Your Ref: Our Ref: F22/37

09 January, 2023

Chief Executive Officer Mareeba Shire Council PO Box 154 MAREEBA QLD 4880



#### Attention: Regional Planning Group

Dear Sir,

## RE: APPLICATION FOR A MATERIAL CHANGE OF USE – NON-RESIDENT WORKFORCE ACCOMMODATION. LOT 1 ON RP741791, 8 VICARY ROAD, MAREEBA.

This application is for a Material Change of Use – Non-Resident Workforce Accommodation over land described as Lot 1 on RP741791, situated at 8 Vicary Road, Mareeba is submitted on behalf of the Dusty Nuts Pty Ltd.

The application comprises of Application Forms, Proposal Plans, SmartMap, Dirt Professionals Site Assessment and Design Report and this Town Planning Submission. It is understood that a Representative of the proponent will provide payment of the Application Fee to Council.

#### The Site

The subject land is described as Lot 1 on RP741791, Locality of Mareeba and situated at 8 Vicary Road, Mareeba. The site is owned by Dusty Nuts Pty Ltd who are also the applicants for the proposed development. The subject site comprises of a single regularly shaped allotment, has an area of 9,999 m<sup>2</sup> and contains frontage to the Unnamed Road. The site contains existing Dwelling Houses and associated structures.

In relation to the current State Governmental Mapping the site is Not Mapped as containing Remnant Vegetation, Regrowth Vegetation and Essential Habitat nor is the site designated as including a Referable Wetland or Wetland Protection Area. The site is not located within 25 metres of a State Controlled Road nor within 25 metres of an Active Railway Corridor. It is considered that the proposal does not require Referral to the State Agencies.

#### The Proposed Development

The proposed development is for a Material Change of Use – Non-Resident Workforce Accommodation, over two (2) Stages in the Rural Zone of the Mareeba Shire Council's Planning Scheme. The site is located at 8 Vicary Road, Mareeba and is more particularly described as Lot 1 on RP741791. The site is regular in shape, has an area of 9,999 m<sup>2</sup> and contains Dwelling Houses and associated structures.

A Development Permit for a Material Change of Use is sought to facilitate the construction of seventy-two (72) person Workforce Accommodation and a Manager's Residence. The site is designated within the Rural Zone of the Mareeba Shire Planning Scheme is vacant. The proposal is to provide necessary Workforce Accommodation supporting the immediate, surrounding, and Rural Areas of Mareeba and the Tablelands Region. This Rural Allotment contains an area of 9,999 m<sup>2</sup> and whilst including Mapped Agricultural Land is constrained by the physical shape, location and existing improvements. The proposal will ensure to take this non-viable Rural Page Allotment and convert the site into Non-Resident Workforce Accommodation to support the surrounding 2 Activities and Rural Industries within the Tablelands Region.

The proposal is for a three (3) Staged Approval which involves the following:

#### <u>Stage1</u>

- 4 Conversion of the northernmost Dwelling House into a Manager Residence
- Conversion of the southernmost Dwelling House into a five (5) Bedroom Worker's Accommodation including a kitchen, bathroom, laundry, common area and verandah
- Construction of six (6) Modular Donga Units
- 🜲 Covered area
- Laundry
- 🜲 Kitchen
- Amenities (Toilets and Showers)

Stage 1 will allow for the accommodation of twenty-four (24) persons and include common areas, kitchens, laundries and toilets and showers.

#### Stage 2

- 🖊 Construction of twelve (12) Modular Donga Units
- Covered area
- Laundries
- Kitchens
- Amenities (Toilets and Showers)

Stage 2 will allow for the accommodation of a further twenty-four (24) persons and include common areas, kitchens, laundries and toilets and showers.

#### Future Stage 3

- Construction of twelve (12) Modular Donga Units
- 🜲 Covered area
- Laundries
- Kitchens
- Amenities (Toilets and Showers)

Future Stage 3 will allow for the accommodation of a further twenty-four (24) persons and include common areas, kitchens, laundries and toilets and showers. This is not expected to be provided in the short-term and will be dependent on the Agricultural aspects of the Mareeba Shire and surrounding Tablelands Region.

The site contains frontage to the Unnamed Road and proposes access from what is considered to be a limited access road. The proposal provides for the provision of existing car parking spaces in addition to parking in front of the pump storage shed and is expected to be provided fronting the frontage of the site between the proposed buildings and east boundary. The Gregory G Terzi Proposal Plan Sheet 08 demonstrates the ability for vehicle circulation and manoeuvring over the constrained. It is expected that the provision of minibus/van parking will

be provided for the proposed Worker's Accommodation. It is also anticipated that with each Stage the provision of five (5) parking spaces will be provided. Freshwater Planning Pty Ltd understands that the 12 seater Vans and/or minibuses will be provided to service the Worker's Accommodation. The site, whilst physically constrained, contains ample room for vehicle parking outside of any proposed wastewater storage.

The site will be connected to Water Supply from the channel for the non-potable Water Supply and Bore Water Page and Holding Tanks for potable Water Supply. Landscaping in the form of screening hedges/gardens with the 3 existing Landscaping to be maintained and enhanced and extended with the provision of Stage 2. Fencing can be provided on the adjoining boundary in proximity of the existing and proposed buildings (curtilages).

Attached to this Submission is a Site and Soil Report from the Dirt Professionals in relation to the Effluent Disposal of the site. Freshwater Planning Pty Ltd understand that the provision of the Dirt Professionals Report demonstrates that the proposal will not require any ERA63. It is further understood, that whilst the Report does not provide for Stage 3, confirmation has been provided that the existing Disposal Area and Reserve Areas are large enough to accommodate Stage 3 and additionally without the requirement for a ERA63. An updated Report and figures can be provided if required.

The site is located in the Rural Zone of the Mareeba Shire Council's Planning Scheme. A Material Change of Use for Non-Resident Workforce Accommodation is an Impact Assessable Use within this Zone. The application is Impact Assessable.

This Submission provides a comprehensive assessment of the relevant planning instruments and site context for the proposed Uses. This is supported by the attached Proposal Plans and the assessment against the relevant aspects of the Mareeba Shire Council's Planning Scheme. It is considered that the proposed development is an appropriate Use for the site, immediate vicinity and surrounding environs providing supporting Rural Services/Uses to the surrounding and local residents and Agricultural Industries of Mareeba and the Tablelands Region.

#### Far North Queensland Regional Plan 2009-2031

Lot 1 on RP741791 is identified as being in the Regional Landscape and Rural Production Area designation of the FNQ Regional Plan Mapping.

The proposal provides accommodation that supports the Rural Activities within the immediate and surrounding areas of Mareeba and the Tablelands Region. The Land Use Policy of the Primary Industries within the Regional Plan nominates that *'Sites and corridors for infrastructure that supports agricultural development, are identified, maintained and protected to support operation of those facilities and the ongoing operation of agricultural activities'*. The proposed Non-Resident Workforce Accommodation provides support through infrastructure for the accommodation of a Rural Workers associated with the Rural Activities of Mareeba and the Tablelands Region. This support will ensure the ongoing viability of Rural Industries for not only Mareeba but also the Tablelands Region.

It is additionally noted that a separate assessment against the Regional Plan is not required due to the fact that the Tablelands Regional Council Planning Scheme appropriately advances the Far North Queensland Regional Plan 2009-2031, as it applies to the Planning Scheme area. However, the Objective of Rural Subdivisions within the FNQ Regional Plan is for *'the region's Rural Production Areas and Natural Resources are protected by limiting land fragmentation'*. The proposed development is not in conflict with this Objective as it does not further fragment the existing Regional Landscape and Rural Productions Area and converts a non-viable Rural Allotment into a supporting operation for the agricultural activities of the Region.

It is considered that the proposed Material Change of Use is not in conflict with the Objectives and Intent for Regional Landscape and Rural Production Areas in the FNQ Regional Plan 2009-2031.

#### **Rural Zone Code**

The site is designated in the Rural Zone of the Mareeba Shire Planning Scheme. The Purpose of the Rural Zone Page 'provide opportunities for non-rural uses that are compatible with agriculture, the environmental features, and landscape character of the rural area where the uses do not compromise the long-term use of the land for rural purposes'. The proposal provides for a Non-Rural Use that supports Agricultural Industries and Activities situated on the Tablelands. The proposal is provided over a non-viable Rural Allotment creating much needed Accommodation to compliment and support the Rural Activities within Mareeba. It is considered that the proposed development is considered to meet the Purposes of the Rural Zone.

Performance outcomes	Acceptable outcomes	Comments				
For self-assessable and assessable development						
Height						
<ul> <li>PO1</li> <li>Building height takes into consideration and respects the following:</li> <li>(a) the height of existing buildings on adjoining premises;</li> <li>(b) the development potential, with</li> </ul>	<ul> <li>AO1.1</li> <li>Development, other than buildings used for rural activities, has a maximum building height of:</li> <li>(a) 8.5 metres; and</li> <li>(b) 2 storeys above ground level.</li> </ul>	Complies, Any non-Rural structures will be less than 8.5 metres in height (4.5 metres provided) and not more than 2 storeys above ground level (single storey).				
<ul> <li>respect to height, on adjoining premises;</li> <li>(c) the height of buildings in the vicinity of the site;</li> <li>(d) access to sunlight and daylight for the site and adjoining sites;</li> <li>(e) privacy and overlooking; and</li> <li>(f) site area and street frontage length.</li> </ul>	AO1.2 Buildings and structures associated with a rural activity including machinery, equipment, packing or storage buildings do not exceed 10 metres in height.	Complies Any new Buildings or structures associated with the Rural Use will not exceed 10 metres in height.				
Siting, where not involving a Dwelling h Note—Where for Dwelling house, the se	<b>ouse</b> tbacks of the Queensland Development Coc	le apply.				
<ul> <li>PO2</li> <li>Development is sited in a manner that considers and respects: <ul> <li>(a) the siting and use of adjoining premises;</li> <li>(b) access to sunlight and daylight for the site and adjoining sites;</li> <li>(c) privacy and overlooking;</li> <li>(d) air circulation and access to natural breezes;</li> <li>(e) appearance of building bulk; and</li> <li>(f) relationship with road corridors.</li> </ul> </li> </ul>	<ul> <li>AO2.1</li> <li>Buildings and structures include a minimum setback of: <ul> <li>(a) 40 metres from a frontage to a State-controlled Road; and</li> <li>(b) 10 metres from a boundary to an adjoining lot.</li> </ul> </li> </ul>	Complies, The site is located greater than 40 metres (70 m) from the frontage of a State Controlled Road (the Kennedy Highway). The site is constrained by its configuration (shape). The proposed structures are setback greater than 8.70 metres from the frontage (eastern property boundary) as per the existing structures and given the shape of the site and location of existing structures, it is considered that the provided setback is appropriate. The site has been meticulously designed to incorporate the natural features of the site and surrounds while ensuring appropriate amenity and safety.				
	AO2.2 Buildings and structures, where for a Roadside stall, include a minimum	Not Applicable. Not Roadside Stall proposed.				

Performance outcomes	Acceptable outcomes	Comments
	setback of 0 metres from a frontage to a road that is not a State-controlled Road.	
	<ul> <li>AO2.3</li> <li>Buildings and structures, expect where a Roadside stall, include a minimum setback of: <ul> <li>(a) 10 metres from a frontage to a sealed road that is not a Statecontrolled road; and</li> <li>(b) 100 metres from a frontage to any other road that is not a Statecontrolled road;</li> </ul> </li> </ul>	Complies, The site is constrained by its configuration (shape). The proposed structures are setback greater than 8.70 metres from the frontage of the site as per the existing structures. Any new structures are setback 10 metres from the frontage. Given the shape of the site and location of existing structures, it is considered that the provided setback is appropriate. The site has been meticulously designed to incorporate the natural features of the site and surrounds while ensuring appropriate amenity and safety.
Accommodation density		
<b>PO3</b> The density of Accommodation activities:	AO3.1 Residential density does not exceed one dwelling house per lot.	Not Applicable. No Residential Density proposed.
<ul> <li>(a) respects the nature and density of surrounding land use;</li> <li>(b) is complementary and subordinate to the rural and natural landscape values of the area; and</li> <li>(c) is commensurate to the scale and frontage of the site.</li> </ul>	<ul> <li>AO3.2</li> <li>Residential density does not exceed two dwellings per lot and development is for:</li> <li>(a) a secondary dwelling; or</li> <li>(b) Caretaker's accommodation and includes building work or minor building work with a maximum gross floor area of 100m<sup>2</sup>; or</li> <li>(c) Rural worker's accommodation.</li> </ul>	Not Applicable. No Residential Density proposed. The proposal is for Non-Resident Workforce Accommodation. The site is bounded by the Road Reserve and LeaseHold Land (Rail Trail) with a single Rural Allotment surrounding the site. No adjoining Residential Residence is located within proximity of the site. The proposal is considered to respect the nature of the surrounding Uses and provides for a Use to support the surrounding Rural Allotments. The Workforce Accommodation has been positioned appropriately.

#### For assessable development

Site cover							
<ul> <li>PO4</li> <li>Buildings and structures occupy the site in a manner that:</li> <li>(a) makes efficient use of land;</li> <li>(b) is consistent with the bulk and scale of buildings in the surrounding area; and</li> <li>(c) appropriately balances built and natural features.</li> </ul>	AO4 No acceptable outcome is provided.	The provision of the Non-Resident Workforce Accommodation will be sure to make efficient Use of the land, keeping with the Rural nature, natural and physical features of the site. Any structures will be of appropriate scale and will ensure to balance the natural features of the site.					

Performance outcomes	Acceptable outcomes	Comments
PO5Developmentcomplementsandintegrateswith the established builtcharacterof the Rural zone, havingregard to:(a)roof form and pitch;(b)eaves and awnings;(c)building materials, colours and textures; and(d)window and door size and location.	<b>AO5</b> No acceptable outcome is provided.	The proposed structures will be provided to compliment the Rural Zone and in particularly the natural characteristics of the site. The proposal is for a Non- Resident Workforce Accommodation over the site to support the immediate and surrounding Rural Activities. Any structures will ensure to reflect the proposed Uses of the site and surrounding Rural Allotments.
Amenity		
PO6 Development must not detract from the amenity of the local area, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) advertising devices; (e) visual amenity; (f) privacy; (g) lighting; (h) odour; and (i) emissions.	AO6 No acceptable outcome is provided.	The proposal is for a Non-Resident Workforce Accommodation to support the surrounding Rural Activities within Mareeba and the Tablelands. Any development over the site will ensure not to detract the amenity of the local area instead protecting the area and surrounding allotments amenity. The proposed will reflect the existing amenity of the site and surrounding area whilst supporting the Rural Industries of Mareeba.
PO7 Development must take into account and seek to ameliorate any existing negative environmental impacts, having regard to: (a) noise; (b) hours of operation; (c) traffic; (d) advertising devices; (e) visual amenity; (f) privacy; (g) lighting; (h) odour; and (i) emissions.	<b>AO7</b> No acceptable outcome is provided.	The proposal is for a Non-Resident Workforce Accommodation to support the surrounding Rural Activities within Mareeba and the Tablelands. Any development over the site will ensure to ameliorate any existing negative environmental impacts. The purpose of the development is to support the Rural Industries of Mareeba and the Tablelands.

The proposed development is considered to generally comply with the Code achieving the Acceptable Outcomes and where not able to be met, or are available, meet the Performance Outcomes of the Code. The proposed development is considered appropriate and not in conflict with the Rural Zone Code as it provides for a supporting Use to service the immediate and surrounding Rural Industries and Townships in addition to providing a Use to a majority vacant non-viable Rural Allotment.

#### **Accommodation Activities Code**

The proposed development is for the facilitation of Non-Resident Workforce Accommodation to support the Rural Industries within Mareeba and on the Tablelands. Assessment against the relevant aspects of the Accommodation Activities Code is provided below.

Performance outcomes	Acceptable outcomes	Comments
For accepted development subject to re	quirements and assessable development	
All Accommodation activities, apart from	n Dwelling house	
<ul> <li>PO1</li> <li>Accommodation activities are located on a site that includes sufficient area:         <ul> <li>(a) to accommodate all buildings, structures, open space and infrastructure associated with the use; and</li> <li>(b) to avoid adverse impacts on the amenity or privacy of nearby land uses.</li> </ul> </li> </ul>	<b>AO1</b> Development is located on a site which provides the applicable minimum site area and minimum road frontage specified in <b>Table 9.3.1.3B</b> .	Complies, The proposed Non-Resident Workforce Accommodation is located over the Rural site containing and area of 9,999 m <sup>2</sup> with frontage to the Unnamed Road (via Vicary Road). The site contains appropriate street frontage and sufficient area for the appropriate location of the Accommodation Activities.
All Accommodation activities, apart from	n Tourist Park and Dwelling house	
<ul> <li>PO2</li> <li>Accommodation activities are provided with on-site refuse storage areas that are: <ul> <li>(a) sufficient to meet the anticipated demand for refuse storage; and</li> </ul> </li> <li>(b) appropriately located on the site having regard to potential odour and noise impacts on uses on the site and adjoining sites.</li> </ul>	<ul> <li>AO2.1</li> <li>A refuse area is provided that: <ul> <li>(a) includes a water connection;</li> <li>(b) is of a size and configuration to accommodate 2x240 litre bins per dwelling or accommodation unit where involving a use other than a residential care facility or retirement facility; and</li> <li>(c) is of a size and configuration to accommodate a minimum of two bulk refuse bins where involving a residential care facility.</li> </ul> </li> </ul>	Complies, The proposal can be provided with appropriate on-site Refuse Storage Areas. The site contains large areas available for the appropriately positioning to avoid any potential odour and noise impacts.
All Accommodation activities, except fo	facility or retirement facility.	
<b>PO3</b> Accommodation activities are designed to avoid overlooking or loss of privacy for adjoining uses. Note—These provisions apply to any adjoining use, both on an adjoining site and on the same site.	AO3 The windows of habitable rooms: (a) do not overlook the windows of a habitable room in an adjoining dwelling or accommodation unit; or (b) are separated from the windows of a habitable room in an adjoining dwelling or accommodation unit by a distance greater than: (i) 2 metres at ground level; and (ii) 8 metres above ground level; or (c) are treated with: (i) a minimum sill height of 1.5 metres above floor level; or	Complies, Any Workforce Accommodation is positioned appropriately within the site. The site does not adjoin, in proximity of, any other Residential Improvements of the adjoining Rural Allotment. It is considered that the Accommodation Activities will not impact on any privacy for the adjoining Rural Allotment.
PO4	(ii) fixed opaque glassed installed below 1.5 metres; or (iii) fixed external screens; or (iv) a 1.5 metre high screen fence along the common boundary. AO4.1 Development, except for Caretaker's accommodation, Dwelling house, Dual	Complies, The site contains an area of 9,999 m <sup>2</sup> with substantial communal open spaces

Performance outcomes	Acceptable outcomes	Comments	
<ul> <li>Accommodation activities are provided with sufficient private and communal open space areas which:</li> <li>(a) accommodate a range of landscape treatments, including</li> </ul>	occupancy or Home based business, includes communal open space which meets or exceeds the minimum area, dimension and design parameters specified in <b>Table 9.3.1.3C</b> .	provided, if needed, in addition to the Communal kitchens, Common Areas and Laundry Areas.	Page
<ul> <li>soft and hard landscaping;</li> <li>(b) provide a range of opportunities for passive and active recreation;</li> <li>(c) provide a positive outlook and high quality of amenity to residents;</li> </ul>	AO4.2 Development includes private open space for each dwelling or accommodation unit which meets or exceeds the minimum area, dimension and design parameters specified in Table 9.3.1.3D.	complies,	8
<ul> <li>(d) is conveniently located and easily accessible to all residents; and</li> <li>(e) contribute to an active and</li> </ul>	<b>AO4.3</b> Clothes drying areas are provided at the side or rear of the site so that they are not visible from the street.	Complies, Any clothes drying areas will be located within the individual Units. Laundries are provided with drying facilities.	
attractive streetscape.	<ul> <li>AO4.4</li> <li>If for Dual occupancy, Multiple dwelling, Residential care facility or Retirement facility, development provides a secure storage area for each dwelling or accommodation unit which:</li> <li>(a) is located to facilitate loading and unloading from a motor vehicle;</li> <li>(b) is separate to, and does not obstruct, on-site vehicle parking or manoeuvring areas;</li> <li>(c) has a minimum space of 2.4m<sup>2</sup> per dwelling or accommodation unit;</li> <li>(d) has a minimum height of 2.1 metres;</li> <li>(e) has minimum dimensions to enable secure bicycle storage;</li> <li>(f) is weather proof; and</li> <li>(g) is lockable.</li> </ul>	Not Applicable.	

