

TARRANT REGIONAL WATER DISTRICT

Rt 1 Box 1660, Streetman, Texas 75859

903-389-3928

TRWD USE ONLY

RC01007

APPLICATION NO.

9829

RECEIPT NO.

1-24-00

DATE

#150.00

AMOUNT

APPLICATION FOR ON-SITE
SEWAGE FACILITYR.C.
TRWD RESERVOIRFreestone
COUNTY OF INSTALLATION

1. PROPERTY OWNER'S NAME: Brown James W
(LAST) (FIRST) (MIDDLE)
2. PERMANENT MAILING ADDRESS: 1401 Danbury Dr. Mansfield, TX 76063
(STREET/PO BOX) (CITY/STATE) (ZIP)
3. TELEPHONE NO. DURING DAY: (972) 988-0454
4. SITE ADDRESS: 130 Manassass Sq. Streetman, TX
(STREET) (CITY/STATE) (ZIP)
5. PROPERTY DESCRIPTION: LOT NO. 37 BLOCK _____ SEC _____ SIZE 53,597 SQ.FT.
and/or legal description (attached) SUBDIVISION: Wilderness
- OTHER THAN SUBDIVISION: Acreage _____ Survey _____
6. SOURCE OF WATER: _____ Private Well ☒ Public Water Supply Carizzo
(NAME OF SUPPLIER)
- TYPE OF DEVELOPMENT
7. SINGLE FAMILY RESIDENCE: No. of Bedrooms 5 Living Area (sq. ft.) 5060
8. COMMERCIAL/INSTITUTIONAL (including multi-family residences) TYPE: na
- NO. OF EMPLOYEES/OCCUPANTS/UNITS: na DAYS OCCUPIED PER WEEK: na
- ESTIMATED MAXIMUM DAILY WATER CONSUMPTION (gpd): 420 per day
9. IS AN ORGANIZED SEWAGE COLLECTION WITHIN 300 FEET? _____ Yes ☒ No
10. DESIGNER: PH. M. P. Manlan LICENSE NO.: 2604
- PHONE NO.: 972/452-8487
11. INSTALLER: Jimmy Rast REGISTRATION NO.: OS 583
- PHONE NO.: 903-872-5520

I certify that the above statements are true and correct to the best of my knowledge. Authorization is hereby given to the Tarrant Regional Water District to enter upon the above described private property for the purpose of lot evaluation and inspection of on-site sewerage facilities. I understand that the approval of this application constitutes authorization for construction of the on-site sewerage facility and that a permit to operate the facility will be granted following successful inspection of the installed system which indicates that the system was installed in compliance with TNRCC's On-Site Sewage Facility Rules (OSSF) and the District's Waste Control Order.

James W Brown
(SIGNATURE OF OWNER)7-9-98
(DATE)Charlotte Smith
(SIGNATURE OF AUTHORIZED DISTRICT REPRESENTATIVE)1-24-00
(DATE)

TARRANT REGIONAL WATER DISTRICT

140 FM 416, Streetman, Texas 75859
903-389-3928

**AUTHORIZATION TO CONSTRUCT
AN
ON-SITE SEWAGE FACILITY**

Application Number RC 01007

Property Owner James W. Brown

Mailing Address 1401 Danbury Dr.
 Mansfield, Tx. 76063

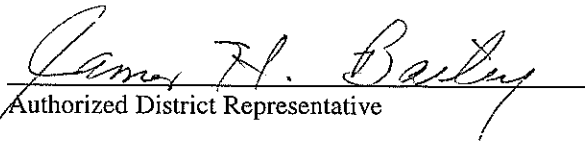
Property Location Lot 37
 The Wilderness
 Freestone County, Texas

This serves to notify all persons that an on-site sewerage facility application, related technical data, and the appropriate fee have been received by the Tarrant Regional Water District (District) from the property owner. The application has been reviewed for technical and administrative consideration against the standards set forth by the District. Approval is hereby granted for the construction as shown on the submitted plans.

Any modifications to submitted plans require approval by the Tarrant Regional Water District prior to installation.

You or your installer must contact the District office at 903-389-3928 between 7:30 A.M. to 8:30 A.M. to arrange for the required facility inspection. Calls after 8:30 A.M. may result in inspection being delayed until the next working day. **The authorization to construct is valid for one year from the date of issue of an application.** If a final inspection has not been performed within one year of issue, a new application and fee will be required.

