

BUILDING CONSENT REPORT**LIR ANALYSIS COVER SHEET**

File Ref. No (=Reference): Map Type No. Hazard / Info Code Extn.

H21	C	160046	EF
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Old Ref. No & Date: ADD TO H21-6 7/11/96

Prepared by (=Comments): BK DESIGN POBOX 23 WARKWORTH

Ref.No: BK413

Date: OCTOBER 96

Property Address: 362 MATAKANA VALLEY ROAD

Legal Description: Lot ALLOT 51

Land Parcel No (=Parcel Id): 7002662

BCA/PCA No: 963097

Analysed by (name & date): M. AVDJIEVA 15/11/96

Copies of Plans No: N/A and this sheet sent to the Land Mapping Officer by:

[name] [date]

Recorded on GEMS by: [name] [date (=Start Date)]

Type of Hazard / Tech.Info & <u>CODE</u> (=Note Type)	LIM Code (=Sub Group Type)	<u>FEATURE</u> : Brief Details [Selection Menu/Glossary] (=Note Details Screen)
1	2	3
TECHNICAL LAND INFORMATION Q(=Sub Group Type)		
Effluent Disposal EF	T2	<u>APPENDIX A, TP 58, ARC, SECOND EDITION:</u> Single chamber septic tank with an Innoflow filter installed. Distribution box to 3 x 8 m Evapo-transpiration seepage (ETS) beds .

N.B! Headings in parentheses refer to GEMS screens !

HAZARDS REGISTER REPORT FORM

① ~~copy~~
② file

DATE:

7/11

MATAKANA.

ADDRESS:

362 MATAKANA VALLEY RD

LEGAL DESCRIPTION:

LOT: P+51 DP ALLOT.

SUBJECT OF REPORT:

EFFLUENT.
(e.g. Fill, Flooding, Instability etc)

MAP REF NO:

H21-6 APP TO.

BCA/BPA NO:

963097.

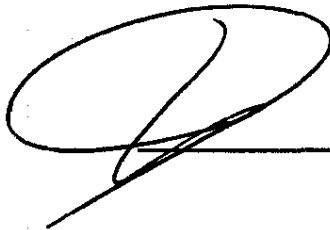
SP NO:

