



Enquiries: Direct Our Ref: Your Ref: Date: Krishna Khadka 07 5433 3296 DA/2022/3326 B21549 8 November 2022

Lambert Development Group Pty Ltd c/- David Lenarduzzi 120 Wickham Street FORTITUDE VALLEY QLD 4006

Dear Applicant,

Re:DEVELOPMENT APPROVAL
Planning Act 2016Development Application No.:DA/2022/3326Property Location:57 Coach Road West MORAYFIELDProperty Description:Lot 8 RP 87981

Please be advised that on 8 November 2022 the above development application was approved by Council's Delegate as the Assessment Manager in accordance with section 64 of the *Planning Act 2016* subject to conditions.

The following type of approval has been issued:

• Development Permit - Operational Works (Roadwork, Stormwater and Earthworks)

The development allowed by this approval must be carried out in accordance with the attached Decision package.

Attached is an extract from the *Planning Act 2016* which details your appeal rights and the appeal rights of any submitters, if applicable, regarding this decision.

Should you require any further information about this matter, please contact Krishna Khadka as referenced above.

Yours faithfully

Krishna Khadka Engineer - (Engineering Assessment - North) Development Services

Customer Service Contacts

Enclosures: Attachment 1 - Decision Notice Attachment 2 - Assessment Manager Conditions Attachment 3 - Approved Plans / Documents Attachment 4 - Appeal Rights



Want your plans endorsed faster? or your operational works application approved faster? Council have an accelerated survey plan endorsement & operational works application option

Visit https://www.moretonbay.qld.gov.au/mbplus

ATTACHMENT 1

Decision Notice

Decision Notice *Planning Act 2016, section 63*

APPLICATION DETAILS

Application No:	DA/2022/3326
Applicant:	Lambert Development Group Pty Ltd
Street Address:	57 Coach Road West MORAYFIELD
Real Property Description:	Lot 8 RP 87981
Planning Scheme:	Moreton Bay Regional Council Planning Scheme

APPROVAL DETAILS

Date of Decision: 8 November 2022

The development application was approved by Council's Delegate as the Assessment Manager subject to conditions (refer Attachment 2).

Application Type	Development Permit	Preliminary Approval
Operational Works for Roadwork , Stormwater and Earthworks		

OTHER NECESSARY PERMITS

Listed below are other permit/s that are necessary to allow the development to be carried out:

 Operational Works - Development Permit - Electrical Reticulation & Street Lighting

CURRENCY PERIOD OF APPROVAL

The currency period stated in section 85 of the *Planning Act 2016* applies to this approval as outlined below:

• Operational Works - 2 years from the date of this approval starts to have effect.

DEEMED APPROVAL

Not applicable.

VARIATION APPROVAL

Not applicable.

INFRASTRUCTURE

Unless otherwise specified, all assessment manager conditions of this development approval relating to the provision of infrastructure are non-trunk infrastructure conditions under Chapter 4, section 145 of the *Planning Act 2016*.

ASSESSMENT MANAGER CONDITIONS

The Conditions relevant to this development approval are listed in Attachment 2 of the Decision package.

APPROVED PLANS / DOCUMENTS

The approved plans and/or documents as listed below for this development approval are included in Attachment 3 of the Decision package.

Approved Plans and Documents				
Plan / Document Name	Reference Number	Prepared By	Dated	
General Layout, Locality Plan & Drawing Index	B21549-C001 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Roadworks & Drainage Layout Plan	B21549-C100 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Roadworks & Drainage Details & Notes	B21549-C101 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 01 Longitudinal Section	B21549-C102 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 01 Cross Sections - Sheet 1 of 2	B21549-C103 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 01 Cross Sections - Sheet 2 of 2	B21549-C104 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 02 Longitudinal Section	B21549-C105 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 02 Cross Sections - Sheet 1 of 3	B21549-C106 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 02 Cross Sections - Sheet 2 of 3	B21549-C107 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 02 Cross Sections - Sheet 3 of 3	B21549-C108 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 03 Longitudinal Section and Cross Sections	B21549-C109 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Road 04 (Citronella St) Longitudinal and Cross Sections	B21549-C110 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Coach Road Longitudinal Sections	B21549-C111 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Coach Road Cross Sections	B21549-C112 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Intersection Details - Sheet 1 of 2	B21549-C113 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Intersection Details - Sheet 2 of 2	B21549-C114 Rev B	Lambert & Rehbein Engineers	04/10/2022	

Approved Plans and Documents				
Plan / Document Name	Prepared By	Dated		
Signs & Linemarking Layout Plan	B21549-C115 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Catchment Plan	B21549-C200 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Bio-Retention Basin Details	B21549-C201 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Drainage Details and Notes	B21549-C202 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Drainage Longitudinal Sections - Sheet 1 of 4	B21549-C203 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Drainage Longitudinal Sections - Sheet 2 of 4	B21549-C204 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Drainage Longitudinal Sections - Sheet 3 of 4	B21549-C205 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Drainage Longitudinal Sections - Sheet 4 of 4	B21549-C206 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Calculation Table - Sheet 1 of 3	B21549-C207 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Calculation Table - Sheet 2 of 3	B21549-C208 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Stormwater Calculation Table - Sheet 3 of 3	B21549-C209 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Bulk Earthworks Layout Plan	B21549-C300 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Bulk Earthworks Typical Sections	B21549-C301 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Bulk Earthworks Layout Plan	B21549-C302 Rev B	Lambert & Rehbein Engineers	04/10/2022	
Safety in Design Report	B21549-C900 Rev B	Lambert & Rehbein Engineers	04/10/2022	

ASSESSMENT BENCHMARKS

The Assessment Benchmarks that applied to the development from the following Categorising Instruments include;

Categorising Instrument (Planning Regulation 2017)

State Planning Policy

• State Planning Policy 2017, Part E.

Regional Plan

• South East Queensland Regional Plan 2017 (ShapingSEQ).

Local Categorising Instrument (Moreton Bay Regional Planning Scheme)

Works Code

Local Categorising Instrument (Variation Approval) Not applicable.

Local Categorising Instrument (Temporary Local Planning Instrument) Not applicable.

OTHER RELEVANT ASSESSMENT MATTERS

Not applicable.

REASONS FOR THE DECISION

Not applicable.

REASONS FOR APPROVAL DESPITE NON-COMPLIANCE WITH ASSESSMENT BENCHMARKS

Not applicable.

REFERRAL AGENCY CONDITIONS

There were no Referral Agencies applicable to this development application.

SUBMISSIONS

Not applicable.

APPEAL RIGHTS

Attachment 4 of the Decision package is an extract from the *Planning Act 2016* which details your appeal rights, and the appeal rights of any submitters, if applicable, regarding this decision.

ATTACHMENT 2

Assessment Manager Conditions of Approval

CONDITION		TIMING
OPEF	RATIONAL WORKS	
DEVE	LOPMENT ENGINEERING	
1	Road Classifications for Pavement Design	
	Design pavement in accordance with the following road classifications:	Prior to subgrade inspections.
	Coach Road - Council Local Collector ESA = 3.0x10 ⁵	
	Road 01,02,03 & 04 - Living Residential ESA = 1.2x10 ⁵	
2	Errors and Omissions	
	Where errors or omissions occur in the design or works do not conform to or meet Council standards then these works shall be rectified to comply with Council standards at no cost to Council.	At all times during construction and prior to works being accepted Off Maintenance.
	Where drawings contain insufficient detail or do not contain details of works that are either necessary or associated with the development then these works shall be designed and constructed to Council standards.	
	Only the approved plans shall be used for construction.	
	Note: Council reserves the right to amend the approved drawings or request further information should this become necessary.	
3	Works – Applicant's Expense	
	All works, services, facilities and/or public utility alterations required by or as a consequence of this approval or stated condition/s, whether carried out by the Council or otherwise, shall be at the developer's expense unless otherwise specified or agreed in writing.	At all times during construction and prior to works being accepted Off Maintenance.
	Replace existing Council infrastructure (including but not limited to street trees and footpaths) to Council's standards.	
4	Works – Connection to existing works	
	Where existing works, including roads and drainage works, will not link up with and join smoothly to proposed works and are not more than twenty (20) metres from the nearest point of the proposed works the developer shall carry out such works as are necessary to ensure that the incomplete works, including roads and drainage, are constructed to link up with and join smoothly to the works proposed in accordance with Council's standards.	Prior to works being accepted On Maintenance.
	These works are to be undertaken at the developer's expense unless otherwise specified or agreed in writing.	

CONDITION		DITION	TIMING
5		As Constructed Drawings	
	A	Provide, for review and approval, Council with a preliminary set of the surveyor and engineering As Constructed drawings for the approved works and a digital ADAC file.	Prior to requesting an On Maintenance inspection.
		Note: The current design standard and relevant planning scheme policy is MBRC Planning Scheme Policy Operational Works inspection, maintenance and bonding procedures.	
	B	Submit 'As Constructed' drawings and digital ADAC file in accordance with Council's Planning Scheme, relevant Planning Scheme Policies and design standards current at the time of development.	Prior to works being accepted On Maintenance.
6		Works Through Land not owned by the Developer	
		Where any works are proposed to be undertaken on or extend into any property not owned by the developer then the other property owner's written consent must be lodged with Council. The written consent from the land owner must identify the correct drawing title and number (including revision number) for the works within or through their land.	Prior to any works commencing within those properties.
7		Works in Existing Roads	
	A	Works carried out in or affecting existing Roads must be undertaken so that these roads are maintained in a safe and useable condition.	At all times.
	В	Provide to Council's delegated officer and receive acknowledgement of a Traffic Management Plan, with site specific Guidance Scheme, prepared and signed by an appropriately qualified person and in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) for any works that will affect traffic movements or traffic safety in existing roads.	At least five (5) days prior to undertaking the works in or affecting existing roads.
		 Note: A 'Part Road Closure Application' for Development Works form is to accompany the Traffic Management Plan submission. This submission is required to be made in addition to any Traffic Management Plan which has been submitted and/or approved as part of a Construction Management Plan for the site during the development application process for Material Change of Use or Reconfiguring a Lot or subsequent non-IDAS applications. 	

CONDITION		TIMING
8	Information Sign – Works in Existing Roads	
	A construction advisory road sign must be erected and regularly updated and maintained displaying the developer and contractors details and the expected completion date for works on existing roads. The sign shall be located so as be clearly legible to the public from of minimum 15m distance from the existing road on which the works are to be carried out on.	For the duration of the works from commencement to acceptance of On Maintenance.
9	Notification to Affected Premises	
A	 Provide Council with a copy of an information kit for 'Notification to Affected Premises' which includes the following: A layout plan of the proposed development showing adjoining lot boundaries, new and existing roads, park and open space, drainage reserves and community purposes lots as applicable; Details of any external works with any changes to existing works highlighted for easy identification; Scheduled start and completion dates; Contact names and phone numbers for the Developer, Supervising Engineer, Consulting Engineer, the Contractor, Wildlife Spotter and who to contact in an emergency; and The site working hours authorised for the site works. 	Prior to distribution of information kit to residents.
В	Provide all occupiers of premises adjoining the site, directly opposite the frontage of the site, adjacent to and directly opposite external works and residents/occupiers likely to be directly affected by the works with a copy of the 'Notification to Affected Premises' information kit. Provide Council's delegated officer with a list of premises which the information kit has been delivered to.	Not less than 14 days prior to commencing any construction works.
10	Information Sign – Development Works	
	 An information sign containing the following details and after hours contact details must be provided at each entrance to the development site: Developer Supervising Consultant/ Engineers / Project Manager Principal Contractor The sign must be at least 0.9m (W) by 0.6m (H). The sign must be erected and maintained for the duration of the development works. 	For the duration of the development works from commencement to acceptance On Maintenance by Council.

CONDITION		TIMING
11	Prestart Meeting	
	Arrange a prestart meeting with Council officers from Development Services on 32050555 or (<u>Email-</u> <u>MBRC@moretonbay.qld.gov.au</u> - Attention - Development Services - Engineering North - Construction Team - Referencing (DA/2022/3326)	Not less than 7 days prior to commencing any construction works.
	 The following people will be required to attend the prestart meeting: Developer's Supervising Engineer Contractor's Engineer / Project Manager Contractor's Site Supervisor Fauna Manager (where required). 	
12	Mandatory Inspections with Council Officers	
	Submit required documentation for each mandatory inspection in accordance with MBRC Planning Scheme Policy - Operational Works inspection, maintenance and bonding procedures.	Prior to requesting inspection.
	Undertake the following inspections with Council's delegated officer (where applicable to approved works) in accordance with MBRC Planning Scheme Policy - Operational Works inspection, maintenance and bonding procedures:	As prescribed below.
A	Stormwater drainage.	Prior to backfilling stormwater trenches.
В	Subgrade / box inspection.	Prior to placement of structural pavements.
С	Preseal inspection.	Prior to priming and sealing of structural pavements.
D	For concrete slabs and concrete pavements - foundations / subgrade and pre-pour inspections.	Prior to concrete pouring.
E	On maintenance inspection for Council's acceptance of all works.	Prior to works being accepted On Maintenance.
F	Off maintenance inspection of all works. Note: Reinspections attract a fee in accordance with Council's Fee Schedule. The fee must be paid prior to the reinspection.	After maintenance period has elapsed.
G	Provide Council's delegated officer with a copy of an Engineers' Certificate Soil tester's reports demonstrating that required compaction standards, finished levels and textures of finish have been obtained in accordance with Council's Planning Scheme Policy - Operational Works inspection, maintenance and bonding procedures.	Prior to proceeding to construction of next layer or surfacing.

CONDITION		TIMING
13	Testing Frequency – General	
A	All testing of the works shall be carried to comply with the minimum testing frequencies given in MBRC Planning Scheme Policy - Operational Works inspection, maintenance and bonding procedures.	At all times during construction.
	Note: Council's delegated officer may vary the frequency of testing to suit site conditions but must provide written advice to the supervising engineer prior to commencement of the relevant works.	
В	Provide a plan identifying locations where testing has occurred.	Prior to works being accepted On Maintenance.
14	Construction Hours Restrictions	
	Ensure hours of construction are limited to 0630 to 1830 Monday to Saturday and not at all on Sundays and public holidays.	At all times.
	Note: Council's engineer may approve (in writing) work outside the above hours where it can be demonstrated to the satisfaction of Council that the work will not cause unreasonable interference with the amenity of adjoining premise and any person.	
15	Construction Nuisance and Annoyance	
	Ensure construction works do not cause unreasonable interference with the amenity of adjoining premise and any person by reason of noise, vibration, electrical interference, smell, fumes, vapour, steam, soot, ash, dust, silt, wastewater, waste products, grit, oil or otherwise.	At all times.
16	Construction Site Management	
	Ensure the construction site is kept in a clean and tidy state.	At all times.
17	Temporary Sedimentation, Erosion and Runoff Control	
A	Implement an Erosion and Sediment Control Plan which is prepared by an experienced Certified Professional in Erosion and Sediment Control (CPESC) in accordance with International Erosion Control Association Australasia (IECA) Best Practice and Sediment Control document and MBRC Planning Scheme current at the time of development.	Prior to commencement of works and to be maintained current at all times during construction and until the development is accepted off-maintenance.
В	The temporary erosion and sediment control measures shall be maintained and be functional until the end of the Maintenance Period for the works or earlier if Council's delegated officer considers they are no longer required.	At all times during construction.
	Note: Council's delegated officer may order additional measures to control silt on site at no cost to Council.	

CON	DITION	TIMING
18	Haul Routes	
	Submit and have approved by Council's delegated officer all haul routes for the transport of imported or spoil material and gravel pavement material along Council roads below sub-arterial standard.	Prior to commencing works onsite.
	Note: Refer to MBRC Planning Scheme Values and Constraints Mapping - Road Hierarchy for details on sub- arterial and arterial roads.	
19	Spillage onto Existing Roads	
	Clean those parts of the access route to the site that are affected by any material dropped, deposited or spilled on the roads as a result of construction processes associated with the site.	At all times during construction.
	 Note: All materials must be swept up and removed from the roads and not directed into Council's stormwater drainage system. All care must be taken to prevent sediments being deposited on roads. 	
20	Dust Control – Nuisance and Annoyance	
	Implement suitable dust control measures. If airborne particles are observed leaving the site, any work is to cease immediately, and satisfactory dust suppression is to be implemented.	At all times prior to works being accepted Off Maintenance.
	Note: Dust suppression measures must be in place at all times including weekends and public holidays.	
21	Earthworks Batters	
	 Where approved drawings do not include specifications for scour and erosion protection apply the following treatments to batter slopes: Slopes of 1:6 or flatter – topsoil and seed Slopes between 1:6 and 1:4 – topsoil and turf Slopes of 1:4 or greater – provide treatment recommendation from a qualified geotechnical engineer (R.P.E.Q.) for Council approval prior to undertaking batter works Or as directed by Council. 	At all times during construction.
	Note: Batters within Open and Civic Spaces are to be treated in accordance with MBRC Planning Scheme Policy Integrated Design - Open and Civil Space Design.	
22	Road Crossings in Existing Roads	
	All services crossings under Existing Council Roads are to be tunnel bored unless approved otherwise by Council's delegated officer.	At all times during construction.

CON	DITION	TIMING
	 Where approval is given for open trenching, the following is to apply: Minor Roads - backfill shall be compacted in layers to 95% standard maximum dry density and topped with 300mm of pavement material and a 50mm AC wearing course. Sub-arterial or Arterial roads - refer to I.P.W.E.A. Standard Drawing RS-170. Verge - Backfill shall be compacted to 90% standard maximum dry density and topped with 75mm of sandy loam. Restoration of any vegetation shall be undertaken to a standard as near as practicable to the pre-construction standard. 	
23	Site works – Stormwater Runoff Quality	
	 Carry out earthworks in accordance with the State Planning Policy - Water Quality and IECA Best Practice Erosion and Sediment Control document. Note: Soil disturbances of greater than 1.0 hectares will require a site-specific Erosion & Sediment Control Plan. Earthworks are to be undertaken to ensure that soil disturbances are staged into manageable areas of not greater than 3.5 hectares. 	At all time during construction and until the site is suitably stabilised.
24	Earth Retaining Structures	
A	Earth retaining structures within the subject land around areas of cut that are on or near the boundaries of the site must be designed to allow for the existing live and dead loads associated with the adjoining land/premises current occupancy and use of the adjoining land including allowance for a 2m high boundary fence. Where the adjoining land use rights or zoning allows for industrial uses a minimum live load of 25kPa must be allowed in the design of the retaining structure for these adjoining premises. The minimum design life (the period assumed in design for which a structure or structural element is required to perform its intended purpose without replacement or major structural repairs) for the earth retaining structure that is specified in Table 2.1 of Australian Standard AS4678.	At all times.
В	Submit for Council records copies of Forms 15 & 16 as detailed under section 254 of the Building Act 2006. The forms are to be signed by an RPEQ for all structural retaining walls.	Prior to works being accepted On Maintenance.

CON	DITION	TIMING
	Additionally, submit certification from an R.P.E.Q. that the design and construction of retaining walls comply with the requirements of this condition.	
25	Unsuitable Fill Materials	
	 Ensure that all fill material used on the development site is free of unsuitable materials, identified in AS3798 and the following: actual acid sulfate soils and potential acid sulfate soils; organic or putrescible matter; material imported from land which is, or has been, listed on the "Environmental Management Register" under the Environmental Protection Act 1994; and building demolition material. 	At all times.
26	Compaction Requirements	
	All fill material which is intended to be load bearing, or the finished surface level of which is required to remain approximately constant, is selected, placed and compacted to the standard prescribed in Australian Standard AS3798 Guidelines on Earthworks for Commercial and Residential developments.	At all times during construction.
27	Advisory Sign – Future Road Extension	
	At the end of each road that is intended to extend with future development an advisory sign shall be supplied and erected to inform residents and the public of the future road extension. The sign shall be worded as follows: "This road may be extended with future development of the adjoining land. For further information refer to Council's Planning Scheme."	Prior to works being accepted On Maintenance.
	This sign must be easily read at a distance of 5 metres. The sign shall not be attached to the road end hazard sign above the sign board.	
28	Pavement Design	
A	All road pavements must be designed, constructed and tested in accordance with MBRC Planning Scheme Policy - Integrated Design - Street, Roads and Utilities and standard drawings current at the time of construction.	At all times during construction.
	 Note: Council requires a primer seal placed under all asphalt surfaces. Increased asphalt surface thicknesses for road thresholds are to be identified in the pavement design. 	

CO	N	DITION	TIMING		
	В	Submit, for review and approval by Council's delegated officer, a pavement design for all roads. Pavement designs are to include Soil tester's reports.	Prior to subgrade inspection.		
29		Pavement Jointing Detail			
		Undertake pavement jointing in accordance with I.P.W.E.A.Q. Standard Drawings SEQ R-170.	Prior to works being accepted On Maintenance.		
30		Concrete Footpaths			
		Construct concrete footpaths and kerb ramps in accordance with I.P.W.E.A. Standard Drawings SEQ R-065 and SEQ R-090.	Prior to works being accepted On Maintenance.		
31		Street Signs			
		Street signs must be provided in accordance with Council's Standard Drawings and I.P.W.E.A. Standard Drawings.	Prior to works being accepted On Maintenance.		
		 Note: House numbers required for these signs shall be obtained from Council's house numbering officer by contacting Council's Customer Service. The MBRC Logo is not to be put on the sign. 			
32		Hazard Management			
	A	Undertake the hazard identification and treatment process for any additional, existing or introduced hazards identified onsite by the Consultant or by Council's delegated officer during the construction process.	Prior to works being accepted On Maintenance		
		Undertake a review of the identified hazards and provide a copy of the completed Hazard Mitigation Worksheet found in AUSTROADS Guide to Road Design Part 6: Roadside Design, Safety and Barriers Appendix B along with any supporting information.			
	В	Provide, for review and approval by Council's delegated officer, adequate design documentation for the recommended hazard management treatment in accordance with AS3845:1999 and AUSTROADS Guide to Road Design Part 6: Roadside Design, Safety and Barriers.	Prior to construction of any hazard management treatment.		
	С	Construct approved hazard management treatments in accordance with Council's Planning Scheme, Planning Scheme Policies, standard drawings and any other relevant standards current at the time of development.	Prior to works being accepted On Maintenance		
33		Stormwater Runoff Control – Batters and Retaining Walls			
		Provide cut-off drains at the top of the batter with turf or rock lined batter drains for all batters and/or retaining walls generally higher than 600mm in height and with a catchment greater than 1000m2.	Prior to works being accepted On Maintenance.		