Comments: The following design is based upon the minimum standards set forth by the Texas Natural Resource Conservation Commission and is based on a maximum daily flow of 420 gallons, the use of water saving devices is required.


Authorized District Representative

1-28-00
Date

TARRANT REGIONAL WATER DISTRICT
140 FM 416, Streetman, Texas 75839
903-389-3928

NOTICE OF APPROVAL
OF
ON-SITE SEWAGE FACILITY

PERMIT # RC 01007

Property Owner

James W. Brown

Mailing Address

1401 Danbury Dr.
Mansfield, Tx. 76063

Property Location

Lot 37
The Wilderness
Freestone County, Texas

This serves to notify all persons that the on-site sewage facility owned by the above has satisfied design, construction, and installation requirements of the Texas Natural Resource Conservation Commission (TNRCC) and the District Waste Control Order. This Tarrant Regional Water District On-Site Sewage Facility Permit is issued for the operation of the above identified on-site sewage facility.

ANY MODIFICATIONS TO THE SYSTEM STRUCTURE, OR ITS COMPONENTS, MAY REQUIRE A NEW PERMIT. The owner must notify this office of the aforementioned changes.

ADDITIONAL INFORMATION:

Authorized District Representative

Mark A. Brown

Date

3-1-00

TARRANT REGIONAL WATER DISTRICT
Rt 1 Box 1660, Streetman, Texas 75859
903-389-3928

ON-SITE SEWAGE FACILITY PROGRAM

AEROBIC SYSTEM INSPECTION REPORT

PROPERTY OWNER: <u>JAMES BROWN</u>	PERMIT NUMBER: <u>RC01007</u>
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I. SEWER		Y	N
CLEANOUTS PROPERLY INSTALLED:		✓	
PROPER TYPE PIPE FROM STRUCTURE TO DISPOSAL SYSTEM: <u>4" Sch 40</u>		✓	
SLOPE OF SEWER 1/4 TO 1/8 INCH PER FOOT:		✓	
II. PRETREATMENT		Y	N
IS PRETREATMENT REQUIRED?		✓	
TANK PROPERLY PLUMBED?		✓	
TANK SIZE REQUIRED: <u>500 GAL</u>	TANK SIZE INSTALLED: <u>500 GAL</u>	**	**
TANK TYPE: <u>CONCRETE</u>	MANUFACTURER: <u>JACKSON</u>	**	**
III. AEROBIC TREATMENT UNIT		Y	N
UNIT SIZE REQUIRED: <u>500</u> GPD	UNIT SIZE INSTALLED: <u>500</u> GPD	**	**
MANUFACTURER: <u>CLEARSTREAM</u>		**	**
MODEL NUMBER: <u>500N</u>	SERIAL NUMBER: <u>26764-05</u>	**	**
TYPE OF AERATOR: <u>CLEARSTREAM</u>	SERIAL NUMBER: <u>30462</u>	**	**
HIGH WATER ALARM INSTALLED?	(check type) ☒ LIGHT ☐ SOUND	✓	
FILTER INSTALLED (if required)?		✓	
ALARM WIRING SEPARATE FROM PUMP?		✓	
CHLORINATOR PROPERLY INSTALLED?		✓	
CHLORINE TABLETS IN PLACE?		✓	
IV. PUMP TANK			
TANK SIZE REQUIRED: <u>500</u>	TANK SIZE INSTALLED: <u>500</u>		
TYPE: <u>CONCRETE</u>	MANUFACTURER: <u>JACKSON</u>		
TYPE AND SIZE OF PUMP: <u>CLEARSTREAM 1/2 hp</u>			
V. APPLICATION AREA (SUB-SURFACE ONLY)			
AREA REQUIRED: <u>2400 FT²</u>	AREA INSTALLED: <u>3200 FT²</u>		
TYPE LINE INSTALLED: <u>Geo Flow "Classic"</u>			
LENGTH OF DRIP EMITTER LINE INSTALLED: <u>1600'</u>			
LENGTH OF LOW PRESSURE DOSING LINE INSTALLED: <u>N/A</u>			
SPACING OF LINE INSTALLED: <u>3"</u>			
DEPTH OF LINE INSTALLED: <u>6"</u>			

COMMENTS: _____

INSPECTED BY: M. Amodeo

DATE: 2-9-00

TARRANT REGIONAL WATER DISTRICT
Rt 1 Box 1660, Streetman, Texas 75859
903-389-3928

PROPERTY OWNER: <u>JAMES BROWN</u>	PERMIT NUMBER: <u>RC01007</u>
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On 2.9.00 an inspection was conducted on the on-site sewerage facility designed to serve your property.

