

TEXAS ASSOCIATION OF REALTORS®

INFORMATION ABOUT ON-SITE SEWER FACILITY

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co	NCERNING THE PROPERTY AT	114 Keanahalululu Bastrop, TX 78602					
Α.	DESCRIPTION OF ON-SITE SEWER FACILITY ON PROPERTY:						
	(1) Type of Treatment System:	Aerobic Treatment	Unknown				
	(2) Type of Distribution System: 3 Sprinklers		🔲 Unknown				
	(3) Approximate Location of Drain Field or Distribution System:						
	(4) Installer: Cloude Horrman		 				
			-				
В.	MAINTENANCE INFORMATION:						
	(1) Is Seller aware of any maintenance contract in effect for the on-site sewer facility? If yes, name of maintenance contractor: Phone: Contract expiration date: Maintenance contracts must be in effect to operate aerobic treatment and certain non-standard" on-site sewer facilities.)						
	(2) Approximate date any tanks were last pumped?	May 20/1	***************************************				
	(3) Is Seller aware of any defect or malfunction in the on If yes, explain:		Yes No				
	(4) Does Seller have manufacturer or warranty informati		Yes Mo				
C.	PLANNING MATERIALS, PERMITS, AND CONTRACTS:						
	(1) The following items concerning the on-site sewer facility are attached: planning materials permit for original installation final inspection when OSSF was installed maintenance contract manufacturer information warranty information						
	(2) "Planning materials" are the supporting materials that describe the on-site sewer facility that are submitted to the permitting authority in order to obtain a permit to install the on-site sewer facility.						
	(3) It may be necessary for a buyer to have the transferred to the buyer.	permit to operate an on-site	sewer facility				
/ΤΔΕ	-1407) 1-7-04 Initialed for Identification by Buyer	and Seller	Page 1 of 2				

RE/MAX Bastrop Area 87 Loop 150 West Bastrop, TX 78602 Phone: 512.921.9134 Fax: 512.366.9613

D. INFORMATION FROM GOVERNMENTAL AGENCIES: Pamphlets describing on-site sewer facilities are available from the Texas Agricultural Extension Service. Information in the following table was obtained from Texas Commission on Environmental Quality (TCEQ) on 10/24/2002. The table estimates daily wastewater usage rates. Actual water usage data or other methods for calculating may be used if accurate and acceptable to TCEQ.

	Usage (gal/day) without water-	Usage (gal/day) with water-
<u>Facility</u>	saving devices	saving devices
Single family dwelling (1-2 bedrooms; less than 1,500 sf)	225	180
Single family dwelling (3 bedrooms; less than 2,500 sf)	300	240
Single family dwelling (4 bedrooms; less than 3,500 sf)	375	300
Single family dwelling (5 bedrooms; less than 4,500 sf)	450	360
Single family dwelling (6 bedrooms; less than 5,500 sf)	525	420
Mobile home, condo, or townhouse (1-2 bedroom)	225	180
Mobile home, condo, or townhouse (each add'l bedroom)	75	60

This document is not a substitute for any inspections or warranties. This document was completed to the best of Seller's knowledge and belief on the date signed. Seller and real estate agents are not experts about on-site sewer facilities. Buyer is encouraged to have the on-site sewer facility inspected by an inspector of Buyer's choice.

Signature of Seller

Alan Rheel

Dăte

nature of Seller

Nicole Rheel

Receipt acknowledged by:

Signature of Buyer

Date

Signature of Buyer

Date

(TAR-1407) 1-7-04 Page 2 of 2

DESIGN OF ON-SITE SEWERAGE FACILITY

For

ALAN & NICOLE RHEEL 114 KEANAHALULULU BASTROP, TEXAS BASTROP COUNTY

November 6, 2003

TAHITIAN VILLAGE SUBDIVISION

PREPARED BY
WEISHUHN ENGINEERING, INC.
JAMES W. WEISHUHN P.E.
BARBARA WEISHUHN R.S.
1026 SMITH RAU ROAD
COLUMBUS, TEXAS 78934
Phone/Fax: (979) 732-6997

RHEEL4aerAQUAKlear.doc

SITE EVALUATION

A site evaluation indicated the following subsurface conditions.

