Preliminary Field Check For Drip Systems

DATE: 4/2/25

INSPECTOR: Hendry

COMMENTS: Probing in the area of the proposed drip field showed an average of 8” of soil above a restrictive horizon.

Olvera,Brandon

From: Olvera,Brandon
Sent: Tuesday, April 1, 2025 2:38 PM
To: Greg Johnson; 'pgmav93231@gmail.com'
Subject: 118434

Property Owner/Agent

Our office will be conducting a site visit on 04-02-2025 prior to the issuance of the Permit to Construct.

Thank You,

| **Brandon Olvera** | **Designated Representative OS0034792** | Comal County | www.cceo.org |
| 195 David Jonas Dr, New Braunfels, TX-78132 | t: 830-608-2090 | f: 830-608-2078 | e: olverb@co.comal.tx.us |

COMAL COUNTY
ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

		118434
Date Received	*Initials*	*Permit Number*

Instructions:

Place a check mark next to all items that apply. For items that do not apply, place "N/A". This OSSF Development Application Checklist **must** accompany the completed application.

OSSF Permit

☒ Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate

☒ Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer

☒ Planning Materials of the OSSF as Required by the TCEQ Rules for OSSF Chapter 285. Planning Materials shall consist of a scaled design and all system specifications.

☒ Required Permit Fee - See Attached Fee Schedule

☒ Copy of Recorded Deed

☒ Surface Application/Aerobic Treatment System

- ☒ Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public
- ☒ Signed Maintenance Contract with Effective Date as Issuance of License to Operate

I affirm that I have provided all information required for my OSSF Development Application and that this application constitutes a completed OSSF Development Application.

Signature of Applicant

02/27/2025
Date

___ COMPLETE APPLICATION

Check No._____ Receipt No._____

INCOMPLETE APPLICATION
___ (Missing Items Circled, Application Refused)

Revised: September 2019

RECEIVED
By Kathy Griffin at 12:09 pm, Feb 27, 2025

COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

195 DAVID JONAS DR
NEW BRAUNFELS, TX 78132
(830) 608-2090

Date September 18, 2024 Permit Number 118434

1. APPLICANT / AGENT INFORMATION

Owner Name	PETER GUY VALENTINO	Agent Name	GREG JOHNSON, P.E.
Mailing Address	123 PEARL	Agent Address	170 HOLLOW OAK
City, State, Zip	NEW BRAUNFELS TEXAS 78132	City, State, Zip	NEW BRAUNFELS, TEXAS 78132
Phone #	814-720-4028	Phone #	830-905-2778
Email	pgmav93231@gmail.com	Email	gregjohnsonpe@yahoo.com

2. LOCATION

Subdivision Name DEER MEADOWS Unit PHASE 5A Lot 287 Block

Survey Name / Abstract Number Acreage

Address 178 BAMBI LANE City CANYON LAKE State TX Zip 78133

3. TYPE OF DEVELOPMENT

☒ Single Family Residential

Type of Construction (House, Mobile, RV, Etc.) MOBILE HOME

Number of Bedrooms 3

Indicate Sq Ft of Living Area 1800

☐ Non-Single Family Residential

(Planning materials must show adequate land area for doubling the required land needed for treatment units and disposal area)

Type of Facility

Offices, Factories, Churches, Schools, Parks, Etc. - Indicate Number Of Occupants

Restaurants, Lounges, Theaters - Indicate Number of Seats

Hotel, Motel, Hospital, Nursing Home - Indicate Number of Beds

Travel Trailer/RV Parks - Indicate Number of Spaces

Miscellaneous

Estimated Cost of Construction: $ 150,000 (Structure Only)

Is any portion of the proposed OSSF located in the United States Army Corps of Engineers (USACE) flowage easement?

☐ Yes ☒ No (If yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)

Source of Water ☒ Public ☐ Private Well ☐ Rainwater Collection

4. SIGNATURE OF OWNER

By signing this application, I certify that:

- The completed application and all additional information submitted does not contain any false information and does not conceal any material facts. I certify that I am the property owner or I possess the appropriate land rights necessary to make the permitted improvements on said property.
- Authorization is hereby given to the permitting authority and designated agents to enter upon the above described property for the purpose of site/soil evaluation and inspection of private sewage facilities..
- I understand that a permit of authorization to construct will not be issued until the Floodplain Administrator has performed the reviews required by the Comal County Flood Damage Prevention Order.
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

Signature of Owner Date 2/24/2025

Revised January 2021

DEER MEADOWS, PHASE 5A, LOT 287

COMALCOUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

195 DAVID JONAS DR
NEW BRAUNFELS, TX 78132
(830) 608-2090
WWW CCEO ORG

Planning Materials & Site Evaluation as Required Completed By GREG W. JOHNSON, P.E.

System Description PROPRIETARY; AEROBIC TREATMENT AND DRIP TUBING

Size of Septic System Required Based on Planning Materials & Soil Evaluation

Tank Size(s) (Gallons) SOLAR AIR SA600LP Absorption/Application Area (Sq Ft) 2000

Gallons Per Day (As Per TCEQ Table 111) 240

(Sites generating more than 5000 gallons per day are required to obtain a permit through TCEQ.)

Is the property located over the Edwards Recharge Zone? ☐ Yes ☒ No

(if yes, the planning materials must be completed by a Registered Sanitarian (R.S.) or Professional Engineer (P.E.))

Is there an existing TCEQ approved WPAP for the property? ☐ Yes ☒ No

(if yes, the R.S. or P.E. shall certify that the OSSF design complies with all provisions of the existing WPAP.)

Is there at least one acre per single family dwelling as per 285.40(c)(1)? ☐ Yes ☒ No

If there is no existing WPAP, does the proposed development activity require a TCEQ approved WPAP? ☐ Yes ☒ No

(if yes, the R.S or P.E. shall certify that the OSSF design will comply with all-provisions of the proposed WPAP. A Permit to Construct will not be issued for the proposed OSSF until the proposed WPAP has been approved by the appropriate regional office.)

Is the property located over the Edwards Contributing Zone? ☒ Yes ☐ No

Is there an existing TCEQ approval CZP for the property? ☐ Yes ☒ No

(if yes, the P.E. or R.S. shall certify that the OSSF design complies with all provisions of the existing CZP.)