The proposed development is considered to generally comply with the Code achieving the Acceptable Outcomes and where not able to be met, or are available, meet the Performance Outcomes of the Code. The proposed development is considered appropriate and not in conflict with the Accommodation Activities Code as it provides for a supporting Use to service the immediate and surrounding Rural Industries and Townships in addition to providing a Use to a majority vacant non-viable Rural Allotment.

#### **Airports Environs Overlay Code**

The site is located inside of the 3km Bird and Bat Zone and within the 6 km Light Intensity Zone as designated within the Mareeba Overlay Mapping. The proposed Non-Resident Workforce Accommodation provides for additional structures to support the Rural Industries of Mareeba and the Tablelands Region. The proposed Workforce Accommodation has been meticulously designed not adversely affecting the site, immediate vicinity, or surrounds. The proposal is not for a waste disposal site. The proposal is not considered to contribute to the potentially serious hazard from wildlife (bird or bat) strike and will ensure that potential food and waste sources are covered and collected so that they are not accessible to wildlife. It is considered that the Airports Environs Overlay Code is Not Applicable to the proposed Non-Resident Workforce Accommodation and the proposal will not affect the Bird and Bat Strike Zone and Light Intensity Zone.

#### **Bushfire Hazard Overlay Code**

The site is Mapped as containing areas of Potential Impact Buffer (100 metres) over the site. The site is for the majority vacant and clear of any significant vegetation. It is noted that the site is bounded by Road Reserves and Leasehold Land (Rail Trail) and adjoins a Rural Banana Farm. Any future structures are able to be provided with appropriate setbacks and firebreaks if located within the Mapped Hazard and if required. The proponents will Page ensure that maintenance and upkeep of the site will be maintained to ensure no build-up of hazardous materials and that any existing or proposed firebreaks are maintained. It is not considered that the proposal will affect the Bushfire Hazard of the property as the site will ensure to remove any piling of fuel loads, contains existing firebreaks, and is provided with appropriate water sources. Any appropriate water source will contain sufficient storage of water for Firefighting Supply and will be provided with the appropriate connections where required.

#### Landscaping Code

The proposed development is for the facilitation of a Non-Resident Workforce Accommodation located within the Rural Zone of the Mareeba Shire Planning Scheme. The site contains an area of 9,999 m<sup>2</sup> with the site containing existing Landscaping. The proponents have informed Freshwater Planning Pty Ltd that the existing buildings and landscaping will remains as is and are to be extended to include Stage two. Fencing is to be provided along the adjoining boundary in proximity of existing and proposed buildings for that relevant stage. The site includes large areas of Communal Open Space and Communal kitchens, Common Areas, and Laundry Areas. The Landscaped Areas will include both landscaped areas and communal open space areas to be used as leisure areas within the Workforce Accommodation. Any planting located within the nominated Landscaping Area/s will be provided as the preferred plant species which is understood to comply with the requirements of the Planning Scheme Policy. Landscaping is an important feature of a site, the proposed landscaping will be sourced from a local plant nursery to ensure that readily available and suitable plant species are planted. Plantings of various species, colour scheme, densities and heights will be selected to create a visually attractive site. The nominated Landscaping is considered to contribute to the Landscaping character of the Shire, complimenting the immediate surrounds and surrounding vicinity. The Landscaping provides for an attractive streetscape and assists in breaking up and softening the built form of the proposed Workforce Accommodation. Any plantings provided over the site will ensure suitability of the intended Workforce Accommodation Use and will not include the provision of invasive weeds. The proposed Landscaping is considered appropriate for the proposed development ensuring that these areas are easily maintained while allowing for casual surveillance and enhance the safety of pedestrians through the Crime Preventions Through Environmental Design (CPTED) principles.

#### **Parking and Access Code**

The site contains frontage to the Unnamed Road and proposes access from what is considered to be a limited access road. The proposal provides for the provision of existing car parking spaces in addition to parking in front of the pump storage shed and is expected to be provided fronting the frontage of the site between the proposed buildings and east boundary. The Gregory G Terzi Proposal Plan Sheet 08 demonstrates the ability for vehicle circulation and manoeuvring over the constrained. The site contains sufficient area for the manoeuvring, pickup and drop off of vehicles/buses/vans and the likes. It is expected that the provision of minibus/van parking will be provided for the proposed Worker's Accommodation. It is also anticipated that with each Stage the provision of five (5) parking spaces will be provided. Freshwater Planning Pty Ltd understands that the 12 seater Vans and/or minibuses will be provided to service the Worker's Accommodation. The site, whilst physically constrained, contains ample room for vehicle parking outside of any proposed wastewater storage.

The proposal provides for seventy-two (72) units requiring seventy-two (72) parking spaces over three Stages however, it is common knowledge that the occupants for Workforce Accommodation either ride share or don't own a vehicle for the majority. While recent trends are starting to show that more and more Workforce Accommodation users are starting to obtain a vehicle, the majority of these vehicles ride share. The proposal provides for a considered sufficient amount of vehicle parking spaces for the proposed Use, in addition to this the proposed development contains the ability for the provision of 22-seater busses to ensure that sufficient and suitable vehicle spaces are provided for the development.

The dimensions of the proposed car parking spaces can satisfy the requirements of Australian Standard AS2890.1 and all parking spaces/driveway areas will be appropriately sealed. It is considered that the proposed development is not in conflict with the Purpose or Intent of the Parking and Access Code and is acceptable.

#### Works, Services, and Infrastructure Code

The proposed development is for the facilitation of a Non-Resident Workforce Accommodation located within the Rural Zone of the Mareeba Shire Planning Scheme. The site contains frontage to the Unnamed Road and proposes access from what is considered to be a limited access road. The site will be connected to Water Supply from the channel for the non-potable Water Supply and Bore Water and Holding Tanks for potable Water Supply. Landscaping in the form of screening hedges/gardens with the existing Landscaping to be maintained and enhanced and extended with the provision of Stage 2. Fencing can be provided on the adjoining boundary in proximity of the existing and proposed buildings (curtilages). The proposal will ensure that any additional Stormwater collected from the proposed Workforce Accommodation will be dispersed over the site or directed to the lawful point of discharge.

Attached to this Submission is a Site and Soil Report from the Dirt Professionals in relation to the Effluent Disposal of the site. Freshwater Planning Pty Ltd understand that the provision of the Dirt Professionals Report demonstrates that the proposal will not require any ERA63. It is further understood, that whilst the Report does not provide for Stage 3, confirmation has been provided that the existing Disposal Area and Reserve Areas are large enough to accommodate Stage 3 and additionally without the requirement for a ERA63. An updated Report and figures can be provided if required.

The vacant site is generally flat with any Filling or Excavation anticipated to be limited to site preparation, levels and internal servicing or be provided as a part of an Operational Works Approval.

It is considered that the proposed Non-Resident Workforce Accommodation is not in conflict with the Purposes of the Works, Services, and Infrastructure Code. The proposal is considered acceptable and appropriate.

#### Conclusion

It is considered that the proposed development being a Material Change of Use to facilitate the construction of a Non-Resident Workforce Accommodation over land described as Lot 1 on RP741791 is appropriate. The proposed design of this development represents a small-scale development that has mitigated all possible negative effects of the surrounding environment maintaining and enhancing an attractive amenity. In particular, the proposed development:

- Converts a non-viable Rural Allotment into a Supporting Operation for the Agricultural Activities of the Region;
- 4 Can meet the Performance Outcomes and the Purpose of the Accommodation Activities Codes;

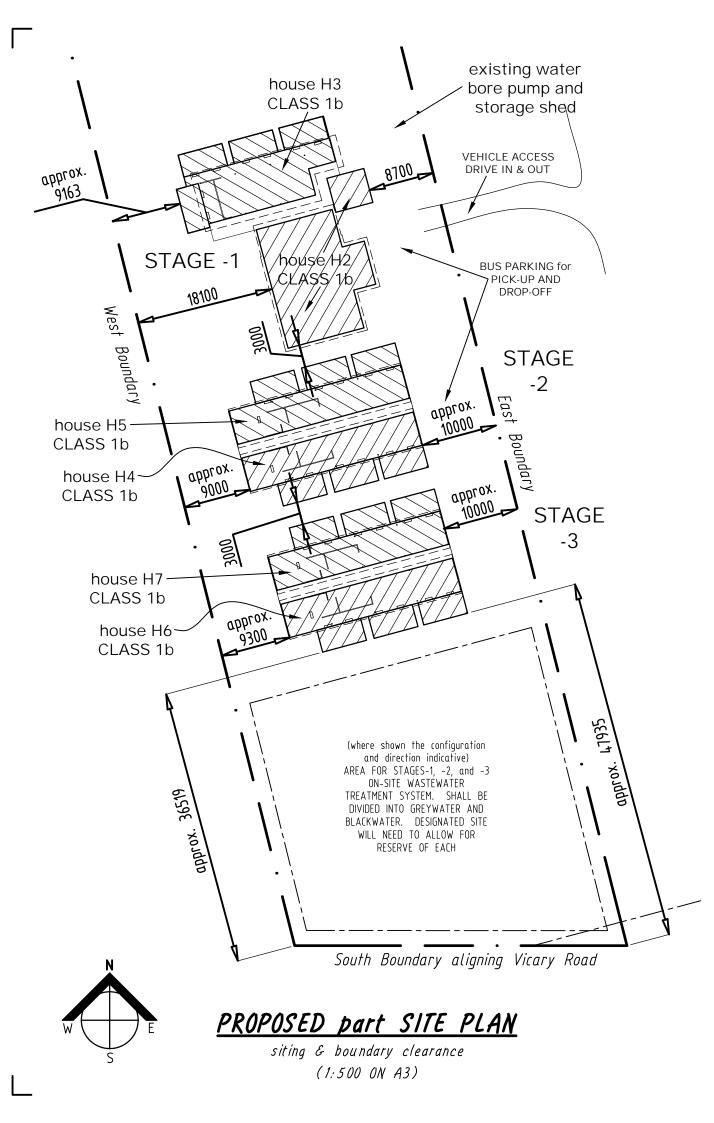
Page 10

- Is not in conflict with the Intent or Purposes for land designated in the Rural Zone, as it provides for supporting Uses to the Shire's Rural Industries;
- Provides for appropriate and acceptable level of servicing without compromising the environmental values of the Shire and Mareeba;
- Will encompass no significant negative impacts to the existing nature and amenity of the area, instead Page enhancing the amenity and character as the Material Change of Use provides an attractive necessary service 11 supporting the Rural Activities of Mareeba and the surrounding Townships;
- Is not in conflict with the Regional Plan's Regional Landscape and Rural Production Area Designation as the proposal provides necessary services to Mareeba which will continue to support the communities needs of the Mareeba Township and Region; and
- The proposed development is for the construction of Workforce Accommodation within the Mareeba Township ensuring additional Accommodation Activities to support the surrounding Mareeba Township and environs. This helps to cement Mareeba as a Major Urban Area and Regional Centre of the Tablelands while providing a much needed Use within the Township.

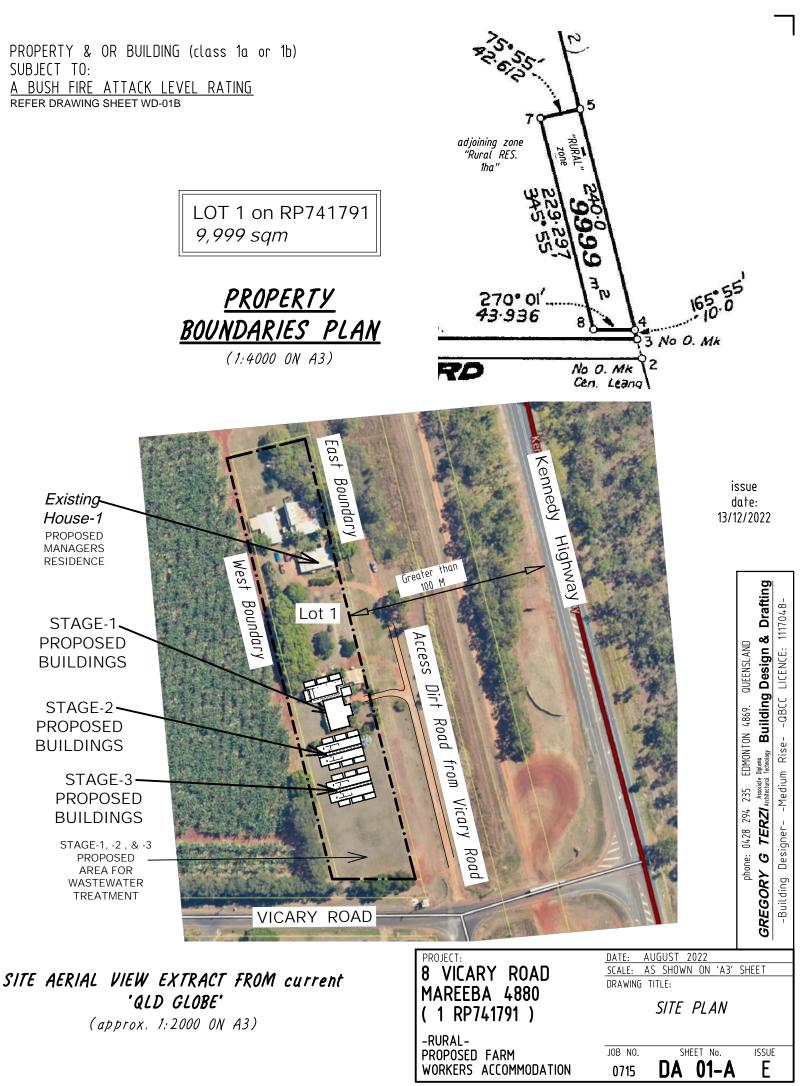
Freshwater Planning Pty Ltd request that Council provide a copy of the Draft Conditions with sufficient time for review prior to issuing a Decision Notice over the site or tabulating and Item on the Agenda. If you have any queries, please do not hesitate to contact Freshwater Planning Pty Ltd.

