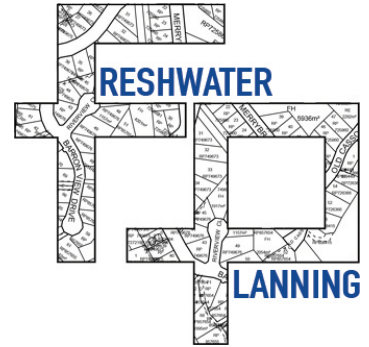


Your Ref: RAL22/0014
Our Ref: F22/01



14 August, 2022

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

Attention: Carl Ewin
Town Planning Department

Dear Sir,

**RE: RESPONSE TO INFORMATION REQUEST
APPLICATION FOR A MATERIAL CHANGE OF USE – NON-RESIDENT WORKFORCE
ACCOMMODATION. LOT 512 ON NR8022, KENNEDY HIGHWAY, MAREEBA.
DEVELOPMENT APPLICATION RAL22/0015.**

I refer to the Mareeba Shire Council's Confirmation Notice and subsequent Information Request letter dated 24 June, 2022. The following advices are provided for your information in accordance with the Development Assessment Rules, 2017 supported by the *Planning Act, 2016*.

It is noted that with the review, investigations and provision of the requested Further Information, the resulting undertakings has demonstrated the ability for the additional provision of Non-Resident Workforce. This, as a result of the Water and Sewer Investigations, has led to the provision of a Stage 2 of the proposed Development. Please find attached Amended Proposal Plans demonstrating the additional Stage 2.

Stage 2 includes the provision of an additional 24 Units provided within six additional buildings resulting in the total development now accommodation for 64 persons Non-Resident Workforce. Additional Parking has been provided to accommodate proposed Stage 2.

Information Request Item 1

Wastewater Disposal

It is noted in the application that wastewater will be disposed of on-site. Please provide a report, prepared by a suitably qualified wastewater consultant, outlining the proposed means of wastewater disposal. The report should demonstrate that enough area exists on the subject land to accommodate the wastewater disposal system/s and associated land application areas.

Attached to this Response is a Site Assessment and Design Report by the Dirt Professionals demonstrating that the provision of adequate and acceptable On-site Sewerage can be achieved.

Information Request Item 2

Water Supply

It is noted in the application that water supply will be made available through the SunWater channel network. Please provide evidence of a SunWater allocation large enough to service the anticipated water supply demand of the development. The wastewater consultant engaged to address point 1 should be able to provide the anticipated daily water usage estimates.

Page
2

Attached to this Response is a SunWater Water Account Statement demonstrating that the site contains a 5.00 ML Water Allocation. The Dirt Professionals and Applicants have confirmed that this Allocation of Water Supply is sufficient and acceptable for the proposed development.

Information Request Item 3

Manager/Caretaker's Residence

Please confirm your level of support for the provision of a manager/caretaker residence on-site to help minimise health and safety concerns as well as antisocial behaviour.

Attached to this Response is an amended set of Proposal Plans demonstrating the provision of a Manager/Caretaker's Residence located towards the access frontage of the site and additionally includes the provision of an Office and Storage. It is considered that the provision and location of the proposed Manager/Caretaker's Residence will aid in minimising any health and safety concerns as well as any antisocial behaviour.

This completes this Response to the Information Request. Please do not hesitate to contact me, in the first instance, should you require further information in relation to the matter.

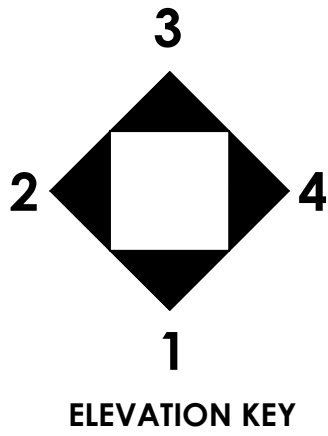
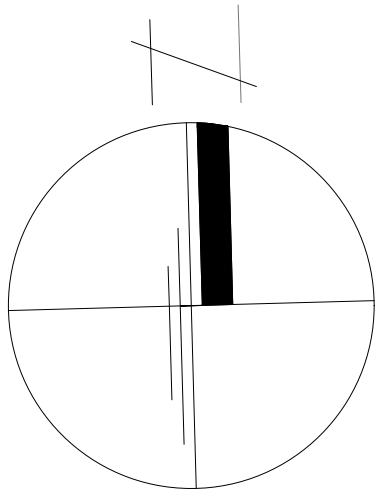
Yours faithfully,