If there is no existing CZP, does the proposed development activity require a TCEQ approved CZP? ☐ Yes ☒ No

(if yes, the R.S. or P.E. shall certify that the OSSF design will comply with all provisions of the proposed CZP. A Permit to Construct will not be issued for the proposed OSSF until the UP has been approved by the appropriate reg

Is this property within an incorporated city? ☐ Yes ☒ No

If yes, indicate the city: _____

STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

FIRM #2585

By signing this application, I certify that:

- The information provided above is true and correct to the best of my knowledge.
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

Signature of Designer

February 14, 2025
Date

Revised March 2024

AFFIDAVIT

THE COUNTY OF COMAL
STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

According to Texas Commission on Environmental Quality Rules for On-Site Sewage Facilities (OSSF's), this document is filed in the Deed Records of Comal County, Texas.

I

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on Environmental Quality (TCEQ) to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the commission primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The commission, under the authority of the TWC and the Texas Health and Safety code, requires owner's to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the commission requires a recorded affidavit. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This recorded affidavit is not a representation or warranty by the commission of the suitability of this OSSF, nor does it constitute any guarantee by the commission that the appropriate OSSF was installed.

II

An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code §285.91(12) will be installed on the property described as (insert legal description):

5A UNIT/PHASE/SECTION _____ BLOCK 287 LOT DEER MEADOWS SUBDIVISION

IF NOT IN SUBDIVISION: _____ ACREAGE _____ SURVEY

The property is owned by (insert owner's full name): PETER GUY VALENTINO

This OSSF must be covered by a continuous maintenance contract for the first two years. After the initial two-year service policy, the owner of an aerobic treatment system for a single family residence shall either obtain a maintenance contract within 30 days or maintain the system personally.

Upon sale or transfer of the above-described property, the permit for the OSSF shall be transferred to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from the Comal County Engineer's Office.

WITNESS BY HAND(S) ON THIS 24 DAY OF February ,20 24

X _____
Owner(s) signature(s)

PETER GUY VALENTINO
Owner (s) Printed name (s)

PETER GUY VALENTINO SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 24 DAY OF February ,20 24

_____
Notary Public Signature

GREG W. JOHNSON
Notary Public, State of Texas
Comm. Expires 05-17-2026
Notary ID 124218310

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
02/27/2025 08:54:14 AM
TERRI 1 Pages(s)
202506005457

Bobbie Koepp

Countryside *Construction, Inc.*

300 Chapman Parkway, Canyon Lake, TX. 78133
Phone: 830-899-2615 or 1-888-379-3721 Fax: 830-899-6662

Septic System Service Agreement

In consideration of payment for this service contract, we will abide by and agree to its terms and conditions:

Name: PETER GUY VALENTINO **Address:** 178 BAMBI LANE
Sub-Div./County: DEER MEADOWS / COMAL **City, State, Zip Code** CANYON LAKE, TX 78133
Permit #: _____ TYPE, Model# & SIZE: SOLAR AIR SA600LP **Serial #:** _____
Phone: 814-720-4028

(X) Initial Two Year Service & Two Year Limited Warranty

Legal Description: DEER MEADOWS, PHASE 5A, LOT 287

The effective date of the initial maintenance contract shall be the date the License to Operate is issued.
This contract will be in effect **FROM:** LTO **TO:**_____
Countryside Construction, Inc. will provide the following:

- An inspection every (4) four months which will include: Servicing of the mechanical & electrical components as necessary to insure system is functioning as engineer designed, pulling and cleaning the Norweco Brand aerator shaft, cleaning compressor air filters of other brands, check chlorine, conduct solids test to determine if system should be pumped, back flushing tubing for drip irrigation fields and checking sprinklers on above ground systems.

1) **The property owner is responsible for "purchasing and keeping chlorine"** in the chlorinator, (if applicable). If the chlorine test reveals "No Chlorine" in the system, the property owner may incur an additional cost.
2) If any improper operation is observed (which cannot be corrected at that time) the property owner will be notified immediately of the conditions and the estimated cost.
3) ANY PARTS, WARRANTY OR NON-WARRANTY, FREIGHT CHARGES, LABOR OR SERVICE CALLS NOT PAID IN FULL AT THE END OF (30) DAYS SHALL REMAIN THE PROPERTY OF COUNTRYSIDE CONSTRUCTION AND AUTHORIZES CONTRACTOR TO REMOVE AND REPOSSESS ANY PARTS INSTALLED. CLIENT FURTHER AGREES TO PAY ANY LABOR COST OF THE INSTALLATION AND REASONABLE COST OF REMOVAL OF SAID PARTS.
4) THE SIGNING OF THIS SERVICE AGREEMENT AUTHORIZES COUNTRYSIDE CONSTRUCTION TO ENTER THE PROPERTY TO EXECUTE ALL TERMS OF THIS CONTRACT.

Countryside Construction, Inc., **will warranty installation** of the septic system to be according to state and county regulations and the designs approved by the county. **HOMEOWNER WILL BE RESPONSIBLE FOR SERVICE CALLS, LABOR AND SHIPPING COSTS ON ANY "WARRANTIED PARTS" EXCHANGED DURING WARRANTY.** All other components will be according to manufacturer's warranties.
Important: As Countryside Construction, Inc. cannot control **what or how much effluent** goes into this septic system, we cannot warranty how the system will function. Refer to manufacturers or installer's instructions, for suggestions on septic operation. If necessary, between inspections, it is the property owner's responsibility to clean the micron filters on drip irrigation systems. This service agreement does not cover the cost of "**service calls, labor or materials** that are required or **parts out of warranty**, the failure to maintain electrical power to the system, **sprinklers that are broken**, leaking, stopped-up or otherwise mal-functioning; or sewage flows exceeding the hydraulic/organic design capabilities and the input of non-biodegradable materials (solvents, grease, oil, paints, etc.), or any usage contrary to the requirements as advised by authorized service representative. Laboratory test work is available at an additional cost. Chlorine, filters, or parts that are out of warranty are available at a reasonable cost.
This contract does not include the pumping of a tank or of any compartment of a tank, or settlement of soil on or around any part of the system regardless of reason:
Violations of the warranty also include: disconnecting the alarm, restricting ventilation to the aerator, overloading the system above its rated capacity; or flooding by external means. Rodent, insect or fire ant damage or any other form of unusual abuse is a violation.
A renewal service contract should be "activated" (30) thirty days **before expiration** of existing contract. We will contact property owner prior to expiration of existing contract.

Serviced by: *Countryside Construction Inc.*
Walker Chapman – Installer's Licensee #OS0002929-OSSF Maintenance Provider Licensee #MP0000035

(X) _____ Print Name (X) PETER GUY VALENTINO Date: 2/24/2025
Property Owner Signature

(X) _____ Date: 2/24/25 Authorized Service Representative *(revised 08/13/2020)*

ON-SITE SEWERAGE FACILITY
SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: **September 18, 2024**

Site Location: **DEER MEADOWS, PHASE 5A, LOT 287**

Proposed Excavation Depth: **N/A**

Requirements:

At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area.
Locations of soil boring or dug pits must be shown on the site drawing.
For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.
Describe each soil horizon and identify any restrictive features on the form. Indicate depths where features appear.

