# COMAL COUNTY

ENGINEER'S OFFICE

## License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date: **01/16/2024** Permit Number: **116949**

Location Description: 1365 POWDER RIDGE RD
NEW BRAUNFELS, TX 78132

| | |
|---|---|
| Subdivision: | Vintage Oaks at the Vineyard |
| Unit: | 28 |
| Lot: | 2214 |
| Block: | N/A |
| Acreage: | 1.0000 |

Type of System: Aerobic
Drip Irrigation

Issued to: Jill and Brian Ferrante

This license is authorization for the owner to operate and maintain a private facility at the location described in accordance to the rules and regulations for on-site sewerage facilities of Comal County, Texas, and the Texas Commission on Environmental Quality.

The license grants permission to operate the facility. It does not guarantee successful operation. It is the responsibility of the owner to maintain and operate the facility in a satisfactory manner.

Alterations to this permit including, but not limited to:

- Increase in the square feet of living area
- Increase in the number of bedrooms
- A change of use (i.e. residential to commercial)
- Relocation of system components (including the relocation of spray heads)
- Installation of landscaping
- Adding new structures to the system

may require a new permit. **It is the responsibility of the owner to apply for a new permit, if applicable.**

Inspection and licensing of a facility indicates only that the facility meets certain minimum requirements. It does not impede any governmental entity in taking the proper steps to prevent or control pollution, to abate nuisance, or to protect the public health.

This license to operate is valid for an indefinite period. The holder may transfer it to a succeeding owner, provided the facility has not been remodeled and is functioning properly.

Licensing Authority
**Comal County Environmental Health**

Corey Allen OS0036769
ENVIRONMENTAL HEALTH INSPECTOR

Assistant
OS0034792
ENVIRONMENTAL HEALTH COORDINATOR

# Comal County Environmental Health
# OSSF Inspection Sheet

**Installer Name:** Countryside **OSSF Installer #:** OS0002929

**1st Inspection Date:** 1/9/24 **2nd Inspection Date:** 1/16/24 **3rd Inspection Date:**

**Inspector Name:** Corey Allen **Inspector Name:** Corey Allen **Inspector Name:**

**Permit#:** 116949 **Address:** 1365 Powder Ridge

| 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 | X | 285.31(a)<br>285.30(b)(1)(A)(iv)<br>285.30(b)(1)(A)(v)<br>285.30(b)(1)(A)(iii)<br>285.30(b)(1)(A)(ii)<br>285.30(b)(1)(A)(i) | | X | | |
| 2 | SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances<br>Meet Minimum Standards | X | 285.91(10)<br>285.30(b)(4)<br>285.31(d) | | X | | |
| 3 | SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26) | X | 285.32(a)(1) | | X | | |
| 4 | SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot | X | 285.32(a)(3) | | X | | |
| 5 | SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends) | X | 285.32(a)(5) | | X | | |
| 6 | PRETREATMENT Installed (if required) TCEQ Approved List PRETREATMENT Septic Tank(s) Meet Minimum Requirements | | 285.32(b)(1)(G)<br>285.32(b)(1 )(E)(iii)<br>285.32(b)(1)(E)(iv)<br>285.32(b)(1)(F)<br>285.32(b)(1)(B)<br>285.32(b)(1)(C)(i)<br>285.32(b)(1)(C)(ii)<br>285.32(b)(1)(D)<br>285.32(b)(1)(E)<br>285.32(b)(1)(A)<br>285.32(b)(1)(E)(ii)(II)<br>285.32(b)(1)(E)(i)<br>285.32(b)(1)(E)(ii)(I) | | | | |
| 7 | PRETREATMENT Grease Interceptors if required for commercial | | 285.34(d) | | | | |

**Inspector Notes:** **1/9/24 CA: Tank level no leaks operational field to design no second structure on site cover**
**1/16/24 CA: Seed present and covered**

# 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 SingleTank, 2Compartments Provided withBaffle SEPTIC TANK Inlet Flowline Greater than3" and " T " Provided on Inlet and OutletSEPTIC TANK Septic Tank(s) MeetMinimum Requirements | | 285.32(b)(1)<br>(E)285.91(2)285.32(b)(1)<br>(F)285.32(b)(1)(E)<br>(iii)285.32(b)(1)(E)(ii)<br>(II)285.32(b)(1)(E)(ii)<br>(I)285.32(b)(1)(E)<br>(i)285.32(b)(1)<br>(D)285.32(b)(1)(C)<br>(ii)285.32(b)(1)(C)<br>(i)285.32(b)(1)<br>(B)285.32(b)(1)<br>(A)285.32(b)(1)(E)(iv) | | | | |
| 9 | ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used | x | 285.32(b)(1)(F)<br>285.32(b)(1)(G)<br>285.34(b) | | x | | |
| 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 providedSEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions | | 285.38(d)<br>285.38(e) | | | | |
| 12 | SEPTIC TANK Tank Volume Installed | | | | | | |
| 13 | PUMP TANK Volume Installed | | | | | | |
| 14 | AEROBIC TREATMENT UNIT Size Installed | x | | 840 | x | | |
| 15 | AEROBIC TREATMENT UNIT Manufacturer<br>AEROBIC TREATMENT UNIT Model Number | x<br>x | | Aeris | x<br>x | | |
| 16 | DISPOSAL SYSTEM Absorptive | | 285.33(a)(4)<br>285.33(a)(1)<br>285.33(a)(2)<br>285.33(a)(3) | | | | |
| 17 | DISPOSAL SYSTEM Leaching Chamber | | 285.33(a)(1)<br>285.33(a)(3)<br>285.33(a)(4)<br>285.33(a)(2) | | | | |
| 18 | DISPOSAL SYSTEM Drip Irrigation | x | 285.33(c)(3)(A)-(F) | | x | | |

# Comal County Environmental Health
# OSSF Inspection Sheet

| No. | Description | Answer | Citations | Notes | 1st Insp. | 2nd Insp. | 3rd Insp. |
|---|---|---|---|---|---|---|---|
| 32 | EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling<br>EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0%<br>EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field ( 1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom )<br>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<br>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)<br>285.33(b)(3)(A)<br>285.33(b)(3)<br>(B)285.91(13)<br>285.33(b)(3)(D)<br>285.33(b)(3)(F) | | | | |
| 33 | AEROBIC TREATMENT UNIT Is Aerobic Unit Installed According to Approved Guidelines. | X | 285.32(c)(1) | | X | | |
| 34 | AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided<br>AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank<br>AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions | X<br>X<br>X | | | X<br>X<br>X | | |
| 35 | AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place. | X | | | X | | |
| 36 | PUMP TANK Is the Pump Tank an approved concrete tank or other acceptable materials & construction<br>PUMP TANK Sampling Port Provided in the Treated Effluent Line<br>PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required<br>PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump | | | | | | |
| 37 | PUMP TANK Inspection/Clean Out Port & Risers Provided<br>PUMP TANK Secondary restraint system provided<br>PUMP TANK Riser permanently fastened to lid or cast into tank<br>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 | X | | | | | |

# 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? | X | 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<br>APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads?<br>APPLICATION AREA The Landscape Plan is as Designed | X<br>X | 285.33(d)(2)(G) (i)285.33(d)(2) (A)285.33(d)(2)(F) | | | | |
| 42 | APPLICATION AREA Area Installed | X | | | | | |
| 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: | 116949 |
| Issued This Date: | 12/08/2023 |
| This permit is hereby given to: | Jill and Brian Ferrante |

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

1365 POWDER RIDGE RD
NEW BRAUNFELS, TX 78132

| | |
|---|---|
| Subdivision: | Vintage Oaks at the Vineyard |
| Unit: | 28 |
| Lot: | 2214 |
| Block: | N/A |
| Acreage: | 1.0000 |

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.

# Preliminary Field Check For Drip Systems

OS0002929

Countryside

1/9/24 CA: Tank level no leaks operational field to design no second structure on site cover
1/16/24 CA: Seed present and covered

RECEIVED
By Kathy Griffin at 8:50 am, Nov 30, 2023

REVISED
8:48 am, Jan 12, 2024

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 Nov. 8, 2023

Permit Number 116949

## 1. APPLICANT / AGENT INFORMATION

| | | | |
|---|---|---|---|
| Owner Name | Jill and Brian Paul Ferrante | Agent Name | Countryside Construction - Walker Chapman |
| Mailing Address | 17037 Holiday Dr | Agent Address | 300 Chapman Parkway |
| City, State, Zip | Morgan Hill, CA, 95037 | City, State, Zip | Canyon Lake, TX, 78133 |
| Phone # | 408-472-4915 | Phone # | 830-899-2615 |
| Email | jill.brian@yahoo.com | Email | rwkeltner@hotmail.com |

## 2. LOCATION

Subdivision Name Vintage Oaks at the Vineyard Unit 28 Lot 2214 Block N/A

Survey Name / Abstract Number _____ Acreage _____

Address 1365 Powder Ridge City New Braunfels State TX Zip 78132

## 3. TYPE OF DEVELOPMENT

☒ Single Family Residential

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

Number of Bedrooms 5

Indicate Sq Ft of Living Area 4080

☐ 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: $ _____ (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

## 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

November 8, 2023
Date


Revised January 2021

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 Corrie Smith

System Description drip irrigation

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

Tank Size(s) (Gallons) 840 GPD ATU  Absorption/Application Area (Sq Ft) 2100

Gallons Per Day (As Per TCEQ Table III) 420

(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.)

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 CZP has been approved by the appropriate regional office.)

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

If yes, indicate the city: _____

---

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.

Corrie Smith
Signature of Designer

9-20-23
Date

THE COUNTY OF COMAL
STATE OF TEXAS

AFFADAVIT

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 (commission) 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)**: Lot 2214, Vintage Oaks at the Vineyard, Unit 2B, Comal County, Texas

The property is owned by **(insert owner's full name)**: Jill & Brian Ferrante

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 8 DAY OF November, 20 23

Owner(s) signature(s)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 8 DAY OF November, 20 23

Notary Public, State of Texas

Notary's Printed Name: Krystal Fernandez
My Commission Expires: 12-20-2026

KRYSTAL FERNANDEZ
Notary Public, State of Texas
Comm. Expires 12-20-2026
Notary ID 134112226

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
11/20/2023 02:24:23 PM
TAMMY 2 Page(s)
202306036665

Bobbie Koepp

2/m

202306036665 11/20/2023 02:24:23 PM 1/2

# 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:** Jill & Brian Ferrante **Address:** 3165 Powder Ridge
**Sub-Div./County:** Vintage Oaks/Comal **City, State-Zip:** New Braunfels, Tx, 78132
**Permit #:** _____ **Model #:** _____ **Serial #:** _____
**Phone # :** 408-472-4915

(✓) Initial Two Year Service Agreement & Two Year Limited Warranty ( ) One Year Service Agreement

The effective date of this initial maintenance contract shall be the date the License to Operate is issued.
For $ 0, a year this contract will be in effect **FROM** LTO **TO** _____ and will provide the following:

Legal Description: lot 2214, unit 28, Vintage Oaks, Comal County, Tx

A: An inspection/service call every (4) four months which will include: inspection, adjustments and servicing of the mechanical & electrical components as necessary to insure proper function of the system.
B: An effluent quality inspection consisting of a visual check for color, turbidity, scum, overflow and odor.
C: **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.
D: 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.
E: The response time to a complaint by the property owner regarding operation of the system, shall be within "48 hours," from the time of notification.
F: **ANY PARTS, WARRANTY OR NON-WARRANTY, OR FREIGHT CHARGES, LABOR OR SERVICE CALLS DUE NOT PAID FOR REMAIN THE PROPERTY OF COUNTRYSIDE CONSTRUCTION AND COULD RESULT IN REPOSSION OF PARTS BY COUNTRYSIDE CONSTRUCTION.**
G: **THE SIGNING OF THIS SERVICE AGREEMENT AUTHORIZESCOUNTRYSIDE CONSTRUCITON 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 "WARRANTED PARTS" EXCHANGED DURING WARRANTY.** All other components will be according to manufacture'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. 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, over loading 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*

Property Owner Signature _____ Print Name ⊗ BRIAN FERRANTE Date: 11/8/23

⊗ Walker Chapman Date: _____ Authorized Service Representative *(revised 10/9/09)*
OS0002929

# 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: Jill & Brian Ferrante Address: 1365 Powder Ridge
Sub-Div./County: Vintage Oaks/Comal City, State-Zip: New Braunfels, Tx, 78132
Permit #: _____ Model #: _____ Serial #: _____
Phone #: 408-472-4915

(✓) Initial Two Year Service Agreement & Two Year Limited Warranty ( ) One Year Service Agreement

The effective date of this initial maintenance contract shall be the date the License to Operate is issued.
For $ 0, a year this contract will be in effect FROM LTO TO _____ and will provide the following:

Legal Description: lot 2214, Unit 28, Vintage Oaks, Comal County, Tx

A: An inspection/service call every (4) four months which will include: inspection, adjustments and servicing of the mechanical & electrical components as necessary to insure proper function of the system.
B: An effluent quality inspection consisting of a visual check for color, turbidity, scum, overflow and odor.
C: **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.
D: 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.
E: The response time to a complaint by the property owner regarding operation of the system, shall be within "48 hours," from the time of notification.
F: **ANY PARTS, WARRANTY OR NON-WARRANTY, OR FREIGHT CHARGES, LABOR OR SERVICE CALLS DUE NOT PAID FOR REMAIN THE PROPERTY OF COUNTRYSIDE CONSTRUCTION AND COULD RESULT IN REPOSSION OF PARTS BY COUNTRYSIDE CONSTRUCTION.**
G: **THE SIGNING OF THIS SERVICE AGREEMENT AUTHORIZESCOUNTRYSIDE CONSTRUCITON 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 "WARRANTED PARTS" EXCHANGED DURING WARRANTY.** All other components will be according to manufacture'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. 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, over loading 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*

(x) _____ Print Name (x) BRIAN FERRANTE Date: 11/8/23
Property Owner Signature

(x) Walker Chapman Date: _____ Authorized Service Representative *(revised 10/9/09)*
OS0002929

# ON-SITE SEWAGE FACILITY (OSSF)
# SITE EVALUATION FORM

| 1. OWNER INFORMATION: |
|---|
| Property Owner's Full Legal Name: Ferrante |

| 2. PROPERTY INFORMATION (the property or tract for which an Application has been submitted under the Hays County Development Regulations): | | | | |
|---|---|---|---|---|
| 911 street address for the Subject Property (if established)[1]: 1365 Powder Ridge | | | | |
| City: New Braunfels | | | Zip Code: | |
| Legal description: | | | | |
| Lot: 2217 | Block: | Subdivision: Vineyard Oaks | Sec: 28 | Phase: |
| If not located in a subdivision: Survey: | | | | |
| | Abstract: | | Recorded (Vol/Page): | |

[1]If a 911 street address has not yet been assigned to the Subject Property, the Applicant must contact the 911 Coordinator at (512) 393-2160 to obtain an address.

| 3. SITE EVALUATION INFORMATION: | |
|---|---|
| Name of Site Evaluator: Corrie Smith | OS#: 0029488 |
| Date Performed: 4-25-23 | Proposed Excavation Depth: N/A |

**4. REQUIREMENTS:**

- At least two soil evaluations must be performed on the site at opposite ends of the proposed disposal area. Locations of soil evaluations must be shown on the application site drawing or designer's site drawing.
- For subsurface disposal, soil evaluations must be performed to a depth of at least 2 feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.
- Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depths.

