

Comal County Environmental Health

OSSF Inspection Sheet

Installer Name: _____

OSSF Installer #: _____

1st Inspection Date: _____

2nd Inspection Date: _____

3rd Inspection Date: _____

Inspector Name: _____

Inspector Name: _____

Inspector Name: _____

Permit#:

Address:

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
1	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Submitted Planning Materials		285.31(a) 285.30(b)(1)(A)(iv) 285.30(b)(1)(A)(v) 285.30(b)(1)(A)(iii) 285.30(b)(1)(A)(ii) 285.30(b)(1)(A)(i)				
2	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards		285.91(10) 285.30(b)(4) 285.31(d)				
3	SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)		285.32(a)(1)				
4	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot		285.32(a)(3)				
5	SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)		285.32(a)(5)				
6	PRETREATMENT Installed (if required) TCEQ Approved List PRETREATMENT Septic Tank(s) Meet Minimum Requirements		285.32(b)(1)(G) 285.32(b)(1)(E)(iii) 285.32(b)(1)(E)(iv) 285.32(b)(1)(F) 285.32(b)(1)(B) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(D) 285.32(b)(1)(E) 285.32(b)(1)(A) 285.32(b)(1)(E)(ii)(II) 285.32(b)(1)(E)(i) 285.32(b)(1)(E)(ii)(I)				
7	PRETREATMENT Grease Interceptors if required for commercial		285.34(d)				

Inspector Notes:

**Comal County Environmental Health
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
8	SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If Single Tank, 2 Compartments Provided with Baffle SEPTIC TANK Inlet Flowline Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements		285.32(b)(1) (E) 285.91(2) 285.32(b)(1) (F) 285.32(b)(1)(E) (iii) 285.32(b)(1)(E)(ii) (II) 285.32(b)(1)(E)(ii) (I) 285.32(b)(1)(E) (i) 285.32(b)(1) (D) 285.32(b)(1)(C) (ii) 285.32(b)(1)(C) (i) 285.32(b)(1) (B) 285.32(b)(1) (A) 285.32(b)(1)(E)(iv)				
9	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used		285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
10	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
11	SEPTIC TANK Secondary restraint system provided SEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions		285.38(d) 285.38(e)				
12	SEPTIC TANK Tank Volume Installed						
13	PUMP TANK Volume Installed						
14	AEROBIC TREATMENT UNIT Size Installed						
15	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number						
16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo-transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

**Comal County Environmental Health
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No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
19	DISPOSAL SYSTEM Drip Irrigation		285.33(c)(3)(A)-(F)				
20	DISPOSAL SYSTEM Soil Substitution		285.33(d)(4)				
21	DISPOSAL SYSTEM Pumped Effluent		285.33(a)(4) 285.33(a)(3) 285.33(a)(1) 285.33(a)(2)				
22	DISPOSAL SYSTEM Gravelless Pipe		285.33(a)(3) 285.33(a)(2) 285.33(a)(4) 285.33(a)(1)				
23	DISPOSAL SYSTEM Mound		285.33(a)(3) 285.33(a)(1) 285.33(a)(2) 285.33(a)(4)				
24	DISPOSAL SYSTEM Other (describe) (Approved Design)		285.33(d)(6) 285.33(c)(4)				
25	DRAINFIELD Absorptive Drainline 3" PVC or 4" PVC						
26	DRAINFIELD Area Installed						
27	DRAINFIELD Level to within 1 inch per 25 feet and within 3 inches over entire excavation		285.33(b)(1)(A)(v)				
28	DRAINFIELD Excavation Width DRAINFIELD Excavation Depth DRAINFIELD Excavation Separation DRAINFIELD Depth of Porous Media DRAINFIELD Type of Porous Media						
29	DRAINFIELD Pipe and Gravel - Geotextile Fabric in Place		285.33(b)(1)(E)				
30	DRAINFIELD Leaching Chambers DRAINFIELD Chambers - Open End Plates w/Splash Plate, Inspection Port & Closed End Plates in Place (per manufacturers spec.)		285.33(c)(2)				
31	LOW PRESSURE DISPOSAL SYSTEM Adequate Trench Length & Width, and Adequate Separation Distance between Trenches		285.33(d)(1)(C)(i)				

**Comal County Environmental Health
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No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
32	EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0% EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field (1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom) EFFLUENT DISPOSAL SYSTEM Lateral Depth of 18 inches to 3 ft. & Vertical Separation of 1ft on bottom and 2 ft. to restrictive horizon and ground water respectfully EFFLUENT DISPOSAL SYSTEM Lateral Drain Pipe (1.25 - 1.5" dia.) & Pipe Holes (3/16 - 1/4" dia. Hole Size) 5 ft. Apart		285.33(b)(3)(A) 285.33(b)(3)(A) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
33	AEROBIC TREATMENT UNIT Is Aerobic Unit Installed According to Approved Guidelines.		285.32(c)(1)				
34	AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions						
35	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.						
36	PUMP TANK Is the Pump Tank an approved concrete tank or other acceptable materials & construction PUMP TANK Sampling Port Provided in the Treated Effluent Line PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump						
37	PUMP TANK Inspection/Clean Out Port & Risers Provided PUMP TANK Secondary restraint system provided PUMP TANK Riser permanently fastened to lid or cast into tank PUMP TANK Riser cap protected against unauthorized intrusions						
38	PUMP TANK Secondary restraint system provided						
39	PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried						