SOIL BORING NUMBER **SURFACE EVALUATION**

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 – 8"	**III**	**CLAY LOAM**	**N/A**	**NONE OBSERVED**	**LIMESTONE @ 8"**	**BROWN**
1						
2						
3						
4						
5						

SOIL BORING NUMBER **SURFACE EVALUATION**

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	**SAME**		**AS**		**ABOVE**	
1						
2						
3						
4						
5						

I certify that the findings of this report are based on my field observations and are accurate to the best of my ability.

Greg W. Johnson, P.E. 67587-F2585, S.E. 11561

09/18/24
Date

OSSF SOIL EVALUATION REPORT INFORMATION

Date: September 19, 2024

Applicant Information:

Name: PETER GUY VALENTINO
Address: 123 PEARL
City: NEW BRAUNFELS State: TEXAS
Zip Code: 78132 Phone: (814) 720-4028

Site Evaluator Information:

Name: Greg W. Johnson, P.E., R.S, S.E. 11561
Address: 170 Hollow Oak
City: New Braunfels State: Texas
Zip Code: 78132 Phone & Fax (830)905-2778

Property Location:

Lot 287 Unit 5A Blk ___ Subd. DEER MEADOWS
Street Address: 718 BAMBI LANE
City: CANYON LAKE Zip Code: 78133
Additional Info.: _____

Installer Information:

Name: _____
Company: _____
Address: _____
City: _____ State: _____
Zip Code: _____ Phone _____

Topography: Slope within proposed disposal area: 10 %

Presence of 100 yr. Flood Zone:	YES ___ NO X
Existing or proposed water well in nearby area.	YES ___ NO X
Presence of adjacent ponds, streams, water impoundments	YES ___ NO X
Presence of upper water shed	YES ___ NO X
Organized sewage service available to lot	YES ___ NO X

I HAVE PERFORMED A THOROUGH INVESTIGATION BEING A REGISTERED PROFESSIONAL ENGINEER AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 (REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (EFFECTIVE DECEMBER 29, 2016).

GREG W. JOHNSON, P.E. 67587 - S.E. 11561

09/19/24
DATE

STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

FIRM #2585

DRIP TUBING SYSTEM
DESIGNED FOR:
PETER GUY VALENTINO
123 PEARL
NEW BRAUNFELS, TX 78132

SITE DESCRIPTION:
Located in Deer Meadows, Phase 3A, Lot 287, on Bambi Lane, the proposed system will serve a three bedroom mobile residence (1800sf.) situated in an area with shallow Type-III soil as described in the Soil Evaluation Report. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOSED SYSTEM:
A 3-inch SCH-40 pipe discharges from the residence into a Solar SA600 LP 600gpd aerobic plant containing a 376-gallon pretreatment tank, an aerobic treatment plant, and a 778-gallon pump chamber containing a submersible well pump. The well pump is activated by a time controller allowing the distribution ten times per day with an 8 minute run time with float setting at 240 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self flushing 100 micron disc filter (Arkal) then through a 1" SCH-40 manifold to a 2000sf. drip tubing field, with ***Netifim Bioline*** drip lines set approximately two feet apart with ***0.61 gph*** emitters set every two feet, as per the attached schematic. A pressure regulator PMR-MF 30psi installed in the pump tank on the manifold to the field will maintain pressure at 30 psi. A 1" SCH-40 return line is installed to continuously flush the system to the pump tank by throttling a 1" ball valve. Solids caught in the disc filter are flushed each cycle back to the trash tank. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Field area will be scarified and built up with 4" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil ***(NOT SAND)***. ***(A minimum of twelve inches required between rock and drip tubing.)*** The field area will be sodded with grass prior to system startup. **Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed.**

DESIGN SPECIFICATIONS:
Daily waste flow: 240 GPD Table III
Pretreatment tank size: 376 Gal
Plant Size: Solar 600LP 600 gpd (TCEQ Approved)

Pump tank size: 778Gal
Reserve capacity after High Level: 80 Gal (>1/3 day Req'd)
Application Rate: Ra = 0.2 gal/sf
Total absorption area: Q/Ra = 240 GPD/0.20 = 1200 sf. (Actual 2000 sf.)
Total linear feet drip tubing: 1000' ***Netifim Bioline*** drip tubing .61 GPH
Pump requirement: 500 emitters @ .61 gph @ 30 psi = 5.0833 gpm
Pump Requirement (cont.): FPS 0.5 hp submersible well pump
Dosing volume: 50-70 gal.

MINIMUM SCOUR VELOCITY (**MSV**) > 2 FPS
IN DRIP TUBING W/ NOM. DIA. 0.55" ID

MSV = 2 FPS (Πd↑2)/4*7.48 gal/cf*60 sec/min
MSV = 2(3.14159((.55/12)↑2)/4)*7.48*60
MSV = 1.5 gpm MIN FLOW RATE x 3 = 4.5 gpm

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

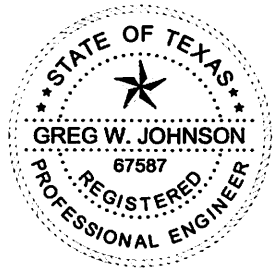
MSV = 2 FPS (Πd↑2)/4*7.48 gal/cf*60 sec/min
MSV = 2(3.14159((1.049/12)↑2)/4)*7.48*60
MSV = 5.4 GPM

PIPE AND FITTINGS:
All pipes and fittings in this drip tubing system shall be 1" schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plugging. Drip tubing 0.61 gph drip tubing to be used in field.

