

**GREG SKYRING** *Design*  
**and DRAFTING** PTY. LTD.

ATF THE SKYRING FAMILY TRUST  
ABN 78 409 217 980

24<sup>th</sup> September 2018

The Manager,  
Planning Services,  
Douglas Shire Council  
P.O. Box 723  
Mossman Q 4873

Attention: - Development Services

Dear Sir/Madam,

43.2018.2864.1-953

RN: 304695

25/9/18

8 Don

**RE: APPLICATION FOR MATERIAL CHANGE OF USE OF PREMISES -  
DWELLING HOUSE and SHED on L6 RP735853, ANDREW ROAD, FOREST CREEK  
For C. & M. Johanson**

Attached is DA Form 1 duly completed, together with sketches of the proposed 3 bedroom dwelling house and shed, and soil classification and wastewater management reports.

In addition to the house site, the attached site plan shows the extent of proposed vegetation clearing. No overlays affect the allotment in the general area of the house site.

The following report provides supporting information to show compliance or otherwise with the planning scheme and codes within.

**1.0 General Details**

**Applicant**

C. & M. Johanson

**Contact**

Greg Skyring,  
Greg Skyring Design and Drafting Pty Ltd  
11 Noli Close,  
Mossman QLD 4873  
Ph 07 40982061  
Email greg@skyringdesign.com.au

**Registered Owner of Land**

C. & M. Johanson

**Real Property Description**

L6 RP735853

**Location**

Andrew Road, FOREST CREEK

**BUILDING DESIGN**

Lic. Under QBSA Act 1991- No. 1040371

11 NOLI CLOSE  
MOSSMAN Q 4873  
Phone/Fax: (07)40982061  
Mobile: 0419212652  
Email: greg@skyringdesign.com.au

## **1.0 – General Details continued**

<b>Tenure</b>	Freehold
<b>Land Area</b>	19,990m <sup>2</sup>
<b>Present Use</b>	Vacant
<b>Easements and Encumbrances</b>	None
<b>Local Government Authority</b>	Douglas Shire Council
<b>Planning Scheme</b>	2018 Douglas Shire Planning Scheme
<b>Planning Area</b>	Environmental Management Zone
<b>Assessment Level</b>	Code Assessable
<b>Applicable Codes</b> (Affecting building site only)	Environmental Management Zone Code

## **2.0        Assessment Against the Douglas Shire Planning Scheme Codes**

### **ENVIRONMENTAL MANAGEMENT ZONE CODE**

<b>Performance Outcomes</b>	<b>Acceptable Outcomes</b>	<b>Comments</b>
<b>PO1</b> The height of all buildings and structures is in keeping with the natural characteristics of the site. Buildings and structures are low-rise and not unduly visible from external sites.	<b>AO1.1</b> Buildings and structures are not more than 8.5 metres and two storeys in height.  Note – Height is inclusive of the roof height.  <b>AO1.2</b> Buildings have a roof height not less than 2 metres.	Buildings comply with max height and storeys.  The buildings have a roof pitch set at 15° to optimize roof strength and fitted solar panels. As the buildings are modest in size, the narrow width is the major contributor to the roof height being only approximately 1.5m. A concession is requested.
<b>PO5</b> Development is located, designed, operated and managed to respond to the characteristics, features and constraints of the site and its surrounds.  Note - Planning scheme policy – Site assessments provides guidance on identifying the characteristics, features and constraints of a site and its surrounds.	<b>AO5.1</b> Buildings, structures and associated access, infrastructure and private open space are sited: (a) within areas of the site which are already cleared; or (b) within areas of the site which are environmentally degraded; (c) to minimise additional vegetation clearing.	There are no cleared areas on this allotment.  The Owners have located the buildings on the flattest available area while still maintaining an adequate privacy buffer to the road. Use of this location places the buildings on a 1 in 10 max grade, (10%) then rising steeply towards the rear of the property.

	<b>AO5.2</b> Buildings and structures and associated infrastructure are not located on slopes greater than 1 in 6 (16.6%) or on a ridgeline.	
<b>PO6</b> Buildings and structures are responsive to steep slope through innovative construction techniques so as to: (a) maintain the geotechnical stability of slopes; (b) minimise cut and/or fill; (c) minimise the overall height of development.	<b>AO6.1</b> Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the land and single plane concrete slab on-ground methods of construction are not utilised.  <b>AO6.2</b> Access and vehicle manoeuvring and parking areas are constructed and maintained to: (a) minimise erosion; (b) minimise cut and fill; (c) follow the natural contours of the site.	Complies A few meters further into the property the land steepens to slope upwards varying from 1 in 4 to 1 in 3, making the construction of a dwelling inappropriate in that region.  The driveway will be lightly gravelled to ensure all weather access and is located perpendicular to the contour, thereby naturally minimizing erosion risk.

## CONCLUSION

The development application seeks a Development Permit for Material Change of Use for the purpose of a single dwelling house and shed on land described as L6 RP735853, Andrew Road, FOREST CREEK. The report includes supporting information intended to address any concerns Council may have as the assessing authority.

The proposed development is considered generally consistent with the relevant Planning Scheme Codes and overlays.

In particular, note that the site is within the Hillslopes Overlay Code, but otherwise complies with all acceptable outcomes.

Bushfire hazard overlay, very high potential bushfire intensity, falls marginally short of the building site as depicted, but a setback buffer of 15m in lieu of the 20m requested by the Owners would be considered more appropriate.

# DA Form 1 – Development application details

**Approved form (version 1.0 effective 3 July 2017) made under section 282 of the Planning Act 2016.**

This form **must** be used to make a development application **Involving code assessment or impact assessment**, except when applying for development involving building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development**, use this form (*DA Form 1*) and parts 4 to 6 of *DA Form 2 – Building work details*.

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

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

**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)	C. and M. Johanson
Contact name (only applicable for companies)	Greg Skyring, Greg Skyring Design and Drafting Pty Ltd
Postal address (P.O. Box or street address)	11 Noli Close
Suburb	Mossman
State	QLD
Postcode	4873
Country	AUS
Contact number	07 40982061
Email address (non-mandatory)	greg@skyringdesign.com.au
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

2) Owner's consent	
2.1) Is written consent of the owner required for this development application?	
<input checked="" type="checkbox"/> Yes – the written consent of the owner(s) is attached to this development application <input type="checkbox"/> No – proceed to 3)	



## PART 2 – LOCATION DETAILS

## 3) Location of the premises (complete 3.1) or 3.2, and 3.3) as applicable)

Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see [DA Forms Guide](#), [Relevant plans](#).

## 3.1) Street address and lot on plan

☒ Street address AND lot on plan (all lots must be listed), or

☐ 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).

a)	Unit No.	Street No.	Street Name and Type	Suburb
			Andrew Road	Forest Creek
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
		6	RP735853	Douglas Shire
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

## 3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

Note: Place each set of coordinates in a separate row. Only one set of coordinates is required for this part.

☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

## 3.3) Additional premises

☐ Additional premises are relevant to this development application and their details have been attached in a schedule to this application

☒ Not required

## 4) Identify any of the following that apply to the premises and provide any relevant details

☐ In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

☐ On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

☐ In a tidal area

Name of local government for the tidal area (if applicable):

Name of port authority for tidal area (if applicable):

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:

☐ Listed on the Environmental Management Register (EMR) under the *Environmental Protection Act 1994*

EMR site identification:

☐ Listed on the Contaminated Land Register (CLR) under the *Environmental Protection Act 1994*

CLR site identification: \_\_\_\_\_

**5) Are there any existing easements over the premises?**

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

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

☒ No

## PART 3 – DEVELOPMENT DETAILS

### Section 1 – Aspects of development

#### 6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

☒ Material change of use

☐ Reconfiguring a lot

☐ Operational work

☐ Building work

b) What is the approval type? *(tick only one box)*

☐ Development permit

☐ Preliminary approval

☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

☒ Code assessment

☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal (e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):

Dwelling house

e) Relevant plans

*Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms guide: Relevant plans](#).*

☒ Relevant plans of the proposed development are attached to the development application

#### 6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

☐ Material change of use

☐ Reconfiguring a lot

☐ Operational work

☐ Building work

b) What is the approval type? *(tick only one box)*

☐ Development permit

☐ Preliminary approval

☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

☐ Code assessment

☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal (e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots)

e) Relevant plans

*Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).*

☐ Relevant plans of the proposed development are attached to the development application

#### 6.3) Additional aspects of development

☐ Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application

☐ Not required

## Section 2 – Further development details

7) Does the proposed development application involve any of the following?	
Material change of use	<input checked="" type="checkbox"/> Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	<input type="checkbox"/> Yes – complete division 2
Operational work	<input type="checkbox"/> Yes – complete division 3
Building work	<input type="checkbox"/> Yes – complete DA Form 2 – Building work details

## Division 1 – Material change of use

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

8.1) Describe the proposed material change of use			
Provide a general description of the proposed use	Provide the planning scheme definition (include each definition in a new row)	Number of dwelling units (if applicable)	Gross floor area (m <sup>2</sup> ) (if applicable)
New house	Dwelling house	1	approx 120m <sup>2</sup>
Shed			
8.2) Does the proposed use involve the use of existing buildings on the premises?			
<input type="checkbox"/> Yes			
<input checked="" type="checkbox"/> No			

## Division 2 – Reconfiguring a lot

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

9.1) What is the total number of existing lots making up the premises?	
9.2) What is the nature of the lot reconfiguration? (tick all applicable boxes)	
<input type="checkbox"/> Subdivision (complete 10))	<input type="checkbox"/> Dividing land into parts by agreement (complete 11))
<input type="checkbox"/> Boundary realignment (complete 12))	<input type="checkbox"/> Creating or changing an easement giving access to a lot from a construction road (complete 13))

## 10) Subdivision

10.1) For this development, how many lots are being created and what is the intended use of those lots:

Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				
10.2) Will the subdivision be staged?				
<input type="checkbox"/> Yes – provide additional details below				
<input type="checkbox"/> No				
How many stages will the works include?				
What stage(s) will this development application apply to?				