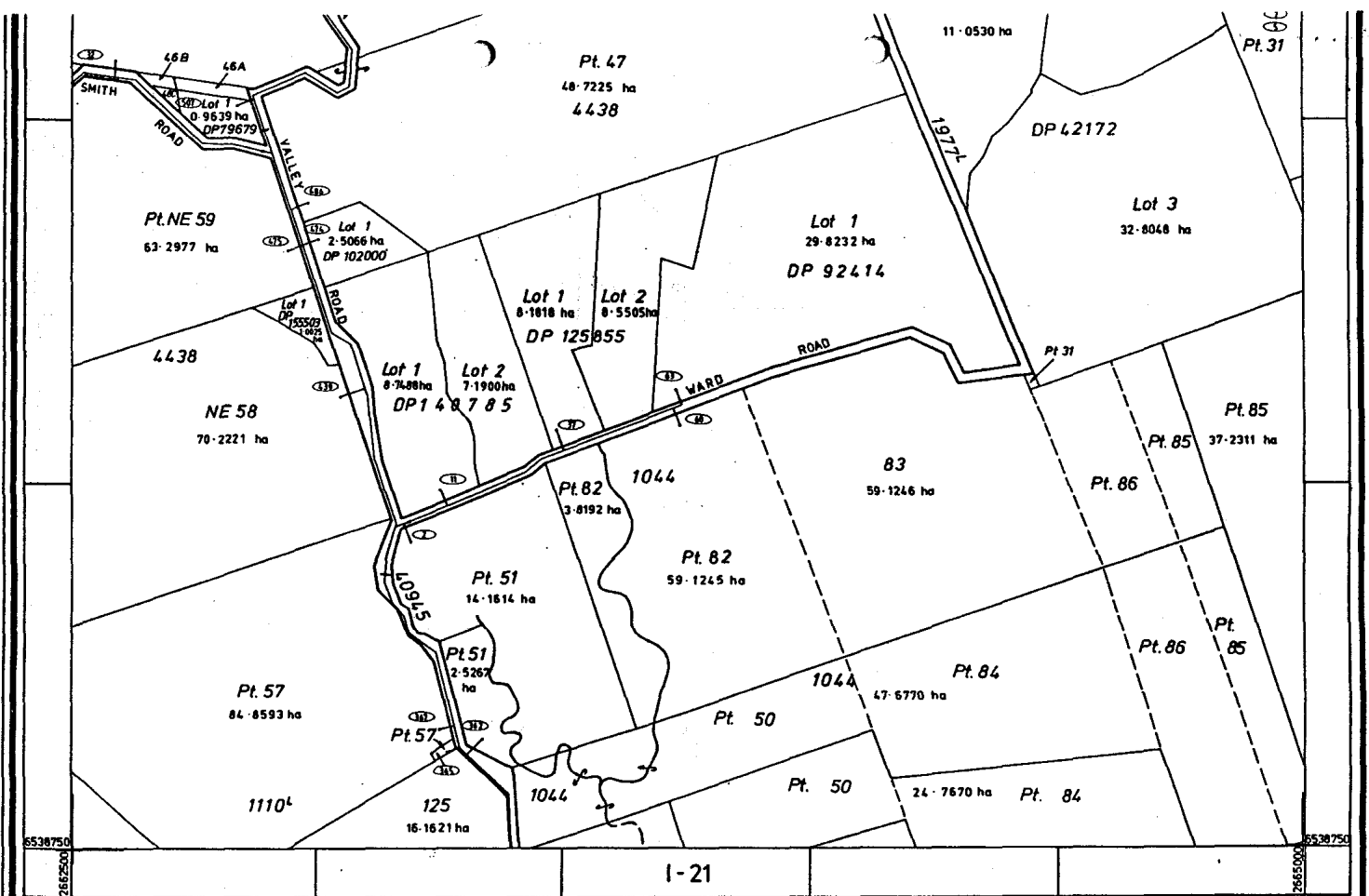
~~FILE NO:~~ Parcel 7002662

☒ Please attach copy of base map with site clearly identified.

☐ Please mark original "Copy Taken for H/R" date and initial.
(This ensures we do not take more than one copy)

SIGNED:





R09/6 3

Scale 1:5000

REDUCED COPY

RODNEY DISTRICT

20 NOV 1995

HATAKANA WARD

Sheet No H-21

BK DESIGN

DRAUGHTING & ENGINEERING SERVICES
PO BOX 23 WARKWORTH

JOB No: BK413

DATE: OCT 96

CLIENT: KOWHAI TIMBER

STRUCTURE: HOUSE

STRUCTURAL COMPONENTS: On Site Effluent Disposal Design

NZS: ARWB TP58

DESIGNER: B J KOSE

CHECKED:

SITE: LOT PT. LOT 51

DP: CT. 110/152

AREA: 2.5267 ha

ADDRESS: MATAKANA VALLEY RD
MATAKANA

ASSUMPTIONS: No BEDROOMS Z = 4 people

WATER SUPPLY 1) TANK = 140 l/p/day
* WATER SAVING FIXTURES 2) TOWN

BORE HOLE: REVEALED CLAYS. SITE SUITS EVAPORATION SEEPAGE BEDS. ALLOW 15mm/DAY LTS.

DESIGN: TOTAL DAILY EFFLUENT LOADING = 4×140
= 560 l/day

TOTAL SOAKAGE AREA REQUIRED = $560 \div 15$

DESIGN FOR(ETS) = 38 m²

IF BEDS ARE 20 m WIDE THEN CONSTRUCT
3 X 8m LONG BEDS

USE 4500 L SINGLE CHAMBER SEPTIC TANK & WITH
AN INNOFLOW FILTER INSTALLED.