Designed in accordance with Chapter 285, Subchapter D, §285.30 and §285.40 Texas Commission on Environmental Quality (Effective December 29, 2016)

09/19/21

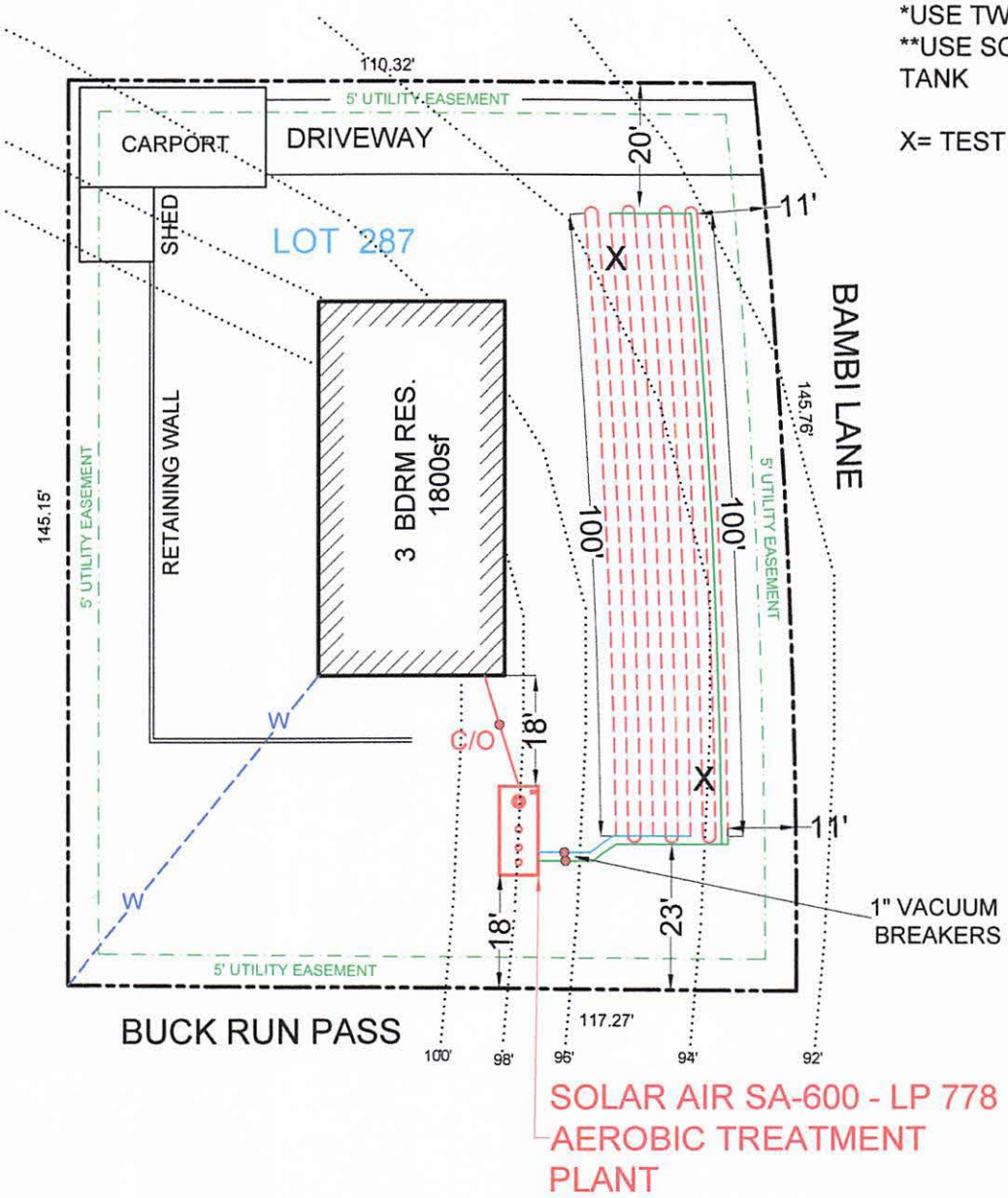
Greg W. Johnson, P.E. No. 67587 - F-2585
170 Hollow Oak
New Braunfels, Texas 78132
830/905-2778



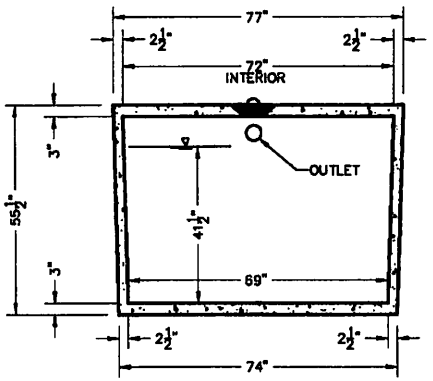
INSTALL 2000sf OF FIELD USING 1000' OF DRIP TUBING. THERE SHALL BE NO PARKING, DRIVING OR STORAGE ON THE SEPTIC FIELD AT ANY TIME FOR ANY REASON.