CONI	DITION	TIMING
	Note: Where these are not detailed on the approved drawings then these works shall be in accordance with Council's current standards.	
34	Stormwater Pipe Outlets and Culvert Inlets and Outlets	
	 Stabilise all culvert inlets and outlets or stormwater drainage outlets in accordance with industry best practice and the following requirements: Rock gabion baskets/rock mattresses Grouted rock/stone pitching with a properly designed and prepared base and constructed to the following requirements: Mortar to be 1 part cement to 3 parts sand (by volume). Open face stone pitching is to be used where the concrete is recessed 50mm behind the stone facing. Select spalls to avoid sharp edges. Other solutions as approved by Council's delegated officer. 	At all times.
	appropriate solution.	
35	Stormwater Overland Flow – Site Earthworks	
26	 Earthworks must be undertaken on the site so as not to cause nuisance and annoyance to any person or premises. The development must: Allow stormwater overland flow which entered the land prior to the commencement of the earthworks to continue to enter the land; and Ensure stormwater overland flow from the development site is not discharged or diverted onto land (other than a road) adjacent to the site in a manner which: concentrates the rate of flow at any point along the property boundary; or increases the peak flow rates of stormwater discharged at any point along the property boundary; beyond that which existed prior to commencement of these earthworks. 	At all times during construction.
30		
	Undertake and provide, to the satisfaction of the Council, a high definition Closed Circuit Television (CCTV) recording of all stormwater pipes, including inter allotment roof water drainage. Recording to be undertaken within one month immediately preceding making a request for On Maintenance inspection and post road pavement construction works. CCTV to clearly display all joints (full surrounds) and any form of damage or defects, including date and time of the recording.	Maintenance Inspection

CONI	DITION	TIMING
	The recording is to include a report signed by a suitably qualified Registered Professional Engineer Queensland (RPEQ) stating that the recording has been reviewed and all works are satisfactory. Where defects have been identified, consultant is to provide method of rectification to Council for approval, prior to carrying out any rectification works.	
В	Undertake and provide, to the satisfaction of the Council, a high definition Closed Circuit Television (CCTV) recording of all stormwater pipes, including inter allotment roof water drainage. Recording to be undertaken within one month immediately preceding making a request for Off Maintenance inspection. CCTV to clearly display all joints (full surrounds) and any form of damage or defects, including date and time of the recording. The recording is to include a report signed by a suitably qualified Registered Professional Engineer Queensland (RPEQ) stating that the recording has been reviewed and all works are satisfactory. Where defects have been identified, consultant is to provide method of rectification to Council for approval, prior to carrying out any rectification works.	Prior to a request for Off Maintenance inspection.
37	Drainage Behind Retaining Walls	
	 Design and install agricultural pipes or strip drains behind retaining walls in accordance with Q.U.D.M. to connect to: The proposed inter-allotment drainage systems; or To drainage inlet structures via a stub connection in roadways; or Directly to kerb and channel if there are no drainage structures within 10m of the frontage of the land; or As approved in writing by Council's delegated officer. 	Prior to works being accepted On Maintenance.
	 Notes: Corrugated pipes are not to be used to connect the stormwater drainage to Council's infrastructure. The drainage system behind retaining walls must not connect to Council's subsurface drainage system in the Council road. 	
38	Provision of Kerb Adapters	
	Provide a minimum of two (2) metal kerb adaptors per lot for lots that drain to the road. Where a lot has side crossfall of up to 1.5%, one (1) kerb adaptor shall be	Prior to works being accepted On Maintenance.

CON	DITION	TIMING
	located at each side of the lot. Where a lot has side crossfall of greater than 1.5%, both kerb adaptors shall be located at the low side of the lot.	
	For lots with a concrete footpath at the frontage, the kerb adaptors shall be connected to the front boundary of the lot with Class SN8 uPVC stormwater pipe.	
39	Certification – Public Stormwater Management Infrastructure	
	Provide documentation to Council from a Registered Professional Engineer (RPEQ) specialising in stormwater design certifying that the stormwater management treatment train as approved in the stormwater management plan and design drawings has been constructed in accordance with engineering best practise and is functioning as designed.	Prior to works being accepted On Maintenance.
	The certification shall include the completed sign-off forms for bioretention systems prepared by Water by Design in Partnership with Healthy Waterways shall be completed. The sign-off forms are accessible from <u>www.waterbydesign.com.au</u> .	
40	Public Bioretention Inspections	
	Provide Council with notice of the subsoil drains being laid and the filter media being installed.	Not less than 48 hours prior to subsoil drains being laid and the filter media being
	Note: Council's delegated officer may attend the inspection.	installed.
41	Fertilisers for Grassing and Landscape Works	
	Odorous chemicals, fertilisers, soil conditioners or mulches shall not be used on land development projects. Only a non-odorous, commercially bagged and labelled fertiliser shall be used when seeding grass areas or laying turf.	At all times during construction.
	Without limiting the above, Council's delegated officer may approve the use of suitably composed and aged organic material, such as soil conditioners, at the following locations:	
	 in isolated locations where existing and proposed houses are considerable distances from the work site; and where, in the officer's opinion, their use would not adversely affect the occupiers of any nearby properties with strong odours or loose material blown from the work site. 	
	Council's delegated officer will provide the approval in writing with conditions where odorous fertilisers are approved.	

CON	IDITION	TIMING		
42	Stabilisation of Disturbed Areas			
	Ensure that a grass strike rate of at least 80% cover has been attained on all disturbed areas or other approved means of stabilisation of grassed areas have been provided.	Prior to works being accepted On Maintenance.		
	Note: For residential and rural residential subdivisions, the road reserve between kerb and property line shall be turfed as a condition of completion.			

ADV	ICES			
1	Development Permit			
	This approval shall comply with all the conditions of related approval as stipulated in Council's Decision Notice – Development Permit dated 17/05/2022 referenced as DA/2021/5255			
	The Applicant needs to be aware that the Currency Period of that Decision Notice may determine the validity period of this Decision Notice.			
2	Extent of Checking by Council			
	This approval shall not be taken to mean that the drawings have been checked in detail and Council accepts no responsibility whatsoever for the survey information, the design, or for the accuracy of any information or detail contained in the approved drawings and specifications.			
3	Aboriginal Cultural Heritage Act			
	The <i>Aboriginal Cultural Heritage Act 2003</i> commenced in Queensland on April 16, 2004. Under the Act, indigenous parties are key in assessing cultural heritage significance.			
The <i>Aboriginal Cultural Heritage Act 2003</i> establishes a Duty of Care for indige cultural heritage. This applies on all land and water, including freehold land. T Cultural Heritage Duty of Care lies with the person or entity conducting the act				
	Penalty provisions apply for failing to fulfil the Cultural Heritage Duty of Care.			
	Those proposing an activity that involves additional surface disturbance beyond that which has already occurred on the proposed site need to be mindful of the Duty of Care requirement.			
	Details of how to fulfil the Duty of Care are outlined in the Duty of Care Guidelines gazetted with the Act.			
	Council strongly advises that you contact the relevant state agency to obtain a copy of the Duty of Care Guidelines and further information on the responsibilities of developer under the terms of the <i>Aboriginal Cultural Heritage Act 2003</i> .			
4	Environmental Protection Act			
	It remains the duty of care of the site owner not to cause Environmental Harm as defined under the <i>Environmental Protection Act 1994</i> .			

ADV	CES					
5	Road and Stormwater infrastructure					
	In respect to Road and Stormwater infrastructure, the works shall be designed and constructed in accordance with the relevant Planning scheme codes and policies;					
	 The current relevant planning scheme codes and policies are: Works code; Reconfiguring a lot codes; PSP- Integrated Design PSP- Operational Works Inspection, Maintenance and Bonding Procedures. All of which may be downloaded free of charge from Council's website at www.moretonbay.qld.gov.au .					
	 The PSP- Operational Works Inspection, Maintenance and Bonding Procedures also contains details of other requirements such as: arrangements for works going On or Off Maintenance; inspection and testing; checklists and certification proforma; bonding procedures. 					
	Should further information be required regarding the road and stormwater component of the Operational Works Application, please contact Council's Officer, Krishna Khadka on phone (07) 54333296.					

ATTACHMENT 3

Approved Plans / Documents

PROPOSED RESIDENTIAL SUBDIVISION 57-65 COACH ROAD MORAYFIELD, QLD, 4506

Sheet Number B21549-C001	Sheet Title			
B21549-C001	Sheet Inte			
	GENERAL LAYOUT, LOCALITY PLAN, & DRAWING INDEX			
B21549-C100	ROADWORKS & DRAINAGE LAYOUT PLAN			
B21549-C101	ROADWORKS & DRAINAGE DETAILS & NOTES			
B21549-C102	ROAD 01 LONGITUDINAL SECTION			
B21549-C103	ROAD 01 CROSS SECTIONS - SHEET 1 OF 2			
B21549-C104	ROAD 01 CROSS SECTIONS - SHEET 2 OF 2			
B21549-C105	ROAD 02 LONGITUDINAL SECTION			
B21549-C106	ROAD 02 CROSS SECTIONS - SHEET 1 OF 3			
B21549-C107	ROAD 02 CROSS SECTIONS - SHEET 2 OF 3			
B21549-C108	ROAD 02 CROSS SECTIONS - SHEET 3 OF 3			
B21549-C109	ROAD 03 LONGITUIDNAL AND CROSS SECTIONS			
B21549-C110	ROAD 04 (CITRONELLA ST) LONGITUDINAL AND CROSS SECTIONS			
B21549-C111	COACH ROAD LONGITUDINAL SECTION			
B21549-C112	COACH ROAD CROSS SECTIONS			
B21549-C113	INTERSECTION DETAILS - SHEET 1 OF 2			
B21549-C114	INTERSECTION DETAILS - SHEET 2 OF 2			
B21549-C115	SIGNS & LINEMARKING LAYOUT PLAN			
B21549-C200	STORMWATER CATCHMENT PLAN			
B21549-C201	BIO-RETENTION BASIN DETAILS			
B21549-C202	STORMWATER DRAINAGE DETAILS & NOTES			
B21549-C203	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 1 OF 4			
B21549-C204	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 2 OF 4			
B21549-C205	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 3 OF 4			
B21549-C206	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 4 OF 4			
B21549-C207	STORMWATER CALCULATION TABLE - SHEET 1 OF 3			
B21549-C208	STORMWATER CALCULATION TABLE - SHEET 2 OF 3			
B21549-C209	STORMWATER CALCULATION TABLE - SHEET 3 OF 3			
B21549-C300	BULK EARTHWORKS LAYOUT PLAN			
B21549-C301	BULK EARTHWORKS TYPICAL SECTIONS			
B21549-C302	BULK EARTHWORKS DETAILS & NOTES			
B21549-C400	EROSION & SEDIMENT CONTROL LAYOUT PLAN			
B21549-C401	EROSION & SEDIMENT CONTROL DETAILS - SHEET 1 OF 2			
B21549-C402	EROSION & SEDIMENT CONTROL DETAILS - SHEET 2 OF 2			
B21549-C500	SEWERAGE RETICULATION DETAILS AND NOTES SHEET			
B21549-C501	SEWERAGE RETICULATION LAYOUT PLAN			
B21549-C502	SEWERAGE RETICULATION LONGITUDINAL SECTION - SHEET 1 OF 3			
B21549-C503	SEWERAGE RETICULATION LONGITUDINAL SECTION - SHEET 2 OF 3			
B21549-C504	SEWERAGE RETICULATION LONGITUDINAL SECTION - SHEET 3 OF 3			
B21549-C505	SEWERAGE RETICULATION CATCHMENT PLAN			
B21549-C600	WATER RETICULATION DETAILS AND NOTES			
B21549-C601	WATER RETICULATION LAYOUT PLAN			
B21549-C602	WATER RETICULATION LIVE WORKS AND DETAILS			
B21549-C603 HYDRANT COVERAGE LAVOUT DLAN				
B21549-C603				

22.08.22

Date

No.

H.W.

Вy

ORIGINAL ISSUE

Amendment

THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL

RL: 16.843

MERIDIAN: IS27881



GENERAL LAYOUT PLAN

NOTES:- ASSOCIATED REFERENCE DOCUMENTATION

CIVIL DRAWINGS MUST BE READ IN CONJUNCTION WITH ELECTRICAL RETICULATION, LANDSCAPE, HYDRAULIC SERVICES AND ALL OTHER DRAWINGS AND DOCUMENTATION PREPARED BY OTHER ASSOCIATED CONSULTANTS. ANY CONFLICTING INFORMATION MUST BE REFERRED TO THE SUPERINTENDENT FOR RESOLUTION PRIOR TO PROCEEDING.

GENERAL NOTES:

1. ALL DIMENSIONS ARE TO BE CHECKED ON-SITE BEFORE WORK COMMENCES.

- 2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWING.
- 3. DURING CONSTRUCTION BARRIERS, LIGHTS & SIGNS SHALL BE MAINTAINED TO ENSURE SAFE PASSAGE OF TRAFFIC AND PEDESTRIANS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY.
- SAFETY REQUIREMENTS.
- SERVICES AND FOR REPAIR OF ANY SERVICES DAMAGED AS A RESULT OF THE WORKS. 6. ALL R.C.P PIPES TO BE CLASS "2" U.N.O. AND ALL UP.V.C. PIPES SHALL BE CLASS "SN8" U.N.O.
- 7. THE CLIENTS SURVEYOR SHALL PEG R.P. BOUNDARIES PRIOR TO CONSTRUCTION.
- 8. FOOTPATHS AND PRIVATE PROPERTY SHALL BE REINSTATED TO THEIR ORIGINAL CONDITION.
- 9. CONTRACTOR TO VERIFY ALL INVERT LEVELS, SURFACE LEVELS, COVER OVER DRAINAGE LINES, AND MINIMUM FALLS ARE CORRECT & OBTAINABLE PRIOR TO COMMENCEMENT OF WORK. 10. THE CONTRACTOR'S ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE WORKPLACE HEALTH AND SAFETY ACT 1989. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THIS ACT AND IN PARTICULAR THE CONTRACTOR IS TO ENSURE THE REQUIREMENTS OF THIS SPECIFICATION WITH REGARD TO "NOTIFICATION IN RELATION TO A NOTIFIABLE PROJECT" ARE FULFILLED.
- 11. SHEDS AND OTHER STRUCTURES INCLUDING SEPTIC TANKS SHALL BE DEMOLISHED AND ALL MATERIAL DISPOSED OF OFF SITE. 12. SHOULD FENCING BE ERECTED ALONG COMMON BOUNDARIES, IT IS NOT TO IMPEDE FAUNA MOVEMENT AND SHALL COMPLY TO THE DESIGN OPTIONS CONTAINED WITHIN COUNCIL'S
- "FAUNA FRIENDLY FENCING" BROCHURE. 13. THE APPLICANT SHALL BE RESPONSIBLE FOR PROTECTING NEARBY PROPERTY OWNERS FROM DUST POLLUTION ARISING FROM THE CONSTRUCTION AND MAINTENANCE OF THE WORKS, REQUIRED BY THIS APPROVAL. THE APPLICANT SHALL ALSO COMPLY WITH ANY LAWFUL INSTRUCTION FROM THE MANAGER OF ASSESSMENT SERVICES IF IN HIS OPINION A DUST
- NUISANCE EXISTS. 14. ALL EXISTING DAMS SHALL BE DEWATERED AND FILLED IN THE PRESENCE OF A GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL BE RESPONSIBLE FOR PROVIDING A CERTIFICATE INDICATING THAT THE EARTHWORKS OPERATIONS HAVE BEEN COMPLETED TO A LEVEL 1 STANDARD. SATISFACTORY TESTING CERTIFICATES CONFIRMING THE LEVEL OF COMPACTION ACHIEVED SHALL SUPPORT SAID CERTIFICATION. THE TERM 'DAM' IS TAKEN TO INCLUDE ANY ASSOCIATED EARTHWORKS AND / OR STRUCTURES ASSISTING IN THE RETENTION OF WATERS.
- 15. IF ANY OF THE ALLOTMENTS WERE TO BE FILLED IN EXCESS OF 300MM AND/OR IF ANY PART OF THE ALLOTMENT WERE TO BE SUSPECTED OF HAVING ANY CONTAMINANTS AND / OR UNCONTROLLED FILLING A REPORT SHALL BE SUBMITTED FROM A QUALIFIED GEOTECHNICAL CONSULTANT THAT ALL UNSUITABLE MATERIAL HAS BEEN REMOVED FROM SITE AND THAT ALL AREAS THAT HAVE BEEN DISTURBED HAVE BEEN COMPACTED TO COUNCIL REQUIREMENTS AND TO AS3798. ALL FILLING IN EXCESS OF 400MM IN FUTURE RESIDENTIAL / COMMERCIAL ALLOTMENTS SHALL BE TO A LEVEL 1 RESPONSIBILITY AS PER AS3798.
- 16. ROAD BASE REPORTING ACTUAL SOLUBLE SULPHATE IN EXCESS OF 250MG/KG SO AND / OR TOTAL SULPHATE AFTER OXIDIZATION BY PEROXIDE OF 2000 MG/KG SO IS REGARDED AS HAVING SUBSTANTIAL POTENTIAL FOR CAUSING DAMAGE TO ASPHALT BY SULPHATE INDUCED BLISTERING. PRIOR TO THE USE OF ROAD BASE MATERIAL, THE DEVELOPER SHALL SUBMIT CERTIFIED EVIDENCE FROM A QUALIFIED GEOTECHNICAL CONSULTANT THAT THE PROPOSED UNBOUND MATERIAL TO BE USED DOES NOT CONTAIN SULPHATE AMOUNTS IN EXCESS OF QUANTITIES THAT MAY INDUCE SULPHATE BLISTERING IN BITUMEN, SAID CERTIFICATION MUST BE CURRENT (IE WITHIN THE LAST SIX (6) MONTHS).
- 17. WHERE EXISTING TREES ARE TO BE RETAINED WITHIN THE PROPOSED DEDICATIONS OF ROAD RESERVE(S) AND LAND FOR TOWN PLANNING (PARK) PURPOSES, ALL DEAD WOOD AND POTENTIALLY DANGEROUS TREE(S) / TREE LIMBS ARE TO BE REMOVED. WHERE CONSTRUCTION WORKS IMPACT ON THE HEALTH OF A TREE TO INITIATE DETERIORATION AND / OR DEATH TO THE WHOLE OR PART OF THE TREE DURING THE PERIOD OF CONSTRUCTION, THE CONTRACTOR IS TO ATTEND TO THE REMOVAL OF THAT TREE OR PART THEREOF TO THE SATISFACTION OF THE PRINCIPAL OFFICER PARKS AND CONSERVATION. THIS WORK IS TO BE CARRIED OUT PRIOR TO SITE CONSTRUCTION WORKS BEING ACCEPTED ON - OFF MAINTENANCE (AS MAY BE APPLICABLE), IN CONSULTATION WITH THE PRINCIPAL OFFICER PARKS AND CONVERSATION AND TO AS4373-1996.

ENGINEERS · M	Γ& REHBEIN ANAGERS • SCIENTISTS	Project: PROPOSED RESIDENTIAL SUBDIVISION 57-65 COACH ROAD MORAYFIELD, QLD, 4506
CBD HOUSE LEVEL 3 120 WICKHAM STREET	TELEPHONE (07) 3250 9000 EACSIMILE (07) 3250 9001	Title: GENERAL LAYOUT, LOCALITY PLAN,

	MORAYFIE	LD, QLD,	4506		
itle:	GENERAL	LAYOUT,	LOCALITY	PLAN,	2
	DRAWING	INDEX			

FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902

TA

Checked

EMAIL mail@lar.net.au CONSULT AUSTRALI

proved subject to	conditions	of Decision	Notice I	DA/202	2/3326

4. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH S.A.A. CODES & BY-LAWS AND ORDINANCES OF THE RELEVANT LOCAL AUTHORITY AND WORKPLACE HEALTH AND 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL RELEVANT AUTHORITIES AND PAYING ALL FEES NECESSARY BEFORE COMMENCING WORK, FOR LOCATING ALL EXISTING

	LAMBERT DEVELOPMENT GROUP Pty Ltd							
Draftsperson: H.W.		Checked: A.A.	Sheet Size	Drawing No.				
с К	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21549-C001				
	Scale: AS SHOWN	Date: AUG 2022	A	В				



	Client: LAMBER	T DEVELOPME	NT (GROL	JP P	ty L	td	
	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
AN	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2'	1549	9-C	100	
	Scale: AS SHOWN	Date: AUG 2022	A	В				

STANDARD MRBC ROOFWATER DRAINAGE NOTES

1. ROOFWATER PITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 6 OF COUNCIL'S PLANNING SCHEME POLICY 9. THE BENCHING OF THE ROOFWATER PITS SHALL BE COMPLETED IN ACCORDANCE WITH IMEAQ STD. DWG. No. D-0110

MAXIMUM DEPTH	DIMENSIONS IN	PLAN (mm)
TO INVERT(mm)	BOX UNITS	PIPE UNITS
UPTO 900mm	600mm x 600mm	600mm DIAMETER
900mm-1200mm	600mm x 900mm	750mm DIAMETER
> 1200mm	NOT APPLICABLE	USE STANDARD ACCESS CHAMBERS

2. STANDARD ACCESS CHAMBERS SHALL HAVE A MINIMUM DEPTH TO INVERT OF 1500mm. IN ALL INSPECTION CHAMBERS / ACCESS CHAMBERS, A MINIMUM PIPE INLET SIZE OF 150mm DIAMETER SHALL BE PROVIDED.

- 3. WHERE ROOFWATER DRAINLINES ARE PROPOSED TO CONNECT TO THE KERB AND CHANNEL, THE CROSSING OF THE VERGE SHALL BE MADE USING GALVANISED STEEL RECTANGULAR SECTIONS (RHS) OF 100mm MAXIMUM HEIGHT OR EQUIVALENT uPVC CLASS 'SEH' PIPES COMPACTED ON COMPACTED SAND BEDDING. WHERE MORE THAN ONE SUCH RHS IS REQUIRED, EACH SHALL BE PLACED NOT LESS THAN 25mm APART AND WELDED TOGETHER, USING A STEEL SPACER BETWEEN THE SECTIONS. THE WHOLE ITEM SHALL BE GALVANISED AFTER FABRICATION.
- 4. WHERE ROOFWATER DRAINLINES ARE DESIGNED TO DISCHARGE TO THE KERB AND CHANNEL INVERT. THE LAST ROOFWATER PIT PRIOR TO THE VERGE MAY BE LOCATED ON AN ALIGNMENT OF BETWEEN 0.5 METRES FROM THE FRONT PROPERTY BOUNDARY. IN THIS INSTANCE THE ROOFWATER DRAINLINE BETWEEN THE PIT AND THE KERB AND CHANNEL SHALL BE LOCATED PARALLEL TO THE SIDE PROPERTY BOUNDARY, UNLESS NOTED OTHERWISE.
- 5. ALL ROOFWATER DRAINLINES SHALL BE CONSTRUCTED USING EITHER:
- upvc sewer pipe minimum class 'sh', or equivalent upvc drainage pipe;
- uPVC DRAINAGE PIPE PLASCOR OR EQUIVALENT, RUBBER RING JOINTED PIPE, OF EQUIVALENT CLASS TO uPVC SEWER CLASS 'SH'; REINFORCED CONCRETE PIPE CLASS '2'; OR
- FRC PIPE CLASS '2'.
- 6. ALL ROOFWATER DRAINLINE SHALL BE PROVIDED WITH MINIMUM COVER OF 500mm, EXCEPTING IN THE INSTANCE WHERE ROOFWATER DRAINLINES CROSS THE VERGE AND DISCHARGE TO THE KERB AND CHANNEL INVERT.
- 7. ROOFWATER DRAINLINES SHALL BE LOCATED ON A 0.5m ALIGNMENT FROM ALL SIDE AND REAR BOUNDARIES, UNLESS SPECIFICALLY NOTED OTHERWISE.
- 8. THE MAXIMUM ROOFWATER DRAINLINE SIZE SHALL BE 225mm, UNLESS SPECIFICALLY NOTED OTHERWISE.
- 9. ROOFWATER CONNECTION POINTS PROVIDED TO EACH ALLOTMENT SHALL BE LOCATED 4.0m UPSTREAM OF THE LOWER PROPERTY BOUNDARY. THE INDIVIDUAL CONNECTION SHALL EXTEND A MINIMUM OF 1.0m INTO THE PROPERTIES THAT THEY ARE MEANT TO SERVICE. IN THE EVENT THAT THE CONNECTION CROSSES A SEWER DRAINLINE. THE CONNECTION SHALL BE EXTENDED A FURTHER 1.0m BEYOND THE CENTRELINE OF THE SEWER DRAINLINE.
- 10. ONE CONNECTION POINT SHALL BE PROVIDE ON THE ROOFWATER LINE FOR EACH PROPERTY . THIS CONNECTION POINT SHALL BE IN THE FORM OF AN OBLIQUE JUNCTION. IN ADDITION, AN INSPECTION OPENING SHALL BE LOCATED EITHER IN THE PROPERTY BRANCH LINE IMMEDIATELY UPSTREAM OF THE OBLIQUE JUNCTION OR THE ROOFWATER DRAINLINE AT THE JUNCTION ON TOP OF THE PIPE OR IN THE SIDE OPPOSITE THE BRANCH LINE. PROPERTY BRANCH LINES SHALL BE CLOSED OFF USING A PUSH ON CAP.
- 11. ROOFWATER CONNECTIONS IN THE FORM OF PROPRIETARY SADDLE JOINTS SHALL NOT BE USED WITHOUT THE EXPRESS WRITTEN PERMISSION OF COUNCIL'S MANAGER DEVELOPMENT SERVICES. WHERE PERMISSION IS GRANTED, IT SHALL PRIMARY BE FOR THE PURPOSE OF PROVIDING ROOFWATER CONNECTION POINTS WITHIN EXISTING ROOFWATER DRAINLINES.
- 12. WHERE ROOFWATER DRAINLINES ARE PROPOSED TO CONNECT DIRECTLY TO THE STORMWATER DRAINAGE SYSTEM, CONNECTIONS SHALL BE MADE TO EITHER:
- A GULLY BOX; OR • TO A STORMWATER MANHOLE
- 13. ROOFWATER DRAINLINE SHALL NOT CONNECT DIRECTLY TO STORMWATER DRAINLINES.
- 14. WHERE ROOFWATER CONNECTIONS ARE FROM DRAINAGE STRUCTURES, THE CONNECTION SHALL BE CONSTRUCTED OF 100mm DIAMETER uPVC CLASS 'SH' (OR EQUIVALENT), LAID AT BETWEEN 1.0% (MIN.) TO 3.0% (MAX.). THE CONNECTION SHALL BE PROVIDED WITH MINIMUM OF 1000mm COVER AND SHALL EXTEND A MINIMUM OF 1000mm INTO THE ALLOTMENT THAT IS PROPOSED TO SERVICE.
- 15. ROOFWATER CONNECTION POINTS SHALL BE PROVIDE TO EACH ALLOTMENT. IN THIS INSTANCES WHERE A ROOFWATER CONNECTION POINT HAS NOT BEEN PROVIDED FROM A ROOFWATER DRAINLINE, PROVISION SHALL BE MADE FOR THE KERB ADAPTORS TO BE PROVIDE WITHIN THE KERB AND CHANNEL. THE KERB ADAPTORS SHALL BE INSTALLED GENERALLY 0.5m FROM THE LOWER PROPERTY BOUNDARY. WHERE AN ALLOTMENT IS PROPOSED TO BE SERVICED BY A ROOFWATER CONNECTION POINT, THE CONTRACTOR SHALL ENSURE THAT THE MID BLOCK LEVEL IS 600mm ABOVE THE LOWEST POINT OF THE KERB AND CHANNEL INVERT, FRONTING THE ALLOTMENT, AND THE ENTIRE ALLOTMENT GRADES TOWARDS THE KERB AND CHANNEL. KERB ADAPTORS SHALL NOT BE LOCATED WITHIN A DISTANCE OF 2.0m UPSTREAM OF A GULLY INLET, SHOULD THIS SITUATION ARISE, A CONNECTION POINT SHALL BE PROVIDED FROM THE GULLY BOX TO SERVICE THE LOT IN QUESTION.