Soil Profile Hole Number: 1

| Depth (ft) | Textural Class | Gravel Analysis | Drainage (Mottles/Water Table) | Restrictive Horizon | Observations |
|---|---|---|---|---|---|
| 0<br>1 — 14"<br>2<br>3<br>4<br>5 | III | <30% | — | rock | suitable for drip irrigation |

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

| Soil Profile Hole Number: 2 | | | | | |
|---|---|---|---|---|---|
| Depth (ft) | Textural Class | Gravel Analysis | Drainage (Mottles/Water Table) | Restrictive Horizon | Observations |
| 0<br>1 13"<br>2<br>3<br>4<br>5 | III | <30% | — | rock | suitable for drip irrigation |

**5. FEATURES OF SITE AREA:**

| | | |
|---|---|---|
| Presence of 100 year flood zone | ☒ Yes | ☐ No |
| Presence of adjacent ponds, streams, water impoundments | ☒ Yes | ☐ No |
| Existing or proposed water well in nearby area | ☐ Yes | ☒ No |
| Organized sewage available to lot or tract | ☐ Yes | ☒ No |
| Recharge features within 150 feet | ☐ Yes | ☒ No |
| **This site is suitable for a standard On-Site Sewage Facility** | ☐ **Yes** | ☒ **No** |

**6.** I certify that the above statements are true and correct and are based on my own field observations.

Signature of Site Evaluator: **X** Corrie Smith
Print Name: Corrie Smith
Date: 7-25-23

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. [illegible]
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

# ON-SITE SEWAGE FACILITY (OSSF)
# SITE EVALUATION FORM

| 1. OWNER INFORMATION: |
|---|
| Property Owner's Full Legal Name: Ferrante |

| 2. PROPERTY INFORMATION (the property or tract for which an Application has been submitted under the Hays County Development Regulations): | | | | |
|---|---|---|---|---|
| 911 street address for the Subject Property (if established)[1]: 1365 Powder Ridge | | | | |
| City: New Braunfels | | | Zip Code: | |
| Legal description: | | | | |
| Lot: 2217 | Block: | Subdivision: Vineyard Oaks | Sec: 28 | Phase: |
| If not located in a subdivision: Survey: | | | | |
| | Abstract: | | Recorded (Vol/Page): | |

[1]If a 911 street address has not yet been assigned to the Subject Property, the Applicant must contact the 911 Coordinator at (512) 393-2160 to obtain an address.

| 3. SITE EVALUATION INFORMATION: | |
|---|---|
| Name of Site Evaluator: Corrie Smith | OS#: 0029488 |
| Date Performed: 4-25-23 | Proposed Excavation Depth: N/A |

**4. REQUIREMENTS:**

- At least two soil evaluations must be performed on the site at opposite ends of the proposed disposal area. Locations of soil evaluations must be shown on the application site drawing or designer's site drawing.
- For subsurface disposal, soil evaluations must be performed to a depth of at least 2 feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.
- Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depths.

Soil Profile Hole Number: 1

| Depth (ft) | Textural Class | Gravel Analysis | Drainage (Mottles/Water Table) | Restrictive Horizon | Observations |
|---|---|---|---|---|---|
| 0<br>1 — 14"<br>2<br>3<br>4<br>5 | III | <30% | — | rock | suitable for drip irrigation |

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

| Soil Profile Hole Number: 2 | | | | | |
|---|---|---|---|---|---|
| Depth (ft) | Textural Class | Gravel Analysis | Drainage (Mottles/Water Table) | Restrictive Horizon | Observations |
| 0<br>1 13"<br>2<br>3<br>4<br>5 | III | <30% | — | rock | suitable for drip irrigation |

**5. FEATURES OF SITE AREA:**

| | | |
|---|---|---|
| Presence of 100 year flood zone | ☒ Yes | ☐ No |
| Presence of adjacent ponds, streams, water impoundments | ☒ Yes | ☐ No |
| Existing or proposed water well in nearby area | ☐ Yes | ☒ No |
| Organized sewage available to lot or tract | ☐ Yes | ☒ No |
| Recharge features within 150 feet | ☐ Yes | ☒ No |
| **This site is suitable for a standard On-Site Sewage Facility** | ☐ **Yes** | ☒ **No** |

**6.** I certify that the above statements are true and correct and are based on my own field observations.

Signature of Site Evaluator: **X** Corrie Smith
Print Name: Corrie Smith
Date: 7-25-23

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. [illegible]
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

# Smith Septic Design and Consultation

**REVISED**
*11:23 am, Dec 08, 2023*

Designed for:
Ferrante Residence
1365 Powder Ridge
New Braunfels, TX


12-6-23

Smith Septic Design and Consultation contact information:
Bucky Smith · 202 Reimer Ave · San Marcos, TX 78666 · 512-644-6980
smithsepticdesign@gmail.com

Client: Ferrante
Location: 1365 Powder Ridge
Date: 1/11/2024

**REVISED**
1:03 pm, Jan 12, 2024

Netafim Bioline: 17mm .6gph 24in spacing @ 2fps Flush

Maximum Recommended Bioline Lateral Length: 300

1. Soil Texture or Perc Time: III
2. Soil Structure Shape:
   Soil Structure Grade:
3. Infiltration Loading Rate(ILR): 0.2 gal/day/ft^2
4. Slope: %
5. Infiltration Depth: in.
6. Hydraulic Linear Loading Rate: 4 gal/day/ft
7. Maximum Contour Length (MCL): 150 ft
8. Daily Flow
   5.00 (No. of Bedrooms) X 84.00 (Flow / Bedroom) = 420.00 GPD
9. Dosing Area
   420.00 (Daily Flow) / 0.20 (ILR) = 2100.00 sqft
10. Dosing A. Length
    420.00 (Daily Flow) / 4.00 (HLLR) = 105.00 ft
11. Dosing A. Width
    2100.00 (Dosing Area) / 120.00 (Dosing A. Length) = 17.50 ft
11a. Dosing Design Width & Length Adjustment
    Design Width 17.50 ft  Adjusted Dosing Length 120.00 ft
12. Required Dripper Line
    2100.00 (Dosing Area) / 24 (Drip line Spacing) = 1050.00 ft
13. Required Zones
    120.00 (Dosing A. Length) / 150.00 (MCL+) = 0.80 (Theoretical) = 1 (Design Zones)

17. Headworks Head Loss: 18 ft
18. Miscellaneous Head Loss: 10 ft
19. Design Total Dynamic Head: 71.5 ft

20. Pump Data: **MINIMUM Pump Specifications**

Sta-Rite Dominator — Pump Model Selected
0.5 HP — Phase — Volts — 13.3 GPM @ 71.5 FT.
**Note: Selected pump must produce 115 ft @ 12gpm or 35 gpm for filter flush depending on filter model. (auto-flush units only)**

21. Dosing Schedule — Peak Flow Adjustment: 0.00 Minutes

| | Peak | | | Average | |
|---|---|---|---|---|---|
| Total Run Time: | 80.0 Minutes | | | Total Run Time | 80.0 Minutes |
| Total Rest Time: | 1360.0 Minutes | | | Total Rest Time | 1360.0 Minutes |

| Peak | | | | | | |
|---|---|---|---|---|---|---|
| Zone 1 | 5.25 GPM | 10.0 Min/Dose | 52.5 Gal/Dose | 8.0 Cycles/Day | | |
| Zone 2 | GPM | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 3 | 0.00 GPM | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 4 | 0.00 GPM | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 5 | 0.00 GPM | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 6 | 0.00 GPM | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| **Avg** | | | | | | |
| Zone 1 | 5.25 GPM | 10.0 Min/Dose | 52.5 Gal/Dose | 8.0 Cycles/Day | | |
| Zone 2 | 6.00 GPM | 0.0 Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 3 | 0.00 GPM | 0.0 Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 4 | 0.00 GPM | 0.0 Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 5 | 0.00 GPM | 0.0 Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |
| Zone 6 | 0.00 GPM | 0.0 Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day | | |

Portion of Peak Daily Flow: 100%

14. Zone Breakout Table

| | a. | b. | c. | d. | e. | f. | g. | h. | i. | j. | k. | l. | m. | n. | o. | p. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zone No. | Zone Dosing Area (sqft) | Linear Ft. of Tubing (ft) | Longest Lateral (ft) | Dosing Flow Rate (gpm) | Number of Distal Ends | Field Flush Rate (gpm) | Required Total Flow (RTF) (gpm) | Field Flushing Head (ft) | Force Main Supply Line | | | Return Flush Line | | | Static Lift (ft) | Total Field Head Loss (TFHL) |
| | | | | | | | | | Pipe Nom. Dia. (in) | Len. of Run (ft.) | Head Loss (ft) | Pipe Nom. Dia. (in) | Len. of Run (ft.) | Head Loss (ft) | | |
| Zone 1 | 2100.0 | 1050.0 | 2100 | 5.3 | 5.0 | 8.0 | 13.3 | 29.5 | 1.00 | 45 | 4.2 | 1.00 | 105 | 3.8 | 6 | 43.54 |
| Zone 2 | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | |
| Zone 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |
| Zone 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |
| Zone 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |
| Zone 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |

Note: (14c) Longest lateral may be looped one or more times and is a function of: (7) contour length, Bioline lateral length, #of distal ends, #of zones and (10) dosing area length.

15. Max Required Total Flow: 13.3 (Largest RTF Based on 14g.)
16. Max Total Field Head Loss: 43.5 (Largest TFHL Based on 14p.)

**Notes:**
Bioline Must Be Selected at Top of Page. Required inputs go in YELLOW spaces and adjustments in BLUE spaces. Information for the record goes into GREY spaces. Incorporates New UniRam Type Emitter. Peak Flow Cycle Adjustment should be between 2 and 4 minutes. Higher values could result in damage to the drain field.



STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN

1-11-24

Smith Septic Design and Consultation
Bucky Smith
Registered Sanitarian #3611

**REVISED**
*2:45 pm, Jan 11, 2024*

# Design Report
## On-Site Sewage Facility
## Aerobic Wastewater Treatment System
## Drip Irrigation Application


CS 1-11-24

**Owner/Site Location:**
Ferrante Residence
1365 Powder Ridge
New Braunfels, TX

**Site Description & Evaluation:**
A site evaluation indicated that the site is suitable for an aerobic drip irrigation system. The disposal area has a slope of less than 15% and there was no evidence of shallow groundwater. This residence will utilize a public water supply as a water source. All portions of the proposed OSSF must maintain at least a 10' setback from all water lines. This site does not lie in the regulated 100 year floodplain. There were no recharge features found within 150' of the proposed OSSF. Minimum separation distances as stated in Chapter 285 (TCEQ) On-Site Sewage Facilities, must be maintained.

**Wastewater Design Flow:**
This design is for a 5 bedroom residence with <4500 square feet. Low flow fixtures will be utilized. System is designed for 420 gallons per day.

**Aerobic Treatment System Description:**
This residence will utilize a Aeris Model D840 ATU. Wastewater from the residence will flow to a 500 gallon trash tank followed by 840 gallon per day aeration treatment tank. Effluent from the aeration tank will flow to a 900 gallon pump tank. Distribution to the Netafim Bioline tubing is through a SCH 40 PVC supply line. A 100 micron filter, pressure regulator, and check valves will be placed on the supply line. The SCH 40 PVC flush line will have a ball valve installed to set the required flushing velocity back into the pump chamber. Vacuum relief valves will be placed on the highest end of the drain field, one on the supply line and one on the flush line. The system will not be required to use chlorine as a disinfecting agent. Existing soil will be scarified and 12" of class III soil will be placed on the scarified soil. The drip tubing will be placed on the imported soil. A minimum of 6" of class III soil is required to cover the tubing. The drain field will be seeded or hydro mulched. **I certify that this OSSF meets the requirements of the existing CZP.**

field will be seeded or hydro mulched. **I certify that this OSSF meets the requirements of the existing CZP.**

***REVISED***
***11:23 am, Dec 08, 2023***

**REVISED**
*8:48 am, Jan 12, 2024*

## DESIGN SPECIFICATIONS

Daily Flow: 5 bedroom < 4500 sqft = 420 gpd

Required Disposal Area: 420/.2 =2100 sq. ft.

Length of Tubing: 2100/2 = 1050 feet of tubing

Brand of Tubing: Netafim Bioline

Dosing Rate: Bioline tubing will flow 0.62GPH(0.01GPM) @ 35 PSI 1050 feet of tubing with emitters spaced every 2 feet = 525 emitters

525 emitters x 0.01 = 5.25 GPM dosing rate

Distribution Pipe: 1" SCH 40 purple manufactured pipe

## Pump Calculations and Pump Tank Float Settings

ATU Pump: Sta-Rite Dominator 1/2 hp

Pump Off: @ 7.0"

Pump On: @ 10.0"

Alarm On: @ 35.0"

Reserve Above Alarm: 305.64 gallons


CS 1-11-24

* owners requested system to be designed for more than the minimum required

**REVISED**
*2:46 pm, Jan 11, 2024*

# Ferrante Residence
# 1365 Powder Ridge
# New Braunfels, TX 78132

## LEGEND

A: 5 Bedroom, Single Family Residence, < 4,500 Sq. Ft.

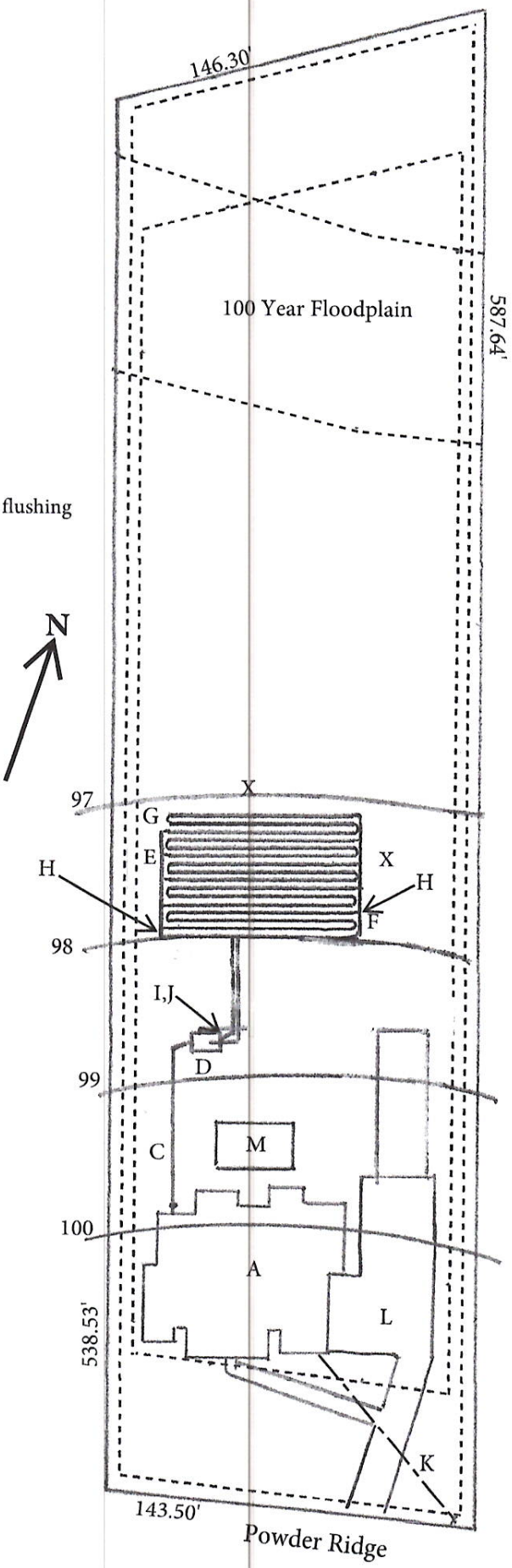
D: Aeris Aerobic Treatment Unit, Model D840
E: 1" SCH 4 PVC Supply Line
F: 1" SCH 40 PVC Return Line
G: 1,050 Linear Feet of Purple Netafim Drip Tubing
15 Lines @ 70' each, 5 runs @ 210'
H: Air/Vacuum Pressure Relief Valve
I: 100 Micron Disc Filter
J: 1.5" PVC Ball Valve: to remain open during dosing to allow continuous flushing
K: Waterline
L: Driveway
M: Pool
X: Profile Hole