MATTHEW ANDREJIC

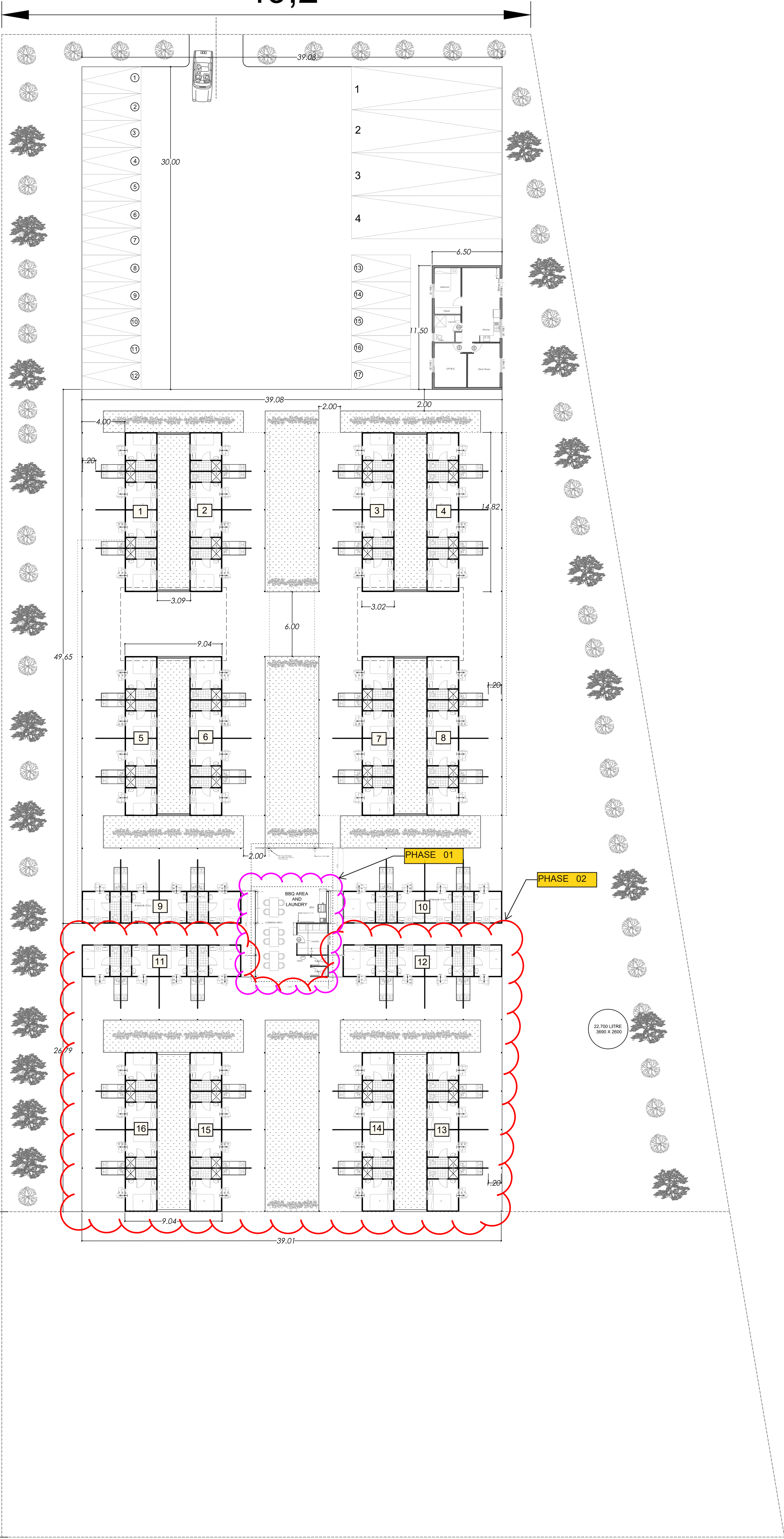
FRESHWATER PLANNING PTY LTD

49,2



109,44

30,26



3

FLOOR PLAN

1:200 SCALE .MTS

SITE PLAN: 6,396.40 M2
SITE AREA - OVERALL : 8,385 M2

ARCH-01

000

PROJECTO:

HOTEL

OWNER:

LUKE SPEIGHT

LOCATED :

KENNEDY HIGHWAY MAREEBA
,QUEENSLAND, CP 4800 AUS.

CONTAINS:

- FLOOR PLAN
- SITE PLAN
- SITE AREA

DRAW:

ICC

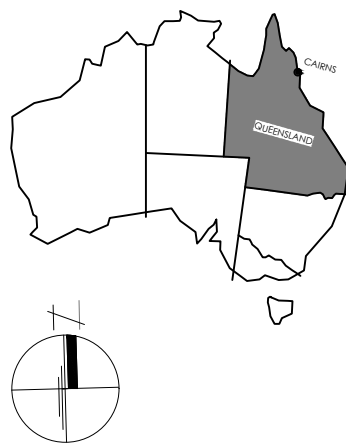
CHECKED:

ICC

APPROVED:

LUKE

LOCATION:



SCALE:

1:200 SCALE. MTS

DATE:

ABRIL 2022

- REVISION 03 01.MAY.2022
- EXTENSION 03 01.JULY.2022

Water Statement **338423**

Issue Date **16 May 2022**

Customer Number **352193**

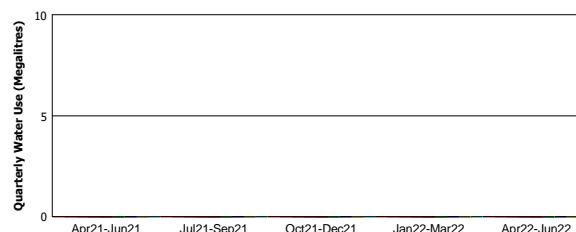
LJ & SC Speight
PO Box 865
RAVENSHOE QLD 4888

Statement Period

01 Apr 2022

16 May 2022

Quarterly Water Use



Water Account Statement

Water Account: 127607

System: Mareeba

Estimated Remaining Balance :

5.00 ML

Allocation Water Summary

DATE	DESCRIPTION	VOLUME (ML)
01 Apr 2022	Opening Balance	0.00
03 May 2022	Allocation Water Adjustment	5.00

Total Available Allocation Water: 5.00

***Allocation Water Usage:** 0.00

Remaining Allocation Water: **5.00**

* As per last recorded Meter Reading

Note: All totals are calculated to three decimal places prior to rounding for display.



Additional Information:-

What is a Water Account Statement?

The Water Account Statement provides a summary of the volume of allocation water which your water account, including the volume of allocation water used and remaining balance. Depending on the location of your metered offtakes, you may have more than one water account on your statement.

How do I find my remaining allocation?

The remaining allocation water balance at the time of the last transaction may be found on the Water Account Statement in the Allocation Water Summary section.

How much water can I use?

Under the *Water Act 2000*, SunWater is responsible for managing the water available within water supply schemes. In the majority of cases, the volume of water which will be supplied in any one water year, is determined by the announcement process. Announcements determine the volume of allocation water which will be available on your account by applying the announced percentage to the volume of allocation held. This may be less than 100% if the volume of water held in storage is low. Contact SunWater for details of products that may be available in your scheme.

How can I find out how much allocation I hold?

Water entitlements (including Interim Water Allocations and Riparian Allowance) are registered and managed by the Department of Natural Resources and Mines. Please contact your local NRM office to determine your water entitlements. The volume of allocation which SunWater has recorded on your account may be found on your Water Authority Statement, which is available upon request.