						300mm MIN. C TO INCLUDE E PAINTED EDGE)r Exis Line
	SETOUT POINT (HOR	IZONTAL	.)			SAW-I A.C. F	CUT 'AVE
	SETOUT LEVEL (VER	RTICAL)	SETOU	T POINT-		EXIST. A.C. PAVE	EMEN
<u>GULLY PIT SE</u>	<u>LIP OF KERB</u>					TRIM EDGE OF EX GRAVEL WITH GRA	ISTII ADEI
<u>SETOUT POINTS</u>	LOCATION DETAIL		<u>M.</u> <u>Cl</u>	<u>ANHOL</u> HAMBE	<u>E & ROOFWATER</u> R SETOUT LOCATION		
Associated Consultants:	<u>R.P.D.</u>						Т
.ANDPARTNERS Surveyors & Planners	LOT 8 ON RP87981						
Ph (07)3842 1000							
	LEVEL DATUM						
	PSM 139927	В	04.10.22	H.W.	AMENDED TO COUNCIL RFI 19 SEP 2022		
	RL: 16.843 MERIDIAN: 15278811	А	22.08.22	H.W.	ORIGINAL ISSUE		
HIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRA YSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTE	WING MAY BE REPRODUCED, STORED IN A RETRIEVAL	No.	Date	Ву	Amendment		

PAVEMENT CONSTRUCTION – GRANULAR

- 1. MATERIAL EXCAVATED FROM CUT AREAS SHALL NOT BE USED AS FILLING WITHOUT THE SUPERINTENDENT'S APPROVAL.
- 2. SELECT FILL UNDER PAVEMENT TO BE PLACED & COMPACTED IN 200mm DEEP LOOSE LAYERS TO SPECIFIED COMPACTION.
- 3. ALL COMPACTION TO BE SUBJECTED TO TESTING IN ACCORDANCE WITH THE RELEVANT S.A.A. CODE.
- 4. ALL WORKS ARE TO BE GRADED TO PROVIDE DRAINAGE DURING CONSTRUCTION.
- 5. MIN. DEPTH OF COURSES TO PAVEMENTS ARE DETAILED ON TYPICAL SECTIONS. ACTUAL PAVEMENT DEPTHS ARE TO BE DETERMINED FOLLOWING SOAKED CBR TESTS ON SUBGRADE.
- 6. PAVEMENT GRAVELS ARE TO BE COMPACTED AT OPTIMUM MOISTURE CONTENT TO ACHIEVE 95% MODIFIED COMPACTION.
- 7. SUBGRADE IS TO BE COMPACTED AT OPTIMUM MOISTURE CONTENT TO ACHIEVE 100% STANDARD FOR THE TOP 300mm & 95% STANDARD BELOW THE TOP 300mm.
- 8. THE EXISTING SEAL EDGE SHALL BE CUT BACK TO PROVIDE A SOUND EDGE FOR JOINING THE NEW SURFACE. REFER DETAIL THIS DRAWING.
- 9. THE NEW SEAL SHALL JOIN SMOOTHLY WITH THE EXISTING SURFACE
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL RELEVANT AUTHORITIES BEFORE COMMENCING WORK, FOR LOCATIONS ALL SERVICES & FOR REPAIR OF ANY DAMAGED SERVICES AS A RESULT OF THE WORK.
- 11. ALL WORK SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY REQUIREMENTS.
- 12. ALL TRENCHES IN ROADWAYS ARE TO BE BACKFILLED TO BOX LEVEL USING APPROVED MATERIAL WITH A MINIMUM CBR 15. THIS BACKFILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 300mm LOOSE AND COMPACTED UNTIL THE DRY DENSITY IS NOT LESS THAN 95% OF THE MATERIAL'S DRY DENSITY (MODIFIED COMPACTION). COMPACTION TEST ARE TO BE CARRIED OUT IN EACH LAYER OF BACKFILL. ONE TEST EVERY 50m OR PART THEREOF. ONE IN FIVE TESTS TO BE LOCATED BESIDE A MANHOLE OR GULLY.
- 13. THE CONTRACTOR SHALL INITIALLY EXCAVATE THE PAVEMENT BOX TO MINIMUM DEPTH BELOW THE DESIGN PROFILE. FINAL PAVEMENT DEPTHS SHALL BE DETERMINED AFTER CBR (SOAKED) SUBGRADE TESTING HAS BEEN CARRIED OUT BY AN N.A.T.A. APPROVED TESTING AUTHORITY.
- 14. SIDE DRAINS ARE TO BE CONSTRUCTED UNDER ALL EXTERNAL KERB & CHANNEL IN ACCORDANCE WITH IPWEA STD. DWG. No. RS-080.

Approved subject to conditions of Decision Notice DA/2022/3326

100mm CBR 45 110mm CBR 15 EXISTING SUBGRADE MATERIAL (ASSUMED CBR 5%) INTERNAL ROADWORKS - DESIGN PAVEMENT DETAIL NOMINAL PAVEMENT DESIGN – INTERNAL ROADS (NOMINAL FLEXIBLE GRANULAR A.C. SURFACED PAVEMENT DESIGN):-- 100mm CLASS 2 (CBR 45) SUB-BASE COURSE - DTMR TYPE 2.3 110mm CLASS 3 (CBR 15) LOWER SUB-BASE COURSE - DTMR TYPE 2.5 FLEXIBLE PAVEMENT PROFILE INDICATED ON THESE DRAWINGS IS BASED ON AN ASSUMED SOAKED CBR SUBGRADE VALUE OF 5.0% FOR A "LIVING RESIDENTIAL ACCESS STREET" ROAD INTERPOLATED FROM AUSTROADS "GUIDE TO PAVEMENT TECHNOLOGY PART 2 - "PAVEMENT STRUCTURAL DESIGN". REFER "FIGURE 8.4 - DESIGN CHART FOR PAVEMENTS WITH THIN IT SHOULD BE NOTED THAT THIS IS A NOMINAL PAVEMENT DESIGN ONLY. ACTUAL PAVEMENT COMPOSITION SHALL BE DETERMINED BY THE SUPERINTENDENT FOLLOWING 4 DAY SOAKED C.B.R. TESTING OF SUBGRADE BY AN N.A.T.A. ACCREDITED GEOTECHNICAL CONSULTANT. THE CONTRACTOR SHALL EXCAVATE ROAD BOX TO MINIMUM PAVEMENT DEPTH OF 220mm AND THEN UNDERTAKE 4 DAY SOAKED C.B.R. GEOTECHNICAL TESTING IN ORDER TO DETERMINE FINAL REGARDLESS OF DESIGN BOX DEPTH A MINIMUM COMPACTED ROAD BASE COURSE DEPTH OF 125mm MUST BE PROVIDED UNDER KERB & CHANNEL, AND SHALL BE EXTENDED MINIMUM 150mm 150 110 110 M.B.R.C. Ref. DA/2021/5255 Client:

5mm PRIMER SEAL COAT (REFER SPECS.)

TYPE 'B1' BARRIER KERB & CHANNEL

LAMBER	T DEVELOPME	NT (GROL	JP P	ty L	.td	
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2'	1549	9-0	101	
Scale: AS SHOWN	Date: AUG 2022	A	В				

08/11/2022

	TION OF COACH ROAD	5.857	84 RL.15.74.2cm to 51 pt 45 202	יטסינו.דא וניסו.חד זו 15.902	EXIS	TING	SURF	ACE	.75.826 RL.17.304	NITEDCECTION OF DOAD 22	CH91.891 IP CH.90.826 RL.17.746	CH.105.826 RL.18.076		CH.126.375 RL.18.528		IP CH.141.375 RL.18.858	CH.156.375 RL.18.948	FI	NISHE	D SUF	RFACE			INTERSECTION OF ROAD 03 CH226.306		O CH.242.676 RL 19.466 RL 19.478 RL 19.478 <thr 19.478<="" th=""> <thr 19.478<="" th=""><th>H IP CH.257.676 RL.19.556</th><th></th><th></th><th>CH.284.117 RL.18.499 CH.288.117 RL.18.419 IP CH.287.117 RL.18.379 CH.290.117 RL.18.439</th><th>CH301.738</th></thr></thr>	H IP CH.257.676 RL.19.556			CH.284.117 RL.18.499 CH.288.117 RL.18.419 IP CH.287.117 RL.18.379 CH.290.117 RL.18.439	CH301.738
	INTERSEC	спи.ии €Н.8.31 RL.1	/ SAG CH.17.4	CH.28.31 RI					H)	1			Ē			ı		L			' I									1	
							1																								
		PROP STORMWATER	PROP SEWER - PROP STORMW∆TFR—				PROP STORMWATER		PROP SEWER -	PROP STORMWATER		PROP STORMWATER	PROP SEWER			PROP SEWER	PROP STORMWATER	PROP SEWER			PROP STORMWATER									PROP STORMWATER	PROP STORMWATER
Vertical I.P. Details		-	L2(R366.	972						L R4	30	~		~	L R1	30 875	~									~	L30 R652.1	14		L6 R100	
Grading	-	<u>-2.5</u> '	%				2.95%				~		2.2%		~~~>	<					0.6	%						-4	%	2%	
Horizontal Details					- R3	30 -																	•	R15	->						
LIP OF KERB (LHS)		FFD	ل 15.639	15.840	16.135	05.4.61	16.725	17.020	17,313	17.585	17.832	18.056	18.276	18.493	18.667	18.787	18.858	18.918	18.978	19.038	19.098	19.164	REF INTE DET	ER ER AILS	19.357	19.357	19.228	18.946	18.551	REFER	
LIP OF KERB (RHS)	IN T	TAILS	15.667	15.840	16.135	16.430	16.725	17.040	REF DET	ER IN AILS	ITER	18.099	18.276	18.493	18.667	18.787	18.858	18.918	18.978	19.038	19.098	19.158	19.218	19.278	19.338	19.357	19.228	18.946	18.551	DETAIL	S
EXISTING SURFACE LEVEL	16.064	16.385	16.239	16.45	17.14	17, 337	17.322	17.562	17, 838	18.275	18.369	18.545	18.657	18.769	18.862	19.001	19.175	19.395	19.437	19.489	19.575	19.647	19.714	19.717	19.724	19.71	19.645	19.535	19.408	19.203	18.955 18.903
CONTROL LINE		19	51	52	t 1	12	37	5	3 52	L6	44	8	38	05	79	66	70	30	06	0	10	70	30	06	50	69	40	28	63	36	36
			= -		5 1		ין י <u>ס</u>	1 🖱		1 V	6	2	ണ്ട	6(ω.	.6	0	6	끈	5	2	Ξ.	l ŭ.	9.4	.4	ñ.	0	0	4	
FINISHED LEVEL	16.06	15.8	15.7	15.9	16.	16.	16. 16.	17.1	17	17.0	17.	18.1	18.	<u>18</u> .	18.	18.	18.	19.	19.	19.	19.	19.	19	19	7	<u>+</u>		19	18.	8	18

<u>R.P.D.</u> Associated Consultants: LANDPARTNERS Surveyors & Planners info@landpartners.com.au LOT 8 ON RP87981 Ph (07)3842 1000 LEVEL DATUM PSM 139927 B 04.10.22 H.W. AMENDED TO COUNCIL RFI 19 SEP 2022 RL: 16.843 22.08.22 А H.W. ORIGINAL ISSUE MERIDIAN: IS278811 _ THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD No. Date Ву Amendment

Regional Council

ROAD	01 - HORIZO	NTAL PO	NTS					
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	1520.073	5066.010	16.065	64°17'00.01''			
ТС	32.309	1549.182	5080.029	16.020	64°17'00.01''			
IP 2	39.036	1555.346	5082.998	16.218		R = 30.000	13.454	25°41′44.97″
ст	45.763	1562.188	5083.001	16.417	89°58'44.98''			
	50.000	1566.425	5083.002	16.542	89°58'44.98''			
	100.000	1616.425	5083.021	17.944	89°58'44.98''			
	150.000	1666.425	5083.039	18.899	89°58'44.98''			
	200.000	1716.425	5083.057	19.210	89°58'44.98''			
тс	211.414	1727.839	5083.061	19.279	89°58'44.98''			
IP 3	223.195	1742.839	5083.067	19.349		R = 15.000	23.562	90°00'00.25''
СТ	234.976	1742.845	5068.067	19.420	179°58'45.23''			
	250.000	1742.850	5053.043	19.469	179°58'45.23''			
	300.000	1742.868	5003.043	18.636	179°58'45.23''			
IP 4	301.738	1742.869	5001.305	18.671	179°58′45.23″			

ROAD 01 - LONGITUDINAL SECTION HORIZONTAL SCALE 1:1000 VERTICAL SCALE 1:100

Æ LAMBERT & REHBEIN ENGINEERS • MANAGERS • SCIENTISTS

CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902

TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL mail@lar.net.au CONSULT AUSTRALIA

SCALE 1 : 1000 (HOR)

SCALE 1 : 100 (VER)

Project	PROPOSED RESIDENTIAL SUBDIVISION
	57–65 COACH ROAD
	MORAYFIELD, QLD, 4506
Title:	ROAD 01 LONGITUDINAL SECTION

M.B.R.C. Ref. DA/2021/5255

LAMBER	T DEVELOPME	NT (GROL	JP P	'ty L	.td	
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2 ⁻	1549	9–C	102	
Scale: AS SHOWN	Date: AUG 2022	A	В				

Client:

Associated Consultants:	<u>R.P.D.</u>					
LANDPARTNERS Surveyors & Planners info@landpartners.com.au	LOT 8 ON RP87981					
Ph (07)3842 1000						
	LEVEL DATUM					\mathcal{T}
	PSM 139927	В	04.10.22	н.w.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: 15278811	А	22.08.22	н.w.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF TH SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE	HIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL WRITTEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	Checked
Mor	egional Council	_		-		

CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902 TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL mail@lar.net.au

Project: PROPOSED RESIDENTIAL SUBDIVISION 57-65 COACH ROAD	Client:	T DEVELOPME	NT (GROUF	P Pty	Ltd	
MORAYFIELD, QLD, 4506	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawing N	No.		
Title: ROAD 01 CROSS SECTIONS - SHEET 1 OF 2	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B215	549-	C103	
	Scale: AS SHOWN	Date: AUG 2022	A	В			

M.B.R.C. Ref. DA/2021/5255

08/11/2022

		T DEVELOPME	NT (GROL	JP P	ty L	.td	
	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
OF 2	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2′	1549	9-C	104	
	Scale: AS SHOWN	Date: AUG 2022	A	В				

	INTERSECTION OF ROAD 01 CH0 CH.4.847 RL.17.697	H SAG CH.14.847 RL.17.647	P CH.19.847 RL.17.547	CH.34.847 RL.17.847					CH.90.713 RL.18.964	IP CH.105.713 RL.19.264	CHESI CH.112.935 RL.19.186	/		STING	SURF	ACE		CH190.469		DESIC	in su	OCH.236.763 RL.18.347	┥ SAG CH.243.127 RL.18.325 -\\	CH255.776 IP CH.251.763 RL.18.242	CH.266.763 RL.18.632		CH.287.187 RL.19.163	H IP CH.302.187 RL.19.553	CH.313.2 CH.313.2 CH.317.187 RL.19.478		INTERSECTION OF ROAD 03				CH 378.00	יכו.עו.וא אענ.ואנ.איד.
		PROP STORMWATER		*		PROP SEWER	PROP STORMWATER	PROP SEWER						PROP_STORMWATER									PROP STORMWATER	PROP STORMWATER	PROP STORMWATER			DDDD CEWFD	PROP STORMWATER				PROP SEWER	PRNP STNRMW∆TFR		
Vertical I.P. Details Grading Horizontal Details		L30 R1000	0	-		2%			R11	L30 11.111	~~~					-0	.7%					~	L3 R909.() 91 - R-15	2.	.6%	R9	<u>L30</u> 67.742				5%				0.32% EXISTIN
DATUM R.L.0.000 LIP OF KERB (LHS)		.548	1.650	1.838	3.038	3.238	1.4.30 8.5.8	828 8	00000 6663	.071	9.052	3.982	3.912	3.842	3.772	3./02	REFEI	R	3.438	3.352	3.282	3.218	3.239	3.369	3.604	3.864	9.120	2.299 3.375	.352	.302	1.252	9.202	9.152	9.127		
LIP OF KERB (RHS)	REFER INTER DETAI	17.548 17	17.650 17	17.838 17	18.038 18	18.238	01 05 4.01 8 4.02 8 4.04 8 4.05 8 4.0		18.999 0c0.01	19.071 19	19.052 19	18.982 18	18.912 18	18.84.2 18	18.772 18	18./02	DETA 18.632	1LS 200.01	18.422 18	18.352 18	18.282 18	18.218 18	18.239 18	18.369 18	18.604 18	18.864 18	19.123 19	RE IN DE	FER TER TAILS	19.341	19.252 19	19.202	19.152 19	19.114 19	REF INTE DET	ER ER AILS
EXISTING SURFACE LEVEL	18.324 18.324	18.322	18.55	18.788	18.908	19.022	281.61 77,01	0 76 2	19.275	19.273	19.252	19.232	19.197	19.161	19.092	170.41	19.006 19.005	دەر.01 848 A	18.83	18.747	18.663	18.589	18.512	18.6	18.876	19.136	19.381	19.477	19.426	19.427	19.457	19.466	19.432	19.344	19.162	19.131
CONTROL LINE FINISHED LEVEL	17.745 17.60	17.660	17.762	17.950	18.150	18.350	0cc.81 18 750	UC/.81	111.01	19.183	19.164	19.094	19.024	18.954	18.884	18.814	18.744	10.0/4 18 604	18.534	18.464	18.394	18.330	18.351	18.481	18.716	18.976	19.232	19.411 19.487	19.464	19.414	19.364	19.314	19.264	19.214	19.164	19.130 19.115
CONTROL LINE	00	.000	0.000	0.000	0.000	0.000	0.000	000.00	00.000	10.000	20.000	30.000	40.000	50.000	60.000	/0.000	80.000	000.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	290.000	300.000	320.000	330.000	340.000	350.000	360.000	370.000	380.000	90.000 94.600

Associated Consultants:	<u>R.P.D.</u>					
LANDPARTNERS Surveyors & Planners	LOT 8 ON RP87981					
Ph (07)3842 1000						
	LEVEL DATUM					
	PSM 139927	В	04.10.22	H.W.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: IS278811	А	22.08.22	H.W.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DESIGN OR TRANSMITTED IN ANY FORM WITHOUT THE WRIT	RAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL TEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	
More	on Bay	-				

ROAD	01 – HOF	RIZONTAL	POINTS	T		_		
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	1608.316	5083.018	17.745	180°00'00.00''			
тс	11.458	1608.316	5071.560	17.653	180°00'00.00''			
IP 2	18.190	1608.316	5064.712	17.653		R = -30.000	13.465	25°42′59.87″
СТ	24.923	1611.287	5058.542	17.698	154°17'00.13''			
	50.000	1622.169	5035.949	18.150	154°17'00.13''			
тс	79.067	1634.781	5009.762	18.731	154°17'00.13''			
IP 3	87.484	1638.872	5001.267	18.900		R = -15.000	16.835	64°18'15.16''
СТ	95.901	1648.301	5001.270	19.056	89°58'44.97''			
	100.000	1652.399	5001.272	19.111	89°58'44.97''			
	150.000	1702.399	5001.290	18.954	89°58'44.97''			
	200.000	1752.399	5001.308	18.604	89°58'44.97''			
тс	245.789	1798.189	5001.325	18.329	89°58'44.97''			
	250.000	1802.344	5001.913	18.351	73°53′46.01"			
IP 4	257.570	1813.189	5001.330	18.439		R = -15.000	23.562	89°59'59.91''
СТ	269.351	1813.183	5016.330	18.699	359°58'45.07''			
	300.000	1813.172	5046.979	19.411	359°58'45.07''			
	350.000	1813.154	5096.979	19.314	359°58'45.07''			
IP 5	359.313	1813.151	5106.292	19.267				
IP 6	376.195	1813.632	5123.167	19.183				
IP 7	394.600	1813.593	5141.572	19.115	359°52'39.88''			

Client: LAMBER	GROL	JP P	'ty L	.td			
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2 ⁻	1549	9-C	105	
Scale: AS SHOWN	Date: AUG 2022	A	В				

Moreton Bay

Approved subject to conditions of Decision Notice DA/2022/3326

		Design 18.750						
		M.B.I	R.C.	Ref.	DA	/202	21/5	255
	Client:	T DEVELOPME	NT (GROL	JP P	'ty L	td	
	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
:	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2 ⁻	1549	9-C	106	
	Scale: AS SHOWN	Date: AUG 2022	A	В				
			-					

Datum 14.00 Design 19.164 Datum 14.00 Design 19.111 2.50%

2.99%

5.00% SLOPE VARIES (1 IN 4 MAX)

REDUCED VERGE APPLIES ALONG SOUTHERN BOUNDARY (CH 95.90-CH 245.00)

NOTE:REDUCED VERGE

Datum 14.00 Design 19.024

0

Datum 14.00

Associated Consultants:	<u>R.P.D.</u>					
LANDPARTNERS Surveyors & Planners info@landpartners.com.au	LOT 8 ON RP87981					
Ph (07)3842 1000						
	LEVEL DATUM					C
	PSM 139927	В	04.10.22	H.W.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: IS278811	А	22.08.22	H.W.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRAW SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTEN	VING MAY BE RE <mark>PRODUCED,</mark> STORED IN A RETRIEVAL I PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	Ch
Moreto	al Council					