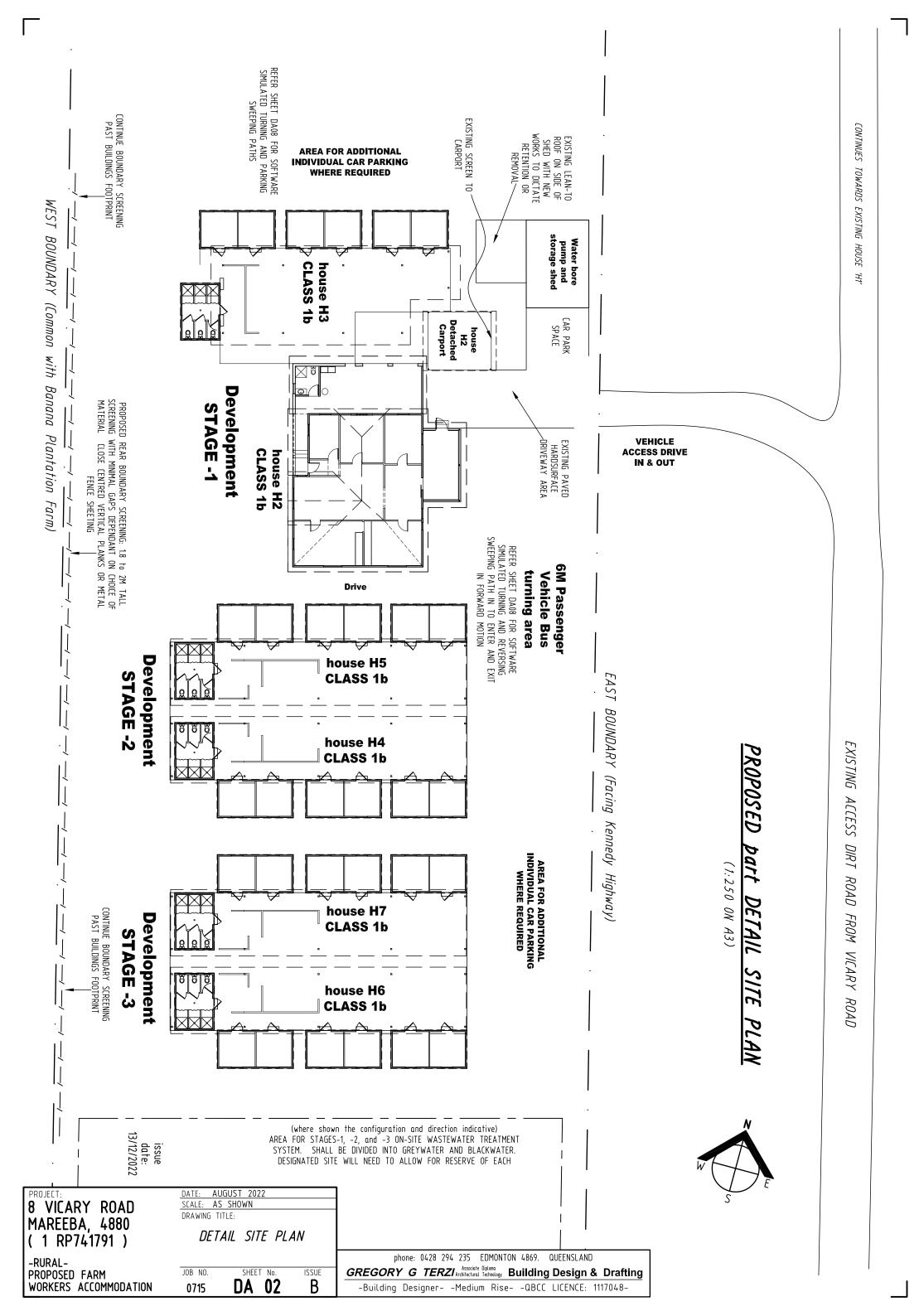
Yours faithfully,

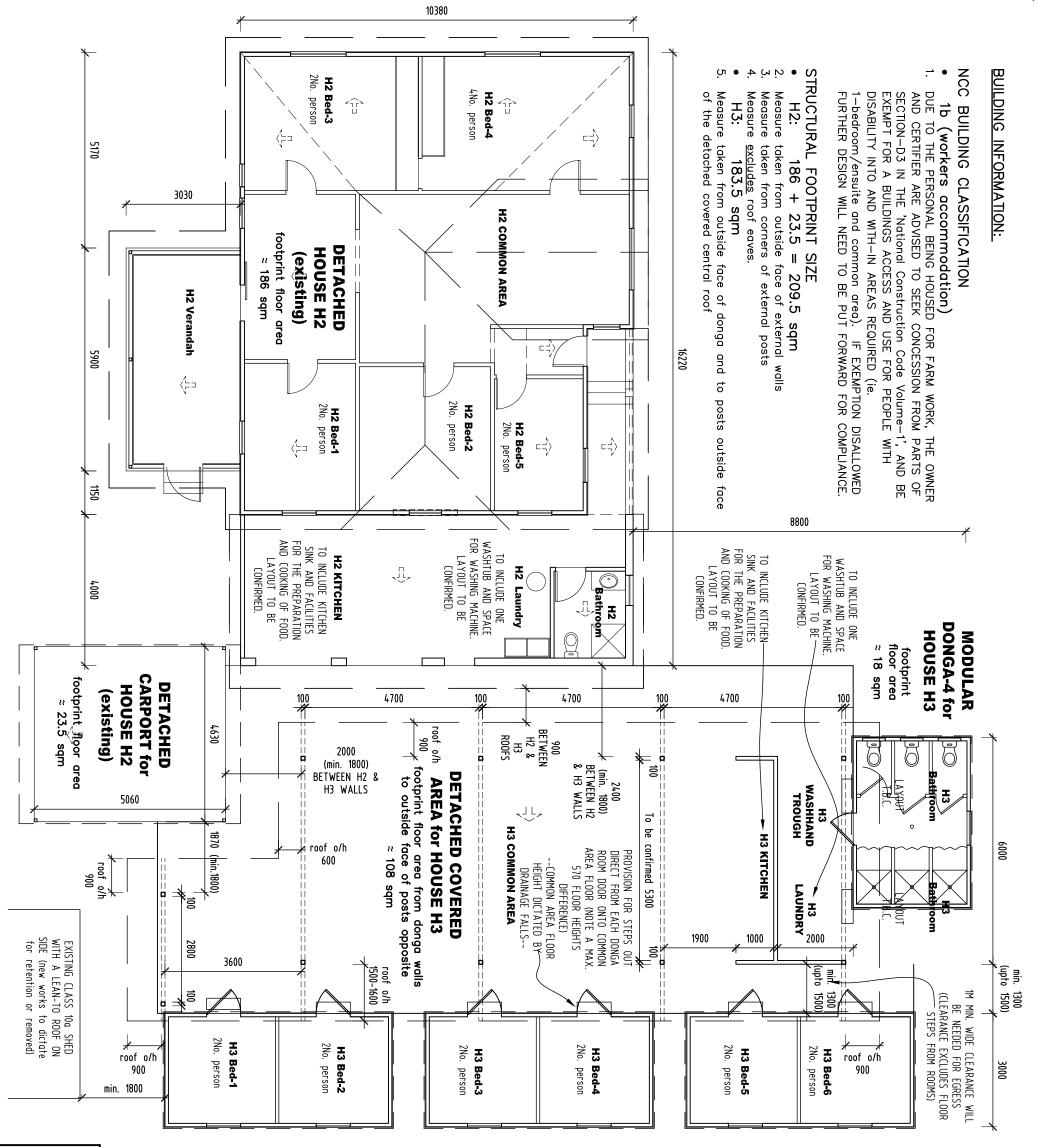
MATTHEW ANDREJIC FRESHWATER PLANNING PTY LTD



PROPERTY & OR BUILDING (class 1a or 1b) SUBJECT TO: A BUSH FIRE ATTACK LEVEL RATING REFER DRAWING SHEET WD-01B

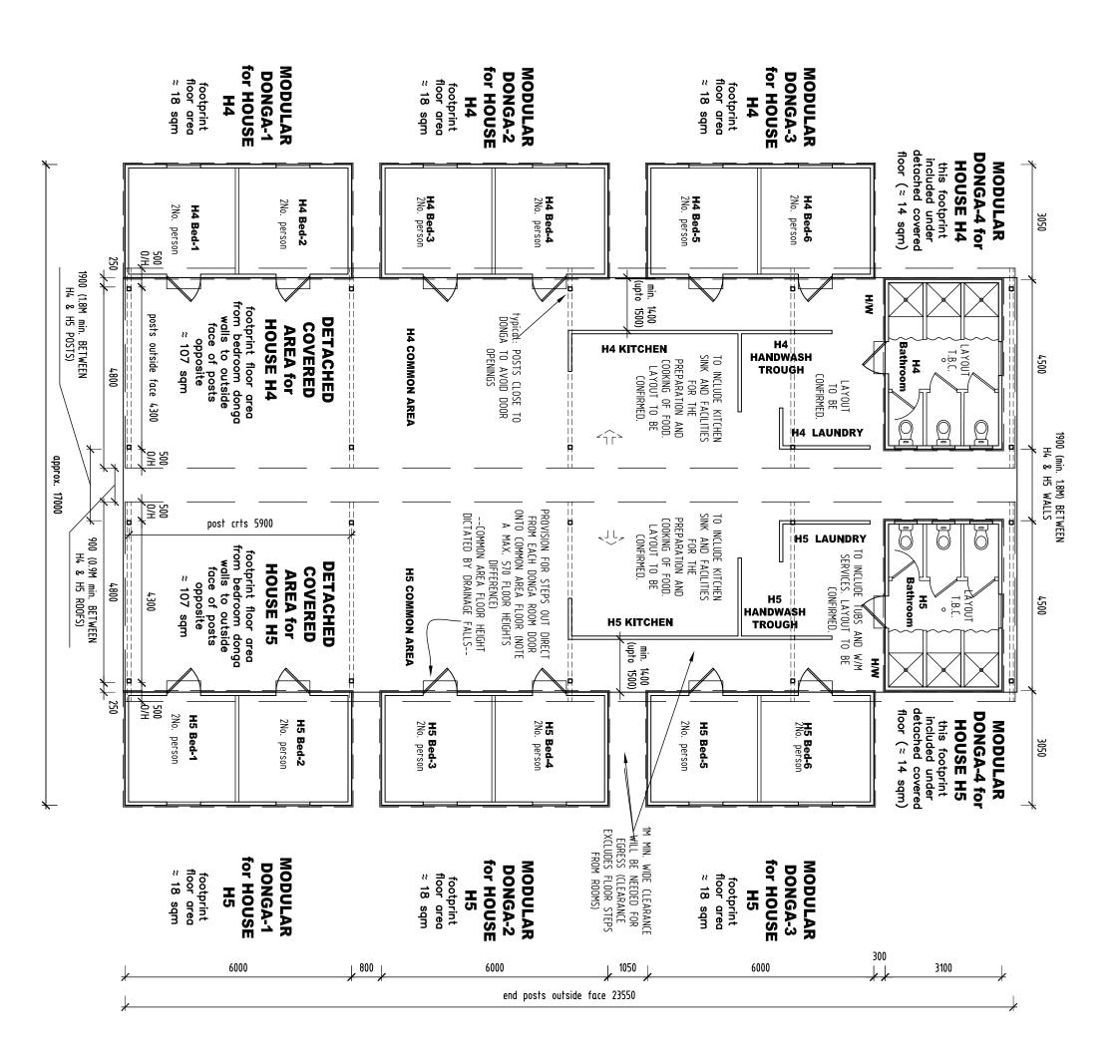






(000

	£ 6000	↓ 900 ↓ 6000	↓ <u>900</u> ↓ <u>6000</u>	<u>↓ 1400</u> ↓
NUECT: VICARY ROAD 1AREEBA 4880 1 RP741791 ) RURAL- ROPOSED FARM VORKERS ACCOMMODATION	MODULAR DONGA-1 Footprint floor area ~ 18 sqm	MODULAR DONGA-2 for HOUSE H3 footprint floor area ≈ 18 sqm	MODULAR DONGA-3 for HOUSE H3 footprint floor area ~ 18 sqm	
DATE: AUGUS 1 ZOZZ SCALE: AS SHOWN ON 'A3' SHEET DRAWING TITLE: Stage-1 FLOOR PLAN JOB NO. SHEET No. ISSUE 0715 DA 03 C	13/12/2022 phone: 0428 294 235 EDMONTON 4869. QUEE GREGORY G TERZI Architectural Technology Building De	NSLAND sign & Drafting ENCE: 1117048-	Farm Workers Accommodation Stage-1 FLOOR PLAN	



-RURAL- PROPOSED FARM WORKERS ACCOMMODATION	PROJECT: 3 VICARY ROAD MAREEBA 4880 ( 1 RP741791 )	Farm Workers Accommodation Stage-2 FLOOR PLAN (1:100 ON A3)
JOB NO. 0715	DATE: SCALE: DRAWING	<i>S A</i>
SHEET No.	AUGUST 2022 AS SHOWN ON 'A3' TITLE: FL OOR PLAN	issue date: 13/12/2022
ISSUE	SHEET	phone: 0428 294 235 EDMONTON 4869. QUEENSLAND GREGORY G TERZI Architectrual Technology Building Design & Drafting
		-Building DesignerMedium RiseQBCC LICENCE: 1117048-

# BUILDING INFORMATION:

NCC BUILDING CLASSIFICATION • 1b (workers accommodati 1. DUE TO THE PERSONAL BEING HO **1b (workers accommodation)** DUE TO THE PERSONAL BEING HOUSED FOR FARM WORK, THE OWNER AND CERTIFIER ARE ADVISED TO SEEK CONCESSION FROM PARTS OF SECTION-D3 IN REQUIRED (ie. 1-bedroom/ensuite and common area). IF EXEMPTION DISALLOWED FURTHER DESIGN WILL NEED TO BE PUT FORWARD FOR COMPLIANCE. THE 'National Construction Code Volume-1', AND BE EXEMPT FOR A BUILDINGS ACCESS AND USE FOR PEOPLE WITH DISABILITY INTO AND WITH-IN AREAS

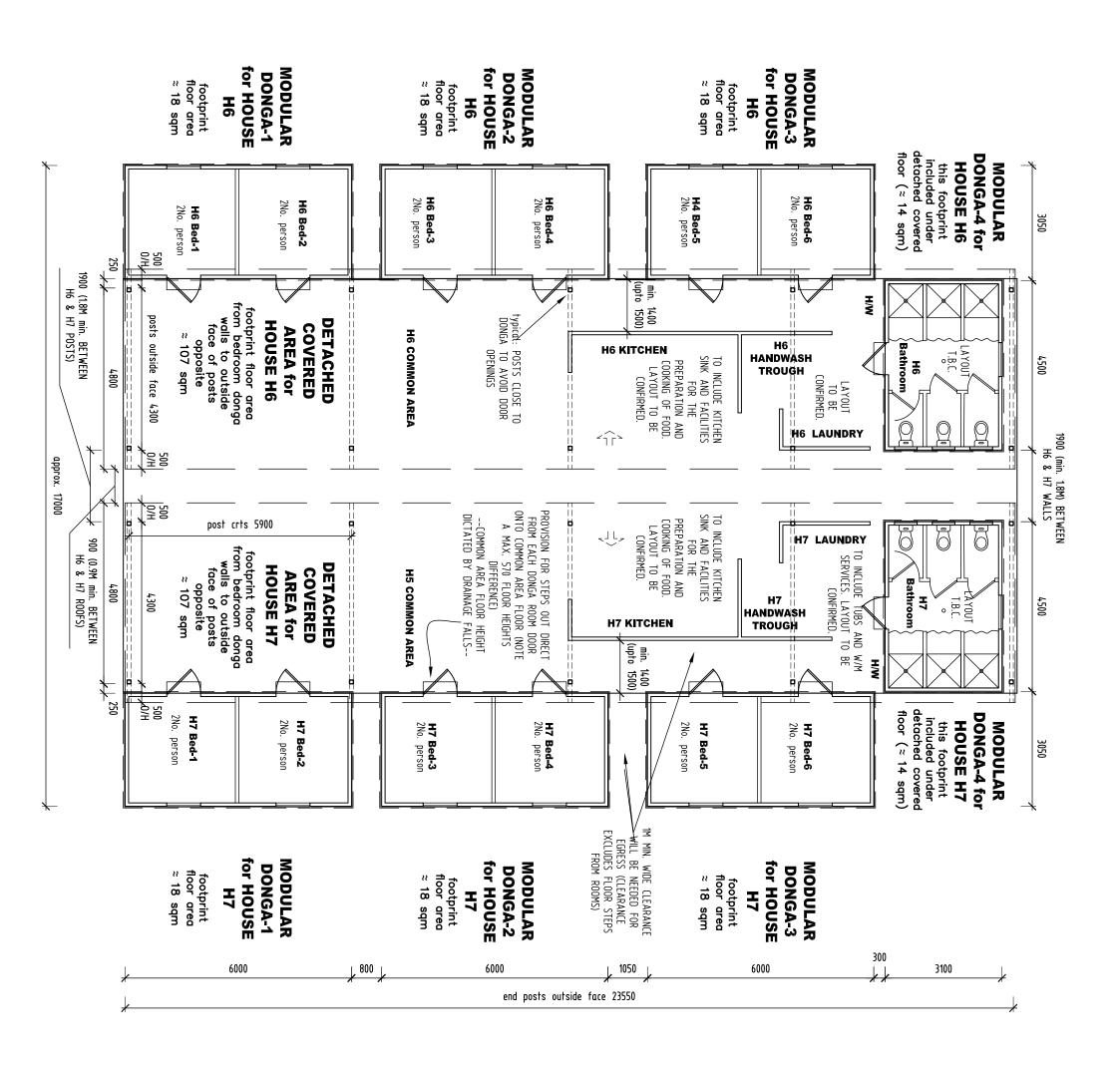
# TRUCTURAL FOOTPRINT SIZE

H4: 160 sqm

roof Measure taken from outside face of donga and to posts outside face of the detached covered central

## H<sub>5</sub>.

Measure taken from outside face of donga and to posts outside face of the detached covered central roof 160 sqm



-RURAL- PROPOSED FARM MORKERS ACCOMMODATION	PROJECT: 3 VICARY ROAD MAREEBA 4880 1 RP741791 )	Farm Workers Accommodation Stage-3 FLOOR PLAN (1:100 ON A3)
0715 DA 04-B	DATE: AUGUST 2022 SCALE: AS SHOWN ON 'A3' DRAWING TITLE: Stage-3 FLOOR PLAN	<b> </b>
B B	SHEET	phone: 0428 294 235 EDMONTON 4869. QUEENSLAND GREGORY G TERZI Architetural Technology Building Design & Drafting -Building DesignerMedium RiseQBCC LICENCE: 1117048-

# BUILDING INFORMATION:

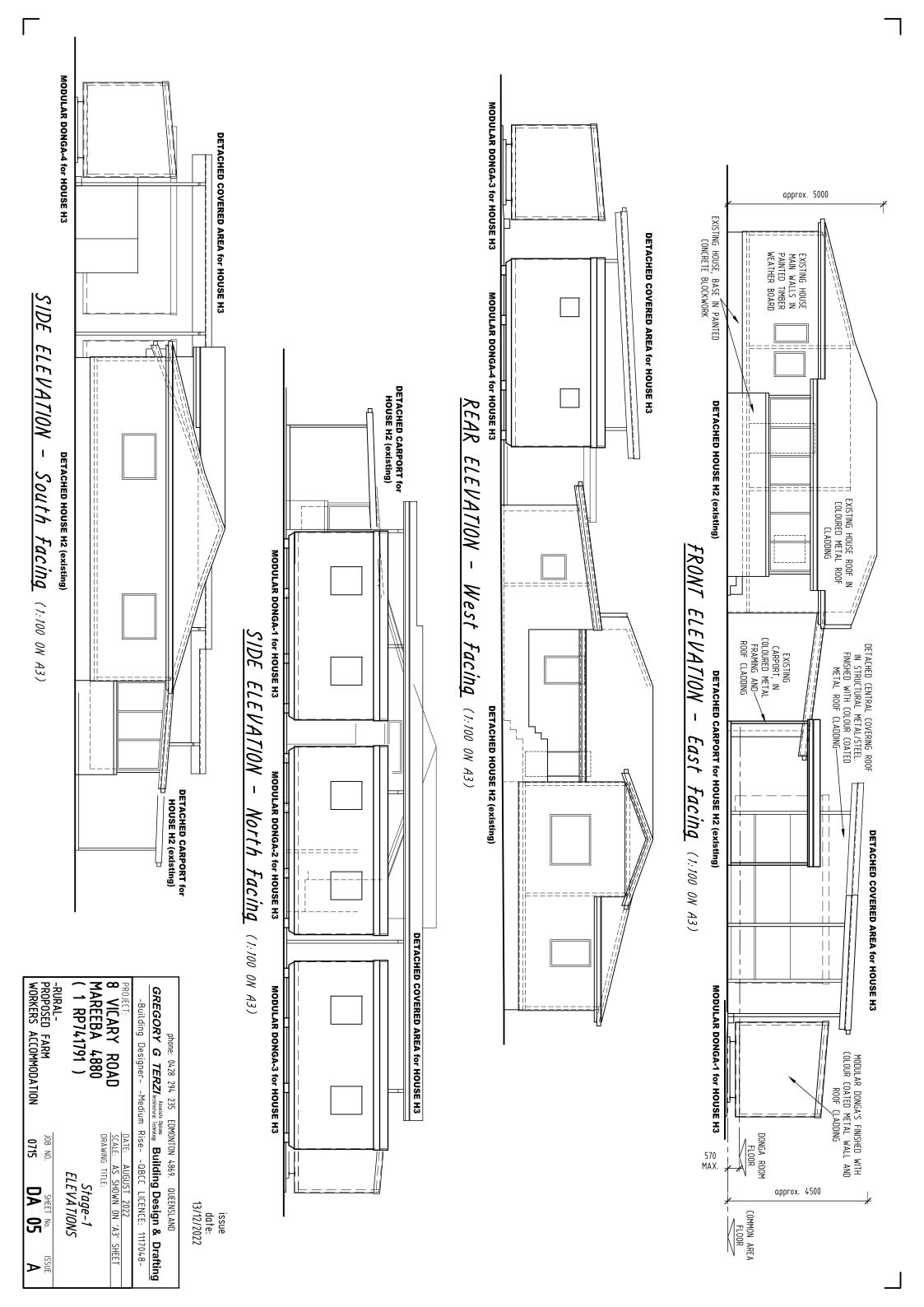
NCC BUILDING CLASSIFICATION • 1b (workers accommodati 1. DUE TO THE PERSONAL BEING HO REQUIRED (ie. 1-bedroom/ensuite and common area). IF EXEMPTION DISALLOWED FURTHER DESIGN WILL NEED TO BE PUT FORWARD FOR COMPLIANCE. **1b (workers accommodation)** DUE TO THE PERSONAL BEING HOUSED FOR FARM WORK, THE OWNER AND CERTIFIER ARE ADVISED TO SEEK CONCESSION FROM PARTS OF SECTION-D3 IN THE 'National Construction Code Volume-1', AND BE EXEMPT FOR A BUILDINGS ACCESS AND USE FOR PEOPLE WITH DISABILITY INTO AND WITH-IN AREAS

