COVERS SHALL BE TYPE B INSIDE PROPERTIES AND TYPE C ELSEWHERE. 4. ALL SEWER MANHOLE COVER LEVELS TO BE 50MM ABOVE FINISHED SURFACE LEVEL UNLESS NOTED
- OTHERWISE. 5. THE CONTRACTOR SHALL ENSURE THAT A FLAT AREA OF 1.5M RADIUS FROM THE CENTRE OF THE MANHOLE IS
- PROVIDED AROUND ALL MANHOLES. 6. ALL HOUSE CONNECTION BRANCHES TO NEW SEWER MAINS TO BE CONSTRUCTED IN ACCORDANCE WITH FNQROC STD DRG S3005. BRANCHES SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE SPECIFICATION.
- CAIRNS REGIONAL COUNCIL MUST BE CONTACTED TO PERFORM ANY DIRECT CONNECTION TO LIVE SEWER MAINS. THE CONTRACTOR SHALL LODGE WITH COUNCIL THE APPROPRIATE APPLICATION FORMS AND FEES FOR THESE WORKS TO BE COMPLETED. IT MAY BE POSSIBLE FOR SOME WORKS TO BE PERFORMED BY THE CONTRACTOR UNDER SPECIAL CIRCUMSTANCES AND SUBJECT TO APPROPRIATE CONDITIONS AGREED TO WITH COUNCIL.
- 8. THE CONTRACTOR SHALL CARRY OUT A CCTV INSPECTION THROUGH ALL SEWERS CONSTRUCTED AS PART OF THIS DEVELOPMENT AND PROVIDE THE FOOTAGE TO THE SUPERINTENDENT FOR ASSESSMENT. ANY SECTIONS OF SEWER CONSIDERED SUB-STANDARD SHALL BE RECTIFIED TO THE SATISFACTION OF COUNCIL.

SITE SPECIFIC NOTES

- 1. SITE ACCESS IS VIA. THE ESPLANADE CARPARKING AREA AND THIS AREA IS TO REMAIN OPEN TO THE PUBLIC AT ALL TIMES. ANY DAMAGE CAUSED TO THE PAVEMENT DURING CONSTRUCTION IS TO BE RECTIFIED BY THE CONTRACTOR AT THEIR EXPENSE. DAMAGE AREAS WILL REQUIRE; PROFILING OF DAMAGED AC, COMPACTION OF THE EXISTING GRAVEL UNDER AND RELAYING OF AC TO A MINIMUM DEPTH OF 30mm.
- 2. THE CONTRACTOR IS TO REVIEW AND HOLD ON SITE A COPY OF THE DECISION NOTICE (CA 2023 5316/1) AND ENSURE WORKS ARE CARRIED OUT IN ACCORDANCE WITH THIS DN.

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-						RPEQ ENGINEER:
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i						M 0414 768 109 ∣ E greg@applinconsulting.com.au
5	1	19.06.2023 OPW APPROVAL		MT	GA	
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DRAWN M. TICKNER	
	PROJECT
DESIGNED	69-73 MUF
M. TICKNER	
APPROVED DATE 19.06.202 G. APPLIN	
RPEQ 6073	PROJECT

SURVEY CONTROL NOTES

SURVEY ORIGIN LEVEL DATUM: AHD(D) ORIGIN OF LEVELS: PM 123510 RL 5.659 MERIDIAN: MGA ZONE 55 HORIZ. MERIDIAN: SP183017 ORIGIN OF CO-ORDS: PM 123510 E: 2037.072 N: 4970.476 SURVEY PLAN: RPS DRG. No. 147352-2

M NOMINEES PTY. LTD.					
FOR API	PROVAL				
AS SHOWN DRAWING NUMBER 22031-C0	A1 REVISION 1				
	STATUS FOR AP SCALE AS SHOWN DRAWING NUMBER 22031-C0				







- EXISTING LOT BOUNDARY
- AREA OF MATERIAL TO BE REMOVED
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- EXISTING ITEM TO BE REMOVED
- EXISTING ITEM TO BE REMOVED AND REPLACED

TM NOMINEES PTY. LTD.				
FOR APPROVAL				
SCALE AS SHOWN SIZE	A1			
DRAWING NUMBER	REVISION			
22031-C00	3 1			
	STATUS FOR APPR SCALE AS SHOWN DRAWING NUMBER 22031-C00			





RKS PACKAGE
THWORKS PLANS

	FOR A	APPRC)VAL	
SCALE	AS SHOWN	SIZE	A1	
DRAWING	NUMBER	I		
22031-C005				

EARTHWORKS VOLUMES DO NOT CONSIDER BULKING

VOLUMES TAKEN TO FINISHED EARTHWORKS SURFACE.

FACTORS AND ARE TAKEN AS RAW VALUES.

SIZE	A1

REVISION
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1

22090AAD
O ENSURE
RDINATED
ARE TO BE
ECHINCAL

EARTHWORKS VOLUMES:

CUT: 2586 m³ FILL: 790m³ BALANCE: -1796m³

NOTE:

-

STATUS

PROPOSED
24.0
• 24.60
• 24.60

NEW EASEMENT BOUNDARY

NEW PROPERTY BOUNDARY

PROPOSED RETAINING WALL (CONSTRUCTED WITH BUILDING)

FUTURE BUILDING WALL RETAINING -

TEMPORARY BATTER NEEDED

SAWCUT EXISTING PAVEMENT

EXISTING SURFACE LEVEL (ESL)

PROPOSED AREA OF CUT

PROPOSED AREA OF FILL

TOP OF BANK

BOTTOM OF BANK

PROPOSED SURFACE CONTOUR (0.2m INTERVALS)

PROPOSED EARTHWORKS SURFACE LEVEL (FSL)

----G----G----G-----EXISTING GAS SERVICE

----- D---- EXISTING DRAINAGE LINE EOH EOH EOH EXISTING ELECTRICAL SERVICE (ABOVE GROUND)

EXISTING LOT BOUNDARY

EXISTING EASEMENT BOUNDARY

EXISTING CONTOUR (1m INTERVAL)

EXISTING





	DESIGN & DOCUMENTATION:			CLIENT GURNER T
NSULTING	PROGRESSION DESIGN & DEVELOPMENT	DESIGNED M. TICKNER		PROJECT 69-73 MUR
j.com.au	M 0417 383 564 E matthew@progressiondesign.com.au www.progressiondesign.com.au	APPROVED I G. APPLIN	DATE 21.06.2023	



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ROPRIETARY)	3
PE B - FIELD o. S1070)	7
RMWATER o. S1065)	2
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XISTING PIT	3

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1	21.06.2023	OPW APPROVAL	MT	GA
REV.	DATE	DESCRIPTION	DES.	APP.

RPEQ ENGINEER: APPLIN — CONSULTING M 0414 768 109 | E greg@applinconsulting.com.au

LONGITUDINAL SECTION - DRIVEWAY CONTROL LINE

		VIF KL 2.033	VID RI 311			GN SURFA	NCE			/	VIP			~		
HORIZONTAL CURVE DATA				NEW	VATER LINE		R 6	>	<	R	3	>			~	=
VERTICAL CURVE LENGTH (m) VERTICAL CURVE RADIUS (m)		0.50	VC 3	3.2 00					<	\	/C 7.87 R 75	,		<	<u> </u>	/C 9 R 7
VERTICAL GEOMETRY GRADE (%) VERTICAL GEOMETRY LENGTH (m)		<u>9.5%</u> 4.36	>	<			11.1% 19.63						21. 8.	93	+	
DATUM RL = -1.900																
FINISHED SURFACE LEVEL	2.695	2.958	3.116	3.287	3.735	4.068		4.800	4.845	4.851	5.392	5.783	6.139	6.204	6.566	6.800
EXISTING SURFACE LEVEL	2.695	2.749	2.791	2.884	3.047	3.155		3.828	3.865	3.869	4.738	5.450	5.974	6.089	6.768	7 608
CUT / FILL DEPTH	0.000	0.208	0.325	0.403	0.688	0.913		0.972	0.981	0.982	0.654	0.333	0.165	0.115	-0.202	-0.808
CONTROL LINE CHAINAGE	0	2.761	4.361	5.961	10	12.993		19.59	20	20.052	23.989	26.186	27.926	28.227	30	31.276
A1 SCALE: H 1:200, V 1:100																

ACCESS DRIVEWAY TYPICAL SECTION SCALE 1 : 20







1	21.06.2023	OPW APPROVAL	MT	GA
EV.	DATE	DESCRIPTION	DES.	APP.