**Comal County Environmental Health
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?		285.33(d)(2)(G)(iii)(II) 285.33(d)(2)(G)(iii)(III) 285.33(d)(2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iv) 285.33(d)(2)(G)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(I)				
41	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed		285.33(d)(2)(G) (i)285.33(d)(2) (A)285.33(d)(2)(F)				
42	APPLICATION AREA Area Installed						
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						



COMAL COUNTY

ENGINEER'S OFFICE

Permit of Authorization to Construct an On-Site Sewage Facility Permit Valid For One Year From Date Issued

Permit Number: 118774
Issued This Date: 07/29/2025
This permit is hereby given to: JACK E. & WHITNEY HENDERSON

To start construction of a private, on-site sewage facility located at:

149 OAK SUMMIT
CANYON LAKE, TX 78133

Subdivision: CANYON CREEK ESTATES
Unit: 1
Lot: 30
Block: 0
Acreage: 0.2300

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic
Drip Irrigation

This permit gives permission for the construction of the above referenced on-site facility to commence. Installation must be completed by an installer holding a valid registration card from the Texas Commission on Environmental Quality (TCEQ). Installation and inspection must comply with current TCEQ and Comal County requirements.

Call (830) 608-2090 to schedule inspections.



COMAL COUNTY
ENGINEER'S OFFICE

**OSSF DEVELOPMENT APPLICATION
CHECKLIST**

Staff will complete shaded items

		118774
<i>Date Received</i>	<i>Initials</i>	<i>Permit Number</i>

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

06/21/2025

Date

___ COMPLETE APPLICATION	
Check No. _____	Receipt No. _____

INCOMPLETE APPLICATION
___ (Missing Items Circled, Application Refeused)



COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

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

Date May 19, 2025

Permit Number 118774

1. APPLICANT / AGENT INFORMATION

Owner Name JACK E. HENDERSON & WHITNEY HENDERSON

Agent Name GREG JOHNSON, P.E.

Mailing Address c/o 167 OAK SUMMIT

Agent Address 170 HOLLOW OAK

City, State, Zip CANYON LAKE TEXAS 78133

City, State, Zip NEW BRAUNFELS TEXAS 78132

Phone # 512-749-7410

Phone # 830-905-2778

Email scot.rapid@gmail.com

Email gregjohnsonpe@yahoo.com

2. LOCATION

Subdivision Name CANYON CREEK ESTATES Unit 1 Lot 30 Block

Survey Name / Abstract Number Acreage

Address 149 OAK SUMMIT City CANYON LAKE State TX Zip 78133

3. TYPE OF DEVELOPMENT

☒ Single Family Residential

Type of Construction (House, Mobile, RV, Etc.) HOUSE

Number of Bedrooms 3

Indicate Sq Ft of Living Area 1204

☐ 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: \$ 240,000 (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



COMAL COUNTY
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) FUJI CE5 & AK750 PUMP Absorption/Application Area (Sq Ft) 2000

Gallons Per Day (As Per TCEQ Table III) 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 P.E. or R.S. 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 CZP has been approved by the appropriate regional office.)

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

If yes, indicate the city: _____



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

May 21, 2025
Date

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 (OSSFs), 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):

1 UNIT/SECTION BLOCK 30 LOT CANYON CREEK ESTATES SUBDIVISION

IF NOT IN SUBDIVISION: ACREAGE SURVEY

The property is owned by (insert owner's full name): JACK E. HENDERSON & WHITNEY HENDERSON

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 13 DAY OF JUNE, 20 25

[Signature]
[Signature]
Owner(s) signature(s)

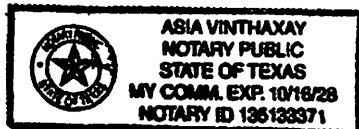
JACK E. HENDERSON

WHITNEY HENDERSON

Owner (s) Printed name (s)

JACK E. & WHITNEY HENDERSON SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 13 DAY OF JUNE, 20 25

[Signature]
Notary Public Signature



Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
06/19/2025 11:17:06 AM
MARY 1 Pages(s)
202506018646



Bobbie Koepp

RECEIVED

By Brandon Olvera at 11:16 am, Jul 29, 2025



By Cody Young LLC

To: JACK E. & WHITNEY HENDERSON
CANYON CREEK ESTATES, UNIT 1, LOT 30

Site: 149 OAK SUMMIT, CANYON LAKE, TX 78133
County: COMAL
Installer: PAUL SWOYER SEPTICS
Agency: COMAL (CCEO)
Mfg./Brand: FUJI CE5