Parameter	Description	Suitable/Unsuitable[a]
Topography	3 % Slope	Suitable
Test Hole 1 & 2	0"-12" below ground surface:	Suitable
	Class Ib Sand, No mottling	
	Crumb, Tan, Gritty, No ball or ribbon	
	12"-24" below ground surface:	Unsuitable
	Class Ia Gravel	
Flood Hazard	Site is not in 100-year floodplain.	Suitable

[a] Relative to a standard system.

Standard subsurface treatment and disposal methods cannot be utilized at this site because one or more of the site evaluation criteria categories were evaluated as unsuitable. Therefore the design will be for a non-standard system.

1. SYSTEM TYPE Non-standard

A standard system is not acceptable for soil conditions because 24-inches of Class I, II or III soil is not available between the bottom of a proposed conventional trench and ground water. Aerobic Treatment with Surface Irrigation Disposal

2. SYSTEM MANUFACTURER

Aquaklear, Inc. 870 N. Bierdeman Pearl, MS 39208 (601) 936-7711

3. SYSTEM SIZE

Table III of 30 TAC Chapter 285 indicates that the daily flow rate for a three bedroom home with less than 2,500 sf is 240 gpd (gal /day).

4. SYSTEM CONFIGURATION

Pretreatment Tank: 500 gallon

Treatment System: Aquaklear Model AK500S96 (rated capacity 500 gallons/day)

Pump Tank: 755 gallons

Treated Effluent Disposal: Surface irrigation by sprinklers controlled by commercial

irrigation timers for application between midnight and 5 a.m.

5. EFFLUENT QUALITY DATA

Biological Oxygen Demand (BOD) & Total Suspended Solids

30 day average

20 mg/L

7 day average

30 mg/L

Daily Maximum 45 mg/L Single grab 65 mg/L pH 6.0-9.0

6. EFFLUENT DISINFECTION

Treated effluent must be disinfected with chlorine prior to irrigation. A liquid chlorinator using sodium hypochlorite (bleach) will be used to disinfect the wastewater.

7. MAX SURFACE APPLICATION RATE, Ri

Maximum application rates for surface irrigation of treated effluent is 0.064 gallons/square foot/day from 30 TAC Chapter 285, Figure 1.

8. REQUIRED SURFACE AREA, A

A=Q/Ri = 240 gpd / 0.064 gpd/sf = 3,750 sf

9. SPRINKLER HEAD SPECIFICATIONS

Nelson 6095 Series w/ # 7 LA nozzle Trajectory = 11 degrees Radius = 30 feet @ 35 psi Flowrate = 3.1 gpm Coverage Area = 3.14*r²= 3.14*23 ft.*23 ft = 1,661 sf

10. Number of Sprinkler Heads

Number of heads = 3,750 sf/1,661 sf/head = 2.3 Use 3 sprinkler heads

11. SPRINKLER HEAD CONFIGURATION

Sprinkler heads will be placed as shown on the site plan drawing.

12. DISTRIBUTION PIPING

Distribution piping must be 1" Schedule 40 PVC.

13. PUMP SIZING

Flow Rate = 3 sprinkler heads * 2.5 gpm = 7.5 gpm Say 8 gpm

Total Head Calculations

Assume Elevation Head = 4'

Pressure Head (Sprinkler Head) = 81' = 35 psi

Friction Head for 1" pipe = 1.2 * (150 ft supply line * 3.63'/100') = 7'

Total Head = 4' + 81' + 7' = 92'

The pump must be sized for 8 gpm @ 92' of head.

14. LANDSCAPE PLAN

The irrigated area must be continuously covered or seeded with Common Bermuda, St. Augustine, or Annual Rye grass. The area must initially be covered with sod or 15 pounds of Common Bermuda seed (an equivalent rate of approximately 100 lb./acre). After initial seed has germinated (approximately 2-3 weeks), bare spots must be seeded again. Should Bermuda or St. Augustine become dormant during winter months, irrigated area must be seeded again with 15 pounds of Annual Rye grass.

15. SYSTEM MAINTENANCE CONTRACT

The homeowner must maintain a valid signed maintenance contract with a valid maintenance company. The initial maintenance contract must be valid for a two-year period. Subsequent contracts must be submitted to the BASTROP County Designated Representative's (D.R.) within 30 days prior to the expiration date of the previous contract. The homeowner may change maintenance companies during a contract period, provided the D.R. is notified at least 30 days prior to the change.