Selling Your Property / Water Allocation:

If you are in the process of selling your property/water allocation, please contact SunWater on 13 15 89 to ensure the transfer is completed.

Where do I find my Customer Account Number?

Your Customer Number can be found on the top of the Water Account Statement.

Enquiries about your Water Account Statement:

If you wish to enquire about this water account statement, or if you wish to obtain a water authority statement, please call us on 13 15 89

Changing Your Address / Account Details:

If your postal address, address for notices, or details of your account change, please notify SunWater by:

- Phone: 13 15 89
- Internet: www.sunwater.com.au
- Email: customersupport@sunwater.com.au
- Mail: SunWater Customer Support
PO Box 15536 City East QLD 4002

Want to view your account?

If you would like to view your account, find your water balance, place a water order or enter a meter reading then go to **www.sunwater.com.au**. Our online service can help you manage your account/s.

DIRT PROFESSIONALS

Email: dirtprofessionals@bigpond.com
MOBILE 04 17 647 477

Luke Speight
sp8building@gmail.com

Tandel Investments Pty Ltd
QBCC No. 1173606

15 July 2022

Site Assessment and Design
Lot 512 Kennedy Highway
Walkamin Qld

Job No 24437

INTRODUCTION

This report presents the results of a site assessment performed at Lot 512 Kennedy Highway, Walkamin. 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 8385m². The allotment was grassed and flat. The proposed development will be constructed in 2 stages, and will house a total of 64 persons. The first stage is to accommodate 40 persons and will be located to the North of the allotment. The second stage will accommodate 24 persons and will be located to the South of the allotment.

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 black water and grey water. The black water will total a maximum amount of 3200 litres per day and the grey water a total of 6400 litres per day. The black water and grey water 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 **Soil Category 4.**

It is proposed that Advanced Secondary Treatment Systems are 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/m² 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.

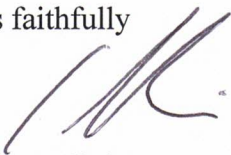
There will be no ponding of water during seasonal rains around the septic tank, pump well and wastewater area. Diversion drains will need to be put in place to divert water from the wastewater area.

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

AES The World Leader in Passive Solutions ©

Site Address	Lot 512 Kennedy Highway, Mareeba BLACKWATER	State	QLD	Post Code	4880
Client Name	Luke Speight	Date of Site Visit	7/15/2022		
Designers Name	Angelo Tudini	Designers Ph Number	0417 647 477	Designer Lic (e.g. QBCC)	1173606
Lic Plumber	TBA	Plumber Ph Number	TBA	Plumb / Drainer Lic Number	TBA
Council Area	Mareeba Shire Council	Designers AES Cert Number	1372	Date	8/4/2022

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

System Designers site and soil calculation data entry		IMPORTANT NOTES
Enter AES L/m loading rate, "30" for ADV Secondary or "38" Secondary	30	>> This design is for an ADVANCED SECONDARY system
Is this a new installation Y or N	Y	>> Minimum 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	1	>> A septic tank outlet filter is NOT RECOMMENDED
Daily Design Flow Allowance Litre/Person/Day	3200	
Number of rows required to suit site constraints	3	>> Longer AES runs are better than multiple short runs.
Infiltration Soil Category from site/soil evaluation. CATEGORY	4	>> Category may require design considerations. 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. HIGH & LOW vent required including a Velocity Diffuser

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


- Ripping of receiving surface required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate & rip parallel to the site slope/AES pipe.
- Specialist soils advice & special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547
- Designers need to be familiar with special requirements of Local Authorities. ie - Minimum falls from Septic tank outlets to Land application areas etc
- Plumbers are reminded to practice good construction techniques as per AS 1547 & as provided on AES installation instructions supplied with components.

AES System Calculator Outcomes			AES dimensions		
Total System load - litres / day (Q).	3200	l/d		AES System	Extension Area
Min Length of AES pipe rows to treat loading	35.56	lm	Length:(L)		
Number of FULL AES Pipe lengths per row	12	lths	Width:(W)		
Total Capacity of AES System pipe in Litres	7632	ltr.	Sand Depth	0.75m	0.15m
			Area m2	65.9 m^2	94.1 m^2

USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y) ☐ >> Slope percentage must be 0% & infiltration footprint must be level for this design

IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y"	y	Enter Custom Width in metre	4.336
AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR \times W)$	Length	Width	Minimum AES foot print required
The length & width of excavation required for this design is >>	36.90m	x 4.34m	= 160.0 m2 total

AES pipes are best centered in the trench parallel to the site slope

Code	AES System Bill of Materials		Chankar Environmental Use Only
AES-PIPE	AES 3 metre Lengths required	36	lths
AESC	AES Couplings required	30	ea
AESO	AES Offset adaptors	12	ea
AESODV	AES Oxygen demand vent	3	ea
AES-IPB	AES 100mm Inspection point base	2	ea
TD Kit 4	4 Hole Distribution Box Kit		ea
TD Kit 7	7 Hole Distribution Box Kit	1	ea
VS43-4	Sweet Air Filter VS43-4		ea
AES DESO	Double Offset Adaptors		ea
TOTAL SYSTEM SAND REQUIRED (Estimate Only)		76	m3
Please email your AES Calculator (EXCEL FORMAT), Site Layout & AES Design to designreview@enviro-septic.com.au			 ADVANCED ENVIRO-SEPTIC™ <i>"Nature's Wastewater Solutions"</i> Digitally signed by Steve Dennis DN: cn=Steve Dennis, o=Chankar Environmental, ou=Design Review, email=steve@enviro-septic.com.au, c=US Date: 2022.08.08 15:09:20 +10'00'

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 The World Leader in Passive Solutions ©

