Please Note:

The Septic System on this Property

requires a contract with a

Certified Sub-Surface Operator.

It is Part of the On-Site Waste Water Monitoring Program.

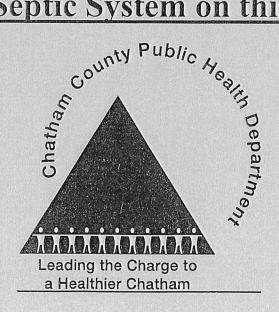
The System is monitored & inspected by the Chatham County Public Health Department, Division of Environmental Health.

There is an annual fee associated with the program.

Please contact the Chatham County
Environmental Health Office for more

SPECIFIC INFORMATION

about the Septic System on this Property.





SEWAGE DISPOSAL OPERATIONS PERMIT

CHATHAM COUNTY PUBLIC HEALTH DEPARTMENT DIVISION OF ENVIRONMENTAL HEALTH 80 EAST ST. D.O. BOY 130 DITTSBODO, NO 27312 013

80 EAST ST., P.O. BOX 130 - PITTSBORO, NC 27312-0130 PHONE 919-542-8208 / FAX 919-542-8288 www.chathamnc.org/environmentalhealth

Date: April 24, 2023

REVISION

Owner: Diana Mitchell

911 Address: 557 Olives Chapel Rd., Apex, NC 27291

Parcel Number: 72617 Subdivision Name: Subdivision Lot:

Residential	Number of Bedrooms: 3	Number of Occupants: 6
Design Flow (GPD): 240 (flow redu	uction) Type System: I 🗌 II [□ III □ III-B □ IV ☒ V □ VI □
Specific System Installed: Low Pre		
Installer: Unknown Certification #:	: RE	HS: Jans & Tyrloks
TYPE III-B, IV, V, VI SYSTEMS REQUIRE F required to pay an annual COUNTY MONITO operators monitor & maintain these systems HOLDERS ARE RESPONSIBLE FOR NOTI	TORING FEE. Type IV, V, & VI systems a s at a frequency specified in RULE .1961	nty Public Health Department and owners are are required to have certified subsurface system 1, TABLE V(a). OPERATION PERMIT OPERATION PERMIT
CONDITIONS / COMMENTS:		
system based on an engineered flo 22, 2023) and flow reduction reque Associates, PLLC. Neither the Stat caused by an engineered system a	low reduction. See attached low est (January 28, 2023) submitte ate nor local health department s approved or permitted pursuant	shall be liable for any damages

This permit authorizes the owner to operate the sewage disposal system in accordance with the state and local rules. The contents shall be pumped whenever the solids level is found to be 1/3 of the liquid depth in any compartment; approximately every 3 to 5 years. In the event of a malfunction contact this office. This certifies that the system has been installed in compliance with applicable NC General Statues and Rules for Sewage Treatment and Disposal and all conditions of the Improvements Permit and Construction Authorization.



Summey Engineering Associates, PLLC

Engineering - Surveying - Consulting P.O. Box 968 Asheboro, NC 27204 Phone: 336-328-0902 • Fax: 336-328-0922

April 22, 2023

Mr. James Tiger, REHS Chatham County Environmental Health Department 12 East Street P.O. Box 1809 Pittsboro, NC 27312

> Ref: Septic - Flow Reduction Request Diana Mitchell Property - Certification 557 Olives Chapel Rd Apex, NC 27502 SEA Job No. E-8381

Dear Mr. Tiger;

Please accept this certification of the above referenced property in conjunction with the flow reduction request. I hereby certify that the low flow fixtures have been installed in the home with the same flow rates in accordance with the original report.

The septic system continues to function properly. Thank you for your assistance in this matter and should you have any questions please do not hesitate to call me at 336-328-0902.

