



TEXAS ASSOCIATION OF REALTORS®

INFORMATION ABOUT ON-SITE SEWER FACILITY

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CONCERNING THE PROPERTY AT 123 Billingsley Hts
Cedar Creek, TX 78612-3806

A. DESCRIPTION OF ON-SITE SEWER FACILITY ON PROPERTY:

- (1) Type of Treatment System: ☐ Septic Tank ☒ Aerobic Treatment ☐ Unknown
☐ _____
- (2) Type of Distribution System: 2 Sprinkler Heads ☐ Unknown
- (3) Approximate Location of Drain Field or Distribution System: In backyard ☐ Unknown

- (4) Installer: _____ ☒ Unknown
- (5) Approximate Age: 12 yrs ☐ Unknown

B. MAINTENANCE INFORMATION:

- (1) Is Seller aware of any maintenance contract in effect for the on-site sewer facility? ☒ Yes ☐ No
If yes, name of maintenance contractor: David Johnson
Phone: 512-243-1190 contract expiration date: March 2017
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? November 2013
- (3) Is Seller aware of any defect or malfunction in the on-site sewer facility? ☐ Yes ☒ No
If yes, explain: _____

- (4) Does Seller have manufacturer or warranty information available for review? ☐ Yes ☒ No

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 permit to operate an on-site sewer facility transferred to the buyer.**

(TAR-1407) 1-7-04

Initialed for Identification by Buyer _____, _____ and Seller [Signature], CS Page 1 of 2

RE/MAX Bastrop Area, 87 Loop 150 West Bastrop, TX 78602

Phone: 512.921.9134

Fax: 512.366.9613

Janis Penick

Produced with ZipForm® by zipLogix 18070 Fifteen Mile Road, Fraser, Michigan 48026 www.zipLogix.com

Stout

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.

<u>Facility</u>	Usage (gal/day) without water- <u>saving devices</u>	Usage (gal/day) with water- <u>saving devices</u>
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.

 25 Apr 2016

Signature of Seller Date
Daniel Stout

 4-25-16

Signature of Seller Date
Cilka Stout

Receipt acknowledged by:

Signature of Buyer Date

Signature of Buyer Date

CURVE	RADIUS
C-1	335.00'
C-2	335.00'
C-3	335.00'
C-4	25.00'
C-5	25.00'
C-6	25.00'
C-7	60.00'
C-8	60.00'
C-9	60.00'
C-10	60.00'
C-11	60.00'
C-12	25.00'
C-13	25.00'
C-14	330.00'
C-15	330.00'
C-16	330.00'