Level 1 Contract

This service contract for the On-Site Sewage-facility, (OSSF), located at the site stated above. OSSF is to be inspected and serviced at regular intervals under a licensed provider. Special emergency service is to be provided within 48 hours of notification by the homeowner or the owner's agent. The initial contract is for (2) years from the date of final septic system inspection. Renewals shall be for a period of 2 years at the current rate and remain in effect for the specified dates listed. From FROM DATE OF until 2 YEARS FROM DATE OF
LICENSE TO OPERATE LICENSE TO OPERATE

Contract price \$700

Service Program Includes:

1. Regular site inspection at 4-month intervals for residential septic system.
2. OSSF maintenance: check aerator components for proper operation, control panel, effluent pump, spray head/drip nozzle. Check Proprietary specific components. Check pumps, check spray heads, check, and clean any Filters, check bull run valves and any other valves. Flush drain field if needed.
3. Visual inspection of control panel, (when accessible).
4. Labor expenses required at the home to maintain, repair, or remove any part of the control center or mechanical aerator to be returned for factory repair.
5. Labor expenses required at the home to service, repair, or install any part of the control panel or aerator returned from factory.
6. All maintenance reports will be emailed to the permitting authority & customer within 14 days of inspection.

RECEIVED

By Brandon Olvera at 11:16 am, Jul 29, 2025

Client Responsibilities:

1. Special service calls after the (at the 4-month intervals) stated in item #1.
2. BODs or TSS grab samples, (if needed).
3. Freight costs to and from factory, for component repair.
4. Costs for replacing damaged or missing parts and repairing any equipment not under any specified warranty.
5. Pumping out any or all the OSSF by a licensed waste hauler.
6. The Homeowner is responsible for maintaining the chlorinator and providing proper chlorine supply if required.
7. Securing pets so that maintenance functions can be performed safely for the technician, and the pet. If pets are present in the yard, and the owner is not on site to secure the animals, it is necessary to cancel the maintenance.
8. Securing pets so that maintenance functions can be performed safely for the technician, and the pet. If pets are present in the yard, and the owner is not on site to secure the animals, and it is necessary to cancel the maintenance, there will be a \$75 trip charge.
9. Insuring access to the property, always to the maintenance provider. (Gates, chains with locks, codes, etc.)

Miscellaneous Provisions

1. This contract can be terminated by either party in writing, within 30 days' notice. Contracts that are terminated will include notification in writing to the Authority having Jurisdiction, the Manufacturer of the system, and the other party.

Homeowner: _____

Date: 6/13/25

Phone: (512) 749-7410 Email: _____

Maintenance Provider: Milo Young, License #MP0002338

Septic Pumping & Maintenance by Cody Young

911 RR3404

Kingsland, TX 78639

(325)248-8740

ON-SITE SEWERAGE FACILITY SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: May 20, 2025

Site Location: CANYON CREEK ESTATES, UNIT 1, LOT 30

Proposed Excavation Depth: N/A

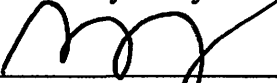
Requirements:

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

SOIL BORING NUMBER <u> </u> SURFACE EVALUATION <u> </u>						
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

05/20/25
Date

Preliminary Field Check For Drip Systems

Date: May 21, 2025

FIRM #2585

**AEROBIC TREATMENT
DRIP TUBING SYSTEM
DESIGNED FOR:
JACK E. & WHITNEY HENDERSON
c/o 167 OAK SUMMIT
CANYON LAKE, TX 78133**

SITE DESCRIPTION:

Located in Canyon Creek Estates, Unit 1, Lot 30, at 149 Oak Summit, the proposed system will serve a three bedroom residence (1204 sf.) situated in an area with shallow Type III soil as described in the Soil Evaluation Report. Native grasses and oak trees were found throughout this property. 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 Fuji CE5 500gpd aerobic plant containing a 198-gallon pretreatment tank, an aerobic treatment plant, and a 750-gallon pump tank containing a submersible (0.5 HP FPS E-series) 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 by throttling a 1" ball valve to the pump tank. Solids caught in the disc filter are continuously flushed each cycle back to the pump 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 12" soil required between drip tubing and rock/tank.*** The field area will be covered with Curlex erosion control blankets and heavily seeded or 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: 198 Gal

Plant Size: Fuji CE5 500gpd (TCEQ Approved)

Pump tank size: AK750 Gal

Reserve capacity after High Level: 80 Gal (1/3 day Req'd)

Application Rate: $R_a = 0.2$ gal/sf

Total absorption area: $Q/R_a = 240 \text{ GPD}/0.20 = 1200 \text{ sf}$. (Actual 2000 sf.)