## PROPERTY NOTES

50' Building Setback on Front and Back Property Lines
10' Building setback on Side Property Lines
5' OSSF Setback from All Property Lines
5' Septic Tank Setback from Structure
*There is Floodplain on the Property

## SCALE

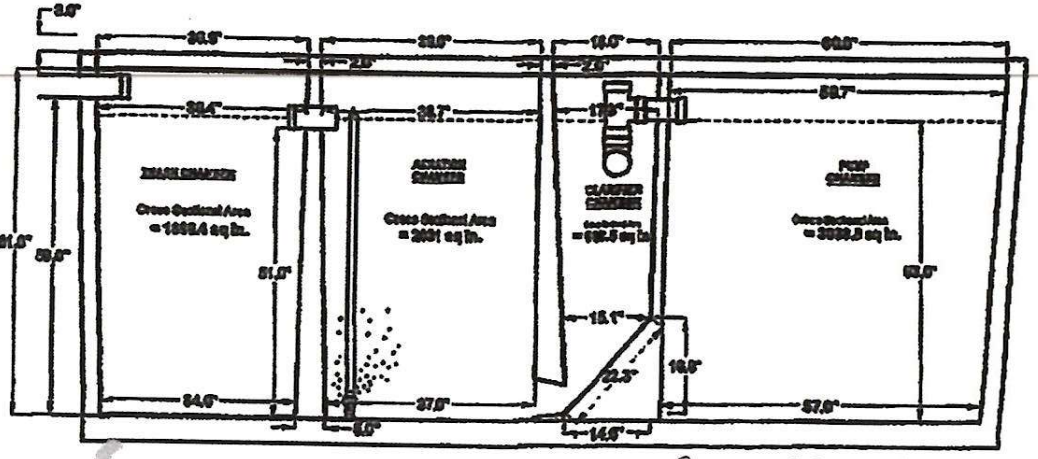
1 INCH = 60 FEET



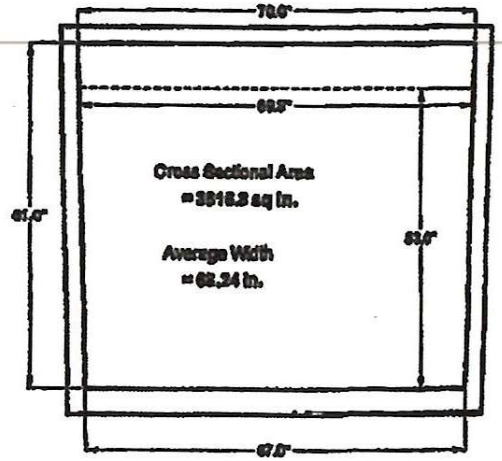

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 36**
REGISTERED
PROFESSIONAL SANITARIAN

CS 1-11-24


**BLOWER**

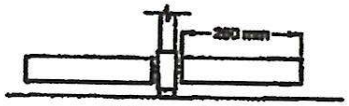



**SIDE SECTION VIEW**
SCALE: 1" = 30"




**END SECTION VIEW**
SCALE: 1" = 30"

Pump off @ 7"
Pump on @ 10"
Alarm on @ 35"
Operating Capacity = 425 gallons
Reserve Capacity = 306 gallons




**Diffuser Detail**
2 - 260 mm
Max flow per diffuser
= 55 litres/minute

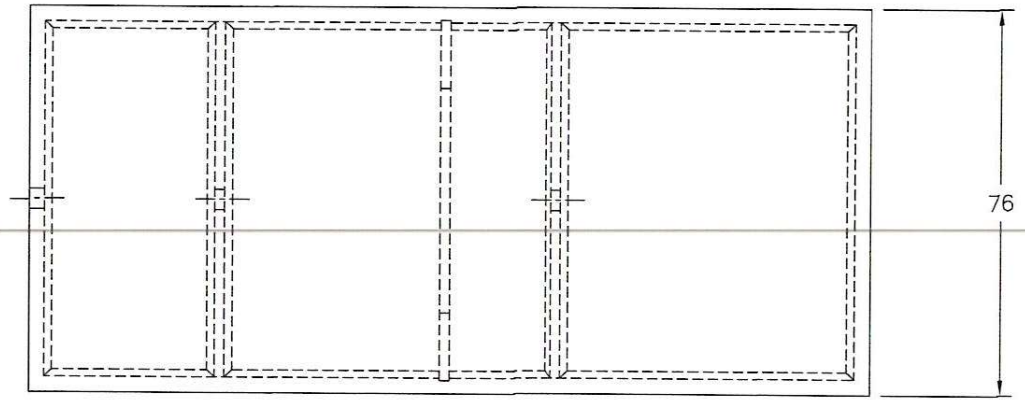
STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 36**
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

| Title: | Company Name: | Date: |
|---|---|---|
| Model D840<br>840 gallon per day Aerobic Treatment Unit | Aeris Aerobics | 3-1-2014 |

**FINAL APPROVAL FOR PRODUCTION**
I CERTIFY THAT THE SUBMITTED DRAWING IS ACCURATE AND REFLECTS ANY CHANGES AS OF THIS DATE.

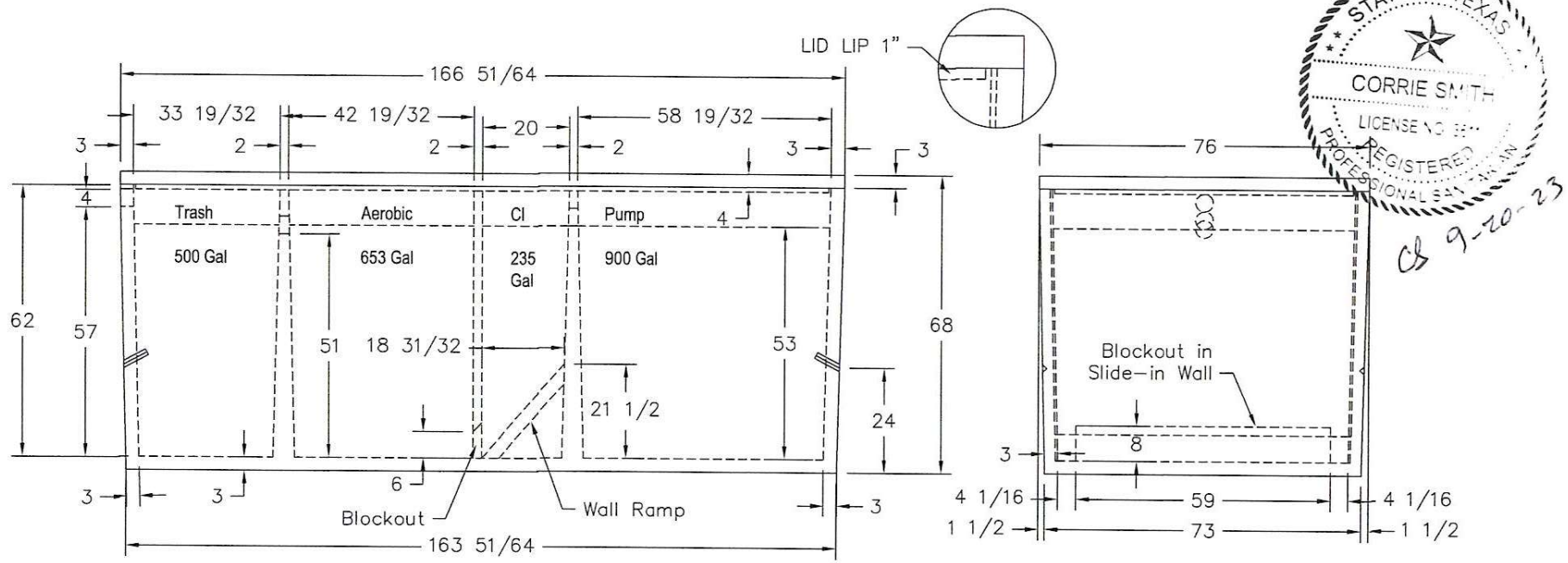
**CUSTOMER APPROVAL SIGNATURE REQUIRED** **DATE**




Tank Weight – 14,388 lbs
Lid Weight – 4,408 lbs

Total Weight – 18,796 Lbs

Total Gallons – 2,288




STATE OF TEXAS
CORRIE SMITH
LICENSE NO 3[illegible]
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCE ON DECIMALS±.005 FRACTIONS±1/64 WELDMENTS±1/16 ANGLES±1/2° REMOVE ALL BURRS AND BREAK ALL SHARP EDGES.

Del Zotto Products of Minnesota
1900 County Road #1, Wrenshall, MN 55797 218-384-3066 Fax 218-384-3088

166.8 x 76W x 68T
Treatment Tank

| SIZE | DWN BY | DWG NO. | REV |
|---|---|---|---|
| B | TAV | DTT168-8x76x68 | C |
| | SCALE 1:24 | DATE 9/18/20 | SHEET 1 OF 1 |

Bucky Smith

Registered Sanitarian #3611

**Tank Notes:**

- The bottom of the excavation for the tanks shall be level and free of large rocks and debris.
- All tanks are to be set level on a layer, with a minimum thickness of 4 inches, of sand, sandy loam, clay loam, or pea gravel.
- Risers are required over all tank openings and must extend to the ground surface.
- Risers shall be permanently fastened to the tank lid.
- The riser lid shall screw down and have a lock or weight 65lbs.
- A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, or to prevent the infiltration of water.
- Tanks must be filled with water for 24-hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8"per foot from house to tank.
- PVC pipe from house to tank must be at least Sch.40 or SDR 26.

**Additional Notes:**

- Install audio-visual alarm for aerator and pump on separate breakers.
- The high water and air compressor alarms shall be audio/visual and mounted in a place that can be easily seen and heard when the alarms are activated.
- A hose bib must be installed in pump tank at tank inspection port.
- The chlorinator must be constructed to allow a chlorine residual of 0.1mg/1 in the pump tank for the period of time between scheduled inspections. The disinfected effluent must obey the standards as stated in §285, TCEQ, On-Site Sewage Facilities. Approved disinfections methods using chlorinated tablets, must use calcium hypochlorite that is properly labeled for wastewater disinfections.

**Maintenance Requirements:**

- The applicant must furnish to the regulatory authority a valid maintenance contracts with a certified maintenance company before a permit will be issued.
- The maintenance company will verify that the system is operating properly and that they will provide on-going maintenance of the installation.
- The initial contract will be a minimum of 2 years.
- A maintenance contract will authorize the Maintenance Company to maintain and repair the system as needed.
- The owner must continuously maintain a signed written contract with a valid maintenance company and shall submit a copy of the contract to the permitting authority at least 30 days prior to the date service will cease.

**Affidavit:**

- The applicant must file a certified copy of an affidavit at the County Clerk's office and filed in reference to the real property deed on which the surface application system is to be installed.
- The affidavit will state that the property shall not be transferred to a new owner without:
  (1) The new owner being advised that the property contains a surface application system for wastewater disposal;

(2) The permit issued to the previous owner of the property being transferred to the new owner in accordance with §285.20(5) of the TCEQ OSS Rules, i.e.; the permit will be issued in the name of the owner of the OSSF. Permits shall be transferred to the new owner automatically upon legal sale of the OSSF. The transfer of an OSSF permit under this section shall occur upon actual transfer of the property on which the OSSF is located unless the ownership of the OSSF had been severed from the property.

(3) The new owners submitting a valid maintenance contract to the permitting authority.

**Operation and Management Notes:**

- The OSSF should not be treated as a normal city Sewer.
- Water conservation practices should be used at all times. Consult your local authorities for more information.
- Run the dishwasher with a full load whenever possible.
- Avoid running water continuously when brushing teeth, washing hands, or cleaning food and utensils.
- Repair any water leaks immediately, such as running toilets or leaky faucets.
- The owner is responsible for cleaning and pumping the septic tank, typically every 2 to 3 years depending on system usage.
- Do not use the toilet to dispose of tissue, feminine hygiene products, trash, cigarettes, etc.
- It is recommended that you do not use the garbage disposal and/or garbage grinders in the facility serviced by this system.
- Household chemicals should be used in moderation.
- According to §285, no water softener will be allowed to enter the OSSF.
- Chemical additives or the so-called enzymes should not be used during the operation of this system. Some of these additives may even be harmful to the facilities operation.
- Do not build driveways, storage buildings, decks, or other structures over the tank or disposal area.
- The OSSF must be protected from coming in contacts with vehicular traffic.
- A strong vegetative cover is essential for the proper operation of this system. The property owner is solely responsible for maintaining this vegetation. The irrigation area should be groomed by mowing on a regular basis.
- If you notice a problem with the spray patterns, or any of the alarms are activated, contact your maintenance provider immediately.
- Never place a greater wastewater load on your system than that prescribed by the design of the system ***(420 gallons per day).***

*The proposed system has been designed generally following the minimum requirements under TCEQ §285 On-Site Sewage Facilities. The site evaluation and subsequent design are based on technical information currently available. The performance of the OSSF is not, and cannot be guaranteed even though all provisions of the Standards have been complied with. If failure should occur, additions to the OSSF may have to be made. In extreme cases a substitute system may be required. By accepting this design, the homeowner/contractor understands the aforementioned conditions, and agrees that the designer will not be liable for any more than the agreed upon design.