.INE			20.702111		1	4.7490					1	1.280m			13.070m			20.6	10
CHAINAGE	0.000		23 462m	23.462		24.637	25.093	28.210		0.000)		11.280)		24.350)—	35.074	
NVERT LEVEL		17.700		18.650	18.595	18.588	18.583	18.550	18.550		14.436		13.240	11.800		8.822	7.967	5.819	
DEPTH OF INVERT BELOW FSL		0.971		1.662	1.717			0.095	0.095		1.156		1.007	2.447		2.393	3.248		_
FINISHED (& EXISTING) SURFACE LEVEL	18.671			20.312				18.645	(18.578)	15.592	(16.122)		14.247	(14.196)		11.215	(10.106)		
HGL IN PIPE & WSE IN STRUCTURE	_	18.667		18.667 18.671	18.650				18.626	15.235	14.722		13.371 12.359	12.092		8.932 8.547	8.263		
CAPACITY FLOW (cumecs) CAPACITY FLOW (cumecs) DATUM RL		-5.000	0.150	>	<	0.150		>			-9.000	0.150 0.571	~>	<	0.157 0.837	~>	<	0.1	-63 784
-ULL PIPE VELOCITY (m/s) NORMAL DEPTH VELOCITY (m/s)		<	1.36	->	<	9.43		~>			<	1.36 4.36	>	<	1.42 5.81	~>	<	1.4 5./	47 60
PIPE GRADE (%) PIPE SLOPE (1 in X)		<	-4.05%	->	<	0.95%		>			<	10.61% 9.4	~>	<	22.79% 4.4	~>	<	5)0° .0
PIPE CLASS & TYPE		<	RCP	~>	<	975 PE		>			<	375 RCP	~>	<	375 RCP	~>	<	37 R(/5 CP
OVERFLO	OW PI				Ø150 WATER SERVICE	45° BER SHO	BLACKM ND OUTLI OTCRETE SHOTCRE DRAINAGE	IAX ET INT E SHU	TO TE. TE			- SHOTC DRAINA PIT AT B/ DRAINAG	RETE AGE SH ASE OF SE SHU		CRETE				
STRUCTURE DESCRIPTION	EXISTING STRUCTURE			STD MANHOLE	VICE 1050mm DIA			OUTLET		CUSTOM FIELD INLET PIT	900×600		STD FIELD INLET	600×600		STD FIELD INLET	600x600		
STRUCTURE NAME & SETOUT COORDINATES	1/EX1	2159.411 E 5027.605 N		1/1	2176.614 E 5011.652 N			1/2	2174.061 E 5007.648 N	2/1	2172.340 E 5004.947 N		2/2	2165.929 E 4995.666 N		2/3	2158.501 E 4084 013 N		





SCALE 1 : 20



CUSTOM INLET PIT - BACK VIEW OF WALL

SCALE 1 : 20



LTD.				
SCALE 1:200) AT ORIGINAL SIZE	SCALE	1:100 AT ORIGIN	AL SIZE
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	DESIGN & DOCUMENTATION:	DRAWN M. TICKNER	CLIENT GURNER TM NC
	PROGRESSION	DESIGNED M. TICKNER	69-73 MURPHY
ING	M 0417 383 564 E matthew@progressiondesign.com.au www.progressiondesign.com.au	APPROVED DATE 21.06.2023 G. APPLIN	





MAINTENANCE HOLE / SHAFT NAME	Ά	2/	/A		3/A
H / MS TYPE MH1050		MH1050		MH105)
S MH / MS DROP TYPE					
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	4.000				
	<	>	<		>
IFE SIZE (MM), GLASS RADE (1 IN X)	150, uP	-VU SINB 	< 150	, urvc sn8 ≥ 150 15	>
	 . 12 	.942	<	18.536	>
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			RPEQ	ENGINEER:	<u>,</u>
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REV. DATE





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DRAWN		CLIENT GURNER TM NOMINEES PTY I TD		
M. TICKNER		PROJECT	STATUS	
DESIGNED		69-73 MURPHY ST. PORT DOUGLAS	FOR AP	PROVAL
M. TICKNER				
APPROVED	DATE 21.06.2023	I TITLE	AS SHOWNVN	A1
G. APPLIN		CIVIL WORKS PACKAGE	DRAWING NUMBER	REVISION
RPEQ 6073		WATER & SEWER LONGSECTIONS	22031-C0	12 1

LONGITUDINAL	SECTION -	WATERMAIN

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 | 2.925 | 3.401 | 9.323
4.781 | 7.053 | 7.222 | |
 | 11.487 | 11.502 | 12.305 | 21.023 | 21.563 | 21.555
 | 21.550
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 | 21.121 | | 20.397 |
| 1.278 | 1.410 | | 2.001 | 2.038
2.139 | | 1.240 | 1.007 | 1.665 | 1.999 | 2.007 | 2.143 | 2.108

 | 0.964 | 0.859 | 0.834 | 0.893 | 0.879 | |
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8 564 | 0.323 | 0.789 | 0.775
 | 0.786
 | 0.974 | 1.048 |
 | 0.863 | | 0.970 |
| 1.900
1.900 | 1.486 | | 0.791 | 0.722 | | 1.510 | 1.394 | 1.031 | 0.749 | 0.745 | 0.620 | 0.727

 | 1.961 | 2.542 | 2.043
3.947 | 6.160 | 6.343 | 6.415
7_467 | 8.186
 | 10.243 | 10.263 | 9.854
0 388 | 20.700 | 20.774 | 20.781
 | 20.764
 | 20.341 | 20.305 |
 | 20.214
20.116 | | 19.428 |
| 57 | 481 | | 8.839 | 0
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18.127 | 53.829 | 59.815 | <u>30</u> | 35.916 | 71.759

 | 30 | 33.885 | 39.289 | 93.484 | 100 | 102.581 | 112.134
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	DESIGN & DOCUMENTATION:	DRAWN M. TICKNER	CLIENT GURNER T
SULTING	PROGRESSION DESIGN & DEVELOPMENT	DESIGNED M. TICKNER	PROJECT 69-73 MUR
m.au	M 0417 383 564 E matthew@progressiondesign.com.au www.progressiondesign.com.au	APPROVED DATE 21.06.2023 G. APPLIN RPEQ 6073	CIVIL WOR WATER & S

LEGEND: EXISTING

PROPOSED

TEMPORARY CONSTRUCTION ENTRY / EXIT

SEDIMENT FENCING ROCK FILTER DAM

TREE TO BE RETAINED (REFER PLAN No. C003 FOR DETAILS) TREE TO BE REMOVED (REFER PLAN No. C003 FOR DETAILS)

		S	CALE 1:250 A	AT ORIGINAL	SIZE
M NOMINEES PTY. LTD.					
PHY ST. PORT DOUGLAS	STATUS	FOR AP	PRC	VAL	-
	SCALE	AS SHOWNVN	SIZE	A1	
KS PACKAGE SED. CONTROL PLAN	DRAWIN	IG NUMBER	14		REVISION 1

0 2.5 5 7.5 10 12.5m

SEDIMENT FENCE

MATERIAL

POLYPROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 700mm IN WIDTH AND A MINIMUM UNIT WEIGHT OF 140GSM. ALL FABRICS TO CONTAIN ULTRAVIOLET INHIBITORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).

ABRIC REINFORCEMENT

WIRE OR STEEL MESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200mm.

