

DA Form 2 – Building work details

Approved form (version 1.2 effective 7 February 2020) made under Section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving building work**.

For a development application involving **building work only**, use this form (DA Form 2) only. The DA Forms Guide provides advice about how to complete this form.

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

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

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

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

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

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	Leigh & Elizabeth Osborne
Contact name (only applicable for companies)	Leigh & Elizabeth Osborne
Postal address (PO Box or street address)	P O Box 591
Suburb	MOSSMAN
State	QLD
Postcode	4873
Country	
Contact number	
Email address (non-mandatory)	leighosborne@yahoo.com.au
Mobile number (non-mandatory)	0407 376 069
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

PART 2 – LOCATION DETAILS

2) Location of the premises (complete 2.1 and/or 2.2 if applicable)	
Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see DA Forms Guide: Relevant plans .	
2.1) Street address and lot on plan	
<input type="checkbox"/> Street address AND lot on plan (all lots must be listed), or	
<input type="checkbox"/> Street address AND lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).	

Unit No.	Street No.	Street Name and Type	Suburb
		Splendour Rd	MOSSMAN
Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
4873	7	RP 907340	Douglas Shire Council

2.2) Additional premises

- ☐ Additional premises are relevant to this development application and the details of these premises have been attached in a schedule to this development application
- ☐ Not required

3) Are there any existing easements over the premises?

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

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

PART 3 – FURTHER DETAILS

4) Is the application only for building work assessable against the building assessment provisions?

- ☐ Yes – (proceed to 8)
- ☐ No

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

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

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

7) Information request under Part 3 of the DA Rules

- ☐ I agree to receive an information request if determined necessary for this development application
- ☐ I do not agree to accept an information request for this development application

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

- that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties.
- Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.

Further advice about information requests is contained in the [DA Forms Guide](#).

8) Are there any associated development applications or current approvals?

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

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

9) Has the portable long service leave levy been paid?

- ☐ Yes – a copy of the receipted QLeave form is attached to this development application

<input type="checkbox"/> No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid		
<input type="checkbox"/> Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)		
Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

10) Is this development application in response to a show cause notice or required as a result of an enforcement notice?
<input type="checkbox"/> Yes – show cause or enforcement notice is attached
<input type="checkbox"/> No

11) Identify any of the following further legislative requirements that apply to any aspect of this development application			
<input type="checkbox"/> The proposed development is on a place entered in the Queensland Heritage Register or in a local government's Local Heritage Register . See the guidance provided at www.des.qld.gov.au about the requirements in relation to the development of a Queensland heritage place			
Name of the heritage place:		Place ID:	

PART 4 – REFERRAL DETAILS

12) Does this development application include any building work aspects that have any referral requirements?
<input type="checkbox"/> Yes – the Referral checklist for building work is attached to this development application
<input type="checkbox"/> No – proceed to Part 5

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

PART 5 – BUILDING WORK DETAILS

14) Owner's details	
<input type="checkbox"/> Tick if the applicant is also the owner and proceed to 15). Otherwise, provide the following information.	
Name(s) (individual or company full name)	Leigh & Elizabeth Osborne
Contact name (applicable for companies)	Leigh & Elizabeth Osborne
Postal address (P.O. Box or street address)	P O Box 591
Suburb	MOSSMAN
State	QLD
Postcode	4873
Contact number	
Email address (non-mandatory)	leighoborne@yahoo.com.au
Mobile number (non-mandatory)	0407 376 069
Fax number (non-mandatory)	

15) Builder's details

☐ Tick if a builder has not yet been engaged to undertake the work and proceed to 16). Otherwise provide the following information.

Name(s) <i>(individual or company full name)</i>	Leigh & Elizabeth Osborne
Contact name <i>(applicable for companies)</i>	Leigh & Elizabeth Osborne
QBCC licence or owner – builder number	
Postal address <i>(P.O. Box or street address)</i>	P O Box 591
Suburb	MOSSMAN
State	QLD
Postcode	4873
Contact number	
Email address <i>(non-mandatory)</i>	leighoborne@yahoo.com.au
Mobile number <i>(non-mandatory)</i>	0407 376 069
Fax number <i>(non-mandatory)</i>	

16) Provide details about the proposed building work

a) What type of approvals is being sought?

- ☐ Development permit
☐ Preliminary approval

b) What is the level of assessment?

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

c) Nature of the proposed building work (tick all applicable boxes)

- | | |
|---|--|
| <input type="checkbox"/> New building or structure | <input type="checkbox"/> Repairs, alterations or additions |
| <input type="checkbox"/> Change of building classification <i>(involving building work)</i> | <input type="checkbox"/> Swimming pool and/or pool fence |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Relocation or removal |

d) Provide a description of the work below or in an attached schedule.

New Construction of Dwelling - 1 Storey & New Construction of Attached Deck & New Construction of Attached Garage

e) Proposed construction materials

External walls	<input type="checkbox"/> Double brick <input type="checkbox"/> Brick veneer <input type="checkbox"/> Stone/concrete	<input type="checkbox"/> Steel <input type="checkbox"/> Timber <input type="checkbox"/> Fibre cement	<input type="checkbox"/> Curtain glass <input type="checkbox"/> Aluminium <input type="checkbox"/> Other
Frame	<input type="checkbox"/> Timber <input type="checkbox"/> Other	<input type="checkbox"/> Steel	<input type="checkbox"/> Aluminium
Floor	<input type="checkbox"/> Concrete	<input type="checkbox"/> Timber	<input type="checkbox"/> Other
Roof covering	<input type="checkbox"/> Slate/concrete <input type="checkbox"/> Aluminium	<input type="checkbox"/> Tiles <input type="checkbox"/> Steel	<input type="checkbox"/> Fibre cement <input type="checkbox"/> Other

f) Existing building use/classification? *(if applicable)*

g) New building use/classification? (if applicable)		
1a & 10b & 10a		
h) Relevant plans <i>Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.</i>		
<input type="checkbox"/> Relevant plans of the proposed works are attached to the development application		
17) What is the monetary value of the proposed building work?		
380,000.00		
18) Has Queensland Home Warranty Scheme Insurance been paid?		
<input type="checkbox"/> Yes – provide details below		
<input type="checkbox"/> No		
Amount paid	Date paid (dd/mm/yy)	Reference number
\$		

PART 6 – CHECKLIST AND APPLICANT DECLARATION

19) Development application checklist	
The relevant parts of <i>Form 2 – Building work details</i> have been completed	<input type="checkbox"/> Yes
This development application includes a material change of use, reconfiguring a lot or operational work and is accompanied by a completed <i>Form 1 – Development application details</i>	<input type="checkbox"/> Yes <input type="checkbox"/> Not applicable
Relevant plans of the development are attached to this development application <i>Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans</i>	<input type="checkbox"/> Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued	<input type="checkbox"/> Yes <input type="checkbox"/> Not applicable
20) Applicant declaration	
<input type="checkbox"/> By making this development application, I declare that all information in this development application is true and correct <input type="checkbox"/> Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the <i>Electronic Transactions Act 2001</i> <i>Note: It is unlawful to intentionally provide false or misleading information.</i>	
<p>Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website. Personal information will not be disclosed for a purpose unrelated to the <i>Planning Act 2016</i>, <i>Planning Regulation 2017</i> and the DA Rules except where:</p> <ul style="list-style-type: none"> such disclosure is in accordance with the provisions about public access to documents contained in the <i>Planning Act 2016</i> and the <i>Planning Regulation 2017</i>, and the access rules made under the <i>Planning Act 2016</i> and <i>Planning Regulation 2017</i>; or required by other legislation (including the <i>Right to Information Act 2009</i>); or otherwise required by law. <p>This information may be stored in relevant databases. The information collected will be retained as required by the <i>Public Records Act 2002</i>.</p>	