Total linear feet drip tubing: 1000' *Netifim Bioline* drip tubing .61 GPH

Pump requirement: 500 emitters @ .61 gph @ 30 psi = 5.08 gpm

Pump Requirement (cont.): FPS - E Series 0.5 hp submersible well pump

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

$$\text{MSV} = 2 \text{ FPS } (\pi d^5 / 2) / 4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

$$\text{MSV} = 2(3.14159((.55/12)^5 / 2) / 4) * 7.48 * 60$$

$$\text{MSV} = 1.5 \text{ gpm PER LINE} * 3 \text{ LINES} = 4.5 \text{ GPM MIN FLOW RATE}$$

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

$$\text{MSV} = 2 \text{ FPS } (\pi d^5 / 2) / 4 * 7.48 \text{ gal/cf} * 60 \text{ sec/min}$$

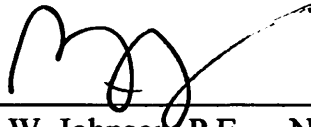
$$\text{MSV} = 2(3.14159((1.049/12)^5 / 2) / 4) * 7.48 * 60$$

$$\text{MSV} = 5.4 \text{ GPM}$$

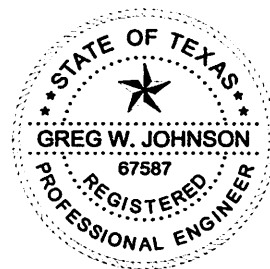
PIPE AND FITTINGS:

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.

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



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



From: Greg Johnson <gregjohnsonpe@yahoo.com>
Sent: Thursday, July 17, 2025 1:53 PM
To: Olvera,Brandon <Olverb@co.comal.tx.us>
Subject: Re: 118774.pdf

This email originated from outside of the organization.

Do not click links or open attachments unless you recognize the sender and know the content is safe.

- Comal I

THE WATER WELL IS 100' AND DOESN'T COME CLOSE TO THE PROPERTY IN QUESTION.

Send for Greg W. Johnson, P.E., R.S.)