16. INSPECTION, TESTING AND REPORTING

The maintenance company must inspect the wastewater treatment and disposal system three times per year. The maintenance company must report the results of any inspection and testing activities, including homeowner complaints, to the homeowner and the D.R. within 10 days. The test results must meet the following minimum standards:

● 1-BOD₅ and TSS Grab Sample per year

< 65 mg/L

1-Chlorine Residual

1 mg/L

Fecal Coliform

200 MPN/100 mL

It is recommended that the system pH be tested at each site visit and steps taken to ensure that the pH is maintained between 6.0-9.0. A sample testing and reporting form is attached.

17. AFFIDAVIT

The owner must file an affidavit with BASTROP County, deed recording that the property cannot be transferred to a new owner without:

- The new owner being advised that the property contains a surface application system for wastewater disposal;
- The permit is issued to the previous owner of the property being transferred to the new owner in accordance with 30 TAC 285.20(5) relating to general application requirements; and
- The new owner submitting a valid maintenance contract to the BASTROP County Designated Representative's Office.

18. LOCATION OF SYSTEM COMPONENTS

- All tanks must be located greater than or equal to 50 ft. from water wells, greater than or equal to 50 ft. from surface water bodies and greater than or equal to 5 ft. from utility easements, 5 feet from property lines and the foundation of any structure;
- The irrigated area must be located greater than or equal to 50 feet from surface water bodies, 100 ft. from water wells, and 10 ft. from property lines, public water supply lines, utility easements and the foundation of any structure;
- Irrigated areas cannot be used for growing food, gardens, orchards or crops used for human consumption; and
- Effluent must not be applied to unseeded bare ground under any circumstances.

19. CONSTRUCTION NOTES

- The irrigated area must be graded such that rain water will not stand or pond;
- All material installed as part of this system, including tanks, pipes, and controls must meet or exceed the construction standards specified in 30 TAC Chapter 285;
- A sampling port must be provided in the treated effluent line in the pump tank; and
- Sprinkler heads with low angle nozzles (13 degrees, or less) must be used to keep the spray stream low and to reduce aerosols. Maximum inlet pressure shall be 40 psi or less.

20. SYSTEM DESIGNER

James W. Weishuhn, P.E. & Barbara J. Weishuhn, R.S. 3568 1026 Smith Rau Road, Columbus, Texas 78934

21. ADDITIONAL NOTES

The system has been designed in accordance with 30 TAC Chapter 285 On-Site Sewage Facilities for the purposes of securing a permit for construction of the system for a 240 gpd flow and 140 mg/L BOD. Weishuhn Engineering, Inc. provides no process guarantee relative to system operation and performance.

SYSTEM SUMMARY

Design Parameters

1 Wastewater Usage: <2,500 sf home with 3 bedrooms

2 Design Flow Rate: 240 gpd.

3 Irrigation Area Loading Rate: 0.064 gpd/sf.

4 Area Required: 3,750 sf 5 Area Designed: 4,983 sf

6 System Parameters

Pretreatment Tank: 500 gal.

Treatment Unit: AQUAKLEAR, AK500S96 (rated capacity 500 gallons/day)