PART 7 –FOR COMPLETION BY THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received: Reference numbers:

For completion by the building certifier		
Classification(s) of approved building work		
1a & 10b & 10a		
Name	QBCC Certification Licence number	QBCC Insurance receipt number
GMA Certification Group		

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

Additional information required by the local government				
Confirm proposed construction materials:				
External walls	<input type="checkbox"/> Double brick	<input type="checkbox"/> Steel	<input type="checkbox"/> Curtain glass	
	<input type="checkbox"/> Brick veneer	<input type="checkbox"/> Timber	<input type="checkbox"/> Aluminium	
	<input type="checkbox"/> Stone/concrete	<input type="checkbox"/> Fibre cement	<input type="checkbox"/> Other	
Frame	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel	<input type="checkbox"/> Aluminium	
	<input type="checkbox"/> Other			
Floor	<input type="checkbox"/> Concrete	<input type="checkbox"/> Timber	<input type="checkbox"/> Other	
Roof covering	<input type="checkbox"/> Slate/concrete	<input type="checkbox"/> Tiles	<input type="checkbox"/> Fibre cement	
	<input type="checkbox"/> Aluminium	<input type="checkbox"/> Steel	<input type="checkbox"/> Other	

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

Additional building details required for the Australian Bureau of Statistics			
Existing building use/classification? (if applicable)			
New building use/classification?			
Site area (m ²)	20040	Floor area (m ²)	382

GMA Certification Group Pty Ltd

BUILDING SURVEYORS

Queensland's leaders in Building Certification Services



PORT DOUGLAS OFFICE

PHONE: (07) 4098 5150
FAX: (07) 4098 5180

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Craiglie Business Park
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CRAIGLIE QLD 4877

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P.O. Box 831,
PORT DOUGLAS QLD 4877

E-Mail: adminpd@gmacert.com.au
Web: www.gmacert.com.au

5 August 2020

The Chief Executive Officer
Douglas Shire Council
PO Box 723
MOSSMAN Q 4873

Attention: Development Assessment

Dear Sir,

**Re: Application for Building Work Made Assessable Development under the Planning Scheme
Lot 7 RP907340 Syndicate Road, Mossman**

GMA Certification Group has been engaged to assess an application for the construction of a dwelling on the abovementioned allotment. The subject site is located within a Rural Zone and the proposed dwelling does not comply with the prescribed road boundary setbacks in the Code. Further, the dwelling may be located on an area of the land affected by the Flood Plain Assessment, Bushfire and Landscape Values Overlays.

Accordingly, please find the application for Building Work Made Assessable Development under the Planning Scheme, which includes:

1. DA Form 2;
2. Waste Water Report
3. Assessment; &
4. Plans

ASSESSMENT

Flood & storm tide hazard overlay code

The property is partly affected by the Floodplain Assessment Overlay. However, there is no evidence the property has ever been affected by flooding. Further, contour maps reveal the Floodplain Assessment Overlay may be inaccurate. The dwelling is to be constructed on an elevated section of the land.

BUILDING APPROVALS & INSPECTIONS

Gold Coast
(07) 5578 1622

Sunshine Coast
(07) 5449 0383

Cloncurry
(07) 4742 2022

BUILDING CERTIFICATION

Chinchilla
(07) 4669 1166

FIRE SAFETY AUDITS

Atherton
(07) 4091 4196

Childers
(07) 4126 3069

Rural Zone Code

Rural Zone Code		
Performance Outcomes	Acceptable Outcomes	Comment
For assessable and self assessable development		
PO2 Buildings and structures are setback to maintain the rural character of the area and achieve separation from buildings on adjoining properties.	AO2 Buildings are setback not less than: (a) 40 metres from the property boundary and a State-controlled road; (b) 25 metres from the property boundary adjoining Cape Tribulation Road; (c) 20 metres from the boundary with any other road; (d) 6 metres from side and rear property boundaries.	The dwelling is to be constructed up to 17m from the road boundary. The proposed setback is consistent with the existing dwellings and sheds in the vicinity. Additionally, there is sufficient existing vegetation between the proposed dwelling and the road reserve to effectively screen the building. Accordingly, the proposed location will not affect the rural character of the area. Further, as the area is sparsely populated the proposed location will achieve adequate separation from adjoining properties.

Bushfire Hazard Overlay

Bushfire Hazard Overlay		
Performance Outcomes	Acceptable Outcomes	Comment
PO1 A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances.	AO1 Vulnerable uses are not established or expanded.	The proposal is not a vulnerable use.
AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.	AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.	NA
PO3 Development involving hazardous materials	AO3 The manufacture or storage of hazardous material in bulk	NA

manufactured or stored in bulk is not located in bushfire hazard sub-category.	does not occur within bushfire hazard sub-category.	
<p>PO10 Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of: (a) 10kW/m² where involving a vulnerable use; or 29kW/m² otherwise.</p> <p>The radiant heat flux level is achieved by separation unless this is not practically achievable.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p>	<p>AO10 Buildings or building envelopes are separated from hazardous vegetation by a distance that: (b) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> <p>For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.</p> <p>Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>	The proposed development has sufficient separation distances from vegetation so as to achieve compliance.
<p>PO11 A formed, all weather fire trail is provided between the hazardous vegetation</p>	<p>AO11 Development sites are separated from hazardous vegetation by a public road</p>	The nearby vegetation is not considered hazardous.

<p>and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p> <p>Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha</p>	<p>or fire trail which has:</p> <p>(c) a reserve or easement width of at least 20m;</p> <p>a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;</p> <p>no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path;</p> <p>a minimum of 4.8m vertical clearance;</p> <p>turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;</p> <p>a maximum gradient of 12.5%;</p> <p>a cross fall of no greater than 10 degrees;</p> <p>drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy;</p> <p>vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m;</p> <p>designated fire trail signage; if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and</p> <p>if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.</p>	
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<p>PO12 All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.</p>	<p>AO12 Private driveways: (d) do not exceed a length of 60m from the street to the building; do not exceed a gradient of 12.5%; have a minimum width of 3.5m; have a minimum of 4.8m vertical clearance; accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and serve no more than 3 dwellings or buildings.</p>	<p>Proposal complies.</p>
<p>PO13 Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.</p>	<p>AO13 A water tank is provided within 10m of each building (other than a class 10 building) which: (e) is either below ground level or of non-flammable construction; (f) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (i) 10,000l for residential buildings Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams. 45,000l for industrial buildings; and 20,000l for other buildings; includes shielding of tanks and pumps in</p>	<p>It is proposed to provide sufficient water storage to comply with this Acceptable Outcome. However, water supply is to be provided via above ground plastic tank/s as with 99% of the of properties not on a reticulated water supply.</p>

	<p>accordance with the relevant standards;</p> <p>includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank;</p> <p>is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and</p> <p>is clearly identified by directional signage provided at the street frontage.</p>	The tank/s will have top access for a suction line.
<p>PO14</p> <p>Landscaping does not increase the potential bushfire risk.</p>	<p>AO14</p> <p>Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.</p>	Noted.
<p>PO15</p> <p>The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).</p>	<p>AO15</p> <p>Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.</p>	Noted.