*USE TWO WAY CLEAN OUT
**USE SCH-40 OR SDR-26 TO TANK

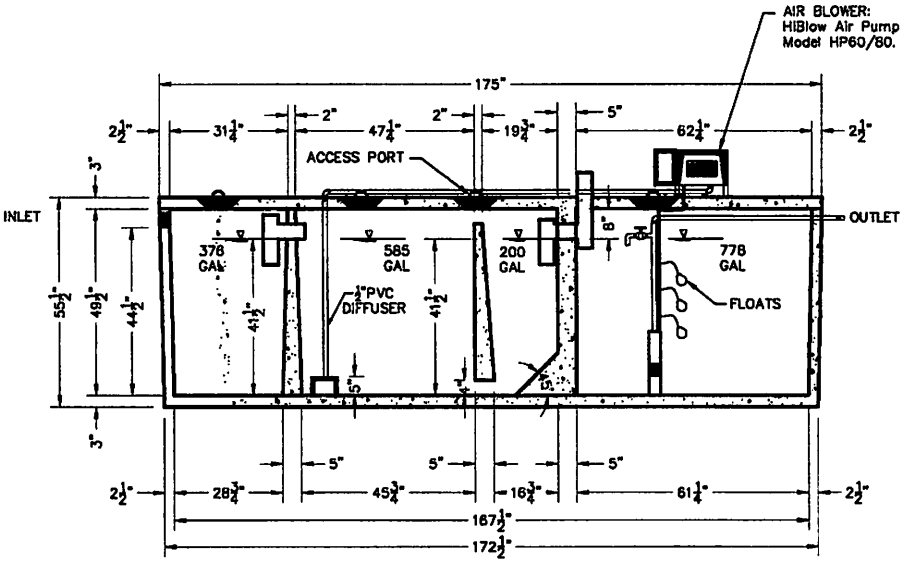
X= TEST HOLE



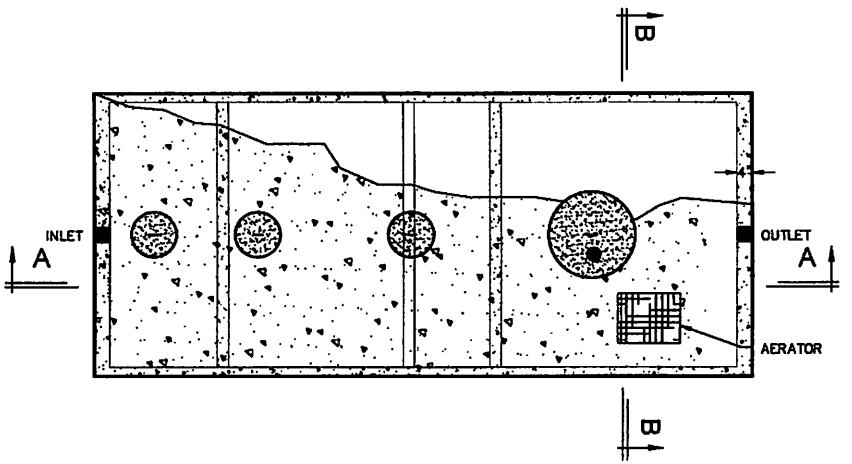
OWNER: PETER GUY VALENTINO					DRAWN BY: EJS III
STREET ADDRESS: 778 BAMBI LANE					
LEGAL DESC: DEER MEADOWS		UNIT/SECTION/PHASE: 5A		BLOCK:	LOT: 287
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=30'	DATE: 9/19/2024			REVISED: 2/14/2025



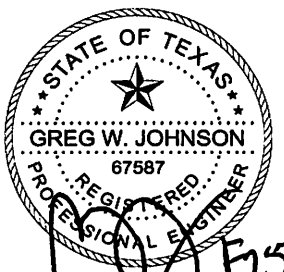
SECTION B-B



SECTION A-A



PLAN VIEW



F2585
09/19/24

DATE: DEC 2016
SHEET: SA-3
PROJECT NO
SCALE: 3/8" = 1'-0"
REVISIONS
DATE
BY

SOLAR AEROBIC
6754 HWY 90 EAST
LAKE CHARLES, LA 70615
PHONE: (337) 439-0680

MODEL SA 600LP
RESIDENTIAL WASTEWATER
TREATMENT SYSTEM

DESIGNER: ESC
DRAWN: ESC
CHECKED: ESC

TANK NOTES:

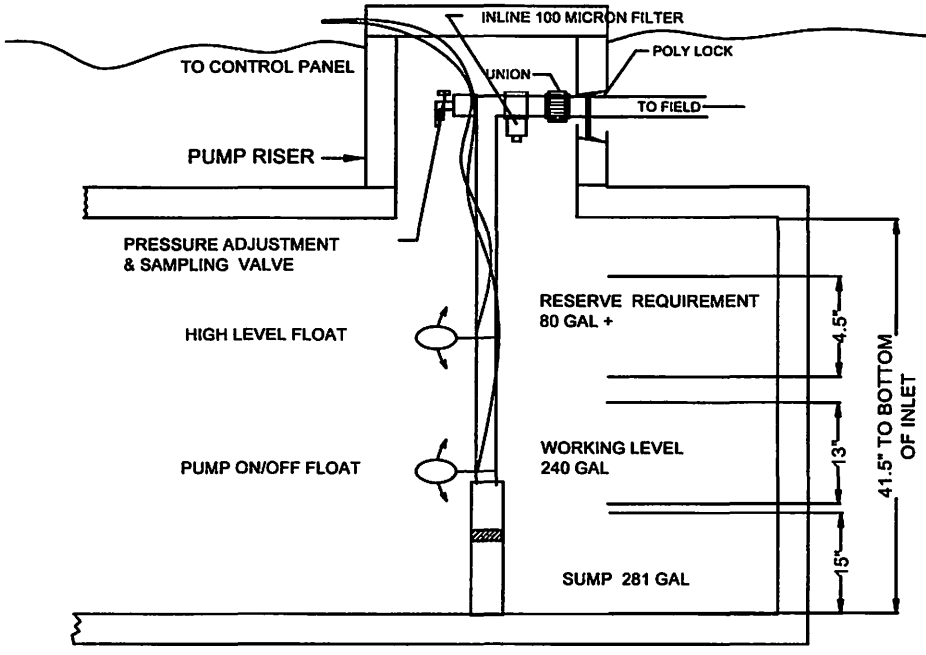
Tanks must be set to allow a minimum of 1/8" per foot fall from the residence.

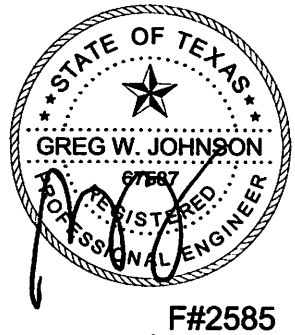
Tightlines to the tank shall be SCH-40 PVC.

A two way sanitary tee is required between residence and tank.

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

ALL WIRING MUST BE IN COMPLIANCE WITH
THE MOST RECENT NATIONAL ELECTRIC CODE





F#2585

09/19/24

TYPICAL PUMP TANK CONFIGURATION
SOLAR-AIR SA-600 LP 778 GAL PUMP TANK

Arkal 1" Super Filter

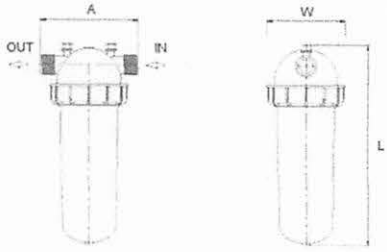
Catalog No. 1102 0_ _ _

Features

- A "T" shaped filter with two 1" male threads.
- A "T" volume filter for in-line installation on 1" pipelines.
- The filter prevents clogging due to its enlarged filtering area that collects sediments and particles.
- Manufactured entirely from fiber reinforced plastic.
- A cylindrical column of grooved discs constitutes the filter element.
- Spring keeps the discs compressed.
- Screw-on filter cover.
- Filter discs are available in various filtration grades.