## 11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?

Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

## 12) Boundary realignment

12.1) What are the current and proposed areas for each lot comprising the premises?

Current lot		Proposed lot	
Lot on plan description	Area (m <sup>2</sup> )	Lot on plan description	Area (m <sup>2</sup> )

12.2) What is the reason for the boundary realignment?

13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement? (attach schedule if there are more than two easements)

Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

## Division 3 – Operational work

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

14.1) What is the nature of the operational work?

- |  |                                     |  |
|--|-------------------------------------|--|
| <input type="checkbox"/> Road work                     | <input type="checkbox"/> Stormwater | <input type="checkbox"/> Water infrastructure  |
| <input type="checkbox"/> Drainage work                 | <input type="checkbox"/> Earthworks | <input type="checkbox"/> Sewage infrastructure |
| <input type="checkbox"/> Landscaping                   | <input type="checkbox"/> Signage    | <input type="checkbox"/> Clearing vegetation   |
| <input type="checkbox"/> Other – please specify: _____ |                                     |  |

14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)

☐ Yes – specify number of new lots: \_\_\_\_\_☐ No

14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)

\$ \_\_\_\_\_

## PART 4 – ASSESSMENT MANAGER DETAILS

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

Douglas Shire Council

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

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

## PART 5 – REFERRAL DETAILS

17) Do any aspects of the proposed development require referral for any referral requirements?

*Note: A development application will require referral if prescribed by the Planning Regulation 2017.*☒ No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the chief executive of the Planning Regulation 2017:

- ☐ Clearing native vegetation
- ☐ Contaminated land (unexploded ordnance)



<input type="checkbox"/> Environmentally relevant activities (ERA) <i>(only if the ERA have not been devolved to a local government)</i> <input type="checkbox"/> Fisheries – aquaculture <input type="checkbox"/> Fisheries – declared fish habitat area <input type="checkbox"/> Fisheries – marine plants <input type="checkbox"/> Fisheries – waterway barrier works <input type="checkbox"/> Hazardous chemical facilities <input type="checkbox"/> Queensland heritage place <i>(on or near a Queensland heritage place)</i> <input type="checkbox"/> Infrastructure – designated premises <input type="checkbox"/> Infrastructure – state transport infrastructure <input type="checkbox"/> Infrastructure – state transport corridors and future state transport corridors <input type="checkbox"/> Infrastructure – state-controlled transport tunnels and future state-controlled transport tunnels <input type="checkbox"/> Infrastructure – state-controlled roads <input type="checkbox"/> Land within Port of Brisbane's port limits <input type="checkbox"/> SEQ development area <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – community activity <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – indoor recreation <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – residential development <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – urban activity <input type="checkbox"/> Tidal works or works in a coastal management district <input type="checkbox"/> Urban design <input type="checkbox"/> Water-related development – taking or interfering with water <input type="checkbox"/> Water-related development – removing quarry material <i>(from a watercourse or lake)</i> <input type="checkbox"/> Water-related development – referable dams <input type="checkbox"/> Water-related development – construction of new levees or modification of existing levees <i>(category 2 or 3 levees only)</i> <input type="checkbox"/> Wetland protection area
--

**Matters requiring referral to the local government:**

<input type="checkbox"/> Airport land <input type="checkbox"/> Environmentally relevant activities (ERA) <i>(only if the ERA have been devolved to local government)</i> <input type="checkbox"/> Local heritage places
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**Matters requiring referral to the chief executive of the distribution entity or transmission entity:**

<input type="checkbox"/> Electricity infrastructure
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**Matters requiring referral to:**

<ul style="list-style-type: none"> <li>• The <b>chief executive of the holder of the licence</b>, if not an individual</li> <li>• The <b>holder of the licence</b>, if the holder of the licence is an individual</li> </ul> <input type="checkbox"/> Oil and gas infrastructure
--

**Matters requiring referral to the Brisbane City Council:**

<input type="checkbox"/> Brisbane core port land
--

**Matters requiring referral to the Minister under the Transport Infrastructure Act 1994:**

<input type="checkbox"/> Brisbane core port land <input type="checkbox"/> Strategic port land
--

**Matters requiring referral to the relevant port operator:**

<input type="checkbox"/> Brisbane core port land <i>(below high-water mark and within port limits)</i>
--

**Matters requiring referral to the chief executive of the relevant port authority:**

<input type="checkbox"/> Land within limits of another port
---

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

<input type="checkbox"/> Tidal works, or development in a coastal management district in Gold Coast waters
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**Matters requiring referral to the Queensland Fire and Emergency Service:**

<input type="checkbox"/> Tidal works, or development in a coastal management district
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**18) Has any referral agency provided a referral response for this development application?**

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

Referral requirement	Referral agency	Date of referral response

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

**PART 6 – INFORMATION REQUEST****19) Information request under Part 3 of the DA Rules**

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

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

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

Further advice about information requests is contained in the DA Forms Guide.

**PART 7 – FURTHER DETAILS****20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)**

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

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

**21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)**

- ☐ Yes – the yellow local government/private certifier's copy of the receipted QLeave form is attached to this development application
- ☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
- ☒ Not applicable

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

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

- ☐ Yes – show cause or enforcement notice is attached
- ☒ No

## 23) Further legislative requirements

**Environmentally relevant activities**

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

☐ Yes – the required attachment (form EM941) for an application for an environmental authority accompanies this development application, and details are provided in the table below

☒ No

*Note: Application for an environmental authority can be found by searching "EM941" at [www.qld.gov.au](http://www.qld.gov.au). An ERA requires an environmental authority to operate. See [www.business.qld.gov.au](http://www.business.qld.gov.au) for further information.*

Proposed ERA number:

Proposed ERA threshold:

Proposed ERA name:

☐ Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

**Hazardous chemical facilities**

23.2) Is this development application for a **hazardous chemical facility**?

☐ Yes – **Form 69: Notification of a facility exceeding 10% of schedule 15 threshold** is attached to this development application

☒ No

*Note: See [www.justice.qld.gov.au](http://www.justice.qld.gov.au) for further information.*

**Clearing native vegetation**

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

☐ Yes – this development application is accompanied by written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)

☒ No

*Note: See [www.qld.gov.au](http://www.qld.gov.au) for further information.*

**Environmental offsets**

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

☐ Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter

☒ No

*Note: The environmental offset section of the Queensland Government's website can be accessed at [www.qld.gov.au](http://www.qld.gov.au) for further information on environmental offsets.*

**Koala conservation**

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work within an assessable development area under Schedule 10, Part 10 of the *Planning Regulation 2017*?

☐ Yes

☒ No

*Note: See guidance materials at [www.ehp.qld.gov.au](http://www.ehp.qld.gov.au) for further information.*

**Water resources**

23.6) Does this development application involve **taking or interfering with artesian or sub artesian water, taking or interfering with water in a watercourse, lake or spring, taking overland flow water or waterway barrier works**?

☐ Yes – the relevant template is completed and attached to this development application

☒ No

*Note: DA templates are available from [www.dilgp.qld.gov.au](http://www.dilgp.qld.gov.au).*

23.7) Does this application involve **taking or interfering with artesian or sub artesian water, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water** under the *Water Act 2000*?