08/11/2022

	Client: LAMBERT DEVELOPMENT GROUP Pty Ltd										
	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.						
F	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2'	1549	9-0	107				
	Scale: AS SHOWN	Date: AUG 2022	A	В							

Datum 14.00 Design 18.330

M.B.R.C. Ref. DA/2021/5255

Datum 14.00 Design 18.976

OPEN SPACE

08/11/2022

LAMBEI	LAMBERT DEVELOPMENT GROUP Pty Ltd										
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.							
OF 3 Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2 ⁻	1549	9-0	108					
Scale: AS SHOWN	Date: AUG 2022	A	В								

Client:

POINT	٢S				
HING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
261	19.368	58°05'17.74''			
804	19.272	58°05′17.74′′			
070	19.306		R = 15.000	8.349	31°53'27.28''
)71	19.347	89°58′45.01′′			
)79	19.593	89°58′45.01′′			
92	19.585	88°41′55.69″			
81	19.560		R = -50.000	9.542	10°56'04.66''
90	19.527	79°02′40.35″			
861	19.476	79°02'40.35''			
25	19.463		R = 20.000	3.817	10°56'04.66''
26	19.449	89°58'45.01''			
'31		89°58'45.01''			

M.B.R.C. Ref. DA/2021/5255

LAMBERT DEVELOPMENT GROUP Pty Ltd									
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.					
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21549-C109						
Scale: AS SHOWN	Date: AUG 2022	A	В						

Client:

ROAD 0	94 – HOI	RIZONTA	L SETO	UT POIN	TS
РТ	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	1813.168	5060.179	19.490	90°00'00.00 ''
IP 2	16.323	1829.490	5060.179	19.245	
IP 3	40.836	1854.003	5060.188	18.785	
	50.000	1863.168	5060.160	18.592	90°10′38.97 "
IP 4	53.232	1866.399	5060.150	18.524	90°10'38.97 "

Associated Consultants:	<u>R.P.D.</u>					
LANDPARTNERS Surveyors & Planners	LOT 8 ON RP87981					
Ph (07)3842 1000						
	LEVEL DATUM					50
	PSM 139927	В	04.10.22	н.พ.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: IS278811	А	22.08.22	H.W.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRAW SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTEN	ING MAY BE RE <mark>PRODUCED</mark> , STORED IN A RETRIEVAL PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	Checked
Moreto	n Bau					

Regional Council

Approved subject to conditions of Decision Notice DA/2022/3326

A.C.N. 010 451 902

CONSULT AUSTRALL

08/11/2022

Scale:

AS SHOWN

AUG 2022

Date:

JOIN NEATLY TO EXISTING K&C H

TRANSITION K&C

Vertical I.P. Details

Grading

Horizontal Details

DATUM R.L.0.000

LIP OF KERB (LHS) SAW CUT LEVEL (LHS) EXISTING SURFACE LEVEL CONTROL LINE FINISHED LEVEL CONTROL LINE CHAINAGE

Associated Consultants:	<u>R.P.D.</u>					Т
LANDPARTNERS Surveyors & Planners info@landpartners.com.au	LOT 8 ON RP87981					
Ph (07)3842 1000						
	LEVEL DATUM					
	PSM 139927	В	04.10.22	H.W.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: IS278811	А	22.08.22	н.w.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THE SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE W	S DRAWING MAY BE RE <mark>PRODUCED, STORED IN</mark> A RE TRIEVAL RITTEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	
More	gional Council					

COACH ROAD (EXIST CROWN) - LONGITUDINAL SECTION HORIZONTAL SCALE 1:1000 VERTICAL SCALE 1:100

0 10 20 30m

LAMBERT & REHBEIN ENGINEERS • MANAGERS • SCIENTISTS

CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902 TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL mail@lar.net.au

Project:	PROPOS 57-65 MORAY	SED RE COACH FIELD,	ESIDENTIAL ROAD QLD, 4506	SUBDIVISION
Title:	COACH	ROAD	LONGITUDI	NAL SECTION

08/11/2022

	LAMBERT DEVELOPMENT GROUP Pty Ltd									
Drafts H.W.	.W. Checked: A.A.		Sheet Size	Drawin	g No.					
Designe H.W.	er: the	Approved: A.PEZZUTTI RPEQ No: 6382		A1	B2′	1549	9–C	111		
Scale: AS S	HOWN	Date: A	UG 2022	A	В					

Client:

Moreton Bay

Approved subject to conditions of Decision Notice DA/2022/3326

LAMBERT DEVELOPMENT GROUP Pfy Lfd									
Draftsperson: H.W. A.A. Size Drawing No.									
Designer: H.W. Approved: A.PEZZUTTI RPEQ No: 6382 A1 B21549-C112									
Scale: AS SHOWN Date: AUG 2022 A B									

PT No.	EASTING	NORTHING	LEVEL
1	1517.869	5082.499	15.336
2	1521.911	5077.748	15.518
3	1527.792	5075.667	15.602
4	1533.923	5076.820	15.631
5	1537.158	5070.098	15.668
6	1532.435	5066.024	15.948
7	1530.394	5060.129	16.289
8	1531.589	5054.007	16.560
9	1604.676	5069.088	17.536
10	1602.951	5074.242	17.515
11	1598,969	5077.941	17.440
12	1593.702	5079.282	17.309
13	1622.201	5079.293	18.038
14	1616.804	5077.709	17.863
15	1613.116	5073.464	17.624
16	1612.302	5067.899	17.538
17	1736.896	5084.459	19.268
18	1740.058	5083.354	19.262
19	1743.407	5083.356	19.215
20	1746.567	5084.462	19.191
21	1751.394	5078.515	19.199
22	1748.560	5076.568	19.219
23	1746.805	5073.611	19.305
24	1746.453	5070.191	19.354
25	1729.138	5005.030	18.655
26	1734.137	5006.371	18.558
27	1737.796	5010.033	18.375
28	1739.134	5015.033	18.307
29	1746.594	5015.036	18.307
30	1747.936	5010.037	18.390
31	1751.597	5006.378	18.491
32	1756.598	5005.040	18.500
33	1816.893	5073.906	19.373
34	1818.234	5068.907	19.357
35	1821.894	5065.248	19.267
36	1826.893	5063.909	19.172
37	1826.903	5056.449	19.180
38	1821.901	5055.109	19.268
39	1818.241	5051.447	19.359
40	1816.903	5046.446	19.348
41	1814.829	5007.737	18.411
42	1814.331	5003.350	18.206
43	1815.670	4999.127	18.158
44	1816.800	4994.831	18.270
45	1808.680	4994.829	18.289
46	1807.392	4996.891	18.362
17	1005 205	1.009 101	19 244

<u>LEGEND – LIN</u>	EWORK (proposed)
	PROPOSED A.C. SURFACED PAVEMENT
	CONCRETE DRIVEWAY PAVEMENT
<u></u>	TYPE 'M3' K&C (REFER IPWEA STD DRG RS-080)
	PROPOSED ROAD CONTROL CENTRE LINE
FFL 16.30	PROPOSED FINISHED PAD LEVEL
M1	2 x KERB ADAPTOR (REFER IPWEA STD DRG RS-081) (EXTEND 2x100ØPVC (SN8) ACCROSS CONCRETE FOOTPATH)
<u>2</u> <u>(1)</u>	PROPOSED STORMWATER MANHOLE (REFER STORMWATER LONGITUDINAL SECTIONS)
2 F1	PROPOSED STORMWATER GULLY PIT (REFER STORMWATER LONGITUDINAL SECTIONS)
SWD -	PROPOSED STORMWATER FIELD INLET PIT (REFER STORMWATER LONGITUDINAL SECTIONS)
RWD	PROPOSED ROOFWATER MAIN
SEW	PROPOSED SEWER MAIN
WAT	PROPOSED WATER MAIN
W/C	PROPOSED WATER SERVICE CONDUIT ROAD CROSSING
	PROPOSED CONCRETE SLEEPER RETAINING WALL. (REFER GENERAL ARRANGEMENT DETAIL ON DWG. B21549-C3
<u> </u>	PROPOSED EARTHWORKS BATTER SLOPE (Max. 1 in 4 SLOPE u.n.o.)
+	PROPOSED DRIVEWAY LOCATIONS
	PROPOSED BIO-RETENTION BASIN FILTER MEDIA
	PROPOSED MAINTENANCE ACCESS RAMP
	PROPOSED CONCRETE FOOTPATH
<u>Legend – Lin</u>	<u>IEWORK (existing)</u>
20.0	EXIST. SURFACE MAJOR CONTOUR
	EXIST. SURFACE MINOR CONTOUR
<u></u>	EXISTING KERB AND CHANNEL
	EXISTING EDGE OF BITUMEN
SW	EXISTING STORMWATER
S	EXISTING SEWER MH & PIPE
OHP	EXISTING OVERHEAD POWER LINE
——————————————————————————————————————	EXISTING COMMUNICATION
W	EXISTING PORTABLE WATER MAIN

EXISTING SERVICES

EXISTING RECYCLE WATER MAIN

—— WR — (D) ———

Client:

NOTWITHSTANDING THAT EXISTING SERVICES MAY OR MAY NOT BE SHOWN ON THESE DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE ENGINEER OR THE PRINCIPAL FOR THIS INFORMATION WHICH HAS BEEN SUPPLIED BY OTHERS. THE DETAILS ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.

	LAMBERT DEVELOPMENT GROUP Pty Ltd								
	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.				
2	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21549-C113					
	^{Scale:} AS SHOWN	Date: AUG 2022	A	В					

THOUT TH	E WRIT	TEN PER	MISSION	OF
Мо	ret	on	B	ງເ

KERB LIP SETUUT TABLE							
PT No.	EASTING	NORTHING	LEVEL				
1	1517.869	5082.499	15.336				
2	1521.911	5077.748	15.518				
3	1527.792	5075.667	15.602				
4	1533.923	5076.820	15.631				
5	1537.158	5070.098	15.668				
6	1532.435	5066.024	15.948				
7	1530.394	5060.129	16.289				
8	1531.589	5054.007	16.560				
9	1604.676	5069.088	17.536				
10	1602.951	5074.242	17.515				
11	1598.969	5077.941	17.440				
12	1593.702	5079.282	17.309				
13	1622.201	5079.293	18.038				
14	1616.804	5077.709	17.863				
15	1613.116	5073.464	17.624				
16	1612.302	5067.899	17.538				
17	1736.896	5084.459	19.268				
18	1740.058	5083.354	19.262				
19	1743.407	5083.356	19.215				
20	1746.567	5084.462	19.191				
21	1751.394	5078.515	19.199				
22	1748.560	5076.568	19.219				
23	1746.805	5073.611	19.305				
24	1746.453	5070.191	19.354				
25	1729.138	5005.030	18.655				
26	1734.137	5006.371	18.558				
27	1737.796	5010.033	18.375				
28	1739.134	5015.033	18.307				
29	1746.594	5015.036	18.307				
30	1747.936	5010.037	18.390				
31	1751.597	5006.378	18.491				
32	1756.598	5005.040	18.500				
33	1816.893	5073.906	19.373				
34	1818.234	5068.907	19.357				
35	1821.894	5065.248	19.267				
36	1826.893	5063.909	19.172				
37	1826.903	5056.449	19.180				
38	1821.901	5055.109	19.268				
39	1818.241	5051.447	19.359				
40	1816.903	5046.446	19.348				
41	1814.829	5007.737	18.411				
42	1814.331	5003.350	18.206				
43	1815.670	4999.127	18.158				
44	1816.800	4994.831	18.270				
45	1808.680	4994.829	18.289				
46	1807.392	4996.891	18.362				
47	1805.285	4998.104	18.266				
48	1802.855	4998.187	18.235				

<u>LEGEND – LIN</u>	EWORK (proposed)
	PROPOSED A.C. SURFACED PAVEMENT
	CONCRETE DRIVEWAY PAVEMENT
	TYPE 'M3' K&C (REFER IPWEA STD DRG RS-080)
	PROPOSED ROAD CONTROL CENTRE LINE
FFL 16.30	PROPOSED FINISHED PAD LEVEL
(M1)	2 x KERB ADAPTOR (REFER IPWEA STD DRG RS-081) (EXTEND 2×100ØPVC (SN8) ACCROSS CONCRETE FOOTPATH)
	PROPOSED STORMWATER MANHOLE (REFER STORMWATER LONGITUDINAL SECTIONS)
2 (F1)	PROPOSED STORMWATER GULLY PIT (REFER STORMWATER LONGITUDINAL SECTIONS)
SWD -	PROPOSED STORMWATER FIELD INLET PIT (REFER STORMWATER LONGITUDINAL SECTIONS)
RWD	PROPOSED ROOFWATER MAIN
SEW	PROPOSED SEWER MAIN
WAT	PROPOSED WATER MAIN
W/C	PROPOSED WATER SERVICE CONDUIT ROAD CROSSING
	PROPOSED CONCRETE SLEEPER RETAINING WALL. (REFER GENERAL ARRANGEMENT DETAIL ON DWG. B21549-C3
<u> </u>	PROPOSED EARTHWORKS BATTER SLOPE (Max. 1 in 4 SLOPE u.n.o.)
-	PROPOSED DRIVEWAY LOCATIONS
	PROPOSED BIO-RETENTION BASIN FILTER MEDIA
	PROPOSED MAINTENANCE ACCESS RAMP
	PROPOSED CONCRETE FOOTPATH
	IFWNRK (existing)
20.0	EXIST. SURFACE MAJOR CONTOUR
	EXIST. SURFACE MINOR CONTOUR
<u></u>	EXISTING KERB AND CHANNEL
	EXISTING EDGE OF BITUMEN
SW	EXISTING STORMWATER
S	EXISTING SEWER MH & PIPE
OHD	EXISTING OVERHEAD POWER LINE
	EXISTING COMMUNICATION

	LAMBERT DEVELOPMENT GROUP Pty Ltd								
	Draftsperson: Checked: H.W. A.A.			Drawin	g No.				
2	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2 [·]	1549	9–C	114		
	Scale: AS SHOWN	Date: AUG 2022	A	В					

6 20508	7 SP220508	 (SP2!	EP 57627	9 SP220508	10 5P220508	11 SP220508	 12 SP2205	08	13 SP220508	14 SP220508	

08/11/2022

	<u>(proposed)</u>				
PROPOSE	D A.C. SURFACED PAN				
CONCRET	E FOOTPATH DRIVEWA				
ΤΥΡΕ 'Μ	3' K&C (REFER IPWEA				
PROPOSE (REFER S PROPOSE STORMW	D STORMWATER GULL STORMWATER LONGITUE D STORMWATER MANH ATER LONGITUDINAL SI				
PROPOSE	D SEWER MAIN				
PROPOSE	D WATER MAIN				
PROPOSE	D WATER SERVICE CO	NDUIT ROA	D CROSSING		
PROPOSE GENERAL	D CONCRETE SLEEPER ARRANGEMENT DETAI	RETAINING L ON DWG	WALL. (REF C21549-C302	ER 2.)	
PROPOSE (Max. 1 i	D EARTHWORKS BATT n 4 SLOPE u.n.o.)	ER SLOPE			
PROPOSE FILTER M	D BIO-RETENTION BAS	IN			
			M.B.F	R.C.	Ref. DA/2021/5255
	Client:				
			ELUPITE		JROUP PIY LIU
	Draftsperson: H.W.	Checked: A.A.		Sheet Size	Drawing No.
	Designer: H.W.	Approved: RPEQ No:	A.PEZZUTTI 6382	A1	B21549-C201

STORMWATER DRAINAGE NOTES

 ALL DRAINAGE MATERIALS, EXCAVATION AND CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE LOCAL AUTHORITY SPECIFICATIONS AND DETAILS AND THE FOLLOWING PUBLICATIONS (AS APPLIES TO THE TYPE OF PIPELINE): "QUEENSLAND URBAN DRAINAGE MANUAL (QUDM)"

- CONCRETE PIPE ASSOCIATION OF AUSTRALIA TECHNICAL ADVISORY PUBLICATIONS
- AS 3725 "DESIGN FOR THE INSTALLATION OF BURIED CONCRETE PIPES"
 AS 4058 "PRE-CAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE)
- AS 4050 FREECAST CONCRETE FIFES (FREESONE AND FITTINGS"
 AS 4139 "FIBRE REINFORCED CONCRETE PIPES AND FITTINGS"
- AS 2566 "BURIED FLEXIBLE PIPELINES"
- AS 3500 "NATIONAL PLUMBING CODE"
 AS 1254 "DVC DIDES AND ELTINGS FO
- AS 1254 "PVC PIPES AND FITTINGS FOR STORM & SURFACE WATER APPLICATIONS"
 AS 1273 "UNPLASTICIZED PVC (uPVC) DOWNPIPE AND FITTINGS FOR RAINWATER
- 2. WHERE THE DEPTH OF FILL OVER THE PIPE IS BETWEEN Min. 600mm AND Max. 1.5m
- ALL uPVC PIPES SHALL BE CLASS "SN8" FOR 150Ø 225Ø AND "SN6" FOR 100Ø
 ALL CONCRETE PIPES SHALL BE MINIMUM CLASS "2"

SHOULD THE DEPTH OF COVER OVER THE PIPE BE OUTSIDE THE ABOVE MAXIMUM AND MINIMUM LIMITS, OR ANY LOADING OTHER THAN NORMAL EARTH LOADS BE APPLICABLE (INCLUDING CONSTRUCTION TRAFFIC LOADS) THE DESIGN ENGINEER MUST BE CONTACTED FOR SPECIFIC DESIGN OF PIPE CLASS.

- 3. UNLESS DETAILED OTHERWISE PIPE CLASSES SPECIFIED ON PROJECT DRAWINGS ARE BASED ON SINGLE PIPE BARREL ONLY - WHERE MULTIPLE PIPE BARRELS ARE PROPOSED THE PIPE CLASS MUST BE REFERRED TO THE DESIGN ENGINEER FOR CONFIRMATION.
- 4. UNLESS SPECIFIED OTHERWISE DESIGN LOADING ON ALL PIPELINES REQUIRE "TRENCH" TYPE BEDDING AND BACKFILL INSTALLATION IN ACCORDANCE WITH AS 3725. "EMBANKMENT" TYPE INSTALLATION WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL. STABILITY OF TRENCH BASE AND SIDES MUST BE ADEQUATE TO PROVIDE REQUIRED SUPPORT TO THE BEDDING, HAUNCH AND SIDES OF THE TRENCH – IF ANY DOUBT EXISTS THE CONTRACTOR MUST OBTAIN GEOTECHNICAL CONSULTANT CONFIRMATION.
- 5. THE WIDTH OF TRENCH OUTSIDE THE PIPE SHALL BE IN ACCORDANCE WITH AS 3725 (NOMINAL 300mm Max.). ANY FURTHER WIDENING OF THE TRENCH WILL INCREASE LOAD ONTO PIPE, AND WILL REQUIRE REVIEW OF PIPE CLASS AND INSTALLATION SPECIFICATIONS. ANY ADDITIONAL ASSOCIATED PIPE OR SUPPORT COSTS WILL BE AT CONTRACTOR'S EXPENSE.
- 6. UNLESS SPECIFIED OTHERWISE PIPE BEDDING AND SUPPORT SHALL BE INSTALLED IN ACCORDANCE WITH AS 3725 AND SHALL BE GENERALLY AS FOLLOWS:"HS2" UNDER ROADWAYS
- "H2" UNDER NON-TRAFFIC / NON-LOADED AREAS

ANY CIRCUMSTANCES OUTSIDE THESE MUST BE REFERRED TO THE DESIGN ENGINEER FOR PIPE SUPPORT SPECIFICATIONS.

- 7. THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION TRAFFIC LOADING ONTO PIPELINES IS LIMITED TO MAXIMUM VEHICLE LOADINGS AND ACHIEVES BACKFILL COVER IN ACCORDANCE WITH AS 3725 (OR ALTERNATIVELY PROVIDE ADEQUATE TEMPORARY AND PERMANENT BRIDGING). REFER C.P.A.A. PIPE CLASS SELECTION CRITERIA / SOFTWARE FOR ACCEPTABLE LOADING APPLICATIONS.
- 8. ANY DRAINLINE BEING INSTALLED WITH ANY PORTION OF THE DRAINLINE BELOW THE MAXIMUM TIDAL LEVEL SHALL HAVE SALTWATER EXPOSURE COVER CLASS PIPES OR CULVERTS INSTALLED. FOR ANY DEVELOPMENT WITHIN 1 KILOMETRE OF THE COASTLINE, OR WITH PIPEWORK THE HIGHEST ASTRONAMICAL TIDE (H.A.T.) THE CONTRACTOR MUST VERIFY THIS REQUIREMENT WITH THE SUPERVISING ENGINEER.
- 9. WHERE DRAINLINES ARE TO BE INSTALLED IN "AGGRESSIVE" PERMEABLE SOILS AS DEFINED IN AS 3600, OR ACID SULPHATE SOILS (pH <4.0) THEY MUST BE REFERRED TO THE SUPERVISING ENGINEER FOR REVIEW OF PIPE / EXPOSURE COVER CLASS. THE CONTRACTOR SHALL VERIFY SOIL CONDITION (BY TESTING) AND UNDERTAKE SOIL REMEDIATION TREATMENT (WHERE REQUIRED) PRIOR TO DRAINLINE CONSTRUCTION.
- 10. MINIMUM AND MAXIMUM PIPE GRADES SHALL BE IN ACCORDANCE WITH Q.U.D.M. SPECIFICATIONS. (N.B. $150 \emptyset = 1\%$ Min. AND $375 \emptyset = 0.4\%$ Min.)
- 11. ANY PIPE DOWNSTREAM OF INLETS CAPTURING ALLOTMENTS GROUND RUNOFF SHALL BE Min. 150Ø.
- 12. WHERE PIPES AND STRUCTURES ARE TO BE LAID WITHIN THE ZONE OF INFLUENCE OF STRUCTURAL ELEMENTS (e.g. BUILDING FOOTINGS, RETAINING WALLS . . . etc.) THE BUILDER SHALL PROVIDE ADEQUATE BRIDGING / PROTECTION TO ENSURE NO UNDUE LOADING ONTO STORMWATER PIPES AND STRUCTURES. WHERE ANY DOUBT MAY EXIST REFERENCE SHALL BE MADE TO THE DESIGNER OF THE STRUCTURE AND THE STORMWATER DESIGN ENGINEER.
- 13. CONTRACTOR MUST VERIFY THAT ALL PIPE LEVELS AND GRADES CAN BE ACHIEVED PRIOR TO CONSTRUCTING DRAINLINES. ANY CONFLICT SHALL BE REFERRED TO THE SUPERINTENDENT FOR RE-DESIGN PRIOR TO ANY PIPELINE CONSTRUCTION.
- 14. BENCHING OF PIT STRUCTURES SHALL HAVE A SMOOTH FINISHED SURFACE, AND PIPES SHALL NOT PROJECT INSIDE THE SHAFT OF THE PIT.
- 15. WHERE RECTANGULAR PITS OR STRUCTURES ARE CONSTRUCTED, PIPES MUST NOT CONNECT INTO THE STRUCTURE AT CORNERS.
- 16. ALL CONSTRUCTION AND EXCAVATIONS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT WORKPLACE HEALTH AND SAFETY ACT INCLUDING AMENDMENTS SUBSEQUENT TO THE ORIGINAL PUBLICATION.
- 17. BASE AND SHAFT OF ALL STORMWATER STRUCTURES SHALL BE "CAST IN-SITU" CONCRETE UNLESS OTHERWISE APPROVED IN WRITING BY THE SUPERVISING ENGINEER.
- 18. ALL GRATED INLETS SHALL BE MINIMUM "CLASS D" TRAFFICABLE, AND SHALL BE BOLTED DOWN UNLESS OTHERWISE APPROVED BY THE SUPERVISING ENGINEER.
- 19. WHERE A BRANCH CONNECTION IS INDICATED DIRECTLY ONTO THE RECEIVING PIPELINE (I.E. WITHOUT JUNCTION PIT) - A PROPRIETORY OBLIQUE BRANCH FITTING SHALL BE INSTALLED ONTO RECEIVING PIPELINE SIZE UP TO 300MM, OR APPROVED SADDLE BRANCH INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS FOR PIPES FOR RECEIVING PIPELINE SIZE 375MM OR GREATER. THE MAXIMUM SIZE OF THE CONNECTING BRANCH LINE (WITHOUT JUNCTION PIT) SHALL BE 150MM U.N.O.
- 20. ALL PIPED OUTLETS AND INLETS MUST BE PROVIDED WITH CEMENT GROUTED STONE PITCHING SCOUR PROTECTION IN ACCORDANCE WITH IPWEA STANDARD DRAWING NUMBER D-0081. ALL VOIDS BETWEEN STONES MUST BE CEMENT GROUTED - NO SHALL NOT BE LOOSE STACKED. ALL STONE PITCHING SHALL BE PLACED OVER GEOFABRIC - BIDIM A24 OR EQUIVALENT.