System approval is DENIED until the following deficiency(s) is corrected and the system reinspected:

REVISE DESIGN

1) JACKSON PUMP TANK

2) 3200 FT² DISPOSAL AREA

Chapter 366, Subchapter D, Section 366.055 (b) of the Texas Health and Safety Code states that "An on-site sewage disposal system may not be used unless it is inspected and approved by the department or the authorized agent". Furthermore Section 366.056 (a) states that "The department or authorized agent may approve or disapprove the on-site disposal system depending on the results of the inspections under Section 366.055"; while 366.055 (b) states that "If a system is not approved under this section, the on-site sewage disposal system may not be used until all deficiencies are corrected and the system is reinspected and approved by the department or authorized agent".

All final permits are being held pending the correction of the above identified deficiency(s) and inspected and approved by this office. Use of the system without agency approval may result in the appropriate legal action being initiated.

Please contact our office at 903-389-3928 as soon as corrective actions are completed to arrange for an inspection to verify that the deficiencies have been corrected.

Mr. Paul
Inspector

[Signature]
Owner or Installer

**ON-SITE SEWAGE FACILITIES (OSSF)
SITE EVALUATION REPORT****Date:**

January 18, 2000

Applicant:

James Brown
c/o Jimmy Rash Construction Company
8628 South Highway 287
Corsicana, Texas 75110
(903) 872-5520

Permitting Authority:

Tarrant Regional Water District
Route 1, Box 1660
Streetman, Texas 75859
(903) 389-3928

Property Location:

130 Manassas Square (Lots 36 and 37, The Wilderness), Freestone County, Texas

Site Analysis:

Total site area: ~ 2.2 acres
Proposed depth of OSSF excavation: < 1 foot
Restrictive horizon present? No
Depth to restrictive horizon: None observed within 50 inches at soil test locations
Presence or evidence of groundwater? See notes on Soil Analysis Test No. 2
Existing or proposed well within 100 feet of proposed OSSF? No
Estimated slope in OSSF area: 8 percent
Presence of nearby ponds, streams or drainageways? None within 75 feet
Is the proposed OSSF in a FEMA 100-year flood plain? No

Soil Analysis:**Test No. 1:**

<i>Depth (inches)</i>	<i>Texture (USDA)</i>	<i>Soil Class (I through IV)</i>	<i>Structure (Class III)</i>	<i>Suitable/ Unsuitable</i>
0 - 12	fsl	II		suitable
12 - 22	sc	III	sub. blocky	suitable
22 - 40	scl	III	sub. blocky	suitable
40 - 50	fsl	II		suitable

Test No. 2:

<i>Depth (inches)</i>	<i>Texture (USDA)</i>	<i>Soil Class (I through IV)</i>	<i>Structure (Class III)</i>	<i>Suitable/ Unsuitable</i>
0 - 16	lfs	Ib		suitable
16 - 36	scl	III	sub. blocky	suitable
36 - 50	scl	III	sub. blocky	unsuitable*