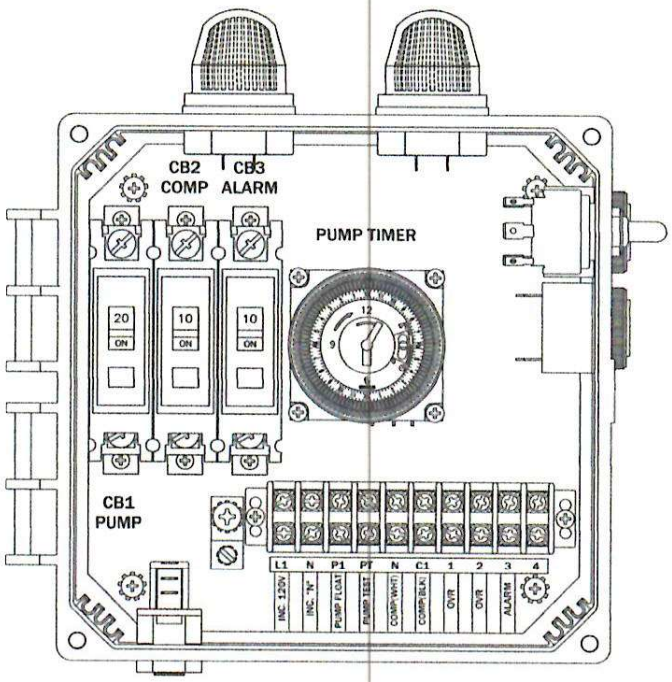

9-20-23

**CONTROL PANEL**

# "A-AV" Model Aerobic Control Panel

## Features & Benefits

- Circuit Breakers for Pump, Compressor & Alarm Circuits
- 24 Hr Timer w/15 minute intervals
- Large & Easy to Access Terminal Block
- Externally Mounted Run/Mute/Test Switch w/UV resistant sealing boot
- Externally Mounted Audible Alarm
- Rugged UV resistant Externally Mounted Alarm Light
- Durable Weather Resistant Hinged Poly Enclosure
- Labeled Back Panel
- Ground Lug
- Easily Replaceable Components
- Nema 4x Rating
- Color Coded Internal Wiring
- Built and Labeled to UL 508A Standard
- Works with most Aerobic Treatment Systems
- Provided with Wiring Schematic and Detailed Connection Diagram for Installer
- Mounting Feet for Enclosure
- Two year limited control panel warranty




**(50B138-BIO-A-AV SHOWN)**

**NOTE: Comp. alarm switch located on enclosure door**

UL LISTED c UL

## Available Options

- Externally Mounted Pump Test Switch
- Externally Mounted Air Pressure Switch
- Auto-Dialer
- Locking Stainless Steel Latch
- Repeat Cycle Timer Option
- Mercury or Mechanical Float Switches for the Pump and High Water Alarm Circuits

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 9611
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

**Note: Consult the factory for other available options. Also some options may require an increase in the enclosure size.**

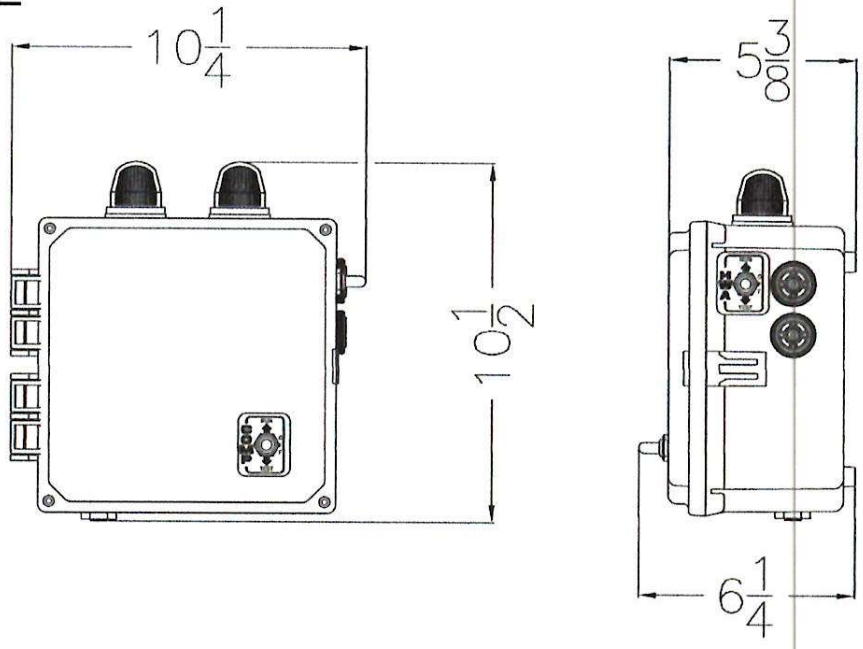
**Septic Products, Inc. 1378 Twp Rd Ashland, Ohio 44805 Ph: (419)282-5933 Fax: (419)282-5943**

Septic Products Inc.

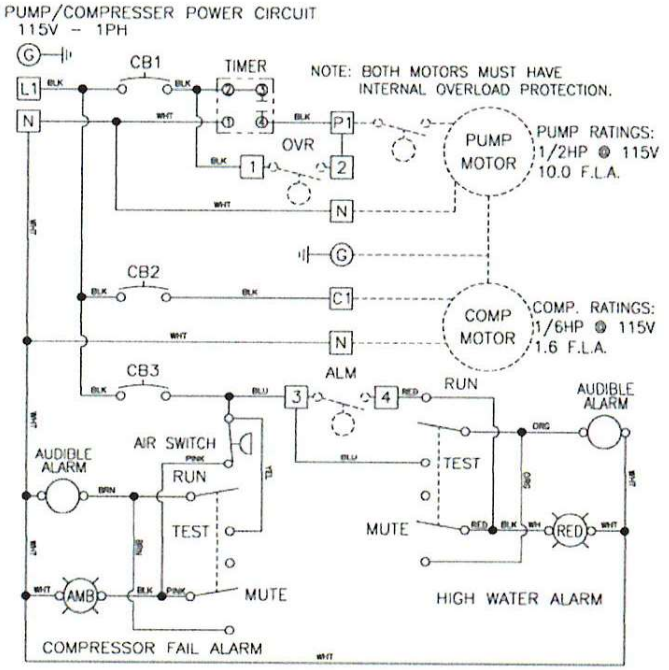
**CONTROL PANEL**

# "A-AV" Model Aerobic Control Panel

## Panel Dimensions




## Wiring Schematic





CS 9-20-23

Septic Products, Inc. 1378 Twp Rd 743 Ashland, Ohio 44805 Ph: (419)282-5933 Fax: (419)282-5943

# STA-RITE® ST.E.P Plus Series

4" high-head multi-stage submersible effluent pumps

**The STEP Plus 4" submersible filtered effluent pumps in 10, 20, 30 and 50 GPM models offer dependable performance and value for high pressure filtered effluent applications.**

**These STEP Plus pumps will handle "dry run" conditions.**

**The 10, 20, 30 and 50 GPM are industry standard 3-3/4" in diameter.**

## APPLICATIONS

**Filtered Effluent...** for residential, commercial, and agricultural use.

## SPECIFICATIONS

**Shell –** Stainless steel

**Discharge –**
10, 20 and 30 GPM models: fiberglass-reinforced thermoplastic; 50 GPM models: stainless steel

**Discharge Bearing –** Nylatron®

**Impellers –** Engineered composite

**Diffusers –** Engineered composite

**Suction Caps –** Engineered composite with stainless steel wear ring

**Thrust Pads –** Proprietary spec.

**Shaft and coupling –** Stainless steel 300 grade

**Intake –** Engineered composite

**Intake Screen –** Polypropylene

**Jacketed Cord –** 600 Volt "SOOW" or 300 Volt "SJOW" jacketed 10' leads (2-wire with ground); optional 20', 30', 50' and 100' lengths available

## FEATURES

**Proven "Floating Impeller" Staging System –** Incorporates 1st-in-class performance, sand handling and thrust management staging system with the industry exclusive "dry-run" design element. Reinforced engineered composites and stainless steel, offering high resistance to corrosion and abrasion.

**Discharge –** Tested-tough, fiberglass-reinforced thermoplastic, with proven internal check valve. Large wrench flats and rope hole.

**Shell –** Stainless steel pump shell offers high corrosion resistance.

**Shaft –** Hexagonal 3/8", 300-grade stainless steel pump shaft; offers generous impeller drive surfaces.

**Shaft Bearing –** Exclusive self-lubricating Nylatron bearing resists wear surface from sand.

**Motor Bracket –** Tested-tough, fiberglass-reinforced thermoplastic; incorporates an integral suction screen.

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

In order to provide the best products possible, specifications are subject to change.

CS 9-20-23


# STA-RITE® ST.E.P Plus Series

4" high-head multi-stage submersible effluent pumps

## ORDERING INFORMATION

| CATALOG NUMBER | HP | STAGES | MAX. LOAD AMPS | VOLTS | PHASE/ CYCLES | CORD LENGTH | PUMP END LENGTH | PUMP + MOTOR LENGTH |
|---|---|---|---|---|---|---|---|---|
| STEP10 | 1/2 | 7 | 12.0 | 115 | 1/60 | 10' | 13" | 21-1/2" |
| STEP10X100FT-05121 | 1/2 | 7 | 12.0 | 115 | 1/60 | 100' | 13" | 21-1/2" |
| STEP10X30FT | 1/2 | 7 | 12.0 | 115 | 1/60 | 30' | 13" | 21-1/2" |
| STEP10X50FT | 1/2 | 7 | 12.0 | 115 | 1/60 | 50' | 13" | 21-1/2" |
| STEP20 | 1/2 | 5 | 12.0 | 115 | 1/60 | 10' | 13-1/4" | 22-1/4" |
| STEP20X30FT | 1/2 | 5 | 12.0 | 115 | 1/60 | 30' | 13-1/4" | 22-1/4" |
| STEP20X50FT | 1/2 | 5 | 12.0 | 115 | 1/60 | 50' | 13-1/4" | 22-1/4" |
| STEP30-05121 | 1/2 | 3 | 9.5 | 115 | 1/60 | 10' | 11-1/2" | 22-1/2" |
| STEP30X30-05121 | 1/2 | 3 | 12.0 | 115 | 1/60 | 30' | 11-1/2" | 22-1/2" |
| STEP30X50-05121 | 1/2 | 3 | 12.0 | 115 | 1/60 | 50' | 11-1/2" | 22-1/2" |
| STEP30-05221 | 1/2 | 3 | 4.7 | 230 | 1/60 | 10' | 11-1/2" | 22-1/2" |
| STEP30X100-05221 | 1/2 | 3 | 4.7 | 230 | 1/60 | 100' | 11-1/2" | 22-1/2" |
| STEP30X30-05221 | 1/2 | 3 | 4.7 | 230 | 1/60 | 30' | 11-1/2" | 22-1/2" |
| STEP30X50-05221 | 1/2 | 3 | 4.7 | 230 | 1/60 | 50' | 11-1/2" | 22-1/2" |
| STEP30-10221 | 1 | 5 | 9.1 | 230 | 1/60 | 10' | 14" | 27-1/2" |
| STEP30X100-10221 | 1 | 5 | 9.1 | 230 | 1/60 | 100' | 14" | 27-1/2" |
| STEP30X30-10221 | 1 | 5 | 9.1 | 230 | 1/60 | 30' | 14" | 27-1/2" |
| STEP30X50-10221 | 1 | 5 | 9.1 | 230 | 1/60 | 50' | 14" | 27-1/2" |
| STEP30-15221 | 1-1/2 | 6 | 11.0 | 230 | 1/60 | 10' | 15-1/4" | 30-1/4" |
| STEP30X100-15221 | 1-1/2 | 6 | 11.0 | 230 | 1/60 | 100' | 15-1/4" | 30-1/4" |
| STEP30X30-15221 | 1-1/2 | 6 | 11.0 | 230 | 1/60 | 30' | 15-1/4" | 30-1/4" |
| STEP30X50-15221 | 1-1/2 | 6 | 11.0 | 230 | 1/60 | 50' | 15-1/4" | 30-1/4" |
| STEP50-05121 | 1/2 | 2 | 9.1 | 115 | 1/60 | 10' | 11-1/ 4" | 21-1/ 2" |
| STEP50-05221 | 1/2 | 2 | 9.1 | 230 | 1/60 | 10' | 11-1/ 4" | 21-1/ 2" |
| STEP50-10221 | 1 | 3 | 9.1 | 230 | 1/60 | 10' | 13-1/4" | 26-3/4" |
| STEP50X100FT-10221 | 1 | 3 | 9.1 | 230 | 1/60 | 100' | 13-1/4" | 26-3/4" |
| STEP50X30FT-10221 | 1 | 3 | 9.1 | 230 | 1/60 | 30' | 13-1/4" | 26-3/4" |
| STEP50X50FT-10221 | 1 | 3 | 9.1 | 230 | 1/60 | 50' | 13-1/4" | 26-3/4" |
| STEP50-15221 | 1-1/2 | 4 | 11.0 | 230 | 1/60 | 10' | 15-1/4" | 30-1/4" |
| STEP50X100FT-15221 | 1-1/2 | 4 | 11.0 | 230 | 1/60 | 100' | 15-1/4" | 30-1/4" |
| STEP50X30FT-15221 | 1-1/2 | 4 | 11.0 | 230 | 1/60 | 30' | 15-1/4" | 30-1/4" |
| STEP50X50FT-15221 | 1-1/2 | 4 | 11.0 | 230 | 1/60 | 50' | 15-1/4" | 30-1/4" |