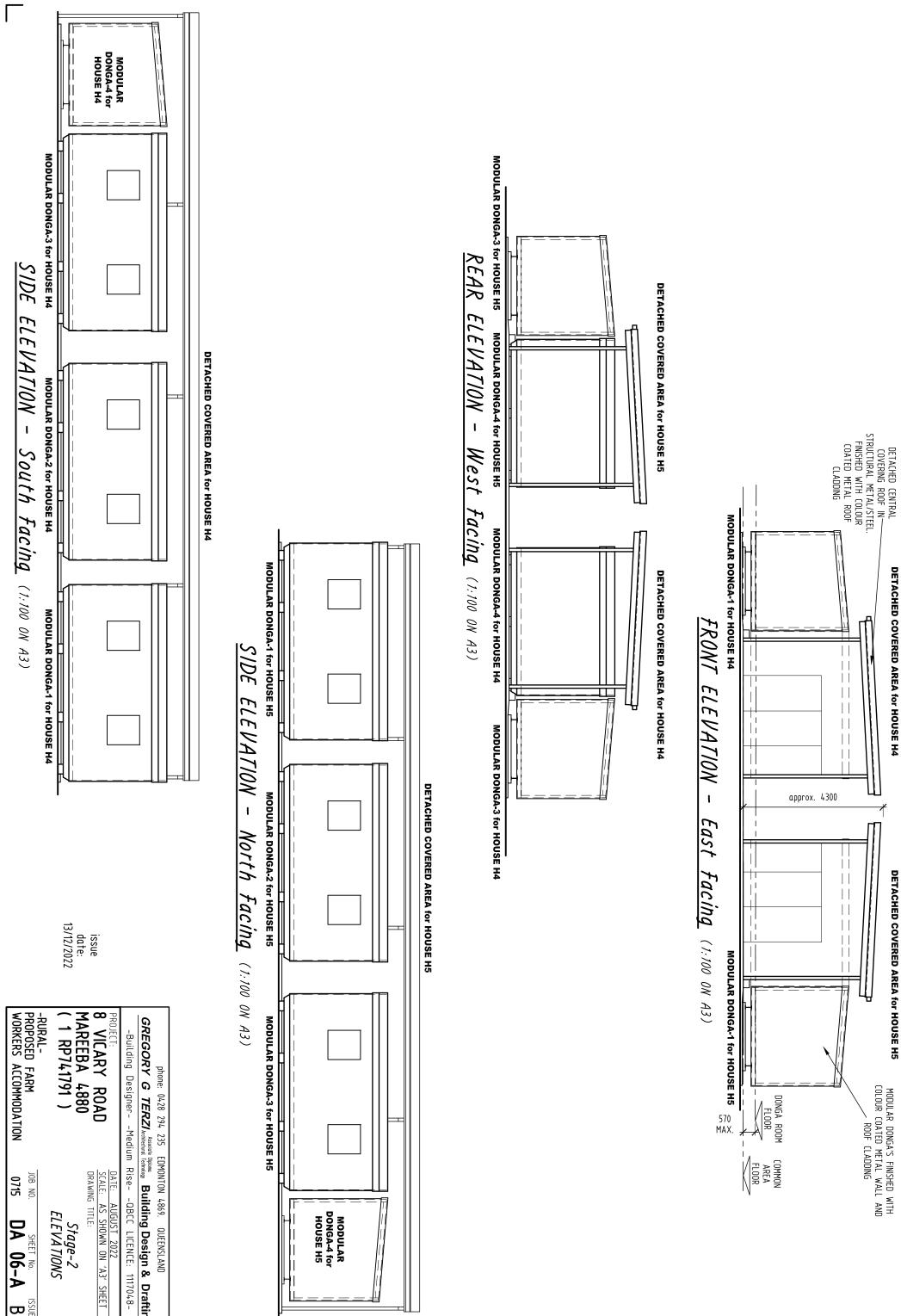
# TRUCTURAL FOOTPRINT SIZE

H6: 160 sqm

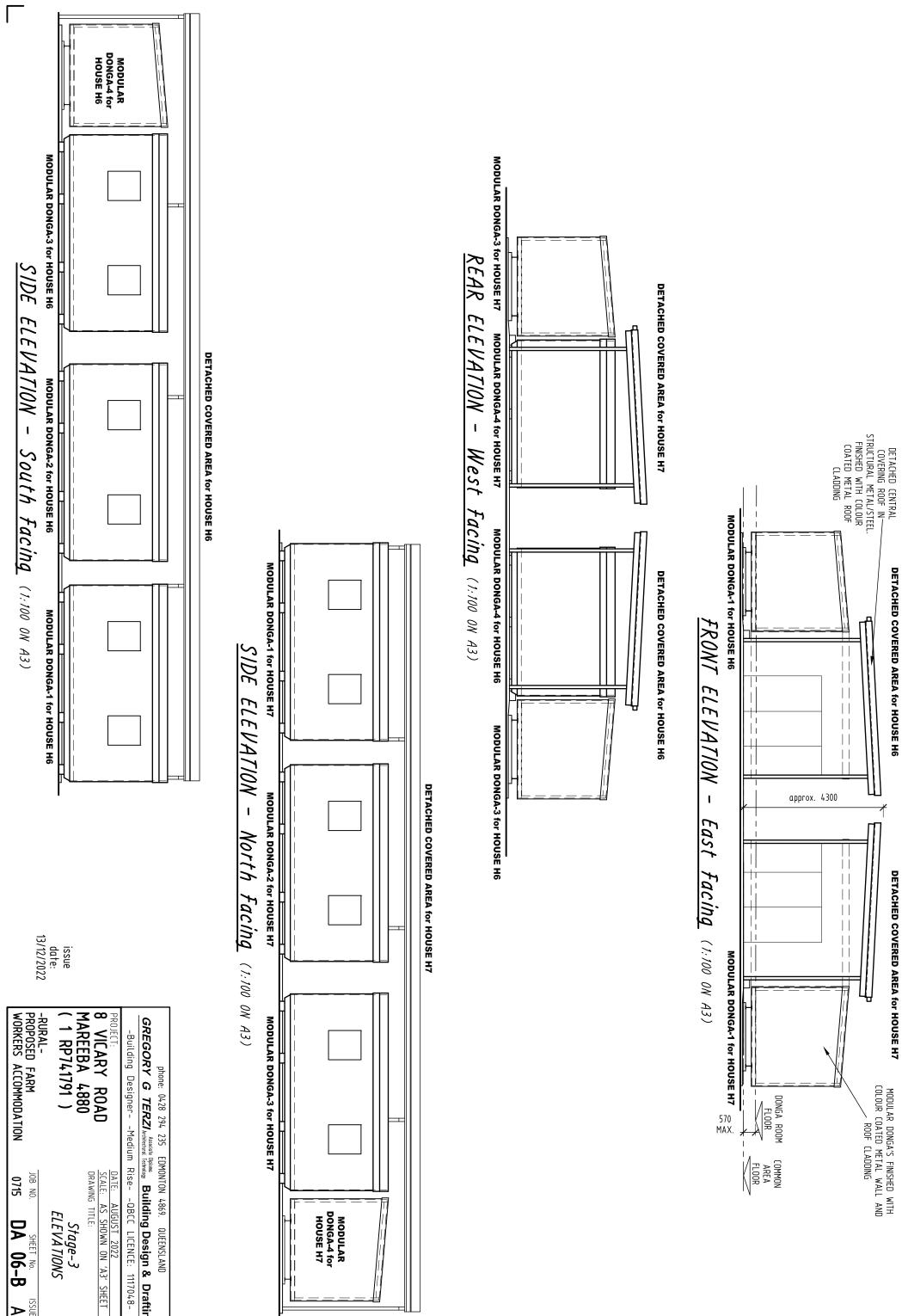
roof H7: Measure taken from outside face of donga and to posts outside face of the detached covered central

Measure taken from outside face of donga and to posts outside face of the detached covered central roof 160 sqm





ROPOSED FARM VORKERS ACCOMMODATION	1 RP741791 )	VICARY ROAD	-Building DesignerMedium RiseQBCC LICENCE: 1117048-	phone: 0428 294 235 EDMONTON 4869. QUEENSLAND GREGORY G TERZI Architectural Technology Building Design & Drafting
JOB NO. 0715		DATE: AUGUS SCALE: AS SH DRAWING TITLE:	Rise	DMONTON 4 ploma echnology <b>Bui</b>
DA 06-A B	Stage-2 ELEVATIONS	DATE: AUGUST 2022 SCALE: AS SHOWN ON 'A3' SHEET DRAWING TITLE:	OBCC LICENCE: 1117048-	+869. QUEENSLAND Ilding Design & Drafting

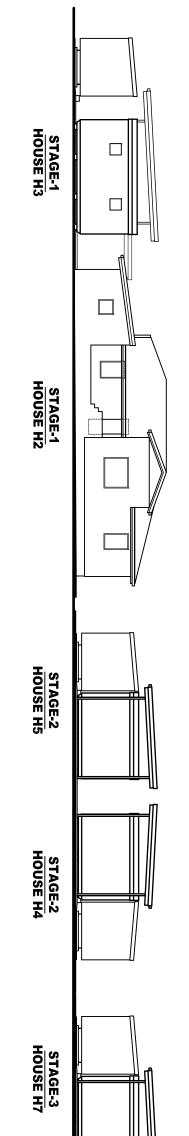


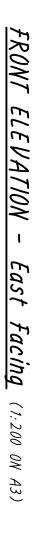
MODATION	RURAL-	1 RP741791 )			-Building DesignerMedium RiseQBCC LICENCE: 1117048-	GREGORY G TERZI Architectural Technology Building Design & Drafting	phone: 0428 294 235 EDMONTON 4869. QUEENSLAND
0715 <b>DA 06-B</b> A	JOB NO. SHEET No. ISSUE	Stage-3 ELEVATIONS	DRAWING TITLE:	CALE: AUGUST 2022	seQBCC LICENCE: 1117048-	Building Design & Drafting	TON 4869. QUEENSLAND

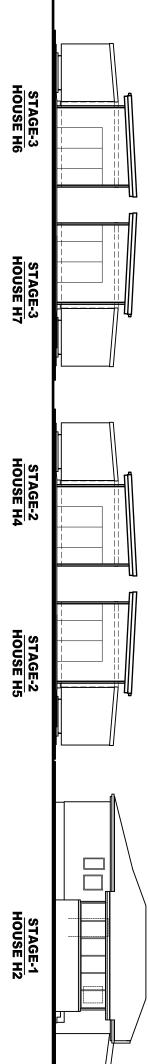
issue date: 13/12/2022

 $\square$ 

# REAR ELEVATION - West Facing (1:200 ON A3)

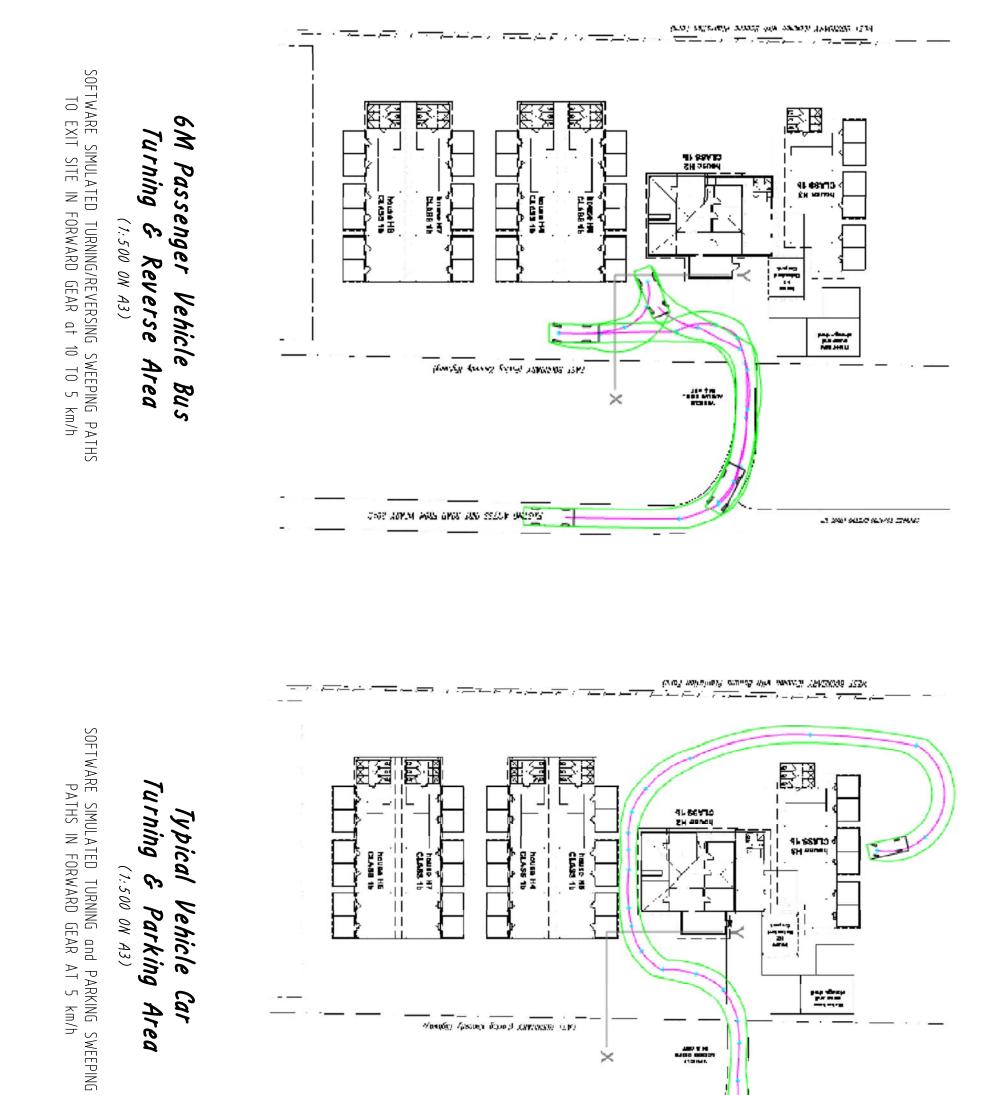


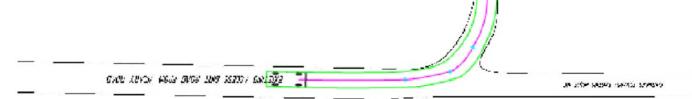




Γ

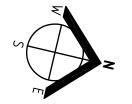
-RURAL- PROPOSED FARM WORKERS ACCOMMODATION	PROJECT: 8 VICARY ROAD MAREEBA 4880 ( 1 RP741791 )	phone: 0428 294 235 <b>:ORY G TERZI</b> Acceletation Iding DesignerMediu	STAGE-3 HOUSE H6	HOUSE H3	
JOB NO. 0715	DATE: AUGUST 20 SCALE: AS SHOWN DRAWING TITLE: Stages -1, ELEVATIONS	EDMONTON 4869. Diploma Technology <b>Building</b> m RiseQBCC			
SHEET NO.	AUGUST 2022 AS SHOWN ON 'A3' SHEET TITLE: YA TIONS COMBINED				
B	SHEET -3 3/NED	<b>&amp; Drafting</b> 1117048-			

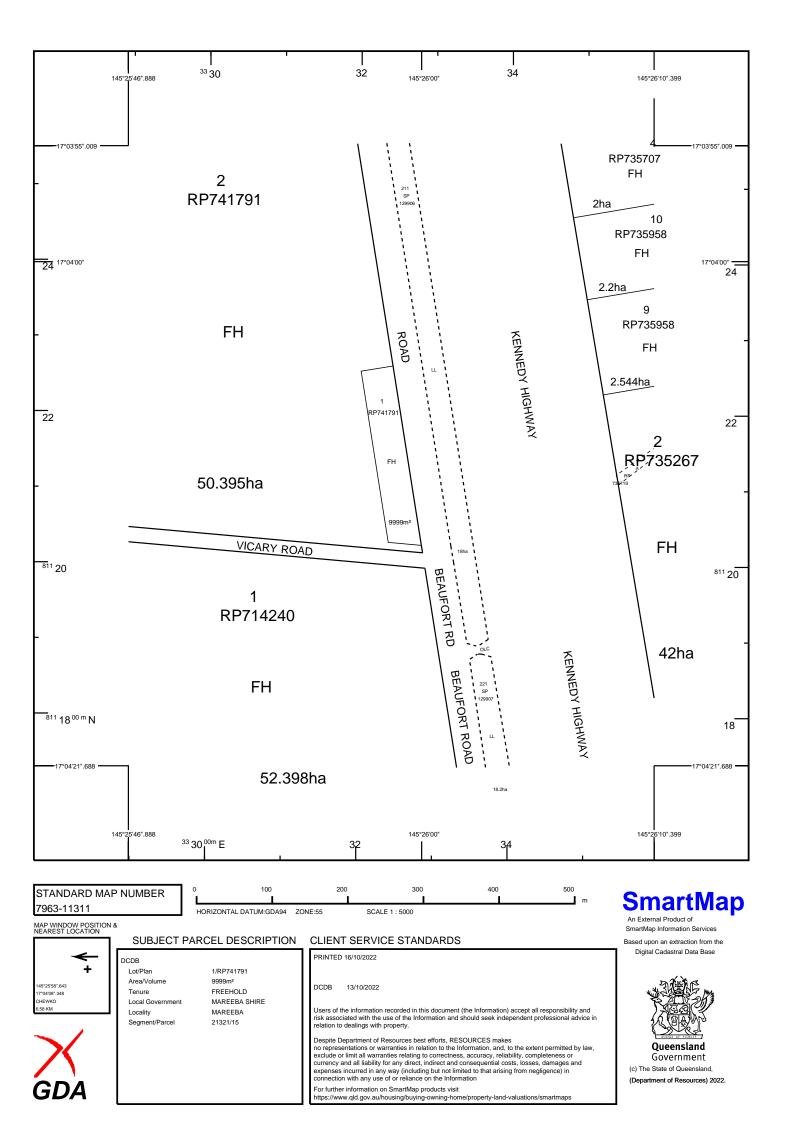




issue date: 13/12/2022

PROJECT: 8 VICARY ROAD MAREEBA, 4880 ( 1 RP741791 )	DATE: AUGUST 2022 <u>SCALE: AS SHOWN</u> DRAWING TITLE: VEHICLE TURNING	- - -
-RURAL-	SIMULATION	phone: 0428 294 235 EDMONTON 4869. QUEENSLAND
PROPOSED FARM	JOB NO. SHEET NO. ISSUE	GREGORY G TERZI Associate Diploma
WORKERS ACCOMMODATION	0715 <b>DA 08 B</b>	-Building DesignerMedium RiseQBCC LICENCE: 1117048-





VIRT PROFESSIONAL

Email: dirtprofessionals@bigpond.com MOBILE 0417 647 477

Dusty Nuts Pty Ltd dustynutspl@gmail.com Tandel Investments Pty Ltd QBCC No. 1173606

17 October 2022

Site Assessment and Design 8 Vicary Road Mareeba Qld

Job No 24796

#### **INTRODUCTION**

This report presents the results of a site assessment performed at 8 Vicary Road, Mareeba. The assessment is required to determine the method of effluent disposal, as per AS/NZS 1547:2012 and the Queensland Plumbing and Wastewater Code for on-site sewerage facilities.