☐ Yes – I acknowledge that a relevant water authorisation under the *Water Act 2000* may be required prior to

**commencing development**☒ No*Note: Contact the Department of Natural Resources and Mines at [www.dnrm.qld.gov.au](http://www.dnrm.qld.gov.au) for further information.***Marine activities****23.8) Does this development application involve aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?**☐ Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*☒ No*Note: See guidance materials at [www.daf.qld.gov.au](http://www.daf.qld.gov.au) for further information.***Quarry materials from a watercourse or lake****23.9) Does this development application involve the removal of quarry materials from a watercourse or lake under the *Water Act 2000*?**☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development☒ No*Note: Contact the Department of Natural Resources and Mines at [www.dnrm.qld.gov.au](http://www.dnrm.qld.gov.au) for further information.***Quarry materials from land under tidal waters****23.10) Does this development application involve the removal of quarry materials from land under tidal water under the *Coastal Protection and Management Act 1995*?**☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development☒ No*Note: Contact the Department of Environment and Heritage Protection at [www.ehp.qld.gov.au](http://www.ehp.qld.gov.au) for further information.***Referable dams****23.11) Does this development application involve a referable dam required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the *Water Supply Act*)?**☐ Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the *Water Supply Act* is attached to this development application☒ No*Note: See guidance materials at [www.dews.qld.gov.au](http://www.dews.qld.gov.au) for further information.***Tidal work or development within a coastal management district****23.12) Does this development application involve tidal work or development in a coastal management district?**☐ Yes – the following is included with this development application:☐ Evidence the proposal meets the code for assessable development that is prescribed tidal work (only required if application involves prescribed tidal work)☐ A certificate of title☒ No*Note: See guidance materials at [www.ehp.qld.gov.au](http://www.ehp.qld.gov.au) for further information.***Queensland and local heritage places****23.13) Does this development application propose development on or adjoining a place entered in the *Queensland heritage register* or on a place entered in a local government's *Local Heritage Register*?**☐ Yes – details of the heritage place are provided in the table below☒ No*Note: See guidance materials at [www.ehp.qld.gov.au](http://www.ehp.qld.gov.au) for information requirements regarding development of Queensland heritage places.*

Name of the heritage place:

Place ID:

**Brothels****23.14) Does this development application involve a material change of use for a brothel?**☐ Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*☒ No

**Decision under section 62 of the Transport Infrastructure Act 1994**

23.15) Does this development application involve new or changed access to a state-controlled road?

- ☐ Yes - this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)
- ☒ No

**PART 8 – CHECKLIST AND APPLICANT DECLARATION****24) Development application checklist**

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17

☒ Yes*Note: See the Planning Regulation 2017 for referral requirements*If building work is associated with the proposed development, Parts 4 to 6 of *Form 2 – Building work details* have been completed and attached to this development application☐ Yes☒ Not applicable

Supporting information addressing any applicable assessment benchmarks is with development application

*Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see DA Forms Guide: Planning Report Template.*☒ Yes

Relevant plans of the development are attached to this development application

*Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see DA Forms Guide: Relevant plans.*☒ Yes

The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21))

☐ Yes☒ Not applicable**25) Applicant declaration**☒ By making this development application, I declare that all information in this development application is true and correct☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001**Note: It is unlawful to intentionally provide false or misleading information.*

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

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

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

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

**PART 9 – FOR OFFICE USE ONLY**Date received:  Reference number(s): **Notification of engagement of alternative 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	

**QLeave notification and payment***Note: For completion by assessment manager if applicable*

Description of the work	
QLeave project number	
Amount paid (\$)	
Date paid	
Date receipted form sighted by assessment manager	
Name of officer who sighted the form	

The *Planning Act 2016*, the *Planning Regulation 2017* and the *DA Rules* are administered by the Department of Infrastructure, Local Government and Planning. This form and all other required development application materials should be sent to the assessment manager.

I, Carl and Melanie Johanson

[Insert full name.]

as owner/s of the premises identified as follows:

L6 RP735853, Andrew Road, Forest Creek

consent to the making of a development application by:

Greg Skyring Design and Drafting Pty Ltd

on the premises described above for:

Development application - Material change of use

[signature of owner and  
date signed]

24/9/18



**EARTH TEST**

---

**Site Classification**

**And**

**Wastewater Management System**

**For**

**Carl Johanson**

**At**

**Lot 6 Andrews Road**

**Forrest Creek**





## **INTRODUCTION:**

Earth Test has been engaged by Carl Johanson to assess, design and report on Site Classification and a Domestic Wastewater Management System at Lot 6 Andrews Road, Forrest Creek.

Real Property Description:-

Lot 6, on RP 735853

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 May 2018.

## **SITE FACTORS:**

The site was identified by its street address.

A photograph is included as part of this report to confirm the identity of the site.

The white paint on the tree can be seen in the photo.

The Lot has an area of 1.999 hectares and is predominantly covered with extensive rainforest.

The water supply to the site is onsite roof rain water only.

No rock outcrops were noted at the site. An open drain was noted on the Northern boundary.

Two Dynamic Cone Penetrometer tests were performed at locations DCP1 and DCP2, and one borehole BH1 as shown on the site plan.

Atterberg Limits tests were performed on a disturbed sample from Borehole1.



**Borehole being sampled at Lot 6 Andrews Road, Forrest Creek**

**SITE INVESTIGATION REPORT****BOREHOLE LOG**

<b>CLIENT:</b> Carl Johanson.		<b>DATE SAMPLED:</b> 23/05/2018
<b>PROJECT:</b> Lot 6 Andrews Road, Forrest Creek.		<b>Sampled by:</b> L. Quinn & B. Wyatt
<b>REPORT DATE:</b> 4/06/2018		
<b>BOREHOLE No:</b> BH1		
<b>DEPTH (m)</b>	<b>DESCRIPTION</b>	<b>COMMENTS</b>
0.0-0.1	Grey Silty Topsoil	Disturbed sample 0.3- 0.6m.
0.1-1.6	Yellow-Brown Silty-Clay with Gravel	Watertable not encountered

**ATTERBERG LIMITS TEST REPORT****CLIENT:** Carl Johanson**SAMPLE No:** SI 180-18**PROJECT:** Lot 6 Andrews Road, Forrest Creek**DATE SAMPLED:** 23/05/2018**SAMPLE DETAILS:** BH1 0.3-0.6m**Sampled by:** L. Quinn & B. Wyatt**REPORT DATE:** 4/06/2018**Tested By:** P. Weigand

TEST METHOD	RESULT
<b>Liquid Limit:</b> AS 1289.3.1.2	40%
<b>Plastic Limit:</b> AS 1289.3.2.1	28%
<b>Plasticity Index:</b> AS 1289.3.3.1	12%
<b>Linear Shrinkage:</b> AS 1289.3.4.1	6.5%
<b>Length Of Mould:</b>	250.0mm
<b>Cracking, Crumbling, Curling, Number Of Breaks:</b>	One Break
<b>Sample History:</b>	Air Dried
<b>Preparation Method:</b>	Dry Sieved
<b>Insitu Moisture Content:</b>	21.8%
<b>% Passing 0.075mm:</b>	44%

**DYNAMIC CONE PENETROMETER REPORT**  
**AS 1289.6.3.2****CLIENT:** Carl Johanson**SAMPLE No:** SI 180-18**PROJECT:** Lot 6 Andrews Road, Forrest Creek.**DATE SAMPLED:** 23/05/2018**SAMPLE DETAILS:** Sites "DCP1 & DCP2" as per site plan.**Tested By:** L. Quinn & B. Wyatt**REPORT DATE:** 4/06/2018

<b>DEPTH (Metres)</b>	<b>Site: DCP1</b>	<b>Site: DCP2</b>
	<b>No Blows</b>	<b>No Blows</b>
<b>0.0 – 0.1</b>	1	1
<b>0.1 – 0.2</b>	2	2
<b>0.2 – 0.3</b>	3	3
<b>0.3 – 0.4</b>	4	4
<b>0.4 – 0.5</b>	4	5
<b>0.5 – 0.6</b>	5	4
<b>0.6 – 0.7</b>	9	8
<b>0.7 – 0.8</b>	10	9
<b>0.8 – 0.9</b>	20	15
<b>0.9 – 1.0</b>	REFUSAL	REFUSAL
<b>1.0 – 1.1</b>		
<b>1.1 – 1.2</b>		
<b>1.2 – 1.3</b>		
<b>1.3 – 1.4</b>		
<b>1.4 – 1.5</b>		
<b>1.5 – 1.6</b>		
<b>1.6 – 1.7</b>		
<b>1.7 – 1.8</b>		
<b>1.8 – 1.9</b>		
<b>1.9 – 2.0</b>		



## **SITE CLASSIFICATION**

### **Lot 6 Andrews Road, Forrest Creek.**

“Abnormal moisture conditions (AS2870-2011 Clause 1.3.3)” exist at the site due to the proposed removal of trees

The Dynamic Cone Penetrometer test results indicate adequate allowable bearing pressure to 1.0m.

The Atterberg Limits test results indicate a slightly reactive soil.

Due to the “abnormal moisture conditions,” 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.

Leonard Quinn.  
Earth Test.

**SITE AND SOIL EVALUATION****Lot 6 Andrews Road, Forrest Creek.**

The site and soil evaluation carried out on 23/05/2018 provided the following results.

**Site Assessment**

<b><u>Site Factor</u></b>	<b><u>Result</u></b>
Slope	8 Degrees
Shape	Linear-Planar
Aspect	East
Exposure	Extremely Limited
Erosion/land slip	Not noted.
Boulders/rock outcrop	Not noted during investigation
Vegetation	Rainforest.
Watercourse/Bores	Open drain on northern boundary
Water table	Not encountered during investigation.
Fill	Not encountered during investigation.
Flooding	Not likely.
Channelled run-off	Not found
Soil surface conditions	Firm, Moist
Other site specific factors	Nil

**Soil Assessment**

<b><u>Soil Property</u></b>	<b><u>Result</u></b>
Colour	Yellow-Brown
Texture	Clay-Loam
Structure	High
Coarse Fragments	30%
Measured Permeability Ksat (m/d)	Not measured
Dispersion	Slakes
Soil Category	4
Resultant Design Load Rate, DLR (mm/day)	30



## **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 2002.
- Queensland STANDARD PLUMBING AND DRAINAGE REGULATION 2003.
- Queensland PLUMBING AND WASTEWATER CODE.