Landscape Values Overlay Code

Landscape Values (Medium) Overlay		
Performance Outcomes	Acceptable Outcomes	Comment
<p>PO2</p> <p>Development within Medium landscape value areas identified on the Landscape values overlay maps contained in Schedule 2:</p> <p>(a) avoids detrimental impacts on the landscape values of forested skylines, visible hillslopes,</p>	<p>AO2.1</p> <p>Buildings and structures are not more than 8.5 metres and two storeys in height.</p> <p>Note - Height is inclusive of the roof height.</p> <p>AO2.2</p> <p>Development is screened from view from roads or other public places by an</p>	<p>Proposal complies.</p> <p>The land between the road and proposed dwelling has existing vegetation which will provide screening.</p>

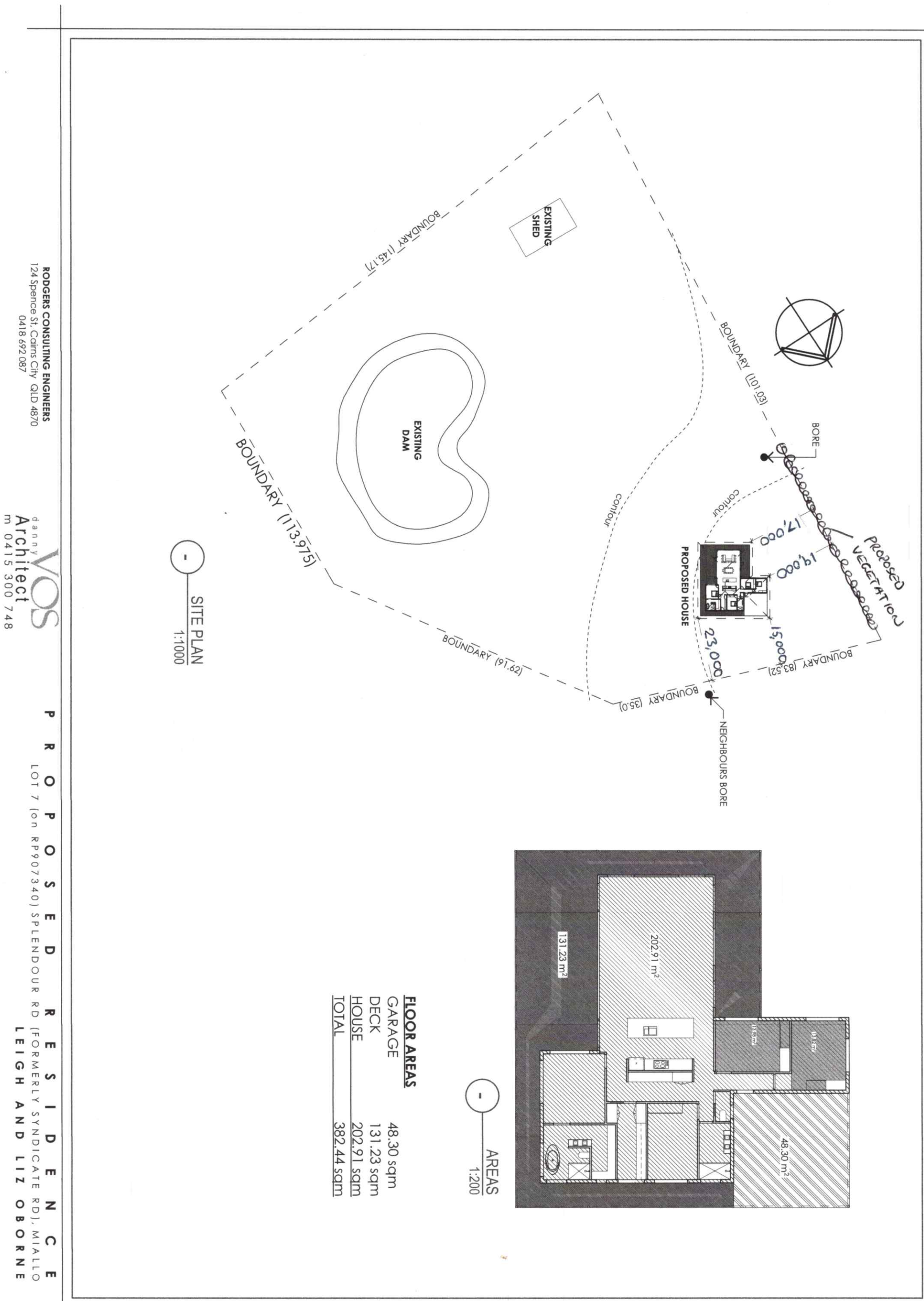
of telecommunications facilities, electricity towers, poles and lines and other tall infrastructure; (g) extractive industry operations are avoided, or where they cannot be avoided, are screened from view.		
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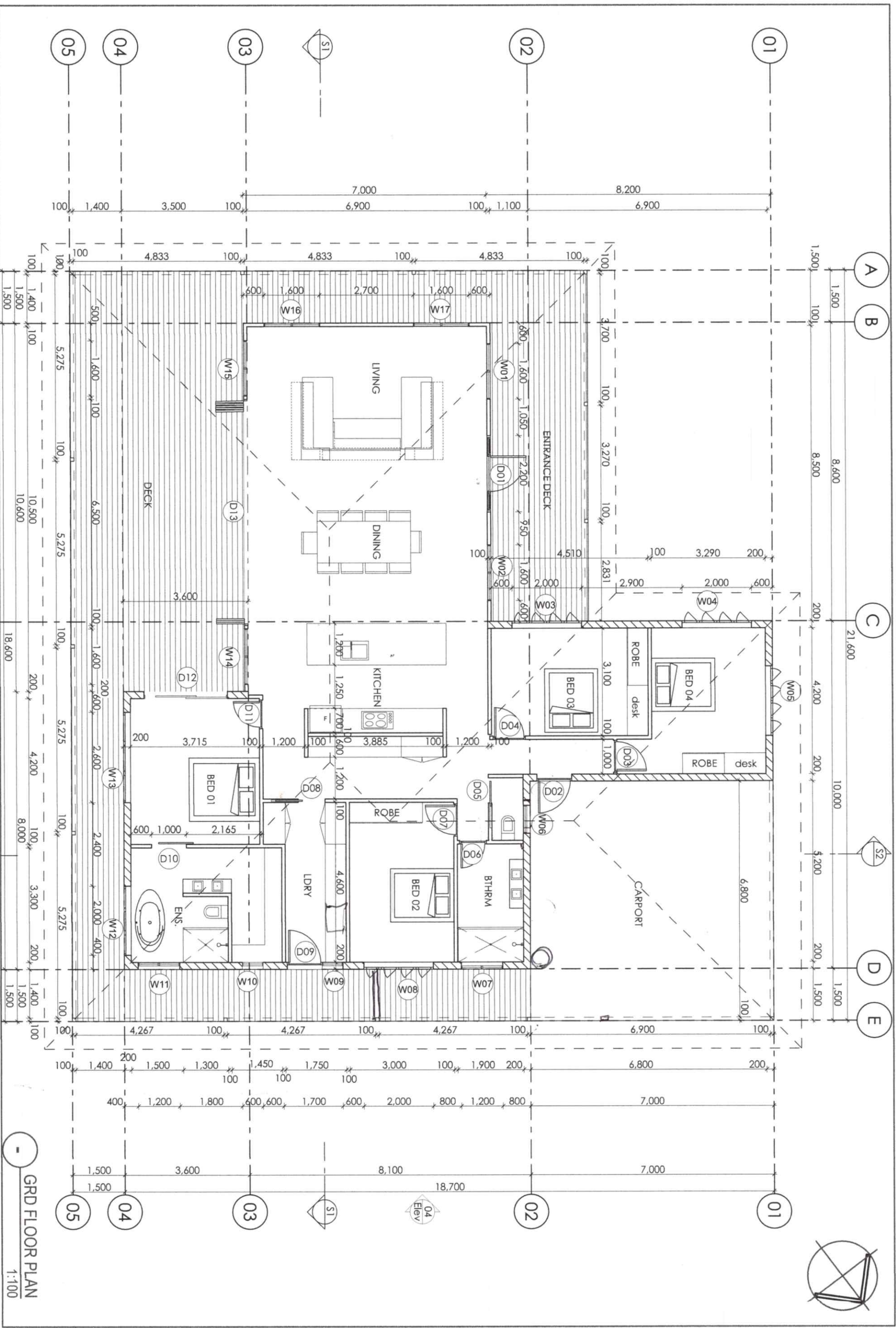
Should you require any further information or wish to discuss the application, please contact me on 4098 5150 or by email adminpd@gmcert.com.au