SUPPORT POSTS/STAKES

1500mm² (MIN) HARDWOOD, 2500mm² (MIN) SOFTWOOD, OR 1.5kg/m (MIN) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

- INSTALLATION
- 1. REFER TO APPROVED PLANS FOR LOCATION, EXTENT AND REQUIRED TYPE OF FABRIC (IF SPECIFIED). IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, FABRIC TYPE, OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- 2. TO THE MAXIMUM DEGREE PRACTICAL, AND WHERE THE PLANS ALLOW, ENSURE THE FENCE IS LOCATED: TOTALLY WITHIN THE PROPERTY BOUNDARIES;
- ALONG A LINE OF CONSTANT ELEVATION WHEREVER PRACTICAL;
- iii. AT LEAST 2m FROM THE TOE OF ANY FILLING OPERATIONS THAT MAY RESULT IN SHIFTING SOIL/FILL DAMAGING THE FENCE.
- INSTALL RETURNS WITHIN THE FENCE AT MAXIMUM 20m INTERVALS IF THE FENCE IS INSTALLED ALONG THE CONTOUR, OR 5 TO 10m MAXIMUM SPACING (DEPENDING ON SLOPE) IF THE FENCE IS INSTALLED AT AN ANGLE TO THE CONTOUR. THE 'RETURNS' SHALL CONSIST OF EITHER:
- V-SHAPED SECTION EXTENDING AT LEAST 1.5m UP THE SLOPE; OR
- SANDBAG OR ROCK/AGGREGATE CHECK DAM A MINIMUM 1/3 AND MAXIMUM 1/2 FENCE HEIGHT, AND EXTENDING AT LEAST 1.5m UP THE SLOPE.
- 4. ENSURE THE EXTREME ENDS OF THE FENCE ARE TURNED UP THE SLOPE AT LEAST 1.5m, OR AS NECESSARY, TO
- MINIMISE WATER BYPASSING AROUND THE FENCE. ENSURE THE SEDIMENT FENCE IS INSTALLED IN A MANNER THAT AVOIDS THE CONCENTRATION OF FLOW ALONG
- THE FENCE, AND THE UNDESIRABLE DISCHARGE OF WATER AROUND THE ENDS OF THE FENCE. 6. IF THE SEDIMENT FENCE IS TO BE INSTALLED ALONG THE EDGE OF EXISTING TREES, ENSURE CARE IS TAKEN TO PROTECT THE TREES AND THEIR ROOT SYSTEMS DURING INSTALLATION OF THE FENCE. DO NOT ATTACH THE
- FABRIC TO THE TREES. UNLESS DIRECTED BY THE SITE SUPERVISOR OR THE APPROVED PLANS, EXCAVATE A 200mm WIDE BY 200mm DEEP TRENCH ALONG THE PROPOSED FENCE LINE, PLACING THE EXCAVATED MATERIAL ON THE UP-SLOPE SIDE
- OF THE TRENCH. ALONG THE LOWER SIDE OF THE TRENCH, APPROPRIATELY SECURE THE STAKES INTO THE GROUND SPACED NO GREATER THAN 3m IF SUPPORTED BY A TOP SUPPORT WIRE OR WEIR MESH BACKING, OTHERWISE NO GREATER THAN 2m.
- 9. IF SPECIFIED, SECURELY ATTACH THE SUPPORT WIRE OR MESH TO THE UP-SLOPE SIDE OF THE STAKES WITH THE MESH EXTENDING AT LEAST 200mm INTO THE EXCAVATED TRENCH, ENSURE THE MESH AND FABRIC IS ATTACHED TO THE UP-SLOPE SIDE OF THE STAKES EVEN WHEN DIRECTING A FENCE AROUND A CORNER OR SHARP CHANGE OF DIRECTION.
- 10. WHEREVER POSSIBLE, CONSTRUCT THE SEDIMENT FENCE FROM A CONTINUOUS ROLL OF FABRIC. TO JOIN FABRIC EITHER:
- ATTACH EACH END TO TWO OVERLAPPING STAKES WITH THE FABRIC FOLDING AROUND THE ASSOCIATED STAKE ONE TURN, AND WITH THE TWO STAKES TIED TOGETHER WITH WIRE; OR OVERLAP THE FABRIC TO THE NEXT ADJACENT SUPPORT POST.
- 11. SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 12.5mm STAPLES, OR TIE WIRE AT MAXIMUM 150mm SPACING.
- SECURELY ATTACH THE FABRIC TO THE SUPPORT WIRE/MESH (IF ANY) AT A MAXIMUM SPACING OF 1m. 13. ENSURE THE COMPLETED SEDIMENT FENCE IS AT 450mm, BUT NOT MORE THAN 700mm HIGH. IF A SPILL-THOUGH
- WEIR IS INSTALLED, ENSURE THE CREST OF THE WEIR IS AT LEAST 300mm ABOVE GROUND LEVEL. 14. BACKFILL THE TRENCH AND TAMP THE FILL TO FIRMLY ANCHOR THE BOTTOM OF THE FABRIC AND MESH TO PREVENT WATER FROM FLOWING UNDER THE FENCE.

ADDITIONAL REQUIREMENTS FOR THE INSTALLATION OF SPILL-THROUGH WEIR 15. LOCATE THE SPILL -THROUGH WEIR SUCH THAT THE WEIR CREST WILL BE LOWER THAN THE GROUND LEVEL AT

- EACH END OF THE FENCE.
- 16. ENSURE THE CREST OF THE SPILL-THROUGH WEIR IS AT LEAST 300mm THE GROUND ELEVATION. SECURELY TIE A HORIZONTAL CROSS MEMBER (WEIR) TO THE SUPPORT POSTS/STAKES EACH SIDE OF THE WEIR. CUT THE FABRIC DOWN THE SIDE OF EACH POST AND FOLD THE FABRIC OVER THE CROSS MEMBER AND APPROPRIATELY SECURE THE FABRIC.
- INSTALL A SUITABLE SPLASH PAD AND/OR CHUTE IMMEDIATELY DOWN-SLOPE OF THE SPILL-THROUGH WEIR TO CONTROL SOIL EROSION AND APPROPRIATELY DISCHARGE THE CONCENTRATED FLOW PASSING OVER THE WEIR.

MAINTENANCE

- 19. INSPECT THE SEDIMENT FENCE AT LEAST WEEKLY AND AFTER ANY SIGNIFICANT RAIN. MAKE NECESSARY REPAIRS IMMEDIATELY.
- 20. REPAIR ANY TORN SECTIONS WITH A CONTINUOUS PIECE OF FABRIC FROM POST TO POST.
- 21. WHEN MAKING REPAIRS, ALWAYS RESTORE THE SYSTEM TO ITS ORIGINAL CONFIGURATION UNLESS AN AMENDED LAYOUT IS REQUIRED OR SPECIFIED. 22. IF THE FENCE IS SAGGING BETWEEN STAKES, INSTALL ADDITIONAL SUPPORT POSTS.
- 23. REMOVE ACCUMULATED SEDIMENT IF THE SEDIMENT DEPOSIT EXCEEDS A DEPTH OF 1/3 THE HEIGHT OF THE FENCE.
- 24. DISPOSE OF SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD. 25. REPLACE THE FABRIC IS THE SERVICE LIFE OF THE EXISTING FABRIC EXCEEDS 6 MONTHS.

REMOVAL

- 26. WHEN DISTURBED AREAS UP-SLOPE OF THE SEDIMENT FENCE ARE SUFFICIENTLY STABILISED TO RESTRAIN EROSION, THE FENCE MUST BE REMOVED.
- 27. REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
- 28. REHABILITATE/REVEGETATE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

NOT TO SCALE

					RPEQ ENGINEER:
					APPLIN — CONSULTING
					M 0414 768 109 E greg@applinconsulting.com.au
1	21.06.2023 OPW APPROVAL		MT	GA	
REV.	DATE	DESCRIPTION	DES.	APP.	

SEDIMENT FENCE NOT TO SCALE

METHOD B

ROCK FILTER DAM NOT TO SCALE

ROCK FILTER DAM

MATERIALS

75 TO 100mm NOMINAL DIAMETER, HARD, EROSION RESISTANT ROCK.

GEOTEXTILE FABRIO HEAVY-DUTY, NEEDLE-PUNCHES, NON-WOVEN FILTER CLOTH ('BIDIM' A24 OR EQUIVALENT).