### **SYSTEM SIZING FACTORS.**

A population equivalent of five (5) persons has been chosen for the proposed three bedroom dwelling.

The site is connected to an onsite roof rain 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 (5 persons @ 150 L/person/day) will be 750 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

$$\begin{aligned} L &= 750 / (30 \times 2.35) \\ &= 10.64\text{m.} \end{aligned}$$

**Use one 15.6m long by 2.35 wide Advanced Enviro-Septic bed.**

See site plan and detail cross-section.

### **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.

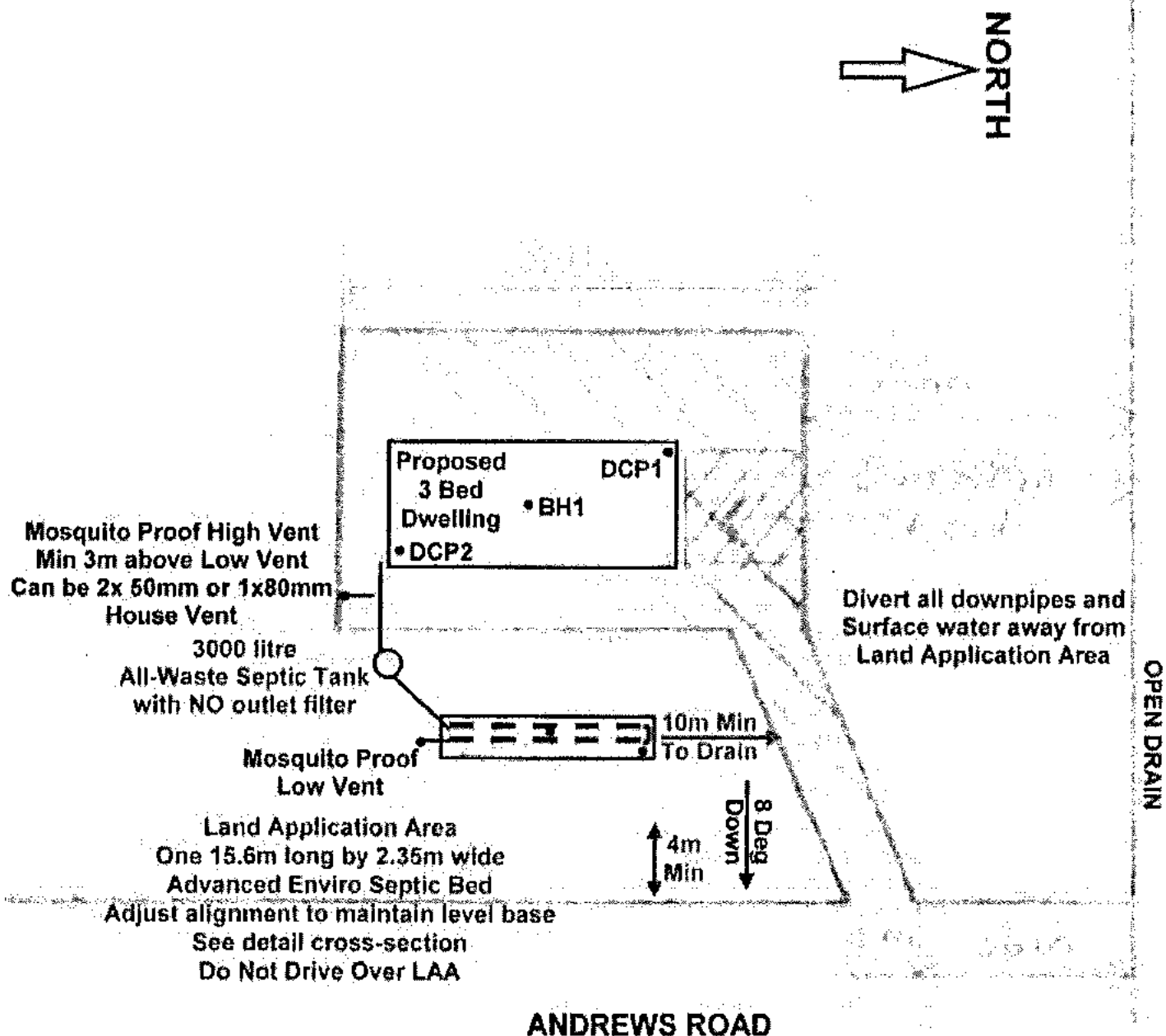
**Operation and Maintenance**

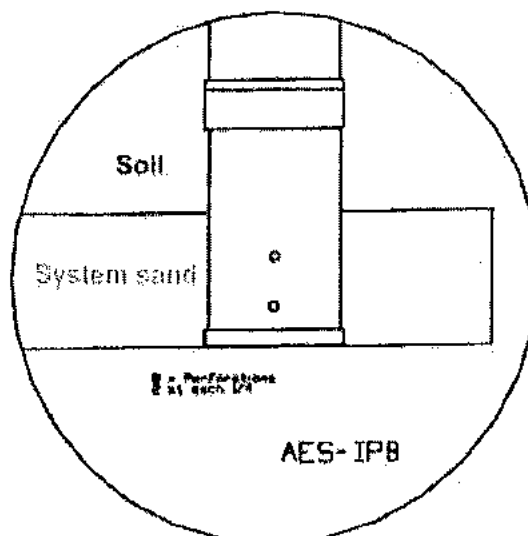
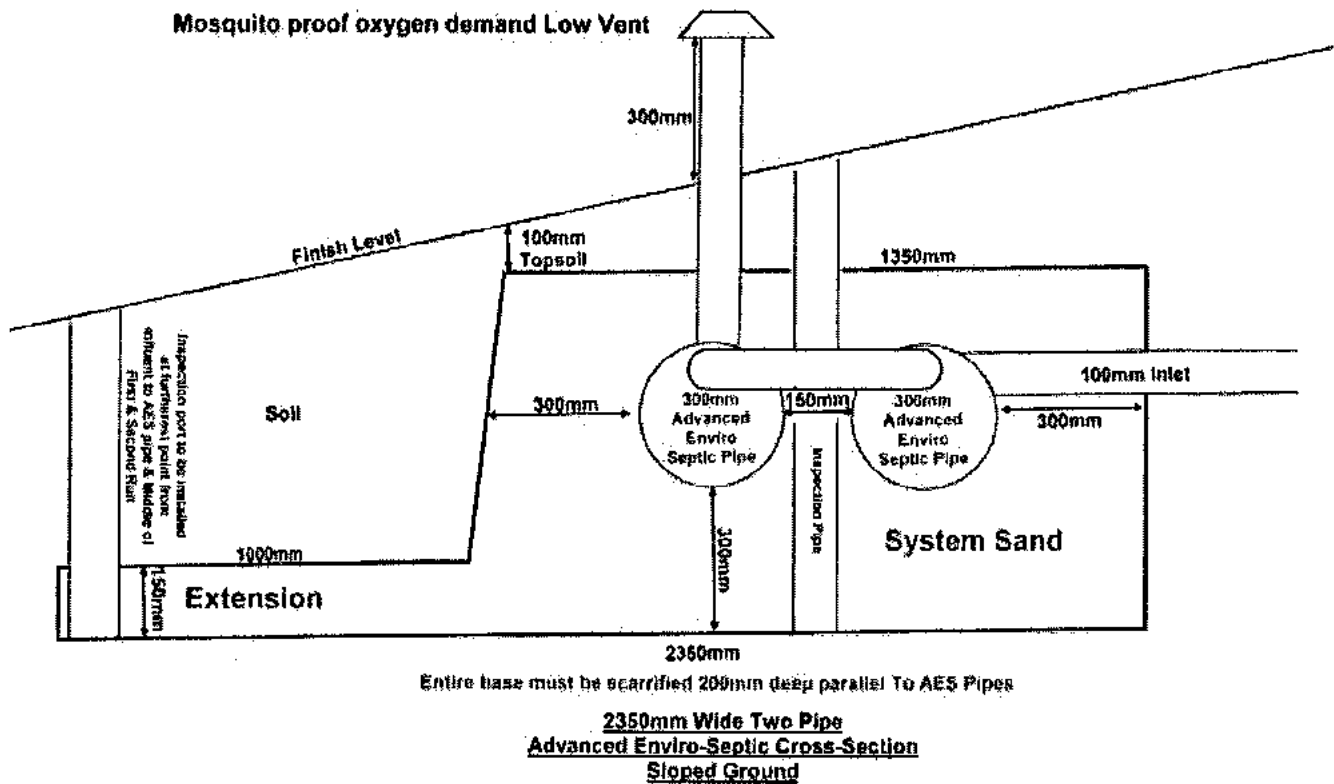
Homeowners should be fully informed of the proper operation and maintenance requirements of the on-site wastewater system.