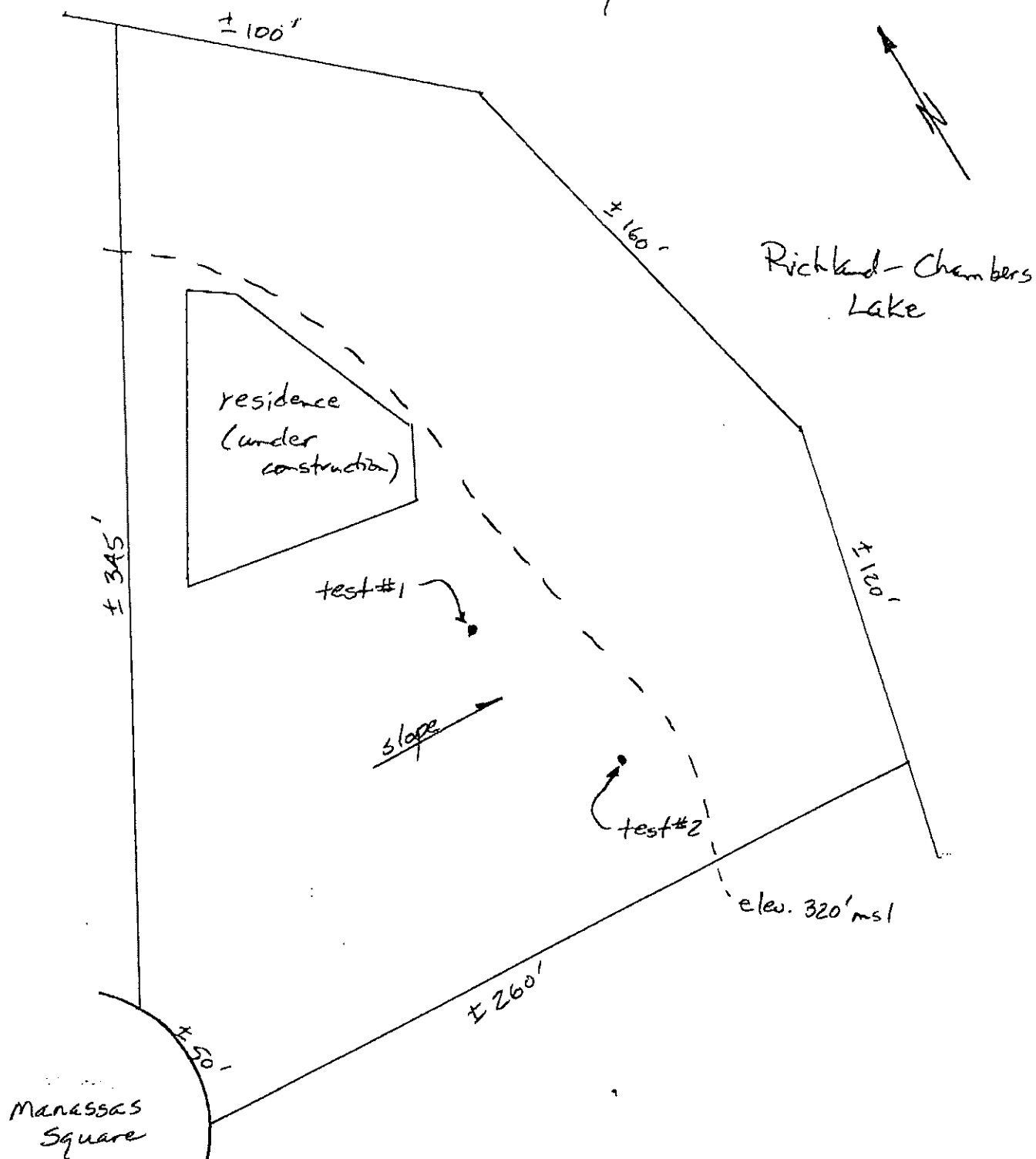
* - evidence of seasonal water table below 36 inches.

OVERALL SITE SUITABILITY:**Soil Criteria: Unsuitable (for standard soil absorption OSSF systems)****Site Criteria: Suitable****ATTESTED BY:**


Edward F. Janak, Jr., CPSS
200 North 13th Street, Suite 113
Corsicana, Texas 75110
(903) 874-0223
Registration No. OS7350

Note: The test data and other information contained in this report do not imply approval of the proposed OSSF. The design, construction and installation of each OSSF are based on specific conditions peculiar to the site in question. This report must be reviewed and approved by the permitting authority prior to initiating construction of the proposed OSSF.