APPENDIX E: ON-SITE WASTEWATER DISPOSAL SITE EVALUATION - SITE ASSESSMENT AND SUBSOIL INVESTIGATION CHECKLIST

1.0 SITE EVALUATOR(S)		
1.1 Name:	Company/Agency:	
BERNIE KOSE	B.K. DESIGN	
Designation:	Address:	P.O. BOX 23
Engineering Assistant	WARKWORTH	
	PH./FAX 09 425 7695	
Phone: (09) 4257695 Fax:		
1.2 Additional Staff Involved:		
Name(s):	\	\
Designation(s):	\	\
Involvement:	\	\
2.0 SITE INFORMATION		
2.1 Location Details: MATAKANA ROAD		
Locality:	MATAKANA	
Owner:	KOWHAI TIMBER	
Address:	Box 170	
	MATAKANA	
Survey Plan Details:	LOT No P151 D.P CT 110/152	
Regional Council Area:	AUCKLAND	
Local Council Area:	RODNEY DISTRICT COUNCIL	
Size/Shape/Layout:	(Sketch Plan Details Attached, Ref. No. BK413	
2.5267 RURAL INDUSTRIAL SITE.		
Photograph Attached: (delete one)	YES / NO	(Specify details)
2.2 Work Undertaken:		
Details	Date (month, day)	Weather (on day, and over preceding week)
HAND AUGERED	OCT 3RD	FINE.
BORE HOLES	\	\
	\	\
	\	\

3.0 SITE ASSESSMENT			
3.1 Topography			
Slope: <u>FLAT.</u>		Ground Cover: <u>GRASS.</u>	
Geology: <u>(FILL ?)</u>			
Drainage Patterns: (sketch details attached) <u>DOWN SLOPE</u>			
Available Clearance: (sketch details attached)			
Boundaries <u>10m</u>		Wells, Bores ☒	
Waterways <u>SMALL DRAIN 5m.</u>		Embankments ☒	
Stands of trees, shrubs <u>3m.</u>		Buildings <u>3m+</u>	
Other (specify)			
3.2 Site Stability:			
Is expert evaluation necessary? (delete one) YES / NO			
If NO, why not? <u>FLAT SITE.</u>			
If YES, attached stability report and give details here of:			
Author:		Designation:	
Company/Agency:		Date of Report:	
3.3 Drainage Controls:			
Depth of seasonal watertable:		WINTER ☒ SUMMER ☒	
<u>GREATER THAN 20m</u>			
Need for groundwater cut off drains? ☒			
Need for surface water collector drains? <u>SWALE DRAIN</u>			
3.4 Climate:			
Annual rainfall: <u>1500</u>		Annual Potential : <u>800</u>	
		mm Evapo-transpiration mm	
General comment: (rainfall intensities, seasonal variation, etc) <u>VERY DRY SUMMERS:</u>			
<u>HEAVY RAIN CAN FALL AT ANY TIME OF THE YEAR.</u>			

3.5	<u>Intended Water Supply Source:</u>			
	Rainwater (roof collection):	YES.	Bore/Well:	/
	Public supply:	/		
3.6	<u>Local Experience (existing on-site systems):</u>			
	Number of systems in locality:	SEVERAL		
	Performance:	✓	% Satisfactory	% Failed, % Problems evident
	Reasons: for satisfactory performance	NEW SYSTEMS.		
	for problems			
	for failures (give type/nature of failure)			
3.7	<u>Availability of Reserve/Buffer Areas:</u>			
	Reserve area available for extensions*;	100 % of design area.		
	Buffer area*;	(between site development and on-site disposal design and reserve areas)		
	10	% of total site area (*Show details on sketch plan).		
4.0	<u>SUBSOIL INVESTIGATION</u>			
4.1	<u>Soil Profile Determination:</u>			
	Method:	Test Pit	Borehole	YES
	Other (specify)			
	Reporting: (attach detailed soil report as appropriate, Ref.	BK 413		
4.2	<u>Percolation Testing:</u>			
	Carried out: (delete one)	YES / NO		
	If YES, specify method:			
	Test results: (attach detailed report as appropriate, Ref.	)		