Pump Tank: 755 gallon capacity

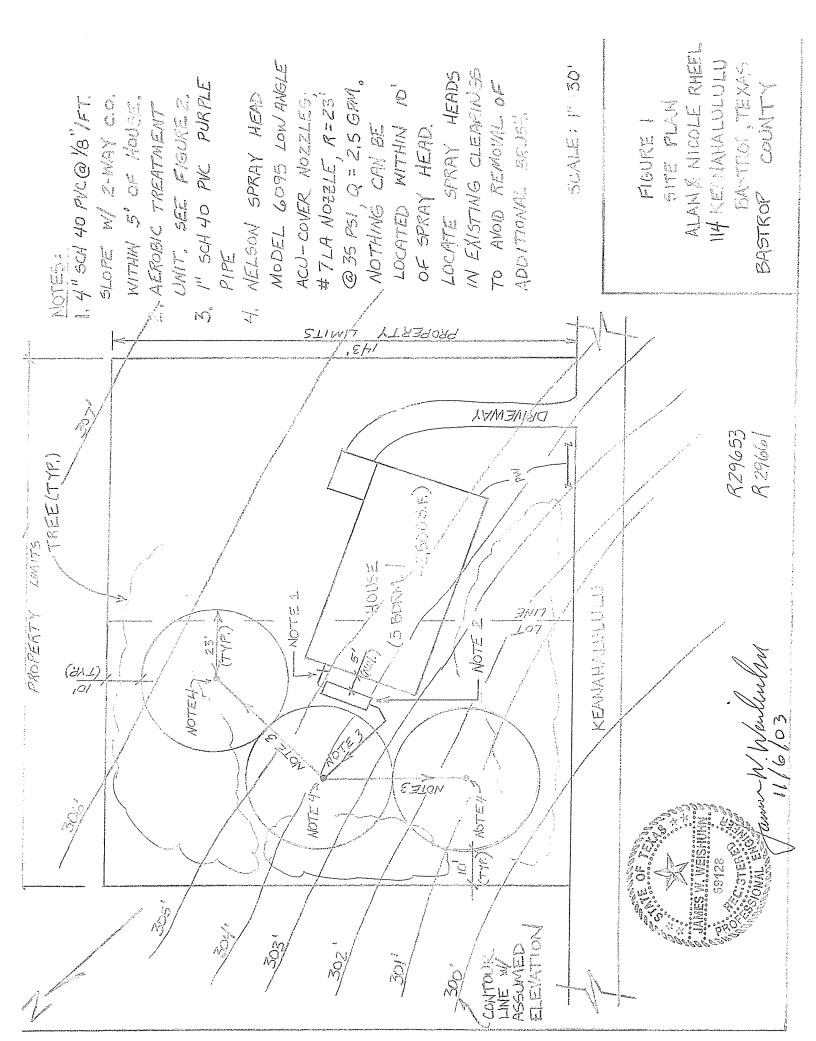
Pump: 8 gpm @ 92' TDH

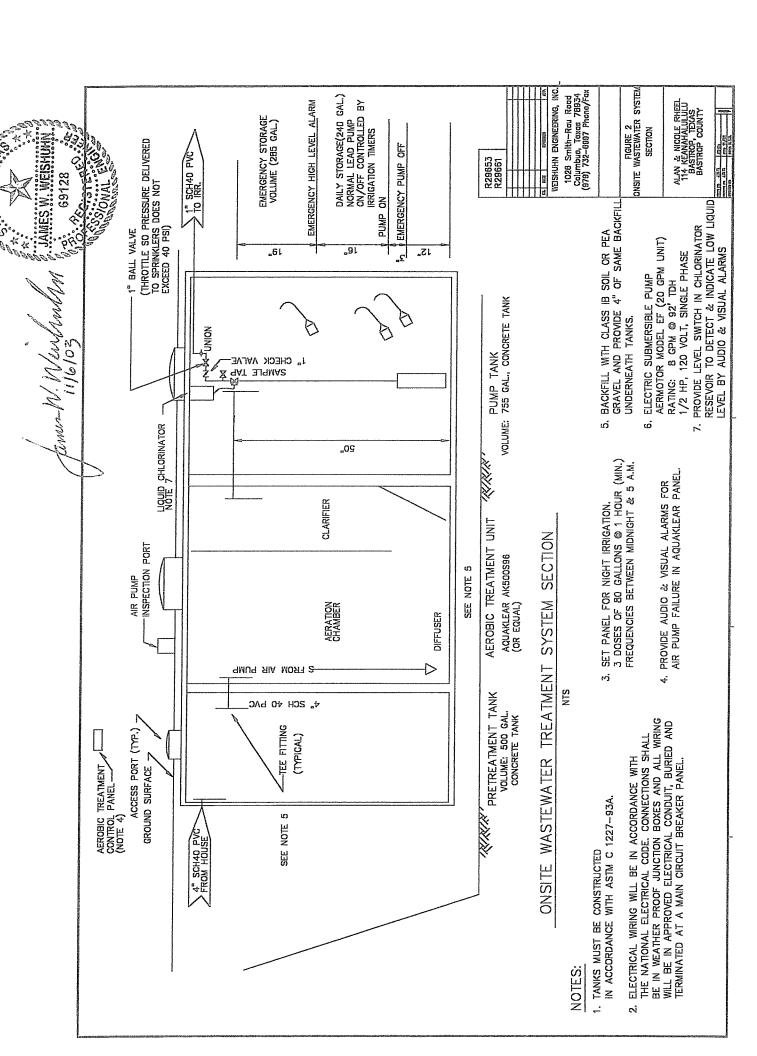
Chlorinator: Liquid Chlorinator, estimated bleach usage per month = 1.25 gallons.