INSTALLATION

- 1. REFER TO APPROVED PLANS FOR LOCATION AND INSTALLATION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- 2. PRIOR TO PLACEMENT OF THE FILTER DAM, ENSURE THE TYPE AND SIZE OF EACH CHECK DAMS WILL NOT CAUSE A SAFETY HAZARD OR CAUSE WATER TO SPILL OUT OF THE DRAIN.
- 3. CONSTRUCT THE FILTER DAM TO THE DIMENSIONS AND PROFILE SHOWN WITHIN THE APPROVED PLAN. 4. WHERE SPECIFIED, THE FILTER DAM SHALL BE CONSTRUCTED ON A SHEET OF GEOTEXTILE FABRIC USED AS A DOWNSTREAM SPLASH PAD.

MAINTENANCE

- 1. INSPECT EACH FILTER DAM AND THE DRAINAGE CHANNEL AT LEAST WEEKLY AND AFTER RUNOFF-PRODUCING RAINFALL.
- 2. CHECK FOR DISPLACEMENT OF THE FILTER DAM
- 3. CHECK FOR SOIL SCOUR AROUND THE ENDS OF THE FILTER DAM. IF SUCH EROSION IS OCCURRING, CONSIDER EXTENDING THE WIDTH OF THE FILTER DAM TO AVOID SUCH PROBLEMS.
- 4. IF SEVERE SOIL EROSION OCCURS EITHER UNDER OR AROUND THE FILTER DAM, THEN SEEK EXPERT ADVICE ON AN ALTERNATIVE TREATMENT MEASURE.
- 5. REMOVE AND SEDIMENT ACCUMULATED BY THE FILTER DAM, UNLESS IT IS INTENDED THAT THIS
- SEDIMENT WILL REMAIN WITHIN THE CHANNEL. 6. DISPOSE OF COLLECTED SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR
- POLLUTION HAZARD. 7. REPLACE GEOFABRIC LAYER ON UPSTREAM FACE WITH A CLEAN LAYER AS REQUIRED.
- REMOVAL 1. WHEN CONSTRUCTION WORK WITHIN THE DRAINAGE AREA ABOVE THE FILTER DAM HAS BEEN
- COMPLETED, AND THE DISTURBED AREAS AND THE DRAINAGE CHANNEL ARE SUFFICIENTLY STABILISED
- TO RESTRAIN EROSION, ALL TEMPORARY CHECK DAMS MUST BE REMOVED. 2. REMOVE THE FILTER DAM AND ASSOCIATED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

TEMPORARY CONSTRUCTION ENTRY / EXIT

NOT TO SCALE

TEMPORARY CONSTRUCTION ENTRY / EXIT

MATERIAL

WELL GRADED, HARD, ANGULAR, EROSION RESISTANT ROCK, NOMINAL DIAMETER OF 50 TO 75mm (SMALL DISTURBANCES) OR 100 TO 150mm (LARGE DISTURBANCES). ALL REASONABLE MEASURES MUST BE TAKEN TO OBTAIN ROCK OF NEAR UNIFORM SIZE.

FOOTPATH STABILISING AGGREGATE

25 TO 50mm GRAVEL OR AGGREGATE

GEOTEXTILE FABRIC HEAVY-DUTY, NEEDLE-PUNCHES, NON-WOVEN FILTER CLOTH ('BIDIM' A24 OR EQUIVALENT).

INSTALLATION

- 1. REFER TO APPROVED PLANS FOR LOCATION AND DIMENSIONAL DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- 2. CLEAR THE LOCATION OF THE ROCK PAD, REMOVING STUMPS, ROOTS AND OTHER VEGETATION TO PROVIDE A FIRM FOUNDATION SO THAT THE ROCK IS NOT PRESSED INTO SOFT GROUND. CLEAR SUFFICIENT WIDTH TO ALLOW PASSAGE OF LARGE VEHICLES, BUT CLEAR ONLY THAT NECESSARY FOR THE EXIT. DO NOT CLEAR ADJACENT AREAS UNTIL THE REQUIRED EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE. 3. IF THE EXPOSED SOIL IS SOFT, PLASTIC OR CLAYEY, PLACE A SUB-BASE OF CRUSHED ROCK OR A LAYER OF
- HEAVY-DUTY FILTER CLOTH TO PROVIDE A FIRM FOUNDATION. 4. PLACE THE ROCK PAD FORMING A MINIMUM 200mm THICK LAYER OF CLEAN, OPEN-VOID ROCK.
- 5. IF THE ASSOCIATED CONSTRUCTION SITE IS UP-SLOPE OF THE ROCK PAD, THUS CAUSING STORMWATER RUNOFF TO FLOW TOWARDS THE ROCK PAD, THEN FORM A MINIMUM 300mm HIGH FLOW CONTROL BERM ACROSS THE ROCK PAD TO DIVERT SUCH RUNOFF TO A SUITABLE SEDIMENT TRAP.
- 6. THE LENGTH OF THE ROCK PAD SHOULD BE AT LEAST 15M WHERE PRACTICABLE, AND AS WISE AS THE FULL WIDTH OF THE ENTRY OR EXIT AND AT LEAST 3m. THE ROCK PAD SHOULD COMMENCE AT THE EDGE OF THE OFF-SITE SEALED ROAD OR PAVEMENT.
- 7. FLARE THE END OF THE ROCK PAD WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES DO NOT TRAVEL OVER UNPROTECTED SOIL.
- 8. IF THE FOOTPATH IS OPEN TO PEDESTRIAN MOVEMENT, THE COVER THE COARSE ROCK WITH FINE AGGREGATE OR GRAVEL. OR OTHERWISE TAKE WHATEVER MEASURES ARE NEEDED TO MAKE THE AREA SAFE.

MAINTENANCE

- 9. INSPECT ALL SITE ENTRY AND EXIT POINTS PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED PERIODS OF RAINFALL, AFTER RUNNOFF-PRODUCING RAINFALL, OR OTHERWISE AT FORTNIGHTLY INTERVALS.
- 10. IF SAND, SOIL, SEDIMENT OR MUD IS TRACKED OR WASHED ONTO THE ADJACENT SEALED ROADWAY, THEN SUCH MATERIAL MUST BE PHYSICALLY REMOVED, FIRST USING A SQUARE-EDGED SHOVEL, AND THEN A STIFF-BRISTLED BROOM, AND THEN BY A MECHANICAL VACUUM UNIT, IF AVAILABLE.
- 11. IF NECESSARY FOR SAFETY REASONS. THE ROADWAY SHALL ONLY BE WASHED CLEAN AFTER ALL REASONABLE EFFORTS HAVE BEEN TAKEN TO SHOVEL AND SWEEP THE MATERIAL FROM THE ROADWAY. 12. WHEN THE VOIDS BETWEEN THE ROCK BECOMES FILLED WITH MATERIAL AND THE EFFECTIVENESS OF THE ROCK
- PAD IS REDUCED TO A POINT WHERE SEDIMENT IS BEING TRACKED OFF THE SITE. A NEW 100MM LAYER OF ROCK MUST BE ADDED AND/OR THE ROCK PAD MUST BE EXTENDED. 13. ENSURE ANY ASSOCIATED DRAINAGE CONTROL MEASURES (e.g. FLOW CONTROL BERM) ARE MAINTAINED IN
- ACCORDANCE WITH THEIR DESIRED OPERATIONAL CONDITIONS. 14. DISPOSE OF SEDIMENT AND DEBRIS IN A MANNER THAT WILL NOT CREATE AN EROSION OR POLLUTION HAZARD.