Site Address	Lot 512 Kennedy Highway, Mareeba [512NR8022] Greywater SINGLE BED	State	QLD	Post Code	4880
Client Name	Luke Speight	Date of Site Visit	7/15/2022		
Designers Name	Angelo Tudini	Designers Ph Number	0417 647 477	Designer Lic (e.g.QBCC)	1173606
Lic Plumber	TBA	Plumber Ph Number	TBA	Plumb / Drainer Lic Number	TBA
Council Area	Tablelands Regional Council	Designers AES Cert Number	1372	Date	8/4/2022

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

System Designers site and soil calculation data entry		IMPORTANT NOTES
Enter AES L/m loading rate, "30" for ADV Secondary or "38" Secondary	30	>> This design is for an ADVANCED SECONDARY system
Is this a new installation Y or N	Y	>> Minimum 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	1	>> A septic tank outlet filter is NOT RECOMMENDED
Daily Design Flow Allowance Litre/Person/Day	6400	
Number of rows required to suit site constraints	12	>> Longer AES runs are better than multiple short runs.
Infiltration Soil Category from site/soil evaluation. CATEGORY	4	>> Category may require design considerations. 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, HIGH & LOW vent required including a Velocity Diffuser

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

- Ripping of receiving surface required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate & rip parallel to the site slope/AES pipe.
- Specialist soils advice & special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547
- Designers need to be familiar with special requirements of Local Authorities. ie - Minimum falls from Septic tank outlets to Land application areas etc
- Plumbers are reminded to practice good construction techniques as per AS 1547 & as provided on AES installation instructions supplied with components.

AES System Calculator Outcomes			AES dimensions		
Total System load - litres / day (Q).	6400	l/d		AES System	System Extension
Min Length of AES pipe rows to treat loading	17.78	lm	Length:(L)	18.60m	18.60m
Number of FULL AES Pipe lengths per row	6	lths	Width:(W)	5.85m	11.35m
Total Capacity of AES System pipe in Litres	15264	ltr.	Sand Depth	0.75m	0.15m
			Area m2	108.8 m^2	211.2 m^2


USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)

IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y"

Enter Custom Width in metre

AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR \times W)$	Length	Width	Minimum AES foot print required	
<i>for this Basic Serial design is</i>	18.600m	x	17.20m	= 320.0 m2 total

AES pipes are best centered in the trench parallel to the site slope

Code	AES System Bill of Materials		Chankar Environmental Use Only	
AES-PIPE	AES 3 metre Lengths required	72 lths	 ADVANCED ENVIRO-SEPTIC™ <i>"Nature's Wastewater Solutions"</i> Digitally signed by Steve Dennis DN: cn=Steve Dennis, o=Chankar Environmental, ou=Design Review, email=steve@enviro-septic.com.au, c=US Date: 2022.08.08 14:44:41 +10'00'	
AESC	AES Couplings required	60 ea		
AESO	AES Offset adaptors	24 ea		
AESODV	AES Oxygen demand vent	4 ea		
AES-IPB	AES 100mm Inspection point base	2 ea		
TD Kit 4	4 Hole Distribution Box Kit	ea		
TD Kit 7	7 Hole Distribution Box Kit	1 ea		
VS43-4	Sweet Air Filter VS43-4	ea		
AES DESO	Double Offset Adaptors	ea		
TOTAL SYSTEM SAND REQUIRED (Estimate Only)		136 m3		
Please email your AES Calculator (EXCEL FORMAT), Site Layout & AES Design to designreview@enviro-septic.com.au			designreview@enviro-septic.com.au	

The AES Calculator is a design aid to allow checking of the AES components, 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

NOT TO SCALE

SITE LOCALITY PLAN

LOT 512 KENNEDY HIGHWAY, MAREEBA

DUE TO SITE CONSTRAINTS NO RESERVE AREA HAS BEEN ALLOCATED.
IN THE EVENT OF A SYSTEM FAILURE THE EXISTING SYSTEMS WILL NEED
TO BE REJUVENATED OR REPLACED



BLACKWATER

OVERALL AES SYSTEM DIMENSIONS
FOR THE PUMPED AES SYSTEM
MINIIMUM AES FOOTPRINT REQUIRED
36.9 m LONG X 4.34 m WIDE = 160.0 m²

AES PIPE SYSTEM DIMENSIONS
36.9 m LONG X 1.80 m WIDE
3 X ROWS OF AES PIPES
12 X FULL AES PIPE LENGTHS PER ROW

AES SYSTEM EXTENSION DIMENSIONS
36.9 m LONG X 2.54 m WIDE

GREYWATER

OVERALL AES SYSTEM DIMENSIONS
FOR THE PUMPED AES SYSTEM
MINIIMUM AES FOOTPRINT REQUIRED m
18.6 m LONG X 17.2 m WIDE = 320 m²

AES PIPE SYSTEM DIMENSIONS
18.6 m LONG X 5.85 m WIDE
12 X ROWS OF AES PIPES
6 X FULL AES PIPE LENGTHS PER ROW

AES SYSTEM EXTENSION DIMENSIONS
18.6 m LONG X 11.35 m WIDE

KENNEDY HIGHWAY / APPROXIMATE WESTERN BOUNDARY LINE

APPROXIMATE EASTERN BOUNDARY LINE

PROPOSED ACCOMMODATION TO CATER FOR 64 PERSONS

BATHROOM
AMENITIES

BBQ
AREA &
LAUNDRY

BATHROOM
AMENITIES

PLEASE NOTE
FINAL PLACEMNT OF THE SEPTIC TANKS AND PUMP WELLS
IS AT THE DISCRETION OF THE PLUMBER

2 X 4000 l SEPTIC TANKS FITTED WITH OUTLET FILTERS (BLACKWATER)
PUMP WELL

4 X 4000 l SEPTIC TANKS FITTED WITH OUTLET FILTERS (GREYWATER)
PUMP WELL

BLACKWATER TREATMENT SYSTEM

GREYWATER TREATMENT SYSTEM

SYSTEM EXTENSION

3 X ROWS OF AES PIPES

DISTRIBUTION BOX

SYSTEM EXTENSION
DISTRIBUTION BOX

12 X ROWS OF AES PIPES
SYSTEM EXTENSION

APPROXIMATE SOUTHERN BOUNDARY LINE

DIRT PROFESSIONALS

EMAIL: dirtprofessionals@bigpond.com

CHECKED BY: A. TUDINI DATE: 04/08/2022

SIGNATURE: 