4.3 Estimated Soil Category

<u>Soil Category</u>	<u>Description</u>	<u>Tick One</u>
1	Gravel, coarse sand; rapid draining	☐
2	Coarse to medium sand; free draining	☐
3	Medium-fine and loamy sand; good drainage	☐
4	Sandy loam, loam and silt loam; moderate drainage	☐
5	Sandy clay-loam, clay-loam and silty clay-loam; moderate to slow drainage	☒
6	Sandy clay, non-swelling clay and silty clay; slowly draining	☐
7	Swelling clay, grey clay, hardpan; poorly or non-draining	☐

Reasons for placing in Stated Category: KNOWN SOIL CHARACTERISTICS
FOR THIS AREA.

5.0 GENERAL COMMENTS

5.1 Need for Groundwater Quality Protection: NO

5.2 Type of Disposal System considered best suited to Site(s): EVAP TRANSPIRATION
SEEPAGE BEDS WITH AN INNOFLOW FILTER INSTALLED

5.3 Minimum Disposal area Recommended for the Site: 70...m² (comprising disposal field, space between and surrounding the disposal field elements, and the reserve area).

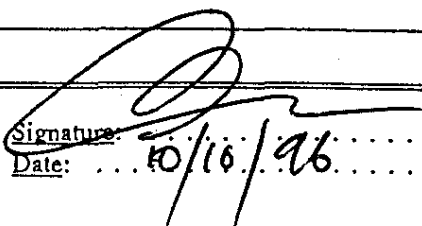
5.4 Design Considerations:

Any specific environmental constraints?

KEEP BEDS AS FAR
AS POSSIBLE AWAY FROM SMALL DRAIN

Any specific public health constraints?

5.5 Other Comment:

Signature: 

Date: 10/10/96

SYSTEM

NOTES:

1. Compiled from information provided by Alan Fielding and Associates, Landscape Architects and Environmental Horticultural Consultants, Whangarei, August 1976.
2. Information applicable to Northland, Auckland, Bay of Plenty and Coromandel areas in particular. For other areas of NZ local horticultural advice should be sought.
3. KEY:

Height

1. Around 1 metre or lower
2. Around 2 metres
3. Above 3 metres

Durability

- A. Very hardy
- B. Hardy
- C. Soft

SECTION A: TREES - GENERAL

Should preferably be evergreens although some deciduous trees offer very good transpiration, e.g.

Elms, 3A
American Oaks, 3A
Birch, 3A
Shrubby Pussy Willow, Bitter Willow, 3A
Hydrangea, 2A
Catalpa, 3B

SECTION B: FRINGE TREES

KawaKawa, 3A
Geniostoma, 3A
Hibiscus (various indigenous and exotic), 1-2B
Catalpa, 3B
Karaka, 3A
Pukatea (for very wet conditions), 3A
Kohekohe, 3A
Puka (Meryta), 3B
Puriri, 3A
Makomako, 3A
Lemonwood (Pittosporus), 3A
Parapara, 3C

(Shelter at least for initial establishment may be very important).

SECTION C: PLANTS AND EVERGREENS

Canna, 1B
Taro, 1C
Aralias, 1-2B
Rhubarb, 1A
Rock Lily (Arthropodium), 1B
Rangiora, 2A
Fuchsia, 2A
Philodendrons (large range), 1C
Flax (Phormium tenax), 2A
Agapanthus, 1B
Kaka Beak (Clanthus), 1-2A
Swan Plant, 2-3A
Gunneras (larger varieties), 1-2A
Geraniums (large range), 1A

Begonias (large range of species), 1C
- are very useful as an underplant in sheltered places.