Client: LAMBER	T DEVELOPME	NT (GROUP Pty Ltd
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawing No.
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21549-C202
Scale: AS SHOWN	Date: AUG 2022	A	B C

STRUCTURE NAME	G1/1		G2/1		M3/1		M4. /1				M5/1			M6/1		M7 / 1
STRUCTURE DESCRIPTION	ON-GRADE LIP IN LINE GULLY	2.4m LINTEL; MOUNTABLE K&C	ON-GRADE LIP IN LINE GULLY	2.4m LINTEL; MOUNTABLE K&C	ACCESS CHAMBER	1050mm DIA	ALCECC CHAMBED				ACCESS CHAMBER	1200mm DIA		ACCESS CHAMBER	1200mm DIA	
	ľ,		PROP. SIEWICH				PROP. SEMHERED)		EXISTIN	G SURFACE	IISHED S				PROBUGEWER	PROFFSOSSEMER
0 10 20 30m 0 1 2 3m SCALE 1 : 1000 (HOR) SCALE 1 : 100 (VE	R)												10	YEA	R A	RI HYDRAULIC
PIPE SIZE (mm) ØRCP		<	375		525	<	600		<u>.</u>	675	>	<	675	~	<	675
PIPE CLASS PIPE GRADE (%)		×	2 0.50%		2 0.50%	< (2 0.50%			2 0.48%	~~~>	<	2 <u>0.50%</u>	Λ	٧	2 0.50%
PIPE SLOPE (1 in X) <u>FULL PIPE VELOCITY (m/s)</u> PART FULL VELOCITY (m/s) <u>DATUM RL</u>		3.	0.59 1.13	<	0.60 1.35	<	0.52 1.39	><		0.90 1.67	>	<	<u> </u>	~	<	<u> </u>
H.G.L IN PIPE & W.S.E IN STRUCTURE	18.509	18.420	18.409 18.417	18.370	18.333 18.341	18.305	18.293 215-31		18.208		18.111 18.125	17.994		17.902 17.927	17.715	17.544
PIPE FLOW (Cumecs)			0.065		0.129		0.148			0.321			0.442			0.571
PIPE CAPACITY AT GRADE (Cumecs)			0.124		0.304		0.434			0.583			0.595			0.595
DEPTH TO INVERT		1.185	1.227	1.267	2.104	2.144	1.11 C	700 0	<i>2.2</i> 04		2.457	2.697		2.732	2.752	, 11E
INVERT LEVEL OF DRAIN		17.590	17.548	17.508	17.306	17.266	871 [1	17 100	1/.108		16.788	16.548		16.384	16.364	017
DESIGN SURFACE LEVEL	18.775		18.775		19.410		C15 01	71 (.71			19.245			19.115		00 00 00 00 00 00 00 00 00 00 00 00 00
SETOUT COORDINATES	E 1851.329	N 5056.457	E 1851.302	N 5063.917	E 1810.936	N 5064.394	E 1810 070	L 1010.727	470.48UC N		E 1744.530	N 5081.691		E 1711.783	N 5085.285	- 1471, 4EQ
CHAINAGE	0.000		227-8 8.437		£08.84 40.366		19.630 g	rr+.00		66.440	134.873		32.944	167.817		37.124
		<u> </u>										<u> </u>				INE 1
Associated Consultants: LANDPARTNERS Surveyors & Planners nfo@landpartners.com.au		R.P LOT	2.D. 8 ON RP87	981												
Ph (07)3842 1000		LE PSM RL: MERI	/EL DAT 139927 16.843 DIAN: IS278	'UM 811		B	04.10.	22	H.W. H.W.	AMENDED TO C ORIGINAL ISSUE	OUNCIL RF	19 5	SEP 2022			
HIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRAWING YSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTEN PER	MAY B	E REPI	RODUCED, STOR	ED IN REHE	A RETRIEVAL	No	. Date	<u>}</u>	By	Amendment						

08/11/2022

		M5/2			M6/2						M7/2			M8/2					
	0mm DIA	HAMBER	0mm DIA		HAMBER	mm DIA					HAMBER	0mm DIA		HAMBER	mm DIA				
	105(ACCESS C	105(ACCESS C	1200r					ACCESS C	105(ACCESS C	1200r				
]					
													ſ						
	EXISTING	SUR	RFA	FINISHE	D \$	URF	ACE				1500X)								
											- //- D								
						-						•							
								10 Y	ΈAR A	ri hy	DRAU	ь ILIC	GRA	DE LI	NE				
	<u>- 675</u> 2		V	<u>675</u> 2	>	<			575 2		~~~~	<	<u>675</u> 2						
Ν	<u> </u>		<	0.50% 200.00	>	<		<u>0.</u> 2 25	40% 0.00		~>	<	<u>0.509</u> 200.0	<u>%</u> >					
	<u> </u>	~	٧	0.95 1.71	>	<		<u>1</u> 1	<u>.18</u> .65		>	<	<u>1.16</u> 1.80						
· · · · ·	17.696	17.645	17.576	17.515	17.529	17.414					17.260 17.281	17.128		17.096 17.108					
	0.272			0.339				0.	423				0.41	4					
	0.595			0.595				0.	532				0.59	5					
1.1.	1.613	2.258	2.278		2.742	2.762					2.961	3.001		2.755					
	16.644	16.359	16.339		16.152	16.132					15.890	15.850		15.783					
		18.616			18.895						18.850			18.539					
	5003.554	1738.662	5003.592		1701.398	5003.509					1640.669	5004.931		1634.060	5016.394				
	∠ 57.128	89.321 E	Z	37.265	26.585 E	z		60	.745		97.331 E	Z	13.23	0.563 E	Z				
		L	 N[E 2	1,			_	M	.B.R	<u>ج</u> ۲.۲.	R	lef.		/20	02	21/5	525	55
		Cliei	nt:	LAM	1BI	ER	ΤD	EVF	ELOP	MEN	١T	G	ROL	JP F	⊃†v	l	.td		
		Dra H V	ftsp N	erson:			Checke	ed:	- *		Sheet Size)rawin	g No.	<u> </u>				
	L	Desi	igner	the			Approv RPEQ	ved: No:	A.PEZZU 6382	JTTI	A1		32′	154	9-1		203	}	
		Scal	le: Sł	HOWN			Date:	AL	JG 202	22	X	┦	В						

Moreton Bay Regional Council

Approved subject to conditions of Decision Notice DA/2022/3326

08/11/2022

Moreton Bay

Regional Council

Approved subject to conditions of Decision Notice DA/2022/3326

08/11/2022

	 <u>11/21</u>			3/22	
	1" IN	020		ILLY M.	AIO
	- "ТҮРЕ	-SO DW		n line gu	1500mm
	LD INLET	IPWEA D		ade lip in	
	<pre><900 FIEI</pre>			ON-GR/	
	6 00				
	_	′] /		/	
		/			
					
		<	750 2		
		<	0.50% 200.00))	
<u>/s)</u> n/s)		<	2.26 2.26	~>	
	13.353	12.830	0	12.534 12.534	12.534
			1.000		
			0.788		
		3.292		2.171	2.171
		.068		.918	.918
	360	12		11	
	15.3			14.0	
	1529.600	5105.816		1500.856	5114.365
	 0.000 E	z	20.000	.989 E	Z
	NE	21	29.989 (DE	, <u>5</u> Ten	ITION) MEDC DAT DA 12021 (FOFF
	Client	:		D- -	
	Draft	sper	LAM	BEB	KI UEVELUPMENI GROUP Pty Ltd Checked: Sheet Drawing No.
L	H.W Design	ner:	Kas UN.		A.A. Approved: A.PEZZUTTI RPEG No: 6382 Size A1 B21549-C206
	H.W Scale AS	SHC	<u>гис</u>)WN		Date: AUG 2022 A B C

 		LOCA	ATION			SUB	-CATCHMENT F	RUNOFF					INLET DESIGN								DRAIN	DESIGN											PART	FULL		DES	IGN LEVELS			
					Tc I	C10	С	A	CxA	Q				Qg	Qb	dV tc	1	+CA	Qt	Qs Qa	a (Qp L	S	(SS)	V	Qcap		V2/2g	Ku hu	Kw	hw Sf	hi US X	nf D	Vp						
DESIGN ARI	STRUCTURE No	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	 SLOPE OF CATCHMENT SLOPE OF CATCHMENT 	TIME OF CONC. RAINFALL INTENSITY	10yr RUNOFF CO-EFFICIENT	COEFFICIENT OF RUNOFF	 SUB-CATCHMENT AREA 	- EQUIVALENT AREA	 SUB-CATCHMENT DISCHARGE 	E FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET MINOR FLOW WIDTH	INLET TYPE	FLOW INTO INLET	BYPASS FLOW	 FLOW DEPTH × VELOCITY CRITICAL TIME OF COMP 	RAINFALL INTENSITY	- TOTAL (C × A)	MAJOR TOTAL FLOW	MAJOR ROAD FLOW CAPACIT		REACH LENGTH	PIPE GRADE	PIPE / BOX DIMENSIONS (CLA	FLOW VELOCITY FULL (PIPE GRADE VELOCITY)	FIPE FLOW CAPACITY AT GRA	STRUCTURE CHART No. STRUCTURE RATIOS FOR 'K' VALUE CALCULATIONS	VELOCITY HEAD	U/S HEAD LOSS COEFFICIENT U/S HEAD LOSS	W.S.E COEFFICIENT	CHANGE IN W.S.E	PIPE FRICTION HEADLOSS (L)	DEPTH	, VELOCITY	OBVERT LEVELS DRAIN SECTION H.G.L	UPSTREAM H.G.L LAT. H.G.L	W.S.E	SURFACE OR K&C INVERT LEV	FREEBOARD STRUCTURE No. /	LINK STRUCTURE
10	G1/1	G2/1		%	min mm/h 5.0 211.6 316.6	0.85	0.85	ha 0.097	ha 0.083 0.097	1/s 48.7 85.7	48.7	% m 2.43 1.8	ON-GRADE LIP IN LINE GULLY 2.4m	48.7	0.0	0.062 5.00	211.6 316.6	ha 0.083	0.0	480.9 16.	0 6	/s m 4.7 8.4	4 0.50	375(2)	m/s 0.59 0.09	1/s 124.0	G2 Ku = 5.11	0.018	5.11 0.089		m %	4 0.0	m m 011 0.192	m/s	m m 17.965 18.4206	18.509	m 18.509 18.717	18.719	0.210 G ^r	31/1
10	G2/1	M3/1	G1/1		5.0 211.6	0.85	0.85	0.098	0.083	48.9	48.9	2.51 1.8	K&C ON-GRADE LIP IN LINE GULLY 2.4m	48.9	0.0	0.063 5.11	3 210.4	0.166	0.0	504.5 16.	0 12	29.0 40.3	7 0.50	525(2)	0.60	304.2	T10 Ku = 2.15, Kw = 2.6	2 0.018	2.15 0.039	2.62	0.048 0.09	9 0.0	036 0.239	1.35	18.033 18.3706	18.417	18.417	18.717	0.300 G	<u> </u>
100	M3/1	M4/1	G1/1; G2/1		316.6		1.00		0.098	86.0	86.0		LINTEL; MOUNTABL K&C 1050 DIA	-E -10.6	96.6	5.60	205.9	0.195	96.6	504.5 16. 21.	0 14	4.8	3 0.50	600(2)	(1.41) 0.52 0.11	434.4	T10 Ku = 2.03, Kw = 2.5	0.000 7 0.014 7 0.001	1.84 0.000 2.03 0.028	2.56	0.001 0.00	0 0.0 6 0.0	011 0.241	1.39	17.866 18.3055	18.580	18.580	19.365	1.024 M	/13/1
100 10 100	M4/1	G5/1	G1/4A; G1/4; G1/1; G2/1										1050 DIA ACCESS CHAMBER	х х		5.8	2 203.8 305.3	0.351		21. 21. 21.	0 32 0 32 0 17	21.3 74.4 66.4	4 0.48	675(2)	(1.54) 0.90 0.49 (1.62)	583.4	T9/T10 Ku = 2.07, Kw = 2.5	6 0.041 0.012	2.07 0.085 1.96 0.024	2.56	0.105 0.1 0.028 0.0	5 0.0 4 0.0	097 0.358 029 0.253	1.67 1.42	17.783 18.2089	18.313 18.581	18.313 18.581	19.267	0.953 M	14/1
10 100	M5/1	M6/1	G1/5B; G1/5A; G1/4A; G1/4; G1/1; G2/1										1050 DIA ACCESS CHAMBER	R		6.3	7 198.9 294.9	0.503 0.592		21. 21.	0 44 0 35	2.4 33.1 32.9	4 0.50	675(2)	(1.63) 1.24 0.99 (1.66)	594.6	T3/T6 Ku = 1.51, Kw = 1.6	8 0.078 0.050	1.51 0.118 1.68 0.083	1.68 1.76).131 0.23).088 0.13	8 0.0 8 0.0	091 0.434 058 0.375	1.82 1.73	17.223 17.9952	18.125 18.529	18.125 18.529	19.182	1.057 0.652 Mf	15/1
10 100	M6/1	M7/1	G1/6B; G1/6A; G1/5B G1/5A; G1/4A; G1/4; G1/1; G2/1	;									1050 DIA ACCESS CHAMBER	٦		6.70) 196.0 290.2	0.671 0.790		21. 21.	0 57 0 49	71.3 98.3 37.1	2 0.50	675(2)	1.60 1.39 (1.66)	594.6	T3/T6 Ku = 1.44, Kw = 1.6	3 0.130 0.099	1.44 0.187 1.30 0.128	1.63 1.46).212 0.4).145 0.3	6 0.1 5 0.1	171 0.531 130 0.473	1.89 1.86	17.039 17.7166	17.927 18.400	17.927 18.400	19.070	1.143 0.671 Mf	16/1
10 100	M7/1	A	1/7B; G1/7A; G1/6B; G1/6A; G1/5B; G1/5A G1/4A; G1/4; G1/1;	;									1050 DIA ACCESS CHAMBER	R		6.7	1 196.0 290.1	0.858 1.010		0.0	0 71 0 68	5.7 6.7 49.2	3 0.80	750(2)	1.62 1.55 (2.25)	996.2	T1/T3 Ku = 1.43, Kw = 1.6	4 0.134 0.123	1.43 0.191 1.34 0.165	1.64).220 0.4).187 0.3	1 0.2 8 0.1	203 0.471 187 0.458	2.45 2.43	16.891 17.3546	17.573 18.147	17.573 18.147	18.848	1.275 0.701 M ⁻	17/1
10 100	M8/1	M9/1	G2/1 G1/8B; G1/8A; 1/7B; G1/7A; G1/6B; G1/6A; G1/5B; G1/5A; G1/4A; G1/4; G1/1; G2/1										1050 DIA ACCESS CHAMBER	۹		7.0	7 192.8 285.1	1.123 1.321		0.1 0.1) 87) 88	78.5 97.2 24.5	3 1.50	750(2)	1.99 2.01 (3.09)	1,364.1	T1/T3 Ku = 1.34, Kw = 1.5	3 0.202 0.206	1.34 0.270 1.23 0.253	1.53 1.44).308 0.63).297 0.63	2 0.1 3 0.1	153 0.438 156 0.441	3.28 3.29	16.477 16.882	17.188 17.816	17.188 17.816	18.034	0.846 0.218 M{	18/1
10 100	M9/1	M9/1	G1/2K; G1/2J; G1/2H; G1/2G; G1/2F; G1/2E; G1/5; G2/5; G1/2D; G1/2C; G1/2B; G1/2X; G1/2; G2/2; G1/8B; G1/8A; 1/7B; G1/7A; G1/6B; G1/6A; G1/5B; G1/5A; G1/4A; G1/4; G1/1; G2/1										1050 DIA ACCESS CHAMBER	٩		7.4	9 189.5 279.7	2.015 2.370		0.0) 1,5) 1,7	06.9 74.9 33.7	1 2.83	825(2)	2.82 3.32 (4.52)	2,416.0	T3/T6 Ku = 1.68, Kw = 1.8	9 0.405 0.482	1.68 0.679 1.48 0.713	1.89 1.63).767 1.0).786 1.3	5 0.4 1 0.4	114 0.472 141 0.526	4.77 4.94	16.146 16.0508	16.815 17.437	16.815 17.437	17.437	0.623 0.000 M€	19/1
10 100	M10/1	M10/1	G1/10A; G1/10B; G1/2K; G1/2J; G1/2H; G1/2G; G1/2F; G1/2E; G1/5; G2/5; G1/2D; G1/2C; G1/2B; G1/2X; G1/2C; G1/2B; G1/2X; G1/2; G2/2; G1/8B; G1/8A; 1/7B; G1/7A; G1/6B; G1/6A; G1/5B; G1/5A; G1/4A; G1/4; G1/1; G2/1										1050 DIA ACCESS CHAMBEF	2		7.6	188.6 1 278.1	2.206 2.595		0.0 0.0) 1,6) 1,9	22.8 74.0 13.7	0 1.00	825(2)	3.04 3.69 (2.69)	1,436.0	T1/T3 Ku = 0.54, Kw = 0.6	1 0.470 0.696	0.54 0.253 0.61 0.422	0.61 0).287 1.21).468 1.81	8 0.1 9 0.2	0.825 0.825 0.825	3.04 3.69	15.172 15.444	15.728 16.255	15.728 16.255	16.452).724).197 M1	10/1
10 100	M11/1	OUT/1	G1B/20B; G1A/20A; F1/20; G2/20; G3/20; G4/20; G1/10A; G1/10B; G1/2K; G1/2J G1/2H; G1/2G; G1/2F G1/2E; G1/5; G2/5; G1/2D; G1/2C; G1/2B G1/2X; G1/2; G2/2; G1/8B; G1/8A; 1/7B; G1/7A; G1/6B; G1/6A; G1/5B; G1/5A; G1/4A; G1/4; G1/1; G2/1	;									1350 DIA ACCESS CHAMBEF	R		7.4	1 190.1 280.7	2.504 2.946		0. 0.) 1,8) 2,2	82.3 91.8 9.7	6 1.00	1050(2)	2.25 2.74 (3.50)	2,934.8	Ku = 1.50	0.258 0.382	1.50 0.387 1.50 0.573		0.387 2.4 0.573 2.2	5 0.0 5 0.0	027 0.641 049 0.736	3.40 3.53	15.148 14.8822	15.266 15.529	15.266 15.529	16.065).799).537 M1	11/1
10 100	OUT/1		G1B/20B; G1A/20A; F1/20; G2/20; G3/20; G4/20; G1/10A; G1/10B; G1/2K; G1/2J G1/2H; G1/2G; G1/2F G1/2E; G1/5; G2/5; G1/2D; G1/2C; G1/2B G1/2X; G1/2; G2/2; G1/8B; G1/8A; 1/7B; G1/7A; G1/6B; G1/6A; G1/5B; G1/5A; G1/4A; G1/4; G1/1; G2/1										OUTLET HEADWALL														Ku = 0.00									14.641 14.736	14.641 14.736	14.973	ou	JT/1
10 100	G1/10B	M10/1			5.0 211.6 316.6	0.85	0.85 1.00	0.057	0.048 0.057	28.4 49.9	35.5 201.9	2.95 1.6	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABL	35.5 E 101.4	0.0 100.5	0.052 0.141 5.00) 211.6 316.6	0.048 0.057	0.0 100.5	446.3 0.0 446.3 0.0) 3:) 10	5.5 01.4 6.2	1 3.00	375(2)	0.32 0.92 (2.75)	303.8	G2 Ku = 9.70	0.005 0.043	9.70 0.051 3.59 0.154		0.051 0.04 0.154 0.33	4 0.0	003 0.087 021 0.149	1.84 2.47	15.561 15.6973	15.748 16.385	15.748 16.385	16.516).768 0.131 G1/	/10B
10 100	G1/2	G2/2			5.0 211.6 316.6	0.85	0.85	0.032	0.027 0.032	16.1 28.3	16.1 28.3	2.60 1.2	K&C ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABL	16.1 E 22.6	0.0 5.7	0.033 0.045 5.00	211.6 316.6	0.027 0.032	0.0 5.7	419.0 23. 419.0 23.	0 3: 0 4:	9.1 5.6 8.4	5 1.50	375(2)	0.35 0.41	214.8	G2 Ku = 7.86	0.006	7.86 0.050 5.02 0.044		0.050 0.03 0.044 0.0	5 0.0 7 0.0	004 0.108 006 0.117	1.48 1.54	17.721 17.9864	18.036 18.273	18.036 18.273	18.618	0.581 0.345 G ^r	;1/2
10	G2/2	M3/2	G1/2		5.0 211.6	0.85	0.85	0.078	0.067	39.2 69.0	39.2 69.0	2.60 1.7	K&C ON-GRADE LIP IN LINE GULLY 2.4m	39.2 F 47.6	0.0	0.053 5.0	7 210.9	0.094	0.0	419.0 0.0) 7	8.1 2.8 11.2	5 2.00	375(2)	0.71 0.84	248.1	T9/T10 Ku = 1.94, Kw = 2.2	7 0.025	1.94 0.049 1.72 0.062	2.27).058 0.20	0 0.0	022 0.145	1.99	17.554 17.9327	17.990	17.990	18.598	0.608 G;	<u> </u>
10 100	M3/2	M4/2	G1/2X; G1/2; G2/2										K&C 1050 DIA ACCESS CHAMBER	٦		5.10	⁵ 210.1 315.2	0.121 0.141		0.0) 11) 14	4.3 4.4 12.4	9 2.00	375(2)	(2.25) 1.04 1.33 (2.25)	248.1	T9 Ku = 1.93, Kw = 2.1	6 0.055 0.000	1.93 0.105 1.83 0.000	2.16).118 0.4).000 0.0	2 0.0 0 0.0	053 0.179	2.20 2.34	17.289 17.806	17.923 18.130	17.923 18.130	18.318	0.395 0.188 M ^r	13/2
10 100	M4/2	M5/2	G1/2C; G1/2B; G1/2X G1/2; G2/2										1050 DIA ACCESS CHAMBER	R		5.18	3 209.9 313.7	0.359 0.422		0.0) 27) 44	72.2 57.1	3 0.50	675(2)	(2.25) 0.76 1.25 (1.66)	594.6	T3/T6 Ku = 1.87, Kw = 2.1	6 0.030 0.000	1.87 0.055 1.70 0.000	2.16 1.85	0.064 0.10 0.000 0.00	0 0.0	060 0.321 000 0.437	1.62 1.82	17.319 17.6968	17.760 18.130	17.760 18.130	18.213).453 0.083 M [,]	14/2
10 100	M5/2	M6/2	G1/5; G2/5; G1/2D; G1/2C; G1/2B; G1/2X G1/2; G2/2	;									1050 DIA ACCESS CHAMBER	R		5.7	5 204.5 306.6	0.452 0.528		0.(0.() 33) 56	88.6 52.9 37.2	6 0.50	675(2)	0.95 1.57 (1.66)	594.6	T1/T3 Ku = 1.34, Kw = 1.5	3 0.046 0.000	1.34 0.061 1.12 0.001	1.53 1.29	0.070 0.10 0.001 0.00	6 0.0 0 0.0	060 0.365 001 0.524	1.71 1.89	17.014 17.5769	17.645 18.130	17.645 18.130	18.501).856).371 Mf	15/2
10 100	M6/2	M7/2	G1/2F G1/2E G1/5 G2/5 G1/2D G1/2C G1/2B G1/2X G1/2 G2/2										1050 DIA ACCESS CHAMBER	R		5.98	3 202.3 300.5	0.570 0.671		0.0 0.0	0 42 0 66	23.4 62.9 60.7	5 0.40	675(2)	1.18 1.85 (1.49)	531.9	T1/T3 Ku = 1.42, Kw = 1.6	1 0.071 0.007	1.42 0.101 0.89 0.006	1.61 1.07	0.115 0.25 0.007 0.02	5 0.1 2 0.0	0.455 015 0.675	1.65 1.85	16.807 17.4152	17.529 18.130	17.529 18.130	18.849	1.320 0.719 Mf	6/2
L	· I								. I.	I	I	<u> I </u>		STI			נ גו רו	JLATI	ON T	ABIF -	. SH	EFT '		3		I	1					I		1	I			<u>. </u>	I	1
														510	<u> </u>	· · · I LI			<u>- 1 1 /</u>		<u></u>	<u></u> 1		<u>_</u>												M.B.R.C	. Ref	. DA/	2021/	525
Associated	Consultant	S:		<u>R.P.D.</u>																					Proje	ect: DC						Cli	ient:							

LANDPARTNERS Surveyors & Planners info@landpartners.com.au Ph (07)3842 1000

_

RL: 16.843

LOT 8 ON RP87981

LEVEL DATUM PSM 139927

MERIDIAN: IS278811

No.