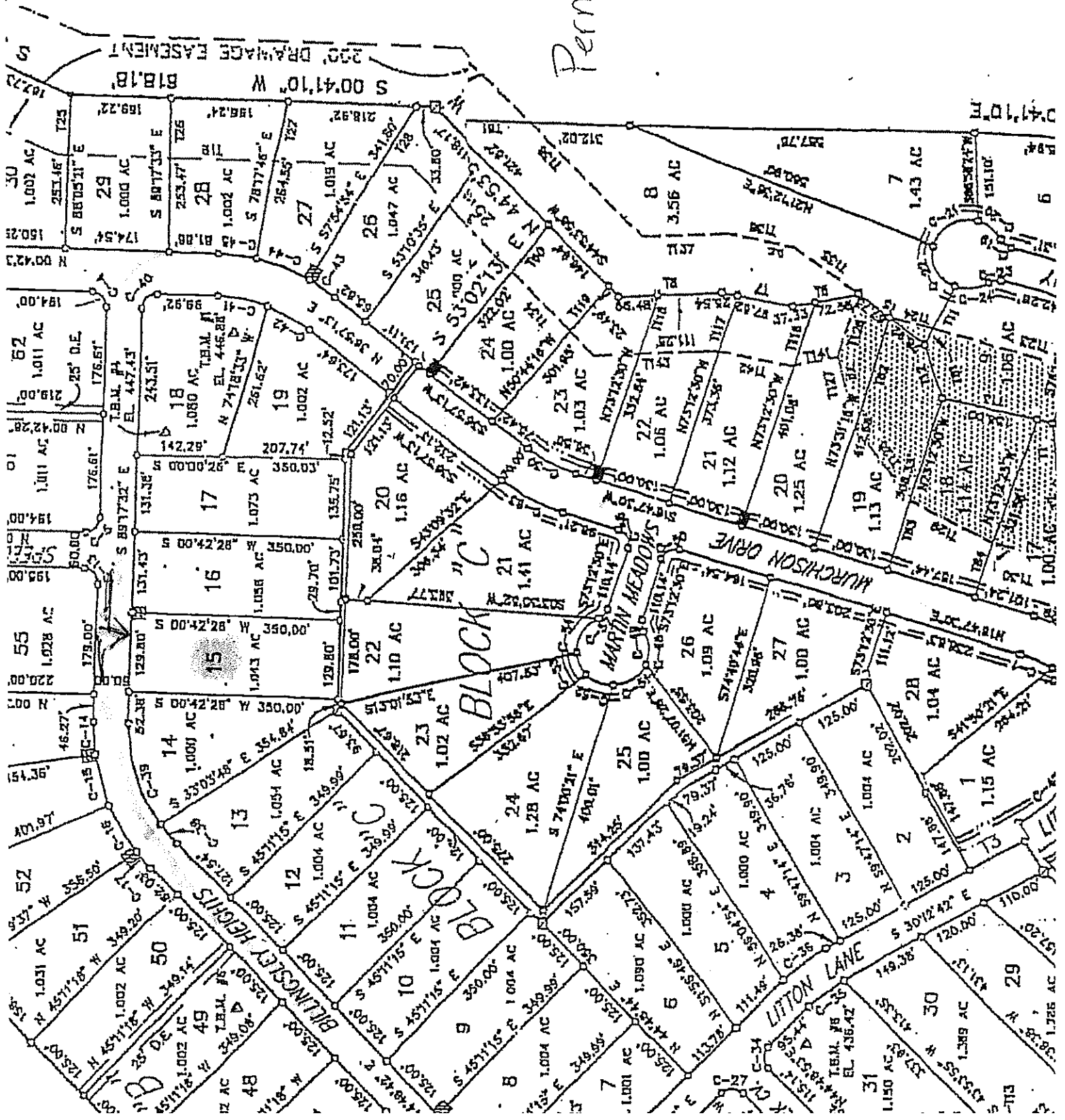
BLOCK "A"

Permit # 2004-294

1

81.768 ACRES

BLOCK "A"



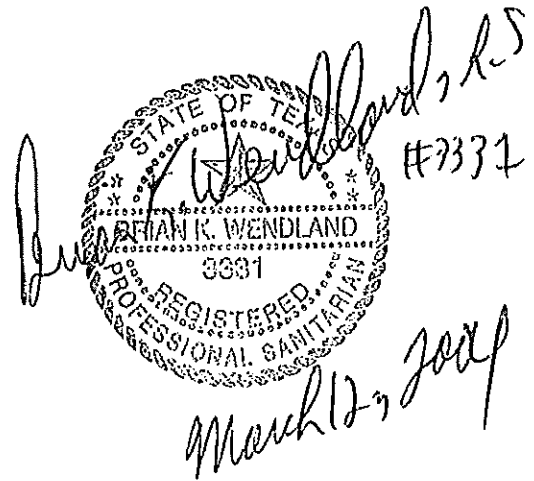
**Brian K. Wendland, R.S.
Septic Designs
2105 Murray Ave.
Rockdale, Texas 76567
(512) 826-8425**