130' Manassas Square (Lots 36 & 37, The Wilderness)
Freestone County, Texas
Site Evaluation map



Approximate scale: 1" = 50'

**PHILLIP MARLAR R.S.
REGISTERED PROFESSIONAL SANITARIAN
TEXAS REGISTRATION # 2604
PHONE (972) 452-8487
P.O. Box 274 SCURRY, TX. 75158**

Subsurface (Drip) Irrigation
On - Site Sewage Facility System Design

July 18, 1998

James Brown
130 Manassass Square
The Wilderness lot 34

Site Location: New System at above address

DESIGN PARAMETERS

Soil Evaluation - Class III Soil at application depth over class II & Ib soil
Number of Bedrooms - Square feet living area - 5,060 s.f.
Gallons per day - 420 gpd (6 bedroom design using water saving fixtures)
Application rate - .2 gal/sq ft / day
Required Disposal Area - 2,100 Sq. Ft.
Designed Disposal Area - 3,200 Sq. Ft.
2- Zones Zone 1- 1,600 sq. ft. Zone 2 - 1,600 sq. ft. = 3,200 Sq. Ft.
Zone 1- 400 Emitters 8.86 gpm Appl. Rate - .13 gal/sq ft / day
Zone 2- 400 Emitters 8.86 gpm Appl. Rate - .13 gal/sq ft / day

Drip irrigation standards for class III soil, require an application rate of .2 gal / sq ft / day. For a 6 bedroom home (5,060 sq ft living area), area based on 420 gpd divided by .2 gal/sq ft/day (dosing rate) = 2,100 sq.Ft.
1,600' of emitter line with 800 emitters at 4 sq ft of area per emitter = 3,200 sq ft field area.

SYSTEM PARAMETERS

Pre-treatment tank - 500 gallon concrete
Aeration Tank - 500 N Clearstream
Chlorinator - stackable - free flowing tablets
Pump tank - 500 gallon concrete
Pump - 1/2 H.P. Submersible "Clearstream"
Supply Line/Manifold Line/Backflush Line - 1" PVC SCH 40
Geo-Flow Wasteflow Drip Emitter Tubing
Emitter lines placed on 2' centers in lateral field
Filter - located in pump tank, automatic backwash (Spin filter - 150 Micron -operates at 20 psi)
Pressure regulator - set for 20 PSI
Vacuum breakers - each zone on highest elevation
Valve - Cam operated valve used to switch dosing from zone 1 to zone 2 then repeat cycle
Manual ball valves at lowest point each zone for backflushing
Pump on timer - pump to run for 8 min. every 4 hrs. (Approx. 6 doses per day)

SOIL ANALYSIS

Class III soil over class II & Ib soil

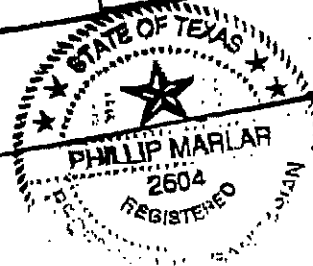
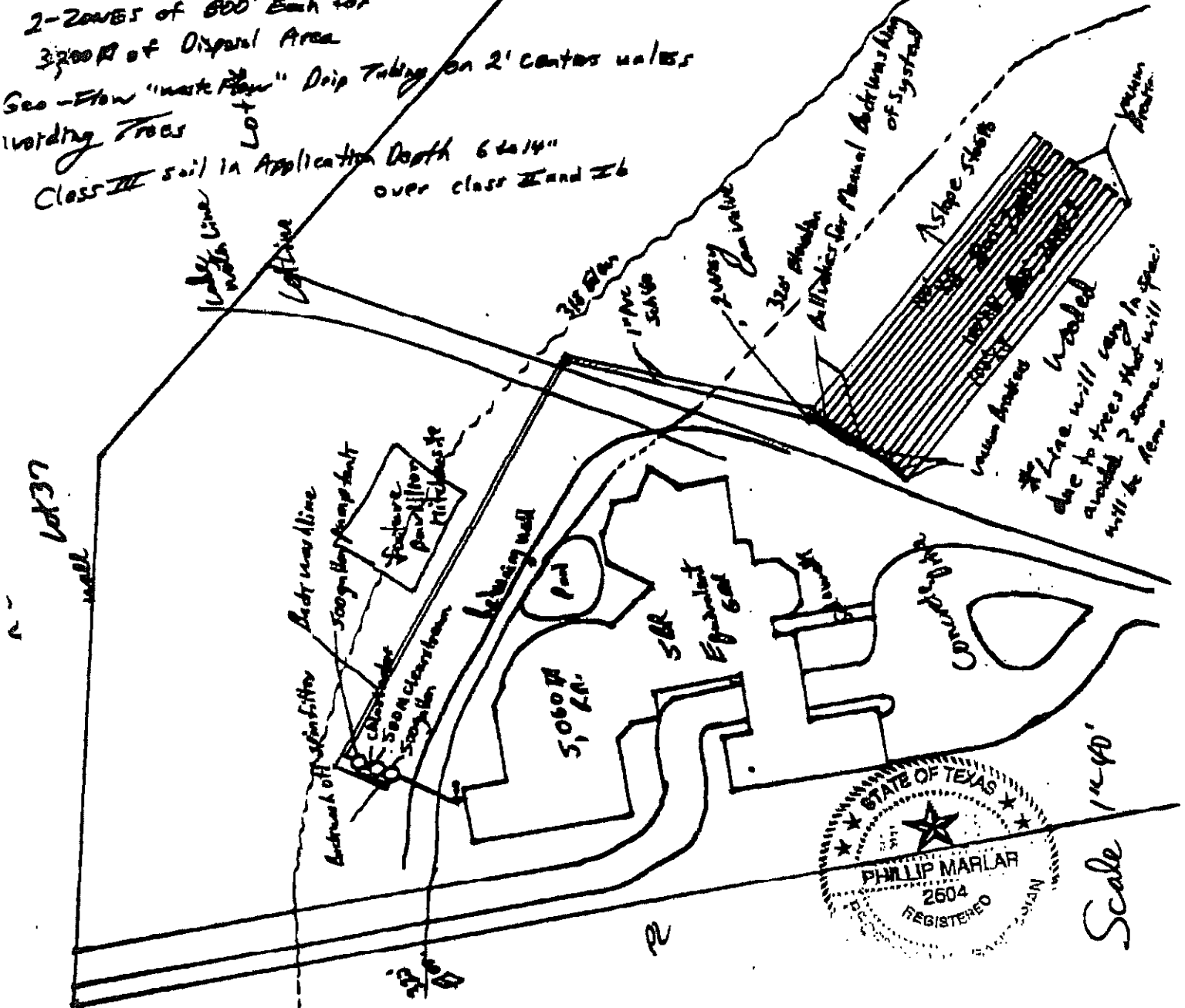