Leonard Quinn  
Earth Test

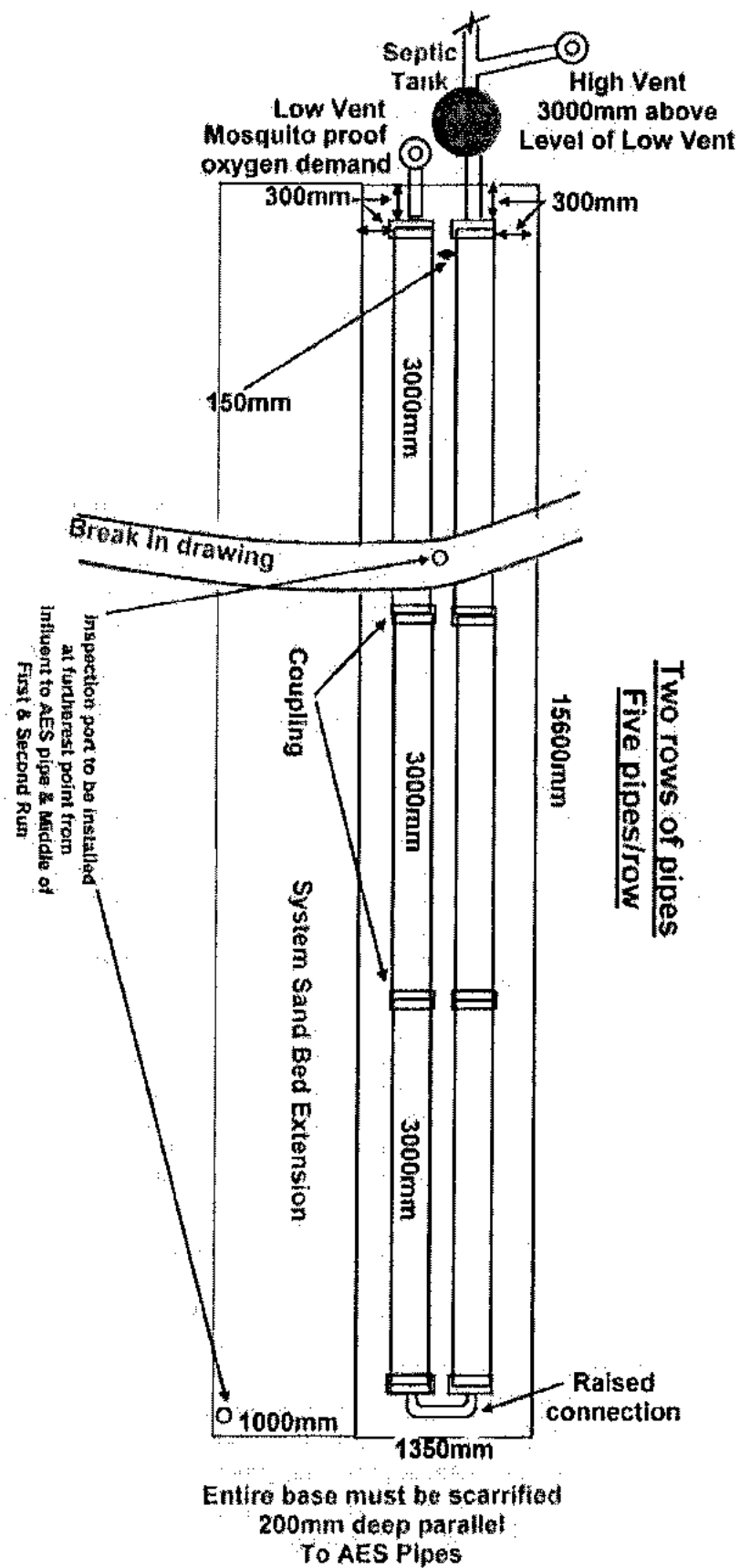


**SITE PLAN**  
**Lot 6 Andrews Road, Forrest Creek.**  
**NOT TO SCALE**





**AES Inspection point detail**





# EARTH TEST

QBSA Lic No. 1017941.

ADVANCED ENVIRO-SEPTIC "Always The Best Option"		Advanced Enviro-septic Design Calculator V8.5	
"Always the BEST Option" until site and soil conditions rule it out.			
Site Address	Lot 8 Ashbur Road, Fourth Creek	State	Q
Client Name	Col Johnson	Post Code	
Designer Name	Earth Test	Designer P# Number	4094734
Plumber Name		Plumber P# Number	
Contract Area	Douglas Store Council	Designer AES Cert Number	
This Calculator is a guide only, requiring soil classification, surface water, septic table and all other site conditions advised by the qualified designer.			
System Designer site and soil calculation data only		IMPORTANT NOTES	
Surface loading rate, "30" for Advanced Secondary or "35" Secondary	30	>> This design is for an ADVANCED SECONDARY system	
Is this a new installation? Y or N	Y	>> Minimum septic vent size is 100mm or 2 x 100mm house vents	
Number of person	150	>> a septic tank outlet filter is NOT RECOMMENDED	
Daily Design Flow Allowance Litres/Person/Day	5		
Number of rows required to suit site constraints	2	>> The maximum length of a single AES pipe run is 30 meters	
Surface Soil Category as established by site and soil evaluation. CATEGORY	2	>> Category may require design considerations. Ref AS1547	
Design Loading Rate based on site & soil evaluation BEM Input/Day	30	>> Soil remediation may be necessary. Ref AS1547 & Comments.	
Bore log depth below system base area	1400	>> Min depth below base area is 600 mm to establish water table or is	
Enter System footprint Slope in % for standard AES systems to calculate	11	>> Consideration required for sloping sites. Ref AS1547 notes contain	
Is this design a gravity system with an outlet filter? Y or N	N	>> A House Vent & LOW TEST required on this system	
PLEASE CHECK YOU HAVE FILL FROM TANK TO AES SYSTEM PIPES			
COMMENTS - The responsibility is dependent on design.			
- Ripping of receiving surface is required on clay soil structures in Cat 4, 5, 6, in addition refer to AS 1547. Always even out and rip parallel to the site slope AES p			
- All sloping sites require special consideration and management through design of slope percentage, surface water and construction methods as per AS1547.			
- Plumbers are reminded to practice good construction techniques as per AS 1547 and as provided on AES installation instructions supplied with components.			
AES System Calculation Overview		AES Dimensions	
Total System Load - litres / day (Q)	750 L/d	AES System	System Extension
Min Length of AES pipe runs to meet loading	12.5 m	Life in (d.)	15.0
Number of FULL AES Pipe lengths per row	5	Width in (m)	1.00
Total Capacity of AES System pipe in Litres	2025 L	Depth	0.15
		Area m2	15.0
DO YOU WANT TO USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)			
IF YOU WISH TO USE A TRENCH EXTERIOR RECEPTION ENTER Y		Enter Current Width in (m)	
AES INFILTRATION FOOT PRINT AREA - $L = Q / (DL \times W)$		Length	Width
for this Design Serial design is		15.6	2.00
		Minimum AES foot print required	
		15.6	
		m2 approx	
Code	AES System Bill of Materials	Checklist & Environmental Data	
AES PIPE	AES 1 mtr Leds required	10	mtr
AESC	AESC Couplings required	8	ea
AESO	AESO Outlet adapters	4	ea
AENODV	AES Outlet demand vent	1	ea
AES-IPB	AES 100mm Inspection point base	2	ea
AES-EPB	AES Speed Flow Expansion	1	ea
TOTAL SYSTEM SAND REQUIRED (Guide Only)		22	m3
PLEASE email your AES CALL and Payment to			
DESIGNER@ADVANCED-SEPTIC.COM.AU			
<p>The AES Calculator is a design aid to ensure a better understanding of the AES system and its application and is a guide only, and not a replacement for engineering or AS 1547. All designs are subject to approval and verification by a Professional Engineer.</p> <p>The designer Environmental and the responsibility for the final design, including calculations and BEM, cannot be held by the calculator or this calculator.</p> <p>AES pipe can be cut to length in 1m. Trenches required in 1m depth (100mm).</p>			
<p>ADVANCED ENVIRO-SEPTIC</p> <p>Digitally signed by Kane Dickson DN: cn=Kane Dickson, o=Chankar Environmental, ou=Design Review, email=designreview@advanced-septic.com.au, c=AU Date: 2018.06.04 16:06:45 +1000</p> <p>Design Review@advanced-septic.com.au</p>			
AES Design V8.5 Calculator Copy Right - Chankar Environmental Pty Ltd 1.11.2015			



## Advanced Enviro-septic Design Calculator v8.5

"Always the BEST Option" until site and soil conditions rule it out.

Site Address	Lot 6 Andrews Road, Forest Creek	State	Q	Post Code	
Client Name	Carl Jobanson				
Designers Name	Earth Test	Designers Ph Number	40954734	Designers Lic Number	1017941
Plumber Name		Plumber Ph Number		Plumb / Drainer Lic Number	
Council Area	Douglas Shire Council	Designers AES Cert Number		Date	

This Calculator is a guide only, receiving soil classification, surface water, water tables and all other site constraints addressed by the qualified designer.