March 12, 2004

Name: Centex Homes
Site Address: 123 Billingsley Heights
City: Cedar Creek
Mailing Address: 8140 N. Mopac Bldg. 4 Ste—150-B Austin, TX---78759
Phone: (512) 795-0170
County: Bastrop
Subdivision: Hobbs Creek Subdivision----Lot 15 Block C
Area of lot: 1 ± Acres
Bedroom Number: 3
Square feet of heated space in house: less than 2500 heated square feet
Water usage per day: 240 gallons
Effluent load rate: .064 (max.)
Water Saving Devices Installed: Yes
New Construction: Yes
Remodel? No
Well on site? No
Presence of sharp slopes and/or break in grade: No
Lakes, ponds, streams on site: No
Presence of 100 year floodplain: No
Slope of disposal area: ~2 %

Installer: Chris Schneider
OS 6836

Phone: (512) 848-8355



Required OSSF Calculations

Required surface area for spray irrigation (minimum):

Whereas: Required surface area in square feet for spray irrigation
equal to:

$$Q/R_i$$

Where Q = estimated daily water usage in gallons
R_i = effluent loading rate in gal/sq. ft./day

Therefore: $240 / .064 = 3750$ sq. ft. of surface application area required.

Actual square feet of application area designed: 4534 sq. ft.

WHEREAS:

38' Radius of 2 spray semi-circles

Of semi-circles: 2 (180° per semi-circle)

Area of semi-circle (in square feet) = (radius x radius)(3.14) ÷ 2

Therefore: $(38' \times 38')(3.14) = 4534$ sq. ft. per circle / 2 = 2267 square feet per semi-circle

2267 ft^2 per semi-circle X 2 semi-circles = 4534 ft^2 for 2 semi-circles

Therefore: 4534 total square feet of spray area designed

Dosing Rate

Two spray nozzles used in this design—every nozzle is a low angle trajectory nozzle and EVERY NOZZLE is a #6 nozzle.

#6 nozzle (2 of them spraying 38' radius) 6.5 gpm (each nozzle) @ 40 psi = **13.0 gpm**

Dosing Duration

240 gallons per day / 13.0 gpm dosing rate = ~18.46 minutes (dosing duration)

Verification of Proper application rate of effluent per designed spray area

nozzle #1 = 18.46 minutes X 6.5 gpm = 120 gallons distributed / 2267 square feet spray area = .053 gallons of effluent per square feet of application area----OK

nozzle #2 = 18.46 minutes X 6.5 gpm = 120 gallons distributed / 2267 square feet spray area = .053 gallons of effluent per square feet of application area----OK

NOTE: The rate of application of effluent SHALL NOT exceed .064 gallons per day per square foot

Design Parameters

Treatment Unit:

Aqua-Safe 500 (Model 4+ 75)

Aeration Chamber:

included in treatment unit

Pre-treatment tank required:

included in treatment unit

Pump Tank:

included in treatment unit

Pump:

½ HP (Model # 20DOM05121) (Dominator)(115 Volt)

Sprinkler nozzles:

K-Rain #6 low angle trajectory spray head (12°)

Sprinkler drive units:

Model # K2

Chlorination:

Tablet-type within pump tank

Length of Supply Line: Approximately 93'

PLEASE SEE NEXT PAGE FOR TOTAL DYNAMIC HEAD CALCULATIONS

Please note: All 38' radius spray nozzles shall use K-Rain #6 nozzles at 40 psi

Pressure Setting Method

PLEASE NOTE: SAMPLING VALVE SHALL REMAIN CLOSED DURING PRESSURE SETTING PROCEDURE.

1. If so said fitting isn't already installed-----Install a fitting (that will accept a pressure gauge) on treated effluent supply line located in pump tank OR the fitting can be installed within a covered valve box cover that contains the supply line.
2. Install a pressure gauge into the fitting.
3. If not provided already---Install a gate or ball valve (1.25") within the effluent supply line.
4. turn pump "on" and let system spray and equalize.
5. Set system pressure at 40 psi using the installed gate or ball valve (while observing the gauge).
6. Turn pump "off" and remove pressure gauge from fitting.
7. Install a "plug" into the fitting used for gauge
8. Remove handle from gate or ball valve to prevent tampering with pressure.