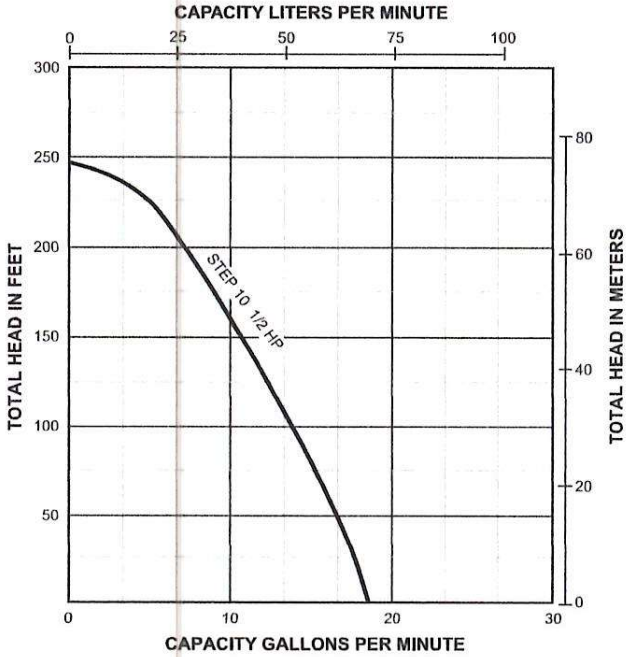
CS 9-20-23

STATE OF TEXAS
CORRIE SMITH
LICENSE NO: 3611
REGISTERED
PROFESSIONAL SANITARIAN

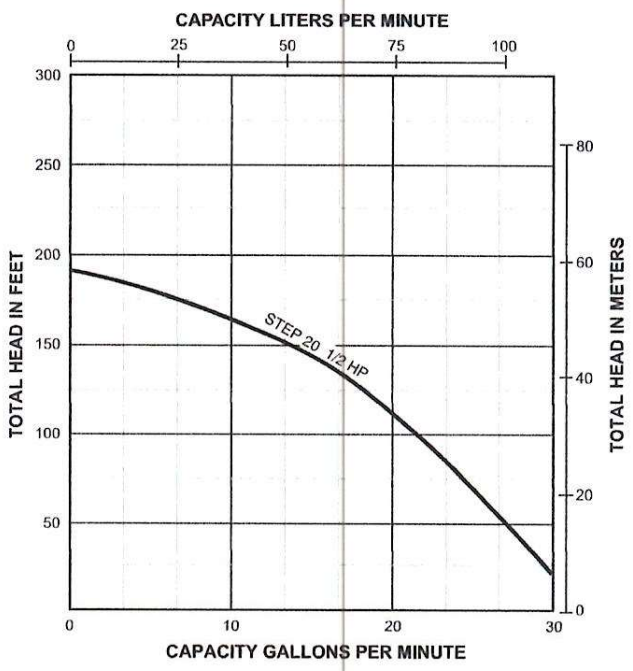
# STA-RITE® ST.E.P Plus Series

4" high-head multi-stage submersible effluent pumps

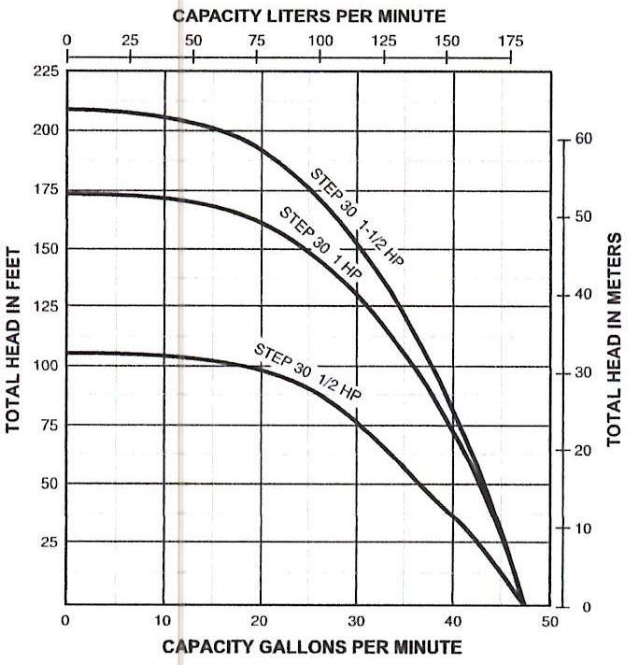
## PUMP PERFORMANCE – 10 GPM



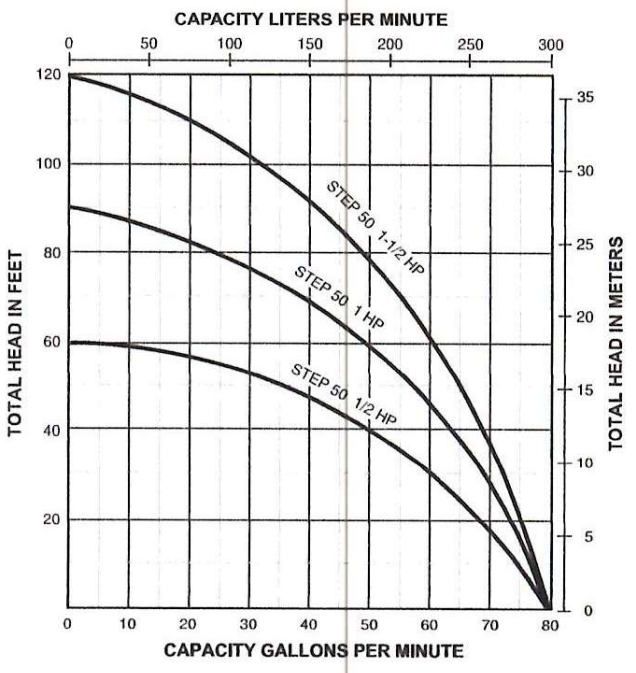

## PUMP PERFORMANCE – 20 GPM




## PUMP PERFORMANCE – 30 GPM




## PUMP PERFORMANCE – 50 GPM




PENTAIR

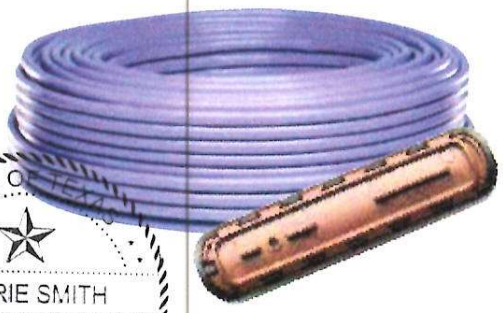
293 WRIGHT STREET, DELAVAN, WI 53115 WWW.STA-RITE.COM PH: 888-782-7483 ORDERS FAX: 800-426-9446

WASTEWATER DIVISION

# BIOLINE® DRIPLINE

**THE WORLD'S MOST ADVANCED CONTINUOUS SELF-CLEANING, PRESSURE COMPENSATING DRIPLINE SPECIFICALLY DESIGNED FOR WASTEWATER**

Copper oxide is impregnated into the emitter serving as a natural antimicrobial agent to help prevent microbial activity.





## PRODUCT ADVANTAGES

- Pressure compensation - all drippers deliver equal flow, even on sloped or rolling terrain.
- Unique flow path - Turbonet technology provides more control of water and a high resistance to clogging.
- Continuous self-flushing dripper design - flushes debris, as it is detected - throughout operation, not just at the beginning or end of a cycle. Ensures uninterrupted dripper operation.
- Single hole dripper outlet from tubing:
  - Better protection against root intrusion
  - Allows the dripline to be used in subsurface applications without need for chemical protection
- Drippers capture water flow from the center of the tubing - ensures that only the cleanest flow enters the dripper.
- Built-in physical root barrier - drippers are protected from root intrusion without the need for chemical protection.
- Three dripper flow rates - provides the broadest range of flow rates available. Allows the designer to match the dripline to any soil or slope condition.
- Bioline tubing is completely wrapped in purple - easily identifying it for non-potable use, regardless of how the tubing is installed.
- Cupron copper oxide is impregnated at specific concentrations, our patent-pending process, ensuring it remains effective throughout the life of the product.
- Bioline can be installed on-surface, under cover or subsurface.
- No special storage requirements - does not degrade if stored outdoors.

## APPLICATIONS

- Typically installed following a treatment process
- Can be used with domestic septic tank effluent with proper design, filtration and operation
- Reuse applications including municipally treated effluent designated for irrigation and other disinfected and non-disinfected water sources.

## SPECIFICATIONS

- Dripper flow rates: 0.4, 0.6 or 0.9 GPH
- Dripper spacings: 12", 18" or 24" dripper spacings and blank tubing
- Pressure compensation range: 7 to 58 psi
- Maximum recommended system pressure: 58 psi
- Tubing diameter: 0.66" OD, 0.56" ID
- Tubing color: Purple color indicates non-potable
- Coil lengths: 500' or 1,000' (Blank tubing in 250')
- Recommended filtration: 120 mesh
- Bending radius: 7"
- UV resistant
- Tubing material: Linear low-density polyethylene

Additional spacing and pipe sizes available by special order. Please contact Netafim USA Customer Service for details.

# BIOLINE DRIPLINE

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 3.0 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 2.3 GPM REQUIRED PER LATERAL TO ACHIEVE 3 fps

| DRIPPER SPACING | | 12" | | | 18" | | | 24" | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIPPER FLOW RATE (GPH) | | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH |
| INLET PRESSURE | 15 | 102 | 94 | 84 | 136 | 127 | 113 | 161 | 151 | 137 |
| | 25 | 151 | 136 | 118 | 203 | 184 | 161 | 245 | 223 | 197 |
| | 35 | 193 | 171 | 146 | 260 | 232 | 200 | 315 | 283 | 245 |
| | 40 | 211 | 186 | 158 | 286 | 254 | 218 | 347 | 311 | 267 |
| | 45 | 228 | 200 | 169 | 310 | 274 | 233 | 377 | 335 | 287 |
| Flow per 100' (GPM / GPH) | | 0.67/40 | 1.02/61 | 1.53/92 | 0.44/26.67 | 0.68/41 | 1.02/61 | 0.34/20 | 0.51/31 | 0.77/46 |

Lateral lengths are based on flows allowing for a 3 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 2.5 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 2.0 GPM REQUIRED PER LATERAL TO ACHIEVE 2.5 fps

| DRIPPER SPACING | | 12" | | | 18" | | | 24" | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIPPER FLOW RATE (GPH) | | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH |
| INLET PRESSURE | 15 | 128 | 115 | 100 | 172 | 155 | 136 | 205 | 187 | 165 |
| | 25 | 183 | 161 | 137 | 248 | 220 | 188 | 301 | 268 | 231 |
| | 35 | 226 | 198 | 166 | 310 | 272 | 229 | 379 | 333 | 283 |
| | 40 | 248 | 214 | 178 | 338 | 295 | 247 | 413 | 362 | 305 |
| | 45 | 266 | 229 | 190 | 364 | 316 | 263 | 447 | 389 | 327 |
| Flow per 100' (GPM / GPH) | | 0.67/40 | 1.02/61 | 1.53/92 | 0.44/26.67 | 0.68/41 | 1.02/61 | 0.34/20 | 0.51/31 | 0.77/46 |

Lateral lengths are based on flows allowing for a 2.5 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 2.0 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 1.6 GPM REQUIRED PER LATERAL TO ACHIEVE 2.0 fps

| DRIPPER SPACING | | 12" | | | 18" | | | 24" | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIPPER FLOW RATE (GPH) | | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH |
| INLET PRESSURE | 15 | 161 | 141 | 119 | 217 | 191 | 164 | 263 | 233 | 201 |
| | 25 | 221 | 190 | 157 | 302 | 261 | 218 | 369 | 321 | 270 |
| | 35 | 269 | 229 | 187 | 370 | 316 | 260 | 455 | 391 | 324 |
| | 40 | 290 | 246 | 200 | 399 | 340 | 278 | 493 | 421 | 347 |
| | 45 | 310 | 261 | 212 | 427 | 362 | 296 | 527 | 449 | 369 |
| Flow per 100' (GPM / GPH) | | 0.67/40 | 1.02/61 | 1.53/92 | 0.44/26.67 | 0.68/41 | 1.02/61 | 0.34/20 | 0.51/31 | 0.77/46 |

Lateral lengths are based on flows allowing for a 2 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 1.5 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 1.2 GPM REQUIRED PER LATERAL TO ACHIEVE 1.5 fps

| DRIPPER SPACING | | 12" | | | 18" | | | 24" | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIPPER FLOW RATE (GPH) | | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH |
| INLET PRESSURE | 15 | 201 | 171 | 140 | 275 | 235 | 194 | 337 | 289 | 241 |
| | 25 | 266 | 222 | 179 | 366 | 308 | 251 | 453 | 383 | 313 |
| | 35 | 316 | 262 | 210 | 437 | 365 | 295 | 543 | 455 | 369 |
| | 40 | 337 | 280 | 223 | 469 | 391 | 313 | 583 | 487 | 393 |
| | 45 | 358 | 296 | 235 | 497 | 413 | 331 | 619 | 517 | 415 |
| Flow per 100' (GPM / GPH) | | 0.67/40 | 1.02/61 | 1.53/92 | 0.44/26.67 | 0.68/41 | 1.02/61 | 0.34/20 | 0.51/31 | 0.77/46 |

Lateral lengths are based on flows allowing for a 1.5 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 1.0 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 0.8 GPM REQUIRED PER LATERAL TO ACHIEVE 1.0 fps

| DRIPPER SPACING | | 12" | | | 18" | | | 24" | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIPPER FLOW RATE (GPH) | | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH |
| INLET PRESSURE | 15 | 248 | 205 | 163 | 344 | 285 | 228 | 427 | 355 | 285 |
| | 25 | 315 | 258 | 203 | 440 | 361 | 286 | 549 | 453 | 359 |
| | 35 | 367 | 299 | 234 | 513 | 419 | 331 | 643 | 527 | 417 |
| | 40 | 389 | 316 | 248 | 545 | 445 | 350 | 683 | 559 | 441 |
| | 45 | 409 | 332 | 260 | 574 | 468 | 367 | 721 | 589 | 463 |
| Flow per 100' (GPM / GPH) | | 0.67/40 | 1.02/61 | 1.53/92 | 0.44/26.67 | 0.68/41 | 1.02/61 | 0.34/20 | 0.51/31 | 0.77/46 |

Lateral lengths are based on flows allowing for a 1 fps flushing/scouring velocity

## MAXIMUM LENGTH OF A SINGLE LATERAL WITH 0.5 fps FLUSH VELOCITY

ADDITIONAL FLOW OF 0.4 GPM REQUIRED PER LATERAL TO ACHIEVE 0.5 fps

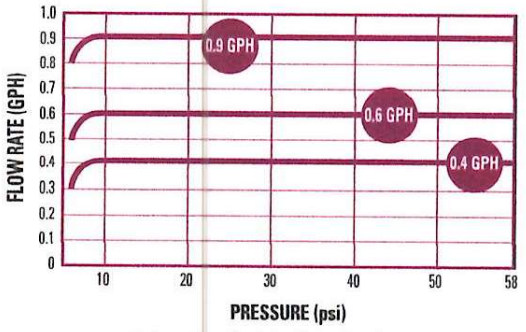
| DRIPPER SPACING | | 12" | | | 18" | | | 24" | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIPPER FLOW RATE (GPH) | | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH | 0.4 GPH | 0.6 GPH | 0.9 GPH |
| INLET PRESSURE | 15 | 301 | 242 | 188 | 422 | 341 | 265 | 531 | 429 | 335 |
| | 25 | 369 | 296 | 228 | 520 | 418 | 323 | 655 | 527 | 409 |
| | 35 | 421 | 337 | 260 | 595 | 476 | 368 | 749 | 603 | 467 |
| | 40 | 443 | 354 | 273 | 626 | 501 | 387 | 790 | 635 | 491 |
| | 45 | 464 | 371 | 285 | 656 | 524 | 404 | 829 | 665 | 513 |
| Flow per 100' (GPM / GPH) | | 0.67/40 | 1.02/61 | 1.53/92 | 0.44/26.67 | 0.68/41 | 1.02/61 | 0.34/20 | 0.51/31 | 0.77/46 |

Lateral lengths are based on flows allowing for a 0.5 fps flushing/scouring velocity

Netafim recommends flushing velocities capable of breaking free any accumulated bioslimes and debris in the piping network.

Notes:
1. Refer to local regulations for information on flushing velocities that may be written into codes.
2. Netafim does not endorse a specific flushing velocity.
3. Flushing velocities should be determined based on regulations, quality of effluent, and type of flushing control.
4. Using a flushing velocity less than 1 fps does not provide turbulent flow as defined by Reynolds Number.
5. Higher flushing velocities provide more aggressive flushing.

### DRIPPER FLOW RATE VS. PRESSURE




Between 0 and 7 psi, the dripper functions as a turbulent flow emitter, ensuring that the nominal design flow is not exceeded at system start-up.

### FLOW PER 100 FEET

| DRIPPER SPACING | 0.4 GPH DRIPPER | | 0.6 GPH DRIPPER | | 0.9 GPH DRIPPER | |
|---|---|---|---|---|---|---|
| | GPH | GPM | GPH | GPM | GPH | GPM |
| 12" | 40.0 | 0.67 | 61.0 | 1.02 | 92.0 | 1.53 |
| 18" | 26.7 | 0.44 | 41.0 | 0.68 | 61.0 | 1.02 |
| 24" | 20.0 | 0.34 | 30.0 | 0.51 | 46.0 | 0.77 |

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

Netafim sets the bar for innovation in drip irrigation with copper. Cupron® copper oxide-based technology allows for maximum performance. The integration of copper oxide in the internal emitter, and the unique patented emitter design with physical root barrier provides two levels of protection, giving your system the protection it needs to fight against root intrusion.

- Cupron copper oxide provides one of two layers of defense against root intrusion, a physical root barrier inside the dripper provides the other.
- Cupron copper oxide technology will not wash out, wear off or leach out; remaining effective throughout the life of the product.
- Cupron copper oxide is approved for use by the EPA ensuring peace of mind.

## EXPLODED VIEW OF BIOLINE DRIPPER

**Top of Dripper**
The large surface area of the filter increases longevity and prevents dirt particles from settling in the dripper.

Chemical-resistant molded silicon diaphragm

**Bottom of Dripper**
Large and effective filter area prevents penetration of coarse particles inside flow path. Superior clog resistance for efficient irrigation.

## BIOLINE DRIPPER OPERATION

Bioline drippers are pressure compensating - delivering the water uniformly into the soil for further treatment or for reuse by the landscape. These unique drippers allow the tubing to be installed on flat topography or steep slopes.

Bioline drippers are protected against microbial activity. Copper oxide impregnated XR drippers – Copper, a natural antimicrobial material, is used to help prevent microbial activity.

Netafim drippers are 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.