Date

Ву

B 04.10.22 H.W. AMENDED TO COUNCIL RFI 19 SEP 2022 22.08.22 А H.W. ORIGINAL ISSUE

Amendment

THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD regional Council

Checked

Æ LAMBERT & REHBEIN ENGINEERS • MANAGERS • SCIENTISTS

CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902

TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL mail@lar.net.au CONSULT AUSTRALIA

roject:	PROPOSED RESIDENTIAL SUBDIVISION 57-65 COACH ROAD		T DEVELOPME	NT (GROU	P P	ty L	td	
	MORAYFIELD, QLD, 4506	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawing	No.			
itle:	STORMWATER CALCULATION TABLE -	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21	549	9-02	207	
	SHEELLUF S	Scale: AS SHOWN	Date: AUG 2022	A	В				

ככ

	L	OCATION				SUB-0	CATCHMENT R	RUNOFF						INLET DESIGN								DR	AIN DESIGN														PART FULL				DESIGN LEVEL	_S		
					Tc I	C10	С	A	СхА	Q					Qg	Qb	dV	tc	I +CA	Qt	Qs	Qa	Qp	L	S		V	Qcap			V2/2g	Ku hu	Kw	hw	Sf	hf	V	′p						
DESIGN ARI STRUCTURE No	DRAIN SECTION		SUB-CATCHMENTS CONTRIBUTING	SLOPE OF CATCHMENT	SUB-CATCHMENT TIME OF CONC. RAINFALL INTENSITY	10yr RUNOFF CO-EFFICIENT	COEFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET	MINOR FLOW WIDTH	INLET TYPE	FLOW INTO INLET	BYPASS FLOW	FLOW DEPTH × VELOCITY	TIME OF CONC.	TOTAL (C x A)	MAJOR TOTAL FLOW	MAJOR ROAD FLOW CAPACITY	ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE / BOX DIMENSIONS (CLASS)	FLOW VELOCITY FULL (PIPE GRADE VELOCITY)	PIPE FLOW CAPACITY AT GRADE	STRUCTURE CHART No.	STRUCTURE RATIOS FOR 'K' VALUE CALCULATIONS	VELOCITY HEAD	U/S HEAD LOSS COEFFICIENT U/S HEAD LOSS	W.S.E COEFFICIENT	CHANGE IN W.S.E	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L × S [†]	DEPIH	VELOCITY OBVERT LEVELS	DRAIN SECTION H.G.L	UPSTREAM H.G.L	LAT. H.G.L w.s.f	W.O.L. SURFACF OR K&C INVERT I EVEL		STRUCTURE No. / LINK STRUCTURE
		G1/2	/2F G1/2E G1/5	%	min mm/h			ha	ha	l/s	l/s	%	m		l/s	l/s	m²/s	min mi	n/h ha	l/s	l/s	l/s	l/s	m	%	mm	m/s	l/s			m	m		m	%	m r	<u>n m</u>	i/s m	m	m	<u>m m</u>	n n	<u>n m</u>	
10 M7/ 100 M7/	2 M8/2	G2/5 G1/2	/5 G1/2D G1/2C /2B G1/2X G1/2 G2/2											1050 DIA ACCESS CHAMBER				6.66 19 29	6.3 0.570 0.7 0.67			0.0 0.0	414.0 644.7	13.23	0.50	675(2)	1.80 (1.66)	594.6 7	Г6/Т9	Ku = 1.93, Kw = 2.24	0.068 0.115	1.93 0.13 1.71 0.19	2.24 7 1.91	0.153 0.219	0.24 0	0.032 0.4	-15 1.8 375 1.8	80 80 16.525	5 17.129	02 17.281 18.130	17.2	281 18.7 130 18.7	778 1.497 0.649) M7/2
10 M8/ 100 M8/	2 M9/2	G1/2H; G1/2D; G1/2D; G1/2	H; G1/2G; G1/2F; /2E; G1/5; G2/5; D; G1/2C; G1/2B; /2X; G1/2; G2/2										,	ACCESS CHAMBER 1050mm DIA				6.80 ¹⁹ 28	5.2 0.633 8.8 0.744			0.0 0.0	471.0 712.3	56.28	0.50	750(2)	1.07 1.61 (1.78)	787.5 1	Г1/ТЗ	Ku = 1.19, Kw = 1.38	0.058 0.133	1.19 0.069 0.79 0.109	9 1.38 5 0.93	0.080 0.123	0.18 0 0.41 0	0.101 0.4 0.230 0.5	18 1.1 559 2.1	86 02 16.513	3 17.029	91 17.108 17.874	17.1 [°] 17.8	108 374 18.4	494 1.386 0.619	j M8/2
10 M9/ 100 M9/	2 M9/1	G1/2K; G1/2G; G1/5; G1/2C; G	2K; G1/2J; G1/2H; G; G1/2F; G1/2E; /5; G2/5; G1/2D; C; G1/2B; G1/2X; G1/2; G2/2											1050 DIA ACCESS CHAMBER				7.30 19 28	1.0 0.882 2.1 1.038			0.0 0.0	637.4 905.4	20.14	0.50	750(2)	1.44 2.05 (1.78)	787.5 1	Г1/ТЗ	Ku = 1.26, Kw = 1.43	0.106 0.110	1.26 0.13 0.81 0.08	4 1.43 9 0.94	0.152 0.104	0.33 (0.34 (0.066 0.5 0.068 0.7	512 1.º 750 2.º	98 05 16.212	2 16.794	16.945 17.536	16.9 17.5	945 536 17.5	536 0.590 0.000)) M9/2
10 100 F1/2	0 G2/20				5.0 211.6 316.6	0.85	0.85 1.00	0.147	0.125 0.147	73.6 129.5	73.6 129.5	2.66	2.2	FIELD INLET	72.1 84.3	1.4 0 45.2 0	.066 .094	5.00 21 31	1.6 0.128 6.6 0.147	1.4 45.2	771.0 771.0	0.0 0.0	72.1 84.3	14.02	1.50	375(2)	0.65 0.76 (1.95)	214.8	G1	Ku = 7.00	0.022 0.030	7.00 0.15 5.07 0.15	2	0.152 0.151	0.99 (0.23 (0.179 0.1 0.032 0.1	150 1. 163 1.	75 83 17.483	3 17.304	17.456 17.835	17.4 17.8	456 835 18.5	.547 1.092	2 3 F1/20
10 100 G2/2	0 G3/20	,	F1/20		5.0 211.6 316.6	0.85	0.85 1.00	0.016	0.014 0.016	8.2 14.5	9.7 59.7	1.29	1.2	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	9.7 47.7	0.0 C 11.9 C	.022 .059	5.12 21	0.5 0.139 4.6 0.164	0.0	75.0 75.0	27.0 27.0	108.4 158.2	23.44	2.50	375(2)	0.98 1.43 (2.51)	277.3	Г1/ТЗ	Ku = 0.92, Kw = 0.99	0.049 0.105	0.92 0.04 1.41 0.14	5 0.99 7 1.46	0.049 0.153	1.81 (0.81 (.480 0.7 .191 0.2	163 2. ⁻ 203 2.	36 59 17.252	2 17.12	17.168 17.657	17.1 17.€	168 557 18.3	.306 1.138 0.65(3 D G2/20
10 100 G3/2	0 G4/20) F1	F1/20; G2/20		5.0 211.6 316.6	0.85	0.85 1.00	0.066	0.056 0.066	32.8 57.7	32.8 69.7	2.14	1.7	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	32.8 47.9	0.0 0 21.8 0	.046 .070	5.28 20 31	9.0 0.198 2.1 0.229	0.0	86.7 86.7	20.0 20.0	160.2 224.0	34.49	3.20	375(2)	1.45 2.03 (2.84)	313.8	Т1	Ku = 1.21	0.107 0.210	1.21 0.13 0.86 0.18)	0.130 0.181	1.13 (1.63 (.434 0.1 .563 0.2	190 2. ² 234 3.	85 09 16.646	6 16.567	75 16.695 17.313	16.6 17.3	695 313 17.7	732 1.037 0.41§	/ 9 G3/20
10 100 G4/2	0 M5/20	F1/20	20; G2/20; G3/20		5.0 211.6 316.6	0.85	0.85 1.00	0.106	0.090 0.106	52.8 93.0	52.8 114.8	3.48	2.4	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	51.1 40.4	1.8 0 74.3 0	.057 .094	5.48 20 30	7.1 0.285 8.8 0.335	5 1.8 5 74.3	57.9 57.9	27.0 27.0	236.1 287.0	19.92	3.20	375(2)	2.14 2.60 (2.84)	313.8	Т1	Ku = 0.89	0.233 0.345	0.89 0.20 0.60 0.20	3	0.209 0.208	1.81 (2.68 (0.361 0.2 0.533 0.2	243 3. 282 3.	12 22 15.523	3 15.970	01 16.176 16.571	16.1 16.5	176 571 16.6	638 0.462 0.067	² 7 G4/20
10 100 M5/2	0 M6/20	, F1/20;	20; G2/20; G3/20; G4/20											1050 DIA ACCESS CHAMBER				5.59 20	5.9 0.285 6.8 0.335	j		0.0 0.0	235.2 285.2	15.54	0.50	450(2)	1.48 1.79 (1.27)	201.7	T10	Ku = 1.71, Kw = 2.08	0.112 0.085	1.71 0.19 1.70 0.14	2.08 5 2.09	0.232 0.177	0.68 (0.52 (0.106 0.4 0.080 0.4	450 1. 450 1.	48 79 14.9	15.417	75 15.648 15.862	15.6 15.8	548 362 15.8	.862 0.214	# M5/20
10 100 M6/2	0 M11/1	G1B/2 F1/20;	3/20B; G1A/20A; 20; G2/20; G3/20;											1050 DIA ACCESS CHAMBER				5.80 20 30	4.0 0.329 3.5 0.386	, ;		0.0 0.0	278.3 351.4	16.91	0.40	675(2)	0.78	531.9 1	Г1/ТЗ	Ku = 0.83, Kw = 0.98	0.031 0.049	0.83 0.020 0.93 0.040	5 0.98 5 1.06	0.030 0.052	0.11 (0.17 (0.019 0.3 0.030 0.4	347 1. 401 1.	50 59 15.028	8 15.285	58 15.315 15.611	15.3 15.6	315 611 15.6	.649 0.33 ⁴ 0.031	4 8 M6/20
10 100 G1A/2	0A M6/20)	64/20		5.0 211.6 316.6	0.85	0.85 1.00	0.021	0.018 0.021	10.4 18.3	30.3 237.8	0.82	2.1	1050 DIA ACCESS CHAMBER	30.3 41.9 1	0.0 0	.033	5.00 21 31	1.6 0.018 6.6 0.02	0.0	189.7 189.7	0.0 0.0	30.3 41.9	3.00	0.50	375(2)	0.27 0.38 (1.12)	124.0	G2	Ku = 5.06	0.004 0.007	5.06 0.019 3.51 0.020)	0.019 0.026	0.03 (0.06 (0.06)	0.001 0.1	126 0. [*] 150 1.	93 01 14.783	3 15.311	3 15.331 15.632	15.3 15.€	331 532 15.6	.634 0.304	4 3 G1A/20A
10 100 G1/2	2 G2/22	2			5.0 211.6 316.6	0.85	0.85 1.00	0.056	0.047 0.056	27.8 49.0	27.8 49.0	3.65	1.5	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	27.8 36.3	0.0 0 12.7 0	.046 .063	5.00 21 31	1.6 0.047 6.6 0.056	0.0	100.0 100.0	0.0 0.0	27.8 36.3	26.67	3.50	375(2)	0.25 0.33 (2.97)	328.2	G1	Ku = 7.00	0.003 0.006	7.00 0.02 7.00 0.03	3	0.023 0.039	2.49 (2.38 (0.705 0.0 0.679 0.0)74 1. 084 1.	81 96 14.17	7 13.915	i3 13.937 13.971	13.9 13.§	937 971 15.2	.230 1.292	² 9 G1/22
10 100 G2/2	2 M3/22	2	G1/22		5.0 211.6 316.6	0.85	0.85 1.00	0.033	0.028 0.033	16.6 29.2	16.6 41.9	3.13	1.1	SAG LIP IN LINE GULLY - 2.4m LINTEL; MOUNTABLE K&C	16.6 32.9	0.0 C 9.0 C	.037 .062	5.15 21 31	0.2 0.076	0.0	94.7 94.7	0.0 0.0	44.1 68.6	6.80	3.00	375(2)	0.40 0.62 (2.75)	303.8 1	Г1/ТЗ	Ku = 1.76, Kw = 2.17	0.008 0.020	1.76 0.01/ 1.83 0.03	2.17 2.27	0.018 0.045	0.06 (0.15 (0.004 0.0 0.010 0.1)97 1. 121 2.	96 22 13.217	7 13.235	64 13.253 13.307	13.2 13.2	253 307 ^{14.2}	.246 0.995	3 9 G2/22
10 M3/2	2 EXM4/2	22 G ²	G1/22; G2/22											1050 DIA ACCESS CHAMBER				5.19 20 31	9.8 0.076 3.5 0.089	;		1,430.0 1,430.0	1,474.0 1,498.4	11.56	0.50	825(2)	2.76	1,015.4 1	Г3/Т6	Ku = 1.30, Kw = 1.63	0.388 0.401	1.30 0.50 1.29 0.51	5 1.63 9 1.61	0.631 0.645	1.52 (1.54 (0.112 0.8	325 2. [°] 825 2. [°]	76 80 12.713	3 12.728	13.357 13.379	13.3 13.5	357 379 14.0	.043 0.68¢	³ 4 M3/22
10 100 EXM7	10	Gŕ	G1/22; G2/22											1050 DIA ACCESS CHAMBER													(1.90)			Ku = 0.00										12.551 12.555	12.5	551 555 13.8	.829	EXM7/10
10 100 G1/2	B M4/2				5.0 211.6 316.6	0.85	0.85 1.00	0.046	0.039 0.046	23.2 40.9	23.2 40.9	0.25		ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	23.2 40.9	0.0 0.0		5.00 21 31	1.6 0.039 6.6 0.046	0.0	45.8 22.9	0.0 0.0	23.2 40.9	6.54	3.50	375(2)	0.21 0.37 (2.97)	328.2	G2	Ku = 5.85	0.002 0.007	5.85 0.01 3.46 0.02	3	0.013 0.024	0.02 (0.05 (0.001 0.0)68 1.)89 2.	72 02 17.288	8 17.753	32 17.766 18.158	17.7 18.1	766 158 18.2	.214 0.448 0.056	3 6 G1/2B
10 100 G1/2	C M4/2				5.0 211.6 316.6	0.85	0.85 1.00	0.234	0.199 0.234	117.1 206.1	117.1 244.4	0.55		ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	117.1 244.4	0.0 0.0		5.00 21 31	1.6 0.199 6.6 0.234	0.0	283.1 141.5	19.0 19.0	136.1 263.4	2.68	3.00	525(2)	0.63 1.22 (3.44)	745.2	G2	Ku = 6.45	0.020 0.019	6.45 0.130 4.32 0.085	3	0.130 0.083	0.10 (0.09 (0.003 0.2	152 2. 216 3.	62 14 17.29) 17.754	17.884 18.215	17.8 18.2	384 215 18.2	.215 0.331	l G1/2C
10 100 G1/2	D M5/2				5.0 211.6 316.6	0.85	0.85 1.00	0.024	0.021 0.024	12.1 21.2	12.1 21.2	0.70		ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	12.1 21.2	0.0 0.0		5.00 21 31	1.6 0.02 ⁷ 6.6 0.024	0.0		0.0 0.0	12.1 21.2	7.28	5.00	375(2)	0.11 0.19 (3.55)	392.2	G2	Ku = 9.27	0.001 0.002	9.27 0.00 4.01 0.00	5	0.006 0.008	0.00 (0.01 (0.000 0.0 0.001 0.0)45 1. 059 1.	60 89 17.425	5 17.637	71 17.642 18.138	17.6 18.1	542 138 18.5	.566 0.923	3 7 G1/2D
10 100 G1/2	E M6/2				5.0 211.6 316.6	0.85	0.85 1.00	0.025	0.021 0.025	12.6 22.1	12.6 22.1	0.70		ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	12.6 22.1	0.0 0.0		5.00 21 31	1.6 0.02 ² 6.6 0.025	0.0		0.0 0.0	12.6 22.1	7.18	5.00	375(2)	0.11 0.20 (3.55)	392.2	G2	Ku = 9.70	0.001 0.002	9.70 0.00 8.08 0.01	5 7	0.006 0.017	0.50 (0.02 (0.063 0.0 0.001 0.0)46 1. 060 1.	62 92 17.846	6 17.551	17.557 18.146	17.5	557 146 18.8	827 1.270 0.68') 1 G1/2E
10 100 G1/2	F M6/2				5.0 211.6 316.6	0.85	0.85 1.00	0.118	0.100 0.118	59.0 103.9	59.0 103.9	0.70	2.6	SAG LIP IN LINE GULLY - 2.4m LINTEL; MOUNTABLE K&C	59.0 72.3	0.0 0 31.6 0	.051 .071	5.00 21 31	1.6 0.100 6.6 0.118	0.0	217.4 217.4	21.0 21.0	80.0 93.3	3.76	5.00	375(2)	0.72 0.84 (3.55)	392.2	G2	Ku = 8.95	0.027 0.036	8.95 0.24 5.22 0.19)	0.240 0.190	2.98 (0.28 (0.155 0.1 0.011 0.1	115 2. ⁻ 125 2.	79 91 17.795	5 17.627	77 17.867 18.329	17.8 18.3	867 329 18.8	.827 0.960 0.498) 8 G1/2F
10 100 G1/2	G M8/2				5.0 211.6 316.6	0.85	0.85 1.00	0.036	0.031 0.036	18.0 31.6	18.0 31.6	2.00	1.3 (SAG LIP IN LINE GULLY - 2.4m LINTEL; MOUNTABLE K&C	18.0 25.3	0.0 0 6.3 0	.033 .045	5.00 21 31	1.6 0.03 ² 6.6 0.036	0.0	367.5 367.5	25.0 25.0	43.0 50.3	2.95	3.00	375(2)	0.39 0.46 (2.75)	303.8	G2	Ku = 9.70	0.008 0.011	9.70 0.07 6.05 0.06	5	0.075 0.064	4.80 (0.08 (0.011 0.0 0.002 0.1)95 1.' 103 2.	94 03 17.464	4 17.238	17.313 17.923	17.3 17.§	313 923 18.5	.537 1.224 0.614	‡ 4 G1/2G
10 100 G1/2	H M8/2				5.0 211.6 316.6	0.85	0.85 1.00	0.038	0.032 0.038	18.8 33.1	18.8 33.1	2.00	1.4 (SAG LIP IN LINE GULLY - 2.4m LINTEL; MOUNTABLE K&C	18.8 26.5	0.0 C 6.6 C	.033 .046	5.00 21 31	1.6 0.032 6.6 0.038	0.0	367.5 367.5	0.0 0.0	18.8 26.5	6.53	5.00	375(2)	0.17 0.24 (3.55)	392.2	G2	Ku = 9.70	0.001 0.003	9.70 0.014 6.98 0.020		0.014 0.020	1.95 (0.02 (0.160 0.0 0.001 0.0)56 1.)66 2.	83 02 17.502	2 17.224	17.238	17.2 17.8	238 379 18.5	.515 1.27€ 0.63€	3 5 G1/2H
10 100 G1/2	J M9/2				5.0 211.6 316.6	0.85	0.85 1.00	0.167	0.142 0.167	83.6 147.2	83.6 153.9	0.56	3.3	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE	76.6 2.0 1	7.1 0 51.9 0	.056 .075	5.00 21 31	1.6 0.142 6.6 0.167	7.1	166.3 166.3	42.0 42.0	118.6 44.0	6.40	2.50	375(2)	1.07 0.40 (2.51)	277.3	G2	Ku = 3.77	0.059 0.008	3.77 0.22 2.71 0.02	2	0.222 0.022	0.46 (0.06 (0.029 0.4 0.004 0.4	171 2. 101 1.	41 83 16.417	7 16.957	,1 17.178 17.547	17.1 17.5	178 547 17.5	.547 0.37() 0 G1/2J
10 100 G1/2	К М9/2				5.0 211.6 316.6	0.85	0.85 1.00	0.127	0.108 0.127	63.3 111.4	69.7 192.0	0.32		K&C SAG LIP IN LINE GULLY - 2.4m LINTEL; MOUNTABLE K&C	69.7 192.0	0.0 0.0		5.00 21 31	1.6 0.108 6.6 0.127	0.0	278.6 139.3	0.0 0.0	69.7 192.0	3.74	2.50	375(2)	0.63 1.74 (2.51)	277.3	G2	Ku = 5.15	0.020 0.005	5.15 0.10 2.96 0.01	5	0.105 0.016	0.16 (0.04 (0.006 0.2 0.002 0.2	128 2. [.] 230 2.	09 71 16.498	8 16.933	36 17.038 17.539	17.0 17.5	038 539 17.5	539 0.502 0.000	²) G1/2K

STORMWATER CALCULATION TABLE - SHEET 2 OF 3

Associated Consultants:	<u>R.P.D.</u>					
LANDPARTNERS Surveyors & Planners info@landpartners.com.au	LOT 8 ON RP87981					
Ph (07)3842 1000						
	LEVEL DATUM					$\mathcal{T} \mathcal{A}$
	PSM 139927	В	04.10.22	н.w.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: IS278811	А	22.08.22	н.w.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE W	S DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL RITTEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	Checked
More	gional Council	-				

LAMBERT & REHBEIN

CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902

ENGINEERS • MANAGERS • SCIENTISTS TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL mail@lar.net.au CONSULT AUSTRALIA

Project: PROPOSED RESIDENTIAL SUBDIVISION
57–65 COACH ROAD
MORAYFIELD, QLD, 4506
Title: STORMWATER CALCULATION TABLE -
SHEET 2 OF 3

M.B.R.C. Ref. DA/2021/5255

Client:	T DEVELOPME	NT (GROL	JP P	ty L	td	
Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawin	g No.			
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2 ⁻	1549	9-C	208	
^{Scale:} AS SHOWN	Date: AUG 2022	A	В				