HMSJ/hmsj CC: File

Enclosure

Sincerely,

Summey Engineering Associates, PLLC

Mack Summey, Jr., PE

Seal



Summey Engineering Associates, PLLC

Engineering - Surveying - Consulting P.O. Box 968 Asheboro, NC 27204 Phone: 336-328-0902 • Fax: 336-328-0922

January 28, 2023

Mr. James Tiger, REHS Chatham County Environmental Health Department 12 East Street P.O. Box 1809 Pittsboro, NC 27312

Ref: Septic - Flow Reduction Request Diana Mitchell Property Single Family Residential 557 Olives Chapel Rd Apex, NC 27502 SEA Job No. E-8381

Dear Mr. Tiger;

Per the request of Ms. Diana Mitchell we are providing this flow reduction request in order to modify the existing permit to allow the existing home to be permitted to have 3 bedrooms instead of 2 bedrooms that are currently permitted for 240 gpd. Ms. Mitchells home is located at the above referenced address and has a Chatham County Parcel ID 0072617. Ms. Mitchell permit is currently permitted to treat 240 gpd for a 2 bedroom home.

The purpose of this letter is to request a 33% flow reduction of septic flows in order to allow the expansion or recategorization of the number of bedrooms in the home. Below is a summary of our findings from water bill data gathered from three (3) Single Family Residences for a 24-month period as shown on the attached information in support of a flow reduction request.

Comparable Single-Family Home Calculations

Three (3) comparable Single-Family Residential Homes were considered in the flow reduction request. Homes located at 640 T Street Asheboro, NC 27203 (3 Bedroom), 1299 Summey Town Road, Trinity, NC 27370 (3 Bedroom) & 1341 Summey Town Road, Trinity, NC 27370 (2 Bedroom).

Monthly water use records for each facility were evaluated to ascertain the feasibility of the proposed flow reduction request. Water records were obtained from the City of Asheboro for the 640 T Street Asheboro, NC location and from Davidson Water, Inc. for the two (2) separate Trinity NC homes. Usage was recorded in the spreadsheet and shown as both monthly and daily rates.

Low Flow Fixtures

In addition to the comparable flows for the homes above, the owner proposes the use of low flow fixtures to maintain lower flows. Fixture flows from years past have been

reduced through the WaterSense program which allows for labeling of fixtures which meet minimum criteria. In this residence, the fixtures installed are already low flow water saver fixtures. These fixtures are as follows:

- Kitchen Fixtures 1.8 gallons per minute
- Shower Fixtures 1.75 gallons per minute
- Lavatory Fixtures 1.2 gallons per minute
- Water closet 1.6 gallons per flush

Altogether, this reduces flows by over 40% of what normal fixtures would use.

Conclusion & Summary

Based on the above results of the analysis of all three (3) homes, actual usage was 97 gpd, 121 gpd & 140 gpd. The Average Daily Flow calculated to be 165 gpd but to be conservative we simply used the higher of the 3 and based the remainder of the calculations off of 188.3 gpd. Using 188.3 gpd for a 3 bedroom home gave us 63 gpd per bedroom of flows being produced. Based on the State requirement of 120 gpd/bedroom this is only 52.5 % actual flows compared to projected flows. Additionally, the use of the low flow fixtures further reduce the flow potential from that of older fixtures with higher flows. This is a reduction of over 40% itself. Please note that the homes studied did not have low flow fixtures.

In order to be more conservative, we added 25% to this 63 gpd which came out to be 78.75 gpd. Based on this number we are requesting a 33% flow reduction of 80 apd/bedroom.

It is our understanding that the Chatham County Environmental Health Department will review this report to determine if this change can be made. Based on our study, we are recommending to allow the existing system serve the 3-bedroom residence which would equal the 240 gpd currently permitted with no improvements required to the septic drain field.

Attached are summaries and analysis of how these numbers were developed. Please see attached spreadsheet detailing each month's usage and a copy of the water data from Davidson Water, Inc. and the City of Asheboro for supporting documentation.

Based on the above information and attached spreadsheet, we respectfully request a reduction in flows by 33% to 80 gpd/bedroom to allow the homeowner to go from the 2 bedroom residence to a 3 bedroom residence using the existing system.

Should you have any questions please do not hesitate to call me at 336-328-0902.