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. [illegible]
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

## SPECIFYING INFORMATION

**SAMPLE MODEL NUMBER**

A — Bioline Dripline = 08WRAM

08WRAM.6-24 V
(1) (2) (3) (A)

**1 DRIPPER FLOW RATE**
0.4 GPH = .4
0.6 GPH = .6
0.9 GPH = 1

**2 DRIPPER SPACING**
12" = 12
18" = 18
24" = 24

**3 COIL LENGTH**
500' = V500
1,000' = V

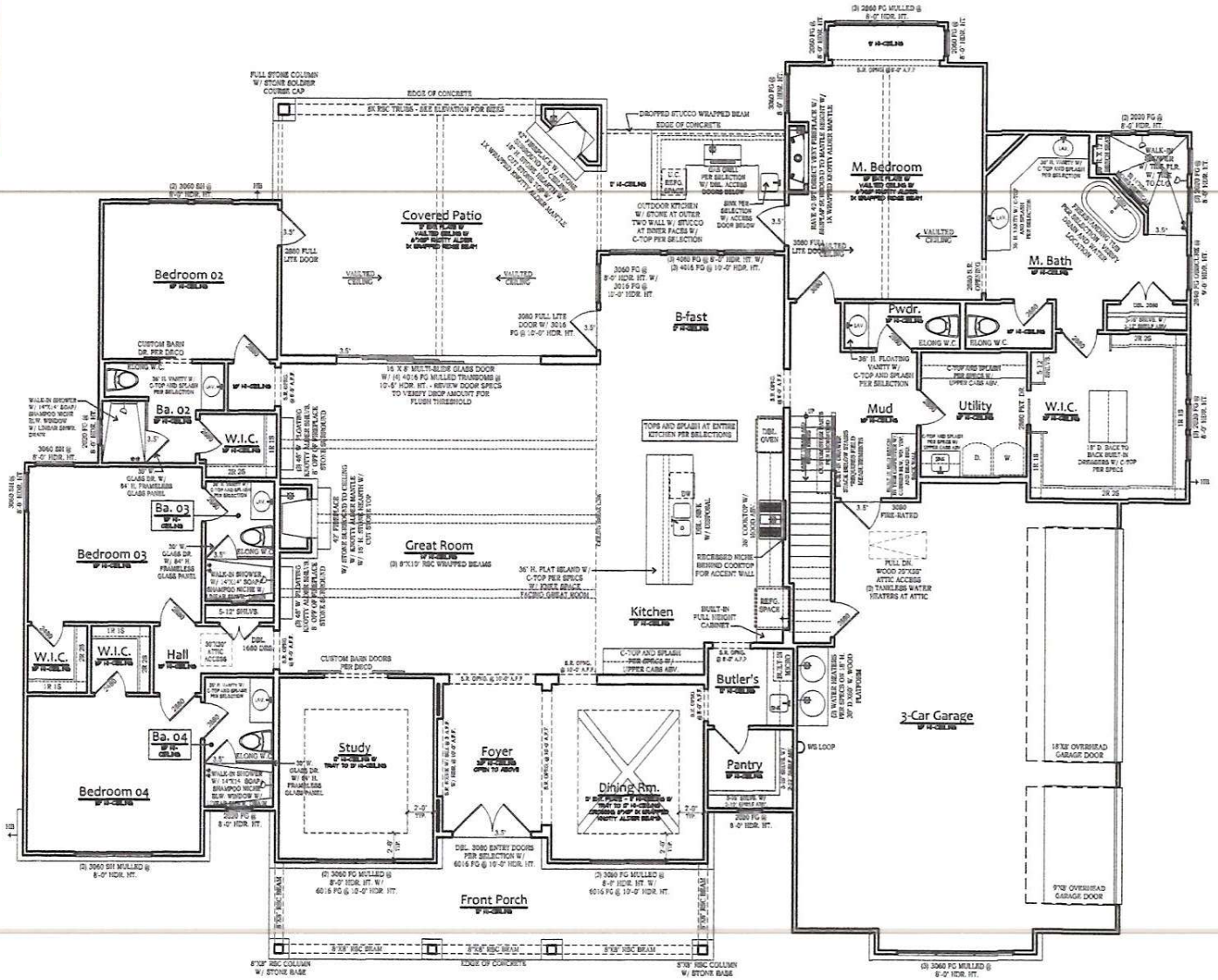
BLANK Tubing Model Number: 250' = 08WRAM-250

## ORDERING INFORMATION

| FLOW RATE | DRIPPER SPACING | COIL LENGTH | MODEL NUMBER |
|---|---|---|---|
| 0.4 GPH | 12" | 1,000' | 08WRAM.4-12V |
| | | 500' | 08WRAM.4-12V500 |
| 0.4 GPH | 18" | 1,000' | 08WRAM.4-18V |
| | | 500' | 08WRAM.4-18V500 |
| 0.4 GPH | 24" | 1,000' | 08WRAM.4-24V |
| | | 500' | 08WRAM.4-24V500 |
| 0.6 GPH | 12" | 1,000' | 08WRAM.6-12V |
| | | 500' | 08WRAM.6-12V500 |
| 0.6 GPH | 18" | 1,000' | 08WRAM.6-18V |
| | | 500' | 08WRAM.6-18V500 |
| 0.6 GPH | 24" | 1,000' | 08WRAM.6-24V |
| | | 500' | 08WRAM.6-24V500 |
| 0.9 GPH | 12" | 1,000' | 08WRAM1-12V |
| | | 500' | 08WRAM1-12V500 |
| 0.9 GPH | 18" | 1,000' | 08WRAM1-18V |
| | | 500' | 08WRAM1-18V500 |
| 0.9 GPH | 24" | 1,000' | 08WRAM1-24V |
| | | 500' | 08WRAM1-24V500 |
| Blank Tubing 17mm | | 250' | 08WRAM-250 |

**Standard GEH Insulation Package**
R-11 Batts at Midfloor

**Natural Gas Locations**
(1) Cooktop
(2) Water Heaters
(2) Furnaces
(1) Interior Fireplace - Great Room
(1) Interior Fireplace - Master Bedroom
(1) Exterior Fireplace
(1) BBQ




| SQUARE FOOTAGE CHART | | |
|---|---|---|
| AREAS | FRAME | w/ MASONRY |
| 1st FLR. LIVING | 3,538 | 3,566 |
| 2nd FLR. LIVING | 542 | 542 |
| 2nd FLR. STOR. | 173 | 173 |
| TOTAL LIVING | 4,253 | 4,281 |
| 3-CAR GARAGE | 868 | 876 |
| COV'D PATIO | 638 | 638 |
| ENTRY PORCH | 262 | 262 |
| 2nd FLR. BALCONY | 104 | 104 |
| TOTAL FRAME | 6,125 | 6,162 |
| TOTAL SLAB | | 5,342 |
| | | |


GEH SUPER
Cameron Cohen
512.855.3224


1 1ST FLOOR PLAN
SCALE: 1/8"=1'-0"

DESIGNER CONTACT:
DANIEL_PAGE_RESIDN
OFFICE_512-750-3483
RESI_BRANFIELD_TEXAS
EMAIL_ADDRESS

GRAND ENDEAVOR HOMES

BUILDER CONTACT:
GRAND_ENDEAVOR_HOMES
OFFICE_512-750-HOME_(4663)
CORRECTION_TEXAS
WILLIAMSON_COUNTY
WWW.GRANDENDEAVORHOMES.COM

DETAILS:
FERRANTE RESIDENCE
1305_POWDER_RIDGE
LOT_324_VINTAGE_OAKS_MUD
COUNTY_TEXAS

ISSUE DATE:
CONSTRUCTION DOCUMENTS:
PERMIT SET: 17 OCT. 2022
CONSTRUCTION DOCUMENTS:
PERMIT SET: 07 NOV. 2022
CONSTRUCTION DOCUMENTS:
PERMIT SET: 07 FEB. 2023
CONSTRUCTION DOCUMENTS:
PERMIT SET: 20 FEB. 2023

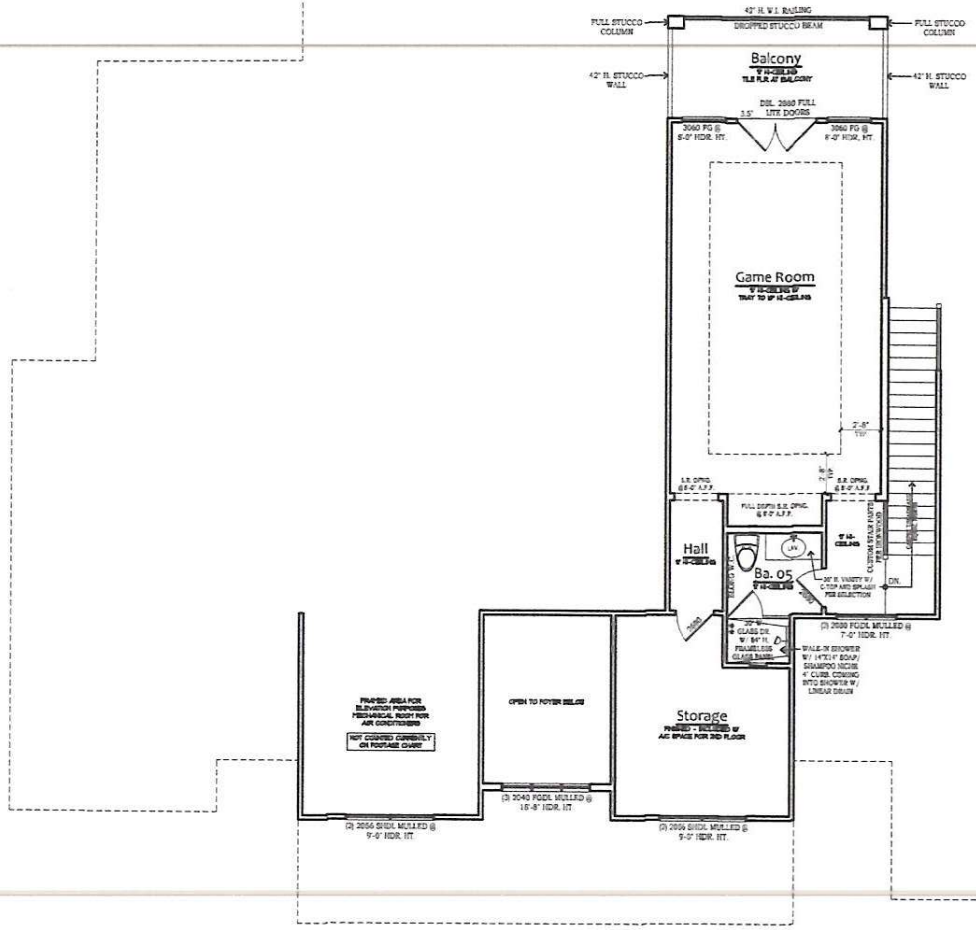
CONTENTS:
1ST_FLOOR_PLAN NOTES

FILE INFO:
GRAND_ENDEAVOR_HOMES
FILE: FERRANTE_RESIDENCE
DATE: 02-20-2023

SHEET:
A2.3

**Standard GEH Insulation Package**
R-11 Batts at Midfloor

**Natural Gas Locations**
(1) Cooktop
(2) Water Heaters
(2) Furnaces
(1) Interior Fireplace - Great Room
(1) Interior Fireplace - Master Bedroom
(1) Exterior Fireplace
(1) BBQ




1 2ND FLOOR PLAN
SCALE: 1/8"=1'-0"


GEH SUPER
Cameron Cohen
512.855.3224


DESIGNER CONTACT:

GRAND ENDEAVOR HOMES

BUILDER CONTACT:

DETAILS:

FERRANTE RESIDENCE

ISSUE DATE:

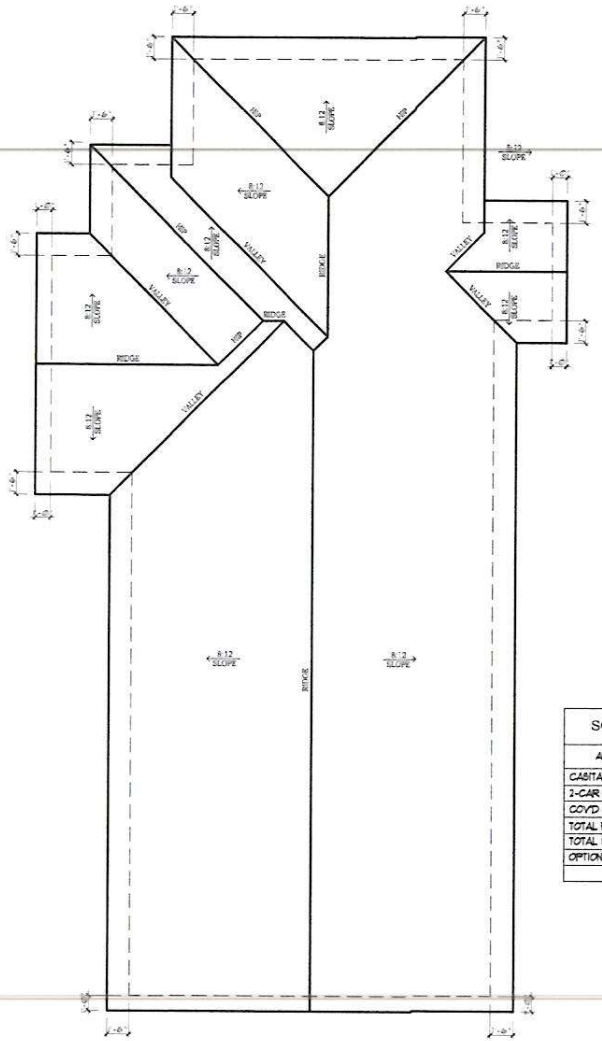
CONTENTS:

2ND_FLOOR_PLAN NOTES

FILE INFO:

SHEET:

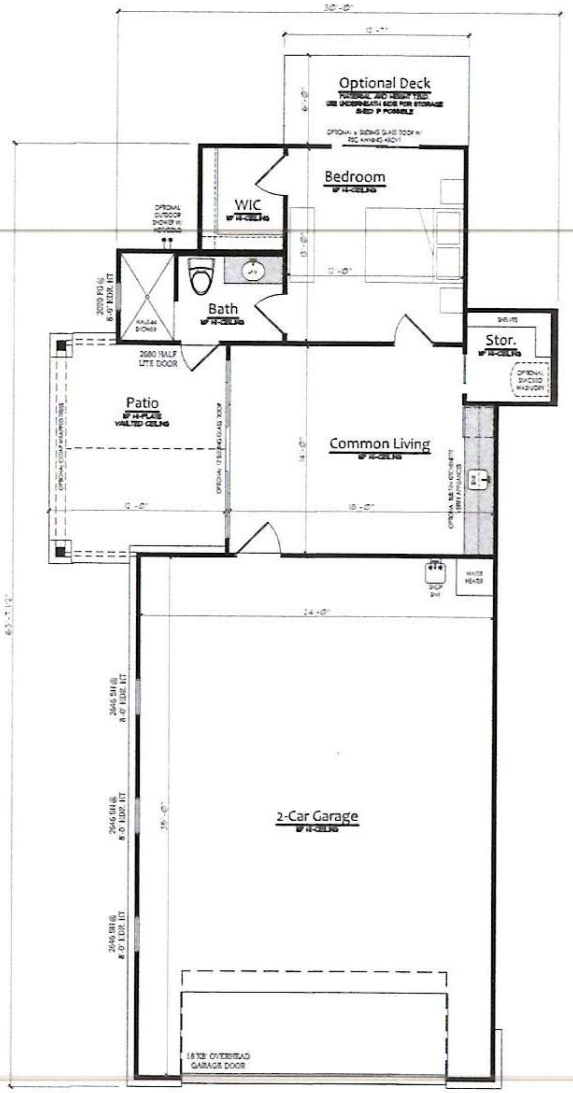
A2.4




2 CASITA ROOF PLAN

SCALE: 1/8" = 1'-0"

| SQUARE FOOTAGE CHART | | |
|---|---|---|
| AREAS | FRAME | w/ MASONRY |
| CASITA LIVING | 582 | 582 |
| 2-CAR GARAGE | 869 | 907 |
| COVD PATIO | 173 | 173 |
| TOTAL FRAME | 1624 | |
| TOTAL SLAB | | 1697 |
| OPTIONAL DECK | | 96 |
| | | |




1 CASITA FLOOR PLAN

SCALE: 1/8" = 1'-0"

GRAND ENDEAVOR HOMES

**DETAILS:**

FERRANTE RESIDENCE

**ISSUE DATE:**

SCHEMATIC DESIGN
REVIEW SET: 13 APRIL 2022
SCHEMATIC DESIGN
REVISED SET: 09 MAY 2022
SCHEMATIC DESIGN
REVISED SET: 16 MAY 2022

**CONTENTS:**

FLOOR_PLAN

**FILE INFO:**

GRAND_ENDEAVOR_HOMES
FILE: FERRANTE_RESIDENCE
DATE: 05-16-2022

**SHEET:**

A2.3

**From:** Ritzen, Brenda
**To:** Diandra Linares
**Subject:** RE: 115853 - 1488 Stahlman Way
**Date:** Thursday, January 4, 2024 4:16:00 PM
**Attachments:** image001.png
image002.png

---

Diandra,

The permit file has been updated.