Kind Regards,



Jeff Evans
GMA Certification Group



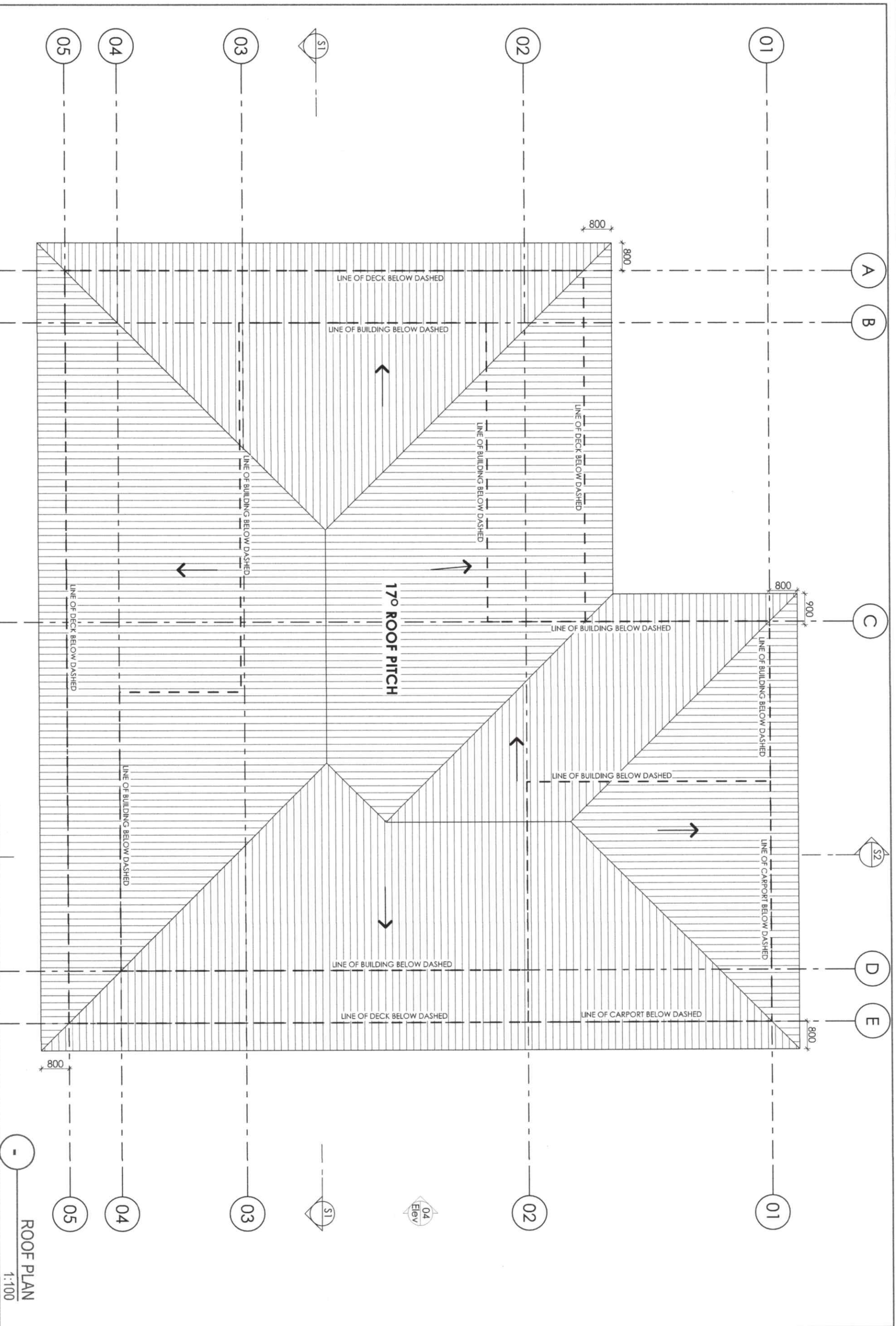


RODGERS CONSULTING ENGINEERS
124 Spence St, Cairns City QLD 4870
0418 692 087

VOSS
danny
Architect
m 0415 300 748

P R O P O S E D R E S I D E N C E
LOT 7 (on RP907340) SPLENDOR RD (FORMERLY SYNDICATE RD), MIALLO
LEIGH AND LIZ OBORNE

GRD FLOOR PLAN
1:100



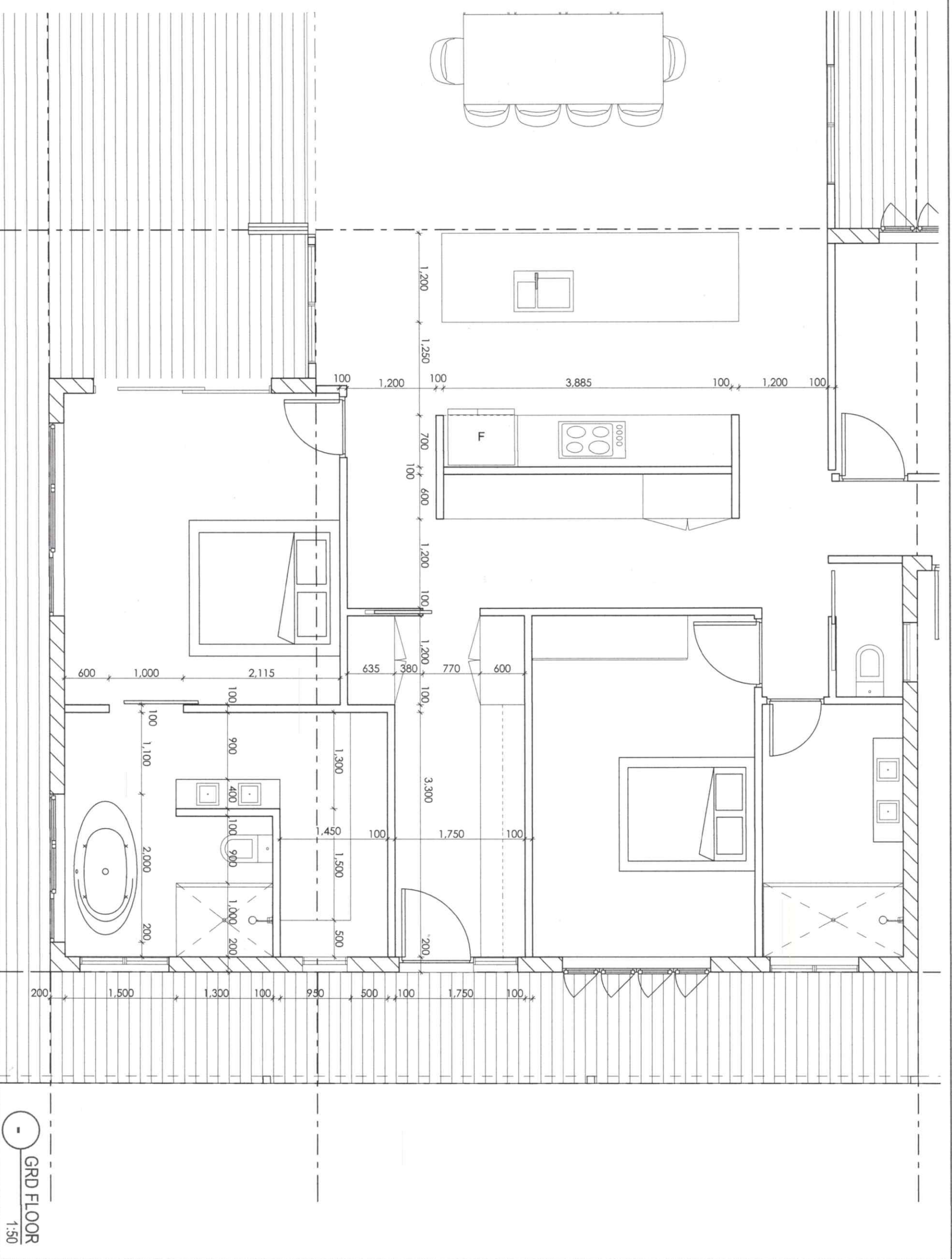
ROOF PLAN

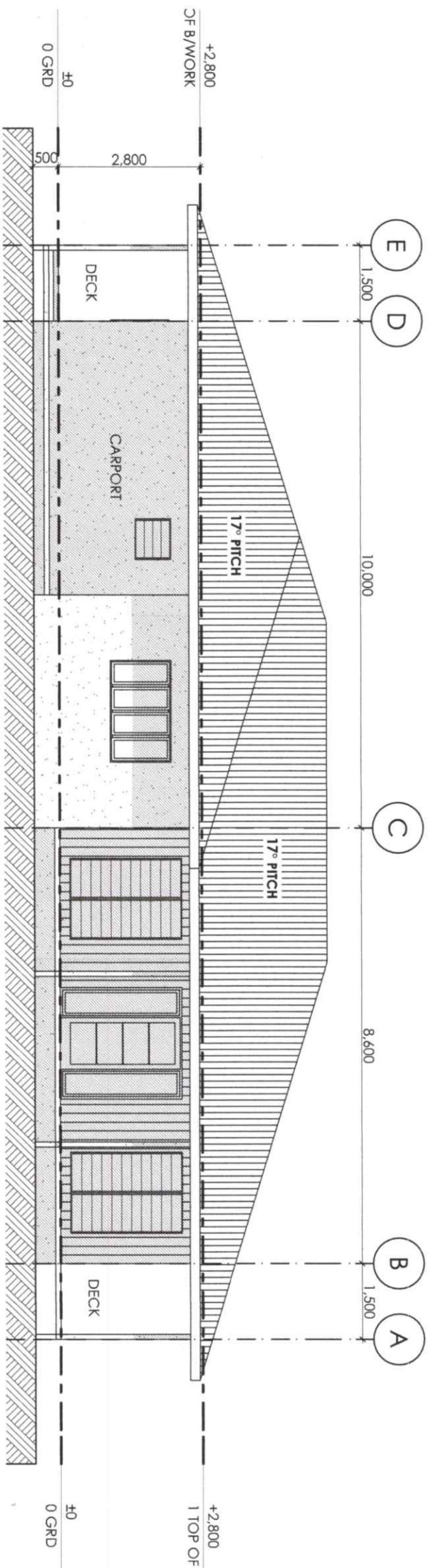
1:100

RODGERS CONSULTING ENGINEERS
124 Spence St, Cairns City QLD 4870
0418 692 087

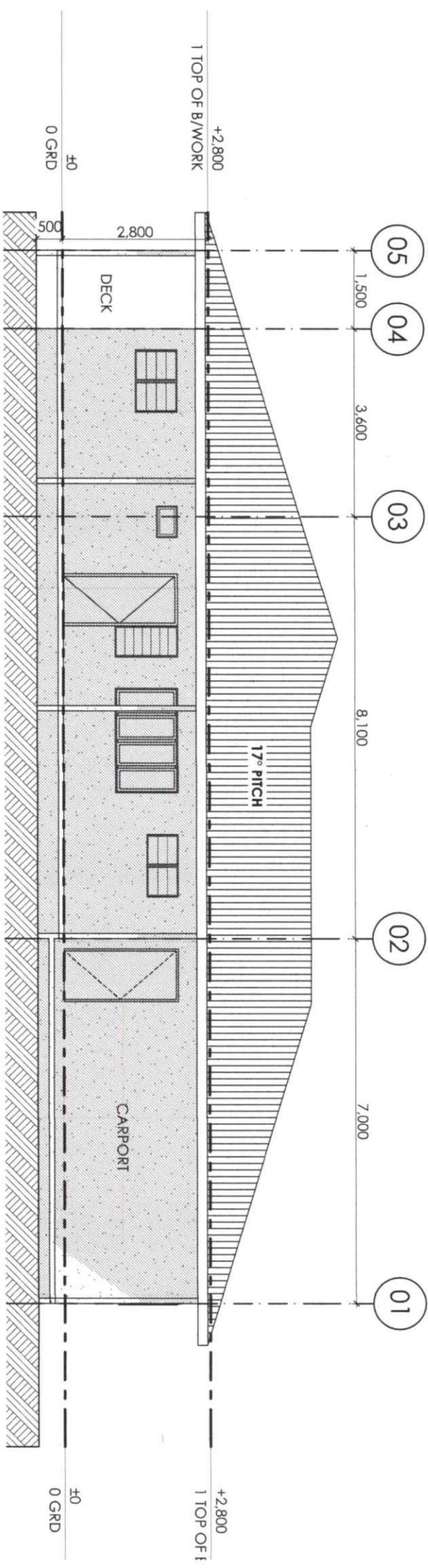
YOS
danny
Architect
m 0415 300 748

P R O P O S E D R E S I D E N C E