Technical Data

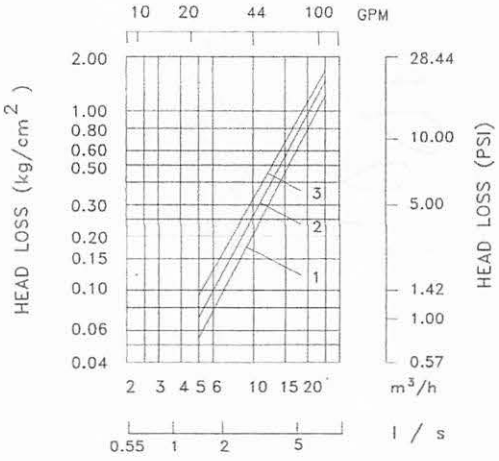
Inlet/outlet diameter	1" BSPT (male) 25.0 mm – nominal diameter 33.6 mm – pipe diameter (O. D.)	1" NPT (male)
Maximum pressure	10 atm	145 psi
Maximum flow rate	8 m^3/h (1.7 l/sec)	35 gpm
General filtration area	500 cm^2	77.5 in^2
Filtration volume	600 cm^3	37 in^3
Filter length L	340 mm	13 13/32"
Filter width W	130 mm	5 3/32"
Distance between end connections A	158 mm	6 7/32"
Weight	1.420 kg	3.13 lbs.
Maximum temperature	70° C	158 °F
pH	5-11	5-11



Filtration Grades

Blue (400 micron / 40 mesh)
Yellow (200 micron / 80 mesh)
Red (130 micron / 120 mesh)
Black (100 micron /140 mesh)
Green (55 micron)

Head Loss Chart



PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

Specifications

The pressure regulator shall be capable of operating at a constant, factory preset, non-adjustable outlet pressure of 6, 10, 12, 15, 20, 25, 30, 35, 40, 50, or 60 PSI (0.41, 0.69, 0.83, 1.03, 1.38, 1.72, 2.07, 2.41, 2.76, 3.45, or 4.14 bar) with a flow range between:

4 - 16 GPM (909 - 3634 L/hr) for 6 - 10 PSI models or
2 - 20 GPM (454 - 4542 L/hr) for 12 - 60 PSI models.

The pressure regulator shall maintain the nominal pressure at a minimum of 5 PSI (0.34 bar) above model inlet pressure and a maximum of 80 PSI (5.52 bar) above nominal model pressure*. Refer to the PRU performance curve to establish specific outlet pressures based on relative inlet pressure and flow rate. Always install downstream from all shut off valves. Recommended for outdoor use only. Not NSF certified.

All pressure regulator models shall be equipped with one of these inlet-x-outlet configurations:

Inlet	Outlet
¾-inch Female National Pipe Thread (FNPT)	¾-inch Female National Pipe Thread (FNPT)
1-inch Female National Pipe Thread (FNPT)	1-inch Female National Pipe Thread (FNPT)
1-inch Female British Standard Pipe Thread (FBSPT)	1-inch Female British Standard Pipe Thread (FBSPT)

The upper housing, lower housing, and internal molded parts shall be of engineering-grade thermoplastics with internal elastomeric seals and a reinforced elastomeric diaphragm. Regulation shall be accomplished by a fixed stainless steel compression spring, which shall be enclosed in a chamber isolated from the normal water passage.

Outlet pressure and flow shall be clearly marked on each regulator.

The pressure regulator shall carry a two-year manufacturer's warranty on materials, workmanship, and performance. Each pressure regulator shall be water tested for accuracy before departing the manufacturing facility.

The pressure regulator shall be manufactured by Senninger Irrigation in Clermont, Florida. Senninger is a Hunter Industries Company.

Physical

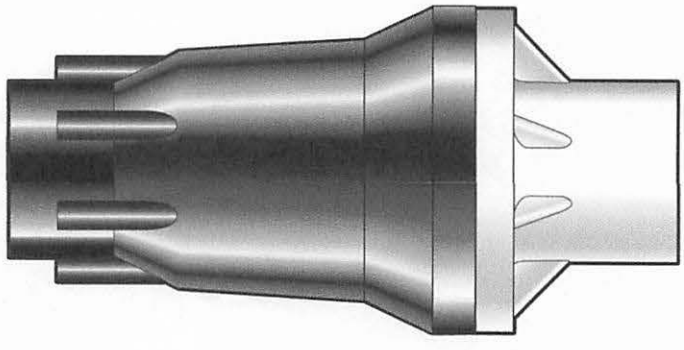
3/4" FNPT x 3/4" FNPT model *(shown on right)*

Overall Length	5.2 inches (13.1 cm)
Overall Width	2.5 inches (6.4 cm)

1" FNPT x 1" FNPT model

1" FBSPT x 1" FBSPT model

Overall Length	5.8 inches (14.6 cm)
Overall Width	2.5 inches (6.4 cm)



* Please consult factory for applications outside of recommended guidelines.

PMR-MF

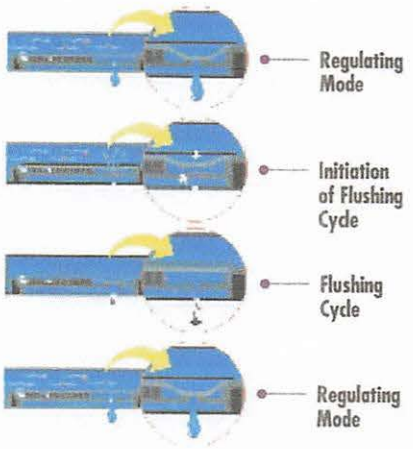
PRESSURE-MASTER REGULATOR - MEDIUM FLOW

Model Numbers

Model #	Flow Range	Preset Operating Pressure	Maximum Inlet Pressure
PMR-6 MF	4 - 16 GPM (909 - 3634 L/hr)	6 PSI (0.41 bar)	80 psi (5.51 bar)
PMR-10 MF	4 - 16 GPM (909 - 3634 L/hr)	10 PSI (0.69 bar)	90 psi (6.20 bar)
PMR-12 MF	2 - 20 GPM (454 - 4542 L/hr)	12 PSI (0.83 bar)	90 psi (6.20 bar)
PMR-15 MF	2 - 20 GPM (454 - 4542 L/hr)	15 PSI (1.03 bar)	95 psi (6.55 bar)
PMR-20 MF	2 - 20 GPM (454 - 4542 L/hr)	20 PSI (1.38 bar)	100 psi (6.89 bar)
PMR-25 MF	2 - 20 GPM (454 - 4542 L/hr)	25 PSI (1.72 bar)	105 psi (7.24 bar)
PMR-30 MF	2 - 20 GPM (454 - 4542 L/hr)	30 PSI (2.07 bar)	110 psi (7.58 bar)
PMR-35 MF	2 - 20 GPM (454 - 4542 L/hr)	35 PSI (2.41 bar)	115 psi (7.93 bar)
PMR-40 MF	2 - 20 GPM (454 - 4542 L/hr)	40 PSI (2.76 bar)	120 psi (8.27 bar)
PMR-50 MF	2 - 20 GPM (454 - 4542 L/hr)	50 PSI (3.45 bar)	130 psi (8.96 bar)
PMR-60 MF	2 - 20 GPM (454 - 4542 L/hr)	60 PSI (4.14 bar)	140 psi (9.65 bar)

NETAFIM™
Bioline® Dripperline

Pressure Compensating Dripperline for Wastewater



BioLine's Self-Cleaning, Pressure Compensating Dripper is a fully self-contained unit molded to the interior wall of the dripper tubing.