[illegible]

CHANKAR ENVIRONMENTAL PTY LTD
T/A



QBCC LICENCE NUMBER
150 238 31
ABN NUMBER 29154897097

Phone: +61 7 5474 4055
Fax: +61 7 5335 1691
Email: designreview@enviro-septic.com.au
Web: www.enviro-septic.com.au

WASTE WATER TREATMENT & EFFLUENT DISPOSAL SYSTEM SITE PLAN BLACKWATER

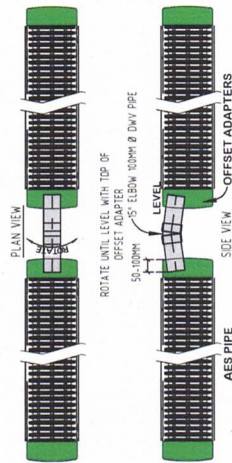
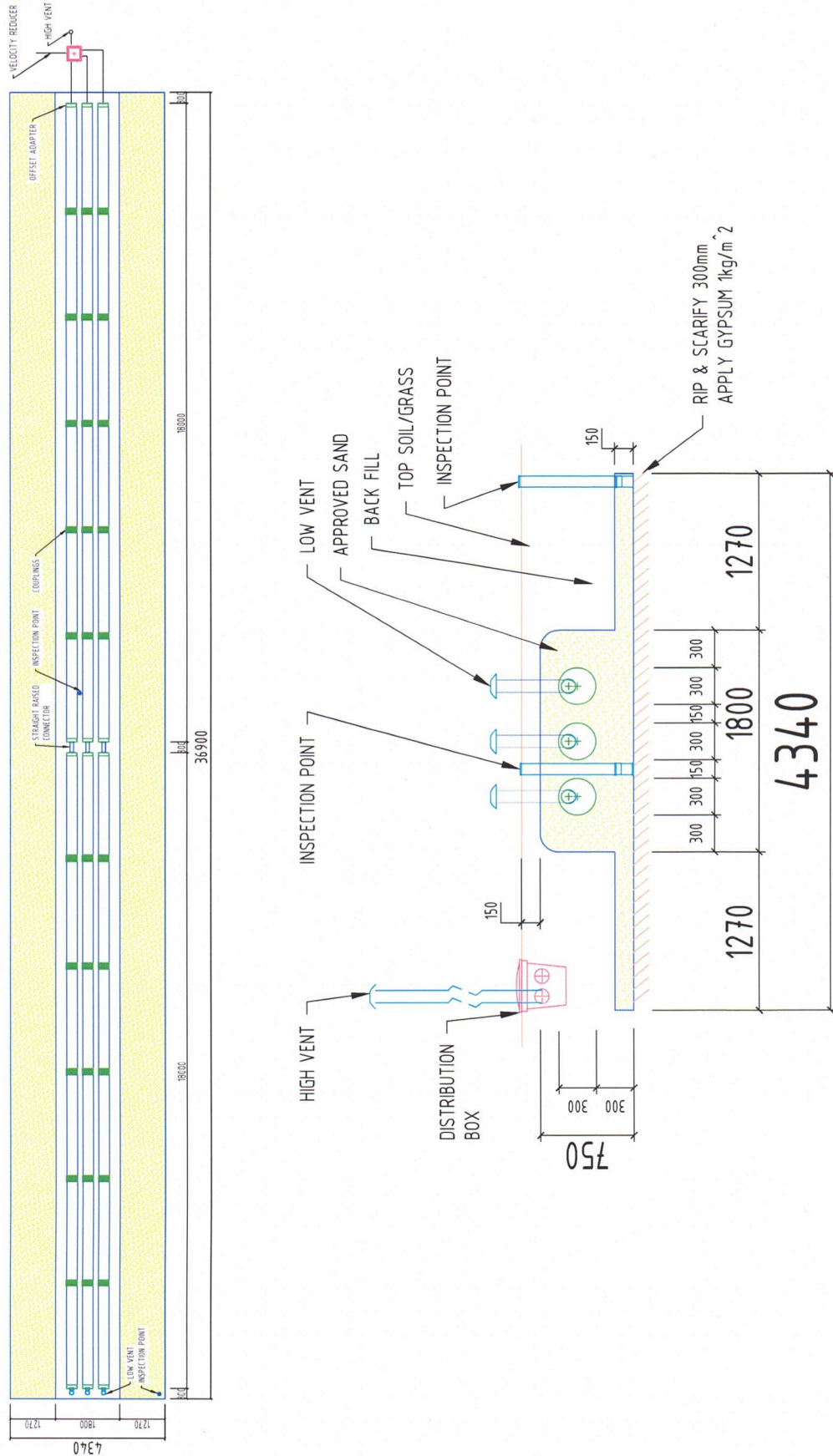
NAME OF CLIENT	Luke Speight
DESIGNER	DATE
Angelo Tudini	04/08/2022
DRAWN	DATE
S. Dennis	