Effluent Sampling Procedure

Samples shall be obtained via sampling valve located within pump tank---The only time this valve shall be opened is during obtainment of a sample.

Soil / Site Evaluation

Site and soil evaluation conducted by independent site evaluator.

Class Soil: Class IV soil was observed during the site & soil evaluation along with presence of groundwater----owner selected aerobic spray irrigation.

Water Supply

Public water supply located on the property will service the residence.

Setbacks

Please refer to table X for setback information

A commercial irrigation timer is required and spray heads shall be at least 10' from property lines and may not encroach easements.

The following total dynamic head calculations are based upon the following:

1. System flow of 13 GPM
2. 1.25" sch 40 PVC
3. 40 psi system pressure

Pipe Friction Head

~90 feet of pipe from pump tank to 1st spray nozzle-----13 gpm

1.05 psi pressure drop X 2.31 X 0.90 = 2.18 ft. friction head X 1.2(misc.losses)= ~ **2.62 ft. head**

~3 feet of pipe from the first spray nozzle to the next spray nozzle

13 GPM – 1(6.5gpm) = 6.5 GPM

0.29 psi pressure drop X 2.31 X 0.03 = 0.02 ft. friction head X 1.2(misc.losses)= ~ **0.024 ft. head**

System Head

40 psi X 2.31 ft. of head= ~ **92.4 ft. of head**

Elevation Head

~ 5.5 ft. (+) to ground level (from pump-off level of pump tank)

~ 0.0 ft. (-) drop in elevation from pump tank to furthest spray head from tank

(+) 5.5 ft. of elevation head

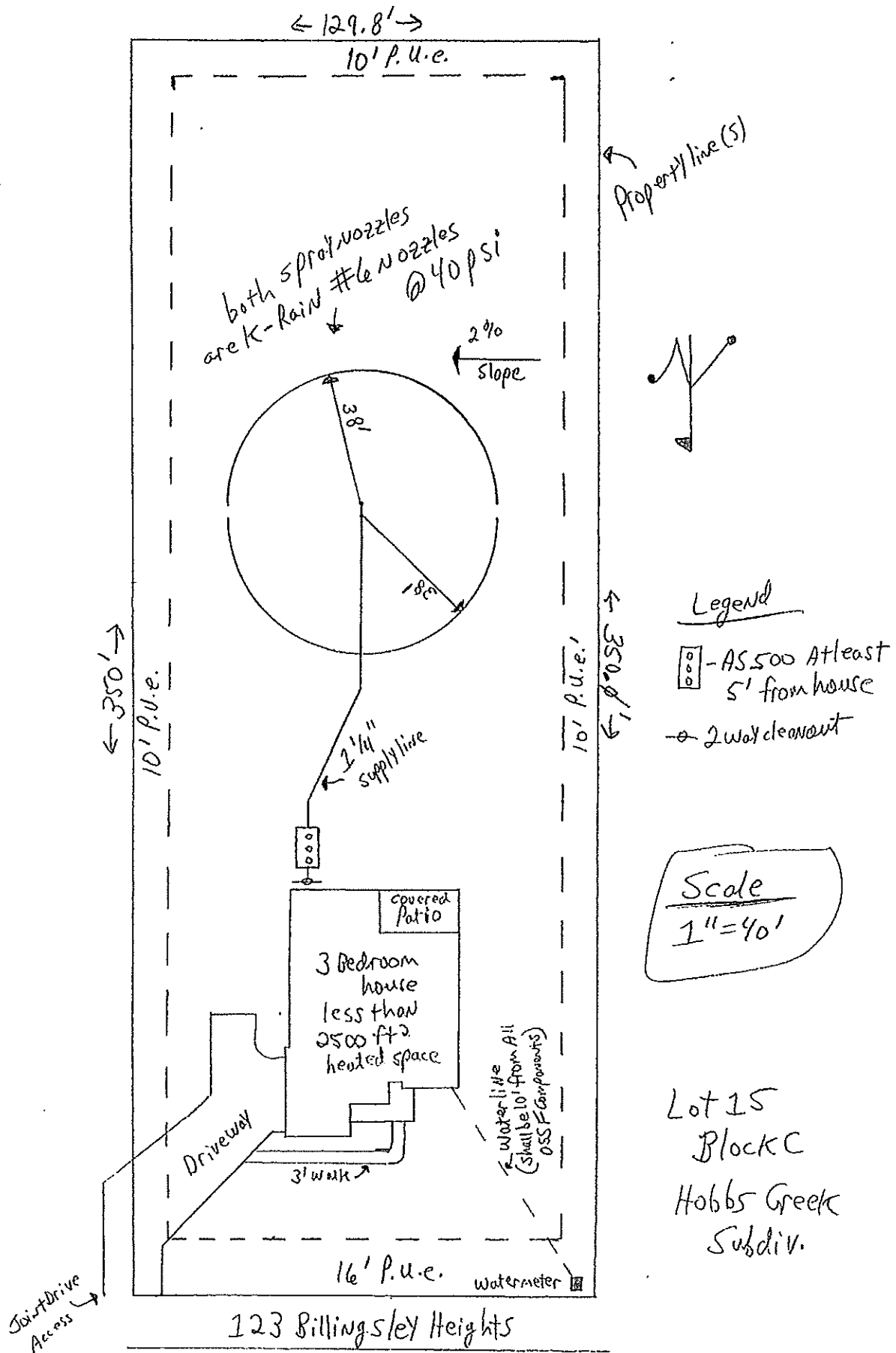
Total head = ~100.5 feet of head @ 13 GPM