REMOVAL

- 1. THE ROCK PAD SHOULD BE REMOVED ONLY AFTER IT IS NO LONGER NEEDED AS A SEDIMENT TRAP.
- 2. REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE
- AN EROSION OR POLLUTION HAZARD. 3. RE-GRADE AND STABILISE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

		I NOMINEES PTY. LTD.
.06.2023	status 21	PHY ST. PORT DOUGLAS
A1	SCALE AS SHOWN	
I 5 REVISION	DRAWING NUMBER 22031-C0	SED. CONTROL DETAILS
^{SIZE} A1	AS SHOWN DRAWING NUMBER 22031-C0	XS PACKAGE SED. CONTROL DETAILS

69 - 73 MURPHY STREET PORT DOUGLAS

PROJECT: 69-73 MURPHY STREET

CLIENT: GURNER

DRAWING SCHEDULE

511_OPW_01	COVER PAGE
511_OPW_02	PLANTING SCHEDULE
511_OPW_03	PLANTING PALETTE
511_OPW_04	TREE RETENTION & REMOVAL PLAN
511_OPW_10	LANDSCAPE PLAN - ENTRY ROAD & WESTERN BOUNDARY
511_OPW_11	LANDSCAPE PLAN - GROUND LEVEL 1/2
511_OPW_12	LANDSCAPE PLAN - GROUND LEVEL 2/2
511_OPW_13	LANDSCAPE PLAN - LEVEL 1
511_OPW_14	LANDSCAPE PLAN - LEVEL 2
511_OPW_15	LANDSCAPE PLAN - LEVEL 3
511_OPW_35	TYPICAL DETAILS
511_OPW_36	BIN SHELTER DETAILS

511_OPW_50 GENERAL SPECIFICATION

AMENDMENT <u>ISSUE DATE DETAILS</u> A 19.06.23 OPERATIONAL WORKS

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS.

CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

GENERAL NOTES

- CORRECT

- CODES
- health and safety act

- LANDSCAPE PLANS

DRAWING: COVER PAGE

· ALL LANDSCAPE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECT'S AND ADDITIONAL CONSULTANT'S DRAWINGS, SPECIFICATIONS AND REPORTS

· ALL PUBLIC UTILITY SERVICES ARE TO BE LOCATED ON SITE BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS. THE LOCATION, PRESENCE AND EXTENT OF SERVICES SHOWN ARE NOT GUARANTEED COMPLETE OR

PERFORM EXCAVATION IN THE VICINITY OF UNDERGROUND UTILITIES WITH CARE AND IF NECESSARY, BY HAND. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK AND DISRUPTION OR DAMAGE TO UTILITIES SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER

NO TREES PROTECTED UNDER THE LOCAL COUNCIL'S TREE PRESERVATION ORDER ARE TO BE REMOVED UNLESS APPROVED BY DEVELOPMENT CONSENT OR PERMIT OBTAINED FROM COUNCIL

· ALL PAVING IS INDICATIVE, TO BE TO FUTURE SPECIFICATION, AND SET OUT ON SITE

· ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE LOCAL COUNCIL'S APPROVAL, STANDARDS AND

• THE CONTRACTOR IS TO ENSURE THAT ALL THE WORKS ARE CARRIED OUT IN ACCORDANCE WITH THE WORK

· MBD TO REVIEW PLANT MATERIALS AT SOURCE OR BY PHOTOGRAPHS PRIOR TO PURCHASE AND DELIVERY EXACT LOCATIONS OF NEW PLANT MATERIAL TO BE SETOUT AND APPROVED BY THE MBD ONSITE PRIOR TO INSTALLATION. MBD RESERVES THE RIGHT TO ADJUST PLANTS TO EXACT LOCATION ONSITE

DRAINAGE AND IRRIGATION NOTES

REFER TO CIVIL ENGINEER'S UTILITY AND DRAINAGE PLANS FOR UTILITY LOCATION AND DRAINAGE INFORMATION. REQUIREMENTS FOR LANDSCAPE DRAINAGE TO BE CONFIRMED ONSITE UNLESS OTHERWISE SHOWN ON THE

TREE PITS THAT HAVE BEEN EXCAVATED INTO HEAVY EARTH OR STONE TO CONTAIN A RING OF AG PIPE LAID AT THE INVERT OF THE PIT WITHIN A MINIMUM 200mm LAYER OF FREE DRAINING MATERIAL. AG PIPE TO BE

CONNECTED TO A DRAINAGE OUTLET (REFER TO TYPICAL TREE PIT DRAINAGE SECTION)

ALL POTS TO HAVE AN IRRIGATION ALLOWANCE (SHRUBBLERS OR DRIP)

FOR POTS LOCATED ON PAVED SURFACES, TYPICAL PAVING IRRIGATION DETAIL TO BE USED AS SHOWN POTS ADJACENT TO GARDEN BEDS TO BE IRRIGATED VIA IN GARDEN IRRIGATION SYSTEM

ALL LAWN AREAS TO HAVE POPUP ROTORS

ALL GARDEN BEDS TO HAVE FIXED SOLID RISERS WITH SPRAYS

PLANT SCHEDULE

TREES						1	,				
CODE	BOTANIC NAME	COMMON NAME	<u>ZONE 1</u>	<u>ZONE 2</u>	ZONE 3	ZONE 4	<u>ZONE 5</u>	TOTAL	POT SIZE	MATURE HEIGHT	NOTES
AA	Archontophoenix alexandrae	Alexandra Palm	5					5	200L	8m	
CA	Cupaniopsis anacardioides	Tuckeroo	3					3	200L	10m	
CS	Chamaedorea seifrizii	Bamboo Palm	22	11		5		38	Mature	3m	
Cl	Calophyllum inophyllum	Beach Calophyllum	8	6				14	Mature	10m	
CN	Cocos nucifera	Coconut Palm	28	15		5		48	Mature	6-10m	
СС	Cyathea cooperi	Tree Fern		3				3	200L	5m	
GF	Glochidon ferdinandi	Cheese Tree	4					4	Mature	8m	
NF	Nypa fruticans	Nipa Palm	9					9	200L	6m	
PS	Pheonix sylvestris	Sylvester Palm				6		6	Mature	10m	
PO	Plumeria obtusa	Frangipani	3	1		8		12	300L	6m	
RF	Randia fitzalanii	Native Gardinia	3	3				6	300L	3m	
VM	Veitchia merrilli	Christmas Palm	9	7		5		21	200L	6-8m	
WF	Waterhousea floribunda	Weeping Lilly Pilly	3					3	200L	3-5m	

SHRUBS & PERENNIALS

CODE	BOTANIC NAME	COMMON NAME	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5	TOTAL	POT SIZE	MATURE HEIGHT	
Ab	Alocasia brisbanensis	Native Cunjevoi Lily	X						200mm	lm	
Ac	Alpinia caerulea	Native Ginger	X						200mm	2m	
Am	Alocasia macrorrhiza	Giant Taro				X			400mm	1.5-2.5m	
CI	Calathea lutea	Cigar Plant	Х	Х	Х				200mm	2-3m	
Cm	Carissa macrocarpa 'Emerald star'	Natal Plum			х				300mm	0.6m	
Fm	Ficus microcarpa 'Green island'	Greenlisland Fig	x	x	x				300mm	0.6m	
Lg	Licuala grandis	Ruffled Fan Palm			Х				300mm	3m	
Md	Monstera deliciosa	Swiss Cheese Plant							400mm	3m	
PS	Philodendron selloum	Hope Philodendron	Х	X		Х			300mm	2m	
Re	Rhapis excelsa	Broadlead lady palm	Х	Х					300mm	4m	
Sa	Syzygium australe	Brush Cherry	X						200mm	5m	
Zf	Zamia furfurfacia	Cardboard Plant			Х				200mm	lm	
FERNS											

CODE	BOTANIC NAME	COMMON NAME	ZONE 1	<u>ZONE 2</u>	ZONE 3	<u>ZONE 4</u>	<u>ZONE 5</u>	TOTAL	<u>POT SIZE</u>	MATURE HEIGHT	
Am	Asparagus densiflorus 'Myersii'	Foxtail Asparagus							200mm	0.7m	
Aa	Asplenium antiquum	Birdsnest Fern				Х			200mm	lm	
Aau	Asplenium australasicum	Bird's Nest Fern	X						200mm	lm	
Bn	Blechnum gibbum	Silver Lady Fern				Х			200mm	lm	
Md	Microsorum diversifolium	Kangaroo Fern	Х	Х		Х			100mm	0.4m	

GROUNDCOVERS & CLIMBERS

	BOTANIC NAME	COMMON NAME	ZONE 1	<u>ZONE 2</u>	<u>ZONE 3</u>	<u>ZONE 4</u>	<u>ZONE 5</u>	TOTAL	POT SIZE	MATURE HEIGHT
Ср	Callipteris prolifera		X						140mm	Groundcover
В	Bougainvillea sp. 'Pink'	Bougainvillea					Х		200mm	Climber
НЬ	Hibbertia banksii		X						140mm	Groundcover
Fp	Ficus pumila	Creeping fig				Х			140mm	Climber
Pp	Pandorea pandorana	Wonga Vine	X						140mm	Climber
Rc	Rhaphidophora cryptantha	Shingle Plant				Х			100mm	Climber
Vo	Viola odorata	Native violet				Х			100mm	Groundcover
Ve	Veronica elliptica	Curtain creeper							100mm	Cascading Groundcover