System Designer site and soil evaluation (date only)		IMPORTANT NOTES	
meter loading rate, "30" for Advanced Secondary or "38" Secondary	20	>>	This design is for an <b>ADVANCED SECONDARY</b> system
Is this a new installation Y or N	y	>>	Minimum single vent size is 80mm or 2 x 50mm house vents
Number of person	150	>>	a septic tank outlet filter is <b>NOT RECOMMENDED</b>
Daily Design Flow Allowance Litre/Person/Day	5		
Number of rows required to suit site constraints	2	>>	The maximum lth of a single AES pipe run is 30 meters
Surface Soil Category as established by site and soil evaluation, CATEGORY	4	>>	Category may require design considerations. Ref AS1547
Design Loading Rate based on site & soil evaluation DLR (nun/day)	30	>>	Soil conditioning may be necessary. Ref AS1547 & Comments.
Bore log depth below system Basal area	1400	>>	Min depth below basal area is 600 mm to establish water table or re
Enter System footprint Slope in % for standard AES systems to calculate	14	>>	Consideration required for Sloping sites. Ref AS1547, refer comment
Is this design a gravity system with no outlet filter? Y or N	y	>>	A House Vent & LOW VENT required on this system
<b>PLEASE CHECK YOU HAVE FALL FROM TANK TO AES SYSTEM PIPES</b>			

COMMENTS :- "The outcome must be important to everyone."

- Ripping of receiving surface is required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate and rip parallel to the site slope/AES pipe

- All Sloping sites require special consideration and management through design of slope percentage, surface water and construction methods as per AS1547.

- Plumbers are reminded to practice good construction techniques as per AS 1547 and as provided on AES installation instructions supplied with components.

AES System Calculator Calculations			AES Dimensions		
Total System load - litres / day (Q).	750	l/d	AES System	System Extension	
Min Length of AES pipe rows to treat loading	12.5	lm	Lth m : (L)	15.6	15.6
Number of FULL AES Pipe lengths per row	5	lths	Width m:(W)	1.35	1.00
Total Capacity of AES System pipe in Litres	2120	ltr.	Sand Depth :	0.75	0.15
			Area m2	21.1	15.6
DO YOU WISH TO USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)					
IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y"			Enter Custom Width in metre		
AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR \times W)$		Length	Width	Minimum AES foot print required	
for this Basic Serial design is		15.6	x 2.35	=	36.7 m2 total

Cat	AES System Dtl. of Materials	Qty	Unit	Chankar Environmental Use Only
AES-PIPE	AES 3 mtr Lths required	10	lths	 Digitally signed by Kane Dickson DN: cn=Kane Dickson, o=Chankar Environmental, ou=Design Review, email=designreview@enviro-septic.com.au, c=AU Date: 2018.06.04 16:06:45 +10'00'
AESC	AESC Couplings required	8	ea	
AESO	AESO Offset adaptors	4	ea	
AESODV	AES Oxygen Demand vent	1	ea	
AES-IPB	AES 100mm Inspection point base	2	ea	
AES Equ	AES Speed Flow Equaliser		ea	
TOTAL SYSTEM SAND REQUIRED (Guide Only)		22	m3	
PLEASE email your AES CALC and Drawings to DESIGNREVIEW@ENVIRO-SEPTIC.COM.AU				Designreview@enviro-septic.com.au

> The AES Calculator is a design aid to allow checking of the AES components and configuration and is a guide only. Site and soil conditions referencing the AS 1547 standard are calculated and designed by a Qualified Designer.


> Chankar Environmental has no responsibility for the soil evaluation, loading calculations or DLR entered by the designer for this calculator.

> AES pipes can be cut to length on site. They are supplied in 3 meter lths only.


Lot 6 Andrew Road Forest Creek

Scale

10m, 20m, 30m, 40m, 50m, 60m, 70m, 80m, 90m, 100m,

 - proposed area to be cleared

- dwelling

 - shed

Andrew Road, Forest Creek

143-066m

Lot 5

186.66m

Lot 6  
RP 735253

Lot 7

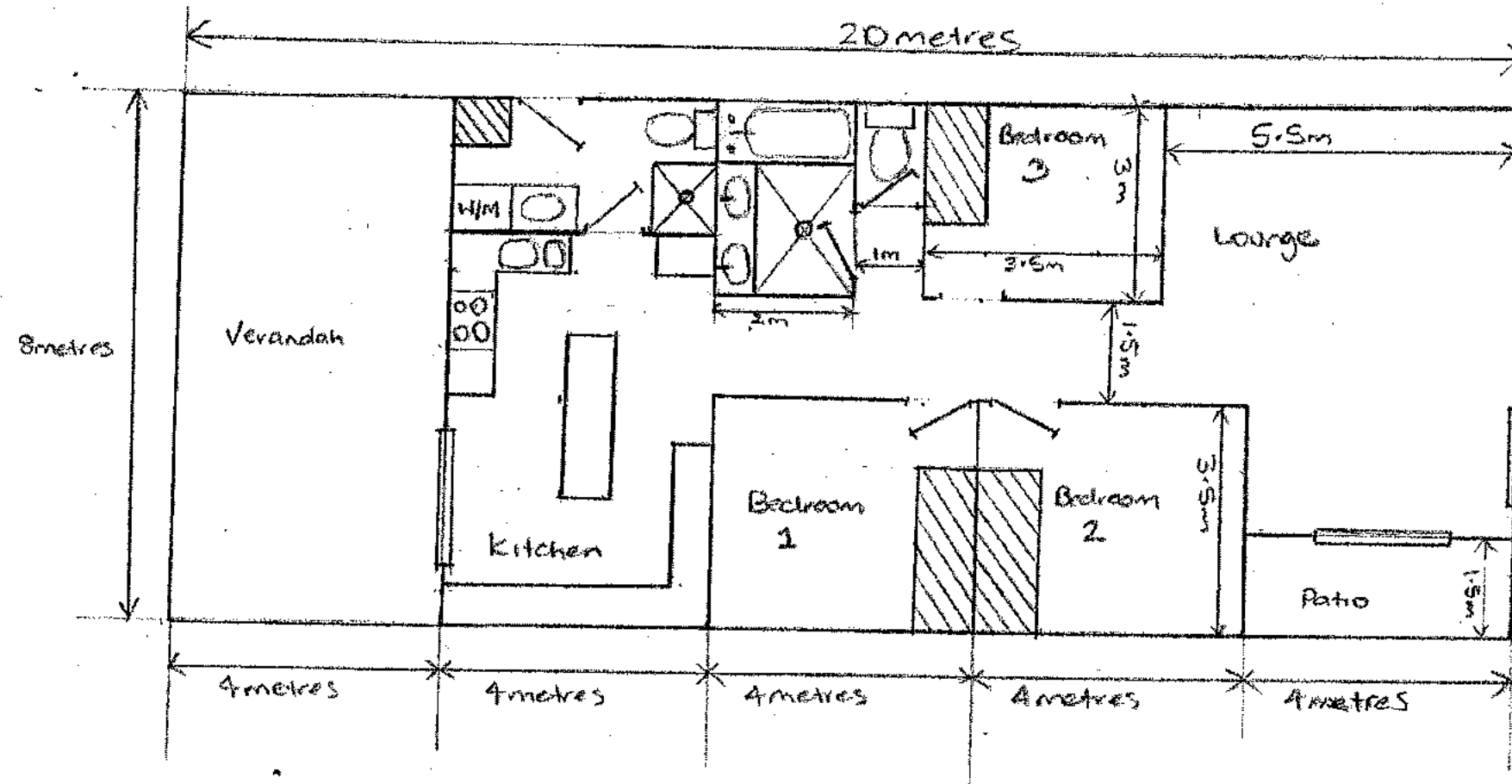
Total area, not including access 7.70m<sup>2</sup>