A CARO

Sincerely, Summey Engineering Associates, PLLC Mach Summey, Jr., PE

HMSJ/hmsi

CC:

File Enclosure

SealUNIN

SUMMEY ENGINEERING ASSOCIATES, PLLC Project: Flow Reduction Job No: E-8381
PO Box 968 336-328-0902 Subject: Mi+chell Date: 1-28-2623
See Attached Flow Data:
Using 3 Highest Average Daily/Monthly Rending ~ See Below
3BR-1299 home - 1931190+182=565/3=188,3374,
2BR-1341 home - 141+109+100=358/3=119.3 gpd
3BR-640 home - 193+183+183=559/3=186,3gpd (494/3) = 1659Pd
Use Highest (Conservative) = 188.3 gpd = AD
Randolph County EH ~ Max Flow Allowed = 240 gPd
Flow (Actual Aug) Based on Data Aug Daily = 188.3 gpd = 63 gpd 3 Bedroem
add 25% (Conservative) = 63 gpd x 1.25% = 78.75 gpd
Request Flow Reduction from 120 gpd/Bedroon to 80 grd/Bedroo
SO 3BR x 80 gpd = 240 gpd
SO Allowed (240 gpd) = Reduced (240 gpd) Requested Re

1341 Summey Town Road Trinity NC - Water Reports - 2 bedroom Single Family

		toda million ide	AARCOL MANDLES T DEGLOOM BUILDING
	Monthly	lvg Monthly	Good/Bad
Month	Vater Usag	Nater Usage	Data
and Year	Gallons	GPD	
Jan-18	3260	(109)	Good Data
Feb-18	2630	88	Good Data
Mar-18	2640	88	Good Data
Apr-18	3250	108	Good Data
May-18	2680	89	Good Data
Jun-18	2940	98	Good Data
Jul-18	3250	108	Good Data
Aug-18	2840	95	Good Data
Sep-18	4230	(141)	Good Data Highest Munth
Oct-18	3090	103	Good Data
Nov-18	3020	101	Good Data
Dec-18	3240	108	Good Data
1/1/2019		90	Good Data
2/1/2019	2490	83	Good Data
3/1/2019	2400	80	Good Data
4/1/2019		101	Good Data
5/1/2019		92	Good Data Mil Runge
6/1/2019		82	Good Data
7/1/2019		99	Good Data
8/1/2019		92	Good Data
9/1/2019		94	Good Data
########		101	Good Data
########	2980	99	Good Data
########		81	Good Data
AVG	2734	97	
Politica politica de			D. W. Mirroria vo

Actual Average Gal/per/day with no adjustm:

Take out Yellow Hi-Lited Numbers from Calc n/a data good

Actual average gpd/bedroom

49 gpd/bedroom

AVERAGE OF 2 YEARS 97 gpd/month

Summary - Using 24 months worth of data from Existing Typical Single family dwelling shows an avg.
Usage of 97 gpd per house with 2 Bedrooms
Numbers based off actual Davidson Water Inc Water Bills
for 1341 Summey Town Road Trinity NC 27370

1299 Summey Town Road Trinity NC Water Reports - 3 bedroom Single Family

	Monthly	Avg Monthly	Good/Bad
Month	Water Usage	Water Usage	Data
and Year	Gallons	GPD	
Jan-18	3040	101	Good Data
Feb-18	2150	72	Good Data
Mar-18	2380	79	Good Data
Apr-18	2560	85	Good Data
May-18	3240	108	Good Data
Jun-18	5780	(193)	Good Data Highes & Month
Jul-18	4180	139	Good Data
Aug-18	5450	(182)	Good Data
Sep-18	3100	103	Good Data
Oct-18	2780	93	Good Data
Nov-18	2730	91	Good Data
Dec-18	2250	7 5	Good Data
1/1/2019	2540	85	Good Data
2/1/2019	3570	119	Good Data
3/1/2019	3080	103	Good Data
4/1/2019	3630	121	Good Data Mid Kenge
5/1/2019	4870	162	Good Data
6/1/2019	4990	166	Good Data
7/1/2019	5700	(190)	Good Data
8/1/2019	4630	154	Good Data
9/1/2019	4030	134	Good Data
10/1/2019	3930	131	Good Data
11/1/2019	3550	118	Good Data
12/1/2019	2850	95	Good Data
"אנר"	US 3947.5	121	
AVERAGE OF 2 Y	/EARS	121	gpd/month

Actual Average Gal/per/day with no adjustments 12
Take out Yellow Hi-Lited Numbers from Calculations n/a data good
Actual average gpd/bedroom 40

Summary - Using 24 months worth of data from Existing Typical Single family dwelling shows an average Usage of 121 gpd per house with 3 Bedrooms

Numbers based off actual Davidson Water Inc Water Bills for 1299 Summey Town Road Trinity NC 27370