#### **EXISTING CONDITIONS**

At the time of the assessment the allotment was located in an established rural subdivision consisting of approximately 9999m<sup>2</sup>. The allotment was grassed and flat with existing buildings. The proposed development will be constructed in 2 stages and will house a total of 48 persons. The first stage is to accommodate 24 persons and will be located approximately 9m from the Eastern boundary and 12m North of Statge 2. The second stage will accommodate 24 persons and will be located to the South of Stage 1.

The proposed wastewater area was grassed and flat. The proposed wastewater area is to be situated at the South end of the allotment. This will require pump wells to distribute the wastewater to the treatment area.

The wastewater will be separated into blackwater and greywater. The blackwater will total a maximum amount of 2400 litres per day and the greywater a total of 4800 litres per day. The blackwater and greywater will be distributed into separate beds located at the South end of the allotment.

#### FIELD WORK

To investigate subsurface conditions test holes were excavated to a depth of 1.8 m. The holes were at the proposed wastewater area. A disturbed sample was taken for laboratory testing.

#### SOIL PROFILE

The test holes indicate similar soil profiles. There is a layer of clay loams to the depth of the bore holes.

#### SOIL CATEGORY FOR DOMESTIC WASTEWATER

The clay loams are regarded as being an imperfectly drained material with a weak structure. The indicative permeability is 0.12 - 0.5 m/d. The soil category on the basis of visual inspection of the materials and AS/NZS 1547:2012, should be classified as a <u>Soil Category 4</u>.

It is proposed that an Advanced Secondary Treatment Systems is to be used for the dispersal of the black and grey wastewater. There were no drains, gullies, creeks or bores located in the area. There was no water encountered at the depth of the bore holes.

A design loading rate of 20 mm/d should be used for the sizing of the wastewater area. This shall be designed by a qualified designer based on AS/NZS 1547:2012 and the soil assessment data in this report.

#### RECOMMENDATIONS

Care should be taken that the base of the systems are level and no greater than 800 mm below ground level. This can be obtained by orientating the systems to follow contours, ensuring even distribution of the wastewater and avoiding any one part of the systems being more heavily loaded.

During construction rip and scarify the base of the beds to a depth of 300 mm and apply gypsum at a rate of 1 kg/m<sup>2</sup> to prevent the clay dispersing. The beds shall be closed in, as soon as possible to protect the gypsum from raindrop impact.

This company is not responsible for the building levels and falls to the wastewater system. These will need to be calculated prior to construction, to determine the building platform heights and allow for sufficient fall to the wastewater area. Consideration should be given as to how the plumber will run the pipes, as this will determine the platform height. If sufficient fall is not available to construct the system as designed, a pump well will need to be installed to distribute the wastewater.

There will be no ponding of water during seasonal rains around the septic tank, pump well and wastewater area. Diversion drains will need to be put in place to divert water from the wastewater area.

#### The treatment system is to be installed as per the manufacturers specifications.

#### VALIDITY

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

Yours faithfully

Angelo Tudini Director Tandel Investments Pty Ltd T/as **Dirt Professionals** Attached:-Site Plan and Site Photo

AES Design Calculator, AES Pipe Layout Details & AES, Cross-sectional Details

#### **BORE HOLE LOGS**

#### **TEST HOLE 1**

0.0 - 1.5 m Clay Loams with some sands - Orange Brown

#### **TEST HOLE 2**

0.0 - 1.8 m Clay Loams with some sands - Orange Brown

#### **TEST HOLE 3**

0.0 - 1.3 m Clay Loams with some sands - Orange Brown



#### Advanced Enviro-septic Design Calculator v9.0 @

	AES The World Leader in Passi	ive Solutio	ns ©				
Site Address	8 Vicary Road, Mareeba - GREYWATER		State	Queensland	Post Code	48	
Client Name	Dusty Nuts Pty Ltd				Date of Site Visit	17/10/20	
Designers Name	Angelo Tudini	Designers Ph Number	0417 6	47 477	Designer Lic' (e.gQBCC)	1173606	
Lic Plumber	ТВА	Plumber Ph Number	TE	BA	Plumb / Drainer Lic Number	ТВА	
Council Area	Mareeba Shire Council	Designers AES Cert Number	13	72	Date	31/10/2022	
	This Calculator is a guide only, receiving soil classification, surface wat	er, water tables a	nd all other site co	nstraints addres	sed by the qualified	designer.	
	System Designers site and soil calculation data entry			IMPORTA	NT NOTES		
nter AES L/	m loading rate, "30" for ADV Secondary or "38" Secondary	30	>> This desig	n is for an AD	VANCED SECON	IDARY system	
	Is this a new installation Y or N	Y	>> Minimun sing	e vent size is 80	mm or 2 x 50mm hou	use vents	
	Number of Bedrooms		>> This is not us	ed in ANY Calcul	ation. If not known u	ise N/A or 0.	
	Number of persons	48	>> A septic tank	outlet filter is NO	T RECOMMENDED		
	Daily Design Flow Allowance Litre/Person/Day	100					
	Number of rows required to suit site constraints	9	>>Longer AES ru	ins are better tha	n multiplule short ru	ins.	
	Infiltration Soil Category from site/soil evaluation. CATEGORY	4	>> Catagory may	require design o	onsiderations. Ref /	AS1547	
	Design Loading Rate based on site & soil evaluation DLR (mm/day)	20	>> Soil conditioning may be necessary. Ref AS1547 & Comments.				
	Bore log depth below system Basal area	1.8m	>> Min depth 1.5m. Check water table/restrictive layer				
	Is this design a GRAVITY system with no outlet filter? Y or N	N	>> PUMPED. HIG	H & LOW vent re	quired including a V	elocity Diffuser	
	oils advice & special design techniques will be required for clay dominated				site slope/AES pipe		
	need to be familar with special requirements of Local Authorities, ie - Minim re reminded to practice good construction techniques as per AS 1547 & as	num falls from Se	eptic tank outlets to	Land applicatio	lefer AS1547 n areas etc		
	need to be familar with special requirements of Local Authorities, ie - Minim	num falls from Se	eptic tank outlets to	Land applicatio	lefer AS1547 n areas etc		
	need to be familar with special requirements of Local Authorities. ie - Minin re reminded to practice good construction techniques as per AS 1547 & as	num falls from Se	eptic tank outlets to	Land applicatio	tefer AS1547 n areas etc with components.		
	need to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes	num falls from Se	eptic tank outlets to S installation instru	Land applicatio	teter AS1547 n areas etc with components. AES dimensions		
	need to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q).	num falls from Se provided on AES 4800	eptic tank outlets to S installation instru	Land applicatio uctions supplied	efer AS1547 n areas etc with components. AES dimensions AES System	System Extension	
	need to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading	num falls from Se provided on AES 4800 17.78	ptic tank outlets to S installation instru Vd Im	Land applicatio	efer AS1547 n areas etc with components. AES dimensions AES System 18.60m	System Extension 18.60m	
	need to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres	num falls from Se provided on AES 4800 17.78 6	ptic tank outlets to S installation instru Vd Im Iths	Land applicatio uctions supplied	efer AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m	System Extension 18.60m 8.40m	
	eed to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)	num falls from Se provided on AE 4800 17.78 6 11448	ptic tank outlets to S installation instru Vd Im Iths	Land applicatio uctions supplied Length:(L) Width:(W) Sand Depth :	efer AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m	System Extension 18.60m 8.40m 0.15m	
Plumbers a	need to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER "Y"	ptic tank outlets to S installation instru Vd Im Iths Itr.	Land applicatio Lections supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom	efer AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m <sup>2</sup> 2	System Extension 18.60m 8.40m 0.15m 156.3 m^2	
Plumbers a	eed to be familar with special requirements of Local Authorities. ie - Minin re reminded to practice good construction techniques as per AS 1547 & as AES System Galculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT TRATION FOOT PRINT AREA - L=Q/(DLR x W)	num falls from Se provided on AE 4800 17.78 6 11448	ptic tank outlets to S installation instru Vd Im Iths	Land applicatio Lections supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom	efer AS1547 n areas etc with components. AES dimensions AES System 18.60m 4.50m 0.75m 83.7 m^2	System Extension 18.60m 8.40m 0.15m 156.3 m^2	
Plumbers a	need to be familar with special requirements of Local Authorities. ie - Minim re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER "Y"	ptic tank outlets to S installation instru Vd Im Iths Itr.	Land applicatio Lections supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom	efer AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m <sup>2</sup> 2	System Extension 18.60m 8.40m 0.15m 156.3 m^2	
Plumbers a	eed to be familar with special requirements of Local Authorities. ie - Minin re reminded to practice good construction techniques as per AS 1547 & as AES System Galculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT TRATION FOOT PRINT AREA - L=Q/(DLR x W)	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER "Y" Length	Vd Im Iths Itr. Width	Land applicatio Lections supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom	eler AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m^2 Width in metre	System Extension 18.60m 8.40m 0.15m 156.3 m^2 equired	
Plumbers a	AES pipes are best centered in the trench parallel to the site slope AES System Bill of Materials.	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER *** Length 18,600m	ptic tank outlets to S installation instru- l/d Im Iths Itr. Width x 12.90m	Land applicatio actions supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom Minin	eler AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m^2 Width in metre	System Extension 18.60m 8.40m 0.15m 156.3 m^2 equired m2 total	
AES INFII Code ES-PIPE	eed to be familar with special requirements of Local Authorities. ie - Minin re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT TRATION FOOT PRINT AREA - L = Q/(DLR x W) for this Basic Serial design is AES pipes are best contered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER 'Y' Length 18.600m	Vd Im Iths Itr. Width	Land applicatio actions supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom Minin	eler AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m*2 Width in metre num AES foot print r 240.0	System Extension 18.60m 8.40m 0.15m 156.3 m^2 equired m2 total	
AES INFII Code ES-PIPE ESC	AES pipes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES System Column of the trench parallel to the site slope AES System Column of the trench parallel to the site slope AES System Column of the trench parallel to the site slope AES System Bill of Materials. AES System Column of the trench parallel to the site slope AES System Bill of Materials. AES Couplings required AES Couplings required	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER *** Length 18,600m	ptic tank outlets to S installation instru- l/d Im Iths Itr. Width x 12.90m	Land applicatio actions supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom Minin	eler AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m*2 Width in metre num AES foot print r 240.0	System Extension 18.60m 8.40m 0.15m 156.3 m^2 equired m2 total	
AES INFII Code ES-PIPE ESC ESO	eed to be familar with special requirements of Local Authorities. ie - Minin re reminded to practice good construction techniques as per AS 1547 & as AES System Calculator Outcomes Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT TRATION FOOT PRINT AREA - L = Q/(DLR x W) for this Basic Serial design is AES pipes are best contered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER 'Y' Length 18.600m	ths	Land applicatio actions supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom Minin	eler AS1547 n areas etc with components. AES dimensions AES system 18.60m 4.50m 0.75m 83.7 m*2 Width in metre num AES foot print r 240.0	System Extension 18.60m 8.40m 0.15m 156.3 m^2 equired m2 total	
Plumbers a	AES pipes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES System Column of the trench parallel to the site slope AES System Column of the trench parallel to the site slope AES System Column of the trench parallel to the site slope AES System Bill of Materials. AES System Column of the trench parallel to the site slope AES System Bill of Materials. AES Couplings required AES Couplings required	num falls from Se provided on AES 4800 17.78 6 11448 ION ENTER "Y" Length 18.600m 54 - 45	ptic tank outlets to S installation instru- Ud Im Iths Itr. Width X 12.90m	Land applicatio actions supplied Length:(L) Width:(W) Sand Depth Area m2 Enter Custom Minin	AES ASTERNAL AND	System Extension 18.60m 8.40m 0.15m 156.3 m^2 equired m2 total I Use Only.	

Digitally signed by Steve Dennis DN: cn=Steve Dennis, o=Chankar Enviromental, ou=Design Review, email=steve@enviroseptic.com.au, c=US Date: 2022.11.01 10:05:53 +10'00'

designreview@enviro-septic.com.au

Please email your AES Calculator (EXCEL FORMAT), Site Layout & AES Design to designreview@enviro-septic.com.au\_\_\_\_

TOTAL SYSTEM SAND REQUIRED (Estimate Only)

4 Hole Distribution Box Kit

7 Hole Distribution Box Kit

Sweet Air Filter VS43-4

Double Offset Adaptors

> The AES Calculator is a design aid to allow checking of the AES components, configuration and is a guide only. Site and soil conditions referencing AS1547 are calculated and designed by a Qualified Wastewater Designer.

> Chankar Environmental accepts 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 lengths only.

> AES ONLY supply AES components as detailed in the Bill of Materials.

SEPTIC Tank & other components including SAND will need to be sourced from other suppliers. Refer to our WEBSITE www.enviro-septic.com.au OR 07 5474 4055 AES-Design-V9.0-Calculator © Copy Right - Chankar Environmental Pty Ltd 20/1/2022

ea

ea

ea

ea

m3

1

103

.

TD Kit 4

TD Kit 7

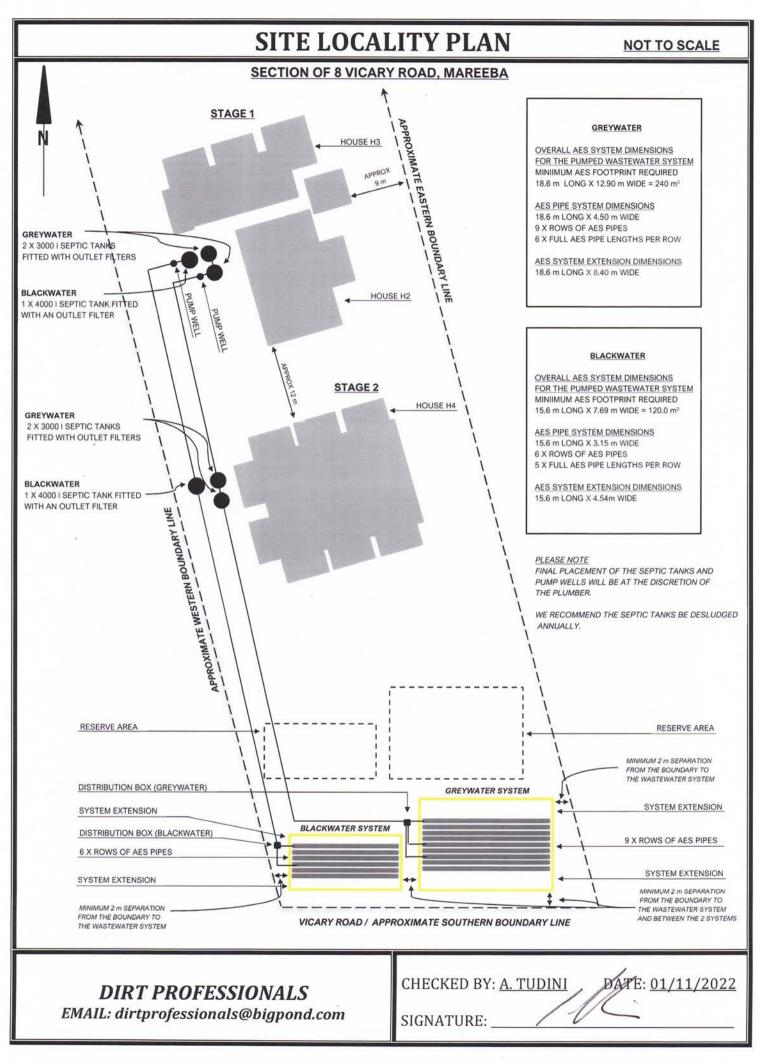
VS43-4

AES DESO

ADVANCED ENVIRO-SEPTIC"