- High water alarm shall be audible and visible. ✓
- An aural and visual alarm shall be located on the chlorinator to notify residents that chlorinator is low on chlorine and/or lacks chlorine. ✓
- Distribution piping, fittings, valve box covers, and sprinkler tops shall be permanently colored purple to identify the system as a reclaimed water system. ✓
- Distribution piping shall be installed below ground surface
- Hose bibs shall *not* be connected to the distribution piping outside the pump tank

The location of sprinkler heads and/or OSSF components may be subject to location modification as needed so long as the modification does not violate any required setbacks/distances/easements and/or required spray area.

Operational Requirements

- Do not treat the OSSF Spray irrigation as if it were a normal city sewer system.
- The OSSF system shall be operated according to the specifications of the manufacturer. Failure to adhere to this may cause system failure.
- Do not dispose of any objects or materials other than toilet paper and human excreta in the toilets. (This includes but isn't limited to sanitary napkins, cigarette butts, etc.).
- The use of Garbage disposals / grinders should be avoided as these units add additional and significant amounts of grease, fats, solids, and/or other organic/inorganic materials to the system. **The use of garbage grinders / disposals may also cause total system failure.**
- If a water softener is used at the residence, water softeners SHALL NOT be back flushed into the OSSF aerobic spray irrigation system (no matter the type) as this may cause failure of the system. Furthermore, the warranty may be voided if water softener back flush is directed into the aerobic OSSF system.
- Do not add any treatments such as biological and/or chemical additives (bacteria, enzymes, yeasts, acids, bases, surfactants, solvents, etc.) to the system as these compounds may cause system failure.
- Soaps, detergents, bleaches, drain cleaners, etc. as normally used in the household should not have an appreciable effect on the system, i.e., large doses of these substances into the system should be avoided.
- Do not operate heavy machinery and/or vehicles on any part of the aerobic OSSF unit.