As shown at left, BioLine is continuously self-cleaning during operation, not just at the beginning and end of a cycle. The result is dependable, clog free operation, year after year.

Product Advantages

The Proven Performer

- Tens of millions of feet used in wastewater today.
- Bioline is permitted in every state allowing drip disposal.
- Backed by the largest, most quality-driven manufacturer of drip products in the U.S.
- Preferred choice of major wastewater designers and regulators.
- Proven track record of success for many years of hard use in wastewater applications.

Quality Manufacturing with Specifications Designed to Meet Your Needs

- Pressure compensating drippers assure the highest application uniformity - even on sloped or rolling terrain.
- Excellent uniformity with runs of 400 feet or more - reducing installation costs.
- Highest quality-control standards in the industry: Cv of 0.25 (coefficient of manufacturer's variation).
- A selection of flows and spacings to satisfy the designer's demand for almost any application rate.

Long-Term Reliability

- Protection against plugging:
  - Dripper inlet raised 0.27" above wall of tubing to prevent sediment from entering dripper.
  - Drippers impregnated with Vinyzene to prevent buildup of microbial slime.
  - Unique self-flushing mechanism passes small particles before they can build up.

Cross Section of Bioline Dripperline

Root Safe

- A physical barrier on each BioLine dripper helps prevent root intrusion.
- Protection never wears out - never depletes - releases nothing to the environment.
- Working reliably for up to 15 years in subsurface wastewater installations.
- Additional security of chemical root inhibition with Techfilter - supplies Trifluralin to the entire system, effectively inhibiting root growth to the dripper outlets.

Applications

- For domestic strength wastewater disposal.
- Installed following a treatment process.
- Can be successfully used on straight septic effluent with proper design, filtration and operation.
- Suitable for reuse applications using municipally treated effluent designated for irrigation water.

Specifications

Wall thickness (mil): 45*

Nominal flow rates (GPH): .4, .6, .9*

Common spacings: 12", 18", 24"*

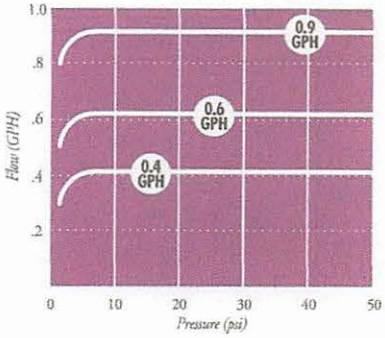
Recommended filtration: 120 mesh

Inside diameter: .570*

Color: Purple tubing indicates non-potable source

*Additional flows, spacings, and pipe sizes available by request. Please contact Netafim USA Customer Service for details.

BIOLINE Flow Rate vs. Pressure



NETAFIM™

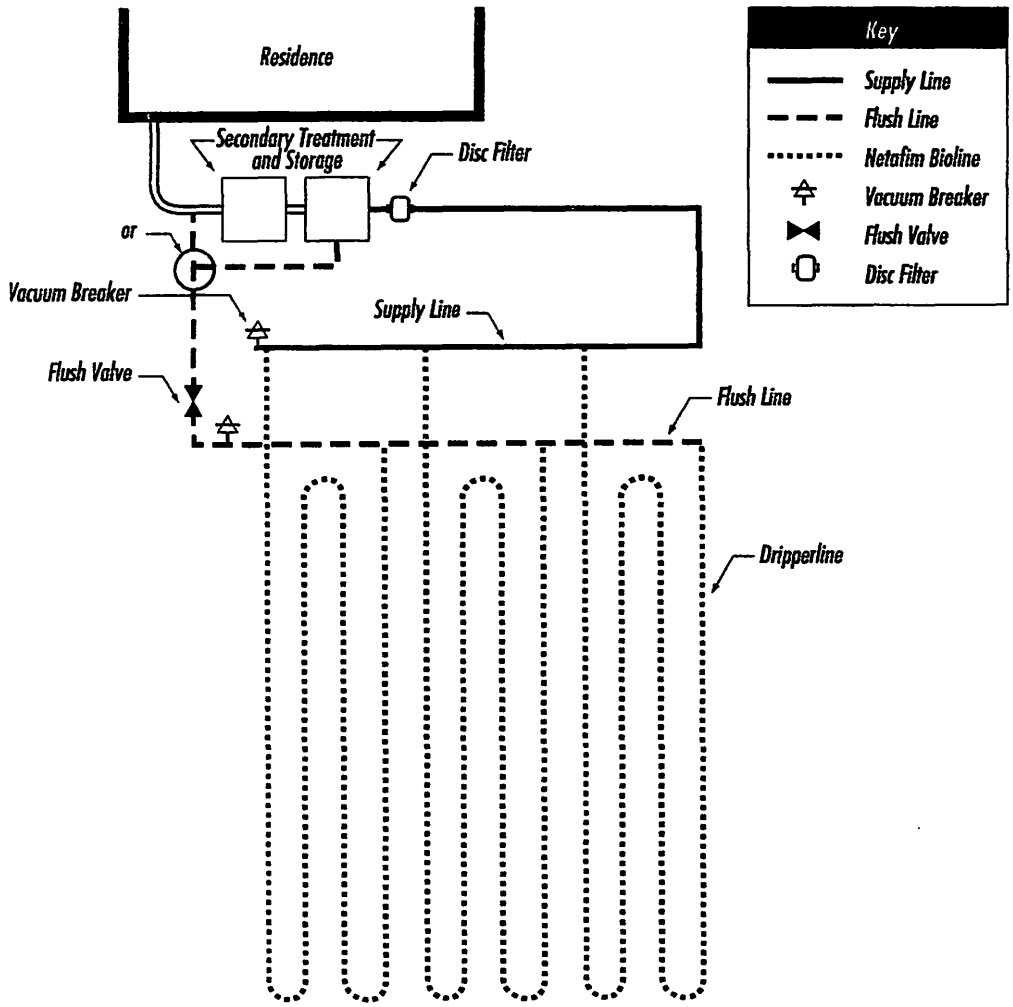
NETAFIM USA
5470 E. Home Ave. • Fresno, CA 93727
888.638.2346 • 559.453.6800
FAX 800.695.4753
www.netafimusa.com

SAMPLE DESIGNS

SINGLE TRENCH LAYOUT

Rectangular field with supply and flush manifold on same side and in same trench;