170 Hollow Oak

New Braunfels, TX 78132

Office/Fax (830) 905-2778

Email: gregjohnsonpe@yahoo.com

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

1" VACUUM
BREAKERS

FUJI CLEAN -
CE5 AEROBIC
TREATMENT
PLANT

AK - 750 GAL.
PUMP TANK

1" VACUUM
BREAKERS

3 BDRM RES.
1204sf

PORCH

DECK

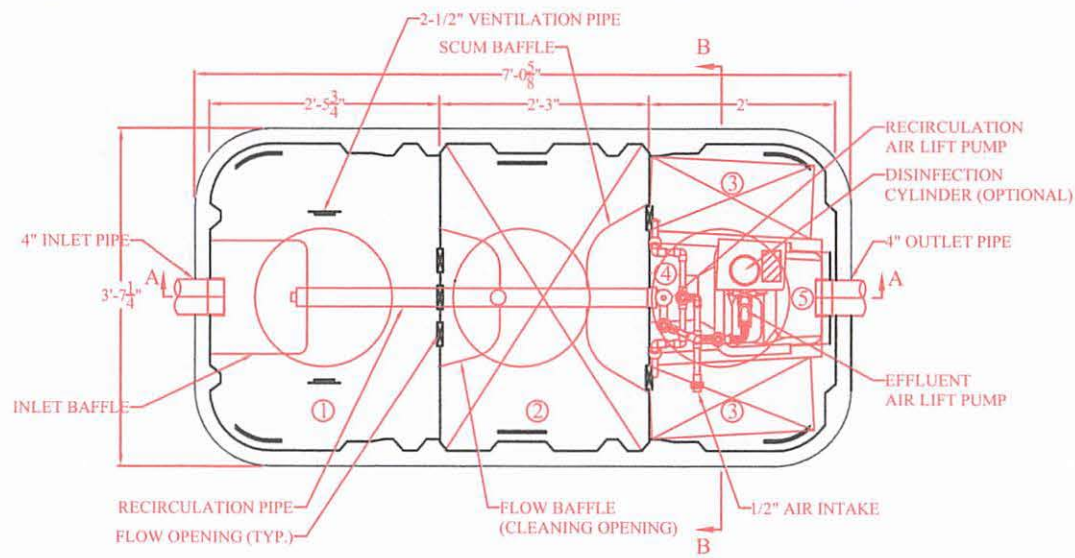
DRIVEWAY

LOT 30

OAK SUMMIT



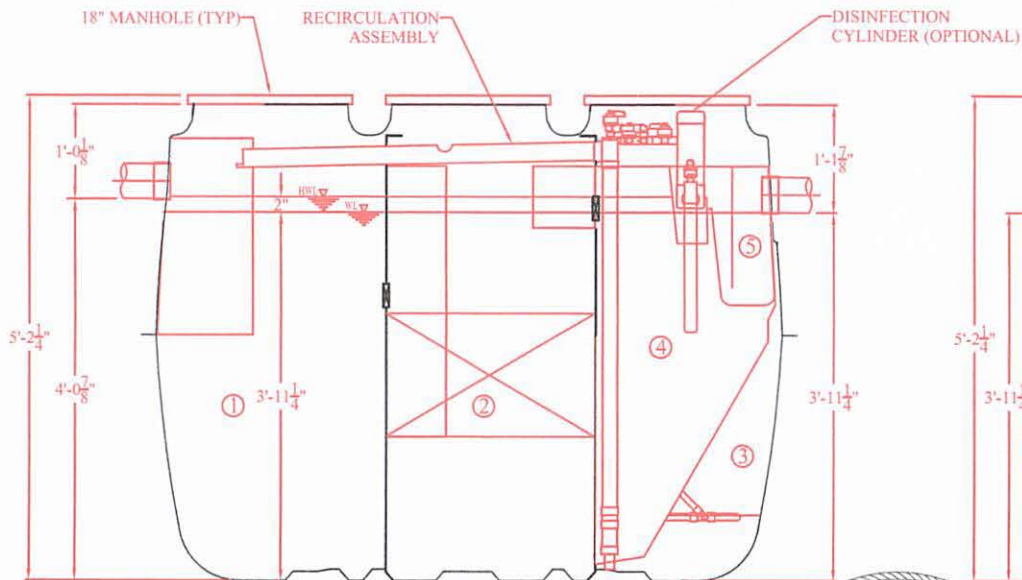
OWNER: JACK E. & WHITNEY HENDERSON				DRAWN BY: EJS III	
STREET ADDRESS: 149 OAK SUMMIT					
LEGAL DESC: CANYON CREEK ESTATES			UNIT/SECTION/PHASE: 1	BLOCK:	LOT: 30
PREPARED BY: GREG W. JOHNSON, P.E. F#002585		SCALE: 1"=20'	DATE: 5/21/2025		REVISED: 5/28/2025



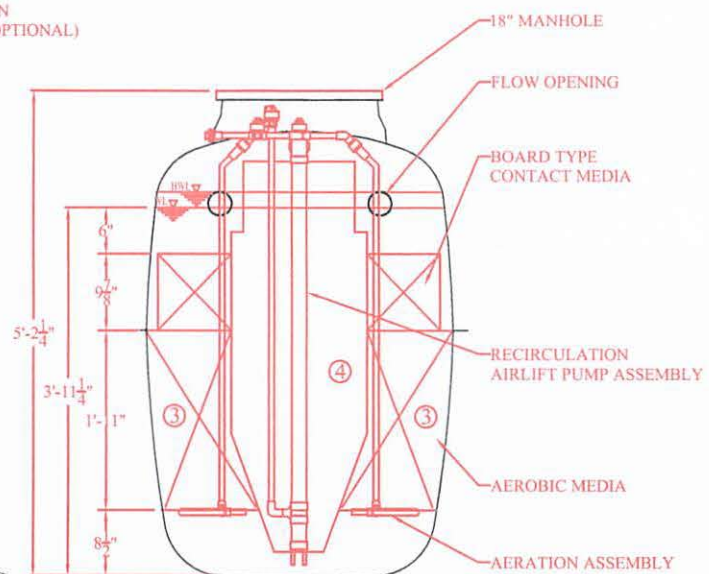
PLAN VIEW

	CHAMBER	Volume (gal)
①	Sedimentation Chamber	198
②	Anaerobic Filtration Chamber	198
③	Aerobic Contact Filtration Chamber	95
④	Storage Chamber	44
⑤	Disinfection Chamber	4
Total Volume		540

SPECIFICATIONS			
Anaerobic Media	PP / PE	Filling Rate	31%
Board Type Aerobic Media	PVC / PP / PE	Filling Rate	16%
Aerobic Media	PP / PE	Filling Rate	55%
Blower	2.8 cfm		
Tank	FRP		
Piping	PVC / PP / PE		
Access Covers	Plastic / Cast Iron		
Disinfectant (Optional)	Chlorine Tablets		



SECTION A-A VIEW



SECTION B-B VIEW



F2585
05/21/25



CE-5 Structural Drawing

DATE: 03/21/2014 SCALE: 1/2" = 1"

TANK NOTES:

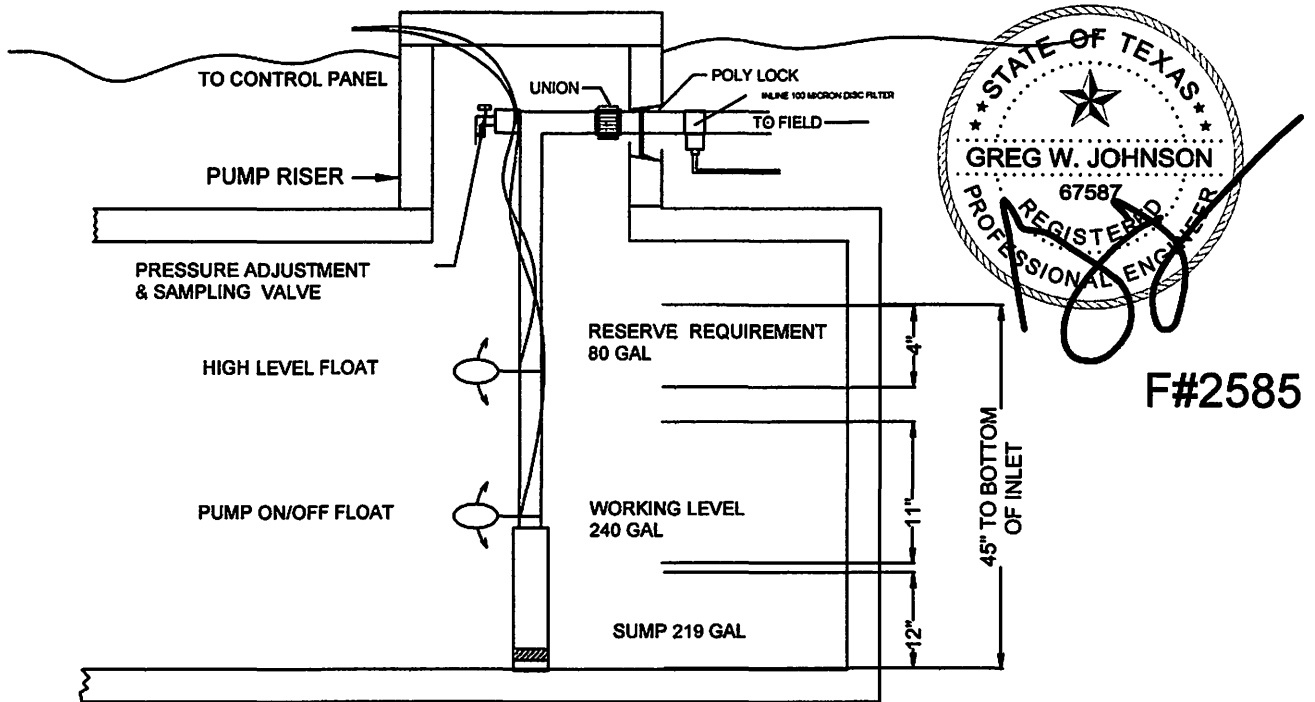
Tanks must be set to allow a minimum of 1/8" per foot fall from the residence.

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**



TYPICAL PUMP TANK CONFIGURATION

AK750 GAL PUMP TANK

Arkal 1" Super Filter

Catalog No. 1102 0 _ _ _

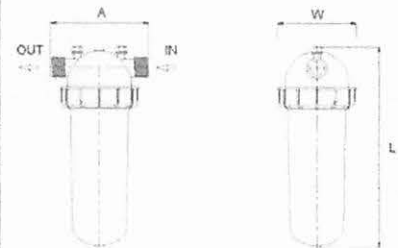
Features

- ♦ 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

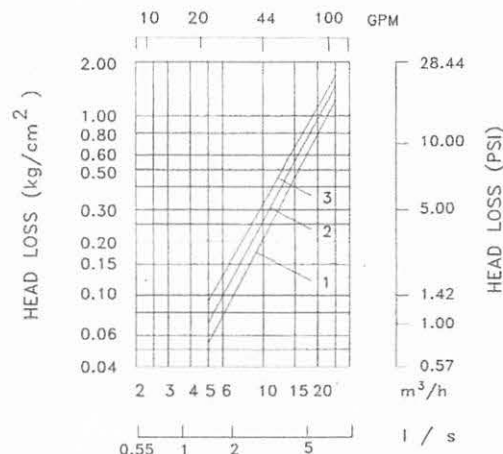
Inlet/outlet diameter	1" BSPT (male)	1" NPT (male)
	25.0 mm – nominal diameter	
	33.6 mm – pipe diameter (O. D.)	
Maximum pressure	10 atm	145 psi
Maximum flow rate	8 m ³ /h (1.7 l/sec)	35 gpm
General filtration area	500 cm ²	77.5 in ²
Filtration volume	600 cm ³	37 in ³
Filter length L	340 mm	13 13/32"
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

¾" FNPT x ¾" 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

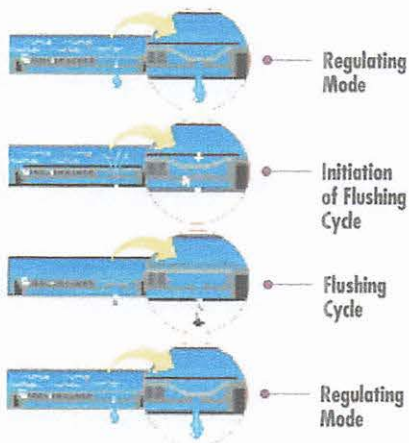
Model Numbers

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)



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.