LOT & PLAN	Lot 512
STREET ADDRESS	Kennedy Highway, Mareeba
COUNCIL	

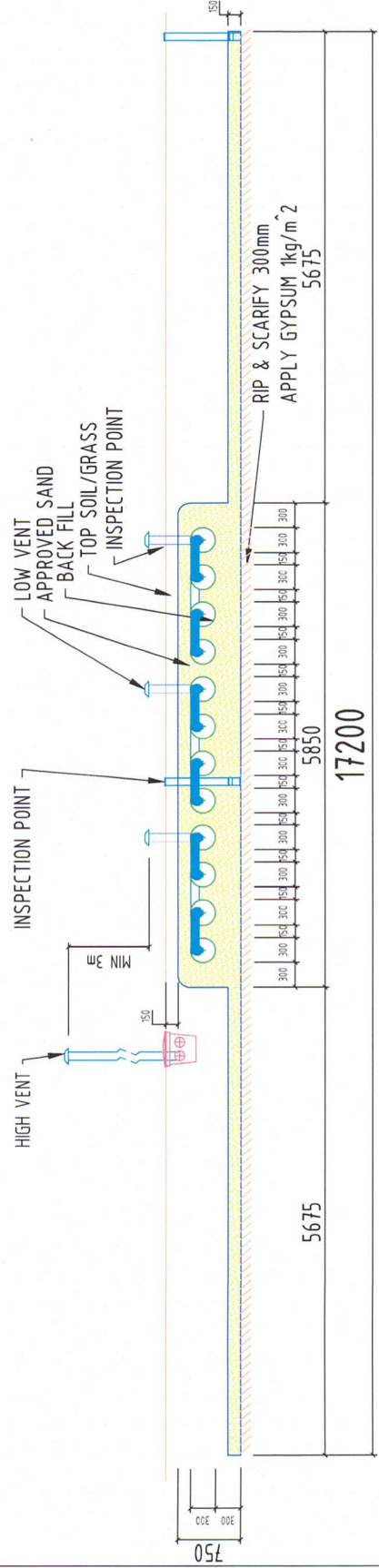
DRAWING DETAILS
ACS 3 Rows 12 Pipes Straight Raised

CLIENT REFERENCE #

JOB NUMBER 24437	REVISION	DWG # 3R 12P
----------------------------	----------	-----------------



RAISED STRAIGHT CONNECTION



		REVISIONS	
REV #	DATE	SUBJECT	AUTHORISED
ADVANCED ENVIRO-SEPTIC[®] 			
			
CHANKAR ENVIRONMENTAL PTY LTD TIA ADVANCED ENVIRO-SEPTIC[®] <i>"Always The First Option"</i> OBCC LICENCE NUMBER 150 238 31 ABN NUMBER 2915487057 Phone: +61 7 5474 4055 Fax: +61 7 5335 1691 Email: designreview@enviro-septic.com.au Web: www.enviro-septic.com.au			
WASTE WATER TREATMENT & EFFLUENT DISPOSAL SYSTEM SITE PLAN GREYWATER			
NAME OF CLIENT		Luke Speight	
DESIGNER	DATE		04/08/2022
Agnelo Tudini		DATE	
DRAWN		DATE	
S. Dennis		DATE	
LOT & PLAN		Lot 512	
STREET ADDRESS		Kennedy Highway, Mareeba	
COUNCIL		Mareeba Shire Council	
DRAWING DETAILS			
6,400/Day 12 Rows & Pipes 3 Sections			
SCALE			
CLIENT REFERENCE #			
JOB NUMBER	REVISION	DWG #	SLZ 12R 4P
24437			