NOTES

· IF SPECIFIED POT SIZES ARE NOT READILY AVAILABLE, PLEASE CONTACT MBD TO CLARIFY SUBSTITUTE SIZES AND Changes to quantities

· ALL MATURE TREES TO BE SOURCED AND SUPPLIED BY MYLES BALDWIN DESIGN

• THE PLANT SCHEDULE IS CALCULATED BASED OFF THE LANDSCAPE PLANS PROVIDED BY MBD. ADDITIONAL PLANTS OUTSIDE OF THIS SCHEDULE MAY BE REQUIRED TO REACH THE DESIRED PLANT DENSITIES ONSITE

ALL PLANT MATERIAL TO BE SETOUT ONSITE BY MYLES BALDWIN DESIGN PRIOR TO INSTALLATION

PROJECT: 69-73 MURPHY STREET

GURNER

SPECIES TO DOUGLAS SHIRE COUNCIL PLANNING SCHEME POLICY SC6.7 LANDSCAPE

LVL 1 PLANTING KEY PLAN

LVL 2 PLANTING KEY PLAN

LVL 3 PLANTING KEY PLAN

LEGEND
ZONE 1
ZONE 2
ZONE 3
ZONE 4
ZONE 5

DWG No: 511_OPW_02 SCALE: AS NOTED DRAWN: RM

TREES

SHRUBS, PERENNIALS & FERNS

Ruffled Fan Palm Licuala grandis

Swiss Cheese Plant Monstera deliciosa

Hope Philodendron
Philodendron selloum

Birdsnest Fern Asplenium antiquum

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Coconut Palm Cocos nucifera

Frangipani Plumeria obtusa

Native Gardinia _{Randia} fitzalanii

Broadlead Lady Palm Rhapis excelsa

Silver Lady Fern Blechnum gibbum

CLIMBERS, HANGING PLANTS & GROUNDCOVERS

AMENDMENT

 ISSUE
 DATE
 DETAILS

 A
 19.06.23
 OPERATIONAL WORKS

PLANTING PALETTE

Native violet Viola odorata

Shingle Plant Rhaphidophora cryptantha

DWG No: 511_OPW_03 SCALE: AS NOTED DRAWN: RM

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PROJECT: 69-73 MURPHY STREET

CLIENT: GURNER AMENDMENT

ISSUE DATE DETAILS A 19.06.23 OPERATIONAL WORKS

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS. CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING: LANDSCAPE PLAN -GROUND LEVEL 1/2

LEGEND PROPOSED TREE EXISTING TREE GARDEN BED

SCALE 1:100

DWG No: 511_OPW_11 SCALE: AS NOTED DRAWN: RM

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CLIENT: GURNER AMENDMENT

ISSUE DATE DETAILS A 19.06.23 OPERATIONAL WORKS

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS. CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING: LANDSCAPE PLAN -GROUND LEVEL 2/2

LEGEND PROPOSED TREE EXISTING TREE GARDEN BED

SCALE 1:100

DWG No: 511_OPW_12 SCALE: AS NOTED DRAWN: RM

PROJECT: 69-73 MURPHY STREET

CLIENT: GURNER

AMENDMENT ISSUE DATE DETAILS A 19.06.23 OPERATIONAL WORKS

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF **<u>ALL PLANTS</u>**. CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING:

LEGEND PROPOSED TREE **EXISTING TREE** GARDEN BED

SCALE 1:100

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DRAWN: RM

SCALE: AS NOTED

DWG No: 511_OPW_13 CHECKED: LM ISSUE: A THIS DRAWING IS COPYRIGHT

LANDSCAPE PLAN - LEVEL 1

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MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS. CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING:

LEGEND PROPOSED TREE EXISTING TREE GARDEN BED

SCALE 1:100

LANDSCAPE PLAN - LEVEL 2

SCALE: DRAWN: RM

DWG No: 511_OPW_14 **AS NOTED**

PROJECT: 69-73 MURPHY STREET

GURNER

LEGEND PROPOSED TREE **EXISTING TREE**

GARDEN BED

SCALE 1:100

DRAWN: RM

DWG No: 511_OPW_15 SCALE: AS NOTED

PROJECT: 69-73 MURPHY STREET

GURNER

TYPICAL PAVING IRRIGATION CLOSED SCALE 1:2 @ A1

SCALE: 1:5 @ A1

TYPICAL GARDEN SOIL PROFILE

TYPICAL TREE PIT DRAINAGE SCALE 1:20 @ A1

SCALE 1:2 @ A1

CLIENT:

TYPICAL PAVING IRRIGATION OPEN

TYPICAL STEEL EDGE SCALE 1:5 @ A1

SSUE	DATE	DETAILS	
A	19.06.23	OPERATIONAL WORKS	

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS. CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING: TYPICAL DETAILS

TYPICAL GARDEN STEPPER SCALE: 1:10 @ A1

STEPPER TO BE LAID ON MORTAR BED ON COMPACTED ROAD BASE

DWG No: 511_OPW_35 SCALE: AS NOTED DRAWN: RM

TYPICAL TREE IN PAVING SCALE 1:20 @ A1

WHEELIE BIN SHELTER - INTERIOR PLAN Scale 1:20 @ a1

PROJECT: 69-73 MURPHY STREET

CLIENT: GURNER

/

WHEELIE BIN SHELTER - FRONT ELEVATION SCALE 1:20 @ A1

-25 x 50mm spotted gum hardwood timber BATTENS FIXED TO 40 X 40MM STEEL FRAMES. SPACED 12.5MM APART.

—ALLOWANCE FOR TWELVE 240L WHEELIE BINS

WHEELIE BIN SHELTER - SIDE ELEVATION SCALE 1:20 @ A1

AMENDMENT

ISSUE DATE DETAILS A 19.06.23 OPERATIONAL WORKS _____

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS. CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING: BIN SHELTER DETAILS

-OPEN TOP FOR EASY ACCESS TO BINS

-HINGES TO FUTURE SPECIFICATION

-HANDHOLES TO ACCESS SS GATE LATCHES

- 25 x 50mm spotted gum hardwood timber battens fixed to 40 X 40MM STEEL FRAMES. SPACED 12.5MM APART.

-OPEN TOP FOR EASY ACCESS TO BINS

-25 x 50mm Spotted Gum Hardwood TIMBER BATTENS FIXED TO 40 X 40M STEEL FRAMES.

DWG No: 511_OPW_36 SCALE: AS NOTED DRAWN: RM

GENERAL SPECIFICATION NOTES

1.0 STANDARDS

1.1 SOILS

- AS 4419: Soils for Landscaping and Garden Use
- AS 3743: Potting Mixes
- · AS 4454: Composts, Soil Conditioners and Mulches

1.2 Plants

- AS 2303: Tree Stock for Landscape Use
- AS 4970: Protection of Trees on Development Sites

2.0 PRODUCTS

2.1 MATERIAL

Topsoi

- · Source: Provide topsoil, which contains organic matter, is free from stones, contaminants and weeds
- Site: If available, provide material recovered from the site

Tur

- Supplier: Obtain turf from a specialist grower of cultivated turf
- Quality: Provide turf of even thickness, free from weeds and other foreign matter

Fertiliser

General: Provide proprietary fertilisers, delivered to the site in sealed bags marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses and application rates

Plants

- Health: Supply plants with foliage size, texture and colour at time of delivery consistent with the size, texture and colour shown in healthy specimens of the nominated species
- Vigour: Supply plants with extension growth consistent with that exhibited in vigorous specimens of the species nominated
- Damage: Supply plants free from damage and from restricted habit due to growth in nursery rows
- Pests and disease: Supply plants with foliage free from pest attack or disease
- Substitutes: Plant substitution (species or quantities) is not acceptable unless approved by Myles Baldwin Design.