121 gpd

gpd/bedroom

640 T Street Asheboro NC - 3 Bedroom Single Family	Residence
--	-----------

	Monthly	Monthly	Monthly	Average	Good/Bad
Month	Water Usage	Water Usage	Water Used	Monthly	Data
and Year	Cubic Feet	Gallons	GPD	GPD/Bedroom	
Aug-18	479	4062	135	45	Good Data
Sep-18	528	4477	149	50	Good Data
Oct-18	423	3587	120	40	Good Data
Nov-18	519	4401	147	49	Good Data
Dec-18	525	4452	148	49	Good Data
Jan-19	570	4834	16 1	54	Good Data
Feb-19	425	3604	120	40	Good Data
Mar-19	648	5495	(183)	61	Good Data
Apr-19	526	4460	149	50	Good Data
May-19	451	3824	127	42	Good Data
Jun-19	552	4681	156	52	Good Data
Jul-19	333	2824	94	31	Good Data
Aug-19	311	2637	88	29	Good Data
Sep-19	509	4316	144	48	Good Data
Oct-19	291	2468	82	27	Good Data
Nov-19	322	2731	91	30	Good Data
Dec-19	495	4198	140	47	Good Data Mid Range Good Data Good Data Highest Marth
Jan-20	425	3604	120	40	Good Data
Feb-20	683	5792	(193)	64	Good Data Highest Month
Mar-20	649	5504	183	61	Good Data
Apr-20	509	4316	144	48	Good Data
May-20	498	4223	141	47	Good Data
Jun-20	597	5063	169	56	Good Data
Jul-20	599	5080	169	56	Good Data
AVG	494	4193	140	47	
AVFRAGE O	F 2 YFARS	4193	gal/month		

AVERAGE OF 2 YEARS 4193 gal/month AVERAGE OF 2 YEARS 140 gpd/month Actual Average Gal/per/day with no adjustments

4193.0 gpd

Take out Yellow Hi-Lited Numbers from Calculations n/a data good

Actual average gpd/bedroom

47

gpd/bedroom

Summary - Using 24 months worth of data from Existing Typical Single family dwelling shows an Average Usage of 140 gpd per house with 3 Bedrooms

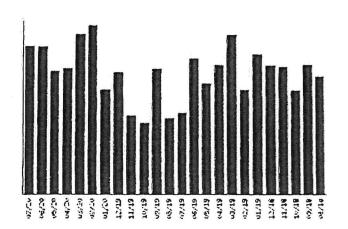
Numbers based off actual Davidson Water Inc Water Bills
for 1341 Summey Town Road Trinity NC 27370



Back to Account 15297-0 Overview

640 T Street Asheboro, NC

US RES WATER



(z ii s	r,Ja	11;	បែរកដ្ឋខ
07/2020	Actual	43431	599
06/2020	Actual	42832	597
05/2020	Actual	42235	498
04/2020	Actual	41737	509
03/2020	Actual	41228	549
02/2020	Actual	40579	683
01/2020	Actual	39896	425
12/2019	Actual	39471	495
11/2019	Actual	38976	322
10/2019	Actual	38654	291
09/2019	Actual	38363	509
08/2019	Actual	37854	311
07/2019	Actual	37543	333
06/2019	Actual	37210	552
05/2019	Actual	36658	451
04/2019	Actual	36207	526
03/2019	Actual	35681	648
02/2019	Actual	35033	425
01/2019	Actual	34608	570
12/2018	Actual	34038	525
11/2018	Actual	33513	519
10/2018	Actual	32994	423
09/2018	Actual	32571	528
08/2018	Actual	32043	479

Mack Summey

From:

Hannah Bailey hbailey@davidsonwater.com

Sent:

Thursday, July 30, 2020 3:50 PM

To:

Mack Summey

Subject:

59-449-75

1299	Summey	TOWN F	T 6	rinity	NC	27370
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							\$0 100 100					
Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Year
4,630	4,030	3,930	3,550	2,850	2,540	3,570	3,080	3,630	4,870	4,990	5,700	2019- 2020
5,450	3,100	2,780	2,730	2,250	3,040	2,150	2,380	2,580	3,240	5,780	4,180	2018- 2019
4,950	3,610	3,630	4,520	5,050	3,450	14,830	2,070	2,640	3,920	4,750	4,440	2017- 2018
5,500	6,070	4,520	5,780	4,750	4,150	4,060	3,490	4,320	5,650	5,140	4,410	2015- 2017
4,230	4,080	4,780	3,510	3,980	4,310	3,970	3,540	4,210	3,670	5,520	5,040	2015- 2016