Thank you,


COMAL COUNTY TEXAS

**Brenda Ritzen**
Environmental Health Coordinator
195 David Jonas Dr.
New Braunfels, TX 78132
DR:OS00007722
830-608-2090
www.cceo.org


---

**From:** Diandra Linares <diandra@stwastewater.com>
**Sent:** Thursday, January 4, 2024 4:08 PM
**To:** Ritzen, Brenda <rabbjr@co.comal.tx.us>
**Subject:** RE: 115853 - 1488 Stahlman Way



---

My fault, sent you the wrong one. Here you go.

*Diandra Linares*


South Texas Wastewater Treatment
Authorized Jet Distributor - Home and Commercial
Engineering Services - Designs - Site Evaluations

**From:** Ritzen, Brenda
**To:** Bucky Smith
**Subject:** RE: 1365 Powder Ridge revision (Ferrante)
**Date:** Friday, January 12, 2024 8:53:00 AM
**Attachments:** Page from 116949.pdf
image001.png

---

Bucky,

Would you be able to resend the attached page? The numbers are hard to read.

Thank you,


COMAL COUNTY TEXAS

**Brenda Ritzen**
Environmental Health Coordinator
195 David Jonas Dr.
New Braunfels, TX 78132
DR:OS00007722
830-608-2090
www.cceo.org


---

**From:** Bucky Smith <smithsepticdesign@gmail.com>
**Sent:** Thursday, January 11, 2024 3:57 PM
**To:** Ritzen, Brenda <rabbjr@co.comal.tx.us>
**Subject:** Re: 1365 Powder Ridge revision (Ferrante)



---

On Thu, Jan 11, 2024 at 2:52 PM Ritzen, Brenda <rabbjr@co.comal.tx.us> wrote:

> Bucky,
>
> The attached pages must also be revised.
>
> Thank you,

VOID

REVISED
8:48 am, Jan 12, 2024

Client: Ferrante
Location: 1365 Powder Ridge
Date: 9/14/2023

Netafim Bioline: 17mm .6gph 24in spacing @ 2fps Flush

Maximum Recommended Bioline Lateral Length: 3.00

1. Soil Texture or Perc Time: III
2. Soil Structure Shape:
   Soil Structure Grade:
3. Infiltration Loading Rate(ILR): 0.2 gal/day/ft^2
4. Slope: %
5. Infiltration Depth: in.
6. Hydraulic Linear Loading Rate: 4 gal/day/ft
7. Maximum Contour Length (MCL): 150
8. Daily Flow
   5.00 (No. of Bedrooms) X 84.00 (Flow / Bedroom) = 420.00 GPD
9. Dosing Area
   420.00 (Daily Flow) / 0.20 (ILR) = 2100.00 sqft
10. Dosing A. Length
    420.00 (Daily Flow) / 4.00 (HLLR) = 105.00 ft
11. Dosing A. Width
    2100.00 (Dosing Area) / 120.00 (Dosing A. Length) = 17.50 ft

11a. Dosing Design Width & Length Adjustment
Design Width 17.50 ft  Adjusted Dosing Length 120.00 ft

VOID

12. Required Dripper Line
    2100.00 (Dosing Area) / 12 (Drip line Spacing) = 12600.00 ft
13. Required Zones
    120.00 (Dosing A. Length) / 150.00 (MCL+) = 0.80 (Theoretical) = 1 (Design Zones)

14. Zone Breakout Table

| | a. Zone No. | b. Zone Dosing Area (sqft) | c. Linear Ft. of Tubing (ft) | d. Longest Lateral (ft) | e. Dosing Flow Rate (gpm) | f. Number of Distal Ends | g. Field Flush Rate (gpm) | h. Required Total Flow (RTF) (gpm) | i. Field Flushing Head (ft) | Force Main Supply Line j. Pipe Nom. Dia. (in) | k. Len. of Run (ft.) | l. Head Loss (ft) | Return Flush Line m. Pipe Nom. Dia. (in) | n. Len. of Run (ft.) | o. Head Loss (ft) | p. Static Lift (ft) | Total Field Head Loss (TFHL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Zone 1 | 2100.00 | 1050.00 | 210 | 5.25 | 5.00 | 8.00 | 26.25 | 1.00 | 90 | 3.84 | 1.00 | 120 | 4.44 | 6 | 48.53 | |
| | Zone 2 | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | | | 0.00 | | | |
| | Zone 3 | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | | | 0.00 | | | |
| | Zone 4 | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | | | 0.00 | | | |
| | Zone 5 | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | | | 0.00 | | | |
| | Zone 6 | 0.00 | 0.00 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 | | | 0.00 | | | |

Note: (14c) Longest lateral may be looped one or more times and is a function of: (7) contour length, Bioline lateral length, #of distal ends, #of zones and (10) dosing area length.

15. Max Required Total Flow: 13.25 (Largest RTF Based on 14g.)
16. Max Total Field Head Loss: 48.53 (Largest TFHL Based on 14p.)

17. Headworks Head Loss: 18 ft
18. Miscellaneous Head Loss: 10 ft
19. Design Total Dynamic Head: 76.3 ft

20. Pump Data: MINIMUM Pump Specifications

Sta-Rite Dominator (Pump Model Selected)
0.5 HP ____ Phase ____ Volts 11.3 GPM @ 70 FT.

Note: Selected pump must produce 115 ft @ 12gpm or 35 gpm for filter flush depending on filter model. (auto-flush units only)

21. Dosing Schedule

Peak Flow Adjustment 0.00 Minutes

| | Peak Total Run Time: 60.0 Minutes | Peak Total Rest Time: 14.0 Minutes | | | | | Average Total Run Time 60.0 Minutes | Average Total Rest Time 139.0 Minutes | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peak | | | | | | | | | | | |
| Zone 1 | 3.15 | GPM | 10.0 | Min/Dose | 12.6 | Gal/Dose | 6.00 | | Cycles/Day | | | |
| Zone 2 | 0.00 | GPM | | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 3 | 0.00 | GPM | | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 4 | 0.00 | GPM | | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 5 | 0.00 | GPM | | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 6 | 0.00 | GPM | | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| | 3.15 | GPM | 10.0 | Min/Dose | 12.6 | Gal/Dose | 6.00 | | Cycles/Day | | | |
| | 0.00 | GPM | 0.0 | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| | 0.00 | GPM | 0.0 | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 4 | 0.00 | GPM | 0.0 | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 5 | 0.00 | GPM | 0.0 | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |
| Zone 6 | 0.00 | GPM | 0.0 | Min/Dose | 0.0 | Gal/Dose | 0.00 | | Cycles/Day | | | |

Portion of Peak Daily Flow 100%

Notes:
Bioline Must Be Selected at Top of Page. Required inputs go in YELLOW spaces and adjustments in BLUE spaces. Information for the record goes into GREY spaces. Incorporates New UniRam Type Emitter. Peak Flow Cycle Adjustment should be between 2 and 4 minutes. Higher values could result in damage to the drain field.



STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 9811
REGISTERED
PROFESSIONAL SANITARIAN

1-11-24

**From:** Ritzen, Brenda
**To:** "Bucky Smith"; robert keltner
**Subject:** RE: 1365 Powder Ridge revision (Ferrante)
**Date:** Thursday, January 11, 2024 2:52:00 PM
**Attachments:** Pages from 116949.pdf
image001.png

---

Bucky,

The attached pages must also be revised.

Thank you,


COMAL COUNTY TEXAS

**Brenda Ritzen**
Environmental Health Coordinator
195 David Jonas Dr.
New Braunfels, TX 78132
DR:OS00007722
830-608-2090
www.cceo.org


---

**From:** Bucky Smith <smithsepticdesign@gmail.com>
**Sent:** Thursday, January 11, 2024 2:34 PM
**To:** Ritzen, Brenda <rabbjr@co.comal.tx.us>; robert keltner <rwkeltner@hotmail.com>
**Subject:** 1365 Powder Ridge revision (Ferrante)



---

--

**Bucky Smith**
**Smith Septic Design & Consultation**
smithsepticdesign@gmail.com
(512) 644-6980

RECEIVED
By Kathy Griffin at 8:50 am, Nov 30, 2023

VOID

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 Nov. 8, 2023 Permit Number 116949

## 1. APPLICANT / AGENT INFORMATION

| | | | |
|---|---|---|---|
| Owner Name | Jill and Brian Paul Ferrante | Agent Name | Countryside Construction - Walker Chapman |
| Mailing Address | 17037 Holiday Dr | Agent Address | 300 Chapman Parkway |
| City, State, Zip | Morgan Hill, CA, 95037 | City, State, Zip | Canyon Lake, TX, 78133 |
| Phone # | 408-472-4915 | Phone # | 830-899-2615 |
| Email | jill.brian@yahoo.com | Email | rwkeltner@hotmail.com |

## 2. LOCATION

Subdivision Name Vintage Oaks at the Vineyard Unit 28 Lot 2214 Block N/A

Survey Name / Abstract Number _____ Acreage _____

Address 1365 Powder Ridge City New Braunfels State TX Zip 78132

## 3. TYPE OF DEVELOPMENT

☒ Single Family Residential

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

Number of Bedrooms 6

Indicate Sq Ft of Living Area 5,500

☐ Non-Single Family Residential

(Planning materials must show adequate land area for double sized drainfield and needed for treatment units and disposal area)

VOID

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: $ _____ (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

## 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 November 8, 2023


Revised January 2021

VOID

Client: Ferrante

Location: 1365 Powder Ridge

Date: 9/20/2023

Netafim Bioline: 17mm .6gph 24in spacing @ 2fps Flush

Maximum Recommended Bioline Lateral Length: 300

1. Soil Texture or Perc Time: III
2. Soil Structure Shape:
   Soil Structure Grade:
3. Infiltration Loading Rate(ILR): 0.2 gal/day/ft^2
4. Slope: %
5. Infiltration Depth: in.
6. Hydraulic Linear Loading Rate: 4 gal/day/ft
7. Maximum Contour Length (MCL): 150 ft
8. Daily Flow: 6.00 (No. of Bedrooms) X 70.00 (Flow / Bedroom) = 420.00 GPD
9. Dosing Area: 420.00 (Daily Flow) / 0.20 (ILR) = 2100.00 sqft
10. Dosing A. Length: 420.00 (Daily Flow) / 4.00 (HLLR) = 105.00 ft
11. Dosing A. Width: 2100.00 (Dosing Area) / 120.00 (Dosing A. Length) = 17.50 ft

11a. Dosing Design Width & Length Adjustment
Design Width 17.50 ft  Adjusted Dosing Length 120.00 ft

12. Required Dripper Line: 2100.00 (Dosing Area) / 24 (Drip line Spacing) = 1050.00 ft
13. Required Zones: 120.00 (Dosing A. Length) / 150.00 (MCL+) = 0.80 (Theoretical) = 1 (Design Zones)

14. Zone Breakout Table

| | a. | b. | c. | d. | e. | f. | g. | h. | i. | j. | k. | l. | m. | n. | o. | p. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zone No. | Zone Dosing Area (sqft) | Linear Ft. of Tubing (ft) | Longest Lateral (ft) | Dosing Flow Rate (gpm) | Number of Distal Ends | Field Flush Rate (gpm) | Required Total Flow (RTF) (gpm) | Field Flushing Head (ft) | Force Main Supply Line: Pipe Nom. Dia. (in) | Force Main Supply Line: Len. of Run (ft.) | Force Main Supply Line: Head Loss (ft) | Return Flush Line: Pipe Nom. Dia. (in) | Return Flush Line: Len. of Run (ft.) | Return Flush Line: Head Loss (ft) | Static Lift (ft) | Total Field Head Loss (TFHL) |
| Zone 1 | 2100.0 | 1050.0 | 210.0 | 5.3 | 5.0 | 8.0 | 13.3 | 29.5 | 1.00 | 45 | 4.2 | 1.00 | 105 | 3.8 | 6 | 43.54 |
| Zone 2 | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | |
| Zone 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |
| Zone 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |
| Zone 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |
| Zone 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | 0.12 |

Note: (14c) Longest lateral may be looped one or more times and is a function of: (7) contour length, Bioline lateral length, #of distal ends, #of zones and (10) dosing area length.

15. Max Required Total Flow: 13.3 (Largest RTF Based on 14g.)
    Max Total Field Head Loss: 43.5 (Largest TFHL Based on 14p.)

17. Headworks Head Loss: 18 ft
18. Miscellaneous Head Loss: 10 ft
19. Design Total Dynamic Head: 71.5 ft

20. Pump Data: MINIMUM Pump Specifications

Sta-Rite Dominator — Pump Model Selected
0.5 HP — Phase — Volts — 13.3 GPM @ 71.5 FT.
Note: Selected pump must produce 115 ft @ 12gpm or 35 gpm for filter flush depending on filter model. (auto-flush units only)

21. Dosing Schedule

Peak Flow Adjustment 0.00 Minutes

| Peak | | | | Average | |
|---|---|---|---|---|---|
| Total Run Time: | 80.0 Minutes | | | Total Run Time | 80.0 Minutes |
| Total Rest Time: | 1360.0 Minutes | | | Total Rest Time | 1360.0 Minutes |
| **Peak** | | | | | |
| Zone 1 | 5.25 GPM | 10.0 | Min/Dose | 52.5 Gal/Dose | 8.0 Cycles/Day |
| Zone 2 | GPM | | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 3 | 0.00 GPM | | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 4 | 0.00 GPM | | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 5 | 0.00 GPM | | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 6 | 0.00 GPM | | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| **Avg** | | | | | |
| Zone 1 | 5.25 GPM | 10.0 | Min/Dose | 52.5 Gal/Dose | 8.0 Cycles/Day |
| Zone 2 | 6.00 GPM | 0.0 | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 3 | 0.00 GPM | 0.0 | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 4 | 0.00 GPM | 0.0 | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 5 | 0.00 GPM | 0.0 | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |
| Zone 6 | 0.00 GPM | 0.0 | Min/Dose | 0.0 Gal/Dose | 0.0 Cycles/Day |

Portion of Peak Daily Flow 100%

Notes:
Bioline Must Be Selected at Top of Page. Required inputs go in YELLOW spaces and adjustments in BLUE spaces. Information for the record goes into GREY spaces. Incorporates New UniRam Type Emitter. Peak Flow Cycle Adjustment should be between 2 and 4 minutes. Higher values could result in damage to the drain field.



VOID

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

VOID

## DESIGN SPECIFICATIONS

Daily Flow: 6 bedroom residence <5500 sq. ft. = 420gpd

Required Disposal Area: 420/.2 =2100 sq. ft.