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"

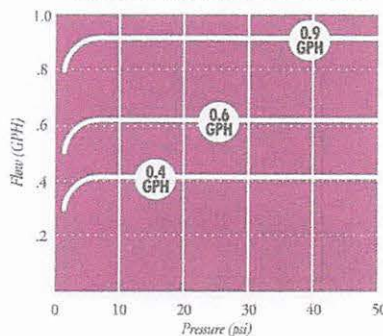
Recommended filtration: 120 mesh

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 USA

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

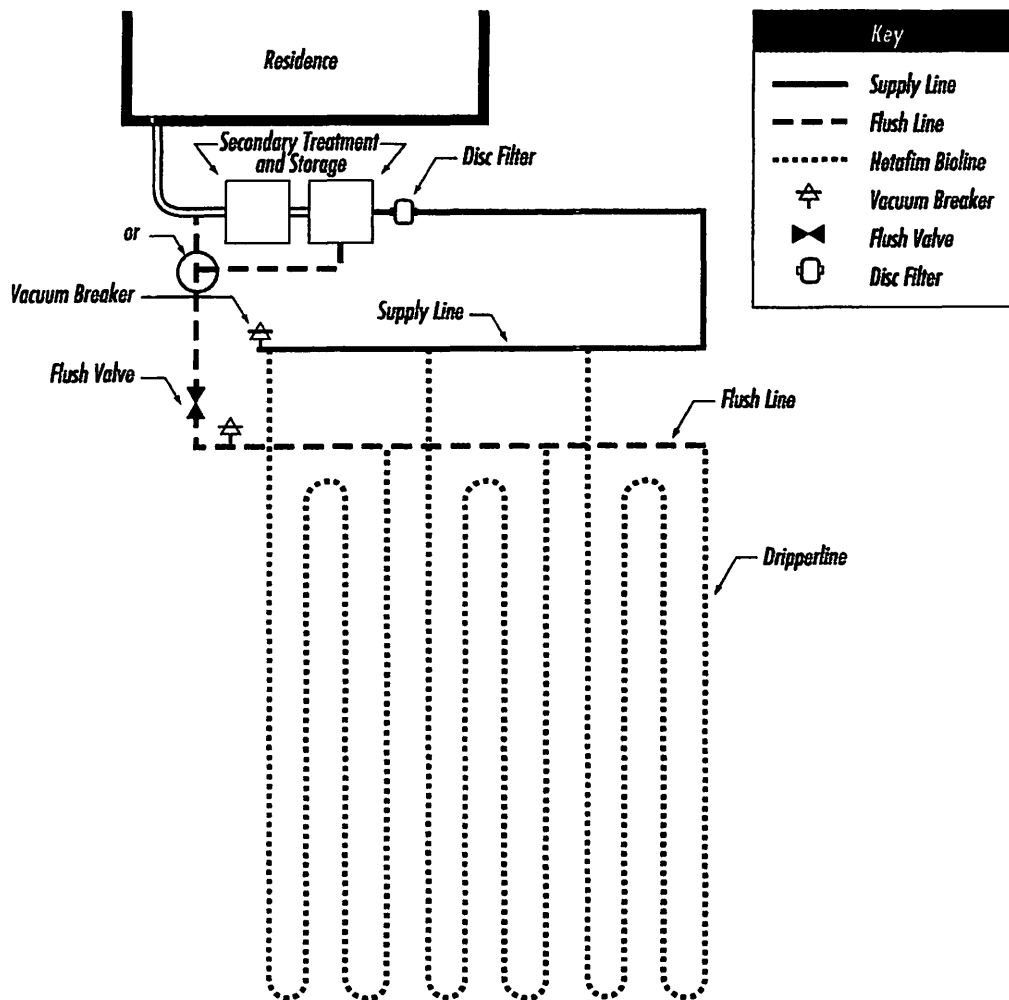
NETAFIM WASTEWATER DISPERSAL SYSTEM DESIGN GUIDE

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





By Cody Young LLC

To: JACK E. & WHITNEY HENDERSON

CANYON CREEK ESTATES, UNIT 1, LOT 30

Site: 149 OAK SUMMIT, CANYON LAKE, TX 78133

County: COMAL

Installer: PAUL SWOYER SEPTICS

Agent: COMAL (CO)

Mfg./Model: FUJI

VOID

This service contract for the On-Site Sewerage System (OSSF), located at the site described above, is to be inspected and serviced at regular intervals by a licensed professional. Specialized maintenance is to be provided within 48 hours of notification by the homeowner or the owner's agent. The initial contract is for (2) years from the date of final septic system inspection. Renewals shall be for a period of 2 years at the current rate and remain in effect for the specified dates listed. From LTO until 2 YEARS FROM LTO

Contract price \$700

1. Regular site inspection at 4-month intervals for residential septic system.
2. OSSF maintenance: check aerator components for proper operation, control panel, effluent pump, spray head/drip nozzle. Check Proprietary specific components. Check pumps, check spray heads, check, and clean any Filters, check ball run valves and any other valves. Flush drain field if needed.
3. Visual inspection of control panel, (when accessible).
4. Labor expenses required at the home to maintain, repair, or remove any part of the control center or mechanical aerator to be returned for factory repair.
5. Labor expenses required at the home to service, repair, or install any part of the control panel or aerator returned from factory.
6. All maintenance reports will be emailed to the permitting authority & customer within 14 days of inspection.