		LOCATIO	ION		S	SUB-CATCHM	IENT RUNOFF					INLET DESIGN								DRAIN DE	ESIGN													PART FULL			DESIG	N LEVELS	
				Tc I	C	C10 C	C A	CxA	Q				Qg	Qb dV	tc	I	+CA	Qt C	Qs Qa	Qp) L	S		V	Qcap		V	2/2g	Ku hu	Kw	hw	Sf	hf	Vp					
DESIGN ARI	STRUCTURE No	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	SLOPE OF CATCHMENT SUB-CATCHMENT TIME OF CONC. RAINFALL INTENSITY		10yr RUNOFF CO-EFFICIENT COFFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUB-CATCHMENT DISCHARGE	FLOW IN K&C (INC. BYPASS)	ROAD GRADE AT INLET MINOR FLOW WIDTH	INLET TYPE	FLOW INTO INLET	BYPASS FLOW FLOW FLOW DEPTH x VELOCITY	CRITICAL TIME OF CONC	RAINFALL INTENSITY	TOTAL (C × A)	MAJOR TOTAL FLOW	MAJOR ROAD FLOW CAPACITY ADDITIONAL PIPE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE / BOX DIMENSIONS (CLASS)	FLOW VELOCITY FULL (PIPE GRADE VELOCITY)	PIPE FLOW CAPACITY AT GRADE	STRUCTURE CHART No.	STRUCTURE RATIOS FOR 'K' VALUE CALCULATIONS		U/S HEAD LOSS COEFFICIENI U/S HEAD LOSS	W.S.E COEFFICIENT	CHANGE IN W.S.E	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L x Sf)	DEPTH VELOCITY	OBVERT LEVELS	DRAIN SECTION H.G.L	UPSTREAM H.G.L LAT. H.G.L	W.S.E SURFACE OR K&C INVERT LEVEL	FREEBOARD STRUCTURE No. / LINK STRUCTURE
				% min mm/h	n		ha	ha	l/s	l/s	% m		l/s	l/s m²/	s min	ı mm/h	ha	l/s l	l/s l/s	l/s	, m	%	mm	m/s	l/s			m	m		m	%	m	m m/s	m	m	m m	m m	m
10 100	G1/2X	M3/2		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8	85 00 0.031	0.027 0.031	15.6 27.4	15.6 33.1	3.06	1050 DIA ACCESS CHAMBER	15.6 33.1	0.0 0.0	5.00	0 211.6 316.6	0.027 0.031	0.0 20 0.0 10	03.1 21.0 01.5 21.0	36.0 54.1	6 1 8.73	1.00	450(2)	0.23 0.34 (1.79)	285.2	G2 Ki	u = 7.13 0.	003 7 000 5	.13 0.0 .24 0.00	19 00	0.019 0.000	0.02 0	0.001 0	.109 1.23 .133 1.38	17.492	17.9122 1 ¹	7.931 3.130	17.931 18.130 18.130	0.199 0.000 G1/2X
10 100	G1B/20B	M6/20		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.031	0.026 0.031	15.3 26.9	15.3 127.4	0.48	LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	15.3 29.2	0.0 98.2	5.00	0 211.6 316.6	0.026 0.031	0.0 58 98.2 29	8.5 0.0 9.2 0.0	15.3 29.2	3 2 6.52	0.50	375(2)	0.14 0.26 (1.12)	124.0	G2 Ki	u = 6.64 0.	001 6 004 4	.64 0.00 .03 0.0)7 4	0.007 0.014	0.01 0.03	0.000 0 0.002 0	.089 0.76 .124 0.92	14.91	15.3111 1	5.317 5.620	15.317 15.620 15.665	0.348 0.045 G1B/20E
10 100	G1/4	M2/4		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.087	0.074 0.087	43.7 76.9	43.7 76.9	0.25 3.2	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	43.7 30.8	0.0 0.00 46.1 0.04	31 13 5.00	0 211.6 316.6	0.074 0.087	0.0 92 46.1 92	2.5 25.0 2.5 25.0	68.7 55.8	7 8 8.03	1.00	375(2)	0.62 0.51 (1.59)	175.4	G2 Ki	u = 6.08 0.	020 6 013 5	.08 0.12 .14 0.00	20 37	0.120 0.067	0.15 (0.10 (0.012 0 0.008 0	.163 1.49 .145 1.41	18.399	18.7366 18 18	3.856 3.940	18.856 18.940 19.105	0.249 0.165 G1/4
10 100	M2/4	M4/1	G1/4A; G1/4									ACCESS CHAMBER 1050mm DIA			5.08	8 210.8 315.2	0.185 0.218		0.0 0.0	156. 130.	.9 .8 32.26	2.00	375(2)	1.42 1.18 (2.25)	248.1	T3/T6 Ku = 1.6	7, Kw = 1.82 0.	103 1 072 1	.67 0.1 .52 0.1	72 1.82 09 1.66	0.187 0.119	0.80 0.56	0.258 0 0.179 0	.216 2.38 .194 2.27	18.278	18.5534 18 18	3.739 3.875	18.739 18.875 19.127	0.388 0.252 M2/4
10 100	G1/4A	M2/4		5.0 211.6 316.6	6 0. 6	0.85 0.8 1.0	85 00 0.131	0.111 0.131	65.2 114.8	65.2 114.8	0.00	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	63.6 50.8	1.6 64.0	5.00	0 211.6 316.6	0.111 0.131	1.6 64.0	25.0 25.0	88.6 75.8	6 8 4.98	0.50	375(2)	0.80 0.69 (1.12)	124.0	G2 Ki	u = 4.84 0.	033 4 024 4	.84 0.1 .35 0.1	59 05	0.159 0.105	0.26 (0.19 (0.013 0 0.009 0	.235 1.22 .212 1.18	18.323	18.7368 11 18.7368 11	3.895 3.979	18.895 18.979 19.127	0.231 0.148 G1/4A
10 100	G1/5	G2/5		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.042	0.036 0.042	21.0 36.9	21.0 36.9	2.62	SAG LIP IN LINE GULLY - 2.4m LINTEL MOUNTABLE K&C	; 21.0 20.0	0.0 16.9	5.00	0 211.6 316.6	0.036 0.042	0.0 4(16.9 2(0.0 19.0 0.0 19.0	40.0 39.0	0 0 8.43	3.00	375(2)	0.36 0.35 (2.75)	303.8	G2 Ki	u = 9.56 0.	007 9 006 3	.56 0.00 .85 0.02	64 25	0.064 0.025	0.05 (0.05 (0.004 0 0.004 0	.092 1.90 .091 1.89	17.553	17.6864 1	7.750 3.294	17.750 18.294 18.314	0.564 0.020 G1/5
10 100	G2/5	M5/2	G1/5	5.0 211.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.043	0.037 0.043	21.6 38.0	21.6 69.7	2.62	SAG LIP IN LINE GULLY - 2.4m LINTEL MOUNTABLE K&C	, 21.6 , 69.7	0.0 0.0	5.0	5 211.1 315.8	0.072 0.085	0.0 15 0.0 75	51.7 0.0 5.9 0.0	61.8 108.	5 .5 12.52	3.00	375(2)	0.56 0.98 (2.75)	303.8	T10 Ku = 1.8	0. 0.	016 1 049 1	.87 0.03 .77 0.03	30 2.28 37 1.97	0.036 0.097	0.12 0.38	0.015 0 0.048 0	.114 2.15 .155 2.52	17.24	17.6526 1 17	7.688 3.275	17.688 18.275 18.314	0.626 0.039 G2/5
10 100	G1/5A	M5/1		5.0 211.6 316.6	6 0, 6 0,	0.85 0.8	85 00 0.110	0.093 0.110	54.8 96.4	54.8 96.4	0.79	SAG LIP IN LINE GULLY - 2.4m LINTEL MOUNTABLE K&C	, 54.8 96.4	0.0 0.0	5.00	0 211.6 316.6	0.093 0.110	0.0 60 0.0 30	0.6 0.0 0.3 0.0	54.8 96.4	⁸ 4 3.66	1.00	375(2)	0.50 0.87 (1.59)	175.4	G2 Ki	u = 9.70 0.	013 9 039 4	.70 0.12 .94 0.19	22 92	0.122 0.192	0.03 0.30	0.003 0 0.011 0	.144 1.40 .198 1.63	18.169	18.1125 18 18	3.234 3.728	18.234 18.728 19.183	0.949 0.455 G1/5A
10 100	G1/5B	G5/1		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.072	0.061 0.072	35.8 63.0	35.8 63.0	1.30	SAG LIP IN LINE GULLY - 2.4m LINTEL MOUNTABLE K&C	; 35.8 63.0	0.0 0.0	5.00	0 211.6 316.6	0.061 0.072	0.0 40 0.0 20	0.0 21.0 0.0 21.0	56.8 84.0	8 0 6.97	1.00	375(2)	0.51 0.76 (1.59)	175.4	G2 Ki	u = 9.70 0.	013 9 029 5	.70 0.13 .07 0.13	31 50	0.131 0.150	0.08 0.23	0.007 0 0.016 0	.147 1.42 .183 1.57	18.143	18.1175 18 18	3.248 3.690	18.248 18.690 19.196	0.949 0.506 G1/5B
10 100	G1/6A	M6/1		5.0 211.6 316.6	6 6	0.85 0.8 1.0	85 00 0.125	0.106 0.125	62.3 109.6	62.3 109.6	0.60 2.7	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	61.6 75.0	0.7 0.08 34.6 0.07	51 71 5.00	0 211.6 316.6	0.106 0.125	0.7 20 34.6 20	01.3 0.0 01.3 0.0	61.6 75.0	6 0 2.98	3.00	375(2)	0.56 0.68 (2.75)	303.8	G2 Ki	u = 9.70 0.	016 9 024 5	.70 0.14 .10 0.12	54 20	0.154 0.120	-0.04 (0.18 (0.003 0 0.005 0	.115 2.16 .127 2.28	17.964	17.9016 18 18	3.055 3.509	18.055 18.509 19.084	1.029 0.575 G1/6A
10 100	G1/6B	M6/1		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.073	0.062 0.073	36.6 64.4	36.6 64.4	0.60 2.2	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	36.6 50.5	0.0 0.03 13.9 0.05	38 52 5.00	0 211.6 316.6	0.062 0.073	0.0 20 13.9 20	01.3 21.0 01.3 21.0	57.0 71.5	6 5 8.46	3.00	375(2)	0.52 0.65 (2.75)	303.8	G2 Ki	u = 9.70 0.	014 9 021 6	.70 0.13 .61 0.14	35 41	0.135 0.141	0.30 0.17	0.079 0 0.014 0	.111 2.11 .124 2.25	18.129	17.9285 18 17	3.062 3.539	18.062 18.539 19.103	1.041 0.565 G1/6B
10 100	G1/7A	M7/1		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.115	0.098 0.115	57.6 101.4	58.3 135.9	0.60 2.7	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	58.3 96.0	0.0 0.04 40.0 0.07	19 78 5.00	0 211.6 316.6	0.098 0.115	0.0 20 40.0 20	01.3 21.0 01.3 21.0	79.3 117.	3 .0 3.09	3.00	375(2)	0.72 1.06 (2.75)	303.8	G2 Ki	u = 9.00 0.	026 9 057 4	.00 0.23 .98 0.23	36 35	0.236 0.285	5.01 (0.44 (0.027 0 0.014 0	.131 2.31 .161 2.57	17.868	17.6987 1 17	7.935 3.423	17.935 18.423 18.862	0.927 0.439 G1/7A
10 100	1/7B	M1/7		5.0 211.6 316.6	6 0. 6 0.	0.85 0.8 1.0	85 00 0.119	0.101 0.119	59.5 104.8	59.5 118.7	0.60 2.7	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	59.5 79.4	0.0 0.03 39.3 0.03	50 73 5.00	0 211.6 316.6	0.101 0.119	0.0 20 39.3 20	01.3 21.0 01.3 21.0	80.5 100.	5 .4 7.75	3.00	375(2)	0.73 0.91 (2.75)	303.8	G2 Ki	u = 8.92 0.	027 8 042 5	.92 0.24 .76 0.24	42 43	0.242 0.243	2.53 (0.33 (0.223 0 0.025 0	.132 2.32 .148 2.47	17.908	17.7407 1 ¹ 17	7.982 3.393	17.982 18.393 18.873	0.892 0.481 1/7B
10 100	G1/8A	M8/1		5.0 211.6 316.6	6 6 0	0.85 0.8 1.0	85 00 0.157	0.133 0.157	78.4 138.0	78.4 178.0	2.20 2.3	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	65.3 93.2	13.1 0.07 84.8 0.12	7 23 5.00	0 211.6 316.6	0.133 0.157	13.1 38 84.8 38	35.4 21.0 35.4 21.0	86.3 114.	3 .2 3.53	3.00	375(2)	0.78 1.03 (2.75)	303.8	G2 Ki	u = 8.29 0.	031 8 055 3	.29 0.29 .52 0.19	58 92	0.258 0.192	0.24 0.42	0.009 0 0.015 0	.137 2.37 .159 2.55	17.131	17.1588 1 [.]	7.416 7.979	17.416 17.979 18.098	0.682 0.119 G1/8A
10 100	G1/8B	M8/1		5.0 211.6 316.6	6 6	0.8 1.0	85 00 0.154	0.131 0.154	77.2 135.8	77.2 175.1	1.45 3.6	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	70.7 100.9	6.4 0.09 74.2 0.08	53 57 5.00	0 211.6 316.6	0.131 0.154	6.4 11 74.2 11	12.0 27.0 12.0 27.0	97.7 127.	7 .9 6.45	3.00	375(2)	0.88 1.16 (2.75)	303.8	G2 Ki	u = 6.96 0.	040 6 068 3	.96 0.2 20 0.2	78 19	0.278 0.219	0.31 0.53	0.020 0 0.034 0	.146 2.45 .170 2.63	17.069	17.1699 1 18	7.447 3.026	17.447 18.026 18.082	0.634 0.056 G1/8B
10 100	G1/10A	M10/1		5.0 211.6 316.6	6 6	0.8 1.0	85 00 0.168	0.143 0.168	84.0 147.8	97.0 232.6	2.95 2.4	ON-GRADE LIP IN LINE GULLY 2.4m LINTEL; MOUNTABLE K&C	77.1	19.9 0.09 121.4 0.15	92 54 5.00	0 211.6 316.6	0.143 0.168	19.9 43 121.4 43	35.7 21.0 35.7 21.0	98.′ 132.	1 .2 4.25	3.00	375(2)	0.89 1.20 (2.75)	303.8	G2 Ki	u = 7.43 0. 0.	040 7 073 3	.43 0.29 .56 0.20	99 30	0.299 0.260	0.31 0.57	0.013 0 0.024 0	.147 2.45 .173 2.65	15.662	15.7079 10 10	5.007 5.495	16.007 16.495 16.551	0.545 0.057 G1/10A

0.100

PCS

. 7. 030

M1 sc/	11/1 – 1500r Ale 1:20	nm DIA DETAIL	<u>S</u>	0 0.2	0.4 ALE 1 :	0.6 0.8m 20 M3/22 - 1500m SCALE 1:20	m DIA	DETAILS
Associated Consultants:		<u>R.P.D.</u>						
LANDPARTNERS Surveyors & info@landpartners.com.au Ph (07)3842 1000	Planners	LOT 8 ON RP87981						
		LEVEL DATUM					TR	CBD HOUSE
		PSM 139927 RL 16 843	В	04.10.22	Н.W.	AMENDED TO COUNCIL RFI 19 SEP 2022	all'	LEVEL 3, 120 W Fortitude Vai
		MERIDIAN: IS278811	А	22.08.22	н.w.	ORIGINAL ISSUE		P.O. BOX 112 FORTITU
THIS DESIGN AND DRAWING IS COPYRIG SYSTEM OR TRANSMITTED IN ANY FO	HT. NO PART OF THIS DRAWING MA DRM WITHOUT THE WRITTEN PERMIS	Y BE REPRODUCED, STORED IN A RETRIEVAL SION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	Checked	A.C.N. 0
	Moreton Regional Co	uncil						

STORMWATER CALCULATION TABLE - SHEET 3 OF 3

	LAMBER	T & REHBEIN
		ANAGERS • SCIENTISTS
R	CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006	TELEPHONE (07) 3250 9000 FACSIMILE (07) 3250 9001 EMAIL mail@lar.net.au
Checked	A.C.N. 010 451 902	CONSULT AUSTRALIA

I.L. 11.918

0.2 0.4 0.6 0.8m

SCALE 1 : 20

750Ø RCP

Project: PROPOSED RESIDENTIAL SUBDIVISION 57–65 COACH ROAD MORAYFIELD, QLD, 4506 Title: STORMWATER CALCULATION TABLE -SHEET 3 OF 3

M.B.R.C. Ref. DA/2021/5255

	Client: LAMBERT DEVELOPMENT GROUP Pty Ltd							
Draftsperson: H.W.		Checked: Sheet A.A. Size		heet Drawing No. Size				
	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B2'	1549	9-C	209	
	Scale: AS SHOWN	Date: AUG 2022	A	В				

	EXTENT OF PROPOSED CUT
	EXTENT OF PROPOSED FILLING
1.87m RETAIN (FILL)	NOMINAL RETAINING WALL HEIGHT TO FINISHED SURFACE (DOES NOT INCORPORATE ANY ADDITIONAL HEIGHT ABOVE OR BELOW FSL WHICH MAY BE REQUIRED TO SUIT CONSTRUCTION METHODOLOGY)
18.94	FINISHED LOT EARTHWORKS LEVEL
— — — 20.00 — — —	PROPOSED FINISHED SURFACE CONTOUR
SWD ———	PROPOSED STORMWATER DRAINAGE
<u> </u>	PROPOSED TOP OF THE BATTER
	PROPOSED TOE OF THE BATTER
	PROPOSED CONCRETE SLEEPER RETAINING WALL
-	PROPOSED DRIVEWAY LOCATIONS

08/11/2022

GENERAL EARTHWORKS PROCEDURES:

- (NOT APPLICABLE FOR FOUNDATIONS UNDER BUILDINGS - REFER SITE SPECIFIC GEOTECHNICAL REPORT)
- CLEARING, STRIPPING AND GRUBBING SHOULD BE CARRIED OUT IN AREAS SUBJECT TO EARTHWORKS. ALSO ALL SOILS CONTAINING ORGANIC MATTER SHOULD BE STRIPPED FROM THE CONSTRUCTION AREA. THIS MATERIAL IS NOT CONSIDERED SUITABLE FOR USE AS STRUCTURAL FILL.
- DEPRESSIONS FORMED BY REMOVAL OF VEGETATION, UNDERGROUND ELEMENTS etc. SHOULD HAVE ALL DISTURBED WEAKENED SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT MATERIAL. THIS IS OF PARTICULAR IMPORTANCE FOLLOWING THE REMOVAL OF THE EXISTING DWELLINGS AND FOUNDATIONS
- AFTER CLEARING, GRUBBING AND STRIPPING THE EXPOSED SURFACE IN THE ROAD CONSTRUCTION AREAS, SHOULD BE PROOF ROLLED TO DETECT ANY SOFT OR LOOSE MATERIAL. WEAK SOILS, PARTICULARLY LOOSE SURFACE CLAYEY SANDS SHOULD BE COMPACTED TO THE APPROPRIATE REQUIREMENTS WHERE POSSIBLE. WEAK, OVERLY MOIST SOILS, PARTICULARLY CLAY SOILS, SHOULD BE PREFERABLY REMOVED. PROOF ROLLING OF CUT AREAS SHOULD BE DEFERRED UNTIL AFTER EXCAVATION.
- THE INSITU SOILS, WHERE FREE OF ORGANIC AND DELETERIOUS MATERIAL, MAY BE USED FOR STRUCTURAL FILL PROVIDED THE MOISTURE CONTENT OF THE SOILS ON PLACEMENT APPROXIMATES THE OPTIMUM MOISTURE CONTENT REQUIRED FOR COMPACTION. THIS MAY REQUIRE CONDITIONING TO BRING THE SOILS TO OPTIMUM. HOWEVER, IT SHOULD BE NOTED THAT PLASTIC CLAY SOILS COULD BE EXPECTED TO PRESENT DIFFICULTIES IN HANDLING, PLACEMENT AND COMPACTION IF THE APPROPRIATE MOISTURE CONTENT COULD NOT BE ACHIEVED, PARTICULARLY IF THE CLAYS WERE OVERLY MOIST.
- ANY IMPORTED FILL, IF NEEDED TO MAKE UP EARTHWORK DEFICIENCIES, SHOULD HAVE A SOAKED CBR OF NOT LESS THAN 15% AND A MAXIMUM AGGREGATE SIZE OF NOT GREATER THAN 75mm, MAX. LIQUID LIMIT = 40 MAX. P.I. = 15, MAX. P.I. x % PASSING 425um = 450
- GUIDELINES FOR MINIMUM RELATIVE COMPACTION VALUES FOR INSITU SOILS AND IMPORTED FILL FOR THE PAVEMENTS ARE PRESENTED IN THE TABLE BELOW.

LOCATION	MINIMUM DRY DENSITY RATIO (%)
BUILDING PADS	REFER SITE SPECIFIC GEOTECHNICAL REPORT RECOMMENDATIONS
ROADWAYS	
a) >0.3m BELOW PAVEMENT SUBGRADE	95 (Std.)
b) <0.3m BELOW PAVEMENT SUBGRADE	100 (S†d.)
NOTE: THE RECOMMENDED COMPACTIONS	ARE PERCENTAGES OF THE
HAMINGH DRI DENGITT DETENHINED DI	AUSTRALIAN STANDARD 1207

- FIELD DENSITY TESTING SHOULD BE CARRIED OUT TO CHECK THE STANDARD OF COMPACTION ACHIEVED AND THE PLACEMENT MOISTURE CONTENT. THE FREQUENCY AND EXTENT OF TESTING SHOULD BE AS PER GUIDELINES IN AS.3798-1996.
- BACKFILLING FOR SERVICE TRENCHES, ETC SHOULD USE GOOD QUALITY MATERIAL FREE OF ORGANIC MATERIAL. THE BACKFILL SHOULD BE PLACED IN UNIFORM LAYERS OVER THE FULL WIDTH OF THE EXCAVATIONS WITH THE LAYERS NOT EXCEEDING 200mm THICKNESS, LOOSELY PLACED. THE BACKFILL MATERIAL SHOULD BE COMPACTED TO THE SPECIFICATIONS OUTLINED ABOVE FOR INSITU OR IMPORTED COHESIVE MATERIAL. BENCHING OF BATTERED EXCAVATIONS SHOULD BE UNDERTAKEN WHEN BACKFILLING.
- BACKFILLING FOR SERVICE TRENCHES UNDER ROADWAYS SHALL BE WITH A QUALITY MATERIAL OF NOT LESS THAN (BR 15% (Soaked) TO THE UNDERSIDE OF PAVEMENT, COMPACTED AT OPTIMUM MOISTURE CONTENT TO ACHIEVE 95% MODIFIED COMPACTION.