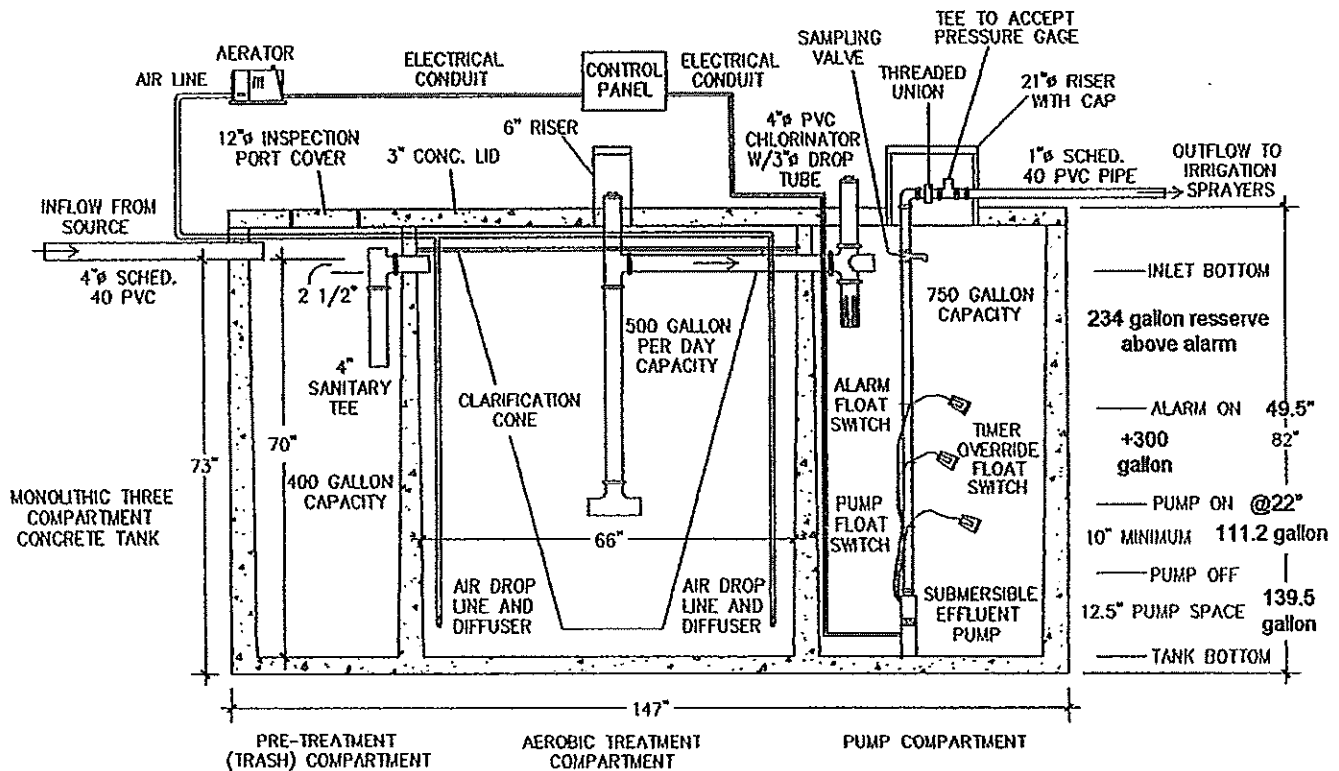


Project
 Project No. Drawing No. ASS-S-75-CONS
 Scale 1/2" = 1'-0" Date 09/23/91

Texas Concrete Tank

5264 Hwy 71 E.
 Del Valle, TX 78617
 (512)247-4193
 (512)247-4163 fax

AquaSafe AS 500 4+75



note: 67" from inside bottom of pump chamber to bottom of inlet to pump chamber.

*credit it given to top of inlet for capacity 750 gallon/ 67"=11.12 gal./in.

$$11.12 \times 3" = 33.36 \text{ gal.}$$

AQUA SAFE SINGLE TANK THREE COMPARTMENT TREATMENT UNIT

750.0 gal
 + 33.36 gal
 783.4 gal
 total capacity
 of pump chamber