#### Advanced Enviro-septic Design Calculator v9.0 ©

		ve Solutio	ns ©	·			
Site Address 8 Vica	ry Road, Mareeba - BLACKWATER			State	QLD	Post Code	48
Client Name Dusty	Nuts Pty Ltd					Date of Site Visit	17/10/20
Designers Name Angel	o Tudini	Designers Ph Number		0417 64	7 477	Designer Lic (e.gQBCC)	1173606
Lic Plumber TBA		Plumber Ph Number		TBA	1	Plumb / Drainer Lic Number	ТВА
Council Area Maree	ba Shire Council	Designers AES	6	1372	2	Date	31/10/2022
This Ca	Iculator is a guide only, receiving soil classification, surface wat	Cert Number	and all	other site con	straints addres	sed by the qualified	designer.
	System Designers site and soil calculation data entry					NT NOTES	
nter AES L/m loading	rate, "30" for ADV Secondary or "38" Secondary	30	>>	This design		VANCED SECON	IDARY system
	Is this a new installation Y or N	Y	>> Minimun single vent size is 80mm or 2 x 50mm house vents				
	Number of Bedrooms		>> This is not used in ANY Calculation. If not known use N/A or 0.				
	Number of persons	48	>> A	septic tank or	utlet filter is NC	T RECOMMENDED	
	Daily Design Flow Allowance Litre/Person/Day	50					
	Number of rows required to suit site constraints	6	>>Lo	nger AES run	s are better tha	n multiplule short r	uns.
In	filtration Soil Category from site/soil evaluation. CATEGORY	4	>> C:	atagory may re	equire design o	considerations. Ref.	AS1547
Design L	oading Rate based on site & soil evaluation DLR (mm/day)	20	>> Se	oil conditionin	ig may be nece	ssary. Ref AS1547 &	k Comments.
	Bore log depth below system Basal area	1.8m	>> M	in depth 1.5m	. Check water t	able/restrictive laye	r
is th	is design a GRAVITY system with no outlet filter? Y or N	n	>> PI	JMPED. HIGH	& LOW vent re	quired including a \	elocity Diffuser
			-				
	All designed and the second seco	P4					
	AES System Calculator Outcomes					AES dimension	S
	AES System Calculator Outcomes Total System load - litres / day (Q).	2400	I/d			AES dimension AES System	System Extension
		2400 13.33	I/d Im		Length:(L)	AES System 15.60m	System Extension 15.60m
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row	13.33 5	lm iths		Length:(L) Width:(W) Sand Depth	AES System 15.60m 3.15m	System Extension 15.60m 4.54m
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading	13.33	Im		Width:(W)	AES System 15.60m	System Extension 15.60m
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row	13.33 5	lm iths		Width:(W) Sand Depth	AES System 15.60m 3.15m 0.75m	System Extension 15.60m 4.54m 0.15m
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres	13.33 5 6360	lm iths		Width:(W) Sand Depth : Area m2	AES System 15.60m 3.15m 0.75m	System Extension 15.60m 4.54m 0.15m
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)	13.33 5 6360	lm iths	Width	Width:(W) Sand Depth : Area m2 Enter Custom	AES System 15.60m 3.15m 0.75m 49.1 m^2	System Extension 15.60m 4.54m 0.15m 70.9 m^2
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT	13.33 5 6360 ION ENTER "Y"	lm iths	Width 7.69m	Width:(W) Sand Depth : Area m2 Enter Custom	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre	System Extension 15.60m 4.54m 0.15m 70.9 m^2
	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/ (DLR x W)	13.33 5 6360 ION ENTER "Y" Length	lm iths		Width:(W) Sand Depth : Area m2 Enter Custom	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre	System Extension 15.60m 4.54m 0.15m 70.9 m*2 required
AES INFILTRATION	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT X FOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope	13.33 5 6360 ION ENTER "Y" Length	lm iths		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print in 120.0	System Extension 15.60m 4.54m 0.15m 70.9 m*2 required m2 total
AES INFILTRATION AES pi Code	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials.	13.33 5 6360 ION ENTER "Y" Length 15,600m	Im Iths Itr.		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre	System Extension 15.60m 4.54m 0.15m 70.9 m*2 required m2 total
AES INFILTRATION AES pl Code ES-PIPE	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/(DLR xW) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required	13.33 5 6360 ION ENTER "Y" Length 15.600m	Im Iths Itr. X		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print in 120.0	System Extension 15.60m 4.54m 0.15m 70.9 m*2 required m2 total
AES INFILTRATION AES pi Code ES-PIPE ESC	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope <u>AES System Bill of Materials.</u> AES 3 metre Lengths required AES Couplings required	13.33 5 6360 ION ENTER "Y" Length 15,600m 30 24	Im Iths Itr. X		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print in 120.0	System Extension 15.60m 4.54m 0.15m 70.9 m^2 required m2 total al Use Only
AES INFILTRATION AES pl Code ES-PIPE ESC ESO	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/(DLR xW) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required	13.33 5 6360 ION ENTER "Y" Length 15.600m	Im Iths Itr. X		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print n 120.0 ankar Environmenta	System Extension 15.60m 4.54m 0.15m 70.9 m^2
AES INFILTRATION AES pl Code ES-PIPE ESC ESO ESODV	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/(DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope <u>AES System Bill of Materials.</u> AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES Oxygen demand vent	13.33 5 6360 ION ENTER "Y" Length 15.600m 30 24 12	Im Iths Itr. X		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print n 120.0 ankar Environmenta	System Extension 15.60m 4.54m 0.15m 70.9 m^2
AES INFILTRATION AES pi Code ES-PIPE ESC ESO ESODV ES-IPB	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors	13.33 5 6360 ION ENTER "Y" Length 15.600m 30 24 12 3	Im Iths Itr. X Iths ea ea ea		Width:(W) Sand Depth : Area m2 Enter Custom Minin	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print n 120.0 ankar Environmenta	System Extension 15.60m 4.54m 0.15m 70.9 m^2
AES INFILTRATION AES pi Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/(DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES Oxygen demand vent AES 100mm Inspection point base	13.33 5 6360 ION ENTER "Y" Length 15.600m 30 24 12 3	Im Iths Itr. X Iths ea ea ea ea ea		Width:(W) Sand Depth : Area m2 Enter Custom Minin = Ch Ch Digitall	AES System 15.60m 3.15m 0.75m 49.1 m*2 Width in metre num AES foot print 120.0 ankar Environment CONVENSION Width in metre Num AES foot print 120.0	System Extension 15.60m 4.54m 0.15m 70.9 m*2
AES INFILTRATION AES pl Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4 D Kit 7	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT VFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES 100mm Inspection point base 4 Hole Distribution Box Kit	13.33 5 6360 ION ENTER "Y" Length 15.600m 30 24 12 3	Im Iths Itr. X Iths ea ea ea ea ea ea		Width:(W) Sand Depth Area m2 Enter Custom Minin = Ch Ch Digitally DN: cn=	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print 1 120.0 ankar Environment ADVAN "Nature's Wast y signed by =Steve Denri	System Extension 15.60m 4.54m 0.15m 70.9 m^2 required m2 total at Use Only SCED D-SEPTIC ewater Solutions Steve Dennis his, o=Chankat
AES INFILTRATION AES pi Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4 D Kit 7 S43-4	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT YFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES Oxygen demand vent AES 100mm Inspection point base 4 Hole Distribution Box Kit 7 Hole Distribution Box Kit	13.33 5 6360 ION ENTER "Y" Length 15.600m 30 24 12 3	Im Iths Itr. X Iths ea ea ea ea ea ea ea		Width:(W) Sand Depth Area m2 Enter Custom Minin = Ch Ch Digitally DN: cn= Environ	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print in 120.0 ankar Environmental CONTROL State of the second sec	System Extension 15.60m 4.54m 0.15m 70.9 m^2 required m2 total al Use Only D-SEPTIC ewater Solutions Steve Dennis sis, o=Chankar Design Review
AES INFILTRATION AES pi Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4 D Kit 7 S43-4 ES DESO	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/ (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES 100mm Inspection point base 4 Hole Distribution Box Kit 7 Hole Distribution Box Kit Sweet Air Filter VS43-4	13.33 5 6360 ION ENTER "Y" Length 15.600m 30 24 12 3	Im Iths Itr. X Iths ea ea ea ea ea ea ea		Width:(W) Sand Depth Area m2 Enter Custom Minin = Ch Ch Digitally DN: cn= Environ email=s	AES System 15.60m 3.15m 0.75m 49.1 m*2 Width in metre num AES foot print i 120.0 ankar Environmenta ADVANC "Nature's Wast y signed by =Steve Denrin nental, ou=I steve@envir	System Extension 15.60m 4.54m 0.15m 70.9 m^2 required m2 total at Use Only DESERTIC ewater Solutions Steve Dennis stis, o=Chankal Design Review O-
AES INFILTRATION AES pl Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4 D Kit 4 D Kit 7 S43-4 ES DESO T(	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT YFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is per are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES 100mm Inspection point base 4 Hole Distribution Box Kit 7 Hole Distribution Box Kit Sweet Air Filter VS43-4 Double Offset Adaptors	13.33 5 6360 ON ENTER "Y" Length 15.600m 30 24 12 3 2 1 1 57	Im Iths Itr. X Iths ea ea ea ea ea ea ea		Width:(W) Sand Depth Area m2 Enter Custom Minin = Ch Ch Digitally DN: cn= Environ email=s septic.c	AES System 15.60m 3.15m 0.75m 49.1 m^2 Width in metre num AES foot print in 120.0 ankar. Environmenta ADVANC "Nature's Wast y signed by Steve Denrin nental, ou=E steve@envir om.au, c=U!	System Extension 15.60m 4.54m 0.15m 70.9 m^2 required m2 total al Use Only D-SEPTIC ewater Solutions Steve Dennis his, o=Chanka Design Review O- S
AES INFILTRATION AES pl Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4 D Kit 7 S43-4 ES DESO T( Please email	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT YFOOT PRINT AREA - L = Q / (DLR x W) for this Basic Serial design is pers are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES OXygen demand vent AES 100mm Inspection point base 4 Hole Distribution Box Kit 7 Hole Distribution Box Kit Sweet Air Filter VS43-4 Double Offset Adaptors DTAL SYSTEM SAND REQUIRED (Estimate Only) your AES Calculator (EXCEL FORMAT), Site Layout & AES Design designreview@enviro-septic.com.au.	13.33 5 6360 ON ENTER "Y" Length 15.600m 30 24 12 3 2 1 1 57 n to	Im Iths Itr. X Iths ea ea ea ea ea ea ea ea ea m3	7.69m	Width:(W) Sand Depth Area m2 Enter Custom Minin = Ch Ch Digitally DN: cn= Environ email=s septic.c Date: 20	AES System 15.60m 3.15m 0.75m 49.1 m*2 Width in metre num AES foot print i 120.0 ankar Environmental ADVANC "Nature's Wast y signed by Steve Denrin nental, ou=E steve@envir om.au, c=U! 022.11.01 10 designreview@envir	System Extension 15.60m 4.54m 0.15m 70.9 m*2 required m2 total I Use Only D-SEPTIC ewater Solutions Steve Dennis his, o=Chankar Design Review 0- S D:05:22 +10'00
AES INFILTRATION AES pi Code ES-PIPE ESC ESO ESODV ES-IPB D Kit 4 D Kit 7 S43-4 ES DESO T( Please email The AES Calculator is calculated and design	Total System load - litres / day (Q). Min Length of AES pipe rows to treat loading Number of FULL AES Pipe lengths per row Total Capacity of AES System pipe in Litres USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPT NFOOT PRINT AREA - L = Q/ (DLR x W) for this Basic Serial design is pes are best centered in the trench parallel to the site slope AES System Bill of Materials. AES 3 metre Lengths required AES Couplings required AES Offset adaptors AES 100mm Inspection point base 4 Hole Distribution Box Kit 7 Hole Distribution Box Kit Sweet Air Filter VS43-4 Double Offset Adaptors DTAL SYSTEM SAND REQUIRED (Estimate Only) your AES Calculator (EXCEL FORMAT), Site Layout & AES Design	13.33 5 6360 ON ENTER "Y" Length 15.600m 30 24 12 3 2 1 1 57 n to and is a guide or	Im Iths Itr. X Iths ea ea ea ea ea ea ea ea ea a	7.69m	Width:(W) Sand Depth Area m2 Enter Custom Minin = Ch Ch Digitally DN: cn= Environ email=s septic.cc Date: 20	AES System 15.60m 3.15m 0.75m 49.1 m*2 Width in metre num AES foot print i 120.0 ankar Environmental ADVANC "Nature's Wast y signed by Steve Denrin nental, ou=E steve@envir om.au, c=U! 022.11.01 10 designreview@envir	System Extension 15.60m 4.54m 0.15m 70.9 m^2 required m2 total I Use Only D-SEPTIC ewater Solutions Steve Dennis his, o=Chankat Design Review 0- S D:05:22 +10'00



### DIRT PROFESSIONALS

Email: dirtprofessionals@bigpond.com MOBILE: 0417 647 477

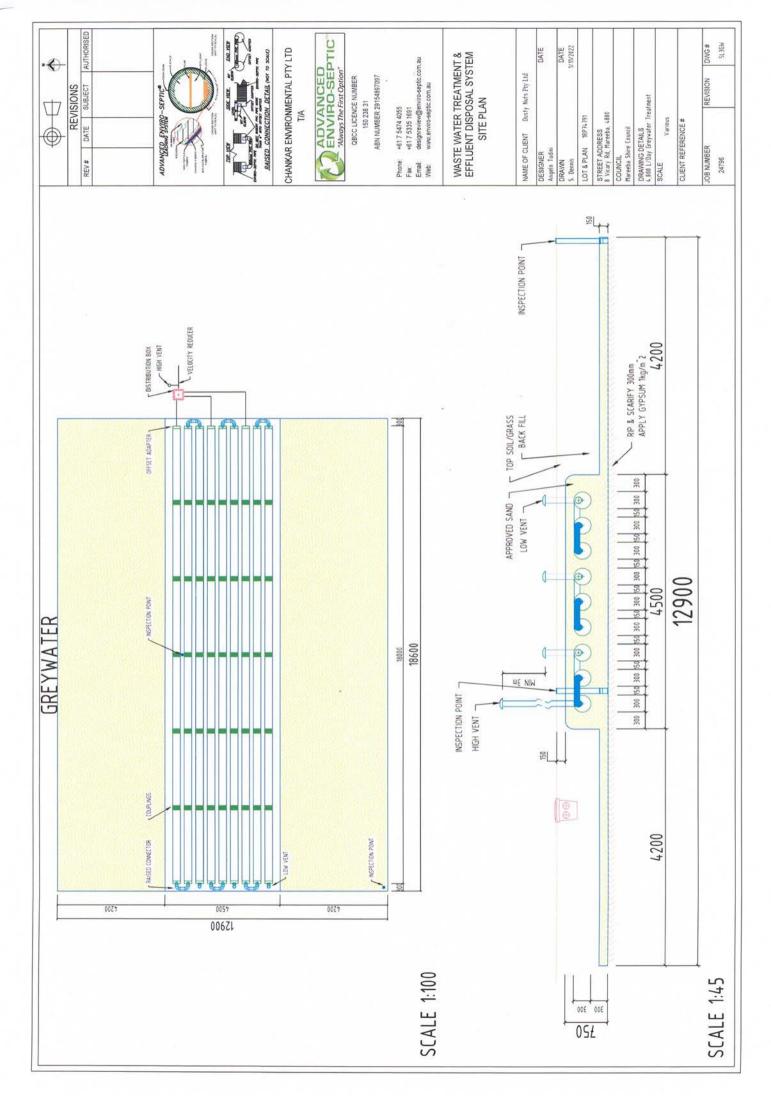
#### SYSTEM INSTALLATION REQUIREMENTS

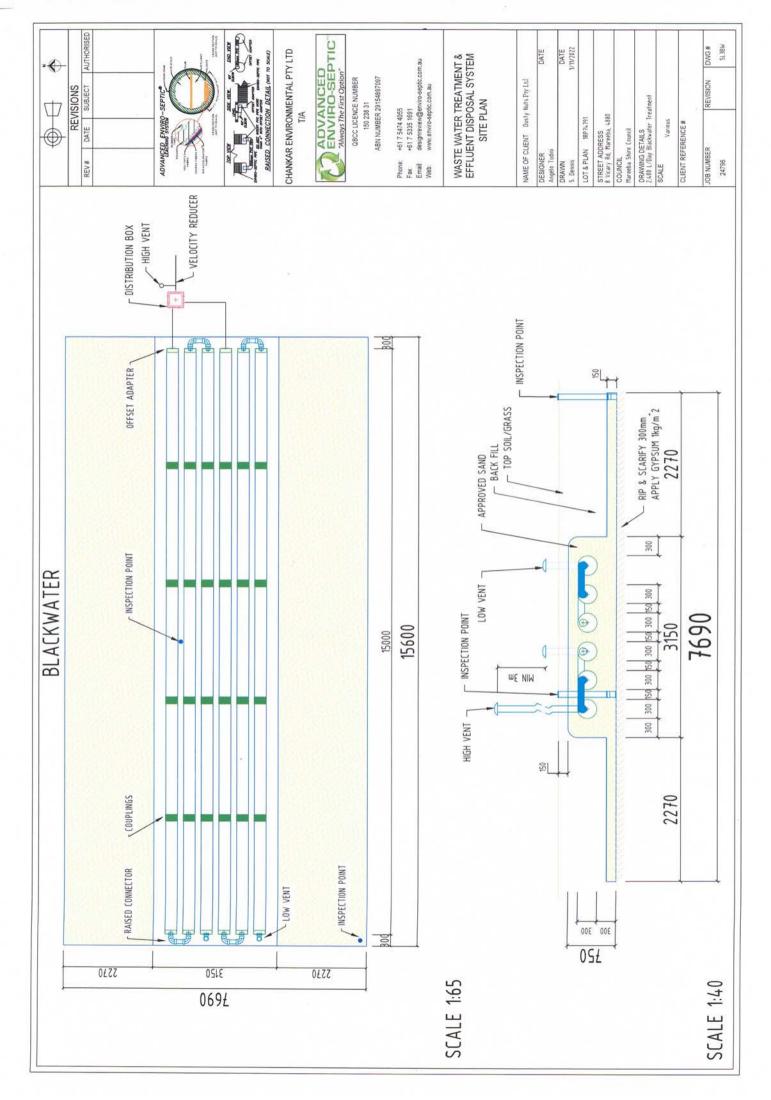
- THIS REPORT MUST BE READ IN ITS ENTIRETY PRIOR TO THE CONSTRUCTION OF THE WASTEWATER AREA.
- SUFFICIENT FALL TO THE WASTEWATER AREA MUST BE CALCULATED PRIOR TO CONSTRUCTION.
- CARE SHOULD BE TAKEN THAT THE BASE OF THE SYSTEM IS LEVEL AND NO GREATER THAN 800 mm BELOW THE EXISTING GROUND LEVEL.
- BEDS MUST BE BUILT ALONG THE CONTOURS TO ENSURE EVEN DISTRIBUTION AND AVOID ANY ONE PART OF THE BED BEING MORE HEAVILY LOADED.
- DURING CONSTRUCTION RIP AND SCARIFY THE BED TO A DEPTH OF 300 mm AND APPLY GYPSUM AT 1 kg/m<sup>2</sup> TO THE BASE OF THE BED TO PREVENT THE CLAY DISPERSING.
- DIVERSION DRAINS WILL NEED TO BE PUT IN PLACE TO DIVERT WATER AWAY FROM THE WASTEWATER AREA.
- THE WASTEWATER SYSTEM MUST BE INSTALLED AS PER THE MANUFACTURERS SPECIFICATIONS.

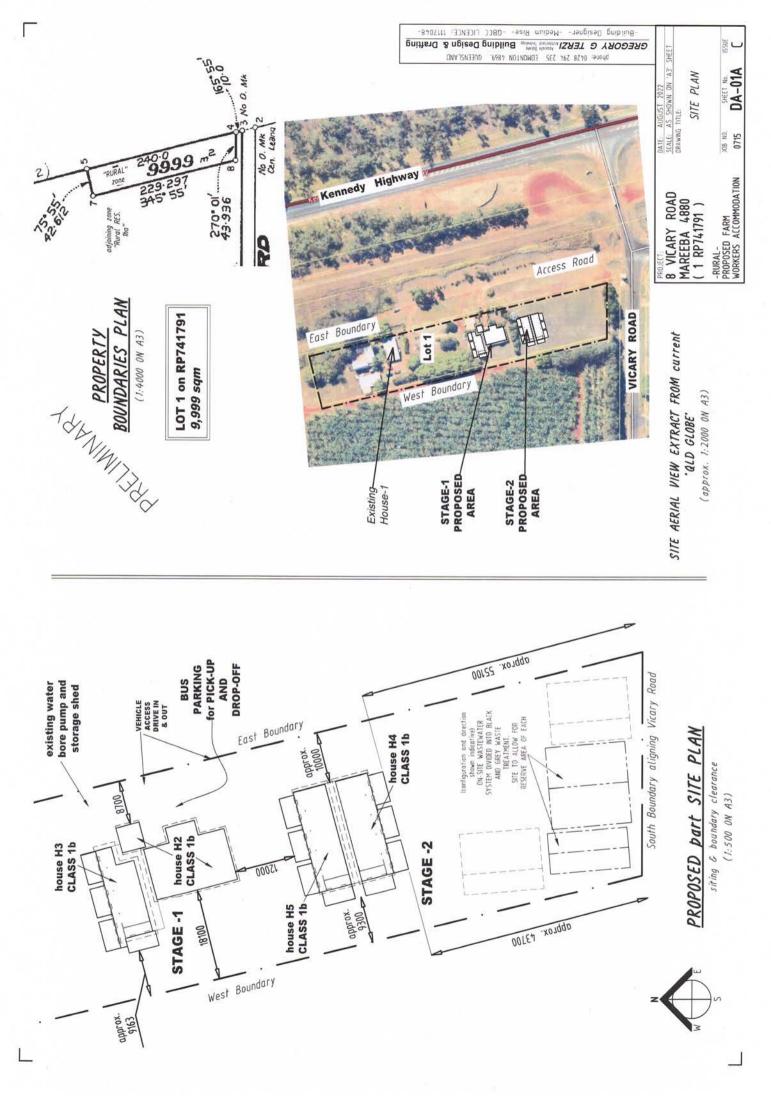
SITE FEATURE	UP SLOPE	DOWN SLOPE	LEVEL
BORE, WELL, DAM, WATERCOURSE AND DRAINAGE CHANNEL	10m	10 m	10 m
PROPERTY BOUNDARIES, PEDESTRIAN PATHS, WALKWAYS, RECREATION AREAS, RETAINING WALL AND FOOTINGS FOR BUILDINGS AND OTHER STRUCTURES	2 m	4 m	2 m
INGROUND SWIMMING POOLS	6 m	6 m	6 m

#### **DIRT PROFESSIONALS**

EMAIL: dirtprofessionals@bigpond.com











## Advanced Enviro-Septic Owner's Manual

#### Head Office

Chankar Environmental Pty Ltd 62 Rene Street Noosaville QLD 4566

(07) 5474 4055 www.enviro-septic.com.au info@enviro-septic.com.au



#### **Important Security instructions**



It is extremely dangerous even potentially deadly to open a septic tank, pumping station or any enclosed space that is part of a wastewater treatment system. This work must be done by a person trained in enclosed space working and rescue procedures who has the necessary equipment.