SECTION D: GRASSES

Paspalum (will tolerate extreme wet and dry)
Poa species
Crested Dogs Tail (Cynosurus cristatus)
Yorkshire Fog (if fairly regular wet)
Canary Reed Grass (Phalaris Arundinacea)

SECTION E: GROUND COVERS

Mercury Bay Weed (Diehondra) could be useful on light soils
Yellow clovers (or pseudo clovers) - good where extra wet

4" Biotube™ Effluent Filter



Orencia System
Incorporated

814 AIRWAY AVENUE
SUTHERLIN, OREGON
97479-9012

TELEPHONE:
(503) 459-4449

FACSIMILE:
(503) 459-2884

The OSI Biotube™ Effluent Filter dramatically improves the quality of effluent discharged from a septic tank by preventing large solids from leaving the tank. The filter is easy to install and maintain. Hosing off the screen is necessary only as often as the tank needs pumping.

A Simple Concept for Residential Applications

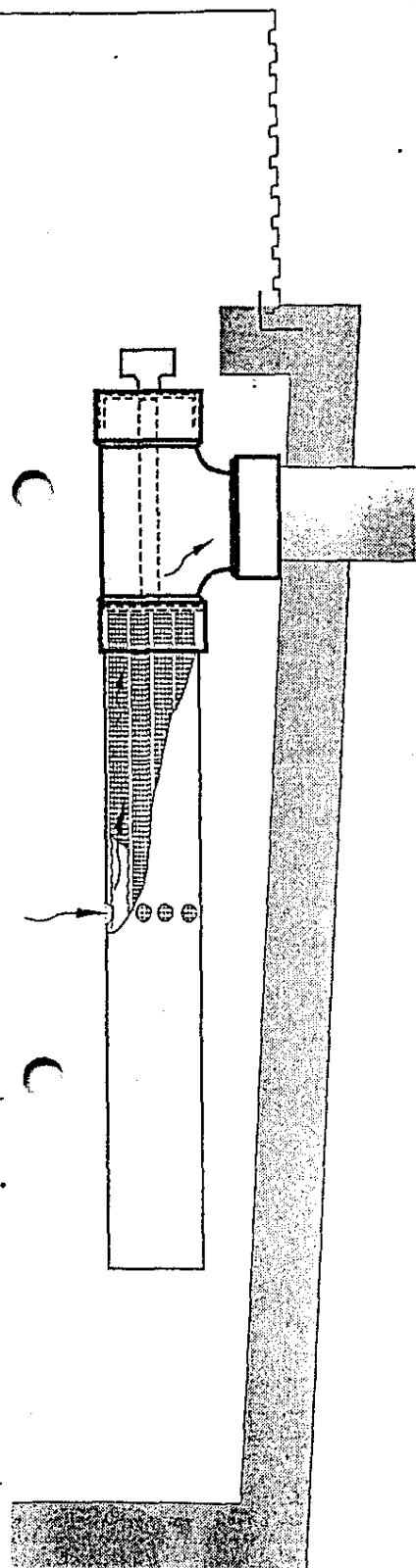
Effluent from the relatively clear zone of the septic tank, between the scum and the sludge layers, enters the Biotube Effluent Filter through its inlet holes. Effluent then enters the annular space between the housing and the Biotubes™, utilizing the Biotubes' entire screen surface for filtering. Particles larger than 1/8" are detained in the annular space, where continued decomposition of organic material occurs.

Once it has been filtered through the Biotubes, effluent flows through the modulating orifices at the outlet of the filter.

If inflow becomes temporarily excessive, the fluid level in the tank will rise as the modulating orifices slow the flow through the tank, allowing maximum settling of solids.