Total fall measured 1m over 10m,  
at actual dwelling

275.585.4

# Lot 6 Andrew Road Forest Creek - Floor Plan

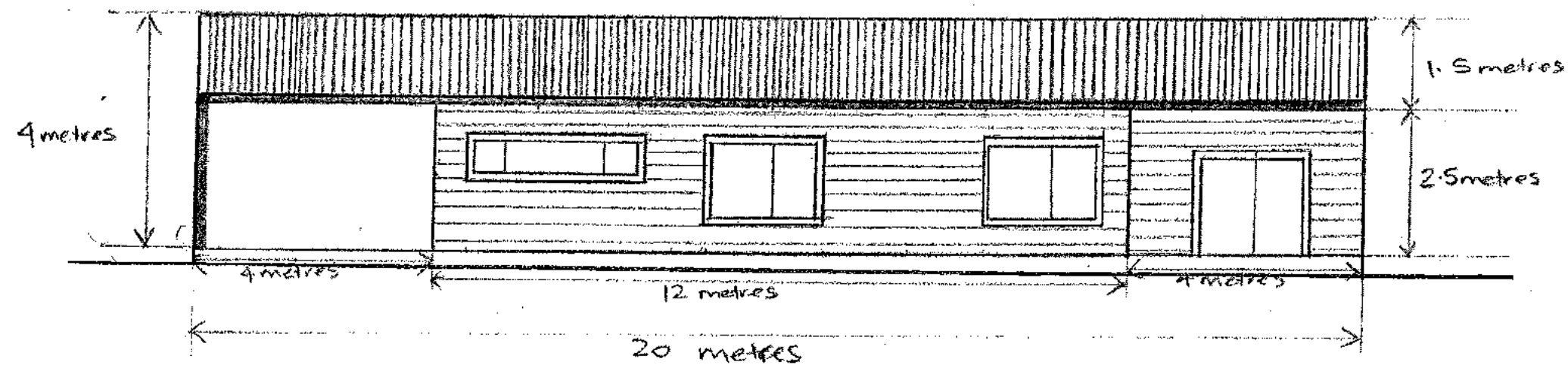
1m 2m 3m 4m 5m 6m 7m 8m 9m 10m  
Scale





Lot 6 Andrew Road Forest Creek Front Elevation - East

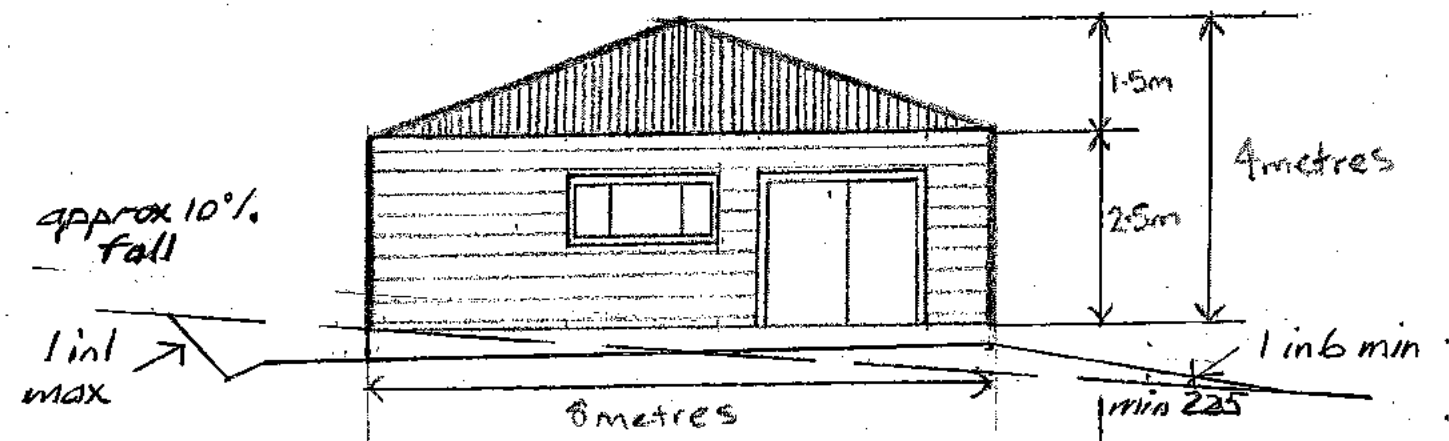
1m 2m 3m 4m 5m 6m 7m 8m 9m 10m  
Scale



Lot 6 Andrew Road Forest Creek Side Elevation - South

1m, 2m, 3m, 4m, 5m, 6m, 7m, 8m, 9m, 10m

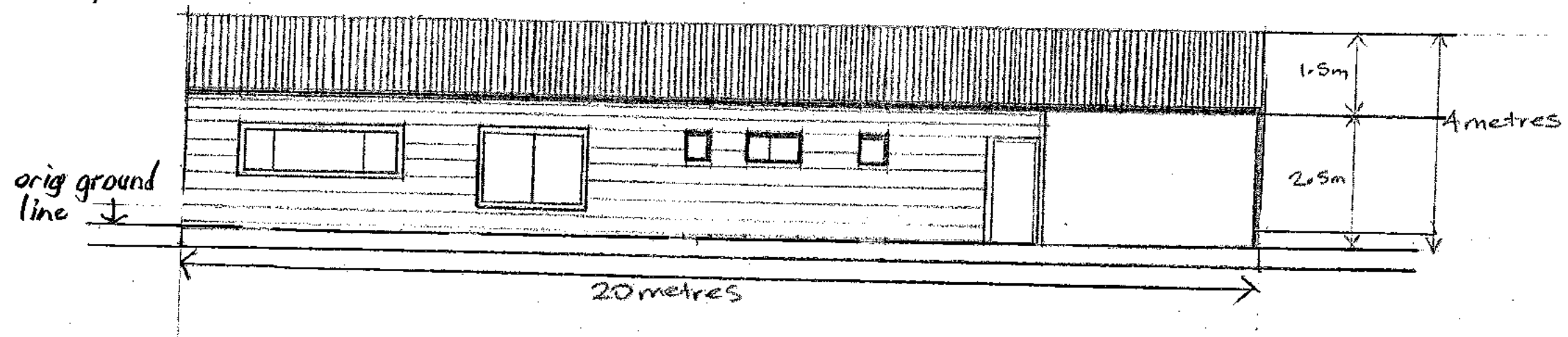
Scale



Lot 6 Andrew Road Forest Creek Rear Elevation - West

1m, 2m, 3m, 4m, 5m, 6m, 7m, 8m, 9m, 10m

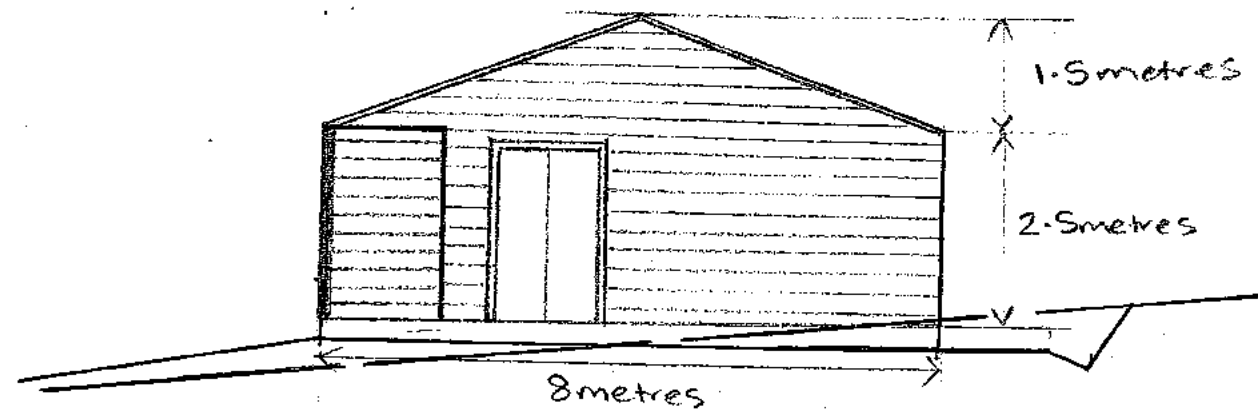
Scale



Lot 6 Andrew Road Forest Creek Side Elevation - North

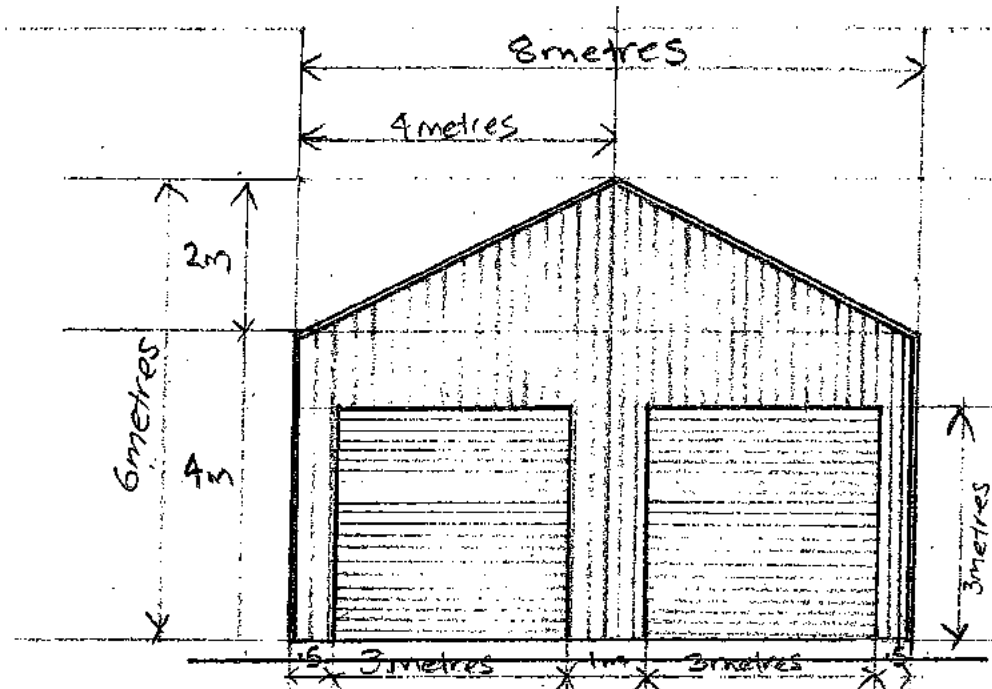
1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