Phillip Marlar
#2604
2/25/00
Revised

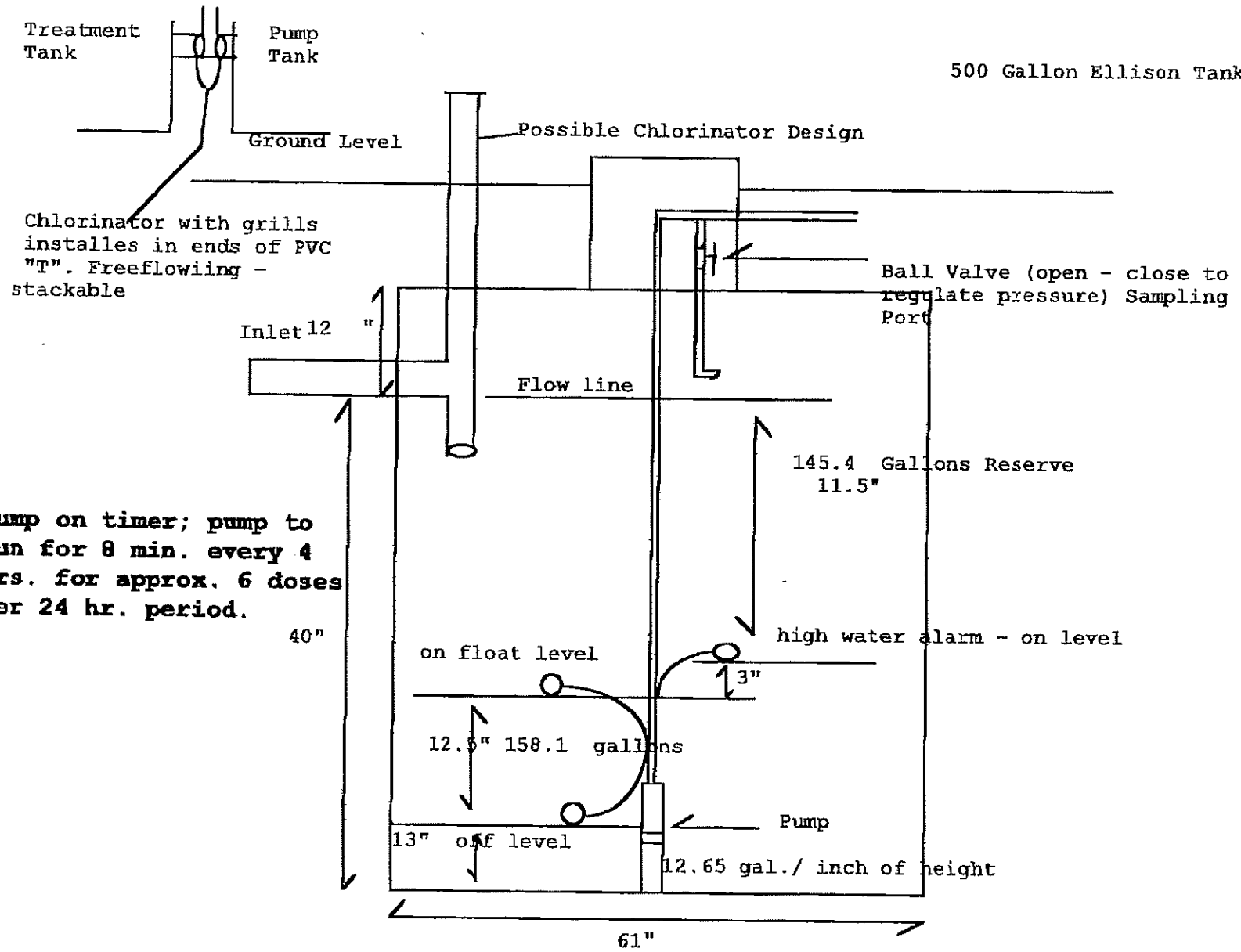
~~Philip Naylor~~
#2004
12-2-99
Revised 7/22/00
Philip Naylor