7. Sprinkler Area: 4,983 square feet

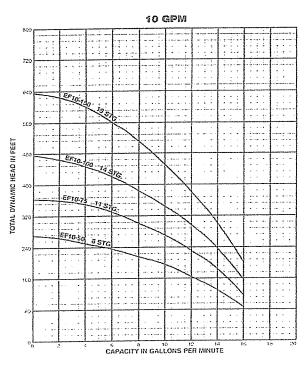
8. Sprinkler Heads: 3 Nelson Pro 6095 series w/ #7 LA nozzle, 23' radius

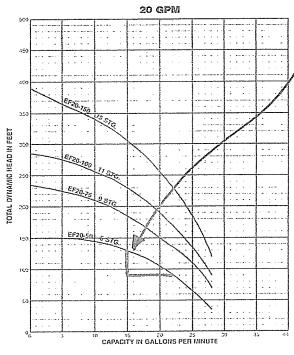
2.5 gpm each @ 35 psi

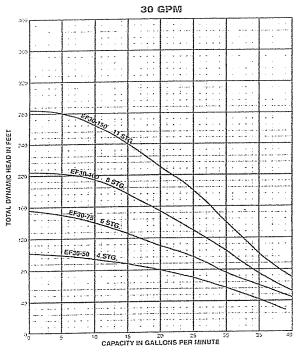


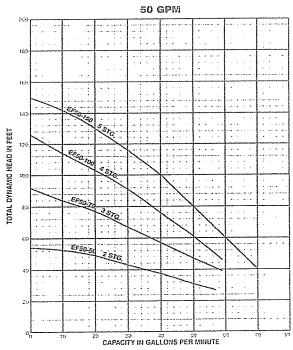


"EF" High Head Onsite Submersible Effluent Pump 4" High Head Performance Curves











110 Keanahalululu Bastrop, TX

	ON-SI	ITE SEWAGE F	BASTROP CO ACILITY SOIL & :	UNTY SITE EVALUATION REPORT Rhos I	114 Keanahal	FORM B Lane
p 0	. No.	Blank	Nicole	Rheel	The second	
Property Owner Site Evaluator In		1	70.00.	Installer Information		
Name Jam	1011	Veis huhu		Name		
	b Smi	th Rau 1	2000	Address		
city Colu	mbus]	<u> </u>		City		
State	· /	Zip	78934	State	Zip	
Phone	79/738	2-6997		Phone		
Cell Phone	(979)7	32 -784	5	Cell Phone		
Fax				Fax		
Circle Type of Co	ertification:	RS/PR (PE SE	License Level: OSS		
Other:	P E - 691	11215 m.	1104	License #	<u></u>	:s
SE License #		UZB Expires	1/01	- 3 bolom 2	< 2500st	Unit 5
Property Location	abition	٥		LOI(s) , 1551& 15	57	Bik
Subdivision Unincorporated A			NO, City		7in	
SITE EVALUAT				Dashey 1	Ζιρ	
Requirements:	IOR - INCL	ODE SITE LOC.	ATION WAT	(5/2)321-	ଅଧିବ	
At least two profi	le holes (exca	ivations) must be o	lug at opposite ends	of the proposed disposal area, Loca	ation of the profile hol	es must be shown on
design. For subsu	rface disposal	l systems, soil eva	luations must be perf	formed to a depth of at least two for CH SOIL HORIZON and IDENT	ct below the proposed FIFY ANY RESTRIC	excavation depth. For
on this form, Indi	cate DEPTH:	S where features a			9653	
Excavation Numb	oer TH	182			29661	
Depth	Texture	Soil	Gravel	Structure Drainage	Restrictive	Observations
(feet & inches)	Class	Texture	Analysis	(mottles/water table)	Horizon	Noted
				.1		tan grithe
0 Ground Surfa	Ξh	Sand	Not-Prese-	+ No Mothling	1/0	no bull or ribban
1	1-1)			Cramb Structu	<u> </u>	
•	Ia	Gravel	> 25% ~ 1" #		Yes	
ú	· ·	0 1410[\sim 1 μ		167	
3						
4						
5						
Excavation Numb						
Depth (feet & inches)	Texture Class	Soil Texture	Gravel Analysis	Structure Drainage (mottles/water table)	Restrictive Horizon	Observations Noted
	<u> </u>					
0 - Ground Surfac	ie\					
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2						
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4						
5						į
			\			
FEATURES OF	SITE AREA					
Presence of flood				Yes	No	
Presence of adjace			indments	Yes	No	
Existing or propos				Yes	No/	
Existing or propos			erty	Yes	No	-
Organized sewage				Yes	No V	
IF Your Learning of the State and County	findings of th	RED YES TO AN is report are bas	VY OF THE ABOV ed on my field obser	E, ADDRESS THESE ISSUES V vations and are accurate to the b	est of my ability, and	in accordance with
Lames W	1/100	Krantina	Λ :	7 19118	11/5/03	
Site Evaluator - S	ionature	000-009	Licens	E Number Date	איןטן וו	
To Evanuator - 3	, _G natate		1.100115			
J -c.vickie/office forms	/osst`soil & site	e evaluation report				1/6/2003