DIRT PROFESSIONALS

Email: dirtprofessionals@bigpond.com

MOBILE: 0417 647 477

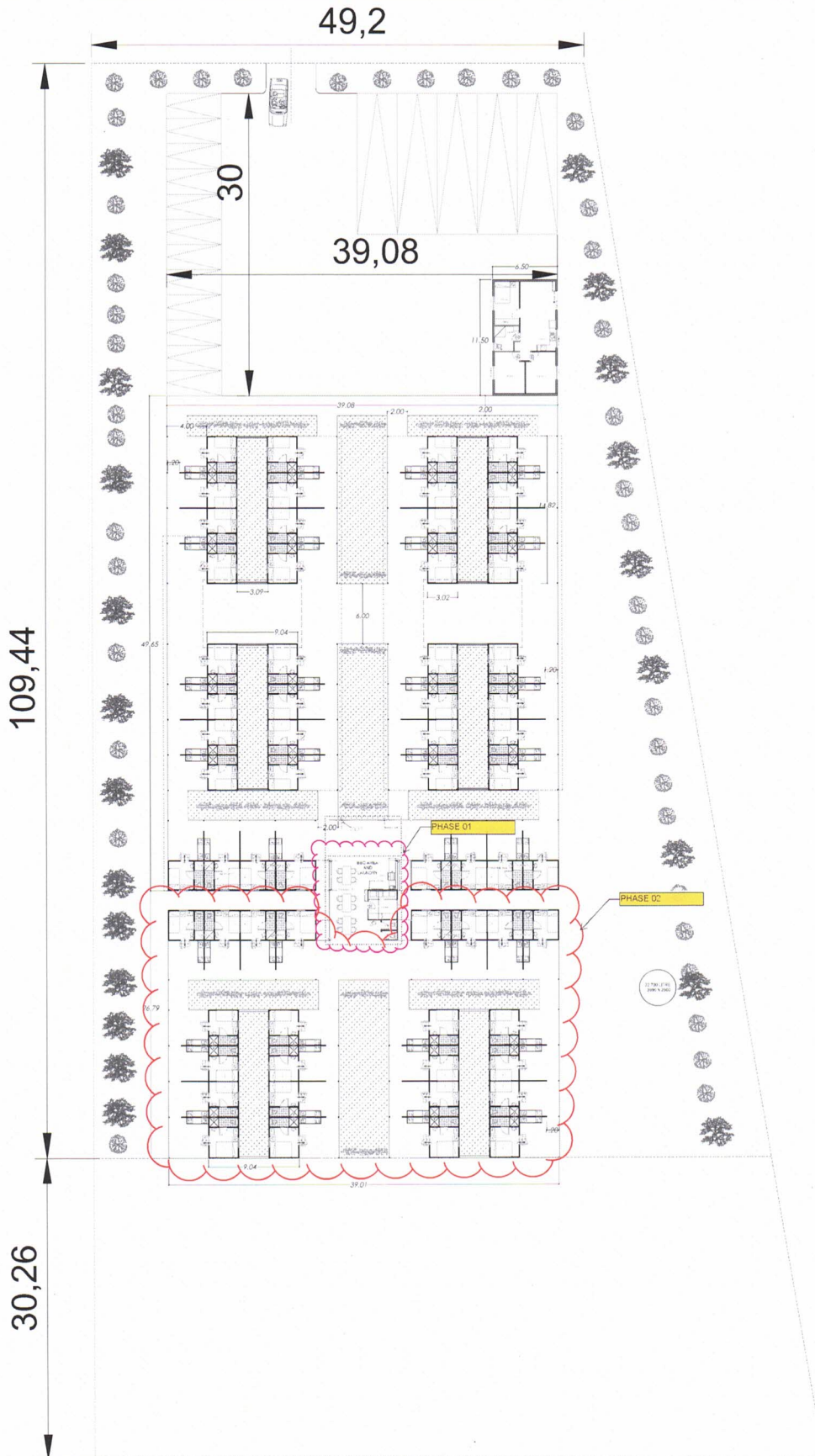
SYSTEM INSTALLATION REQUIREMENTS

- 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/m² 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.

MINIMUM SETBACK DISTANCES FOR AN ADVANCED SECONDARY TREATMENT SYSTEM			
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



3 FLOOR PLAN
1:200 SCALE - MTS

SITE PLAN: 6,396.40 M2
SITE AREA - OVERALL: 8,385 M2

ARCH-01

000

PROJECTO:
HOTEL
OWNER:
LUKE SPEIGHT

LOCATED:
KENNEDY HIGHWAY MAREEBA
QUEENSLAND, CP 4800 AUS.

CONTAINS:
- FLOOR PLAN
- SITE PLAN
- SITE AREA

DRAW: ICC
CHECKED: ICC
APPROVED: LUKE

LOCATION:



SCALE: 1:200 SCALE, MTS
DATE: ABRIL 2022

REVISION 03 01.MAY.2022
EXTENSION 03 01.JULY.2022







Advanced Enviro-Septic Owner's Manual

Head Office

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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 (CO₂), methane gas (CH₄) and sulphuric hydrogen (H₂S). The H₂S 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™ 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™ 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® is a trademark of Presby Environmental, Inc. Advanced Enviro-Septic™ is a trademark of Presby Environmental, Inc. Bio-Accelerator^{MC} is a trademark of Presby Environmental, Inc.

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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 the Enviro-Septic System

Name: Advanced Enviro-Septic™ Wastewater System

Application Domain: Residential Wastewater (sewage).

Class and treatment type: 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.

User's Guide –Enviro-Septic

Definition of the Advanced Enviro-Septic System

The Enviro-Septic system is composed primarily of two inseparable components: the rows of Advanced Enviro-Septic™ 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?

If in the course of normal use of your septic system you notice any of the following problems:

- presence of abnormal odours in the house, around the septic system or emanating from sources of drinking water,
- abnormally wet soil, presence of persistent puddles or odours in the area of the septic tank or the Enviro-Septic system,
- slow flushing toilets or other plumbing in the home,
- presence of abnormally abundant vegetation on the surface or around the septic tank or the Enviro-Septic system installation,
- flooding in the area where the Enviro-Septic system is installed,
- erosion of the land fill on or around the Enviro-Septic system,
- alarm from the pumping station if such a device is part of your installation...

...immediately contact your contractor.

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. Certified by Chankar Environmental. Certification is obtained by attending the online "Enviro-Septic Contractor Certification Course". The Advanced Enviro-Septic™ customer service can provide the name of contractors having the proper certification to install Enviro-Septic Systems.

Enviro-Septic System Capacity

The capacity of the Enviro-Septic System depends on two elements:

- The number of Enviro-Septic Pipes
- The capacity of the underlying soil to evacuate the treated water.

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 Enviro-Septic Pipes (3.0 m each)	Total Length of Advanced Enviro-Septic Pipes (m)	Maximum Daily Flow (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	1800

Table 1
Enviro-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

Residential Wastewater 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 ₅	mg/L	210-530	140-200
Fecal Coliforms	CFU/100 ml	10 ⁶ -10 ¹⁰	10 ³ -10 ⁶

Source: Tchobanoglous and Burton (1991)

³ 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™ comes with a manufacturer's limited warranty. The warranty details are presented in Appendix A.

Functioning of the Enviro-Septic System

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 process of the Enviro-Septic system

The rows of Advanced Enviro-Septic pipes and system sand permit the treatment and distribution of wastewater on the surface of the receiving soil (surface of the polishing leaching field).

The pipes support, first of all, the separation of particles through flotation and decantation. The water is then evacuated through perforations situated all around the pipes and through the pores of the two layers of synthetic media covering the pipes. These membranes facilitate the fixation of the microbial cultures which support wastewater treatment as well as longitudinal distribution.

The layer of sand continues the treatment process and helps in dispersing the water before it infiltrates into the natural soil. In this way, the Enviro-Septic system integrates both functions.