LOT 7 (on RP907340) SPLENDOR RD (FORMERLY SYNDICATE RD), MIALLO
LEIGH AND LIZ OBORNE

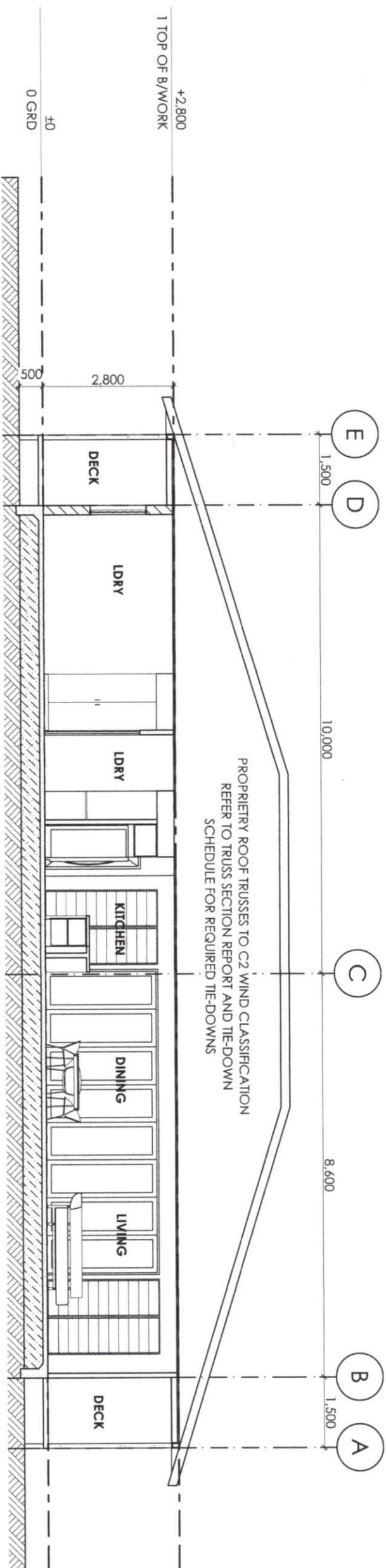




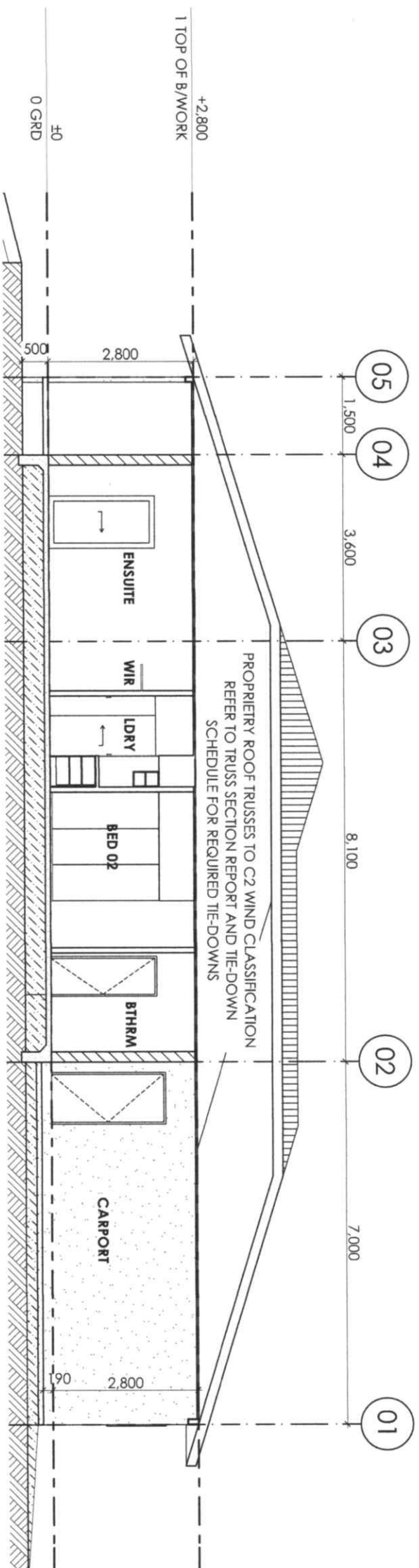
Elev 03
1:100



Elev 04
1:100



Section 01
1:100



Section 02
1:100



Site Classification

And

Wastewater Management System

For

Leigh Osborne

At

Lot 7 Splendour Road

Mossman

INTRODUCTION:

Earth Test has been engaged by Leigh Osborne to assess, design and report on Site Classification and a Domestic Wastewater Management System at Lot 7 Splendour Road, Mossman.

Real Property Description:-

Lot 7, on RP 907340

Local Authority: Douglas Shire Council.

It is understood the intention is to construct a new dwelling at the site.

A site and soil evaluation was carried out in April 2020.

SITE FACTORS:

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

The Lot has an area of 2.004 hectares and is predominantly covered with grass.

The water supply to the site is from a bore as shown on the site plan.

No rock outcrops were noted at the site. A small dam was noted during the investigation.

Four Dynamic Cone Penetrometer tests were performed at locations DCP1 through to DCP4, one borehole BH1 and one constant head soil permeability test P1 as shown on the site plan.

Atterberg Limits tests were performed on a disturbed sample from Borehole 1.