Lake

~~Water Line~~
~~Latline~~



Scale 1"=40'



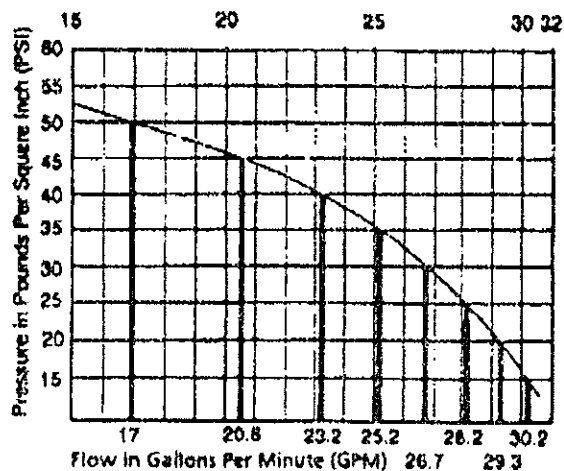
Phillip Marlar P.E.
#2604
2/25/00
Revised

Pump on timer; pump to run for 8 min. every 4 hrs. for approx. 6 doses per 24 hr. period.

Pump Time 8 minutes for 70.8 gallons at 8.86 gpm at 20 psi.	Total Head 70.01 FT at 8.86 gpm for 1" Sch 40 PVC piping.	1/2 HP Clearstream @ 8.86 gpm will deliver 134 FT total head.
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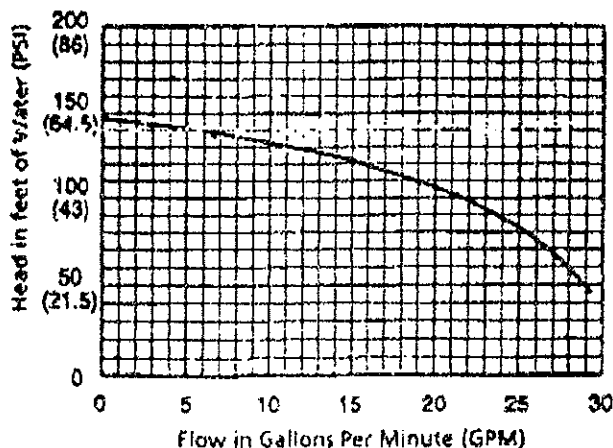
TROUBLESHOOTING GUIDE