The action of the bacteria on the organic matter present in the wastewater produces gases such as carbon gas (CO<sub>2</sub>), methane gas (CH<sub>4</sub>) and sulphuric hydrogen (H<sub>2</sub>S). The H<sub>2</sub>S present in the septic tank or a pumping station can cause the death of an individual in a matter of minutes. This is why this work must be left to competent personnel.



Pipes are buried near your septic installation. Please speak to your contractor or the technical service of Advanced Enviro-Septic<sup>TM</sup> in order to take all the necessary precautions prior to digging or undertaking excavation jobs near your septic system.



Please be sure that the covers of the septic tank, the pumping station, and the sampling device are always in place and that they remain accessible at all times for periodic inspections and interventions when necessary.

Advanced Enviro-Septic<sup>™</sup> U.S. Brevet nos. 6,461,078; 5,954,451; 6,290,429; 6,899,359; 6,792,977; 7,270,532 and 5,606,786. Other patent pending.

Enviro-Septic<sup>®</sup> is a trademark of Presby Environmental, Inc. Advanced Enviro-Septic<sup>™</sup> is a trademark of Presby Environmental, Inc. Bio-Accelerator<sup>MC</sup> is a trademark of Presby Environmental, Inc.

#### **Table of Contents**

Introduction	4
The purpose of this document	4
Designation of the Enviro-Septic System	4
Definition of the Enviro-Septic System	5
What to do if a problem occurs?	4 5 5 5 5
What to do if a problem occurs?	5
Certified Contractor	-
Enviro-Septic System Capacity	6
Residential Wastewater	7
Warranty certificate	8
Functioning of the Enviro-Septic System	
Treatment process of the Enviro-Septic system	
Diagram of the Enviro-Septic chain of treatment	
Diagram of the Enviro-Septic system	
Enviro-Septic System Components	11
Operating the Enviro-Septic System	12
Initial Use	12
Intermittent Use or Prolonged Absences	12
Enviro-Septic System Operating Instructions	12
Wastewater Volume	12
In the bathroom	13
In the kitchen	13
For the laundry	13
Elsewhere in and around the house	13
Chemicals for septic installation	
Ventilation	14
Heavy machinery and motorized vehicle traffic	14
Vegetation	14
Enviro-Septic System Maintenance	15
Distribution box and flow equalizer	15
Advanced Enviro-Septic System Pipe Rows	16
Elements of the Enviro-Septic System installed in the ground	
Elements of the Enviro-Septic System appearing above ground _	17
Embankment surface above the Enviro-Septic System	18
Owners Responsibilities	19
What to do if water level is high	20
Appendix A - Presby Twenty Year Limited Warranty	21
Appendix B – Information Specific to Your Treatment System	22
Appendix C – Register of the Septic Tank Maintenance	23

# User's Guide – Advanced Enviro-Septic Introduction

	Thank you for choosing the Advanced Enviro-Septic System for your septic installation. This system was developed to efficiently treat domestic wastewater. Instructions must be followed in order to maintain its treatment performance so that you can make use of it for many years. Carefully read through this entire document and retain it in your files for future reference.
The purpose of this document	This user guide explains the proper use, procedures and inspections required in order to ensure the proper operation of your Advanced Enviro- Septic System for residential wastewater treatment.
	It is the owner's responsibility to ensure that the system is used properly and according to its treatment capacity. It is also their responsibility to respect the rules and regulations in effect regarding associated council and government regulations.
Designation of	Name: Advanced Enviro-Septic <sup>TM</sup> Wastewater System
the Enviro- Septic System	Application Domain: Residential Wastewater (sewage).
	<b>Class and treatment type</b> : The Enviro-Septic system meets all the performance criteria requirements of both the Australian standard AS/NZS 1546.3: 2008, and the Queensland Plumbing and Wastewater Code: 2011 (for both Secondary and Advanced Secondary treatment)
	The system cannot be used to treat wastewater to make it consumable. It is made to treat residential wastewater to an acceptable level for it to be reintroduced into the environment.

Definition of the Advanced Enviro- Septic System	The Enviro-Septic system is composed primarily of two inseparable components: the rows of Advanced Enviro-Septic <sup>TM</sup> pipe and a layer of system sand. The Enviro-Septic system must be preceded by a septic tank and a wastewater distribution device. The treated water is drained directly into the soil beneath the treatment system through a soil absorption system.
What to do if a problem occurs?	<ul> <li>If in the course of normal use of your septic system you notice any of the following problems:</li> <li>presence of abnormal odours in the house, around the septic system or emanating from sources of drinking water,</li> <li>abnormally wet soil, presence of persistent puddles or odours in the area of the septic tank or the Enviro-Septic system,</li> <li>slow flushing toilets or other plumbing in the home,</li> <li>presence of abnormally abundant vegetation on the surface or around the septic tank or the Enviro-Septic system installation,</li> <li>flooding in the area where the Enviro-Septic system is installed,</li> <li>erosion of the land fill on or around the Enviro-Septic system,</li> <li>alarm from the pumping station if such a device is part of your installation</li> </ul>
Customer service and Technical support information	Please do not hesitate to contact us if you need further information. We can be contacted at the following coordinates: Telephone: (07) 5474 4055 Fax: (07) 5335 1691 Email: info@enviro-septic.com.au Internet site: www.enviro-septic.com.au

## User's Guide – Enviro-Septic

Certified Contractor The Enviro-Septic System must be installed by a licensed contractor by Chankar Environmental. Certification is obtained by a t t e n d i n g t h d "Enviro-Septic Contractor Certification Course". The Advanced Enviro-S customer service can provide the name of contractors having the proper cert to install Enviro-Septic Systems.	
Enviro-Septic System Capacity	<ul> <li>The capacity of the Enviro-Septic System depends on two elements:</li> <li>The number of Enviro-Septic Pipes</li> <li>The capacity of the underlying soil to evacuate the treated water.</li> </ul>
	Tables 1 and 2 present the capacity of each system in relation with the number of pipe installed for a 1 to 6 bedroom residence or other building with a daily flow of 1800 L/d or less. The total volume of wastewater fed to the system must not be more then what is shown in the table.
	The system may also be limited by the capacity of the underlying soil to permit the infiltration and evacuation of wastewater. This value should be evaluated by the designer mandated to create the plans and estimates for your

septic installation. It is, therefore, important to verify with the designer if the capacity of the soil permits complete infiltration and evacuation of the maximum amount of water able to be treated by the pipes installed.

Number of Advanced	Total Length of	Maximum Daily
Enviro-Septic Pipes	Advanced Enviro-Septic	Flow
(3.0 m each)	Pipes (m)	(L/d)
4	12	360
5	15	450
6	18	540
7	21	630
8	24	720
9	27	810
10	30	900
11	33	990
12	36	1080
13	39	1170
14	42	1260
15	45	1350
16	48	1440
17	51	1530
18	54	1620
20	60	1200

Table 1Enviro-Septic hydraulic capacity based on the number of pipes installed

# User's Guide – Enviro-Septic System

Parameters Table 2

Testing Parameters	Advanced Enviro-Septic™ Test Results	Qld Secondary	Qld Advanced Secondary	EPA Tertiary	NSF-40 Class 1	BNQ Advanced
CBOD (mg/L)	< 2	20	10	10	< 25	<15
TSS (mg/L)	< 2	30	10	10	< 30	<15
Fecal Coliforms (CFU/100ml)	N/A ** Subsoil Installation	N/A ** Subsoil Installation	N/A ** Subsoil Installation	1000	N/A ** Subsoil Installation	50,000

<b>Residential Wastewater</b> Table 3 indicates the normal characteristics of raw domestic sewage.				
Table 3	Parameter	Units	Raw Sewage	Septic Tank
				Effluent
	TSS	mg/L	237-600	50-90
	CBOD <sub>5</sub>	mg/L	210-530	140-200
	Fecal Coliforms	CFU/100 ml	$10^{6} - 10^{10}$	$10^3 - 10^6$
	Source: Tchobanoglous	and Burton (1991)		

<sup>3</sup> The hydraulic capacities shown in table 1 are the same regulation for 1 to 6 bedroom isolated

dwellings (clause 1.3). The difference between the minimum number of Enviro-Septic pipe for a similar daily flow between table 1 and 2 come after different security factors that are associated with 1 to 6 bedroom house vs other types of buildings.

#### Warranty certificate

Advanced Enviro-Septic<sup>TM</sup> comes with a manufacturer's limited warranty. The warranty details are presented in Appendix A.

# Functioning of the Enviro-Septic System

system integrates both functions.

The Enviro-Septic system is a passive technology which facilitates the proliferation of the bacteria responsible for wastewater treatment. It is comprised mainly of two inseparable components: the rows of Advanced Enviro-Septic pipes and a layer of system sand.

The Enviro-Septic system must be preceded by a septic tank and a distribution box (or another method of distribution). It must also be installed over a polishing leaching field.

Treatment<br/>process of the<br/>Enviro-Septic<br/>systemThe rows of Advanced Enviro-Septic pipes and system sand permit the<br/>treatment and distribution of wastewater on the surface of the receiving soil<br/>(surface of the polishing leaching field).The pipes support, first of all, the separation of particles through flotation and<br/>decantation. The water is then evacuated through perforations situated all<br/>around the pipes and through the pores of the two layers of synthetic media<br/>covering the pipes. These membranes facilitate the fixation of the microbial<br/>cultures which support wastewater treatment as well as longitudinal<br/>distribution.The layer of sand continues the treatment process and helps in dispersing the<br/>water before it infiltrates into the natural soil. In this way, the Enviro-Septic

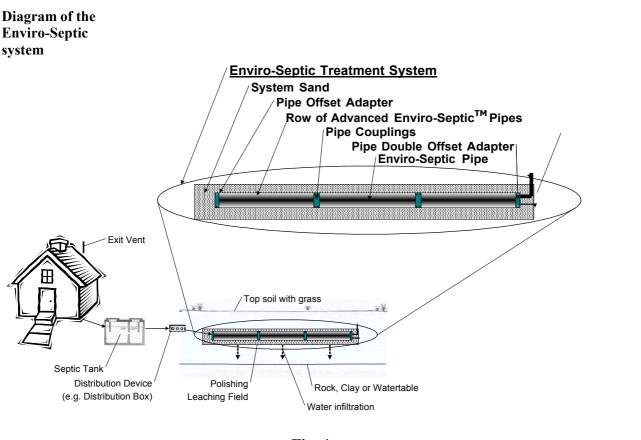


Fig. 4

# **Enviro-Septic System Components**

Your septic installation includes several components. All of these components are parts of the chain of treatment of your installation. Table 4 presents the list of these elements. However it should be noted that some of these are only used when site conditions require them.

The table also presents a summary of inspections required for each component. More detailed information on this subject is presented in the sections that follow.

Component of the septic system	Function	Follow-up needed	Frequency	Responsible fo follow-up
Septic tank	Primary wastewater treatment	Periodic emptying	According to standards and regulations in effect	Owner is res- ponsible to have work done by qualified person
Septic Tank Effluent Filter <sup>4</sup>	Retention of solids in low pressure pumped applications.	According to manufacturer's instructions.		
Distribution systems if required for larger dual bed systems 3 options A) Gravity Dist box and flow equalizers B) Pressure distribution (feed) system C) Automatic distributing valve	Distributes the septic tank effluent to the rows of Advanced Enviro- Septic.	<ul> <li>A) According to water level in the inspection port</li> <li>B) According to the</li> <li>C) According to the</li> </ul>		
Rows of Advanced Enviro-Septic Pipes.	Distribute and treat wastewater			
Sampling device	To verify the treatment performance of the Enviro-Septic System	Ensure that there is access to this device	Optional	Qualified person
Vent	To allow the circulation of air in the Enviro- Septic System	Ensure that the opening is not blocked	As needed	Owner
System sand	To complete the water treatment process and to improve the drainage	No		
Pumping station (optional)	Lift septic tank effluent to the Enviro-Septic System	According to suppli	er's specifications	

<sup>4</sup> The effluent filter is necessary whenever the septic tank is followed by a low pressure distribution system.

### **Operating the Enviro-Septic System**

Initial Use	At the time of installation the septic tank must be filled with clear water.
	If a pumping station is used, the contractor will verify that it is functioning properly at the time of installation. The home owner must make sure that there is adequate electricity to safely operate the equipment as well as the alarm component.
	The Enviro-Septic system is now ready for use.
Intermittent Use or Prolonged Absences	The Enviro-Septic system is a passive wastewater treatment system. When properly installed, it requires no particular attention for intermittent use or in the case of prolonged absence.

### **Enviro-Septic System Operating Instructions**

The use and the maintenance of an Enviro-Septic System are relatively simple. In general, respecting the following rules will allow you use of your installation without problems for years to come.

Wastewater<br/>VolumeLarge quantities of water that leave the house and enter the Enviro-Septic<br/>System in a short period of time could have a negative impact on the<br/>effectiveness of the treatment and the infiltration of wastewater causing<br/>agitation in the septic tank. A quantity of sludge or scum is likely to be put into<br/>suspension and be brought towards the system and the infiltration bed.

You must ensure that the volume of wastewater entering the Enviro-Septic System is reasonable when compared to the total daily flow the system was designed for.

After the installation, if changes are made to the residence (ex. addition of a bedroom), please contact the designer of the Enviro-Septic System. Make sure that the septic system is inspected by a qualified person to determine that it has the necessary capacity to treat and infiltrate the new daily design flow of wastewater being generated.

In the bathroom	<ul> <li>Do: <ul> <li>immediately repair any leaking faucet or toilet,</li> <li>use a reasonable quantity of toilet paper.</li> <li>Minimise or avoid bleach, antiseptic disinfectants, and amonia acids in the system</li> </ul> </li> <li>Do not: <ul> <li>use disinfectant in tablet (puck) form, whether it is placed in the basin or the tank,</li> <li>throw cigarettes, cigarette butts or medication in the toilet,</li> <li>throw paper towels, paper napkins or other personal hygiene products in the toilet.</li> </ul> </li> </ul>
In the kitchen	<ul> <li>Do: <ul> <li>repair any leaking faucet,</li> <li>use dish soap or dishwasher soap that is low in phosphate (0 to 5%),</li> <li>use the necessary quantity of soap to do the work. Take note that the necessary quantity is often less than suggested by the manufacturer.</li> <li>use biodegradeable soap, low-phosphorus or phosphorus free detergents.</li> </ul> </li> <li>Do not : <ul> <li>use a food waste disposal unit in your sink that is connected to your septic installation. If you do have a waste disposal unit, your septic tank may require more frequent pump out to remove sludge build up</li> <li>dispose of vegetables, meats, fat, oil, coffee beans, citrus products or other products into the septic system.</li> </ul> </li> </ul>
For the laundry	<ul> <li>Do:</li> <li>use phosphate free detergent, preferably in liquid form. If it is not possible, use biodegradable powder detergent,</li> <li>use the necessary quantity of soap to do the work. Take note that the necessary quantity is often less than that suggested by the manufacturer,</li> <li>minimize the volume of water used for the laundry according to the quantity of clothing to wash,</li> <li>if possible spread your loads of laundry throughout the week</li> <li>prevent harsh chemicals or products entering the system (eg. paint, nappies)</li> </ul>
Elsewhere in and around the house	<ul> <li>Do:</li> <li>divert drainage and rain water away from the surface of the Advanced Enviro-Septic System.</li> <li>All vents should be mosquito-proofed to prevent mosquitoes from breeding in the tank.</li> <li>Roof and surface water should be redirected away from absorption trenches.</li> <li>Do not :</li> <li>discharge water softener backwash into your septic system,</li> <li>discharge any water from swimming pool filters, spas or other appliances that discharge chlorinated water into your septic system.</li> </ul>

# User's Guide – Enviro-Septic

	<b>A</b>
	<ul> <li>let water from sump pumps, roof drains (gutters) and drainage pipes. pipes discharge into the septic system,</li> <li>dispose of solvents, paints, antifreeze, engine oil or other chemicals in the septic installation. This includes water used to wash brushes or rollers that were used with latex paint (latex paint contains elements that are harmful to septic system),</li> <li>dispose of animal litter in the septic installation.</li> </ul>
Chemicals for septic installation	Your Enviro-Septic System does not require any starting chemical, cleaning or other additives. The bacteria that carry out the treatment are naturally present in raw domestic sewage. Any chemicals or additives added to the Enviro-Septic System could possibly kill these bacteria.
Ventilation	It is very important to ensure that good ventilation occurs so that the septic system functions correctly. The vent(s) installed at the ends of the septic system encourage this air circulation. It is important to make sure that the opening is not blocked and that air can circulate freely at all times. Air enters through the vent, circulates through the rows of pipes and the septic tank and travels through the plumbing of the house to exit through the roof vent.
	The owner must be sure to have a roof vent and to keep it clear at all times. When a pumping station is used, a bypass pipe or an extra vent must be used to ensure proper ventilation of the system.
Heavy machinery and motorized vehicle traffic	No vehicles or heavy machinery must be driven on a septic system, whether it is before, during or after its construction. Heavy machinery or motorized vehicle traffic on the soil closes the natural pores of the soil which reduces its permeability and allows for pounding and the accumulation of water.
Vegetation	The surface of the septic system must be planted with grass. The grass must be cut regularly in order to encourage growth without the use of fertilizers. Vegetation cover contributes to the elimination of nitrogen and phosphorus.
	It is important not to plant trees or other plants with invasive roots within the proximity of the septic installation (minimum distance 3 meters).

# **Enviro-Septic System Maintenance**

Septic Tank Maintenance	The septic tank preceding the Enviro-Septic System must be pumped out regularly (every 3-5 years for normal residential use or sludge exceeds 2/3 of the tank). Verify the current regulation, or get in touch with relevant council or government authorities.
	If the septic tank is not emptied regularly, an increasingly large amount of solids and grease in suspension will leave the septic tank and end up in the treatment system and in time the performance of the Enviro-Septic System may be affected.
	At all times, a professional using the proper equipment must carry out the pumping out of a septic tank
	The owner is responsible to ensure his septic tank is pumped out according to council regulations. This work should always be done by a qualified person since it can be very dangerous to open a septic system without first taking the necessary precautions.
	Note: It is the home owner's responsibility to make sure that at all times the septic tank lids are in their proper position and securely fastened. A lid that is not installed correctly can be harmful to the operation of the Enviro-Septic System.
Pre-filter (Septic tank effluent filter)	Effluent filter equipment is not necessary at the exit of the septic tank <sup>5</sup> . It is mandatory when a low pressure distribution system is used between the septic tank and the Advanced Enviro-Septic pipes.
	The effluent filter must be cleaned according to the maintenance and inspection procedures provided by the manufacturer.