Client Responsibilities:

1. Special service calls after the (at the 4-month intervals) stated in item #1.
2. BODs or TSS grab samples, (if needed).
3. Freight costs to and from factory, for component repair.
4. Costs for replacing damaged or missing parts and repairing any equipment not under any specified warranty.
5. Pumping out any or all the OSSF by a licensed waste hauler.
6. The Homeowner is responsible for maintaining the chlorinator and providing proper chlorine supply if required.

7. Securing pets so that maintenance functions can be performed safely for the technician, and the pet. If pets are present in the yard, and the owner is not on site to secure the animals, it is necessary to cancel the maintenance.

8. Securing pets so that maintenance functions can be performed safely for the technician, and the pet. If pets are present in the yard, and the owner is not on site to secure the animals, and it is necessary to cancel the maintenance, there will be a \$75 trip charge.

Ensuring access to the property for maintenance provider. (e.g., gates, locks, codes, etc.)

VOID

1. This agreement can be terminated by either party by written notice 30 days in advance. Compensation for work performed will include no more than the actual cost of materials and labor. The manufacturer of the system is not responsible for the other party's actions.

Homeowner: [Signature] Date: 6/15/15

Phone: (512) 749-7410 Email: _____

Maintenance Provider: Milo Young, License #MIP0002338

[Signature]

Septic Pumping & Maintenance by Cody Young

911 RR3404

Kingsland, TX 78639

(325)248-8740



COMAL COUNTY

ENGINEER'S OFFICE

RE: ***149 Oak Summit
Canyon Creek Estates I
Lot 30***

Dear Property Owner & Agent,

Thank you for your submission. We have reviewed the planning materials for the referenced permit application, and unfortunately, they are insufficient. To proceed with processing this permit, we require the following:

- ✓. Maintenance Contract:
 - a. Comal county does not accept the abbreviation for License to Operate.
- ✓. What is the well setback radius on the site plan? 100ft. or 150ft.?
- 3. Revise accordingly and resubmit.

If you have any questions, you can email me or call the office.

Thank You,

| Brandon Olvera | Designated Representative OS0034792 |

| t: 830-608-2090 | e: olverb@co.comal.tx.us |

Olvera,Brandon

From: Olvera,Brandon
Sent: Monday, July 21, 2025 2:16 PM
To: Greg Johnson
Subject: RE: 118774.pdf

Property Owner/Agent,
Item 2 has been updated.

Thank You,



| **Brandon Olvera** | Designated Representative OS0034792 |
| t: **830-608-2090** | e: **olverb@co.comal.tx.us** |

From: Greg Johnson <gregjohnsonpe@yahoo.com>
Sent: Thursday, July 17, 2025 1:53 PM
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Do not click links or open attachments unless you recognize the sender and know the content is safe.

- Comal IT

THE WATER WELL IS 100' AND DOESN'T COME CLOSE TO THE PROPERTY IN QUESTION.

Send for Greg W. Johnson, P.E., R.S.)

170 Hollow Oak

New Braunfels, TX 78132

Office/Fax (830) 905-2778

Email: gregjohnsonpe@yahoo.com

9630
11/3
1/3

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 §
COUNTY OF COMAL § KNOW ALL MEN BY THESE PRESENTS:

THAT ERNEST RAY SIMS, JR., a single man, 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 JACK E. HENDERSON and WHITNEY HENDERSON, 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 situated in Comal County, Texas, to-wit:

Lots 27, 28, 29 and 30, CANYON CREEK ESTATES, UNIT NO. 1, a subdivision in Comal County, Texas, according to the plat recorded in Volume 1, Page 96 of the Map and Plat Records of Comal County, Texas.

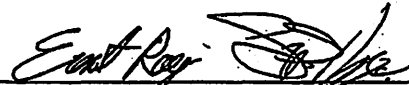
This conveyance is made subject to all and singular, the restrictions, conditions, easements and covenants, if any, applicable to and enforceable against the above described property as reflected by the records of the County Clerk of Comal County, Texas.

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.

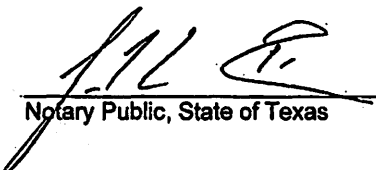
DATED this the 15 day of August, 2020.


ERNEST RAY SIMS, JR., a single man

STATE OF TEXAS

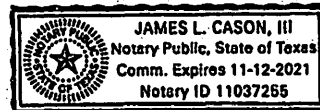
COUNTY OF Harris

This instrument was acknowledged before me on this the 15 day of August, 2020, by ERNEST RAY SIMS, JR.


Notary Public, State of Texas

GRANTEE'S ADDRESS:

251 Westin Hills
New Braunfels, TX
78132



237.deeds2
Old Republic Title (RS)
GF# 9630

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/18/2020 02:10:51 PM
CHRISTY 2 Pages(s)
202006034376



Bobbie Koepp



SEE PAGE 31