OSSF CONSTRUCTION SITE PLAN CHECKLIST FOR DESIGNER

- The installer or designer must complete this form and include it with the site plan and specifications. If installation differs from this report and the approved plans, a revised design, specification and checklist must be submitted and approved prior to any inspections.
- Do not begin construction without a "PERMIT TO CONSTRUCT".

114 Keanaha lululu Property Owner: Alan & Nicole Rhee Location/911 Address: SYSTEM DIMENSION: SYSTEM TYPE:

Rock & Pipe	□ Trench	🗆 Bed	Number Of Tanks	1 Aquakleur Single Tank Acophic
ET			Capacity/#Comp.	500 apol / 3 compart.
Leaching Chamber			Excavation Width	
Gravelless 8"			Excavation Length	
LPD			Excavation Depth	
Spray Application			Linear Feet	
Drip			Square Footage	4,985 sf
Other:			Flow - gpd	240
			Application Rate	0.064 gpd/sf

- Drawing of OSSF and related issued must be drawn to scale.
- Indicate scale.
- Indicate North (direction).
- Refer to and address all points made on Review Page "Form C" concerning site plan.

You may use the space provided below or use your own design form. 167.4 PROPOSED Keanahalululu Designer Print Name: James W. Weishuhn Signature James License Number: P.E. 69/20 Check: OSSFI

□ OSSF II

□ PE

Funk Septic 175 POPE BEND ROAD SOUTH CEDAR CREEK TEXAS 78612

512-559-5208

Aerobic One-Year Monitoring Agreement.

Our firm Funk Septic & Construction Company will inspect and test your Aerobic septic system for one year from the start date below - for the following services only. A total of (3) inspection visits (scheduled once every (4) months over the one year period.) Funk Septic representative shall have full and unobstructed access to check system, during which the electrical, mechanical and other applicable components are inspected and adjusted. This includes but not limited to, inspecting control panels, air compressor and filters, diffuser operation, and checking the chlorine residual. An Effluent quality inspection consisting of a visual assessment for color, turbidity, and scum overflow, and an odor assessment for proper operation are performed on your unit and a report of findings shall be given to Owner then County and a copy for inspection company.