BH1 being sampled at Lot 7 Splendour Road, Mossman



SITE INVESTIGATION REPORT

BOREHOLE LOG

CLIENT: Leigh Osborne.		DATE SAMPLED: 03/04/2020
PROJECT: Lot 7 Splendour Road, Mossman.		Sampled by: G. Negri & C. English
REPORT DATE: 10/04/2020		
BOREHOLE No: BH1		
DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.5	Brown Mottled Grey Clay-Silt	Disturbed sample 0.6- 0.9m. Watertable not encountered
0.5-0.9	Orange-Brown Clay-Silt	
0.9-1.2	Brown Clay-Silt	
1.2-1.4	Yellow-Brown Clay-Silt	
1.4-2.0	Brown Clay-Silt with Gravel	
BOREHOLE No: BH2		
DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.6	Brown Mottled Grey Clay-Silt	Watertable not encountered
0.6-1.0	Yellow-Brown Clay-Silt	
1.0-1.5	White Clay-Silt	



ATTERBERG LIMITS TEST REPORT

CLIENT: Leigh Osborne

SAMPLE No: SI 166-20

PROJECT: Lot 7 Splendour Road, Mossman

DATE SAMPLED: 03/04/2020

SAMPLE DETAILS: BH1 0.6-0.9

Sampled by: G. Negri & C. English

REPORT DATE: 10/04/2020

Tested By: P. Weigand

TEST METHOD	RESULT
Liquid Limit: AS 1289.3.9.2	36%
Plastic Limit: AS 1289.3.2.1	25%
Plasticity Index: AS 1289.3.3.1	11%
Linear Shrinkage: AS 1289.3.4.1	5.0%
Length Of Mould:	250.3mm
Cracking, Crumbling, Curling, Number Of Breaks:	Nil
Sample History:	Air Dried
Preparation Method:	Dry Sieved
Insitu Moisture Content:	18.4%
% Passing 0.075mm:	



DYNAMIC CONE PENETROMETER REPORT

AS 1289.6.3.2

CLIENT: Leigh Osborne

SAMPLE No: SI 166-20

PROJECT: Lot 7 Splendour Road, Mossman.

DATE SAMPLED: 03/04/2020

SAMPLE DETAILS: Sites "DCP1 through DCP4" as per site plan.

Tested By: G. Negri & C. English

REPORT DATE: 10/04/2020

DEPTH (Metres)	Site: DCP1	Site: DCP2	Site: DCP3	Site: DCP4
	No Blows	No Blows	No Blows	No Blows
0.0 – 0.1	8	7	1	1
0.1 – 0.2	7	12	1	2
0.2 – 0.3	6	10		1
0.3 – 0.4	5	11		1
0.4 – 0.5	4	11		1
0.5 – 0.6	3	7	2	2
0.6 – 0.7	2	5	2	3
0.7 – 0.8	4	7	3	1
0.8 – 0.9	4	6	4	3
0.9 – 1.0	3	7	5	7
1.0 – 1.1	3	5	15+	3+
1.1 – 1.2	10	15+	Refusal	Refusal
1.2 – 1.3	17	Refusal		
1.3 – 1.4	19			
1.4 – 1.5				
1.5 – 1.6				
1.6 – 1.7				
1.7 – 1.8				
1.8 – 1.9				
1.9 – 2.0				



SITE CLASSIFICATION

Lot 7 Splendour Road, Mossman.

Uncontrolled fill exists in the footprint of the proposed dwelling.

The Dynamic Cone Penetrometer test results indicate soft conditions to depths up to 0.7m at DCP3 and 0.8m DCP4. DCP1 and DCP2 results indicate adequate allowable bearing pressure to 1.5m.

The Atterberg Limits test results indicate a slightly reactive soil.

Due to the soft conditions and “uncontrolled fill” the site must be classified **CLASS-“P”**. To comply with the “Building Services Board Subsidence Policy” advice should be sought from a Registered Professional Engineer for footing design.

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

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

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

Gavin Negri
Earth Test



SITE AND SOIL EVALUATION

Lot 7 Splendour Road, Mossman.

The site and soil evaluation carried out on 03/04/2020 provided the following results.

Site Assessment

<u>Site Factor</u>	<u>Result</u>
Slope	1° to Level – 13° slope - 4° in LAA
Shape	Linear-Planar
Aspect	South-East
Exposure	Good.
Erosion/land slip	Not noted.
Boulders/rock outcrop	Nil
Vegetation	Grass.
Watercourse/Bores	As shown on site plan.
Water table	Not encountered during investigation.
Fill	Some uncontrolled fill as shown on the site plan.
Flooding	Not likely.
Channelled run-off	Not found
Soil surface conditions	Firm, Dry
Other site specific factors	Nil

Soil Assessment

<u>Soil Property</u>	<u>Result</u>
Colour	Brown
Texture	Clay-Loam
Structure	Weak
Coarse Fragments	Nil
Measured Permeability Ksat (m/d)	P1= 0.18
Dispersion	Slakes
Soil Category	4
Resultant Design Load Rate, DLR (mm/day)	10



WASTEWATER MANAGEMENT SYSTEM

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

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

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

SYSTEM SIZING FACTORS.

A population equivalent of six (6) persons has been chosen for the proposed four bedroom dwelling.

The residence is connected to a bore water supply system.

Standard water-reduction fixtures must be used to ensure the integrity of the system.

They shall include:-

- Dual flush 6/3 Litre water closets.
- Shower-flow restrictors.
- Aerator faucets (taps).
- Water-conserving automatic washing machines.

Note: - Garbage grinders are not permitted.

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

The daily flow for the dwelling (6 persons @ 150 L/person/day) will be 900 L/day.

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

The tank must NOT be fitted with an outlet filter.



LAND-APPLICATION SYSTEM

DISPOSAL AREA SIZING

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

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

Where:

L = length in m

Q = design daily flow in L/day

DLR = Design Loading Rate in mm/d

W = Width in m

$$\begin{aligned} L &= 900 / (10 \times 4.5) \\ &= 20.0\text{m.} \end{aligned}$$

Use one 20.0m long by 4.5m wide Advanced Enviro-Septic bed.

See site plan and detail cross-section.

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

SYSTEM SAND

All configurations of Advanced Enviro-Septic® require a minimum of 150mm of system sand surrounding the circumference of the pipe. This sand, typically gravelly coarse sand, must adhere to the following percentage and quality restrictions.