<sup>&</sup>lt;sup>5</sup> The effluent filter is necessary whenever the septic tank is followed by a low pressure distribution system.

# User's Guide – Enviro-Septic

Advanced Under normal use, the rows of Advanced Enviro-Septic pipe do not require maintenance. It is normal to find fluctuation of the water level in the pipes. If the water level reaches 260 mm, a rejuvenation of the Enviro-Septic System must be considered. A qualified person<sup>6</sup> must carry out this procedure.

<sup>&</sup>lt;sup>6</sup> There may be costs related to this operation, if the problem is due to improper use of the system or due to a design or installation problem.

# User's Guide – Enviro-Septic

Vent	The owner must however ensure that nothing prevents the circulation of air. There must also be a difference of at least 3 meters, at all times, between the entry vent situated at the extremity of the Enviro-Septic system and the exit vent usually located on the roof.
System Sand	There is no maintenance to be done on the system sand during normal use of the Enviro-Septic System.
Pumping station or low pressure distribution system	In certain cases, the site constraints require the use of a pumping station or a low-pressure distribution system to evenly distribute the water. The owner is then responsible to comply with the manufacturer's scheduled maintenance requirements of this equipment.
Embankment surface above the Enviro- Septic System	The surface located above the Enviro-Septic system must be covered with herbaceous vegetation. A slight slope must be given to the surface in order to help the drainage of rainwater towards the outside of the system. The grass must also be cut regularly. Finally, any depression that could be created with time must be filled in order to avoid any accumulation of water above the system and to prevent erosion.

# **Owner's Responsibilities**

Owner's Responsibilities	<ul> <li>The owner is responsible for:</li> <li>using the Enviro-Septic System according to the instructions presented in the user guide.</li> <li>pumping out the septic tank according to the regulations in effect.</li> <li>maintaining the effluent filter (if present), the pumping station, the pressure distribution system or the automatic wastewater distributing valve according to manufacturer's specifications and recording the information if this equipment is part of the system.</li> <li>ensuring that the vent openings are clear of any obstacle.</li> <li>providing access at all times to the Enviro-Septic system.</li> <li>adhering to the requirements of the applicable rules and regulations, in particular with regards to the discharge standards of the system to the environment.</li> </ul>
Qualified person	The qualified person that performs the maintenance or the inspection of an Enviro-Septic System is a person who was trained and certified by Chankar Environmental or has certification from Presby Environmental to perform the tasks associated with the Enviro-Septic system. Chankar Environmental trains these people to carry out the inspections of the system, perform adjustments to the equalizers and/or carry out the rejuvenating procedure. To obtain the name of a qualified person in your area, contact our customer service department on (07) 474 4055). For maintenance on the pumping station and the low pressure distribution system, the owner must refer to the user guide specified by the manufacturer of these systems. The pumping out of the septic tank must be performed by a company specializing in that field. Check with your council for the companies in your area that are qualified to do this work.

# Appendix A- Presby Twenty Year Limited Warranty



This Twenty Year Limited Manufacturer's Warranty is provided by the Manufacturer, Presby Environmental, Inc., a New Hampshire corporation having a mailing address of 143 Airport Rd., Whitefield, New Hampshire, 03598

PRESBY ENVIRONMENTAL, INC. INNOVATIVE SEPTIC TECHNOLOGIES

(hereinafter called "Presby"). This Warranty applies only to Presby Products sold by or through its duly authorized distributor Chankar Environmental an Australian corporation having a mailing address of Unit 6-62 Rene St, Noosaville, Qld 4566 (hereinafter called the "Distributor"). "Presby Products" means Presby's Enviro-Septic® leaching systems and Preesby Maze<sup>©</sup> with the required accessories (couplings, offset adaptor).

**Warranty:** Presby warrants that Presby Products are free from defect for twenty years from the date of installation but in no event more than twenty-one years from the date of manufacture. Product Defects means defects or damage to the Products caused by or occurring during the manufacturing process. This Warranty does not cover or apply to damages to the Products caused by or resulting from transit or from accident, misuse, abuse, neglect, storage, installation, repair, maintenance or from use other than normal and ordinary use of the Products. This Warranty does not apply to damages to the Products caused by or resulting from failure to install or use the Products in accordance with distributor's instructions which have been approved by Presby or failure to properly inspect and maintain the Products.

**Warranty Registration, Claim Process and Remedy:** Any claim under the Warranty must be in writing and received by the distributor within thirty days of the date when the facts giving rise to such claim under this Warranty become known or are otherwise discovered. The distributor must be provided with an opportunity to inspect the Products as installed. Failure to comply with these requirements renders the Warranty null and void. If, during the Warranty period, the distributor and Presby find and determine that defects in Products exist, then the distributor and Presby's sole and exclusive obligation is to either repair the Products or provide replacement Products. The distributor and Presby shall determine whether to repair the Products or provide replacement Products. The distributor and Presby shall have no obligation to remove any defective Products or to install any replacement Products. The distributor and Presby shall not be liable or responsible for any other damages or claims arising from or relating to defective Products, including but not limited to claims for general, consequential, or incidental damages, lost profits, or attorney fees.

**Disclaimer:** The distributor and Presby otherwise make no express warranty concerning the Products and the distributor and Presby disclaims any and all warranties, express or implied. Except as stated herein, there are no warranties express or implied, and the distributor and Presby do not warrant that the goods are merchantable or fit for any particular purpose. Any claim or controversy relating to this Warranty, or to matters of place of contracting, interpretation, performance or breach thereof, shall be brought in and adjudged in accordance with the applicable laws of state of New Hampshire.

# User's Guide – Enviro-Septic

# **Appendix B - Information Specific to Your Treatment System**

Information on your Enviro-	Installation date:						
Septic System	Contractor /Engineer:						
	Contractor:						
	Plumbing inspector:						
	Number of rows of pipes:						
	Hydraulic capacity (L/d):						
	Number of 3m pipes per row:						
	<ul><li>Water Distribution</li><li>Distribution box</li><li>Wastewater distributing valve</li></ul>						
	Septic tank capacity:						
Notes							

22 October, 2022

**Chief Executive Officer** Mareeba Shire Council PO Box 154 MAREEBA QLD 4880

Dear Sir,

#### **APPLICATION FOR A MATERIAL CHANGE OF USE** RE: LOT 1 ON RP741791, 8 VICARY ROAD, MAREEBA.

Under Section 51 of the Planning Act, 2016 it is mandatory for the owner of the land to which a Development Application relates to, consent to the making of the Application.

We, DUSTY NUTS PTY LTD as the registered owner of 8 Vicary Road, Mareeba and more particularly described as Lot 1 on RP741791, authorise Freshwater Planning Pty Ltd to lodge a Town Planning Application on our behalf.

Sthall Director 22/10/22. Aldi Director 20.10.22.

DUSTY NUTS PTY LTD

### DA Form 1 – Development application details

Approved form (version 1.3 effective 28 September 2020) made under section 282 of the Planning Act 2016.

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

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

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

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

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

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

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

1) Applicant details	
Applicant name(s) (individual or company full name)	Dusty Nuts Pty Ltd
Contact name (only applicable for companies)	
Postal address (P.O. Box or street address)	C/ Freshwater Planning Pty Ltd 17 Barronview Drive
Suburb	Freshwater
State	QLD
Postcode	4870
Country	Australia
Contact number	0402729004
Email address (non-mandatory)	FreshwaterPlanning@outlook.com
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	F22/37

### PART 1 – APPLICANT DETAILS

2) Owner's consent
2.1) Is written consent of the owner required for this development application?
Yes – the written consent of the owner(s) is attached to this development application
No – proceed to 3)



# PART 2 – LOCATION DETAILS

Note: P		elow and			) or 3.2), and 3. n for any or all p			ne development	t application. For further information, see <u>DA</u>
3.1) Street address and lot on plan									
			•	•	ots must be liste				
					an adjoining etty, pontoon. A				premises (appropriate for development in
	Unit No.	Street	No.	Stree	t Name and	Туре			Suburb
a)		8		Vicar	y Road				Mareeba
u)	Postcode	Lot No	Э.	Plan	Type and Nu	umber (	(e.g. RP,	SP)	Local Government Area(s)
	4880	1		RP74	1791				Mareeba Shire Council
	Unit No.	Street	No.	Stree	t Name and	Туре			Suburb
b)									
b)	Postcode	Lot No	Э.	Plan	Type and Nu	umber (	(e.g. RP,	SP)	Local Government Area(s)
e.ę <b>Note</b> : P.	g. channel dreo lace each set o	lging in N f coordin	Noreton B ates in a	ay) separat	e row.		note area	s, over part of a	a lot or in water not adjoining or adjacent to land
		premis	-	-	le and latitud	le			Γ
Longit	ude(s)		Latituc	le(s)		Datu	m		Local Government Area(s) (if applicable)
							GS84		
							DA94		
	ordinates of	nromis	as hy a	astina	and northing		ther:		
Easting		1	ing(s)	asting	Zone Ref.	Datu	m		Local Government Area(s) (if applicable)
Lasting	9(3)	North	iiig(3)		l	WGS84			
					□ 54 □ 55		GDA94		
					56	Other:			
3 3) Ao	dditional pre	mises							
· · · ·			re releva	ant to	this develop	ment a	oplicatio	on and the d	etails of these premises have been
	•				opment appli				
Not 🛛	required								
		<b>6</b> 11							
					ly to the prer			-	vant details
	•		•		itercourse or	in or a	bove ar	n aquifer	
	of water boo	-			-				
					insport Infras	structur	e Act 1	994	
	plan descrip		-		land:				
	of port author	ority for	the lot:						
🗌 In a	a tidal area						r		
Name	of local gove	ernmer	nt for the	e tidal	area (if applica	able):			
Name of port authority for tidal area (if applicable):									
🗌 On	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 <u>DA Forms Guide</u>.

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

🛛 No

### PART 3 – DEVELOPMENT DETAILS

#### Section 1 – Aspects of development

6.1) Provide details about the 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 approva								
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):								
72 x single Bedroom Non-Resident Workforce Accommodation								
e) Relevant plans								
Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms guide:</u> <u>Relevant plans.</u>								
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 approva								
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 <u>DA Forms Guide:</u> <u>Relevant plans.</u>								
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	$oxed{i}$ Yes – complete division 1 if assessable against a local planning instrument				
Reconfiguring a lot	Yes – complete division 2				
Operational work	Yes – complete division 3				
Building work	Yes – complete DA Form 2 – Building work details				

#### Division 1 - Material change of use

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

8.1) Describe the proposed material change of use							
Provide a general description of the proposed use	Provide the planning scheme definition (include each definition in a new row)	Number of dwelling units (if applicable)	Gross floor area (m <sup>2</sup> ) ( <i>if applicable</i> )				
Non-Resident Workforce Accommodation	Non-Resident Workforce Accommodation	72					
	use of existing buildings on the premises?						
🛛 Yes							
□ No							

#### Division 2 – Reconfiguring a lot

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

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

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?						
Yes – provide additional details below						
□ No						
How many stages will the works include?						
What stage(s) will this developm apply to?	ent application					

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

12) Boundary realignment					
12.1) What are the current a	nd proposed areas for each lo	t comprising the premises?			
Current lot Proposed lot					
Lot on plan description	Area (m <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?				
Road work	Stormwater	Water infrastructure		
Drainage work	Earthworks	Sewage infrastructure		
Landscaping	Signage	Clearing vegetation		
Other – please specify:				
14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)				
Yes – specify number of new I	ots:			
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
Mareeba 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
The local government is taken to have agreed to the superseded planning scheme request – relevant documents
attached
🛛 🔀 No

### PART 5 – REFERRAL DETAILS

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

Heritage places – Local heritage places

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

Infrastructure-related referrals – Electricity infrastructure

Matters requiring referral to:

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

Infrastructure-related referrals - Oil and gas infrastructure

Matters requiring referral to the Brisbane City Council:

Ports – Brisbane core port land

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

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

Ports – Strategic port land

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

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

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

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

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

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

Matters requiring referral to the Queensland Fire and Emergency Service:

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

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

 $\Box$  Yes – referral response(s) received and listed below are attached to this development application  $\boxtimes$  No

Referral requirement	Referral agency	Date of referral response
Identify and deparibe any changes made to the proposed	development application that we	a the subject of the

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

### PART 6 – INFORMATION REQUEST

19) Information request under Part 3 of the DA Rules

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

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

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

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

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

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

### PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)			
$\Box$ Yes – provide details below or include details in a schedule to this development application $\boxtimes$ No			
List of approval/development application references	Reference number	Date	Assessment manager
Approval     Development application			
Approval     Development application			

21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)			
Yes – a copy of the receipte	ed QLeave form is attached to this devel	opment application	
<ul> <li>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</li> <li>Not applicable (e.g. building and construction work is less than \$150,000 excluding GST)</li> </ul>			
Amount paid	Date paid (dd/mm/yy)     QLeave levy number (A, B or E)		
\$			

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

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

#### 23) Further legislative requirements

**Environmentally relevant activities** 

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

Yes – the required attachment (form ESR/2015/1791) for an application for an environmental authority accompanies this development application, and details are provided in the table below				
🖾 No	No			
<b>Note:</b> Application for an environment requires an environmental authority		ing "ESR/2015/1791" as a search tern <u>rov.au</u> for further information.	n at <u>www.qld.gov.au</u> . An ERA	
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 facilitie	es			
23.2) Is this development application for a hazardous chemical facility?				
Yes – Form 69: Notification of a facility exceeding 10% of schedule 15 threshold is attached to this development application				
No				

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

Clearing native vegetation
23.3) Does this development application involve <b>clearing native vegetation</b> that requires written confirmation that the chief executive of the <i>Vegetation Management Act 1999</i> is satisfied the clearing is for a relevant purpose under section 22A of the <i>Vegetation Management Act 1999</i> ?
Yes – this development application includes written confirmation from the chief executive of the Vegetation Management Act 1999 (s22A determination)
<ul> <li>No</li> <li>Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development.</li> <li>2. See <a href="https://www.qld.gov.au/environment/land/vegetation/applying">https://www.qld.gov.au/environment/land/vegetation/applying</a> for further information on how to obtain a s22A determination.</li> </ul>
Environmental offsets
23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a <b>prescribed environmental matter</b> under the <i>Environmental Offsets Act 2014</i> ?
<ul> <li>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</li> <li>No</li> </ul>
<b>Note</b> : The environmental offset section of the Queensland Government's website can be accessed at <u>www.qld.gov.au</u> for further information on environmental offsets.
Koala habitat in SEQ Region
23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?
<ul> <li>Yes – the development application involves premises in the koala habitat area in the koala priority area</li> <li>Yes – the development application involves premises in the koala habitat area outside the koala priority area</li> <li>No</li> </ul>
<b>Note:</b> If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at <u>www.des.qld.gov.au</u> for further information.
Water resources
23.6) Does this development application involve taking or interfering with underground water through an artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water under the <i>Water Act 2000</i> ?
Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the <i>Water Act 2000</i> may be required prior to commencing development
No Note: Contact the Department of Natural Resources, Mines and Energy at <a href="http://www.dnrme.gld.gov.au">www.dnrme.gld.gov.au</a> for further information.
DA templates are available from https://planning.dsdmip.gld.gov.au/. If the development application involves:
<ul> <li>Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1</li> <li>Taking or interfering with water in a watercourse, lake or spring: complete DA Form1 Template 2</li> </ul>
Taking overland flow water: complete DA Form 1 Template 3.
<u>Waterway barrier works</u> 23.7) Does this application involve waterway barrier works?
<ul> <li>Yes – the relevant template is completed and attached to this development application</li> <li>No</li> </ul>
DA templates are available from <u>https://planning.dsdmip.qld.gov.au/</u> . For a development application involving waterway barrier works, complete DA Form 1 Template 4.
Marine activities
23.8) Does this development application involve aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?
Yes – an associated <i>resource</i> allocation authority is attached to this development application, if required under the <i>Fisheries Act 1994</i>
No Note: See guidance materials at <u>www.daf.gld.gov.au</u> for further information.

Page 9 DA Form 1 – Development application details Version 1.3— 28 September 2020

Quarry materials from a watercourse or lake			
23.9) Does this development under the <i>Water Act 2000?</i>	application involve the <b>remo</b>	val of quarry materials from	a watercourse or lake
☐ Yes – I acknowledge that a ⊠ No			- ·
<b>Note</b> : Contact the Department of Nation	ural Resources, Mines and Energy	at <u>www.dnrme.qld.qov.au</u> and <u>www.l</u>	<u>business.qld.gov.au</u> for turther
Quarry materials from land	under tidal waters		
23.10) Does this development under the <i>Coastal Protection</i>			m land under tidal water
☐ Yes – I acknowledge that a ☑ No	a quarry material allocation n	otice must be obtained prior t	to commencing development
Note: Contact the Department of Env	vironment and Science at <u>www.des.</u>	<u>qld.gov.au</u> for further information.	
Referable dams			
23.11) Does this development section 343 of the <i>Water Supp</i>			
<ul> <li>☐ Yes – the 'Notice Acceptin Supply Act is attached to the</li> <li>☑ No</li> </ul>	g a Failure Impact Assessme his development application	ent' from the chief executive a	administering the Water
Note: See guidance materials at www	<u>v.dnrme.qld.gov.au</u> for further inforn	nation.	
Tidal work or development	within a coastal manageme	ent district	
23.12) Does this development	t application involve <b>tidal wo</b>	rk or development in a coa	stal management district?
if application involves pro	al meets the code for assess		escribed tidal work (only required
No <b>Note</b> : See guidance materials at <u>www.des.gld.gov.au</u> for further information.			
Queensland and local herita			
23.13) Does this development heritage register or on a place			
<ul> <li>☐ Yes – details of the heritag</li> <li>☑ No</li> </ul>			
Note: See guidance materials at www	<u>v.des.qld.gov.au</u> for information req		Queensland heritage places.
Name of the heritage place:		Place ID:	
<u>Brothels</u>			
23.14) Does this development	t application involve a <b>mater</b> i	al change of use for a brot	hel?
<ul> <li>Yes – this development ap application for a brothel un</li> <li>No</li> </ul>	pplication demonstrates how the prosting of th		for a development
Decision under section 62 c	of the Transport Infrastruct	ure Act 1994	
23.15) Does this development			ntrolled road?
		for a decision under section ( tion 75 of the <i>Transport Infras</i>	

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

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

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

🛛 No

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

# PART 8 – CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist	
I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17 Note: See the Planning Regulation 2017 for referral requirements	⊠ Yes
If building work is associated with the proposed development, Parts 4 to 6 of <u>DA Form 2 –</u> <u>Building work details</u> have been completed and attached to this development application	☐ Yes ⊠ Not applicable
Supporting information addressing any applicable assessment benchmarks is with the development application Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see <u>DA</u> Forms Guide: Planning Report Template.	⊠ Yes
Relevant plans of the development are attached to this development application <b>Note</b> : Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms Guide: Relevant plans.</u>	🛛 Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)	☐ Yes ⊠ Not applicable

#### 25) Applicant declaration

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

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

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

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

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

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

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

Date received:	Reference numb	er(s):
Notification of eng	gagement of alternative assessment man	ager
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		

Date paid (dd/mm/yy)

manager