ass	pection consisting of a visual assessment for color, turbidity, and scum overflow, and an odor essment for proper operation are performed on your unit and a report of findings shall be given to
Ov	mer then County and a copy for inspection company. Initials
Z-mid o	If access cannot be gained due to locked gates, dogs, changed codes or any other reason. A rescheduling fee of \$30.00 will be charged at the time of re inspection. An inspection report will be filed with the local permitting authority with reason of non-access. Then a report will be filed when a re inspection is done. Initials
2.	A notice shall be given without delay to the County & owner/operator of any improper operation that cannot be corrected at the time of inspection. (FAILED REPORT) An estimated cost of repair can be obtained from our company. We can perform any needed repair work that is not a part of the inspection contract, at a reasonable price for materials and labor. This work will be <u>Payable immediately at the time of completion</u> . Initials
3.	Owner is responsible for keeping chlorine tablets or liquid chlorine in the chlorination device. (Disinfect ion unit) at all times. If no Chlorine is noted in unit at time of inspection a FAILED report will be left for the owner and a re inspection will have to be done at the cost of \$30.00. If Chlorine alarms are tied up or tampered with in any way the offence will be noted in report and turned into County. Any damages done due to owner's failure to service and keep chlorine in system shall be the responsibility of the property owner. This contract does not include pumping any sludge from any part of the aerobic unit. Owner is responsible for any pumping charges. Funk Septic can request pumping. (Owner will be notified when these services are required.)
4.	Owner is also responsible for keeping <u>ANT BAIT</u> around Septic Unit. Ants are drawn to the vibration of the Electrically currant and can cause costly repairs. Also owner should check for <u>WASP</u> nests around control box and Air Compressor. If either is present at the time of inspection our personal will leave a report stating reason of <u>NO inspection</u> and a <u>Rescheduling fee will be charged of \$30.00.</u> Initials
5.	This system <u>may have</u> a County Commissioner Court mandated visual and audible alarm and also a pump Shut down so that if the Chlorination fails do to <u>NO CHLORINE</u> , <u>improper function</u> , <u>or is not operating properly</u> , <u>or timely</u> , <u>the pump will Not operate and the alarm will engage.</u> Continued usage of the system after alarm has engaged can result in The backflow of raw and untreated sewage. This condition will pose a health threat to the occupants and <u>is the sole responsibility of the owner</u> .
	Initials
	<u>Customer must call promptly</u> : In the event of any failure in the operation of this system and also any alarming, Funk Septic will be on call at 512-303-0339, and will respond within 48 hours. Service call fee is \$65.00 during egular working hours, (<u>Monday thru Friday 8am to 5pm)</u> after hours and holidays is \$85.00 then hourly after that. Initials
]	Permit#1 of 2

 If homeowner allows anyone other than <u>Funk Septic</u> to look at, fix, change, or replace any component of the aerobic Treatment unit or effluent distribution system this contract will be voided without refund. Funk Septic wi 					
not be liable for any damages due to malfunct	ion of said system.	Initia	ls		
8. In accordance with State Laws and T.C.E. Contract expiration date. Someone must check		be in place 30 days prior to Initials_	o current		
9. In case any one or more of the provisions con Or Unenforceable in any respect, such invalidit and This agreement shall be construed as if such herein.	y, illegality or unenforceabil	ity shall not effect any other	provision thereof		
10. This agreement constituted the sole and only a Written or oral agreements between the parties			-		
11. <u>I the undersigned u</u>	nderstand all of the	se conditions fully.			
Property Owner:	A Company of the Comp	Permit #			
Property Address:					
City, State & Zip Code:			etti MARATIA etti oli tai kuusi kasuutta oli tuuree kasta kasta saka siitii saatiin, makki sesti viitee vai ka		
County:	TECHNICATION OF MONTHS OF PLANETS WITH COMMUNICATION OF THE COMMUNICATIO				
Phone #	Cell or Alter	nate#			
System Brand:	Model #	Seria	l #		
Spray:	Drip:	Othe	r°		
Chlorination Type:	Tablet-	Liqu	id-		
Property Owners signature:	BB JOH, FOR CETTORY LANGUAGE AND COLOR AND AND AND AND AND SET OF CETTOR AND COLOR AND	Date:			
D.L.#:	7 9 - 1	State:			
Certified Service Provider: Charles	Funk Sr.	Class 2 OSS	F# OS6249		
Service Provider Signature:					
	Co	ntract Start Date:			
	C	ontract End Date:			
Comments:					
	a dispersion de Autorio de Carlos de Car Carlos de Carlos de Carlo	almation with Additionary with must use discrete substitute in Acad States and	nar am malastone or unasse un entante en la creation dels causer—e e		
*THIS CONTRA	CT IS NON REFU	NDABLE *			
	2 of 2				