- Locate supply and flush manifold in same trench
- Dripperlines are looped at the end opposite the supply and flush manifolds
- The longest Bioline length should not exceed 400 ft. Drip fields 200 ft. in length might loop the Bioline once; drip dispersal fields under 100 ft. might be looped twice, as illustrated



ORT/GF# 1202 S6 /Closer NF /$

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS:
YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GENERAL WARRANTY DEED

THE STATE OF TEXAS §
KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF COMAL §

THAT **ASTRICT K. BRUNET and ANTONIO BRUNET, a married couple,** hereinafter called Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) cash and other good and valuable consideration in hand paid by **PETER GUY VALENTINO,** hereinafter called Grantee, the receipt and sufficiency of which is hereby acknowledged;

HAS GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL and CONVEY unto the said Grantee, the following described property, to-wit:

> **Lot 287 of DEER MEADOWS, PHASE 5-A,** a subdivision in Comal County, Texas according to the plat recorded in **Volume 7, Page 30** of the Map and Plat Records of Comal County, Texas.

This conveyance is made subject to, all and singular, the restrictions, conditions, easements and covenants, if any, applicable to and enforceable against the above described property as reflected by the records of the County Clerk of Comal County, Texas.

Taxes for the current year have been prorated and are thereafter assumed by Grantee.

TO HAVE AND TO HOLD the above described premises, together with, all and singular, the rights and appurtenances thereto in anywise belonging unto the said Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever.

Grantor does hereby bind Grantor, Grantor's heirs, executors, administrators, and successors to warrant and forever defend, all and singular, the said premises unto the said Grantee, Grantee's heirs, executors, administrators, successors, and assigns against any person whomsoever claiming or to claim the same or any part thereof, by through or under Grantor, but not otherwise.

DATED this the 9 day of **August, 2024.**

Astrict K. Brunet
ASTRICT K. BRUNET

ANTONIO BRUNET

STATE OF TEXAS

COUNTY OF Comal

This instrument was acknowledged before me on this the 9 day of **August, 2024,** by **ASTRICT K. BRUNET and ANTONIO BRUNET, a married couple.**

NAOMI M FLORES
Notary ID #10836394
My Commission Expires
April 22, 2025

Notary Public, State of Texas

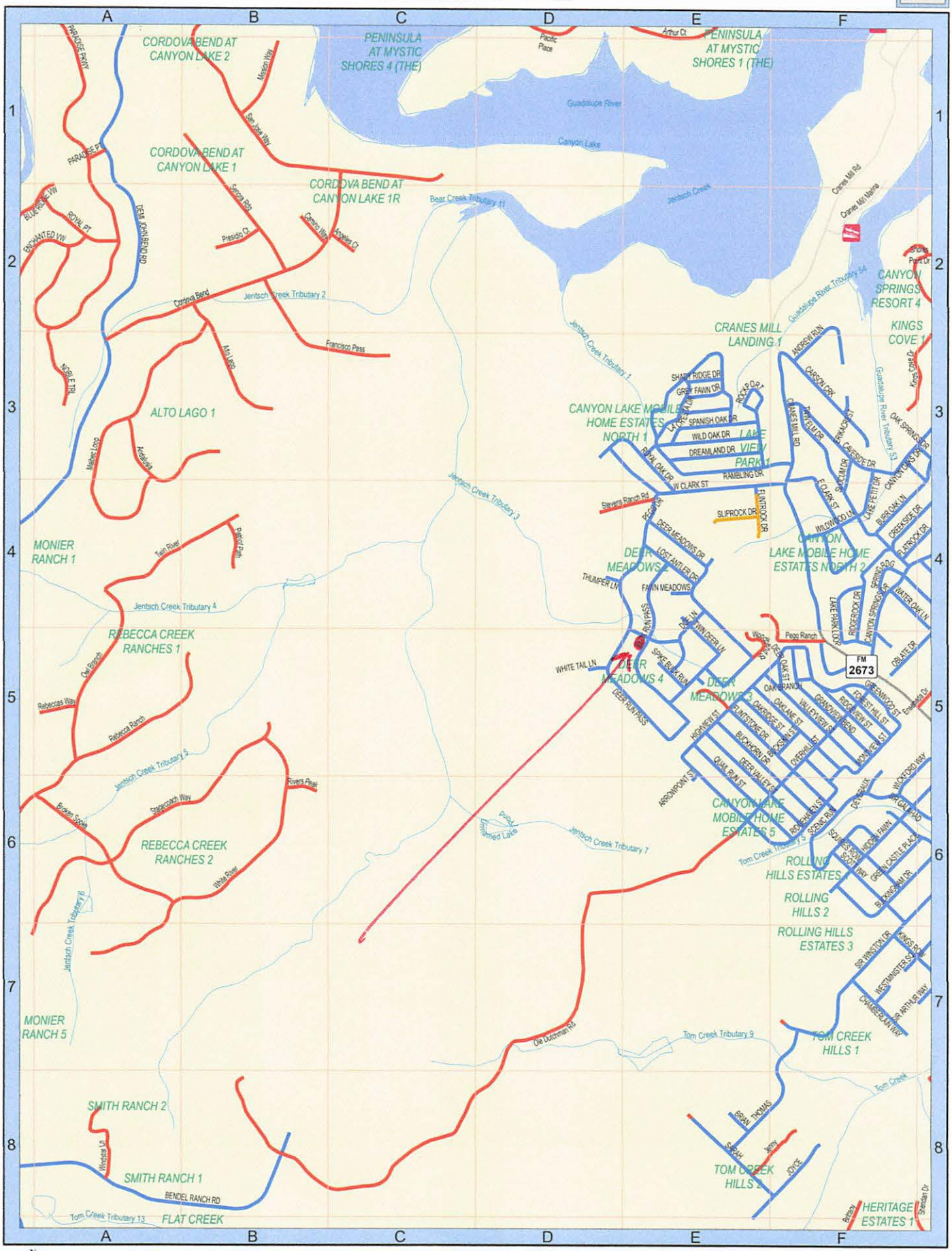
Grantee's Address:
123 Pearl
New Braunfels, TX 78132

2018 deeds
Old Republic Title (NF)
GF#1202SG

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/12/2024 09:24:58 AM
TERRI 2 Pages(s)
202406024226

Bobbie Koepp

↑ SEE PAGE27 ↑



SEE PAGE29

↓ SEE PAGE41 ↓

N
W E
S

0 1,250 2,500
Feet

0 0.25 0.5
Miles

Produced by the Comal County Engineer's Office - 7/17/2023