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

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



SYSTEM INSTALLATION

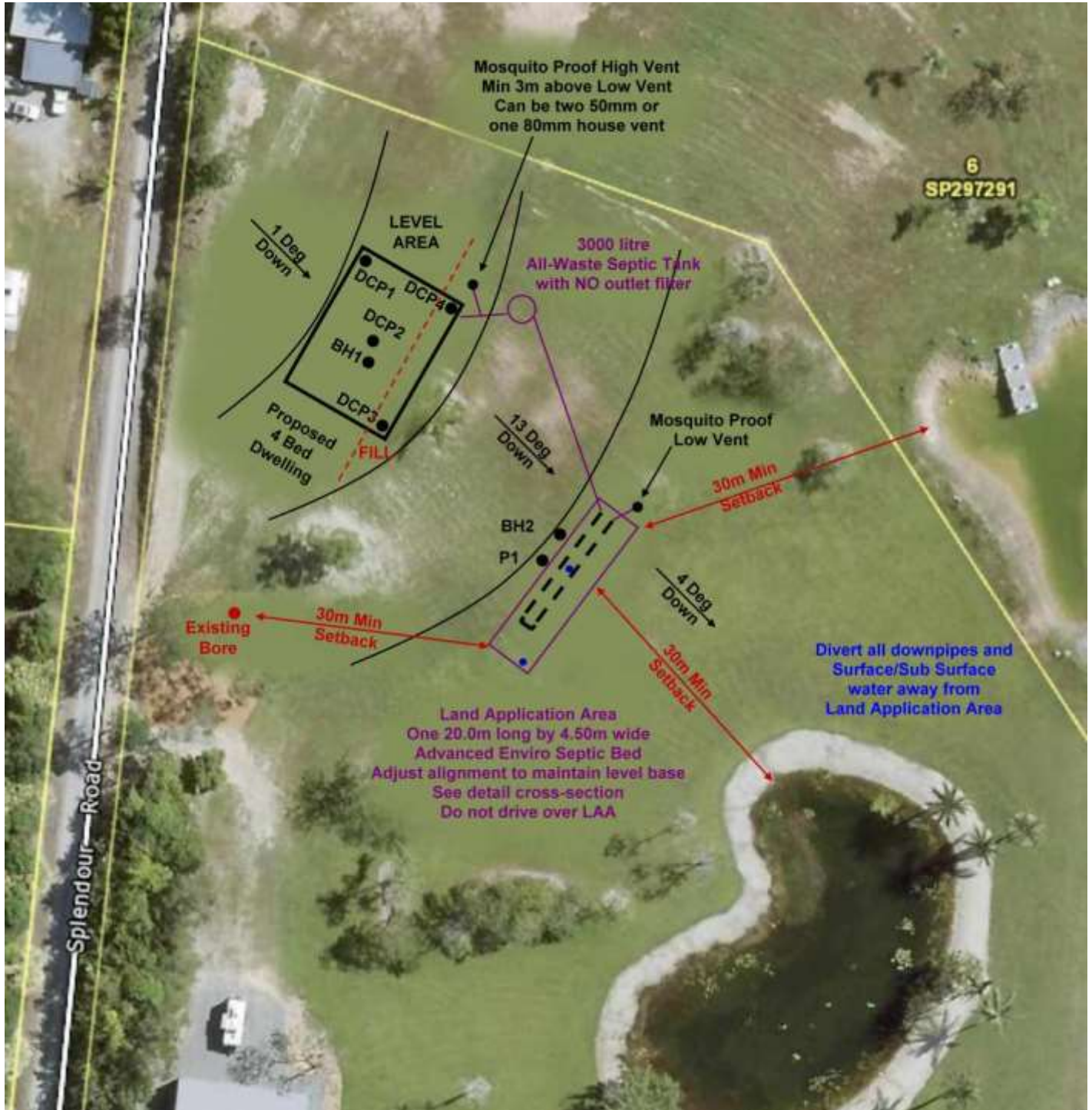
Avoid compaction by keeping people and machinery off the finished trench or bed floor.
The system shall be installed by a licensed plumber in accordance with the manufacturer's recommendations and the relevant Australian Standards.

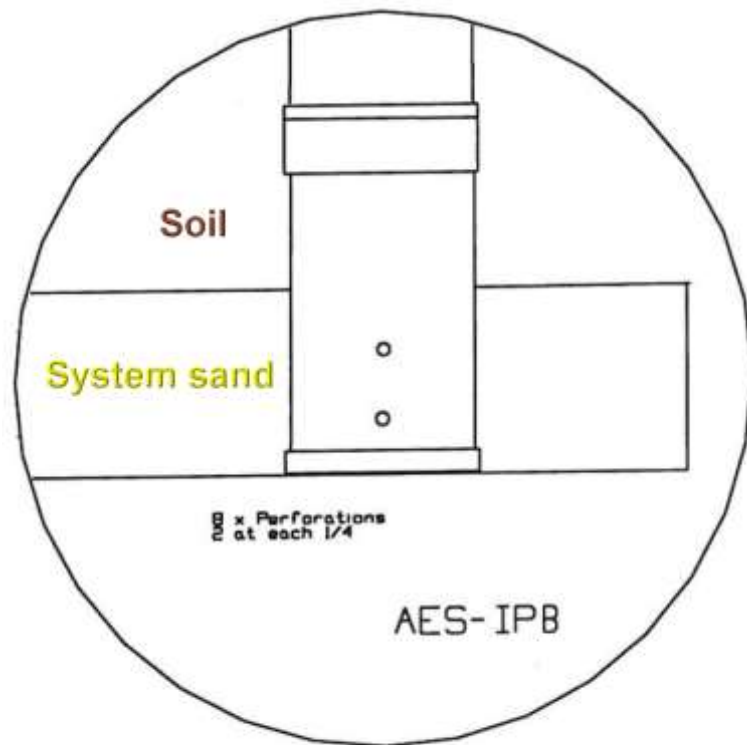
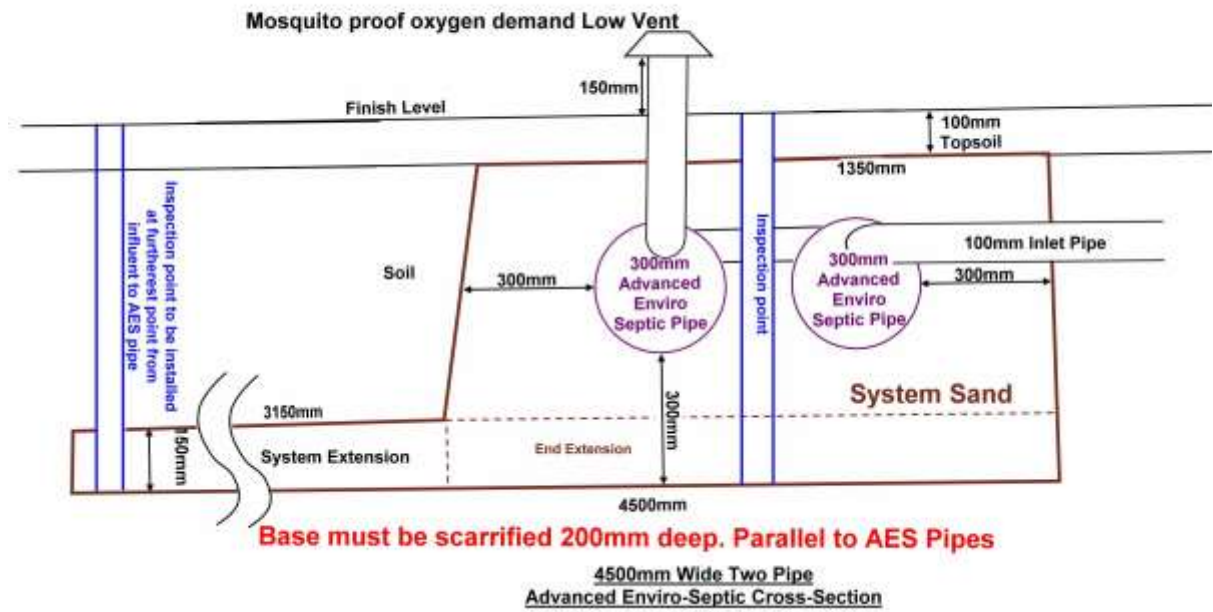
Operation and Maintenance

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

Gavin Negri
Earth Test

SITE PLAN
Lot 7 Splendour Road, Mossman.
NOT TO SCALE





AES Inspection point detail