1341 Summey Town Rd Trinity NC 27370 59-450-00

-	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Year
•	2,760	2,820	3,020	2,980	2,430	2,700	2,490	2,400	3,020	2,750	2,460	2,980	2019- 2020
	2,840	4,230	3,090	3,020	3,240	3,260	2,630	2,640	3,250	2,680	2,940	3,250	2018- 2019
	2,120	2,720	2,230	2,530	2,650	2,170	2,100	1,960	1,670	1,910	2,580	2,070	2017- 2018
	3,480	3,770	3,210	2,840	2,800	2,970	3,290	2,620	1,640	2,000	2,150	2,040	2016- 2017
	3,130	2,920	3,170	2,750	2,740	4,350	2,680	2,890	3,870	2,800	3,450	3,650	2015- 2016



Hannah Bailey Billing Coordinator P 336 731 5504 C 336 73! 5534

hbailey@davidsonwater com www.davidsonwater.com

911 ADDRESS 557 OLIVE CHAPAL APRX

NAME MITCHELL

CHATHAM COUNTY HEALTH DEPARTMENT **SEWAGE DISPOSAL OPERATIONS PERMIT**

Date

Improvements Permit No. 145387

4-6 houman

Owner_ MANGRMENT

Conditions

state and local rules. The department does recommend that septic tanks be pumped out every 3 to 5 years. In the event of a malfunction contact this office. This permit authorizes the owner to operate the sewage disposal system in accordance with the

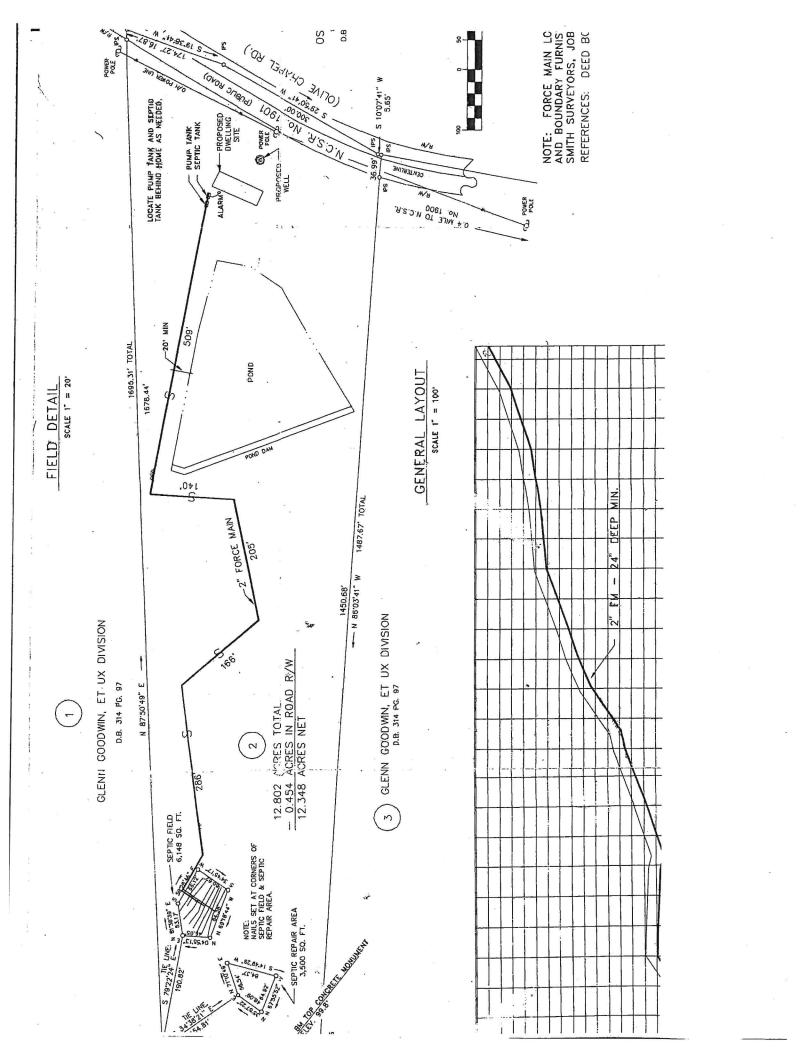
* no site plan on reverse side - " Environmental Health Spo