PROBLEM	CHECK	CORRECTIVE ACTION
Motor will run but does not turn No voltage	No voltage at control box or disconnect switch. Electrical cable bad. Control box incorrectly wired.	Replace blown fuses or bad cable. Consult licensed electrician or serviceman. Reconnect control box correctly (see Wiring Installation Diagrams).
Fuses blow or overload protector trips when motor starts Wrong size fuse or wrong size time delay fuse. Wire size too small. Low or high voltage. Power supply wire leads not correctly connected to control box. Broken wire in control box. Pump or motor stuck or binding. Power supply wires or motor leads grounded, shorted, or open.	Check fuse size against chart, Page 2. Check wire size against chart, Page 3. Check that line voltage is within $\pm 10\%$ of nameplate rated voltage while motor is running. Check control box wiring diagram against incoming power hookup. Check power supply wire color coding. Examine all connections and wiring in control box. Check for locked shaft in pump. Consult licensed electrician or qualified serviceman.	Install correct fuse or time delay fuse. Install correct size wire. If voltage variation is greater than $\pm 10\%$, call power company or local hydro authority to adjust voltage. Reconnect leads to match wiring diagram in control box cover. Reconnect power supply wires so wire color code matches motor lead color code. Disconnect power and repair or replace faulty wire. If necessary, put pump (make all possible above ground checks first). If pump is locked, replace it. Clean tank of all sand or lime, or solids before reinstalling pump. Have a qualified serviceman or electrician make necessary cable repairs.
Fuses blow or overload protector trips when motor is running Low or high voltage. High ambient (atmospheric) temperature. Wire size too small.	Check that line voltage is within $\pm 10\%$ of rated nameplate voltage while motor is running. Check temperature of tank. Check wire size against chart, Page 3.	If voltage variation is more than $\pm 10\%$, call power company to adjust voltage. Protect tank from direct sunlight. Install correct wire size.
Pump starts too frequently Leaks in system. Level switch. Check valves leaking.	Check plumbing for leaks. Check for defective switch or switch out of adjustment. Make sure check valves are not leaking back.	Re-adjust or replace level switch. Replace check valves if necessary.
Little or no water delivered Check valve stuck or installed backwards Low voltage. Plugged intake screen. Check valve at pump discharge stuck. Worn impellers and diffusers. Pump doesn't develop enough pressure ("head"). Plugged impellers	Examine valve. Check voltage at control box with pump running. Check incoming wire size and power supply wire size against chart, Page 3. Pull pump and check condition of screen. Pull pump and examine check valve. Make sure system is clear of obstructions and pump is in solid water and operating normally. Check pump curve against operating conditions. Pull pump and examine impellers	If stuck, free valve; if installed backwards, reverse it. Install larger wire from meter to control box. Install larger wire from control box to pump. If necessary, have power company raise supply voltage. Clean or replace as necessary. Free check valve. Replace pump. Replace pump with "higher head" pump. Clean impellers or replace pump stack.



Performance in GPM at Various Sprinkler Pressures in PSI

PSI	15	20	25	30	35	40	45	50
GPM	30.2	29.3	28.2	26.7	25.2	23.2	20.6	17



Performance in Feet of Head at Gallons per Minute

GPM	0	5	10	15	20	25
Feet Hd	147	140	132	122	112	81

TWO YEAR INITIAL SERVICE POLICY

Date: 1-17-00

Our firm, Jimmy Rosh Const., will inspect and service your Clearstream System for the first two years from the date of installation. There will be 3 inspections made each year for this initial two year period. Effluent quality inspection will include a visual inspection for color, turbidity, sludge build up, scum overflow and odor. Mechanical and electrical inspection and service include inspecting aerator, air filter, and alarm panel and replacing or repairing any component not found to be functioning correctly.

Upon expiration of this policy, our firm will offer a continuing service policy on a yearly basis to cover labor for normal maintenance and repairs on a year by year basis.

Violations of warranty include shutting off the electric current to the system for more than 24 hours, disconnecting the alarm system, restricting ventilation to the aerator, overloading the system above its rated capacity, or introducing excessive amounts of harmful matter into the system, or any other form of unusual abuse.

THIS POLICY DOES NOT INCLUDE PUMPING
SLUDGE FROM UNIT IF NECESSARY.

Service Dealer:

Owner:

Karen H. Brown

130 Manassas Sq.

Streetman Tx

Jimmy Rosh

8628 S. Hwy 287

CORSICANA, TX 75110