3.0 EXECUTION

3.1 SITE PREPARATION

Weed eradication

- Herbicide: Eradicate weeds with a non-residual glyphosate herbicide in any of its registered formulae, at the recommended maximum rate
- Earth mounds
- Placing: Place clean filling in layers approximately 150 mm thick compacted to 85% of the dry density ratio of the surrounding soil as determined by AS 1289.5.4.1. Minimise slumping and further internal packing down

Edges

Construct changes in grade over a minimum width of 500 mm to smooth, gradual and rounded profiles with no distinct joint

Existing trees

- Tree protection zones (TPZ) shall be established around all trees to be retained and in accordance of AS 4970. The area within the fence shall be mulched and maintained at /5mm deptr
- No excavation, construction activity, grade changes, storage of materials, stock piling, siting of sheds, preparation of mixes or cleaning of tolls is permitted within the TPZ

Planting beds

- Excavated: Excavate to bring the subsoil to at least 300 mm below finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Break up the subs to a further depth of 100 mm
- Unexcavated: Remove weeds, roots, building rubble and other debris. Bring the planting bed to 75 mm below finished design levels
- Services and roots: Do not disturb services or tree roots; if necessary, cultivate these areas by hand

Placing topsoil

- General: Spread the topsoil on the prepared subsoil and grade evenly, making the necessary allowances to permit the following:
- Required finished levels and contours may be achieved after light compaction
- Grassed areas may be finished flush with adjacent hard surfaces such as kerbs, paths and mowing strips

Topsoil depths

- General: Spread topsoil to the following typical depths:
- Excavated planting areas: If using organic soil, 300 mm. Refer to typical soil profile detail
- Irrigated grassed areas generally: 150 mm
- Irrigated grassed areas, heavy use (e.g. playing fields, playgrounds, and public parks): 200 mm

Sediment and Erosion Control

Sediment and erosion control measures are required during the construction of all developments and building works. It shall be the contractor's responsibility that works are carried out in accordance with a sediment and erosion control plan and council/approving authority's requirements.

3.2 TURFING

General

- Supply: Deliver the turf within 24 hours of cutting, and lay it within 36 hours of cutting. Prevent the turf from drying out between cutting and laying. If it is not laid within 36 hours of cutting, roll it out on a flat surface with the grass up, and water as necessary to maintain a good condition
- Laying: Lay the turf in the following manner:
- In stretcher pattern with the joints staggered and close butted
- Parallel with the long sides of level areas, and with contours on slopes To finish flush, after tamping, with adjacent finished surfaces of ground, paving edging, or grass seeded areas
- Tamping: Lightly tamp to an even surface immediately after laying. Do not use a roller
- Fertilising: Mix the fertiliser thoroughly into the topsoil before placing the turf. Apply lawn fertiliser at the completion of the first and last mowings, and at other times as required to maintain healthy grass cover
- Watering: Water immediately after laying until the topsoil is moistened to its full depth. Continue watering to maintain moisture to this depth
- Levels: Where levels have deviated from the design levels after placing and watering, lift turf and re-grade topsoil to achieve design levels

\frown	MYLES BALDWIN DESIG
$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$	8 Maddison Lane, Redfern, NSW 2016 Australia PH +61 2 9699 2622 www.mylesbaldwin.com

69-73 MURPHY STREET CLIENT:

GURNER

3.3 PLANTING

General

- Individual plantings in grassed areas: Excavate a hole twice the diameter of the root ball and at least 100 mm deeper than the root ball. Break up the base of the hole to a further depth of 100 mm, and loosen compacted sides of the hole to prevent confinement of root growth
- Watering: Thoroughly water the plants before planting, immediately after planting, and as required to maintain growth rates free of stress
- Placing: Remove the plant from the container with minimum disturbance to the root ball, ensure that the root ball is moist and place it in its final position, in the center of the hole and plumb, and with the top soil level of the plant root ball level with the finished surface of the surrounding soil
- Fertilising plants: In planting beds and individual plantings, place fertiliser pellets around the plants at the time of planting
- Backfilling: Backfill with topsoil mixture. Lightly tamp and water to eliminate air pockets

3.4 TREES

General

All trees must be planted by an AQF Level 3 Qualified Arborist, Landscape Gardener or Horticulturalist

Clay Soils

The base of each tree pit within clay soils shall be laid with 100mm deep scoria. A 90mm ag line ring shall sit within the scoria and drain directly to a suitable location. Lay geo-textile fabric evenly above the scoria, prior to tree placement and backfilling with 80/20 mineral soil

3.5 MULCHING

Placing mulch

- General: Place mulch to the required depth, clear of plant stems, and rake to an even surface flush with the surrounding finished levels. Spread and roll mulch so that after settling, or after rolling, it is smooth and evenly graded between design surface levels sloped towards the base of plant stems in plantation beds, and not closer to the stem than 50 mm in the case of gravel mulches.
- Garden beds: Greenlife Mulch and Compost
- Tree mulch ring: Mushroom compost
- Depths: Spread organic mulch to a depth of 75 mm, and gravel mulch to a depth of 50 mm

3.6 STAKES AND TIES

Stakes

- Material: Hardwood, straight, free from knots or twists, pointed at one end
- Installation: Drive stakes into the ground at least one third of their length, avoiding damage to the root system

Ties

General: Provide 50 mm hessian webbing ties fixed securely to the stakes, one tie at half the height of the main stem, others as necessary to stabilise the plant

3.7 WATERING

Establishment

- Extent: Available soil moisture content of grass areas and garden beds to be monitored on a weekly basis using an approved moisture probe and water applied on a demand basis. Readings should be taken at a depth of 250mm
- All grass areas and garden beds should be maintained within a range of 50-80% available soil moisture. Under no circumstance should areas under irrigation fall below a level of 30% available soil moisture
- No visible signs of wilting of leaves or stems, with all plants fully turgid at all times.
- No sign of over-watering such as constantly wet soil, brown leaf margins, stem rot or brown spots on foliage

3.8 LANDSCAPE SUBSOIL DRAINAGE

General

Include subsoil drainage behind retaining walls, along path edges and in mass planting beds, including lawn areas. Maintenance access points shall be every 15m

Materials

- Geotextile fabric: shall consist of a woven or a non-woven type to be manufactured from synthetic materials other than polyamide
- Aggregate: shall be a single size with a nominal dimension of 10-40mm
- Subsoil pipe: shall be 90 mm diameter corrugated flexible slotted PVC pipe in a geofabric sock, or 100mm µPVC if under pavement. All pipes to requirements of AS 1254. Where vehicle loads are encountered, reinforced concrete pipe shall be used only

Construction

- Trenches to be minimum 300mm wide and extend 500mm below the subgrade level or 150mm if into bed rock
- Trenches to be lined with geotextile fabric and backfilled with aggregate. Pipe to be laid 50mm above trench floor
- Prior to backfilling the trench, drainage and connection to stormwater is to be approved by the site manager

3.9 COMPLETION

Cleaning

- Stakes and ties: Remove those no longer required at the end of the planting establishment period
- Temporary fences: Remove temporary protective fences at the end of the planting establishment period

4.0 ESTABLISHMENT & DEFECTS LIABILITY

4.1 ESTABLISHMENT

General

All landscaping works will have an establishment period of 26 weeks in which the subcontractor will be responsible for the maintenance and upkeep of the contracted scope, unless otherwise noted in the project documentation. If applicable refer to the project manager / builder for confirmation

4.2 DEFECTS LIABILITY PERIOD

General

- All landscaping works will be subject to a defects liability period of 52 weeks, commencing from the date of Practical Completion, unless otherwise noted in the project documentation. If applicable refer to the project manager / builder for confirmation
- 4.3 FAILED PLANTINGS

General

Photographic images of plants shall be approved by Myles Baldwin Design prior to procurement of replacement plant and tree stock

AMENDMENT

ISSUE DATE DETAILS A 19.06.23 OPERATIONAL WORK

MBD MUST BE PRESENT ON-SITE FOR THE POSITIONING OF ALL PLANTS.

CONTACT MBD IF DISCREPANCIES OCCUR BETWEEN LANDSCAPE AND CONSULTANTS DOCUMENTS. BUILDER TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION.