CHATHAM COUNTY HEALTH DEPARTMENT SEWAGE DISPOSAL CONSTRUCTION AUTHORIZATION

	This	s per	rmit	aut yea	hor irs o	izes of th	the	prop	pert da	y ov te	vner The	to i	nsta alle:	II th	e se ust	wag be r	je di egis	ispo stere	sals	yst n C	em p	oer I	mpi Co	rove	men	nt Pe	ermit
	and	veri	fiec	l by	this	dep	partr	nen	t.								/	1				rmi	t mu	ıst b	е со	mpl	eted
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DAX																											
4																											
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vironmental Health Specialis

NAME: /



DIANA STOCIUR CHP

CHATHAM COUNTY HEALTH DEPARTMENT ENVIRONMENTAL HEALTH DIVISION

P. O. Box 126 Pittsboro, NC 27312 1105 E. Cardinal St. Siler City, NC 27344

IMPROVEMENT PERMIT FOR WASTEWATER SYSTEMS

ARTICLE II-CHAPTER 130A OF THE NC GENERAL STATUES

	An Improvement Permit is issued to <u>DIANA MITCHALL</u>	for
İ	a 12,348 acre site located 557 OLIVE CHAPE BD APRIX	
J	in Chatham County. It is specifically issued for the following facility:	
100	Facility: Residence (人) Business ()	
1	No. Bedrooms No. Employees/Residents	
7	Type Wastewater: Residential (x) Commercial ()	15
1	Type System: Shallow Conventional () LPP (X)	
'l S	Other	
911 Address	Design Flow 240 EGPD Application Rate _ / GPD/ft²	
A	Size Tank(s) w/Risers ST_1600 Gal Pt_1600 Gal	
5	Nitrification Line (Length/Width/Max Depth) Phh NRS/6m	
	(On contour in surveyed septic area; solid earth dams every 50' for shallow conventional systems)	
	Type Repair MLPP (6" FILL)	
	Special Conditions INSTALL IN DBX WX. CURTAIN	
	DAAIN ABOUR SXSTEM	
	A plat with site plan showing specific location of the facility, the site for the proposed wastewater sy existing buildings, property lines, water supplies, surface waters, the conditions for any site modification and any other information required by the department must be attached to be valid. For y was S This permit is valid without expiration but is subject to revocation if the site is altered, soil distinct set-backs violated, or the plans of intended use are changed.	itions;
	THIS IS NOT AUTHORIZATION TO INSTALL. An Authorization for Wastewater Construction m obtained from this department before installation.	ust be
	Environmental Health Specialist Level I him the	
•	Reg. No. 1341 Date 8-5-96	

911 ADDRESS

NAME/SUBDIVISION MITCHES CONT AIFTER

CHATHAM COUNTY HEALTH DEPARTMENT ENVIRONMENTAL HEALTH DIVISION

80 EAST STREET P. O. BOX 130 PITTSBORO, NC 27312 542-8208

1000 S. 10TH AVENUE SILER CITY, NC 27344 742-4911

SEWAGE DISPOSAL RE-INSPECTIONS PERMIT

A Re-inspection Permit is issued to Alfred & Diane Mitchell
Original Permit SAME
Location 64E @ Olive Compoled (across from HWY 751) @ Mt. Olive Ext. House on Rt. #557 Olive Chapel
Water Supply: Private Public Public
No. Bedrooms Other
Reason for Re-inspection
Adding agrage.
SYSTEM APPEARED TO BE FUNCTIONING PROPERLY AT TIME OF INSPECTION.
System appointed to be functioning properly at time of
impaction.
SEPTIC TANK SHOULD BE PUMPED OUT EVERY 3 TO 5 YEARS AND SHALL BE MAINTAINED BY OWNER IN SUCH A MANNER AS NOT TO CREATE A PUBLIC HEALTH HAZARD.
DATE APPROVED: 7-14-99 BY: Crepton S. Hoologo Environmental Health Specialist

RE-INSPECTION PERMIT VALID FOR 6 MONTHS FROM DATE OF ISSUANCE.