Diagram of the Enviro-Septic system

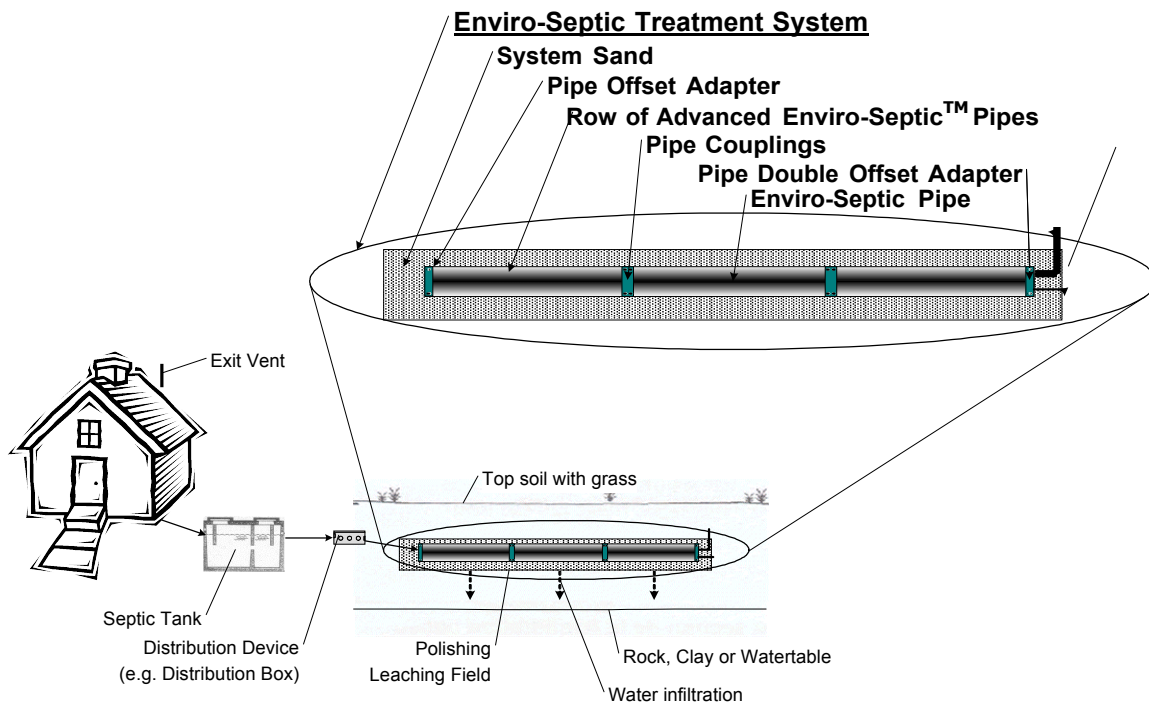


Fig. 4

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.

User's Guide –Enviro-Septic

Table 4 - Enviro-Septic System Components

Component of the septic system	Function	Follow-up needed	Frequency	Responsible for follow-up
Septic tank	Primary wastewater treatment	Periodic emptying	According to standards and regulations in effect	Owner is responsible to have work done by qualified person
Septic Tank Effluent Filter ⁴	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.	A) According to water level in the inspection port B) According to the manufacturer's directions. C) According to the manufacturer's directions.	A) As needed	A) Owner
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 supplier's specifications		

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

Operating the Enviro-Septic System

Initial Use	<p>At the time of installation the septic tank must be filled with clear water.</p> <p>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.</p> <p>The Enviro-Septic system is now ready for use.</p>
Intermittent Use or Prolonged Absences	<p>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.</p>

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

User's Guide –Enviro-Septic

In the bathroom

Do:

- immediately repair any leaking faucet or toilet,
- use a reasonable quantity of toilet paper.
- Minimise or avoid bleach, antiseptic disinfectants, and ammonia acids in the system

Do not :

- use disinfectant in tablet (puck) form, whether it is placed in the basin or the tank,
 - throw cigarettes, cigarette butts or medication in the toilet,
 - throw paper towels, paper napkins or other personal hygiene products in the toilet.
-

In the kitchen

Do:

- repair any leaking faucet,
- use dish soap or dishwasher soap that is low in phosphate (0 to 5%),
- use the necessary quantity of soap to do the work. Take note that the necessary quantity is often less than suggested by the manufacturer.
- use biodegradable soap, low-phosphorus or phosphorus free detergents.

Do not :

- 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
 - dispose of vegetables, meats, fat, oil, coffee beans, citrus products or other products into the septic system.
-

For the laundry

Do:

- use phosphate free detergent, preferably in liquid form. If it is not possible, use biodegradable powder detergent,
 - 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,
 - minimize the volume of water used for the laundry according to the quantity of clothing to wash,
 - if possible spread your loads of laundry throughout the week
 - prevent harsh chemicals or products entering the system (eg. paint, nappies)
-

Elsewhere in and around the house

Do:

- divert drainage and rain water away from the surface of the Advanced Enviro-Septic System.
- All vents should be mosquito-proofed to prevent mosquitoes from breeding in the tank.
- Roof and surface water should be redirected away from absorption trenches.

Do not :

- discharge water softener backwash into your septic system,
 - discharge any water from swimming pool filters, spas or other appliances that discharge chlorinated water into your septic system.
-

User's Guide –Enviro-Septic

- let water from sump pumps, roof drains (gutters) and drainage pipes. pipes discharge into the septic system,
 - 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),
 - dispose of animal litter in the septic installation.
-

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 tank⁵. 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.

⁵ The effluent filter is necessary whenever the septic tank is followed by a low pressure distribution system.

User's Guide –Enviro-Septic

Advanced Enviro-Septic Pipe Rows

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 person⁶ must carry out this procedure.

⁶ 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	<p>The owner must however ensure that nothing prevents the circulation of air.</p> <p>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.</p>
System Sand	<p>There is no maintenance to be done on the system sand during normal use of the Enviro-Septic System.</p>
Pumping station or low pressure distribution system	<p>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.</p>
Embankment surface above the Enviro-Septic System	<p>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.</p>

Owner's Responsibilities

Owner's Responsibilities

The owner is responsible for:

- using the Enviro-Septic System according to the instructions presented in the user guide.
 - pumping out the septic tank according to the regulations in effect.
 - 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.
 - ensuring that the vent openings are clear of any obstacle.
 - providing access at all times to the Enviro-Septic system.
 - adhering to the requirements of the applicable rules and regulations, in particular with regards to the discharge standards of the system to the environment.
-

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



PRESBY ENVIRONMENTAL, INC.
INNOVATIVE SEPTIC TECHNOLOGIES

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 (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 Presby Maze® 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, in their discretion, 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.

Appendix B - Information Specific to Your Treatment System

**Information on
your Enviro-
Septic System**

Installation date: _____

Contractor /Engineer: _____

Contractor: _____

Plumbing inspector: _____

Number of rows of pipes: _____

Hydraulic capacity (L/d): _____

Number of 3m pipes per row: _____

Water Distribution

- Distribution box ☐
- Wastewater distributing valve ☐

Septic tank capacity: _____

Notes