FILL MANAGEMENT NOTES:

- 1. THE LOCATION OF FILL TO BE IMPORTED ONTO THE SITE SHALL BE AS INDICATED BY THE LEVELS ON THESE DESIGN DRAWINGS.
- THE QUALITY OF FILL SHALL MEET THE REQUIREMENTS OUTLINED IN THE EARTHWORKS SPECIFICATIONS WHICH ARE INCORPORATED INTO THE LAMBERT & REHBEIN DESIGN DRAWINGS AND SPECIFICATIONS FOR THIS DEVELOPMENT.
- 3. AT THE PRE-START MEETING THE CONTRACTOR SHALL ADVISE THE COUNCIL INSPECTOR OF THE PROPOSED SOURCE OF IMPORTED FILL TO BE BROUGHT ONTO THE DEVELOPMENT SITE AND PROVIDE ANY CERTIFICATION (IF REQUESTED BY COUNCIL) FROM THE SUPPLIER / GEOTECHNICAL CONSULTANT.
- 4. THE CONTRACTOR SHALL ALSO ADVISE THE COUNCIL INSPECTOR OF THE PROPOSED HAUL ROUTE TO BE TAKEN BY ANY TRUCKS DELIVERING FILL TO THE PROPOSED DEVELOPMENT SITE.
- 5. IT IS THE PRINCIPAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT NO FILL MATERIAL IS DEPOSITED ONTO THE ROADS USED BY DELIVERY TRUCKS. ANY MATERIAL DEPOSITED ONTO ROADWAYS SHALL BE CLEANED AS NECESSARY TO AVOID CAUSING NUISANCE TO VEHICLE TRAFFIC.
- 6. ANY VEHICLE EXITING THE DEVELOPMENT SITE SHALL BE WASHED DOWN PRIOR TO EXITING SITE IN THE NOMINATED WASH DOWN AREA TO ENSURE NO MATERIAL IS DEPOSITED ONTO ROADWAYS.
- 7. FILL SHALL BE PLACED ONTO THE SITE ONLY OUTSIDE THE AREA OF THE NOMINATED FLOOD REGULATION LINE (WHERE APPLICABLE), AND SHALL BE PLACED SO AS TO NOT CAUSE NUISANCE OR PONDING TO ADJOINING PROPERTIES.
- 8. FILLING WORKS WITHIN THE SITE SHALL ONLY TAKE PLACE BETWEEN THE HOURS OF:-7.00am - 6.00pm MONDAY TO FRIDAY
 - 7.00am 12.00 noon SATURDAY (NO FILLING WORKS ON SUNDAY)

EXISTING SERVICES NOTWITHSTANDING THAT EXISTING SERVICES MAY OR MAY NOT BE SHOWN ON THESE DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE ENGINEER OR THE PRINCIPAL FOR THIS INFORMATION	
WHICH HAS BEEN SUPPLIED BY OTHERS. THE DETAILS ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ASCERTAIN THE POSITION OF ALL UNDERGROUND SERVICES PRIOR TO EXCAVATION AND SHALL BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGES CAUSED AS A RESULT OF THE WORKS.	
M.B.R.C. Ref.	DA/2021/525
Client: LAMBERT DEVELOPMENT GROUF	Pty Ltd

	Draftsperson: H.W.	Checked: A.A.	Sheet Size	Drawing No.			
	Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21549-C302			
Scale: AS SHOWN		Date: AUG 2022	A	В			

08/11/2022

SAFETY IN DESIGN REPORT

DURING THE DESIGN LAMBERT & REHBEIN (SEQ) P/L HAS REGULARLY REVIEWED THE DESIGN IN PROGRESS TO ELIMINATE OR REDUCE SAFETY HAZARDS SO FAR AS IS REASONABLY PRACTICABLE FOR THE CONSTRUCTION, MAINTENANCE, OPERATION AND DEMOLITION OF THE PROPOSED CIVIL WORKS. IN ACCORDANCE WITH WORK HEALTH AND SAFETY ACT AND REGULATIONS, POTENTIAL RESIDUAL HAZARDS ASSOCIATED WITH THE CIVIL DESIGN AS DOCUMENTED WILL INCLUDE BUT MAY NOT BE LIMITED TO THE FOLLOWING:

RESIDA RIS	IEIOOD	ΙΡΑΤΙ	RIS RATING I
DEOITION	4	4	8
GROND IRATIONS	4	2	6
SRRONDING PROPERTY AND INFRASTRTRE INDING TREES	4	4	8
EAATIONS	4	4	8
TRIPFA AARDS	4	3	7
FIRE AND OTER EERGENY AARDS INDING EERGENY ROTES AND EITS	3	4	7
NDERGROND AND AOE GROND SERIES AND OSTRTIONS	4	4	8
IFTING AND POSITIONING OF STRTRA OPONENTS	3	4	7
AARDOS ATERIAS	3	4	7
NOISE EPOSRE FRO ONSTRTION AND SRRONDING ATIITIES	3	4	7
OER OADING DE TO ONSTRTION OADS	3	4	7
OPEN TRENING	4	4	8
NDERORE AND OTER TRENESS ETODOOGY FOR PIPEINE ONSTRTION	3	4	7
ORING AT EIGTS	3	5	8
GENERA SITE ORS AND SE OF ONSTRTION EIES EIPENT	3	5	8
SITE AESS INDING RESTRITED OR SPAES	4	4	8
INTERATION OF EIES AND PERSONNE ON TE ROADTRANSPORT NETOR	4	4	8

THE ABOVE LISTED HAZARDS ARE TO BE ADDRESSED BY IMPLEMENTING AND COMPLYING WITH THE FOLLOWING NOTES, AUSTRALIAN STANDARDS, REGULATORY REQUIREMENTS AND OTHER RELEVANT DOCUMENTATION RELATING TO THE PROPOSED WORKS:

.. IT IS TE IENTS RESPONSIIITY TO PROIDE A SAFETY IN DESIGN REPORTS TO TE IDER PROET ANAGER AND OR PRINIPA ONTRATOR

- 2. IT IS TE DER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITY TO ID TE ORS STRITY IN AORDANE IT TE ONTRAT DOENTS AND NOT TO AE ANY ARIATIONS TO TE ONSTRTION ITOT TE SPEIFI RITTEN APPROA OF TE DESIGNERS
- 3. IT IS TE IENTS RESPONSIIITY TROG ONSTATION AND ENGAGEENT OF SITAY AIFIED PROFESSIONAS TO AE TE DESIGNERS AARE OF ANY INFORATION REATING TO AARDS AND RISS ERE ONSTRTION OR IS TO E ARRIED OT INDEING T NOT IITED TO TE OATION OF NDER GROND AND AOE GROND SERIES IDENTIFIATION OF ONTAINATED SOIS AND OTER ATERIAS OR TE PRESENE OF DANGEROS ATERIAS INDING ASESTOS
- 4. TIS DESIGN AS EEN DOENTED IN AORDANE IT REEANT ASTRAIAN STANDARDS OA ATORITY REGATIONS AND STANDARD IDING ODES OF PRATIE NESS NOTED OTERISE EA EE OF ONSTRTION IS TO E OPETED AND INSPETED TO ENSRE DESIGN OPIANE Y TE ERTIFYING ATORITY PRIOR TO ADANING TO TE NET STAGE OF OR IT IS TE IDER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITY TO PROGRA TE ORS IN A SAFE ANNER AND TO IGIGT TO TE DESIGNERS ANY ASPETS OF TE OR TAT AY REIRE FRTER ARIFIATION OR ADIE IT REGARD TO TE EAT AND SAFETY OF TE PROET
- 5. A ASPETS DETAIED OR NOTED IN TE DOENTS ARE TOSE REIRED FOR TE OPETED ORS ONY TE IDER PROET ANAGER OR TE PRINIPA ONTRATOR SA E RESPONSIE FOR PROIDING ANY NEESSARY TEPORARY ORS TO AINTAIN TE STAIITY AND SAFETY OF TE ORS TROGOT TE ONSTRTION PERIOD TE DESIGNER IS TO E ONTATED FOR FTER ADIE IF REIRED
- 6. ERE TESE DESIGN DRAINGS ONY DOENT PART OF TE ORS IT IS TE IDER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITY TO ENSRE A DESIGN DRAINGS ARE OORDINATED ETEEN ONSTANTS FOR EAPE OORDINATION TO ENSRE APPROPRIATE SA TIENINGS AND DETAIING FOR OADEARING AND RAING A EEENTS ET
- 7. DRING ONTRTION TE IDER PROET ANAGER OR PRINIPA ONTRATOR SA PRTOET NEIGORING PROPERTIES FRO NOISE IN AORDANE IT OA ATORITY REIREENTS RADIATION GROND IRATIONS AND OTER ONSTRTION AARDS ONDITION DIAPIDATION REPORTS ON NEIGORING PROPERTIES AND STRTRES ARE REOENDED PRIOR TO ONSTRTION
- 8. TE IDER PROET ANAGER OR PRINIPA ONTRATOR IS REIRED TO ERIFY AND IF NEESSARY ONDT FRTER SEARES TO ARATEY OATE EASEENTS NDER GROND AND AOE GROND SERIES PROPERTY ONDARIES TREES EISTING STRTRES AND OTER OSTRTIONS PRIOR TO ONSTRTION TE DESIGNER IS TO E IEDIATEY NOTIFIED OF ANY EEENTS NOT SON ON TE APPROED DRAINGS AS TE DESIGN AND SAFETY DESIGN REPORT AY REIRE AENDING
- 9. TE IDER PROET ANAGER OR PRINIPA ONTRATOR ST OTAIN DESIGN AND INSPETION ERTIFIATES ON A EEENTS OF TE ORS I PRESENT ANY SAFETY RISS
- 10. TE ONSTRTION IS TO E FY ARRIED OT IN AORDANE IT A DESIGN DRAINGS AND NOTES AS DOENTED IF ONSTRTION EASES AT ANY STAGE TE DESIGNERS ARE TO E NOTIFIED TO PROIDE ADIE ON TE SAFETY OF OPETED ONSTRTION OR AT TAT TIE
- 11. IT IS TE IDER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITY TO INFOR TE DESIGNERS OF ANY ANGE TO ONTRATA ARRANGEENTS ETEEN TE IENT AND TESEES I AY IPAT ON TE DESIGN AND SAFETY OF TE DESIGN
- 12. TE IDER PROET ANAGER OR PRINIPA ONTRATOR SA PROIDE SITAE FENING AROND A EAATIONS AND AT NO STAGE SOD AN EAATION E APPROAED OR ENTERED INTO NESS AN APPROED AND ERTIFIED SORING SYSTE AS EEN INSTAED OR TE ANS AE EEN ATTERED AND OR ENED IN AORDANE IT TE PROETS GEOTENIA ENGINEERING SPEIFIATION AND OR RITTEN INSTRTIONS Y TE INSPETING GEOTENIA ENGINEER
- 13. AT NO STAGE SA SITE PERSONNE PASS NDER ATERIAS EING IFTED AND OED AROND ON SITE IT IS TE IDER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITYTO ENSRE TAT SITE ATERIAS ARE DEIERED TRANSPORTED STORED AND POSITIONED IN A SAFE ANNER AND IN AORDANE IT TE PRODT SPEIFIATION TE SITE SPEIFI SAFETY PAN AND GENERA SAFETY INDTION REGATIONS

EXISTING SERVICES NOTWITHSTANDING THAT EXISTING SERVICE BE SHOWN ON THESE DRAWINGS, NO RESPO BY THE ENGINEER OR THE PRINCIPAL FOR WHICH HAS BEEN SUPPLIED BY OTHERS. T PROVIDED FOR INFORMATION ONLY. THE CO ASCERTAIN THE POSITION OF ALL UNDERGR TO EXCAVATION AND SHALL BE RESPONSIB REPAIRS TO DAMAGES CAUSED AS A RESU	S MAY OR MAY NOT DNSIBILITY IS TAKEN THIS INFORMATION THE DETAILS ARE DNTRACTOR SHALL OUND SERVICES PRIOR LE FOR THE COST OF LT OF THE WORKS.					
Associated Consultants:	<u>R.P.D.</u>					
LANDPARTNERS Surveyors & Planners info@landpartners.com.au Ph (07)3842 1000	LOT 8 ON RP87981					
	LEVEL DATUM					50
	PSM 139927	В	04.10.22	H.W.	AMENDED TO COUNCIL RFI 19 SEP 2022	
	MERIDIAN: IS278811	А	22.08.22	H.W.	ORIGINAL ISSUE	
THIS DESIGN AND DRAWING IS COPYRIGHT. NO PART OF THIS SYSTEM OR TRANSMITTED IN ANY FORM WITHOUT THE W	S DRAWING MAY BE REPRODUCED, STORED IN A RETRIEVAL RITTEN PERMISSION OF LAMBERT AND REHBEIN PTY LTD	No.	Date	Ву	Amendment	Checked
More	pton Bau			-		

- 14. ONTRATORS ARE REIRED TO OTAIN AND OPY IT ATERIA PRODT SPEIFIATIONS AND REOENDATIONS EN SING ATERIAS SPEIFIED IN TE DESIGN DOENTS
- 15. TE IDER PROET ANAGER OR PRINIPA ONTRATOR ST EIINATE OR IIT AS FAR AS REASONAY PRATIAE SIP AND TRIP AARDS AND PROTRDING SARP OR ARASIE EEENTS ON SITE AARDOS EEENTS ST E APPED ADEATEY SREENED OR EARY ARED TO ENSRE SITE SAFETY
- 16. IT IS TE IDER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITY TO ENSRE TAT SITE ORERS ARE SITAY AIFIED TRAINED AND INSRED FOR TE TASS EING NERTAEN ON SITE
- 17. IT IS TE IDER PROET ANAGER OR PRINIPA ONTRATORS RESPONSIIITY TO ENSRE TAT A SITE PERSONNE ARE PROIDED IT ADEATE SPAE ENTIATION AND APPROPRIATE PERSONA PROTETIE EIPENT TO NDERTAE TE ORS REIRED A ONSTRTION EIPENT IS TO E SED IN AORDANE IT EST INDSTRY SAFETY PRATIES AND REGATIONS
- 18. DEOITION ORS ARE REIRED TO E ARRIED OT IN A SAFE SYSTEATI AND ORDERY ANNER IN AORDANE IT TE SITE SPEIFI SAFETY PAN AND A GENERA SAFETY INDTION REGATIONS TEPORARY PROPPING OF EERS AY E REIRED IN AORDANE IT TE DIRETION OF A SITAY AIFIED PROFESSIONA IN AORDANE IT INDSTRY SAFETY PRATIES AND REGATIONS
- 19. AT A TIES TE IDER TE PROET ANAGER OR PRINIPA ONTRATOR IS TO PROIDE SAFE AESS ONTO AND AROND TE SITE INDING ADEATE STAIRS SAFFODING SERE ADDER AESS SAFE ORING PATFORS AESS PATS FREE FRO FAING OETS ADEATE RAIINGS FA ARREST SYSTES ET
- 20. A FOROR AND SAFFODING SYSTES ARE TO E DESIGNED AND ERTIFIED Y A IENSED ONTRATOR TO OPY IT REEANT ASTRAIAN STANDARDS AND EPT AND AINTAINED IN A GOOD ORING ORDER REGAR ES ON ERETED EERS AND FIINGS ST E ARRIED OT Y A AIFIED PROFESSIONA TO ENSRE OPIANE IT TE DESIGN
- 21. IING ON SAFFODING OR FOROR AND ORING AT EIGTS ITOT SITAY APPROED RAIINGS ARRIERS AND RESTRAINTS FIED OFF TO ERTIFIED ANOR POINTS IS STRITY PROIITED
- 22. A SITE AINERY AND EETRIA EIPENT IS TO E EPT IN GOOD ORING ORDER IT RRENT SAFETY TAGGING AND SERIING ERE APPIAE
- 23. TE IDER PROET ANAGER OR PRINIPA ONTRATOR IS TO ADEATEY TREAT AND DISPOSE OF DANGEROS SITE ATERIAS INDING ONTAINATED SOIS AND ASESTOS IN AORDANE IT ATORITY REGATIONS INDSTRY STANDARDS AND PRATIES
- 24. TE IDER PROET ANAGER OR PRINIPA ONTRATOR IS TO ENSRE TAT TE SITE IS AINTAINED IN A SAFE ORING ANNER AND TAT A SITE PRATIES ARE IN AORDANE IT RRENT OR PAE EAT AND SAFETY AS AND REGATIONS

L) Likelihood of the consequences occurring				
Rating	Description			
Almost Certain 5	Has happened several times in the past year and in each of the previous 5 years OR has a > 90% chance of occurring in the next 24 months if the risk is not mitigated			
Likely 4	Has happened at least once in the past year and in each of the previous 5 years OR has a 60-90% chance of occurring in the next 24 months if the risk is not mitigated.			
Possible 3	Has happened during the past 5 years but not in every year OR has a 40-60% chance of occurring in the next 24 months if the risk is not mitigated.			
Unlikely 2	May have occurred once in the last 5 years OR has a 10-30% chance of occurring in the future if the risk is not mitigated.			
Rare 1	Has not occurred in the past 5 years OR may occur in exceptional circumstances, i.e. less than 10% chance of occurring in the next 24 months if the risk is not mitigated.			

I) Impact or Consequence Rating Table				
Rating	Description			
Severe	One or more fatalities or life threatening injuries or illness, OR Public or staff exposed to a			
5	severe, adverse long-term health impact or life-threatening hazard			
Major	One or more major injuries or illness requiring major surgery or resulting in permanent			
4	permanent disablement or adverse permanent health effects			
Moderate	One or more injuries or illness requiring treatment by a physician or hospitalization OR			
3	effects.			
Minor	One or more injuries or illness requiring treatment by a qualified first aid person OR			
2	health effects.			
Negligible	Minor injury or ailment that does NOT require medical treatment by a physician or a qualified first aid person.			

Risk level	Required
lawy High	Act immed The propo lower the controls.
High	Act today The propo (i) the risk hierarchy (ii) the risk of Practice (iii) the ris (iv) The su implemen
Medium	Act this w The propo (i) the risk hierarchy (ii) the risk
Low	Act this m Managed of the hier
Very Low	Keep a wa Although determine

Likelihood	Consequence	Rating			
Rating	Severe	Major	Moderate	Minor	Negligible
	5	4	3	2	1
Almost Certain	Very High	Very High	High	High	Medium
5	10	9	8	7	6
Likely	Very High	High	High	Medium	Medium
4	9	8	7	6	5
Possible	High	High	Medium	Medium	Low
3	8	7	6	5	4
Unlikely	High	Medium	Medium	Low	Low
2	7	6	5	4	3
Rare	Medium	Medium	Low	Low	Very Low
1	6	5	4	3	2

TA

LAMBERT & REHBEIN ENGINEERS • MANAGERS • SCIENTISTS

CBD HOUSE LEVEL 3, 120 WICKHAM STREET FORTITUDE VALLEY QLD 4006 P.O. BOX 112 FORTITUDE VALLEY QLD 4006 A.C.N. 010 451 902

15

Project: PROPOSED RESIDENTIAL SUBDIVISION 57-65 COACH ROAD MORAYFIELD, QLD, 4506 SAFETY IN DESIGN REPORT Title:

Approved subject to conditions of Decision Notice DA/2022/3326

action

osed task or process activity must not proceed. Steps must be taken to risk level to as low as reasonably practicable using the hierarchy of risk

osed activity can only proceed, provided that: level has been reduced to as low as reasonably practicable using the of risk controls; k controls must include those identified in legislation, Standards, Codes

e etc. sk assessment has been reviewed and approved by the Supervisor and upervisor must review and document the effectiveness of the nted risk controls.

eek:

oosed task or process can proceed, provided that:

k level has been reduced to as low as reasonably practicable using the y of risk controls; assessment has been reviewed and approved by the Supervisor.

nonth:

d by local documented routine procedures which must include application rarchy of controls.

atching brief:

the risk level is low the situation should be monitored periodically to e if the situation changes.

s	
ard — remove it completely from your workplace.	() that is it practical. First
tard — with a safer alternative.	if this set practical them
I — as much as possible away from workers.	g the set practical them.
ontrols — adapt tools or equipment to reduce the risk.	g this isa't practical, then
e controls — change work practices and organisation.	() this ise't practical, then
ective equipment (PPE) — this should be the last option after d all the other options for your workplace.	

LAMBERT DEVELOPMENT GROUP Pty Ltd								
Draftsperson: H.W.	Checked: A.A.	Sheet Drawing No. Size				Sheet Drawing No. Size		
Designer: H.W.	Approved: A.PEZZUTTI RPEQ No: 6382	A1	B21549-C900					
Scale: AS SHOWN	Date: AUG 2022	A	В					

ATTACHMENT 4

Appeal Rights

Chapter 6 Dispute resolution

Part 1 Appeal rights

229 Appeals to tribunal or P&E Court

- (1) Schedule 1 states-
 - (a) matters that may be appealed to-
 - (i) either a tribunal or the P&E Court; or
 - (ii) only a tribunal; or
 - (iii) only the P&E Court; and
 - (b) the person-
 - (i) who may appeal a matter (the *appellant*); and
 - (ii) who is a respondent in an appeal of the matter; and
 - (iii) who is a co-respondent in an appeal of the matter; and
 - (iv) who may elect to be a co-respondent in an appeal of the matter.
- (2) An appellant may start an appeal within the appeal period.
- (3) The appeal period is—
 - (a) for an appeal by a building advisory agency—10 business days after a decision notice for the decision is given to the agency; or
 - (b) for an appeal against a deemed refusal—at any time after the deemed refusal happens; or
 - (c) for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises—20 business days after a notice is published under section 269(3)(a) or (4); or

Current as at 10 June 2022

[s 229]

- (d) for an appeal against an infrastructure charges notice—20 business days after the infrastructure charges notice is given to the person; or
- (e) for an appeal about a deemed approval of a development application for which a decision notice has not been given—30 business days after the applicant gives the deemed approval notice to the assessment manager; or
- (f) for an appeal relating to the *Plumbing and Drainage Act* 2018—
 - (i) for an appeal against an enforcement notice given because of a belief mentioned in the *Plumbing and Drainage Act 2018*, section 143(2)(a)(i), (b) or (c)-5 business days after the day the notice is given; or
 - (ii) for an appeal against a decision of a local government or an inspector to give an action notice under the *Plumbing and Drainage Act 2018*—5 business days after the notice is given; or
 - (iii) for an appeal against a failure to make a decision about an application or other matter under the *Plumbing and Drainage Act 2018*—at anytime after the period within which the application or matter was required to be decided ends; or
 - (iv) otherwise—20 business days after the day the notice is given; or
- (g) for any other appeal—20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

Note-

See the P&E Court Act for the court's power to extend the appeal period.

(4) Each respondent and co-respondent for an appeal may be heard in the appeal.

- (2) The Judicial Review Act 1991, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
- (3) A person who, but for subsection (1) could have made an application under the *Judicial Review Act 1991* in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.
- (4) In this section—

decision includes-

- (a) conduct engaged in for the purpose of making a decision; and
- (b) other conduct that relates to the making of a decision; and
- (c) the making of a decision or the failure to make a decision; and
- (d) a purported decision; and
- (e) a deemed refusal.

non-appealable, for a decision or matter, means the decision or matter—

- (a) is final and conclusive; and
- (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the *Judicial Review Act 1991* or otherwise, whether by the Supreme Court, another court, any tribunal or another entity; and
- (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, any tribunal or another entity on any ground.

232 Rules of the P&E Court

- A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
- (2) However, the P&E Court may hear and decide an appeal even if the person has not complied with rules of the P&E Court.

[s 231]

- (e) each person who may elect to be a co-respondent for the appeal other than an eligible submitter for a development application or change application the subject of the appeal; and
- (f) for an appeal to the P&E Court—the chief executive; and
- (g) for an appeal to a tribunal under another Act—any other person who the registrar considers appropriate.
- (4) The service period is—
 - (a) if a submitter or advice agency started the appeal in the P&E Court—2 business days after the appeal is started; or
 - (b) otherwise—10 business days after the appeal is started.
- (5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
- (6) A person elects to be a co-respondent to an appeal by filing a notice of election in the approved form—
 - (a) if a copy of the notice of appeal is given to the person—within 10 business days after the copy is given to the person; or
 - (b) otherwise—within 15 business days after the notice of appeal is lodged with the registrar of the tribunal or the P&E Court.
- (7) Despite any other Act or rules of court to the contrary, a copy of a notice of appeal may be given to the chief executive by emailing the copy to the chief executive at the email address stated on the department's website for this purpose.

231 Non-appealable decisions and matters

 Subject to this chapter, section 316(2), schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.

- (5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.
- (6) To remove any doubt, it is declared that an appeal against an infrastructure charges notice must not be about—
 - (a) the adopted charge itself; or
 - (b) for a decision about an offset or refund-
 - (i) the establishment cost of trunk infrastructure identified in a LGIP; or
 - (ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

230 Notice of appeal

- An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that—
 - (a) is in the approved form; and
 - (b) succinctly states the grounds of the appeal.
- (2) The notice of appeal must be accompanied by the required fee.
- (3) The appellant or, for an appeal to a tribunal, the registrar, must, within the service period, give a copy of the notice of appeal to—
 - (a) the respondent for the appeal; and
 - (b) each co-respondent for the appeal; and
 - (c) for an appeal about a development application under schedule 1, section 1, table 1, item 1—each principal submitter for the application whose submission has not been withdrawn; and
 - (d) for an appeal about a change application under schedule 1, section 1, table 1, item 2—each principal submitter for the application whose submission has not been withdrawn; and