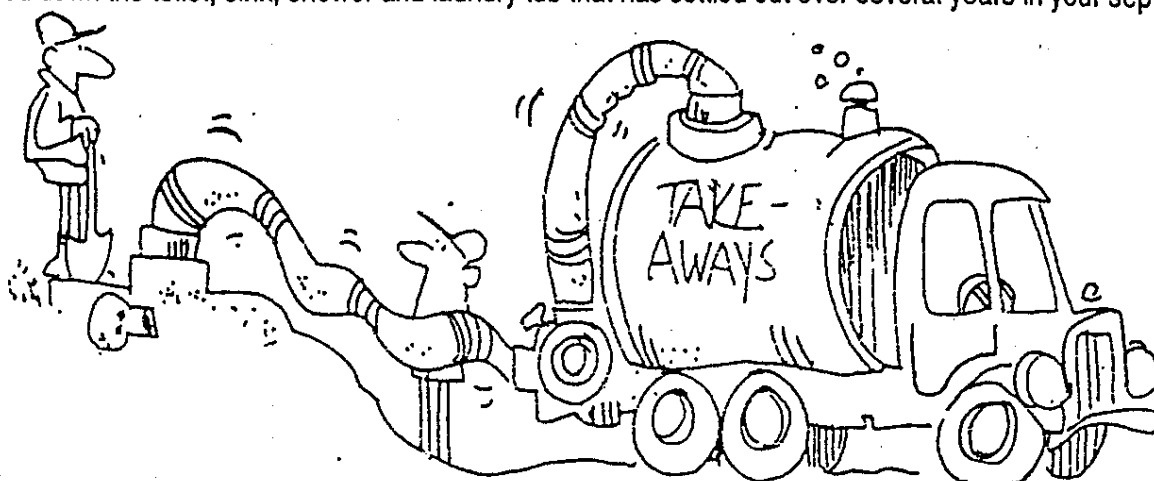
Features and Benefits

- **Improves effluent quality.**
Average Total Suspended Solids (TSS) is less than 30 PPM, nearly 2-1/2 times lower than a non-screened system!
- **Superior patented design.**
Extends drainfield life.
Reliable, corrosion-proof construction.
- **Easy installation.**
Installs in minutes in new or existing tanks.
- **Simple, hassle-free maintenance.**
Cleaning is necessary only as often as the tank needs pumping.
- **Allows for smaller diameter drainfield pipe.**
Lowers drainfield material costs.
- **Ideal for variable-grade sewers.**
Allows reduction of the transport line size and associated costs.
- **Available alarm.**
Indicates when maintenance is needed.
- **Custom sizes.**
Call for availability.



If you live in Rodney, you will be disposing of your laundry water, shower water, sink water and toilet flushing into an on-site disposal system commonly known as a septic tank. All of these waters contain body wastes and can be contaminated with bacteria and viruses. The following advice will help you to operate your system effectively and reduce health risks.

1. Have you desludged recently? Cleaning of your on-site water disposal systems first stage (septic tank) of two or three years of accumulated fats, toilet paper and your family's body wastes is essential. This is all the waste you have flushed down the toilet, sink, shower and laundry tub that has settled out over several years in your septic tank.



2. The frequency of desludging is important. The following table gives you a guide. Obviously, occasional use (just weekends) will reduce the frequency so go back one or two steps.

DESLUDGE FREQUENCY TABLE

Number of Residents in your house	☺	☺☺	☺☺☺	☺☺☺☺	☺☺☺☺☺
Small septic tank 600 = 2300 litres	4 yrs	3 yrs	2 yrs	2 yrs	2 yrs
Medium septic tank 800 gal = 3000 litres	5 yrs	4 yrs	3 yrs	2 yrs	2 yrs
Large septic tank 1000 gal = 3800 litres	6 yrs	5 yrs	4 yrs	3 yrs	2 yrs

3. If you have doubts, get your drainlayer or septic tank cleaner to inspect your first stage on-site waste water disposal system before you pack in those extra people during the holidays. Note that any occupancy more than recommended, i.e. to the right of the dotted line, will cause problems - even over one week - because of the need for 24 hour retention in your first stage septic tank.

— SOME DO'S AND DON'TS —

- Don't wash or disinfect the tank after cleaning; a small residue of sludge should be left in the tank to get bacterial action started again.
- Dishes and utensils should be well scraped to remove grease and food scraps before washing.
- Soaps or detergents, bleaches, draincleaners, or other materials normally used in the household, should have no appreciable adverse effect on the system as they are rapidly diluted in the tank. But ask advice before discharging large doses of chemicals or disinfectants into the system.
- Roof run-off, and drainage from other sources producing large volumes of water, must not be piped into the septic tank or absorption area. They tend to stir up the contents of the tank and carry solids into the outlet, or flood the disposal field.