Scale

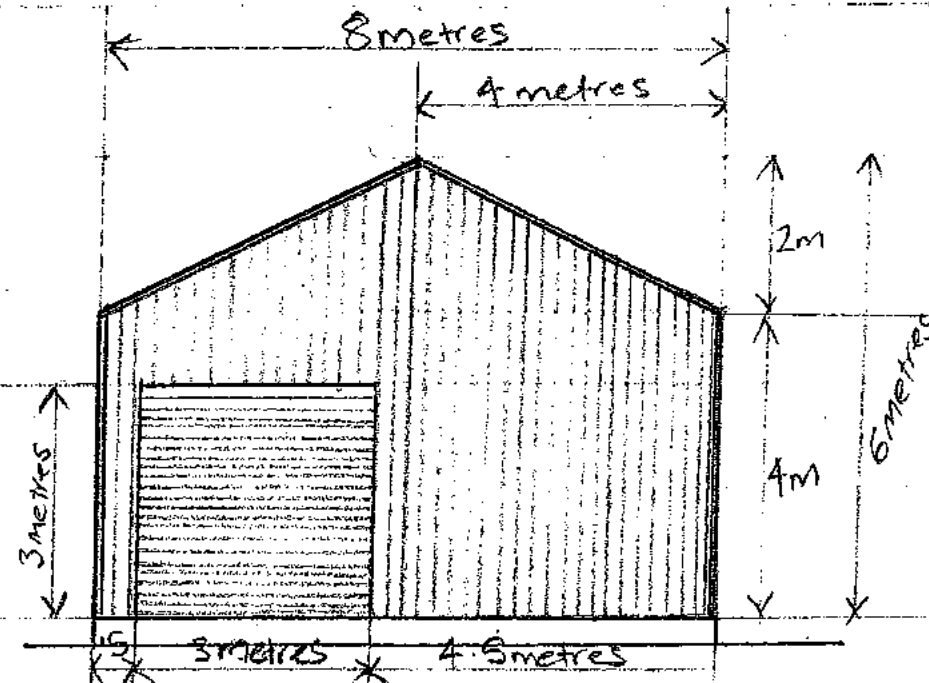


1m, 2m, 3m, 4m, 5m, 6m, 7m, 8m, 9m, 10m,  
Scale

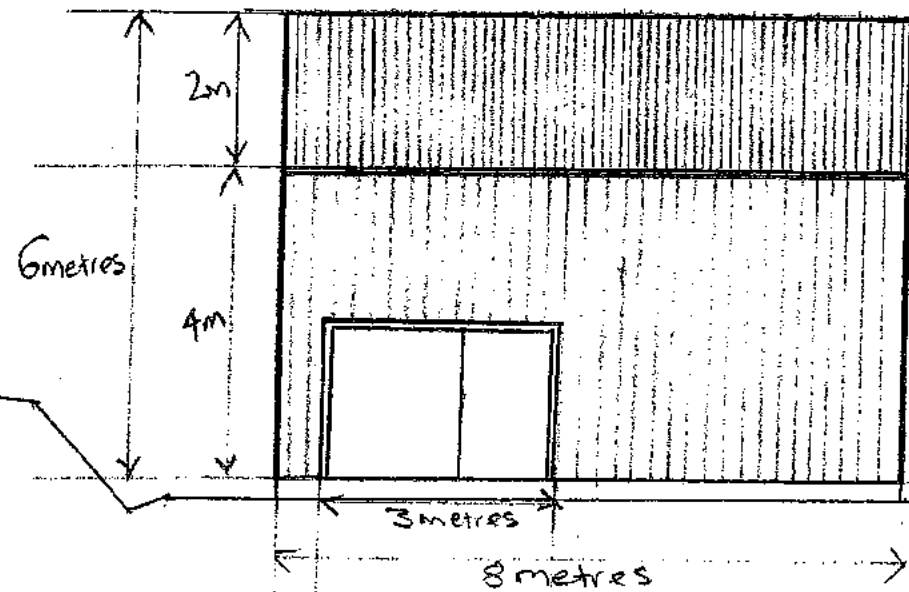
Lot 6 Andrew Rd Forest Creek - Detached Structure - Garage/Shed



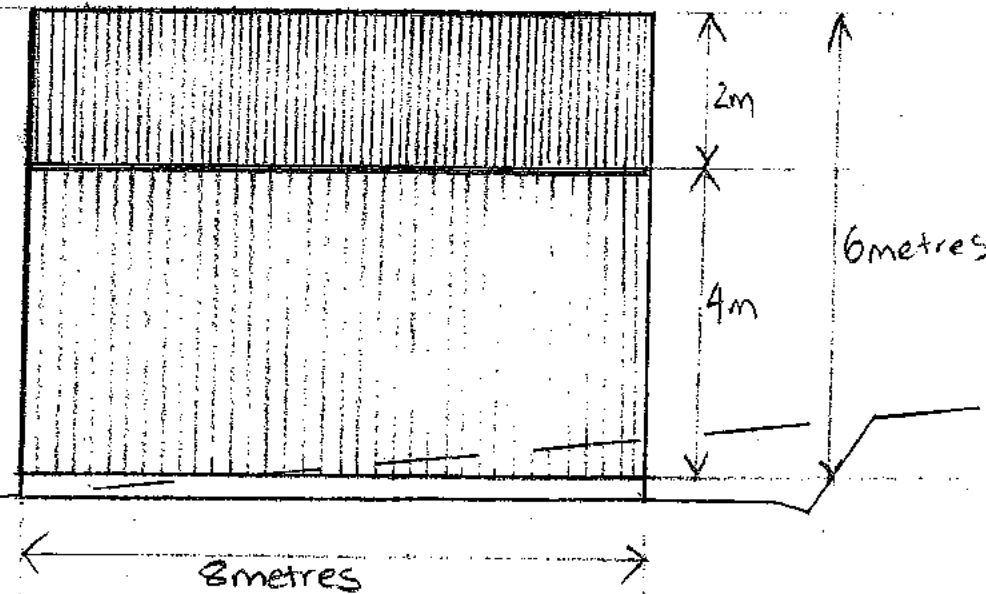
Front Elevation - East



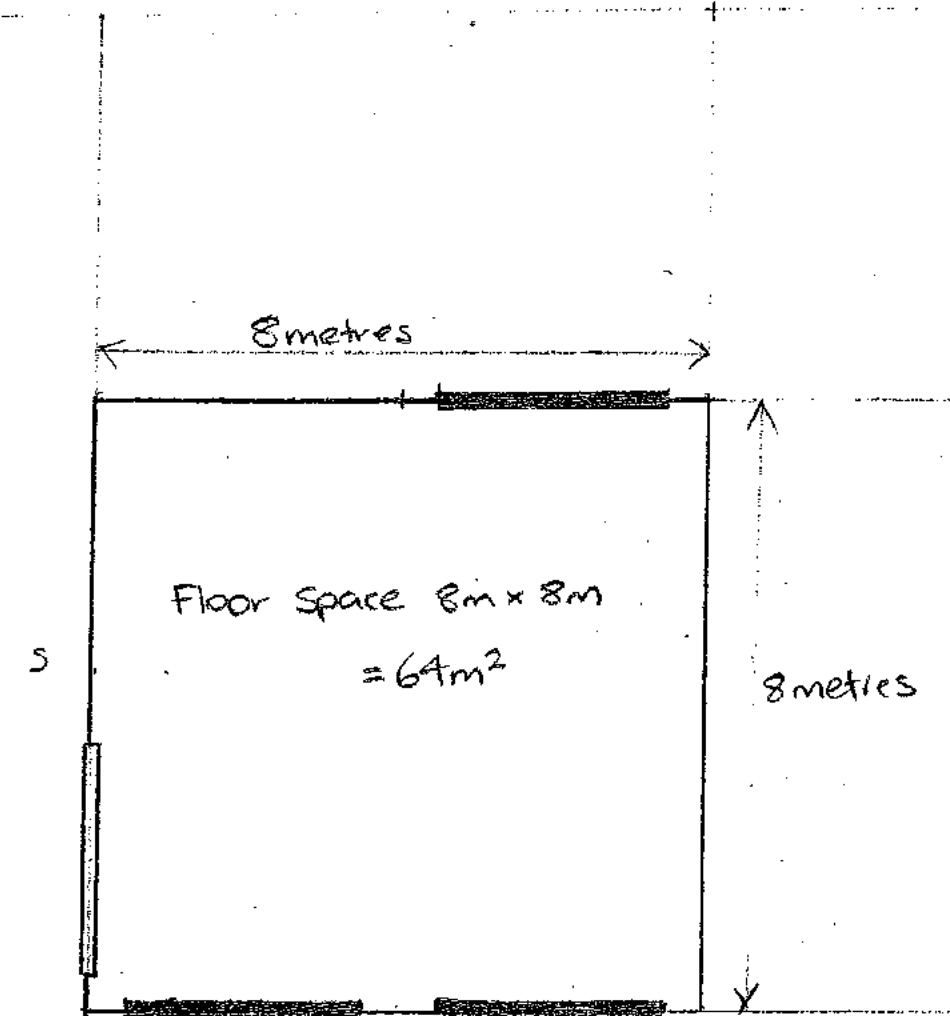
Rear Elevation - West



Side Elevation - South



Side Elevation - North



East Facing  
— Roller door  
— Sliding window door

Floor Plan