DRAWING:

GENERAL SPECIFICATION

DRAWN: RM

DWG No: 511_OPW_50 SCALE: AS NOTED

Road Pavement Dilapidation Report 69-73 Murphy Street Port Douglas

Gurner TM Nominee P/L

15 December 2022

Our Ref: 22010 Road Dilapidation

15 December 2022

The Chief Executive Officer Douglas Shire Council Po Box 723 MOSSMAN QLD 4873

Attention: Paul Hoye

Dear Paul,

Road Pavement Dilapidation Report

This dilapidation report has been prepared by Applin Consulting in accordance with Condition 5 'Road condition survey' of Decision Notice MCUC 2021_4490/1 to serve as a record of the condition of part of the haulage route between Davidson St and the proposed construction site entrance of the Esplanade carpark, based on an inspection conducted on 07 November 2022 by Greg Applin RPEQ.

The inspection comprised a visual and photographic non-intrusive survey of the section of road in question to document existing visible structural defects for a record of the road's condition prior to commencement of construction works. While defects of high concern will be highlighted for further attention, it does not constitute a detailed structural assessment of the road's condition.

We trust the above is sufficient for your needs and should you have any further queries regarding our proposal please do not hesitate to contact me.

Regards,

Greg Applin BEng RPEQ M: 0414 768 109 E: greg@applinconsulting.com.au

1.1 Dilapidation survey findings – 7 November 2022

Table 1

Summary of defects and observations from dilapidation survey

Photo ID	Description of defect(s)	Image
IMG_1160	• Unformed edges near location of future site entrance	
IMG_1162	• Existing gravel to future site entrance	
IMG_1163	 Existing carpark surfacing noted as no defects 	

Photo ID	Description of defect(s)	Image
IMG_1164	• Entrance road to existing carpark shows signs of low points and pavement failure commencing	

Photo ID	Description of defect(s)	Image
IMG_1165	• Edge of existing carpark starting to fail	<image/>

Photo ID	Description of defect(s)	Image
IMG_1166	• Looking back from carpark. Pavement generally sound	

Photo ID	Description of defect(s)	Image
IMG_1167	• Carpark entrance showing patch work repairs	<image/>

Photo ID	Description of defect(s)	Image
IMG_1168	Trench crossing at carpark entrance. Pavement is sound	

Photo ID	Description of defect(s)	Image
IMG_1169	 Pavement patches at entrance. No deflections but pavement surface well worn 	<image/>
IMG_1170	 Pavement patches at entrance. No deflections but pavement surface well worn 	

Photo ID	Description of defect(s)	Image
IMG_1171	• Beach end of Macrossan St. pavement repairs to correct differential settlement against concrete pavement edge.	
IMG_1172	 Start of Macrossan St from Esplanade. Existing edge replacement pavement. Unformed edges 	

Photo ID	Description of defect(s)	Image
IMG_1173	• Damaged pavement Macrossan St start	

Photo ID	Description of defect(s)	Image
IMG_1174	• Edge pavement joints previous repair works	

Photo ID	Description of defect(s)	Image
IMG_1175	• Distressed pavement with low points and previous repairs.	

Photo ID	Description of defect(s)	Image
IMG_1176	 Macrossan St pavement failures (Between Davidson and Esplanade). Crocodile cracking of seal. Typical of aging pavement, beyond design life. Pavement needs to be removed to subgrade and replaced. 	

Photo ID	Description of defect(s)	Image
IMG_1177	 Macrossan St pavement failures (Between Davidson and Esplanade). Crocodile cracking of seal with attempts to reduce pavement failure further by sealing cracks poorly. Typical of aging pavement, beyond design life. Pavement needs to be removed to subgrade and replaced 	

Photo ID	Description of defect(s)	Image
IMG_1178	 Macrossan St pavement failures (Between Davidson and Esplanade). Crocodile cracking of seal with attempts to reduce pavement failure further by sealing cracks poorly. Typical of aging pavement, beyond design life. Pavement needs to be removed to subgrade and replaced 	

Photo ID	Description of defect(s)	Image
IMG_1180	 Macrossan St pavement failures (Between Davidson and Esplanade). Crocodile cracking of seal. Typical of aging pavement, beyond design life. Pavement needs to be removed to subgrade and replaced 	
Photo ID	Description of defect(s)	Image
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IMG_1181	 Close up of 1180 Staining is typical of ponded water which will accelerate failure 	

Photo ID	Description of defect(s)	Image
IMG_1183	 Macrossan St pavement failure (Between Davidson and Esplanade). Longitudinal crack - unsealed 	

Photo ID	Description of defect(s)	Image
IMG_1184	 Macrossan St pavement failures (Between Davidson and Esplanade). Crocodile cracking of seal and patch works repairs. Typical of aging pavement, beyond design life. Pavement needs to be removed to subgrade and replaced 	

Photo ID	Description of defect(s)	Image
IMG_1185	 Macrossan St pavement failure (Between Davidson and Esplanade). Longitudinal crack - unsealed 	

Photo ID	Description of defect(s)	Image
IMG_1186	 Macrossan St pavement failure (Between Davidson and Esplanade). Longitudinal crack - unsealed Commenceme nt of crocodile cracking. 	

Photo ID	Description of defect(s)	Image
IMG_1187	 Macrossan St pavement failure (Between Davidson and Esplanade). Longitudinal crack - unsealed Commenceme nt of crocodile cracking at edges and patch work repairs 	

Photo ID	Description of defect(s)	Image
IMG_1188	 Macrossan St pavement failure (Between Davidson and Esplanade). Longitudinal crack - unsealed Commenceme nt of crocodile cracking at edges 	

Photo ID	Description of defect(s)	Image
IMG_1189	 Macrossan St pavement failure (Between Davidson and Esplanade). Close up of Longitudinal crack - unsealed 	

Photo ID	Description of defect(s)	Image
IMG_1190	 Macrossan St pavement failure (Between Davidson and Esplanade). Close up of Longitudinal crack - unsealed 	

Photo ID	Description of defect(s)	Image
		PORTICO
IMG_1191	•	

Photo ID	Description of defect(s)	Image
IMG_1192	 General view from Davidson St Intersection to Esplanade 	<image/>

FNQROC DEVELOPMENT MANUAL

STATEMENT OF COMPLIANCE OPERATIONAL WORKS DESIGN

This form duly completed and signed by an authorised agent of the Designer shall be submitted with the Operational Works Application for Council Approval.

Name of De	velopment Gurner Murphy St
Location of	Development 69-73 Murphy St, Port Douglas
Applicant	Port Douglas developments by Gurner P/L
Designer	Applin Consulting
Deelighter	

It is hereby certified that the Calculations, Drawings, Specifications and related documents submitted herewith have been prepared, checked and amended in accordance with the requirements of the FNQROC Development Manual and that the completed works comply with the requirements therein, **except** as noted below.

Compliance with the requirements of the Operational Works Design Guidelines	Non-Compliance refer to non-compliance report / drawing number
Plan Presentation	Yes
Geotechnical requirements	yes - by GEO design
Geometric Road Design	N/A - concrete driveway
Pavements	N/A - concrete driveway
Structures / Bridges	N/A
Subsurface Drainage	N/A
Stormwater Drainage	Yes
Site Re-grading	N/A - house pad only
Erosion Control and Stormwater Management	Yes
Pest Plant Management	N/A
Cycleway / Pathways	N/A

Landscaping	By Myles Baldwin Design
Water Source and Disinfection/Treatment Infrastructure (if applicable)	N/A
Water Reticulation, Pump Stations and water storages	Yes
Sewer Reticulation and Pump Stations	Yes
Electrical Reticulation and Street Lighting	N/A
Public Transport	N/A
Associated Documentation/ Specification	As per FNQROC
Priced Schedule of Quantities	N/A
Referral Agency Conditions	N/A
Supporting Information (AP1.08)	Yes
Other	N/A

Conscientiously believing the above statements to be true and correct, signed on behalf of:

Designer	Applin Consulting	RPEQ No ⁶⁰⁷³
Name in Fi	ull Gregory M Applin	
Signature	Coff	Date 16/06/2023