Length of Tubing: 2100/2 = 1050 feet of tubing

Brand of Tubing: Netafim Bioline

Dosing Rate: Bioline tubing will flow 0.62GPH(0.01GPM) @ 35 PSI 1050 feet of tubing with emitters spaced every 2 feet = 525 emitters

525 emitters x 0.01 = 5.25 GPM dosing rate

Distribution Pipe: 1" SCH 40 purple manufactured pipe

## Pump Calculations and Pump Tank Float Settings

ATU Pump: Sta-Rite Dominator 1/2 hp

Pump Off: @ 7.0"

Pump On: @ 10.0"

Alarm On: @ 35.0"

Reserve Above Alarm: 305.64 gallons

VOID


CS 9-20-23

Smith Septic Design and Consultation
Bucky Smith
Registered Sanitarian #3611

VOID

REVISED
11:23 am, Dec 08, 2023

On-Site Sewage Facility
Aerobic Wastewater Treatment System
Drip Irrigation Application

STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 3611
REGISTERED
PROFESSIONAL SANITARIAN
12-4-23

**Owner/Site Location:**
Ferrante Residence
1365 Powder Ridge
New Braunfels, TX

**Site Description & Evaluation:**
A site evaluation indicated that the site is suitable for an aerobic drip irrigation system. The disposal area has a slope of less than 15% and there was no evidence of shallow groundwater. This residence will utilize a public water supply as a water source. All portions of the OSSF must maintain at least a 10' setback from all water lines. This site does not lie in the regulated 100 year floodplain. There were no recharge features found within 150' of the proposed OSSF. Minimum separation distances as stated in Chapter 285 (TCEQ) On-Site Sewage Facilities, must be maintained.

**Wastewater Design Flow:**
This design is for a 6 bedroom residence with <5500 square feet. Low flow fixtures will be utilized. System is designed for 420 gallons per day. One of the bedrooms is detached with a bathroom but no kitchen facilities.

VOID

**Aerobic Treatment System Description:**
This residence will utilize an Aeris Model D840 ATU. Wastewater from the residence will flow to a 500 gallon trash tank followed by 840 gallon per day aeration treatment tank. Effluent from the aeration tank will flow to a 900 gallon pump tank. Distribution to the Netafim Bioline tubing is through a SCH 40 PVC supply line. A 100 micron filter, pressure regulator, and check valves will be placed on the supply line. The SCH 40 PVC flush line will have a ball valve installed to set the required flushing velocity back into the pump chamber. Vacuum relief valves will be placed on the highest end of the drain field, one on the supply line and one on the flush line. The system will not be required to use chlorine as a disinfecting agent. Existing soil will be scarified and 12" of class III soil will be placed on the scarified soil. The drip tubing will be placed on the imported class III soil. A minimum of 6" of class III soil is required to cover the tubing. The drain

**From:** Ritzen, Brenda
**To:** jill.brian@yahoo.com; robert keltner
**Subject:** Permit 116949
**Date:** Wednesday, December 6, 2023 4:28:00 PM
**Attachments:** image001.png
Page from 116949.pdf

---

**Re: Jill and Brian Paul Ferrante**
**Vintage Oaks at the Vineyard Unit 28 Lot 2214**
**Application for Permit for Authorization to Construct an On-Site Sewage Facility (OSSF)**

**Owner / Agent :**

**The following information is needed before I can continue processing the referenced permit submittal:**

1. ✔ **See attached comments from a preliminary inspection completed today of the proposed drip field area.**
2. **Revise as needed and resubmit.**

**Thank you,**


COMAL COUNTY TEXAS

**Brenda Ritzen**
Environmental Health Coordinator
195 David Jonas Dr.
New Braunfels, TX 78132
DR:OS00007722
830-608-2090
www.cceo.org

**Ferrante Residence**
**1365 Powder Ridge New**
**Braunfels, TX 78132**

VOID

**LEGEND**

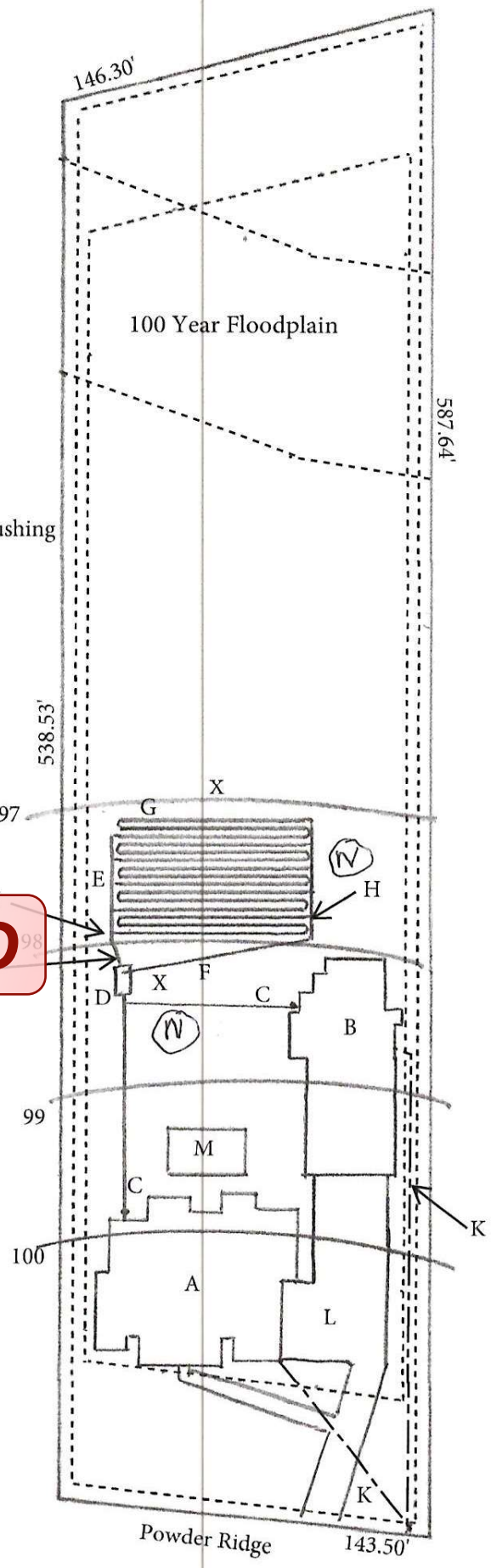
A: 5 Bedroom, Single Family Residence
B: 1 Bedroom Casita, < 1,500 Sq. Ft.
C: 3" or 4" SCH 40 PVC Pipe with Two Way Clean Out
D: Aeris Aerobic Treatment Unit, Model D840
E: 1" SCH 40 PVC Supply Line
F: 1" SCH 40 PVC Return Line
G: 1,050 Linear Feet of Purple Netafim Drip Tubing
15 Lines @ 70' each, 5 total runs @ 210' each
H: Air/Vacuum Pressure Relief Valve
I: 100 Micron Disc Filter
J: 1.5" PVC Ball Valve: to remain open during dosing to allow continuous flushing
K: Waterline
L: Driveway
M: Pool
IV. profile holes

**PROPERTY NOTES**

50' Building Setback on Front and Back Property Lines
10' Building Setback on Side Propert Lines
5' OSSF Setback from All Property Lines
5' Septic Tank Setback from Structure
*There is Floodplain on the Property

**SCALE**
1 INCH = 60 FEET

VOID




STATE OF TEXAS
CORRIE SMITH
LICENSE NO. 36[illegible]
REGISTERED
PROFESSIONAL SANITARIAN

CS 9-20-23

VOID

# Smith Septic Design and Consultation

Designed for:

Ferrante Residence

VOID

136[illegible] Ridge

New Braunfels, TX


CS 9-20-23

Smith Septic Design and Consultation contact information:

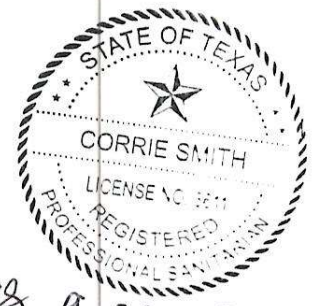
Bucky Smith · 202 Reimer Ave · San Marcos, TX 78666 · 512-644-6980

smithsepticdesign@gmail.com

VOID

Smith Septic Design and Consultation
Bucky Smith
Registered Sanitarian #3611

Design Report
On-Site Sewage Facility
Aerobic Wastewater Treatment System
Drip Irrigation Application




CS 9-20-23

**Owner/Site Location:**
Ferrante Residence
1365 Powder Ridge
New Braunfels, TX

**Site Description & Evaluation:**
A site evaluation indicated that the site is suitable for an aerobic drip irrigation system. The disposal area has a slope of less than 30% and there was no evidence of shallow groundwater. This residence will utilize a public water supply as a water source. All portions of the proposed OSSF must maintain at least a 10' setback from all water lines. A portion of this site lies in the regulated 100 year floodplain. No portion of the home or OSSF lie in the regulated floodplain. There were no recharge features found within 150' of the proposed OSSF. Minimum separation distances as stated in Chapter 285 (TCEQ) On-Site Sewage Facilities, must be maintained.

VOID

**Wastewater Design Flow:**
This design is for a 6 bedroom residence with <5500 square feet. Low flow fixtures will be utilized. System is designed for 420 gallons per day. One of the bedrooms is detached with a bathroom but no kitchen facilities.

**Aerobic Treatment System Description:**
This residence will utilize an Aeris Model D840 ATU. Wastewater from the residence will flow to a 500 gallon trash tank followed by 840 gallon per day aeration treatment tank. Effluent from the aeration tank will flow to a 900 gallon pump tank. Distribution to the Netafim Bioline tubing is through a SCH 40 PVC supply line. A 100 micron filter, pressure regulator, and check valves will be placed on the supply line. The SCH 40 PVC flush line will have a ball valve installed to set the required flushing velocity back into the pump chamber. Vacuum relief valves will be placed on the highest end of the drain field, one on the supply line and one on the flush line. The system will not be required to use chlorine as a disinfecting agent. Existing soil will be scarified. The drip tubing will be placed on the scarified soil. A minimum of 6" of class III soil is required to cover the tubing. The drain field will be seeded or hydro mulched. **I certify that this OSSF meets the requirements of the existing CZP.**

ORT/GR# 13571 /Closer RS /$ NB

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 TODD TUSTIN and wife, JILLIAN TUSTIN, 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 BRIAN PAUL FERRANTE and wife, JILL FERRANTE, 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:

> Lot 2214 of VINTAGE OAKS AT THE VINEYARD, UNIT 28, a subdivision in Comal County, Texas, according to plat recorded in Document No. 202006037730, 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 24 day of February, 2022.

TODD TUSTIN

JILLIAN TUSTIN

STATE OF TEXAS §
COUNTY OF ~~COMAL~~ Travis §

This instrument was acknowledged before me on this the 24th day of February, 2022, by TODD TUSTIN and wife, JILLIAN TUSTIN.

Notary Public in and for the State of Texas

ANNA LAZAREVA
Notary ID #132631945
My Commission Expires
August 19, 2024

GRANTEE'S MAILING ADDRESS:
17037 Holiday Drive
Morgan Hill, CA 95037

1799.deeds
Old Republic Title Co. (RS)
GF #13571NB

**Filed and Recorded**
**Official Public Records**
**Bobbie Koepp, County Clerk**
**Comal County, Texas**
**03/02/2022 04:02:49 PM**
**CHRISTY 2 Pages(s)**
**202206010098**

Bobbie Koepp

**RECEIVED**
*By Kathy Griffin at 8:46 am, Nov 30, 2023*

COMAL COUNTY
ENGINEER'S OFFICE

# OSSF DEVELOPMENT APPLICATION CHECKLIST

*Staff will complete shaded items*

| | | |
|---|---|---|
| | | 116949 |
| *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

- [X] Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate
- [X] Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer
- [X] 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.
- [X] Required Permit Fee - See Attached Fee Schedule
- [X] Copy of Recorded Deed
- [X] Surface Application/Aerobic Treatment System
  - [X] Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public
  - [X] 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

Nov. 8, 2023
Date

___ COMPLETE APPLICATION

Check No._____ Receipt No._____

INCOMPLETE APPLICATION
___ (Missing Items Circled, Application Refeused)

Revised: September 2019

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

# TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: MAY 16,2024 Installed: 1/16/2024 Service Expires:1/16/2026

BILLING ADDRESS:
BRIAN & JILL FERRANTE
1365 POWDER RIDGE
NEW BRAUNFELS, TX 78132

PHYSICAL ADDRESS:
1365 POWDER RIDGE
NEW BRUANFELS, TX 78132

TELEPHONE: 408-781-3612 (BRIAN)
ALT. PHONE: 408-472-4915 (JILL)
GATE CODE:
SUBDIVISION: VINTAGE OAKS MFG: AERIS 840

LOT: LT 2214,

PERMIT#: 116949
COUNTY: COMAL
SN:
MAPSCO: N/A

NOTES:
TYPE OF SYSTEM: DRIP

| Inspected Item: | Operational | Inoperative |
|---|---|---|
| Aerators SCFM/Compressors PSI Record Pressure Reading | 1.5 | |
| Filters | / | |
| Irrigation Pumps | / | |
| Recirculation Pumps | N/A | |
| Disinfection Device | / | |
| Chlorine Supply | / | |
| Electrical Circuits | / | |
| Distribution System | / | |
| Sprayfield Vegetation | / | |
| Back Flush Drip Field, if applicable | N/A | |
| Other as Noted | | |
| Access Posts are Secured | Yes | No |

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

Checked Compressor
Cleaned Air filter
Checked Chlorine
Floats and sprinklers
Set timer

SYSTEM OPERATING AS DESIGNED? (Y)/N

3. Tests required and results:

| | Required | | Results | Test |
|---|---|---|---|---|
| | Yes | No | mg/l mpn/100ml or Trace | Method |
| BOD(Grab) | | | | |
| TSS(Grab) | | - | Clear | grab |
| Cl(Grab) | ✓ | | 1.0 | 0to |
| Fecal Coliform | | | | |
| | | | | |

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Mikle 3

Date of completion: 5-16 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walker Chapman

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

# TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1.Inspection Date: September 16,2024 Installed: 1/16/2024 Service Expires:1/16/2026

BILLING ADDRESS:
BRIAN & JILL FERRANTE
1365 POWDER RIDGE
NEW BRAUNFELS, TX 78132

PHYSICAL ADDRESS:
1365 POWDER RIDGE
NEW BRUANFELS, TX 78132

TELEPHONE: 408-781-3612 (BRIAN)
ALT. PHONE: 408-472-4915 (JILL)
GATE CODE:
SUBDIVISION: VINTAGE OAKS MFG: AERIS 840

LOT: LT 2214,

PERMIT#: 116949
COUNTY: COMAL
SN:
MAPSCO: N/A

NOTES:
TYPE OF SYSTEM: DRIP

| Inspected Item: | Operational | Inoperative |
|---|---|---|
| Aerators SCFM/Compressors PSI Record Pressure Reading | 1.5 | |
| Filters | ✓ | |
| Irrigation Pumps | N/A | |
| Recirculation Pumps | ✓ | |
| Disinfection Device | ✓ | |
| Chlorine Supply | N/A ✓ | |
| Electrical Circuits | ✓ | |
| Distribution System | ✓ | |
| Sprayfield Vegetation | N/A | |
| Back Flush Drip Field, if applicable | ✓ | |
| Other as Noted | | |

2. Action taken or Repairs or Needed repairs to system (list all components replaced):
Checked compressor
cleaned air filter and micron
Checked Chlorine
floats and BACK flushed
set timer

SYSTEM OPERATING AS DESIGNED? (Y)/N

Access Posts are Secured (Yes) No

3. Tests required and results:

| | Required | | Results | Test |
|---|---|---|---|---|
| | Yes | No | mg/l mpn/100ml or Trace | Method |
| BOD(Grab) | | | | |
| TSS(Grab) | | ✓ | CLEAR | grab |
| Cl(Grab) | ✓ | | 1.9 | OTO |
| Fecal Coliform | | | | |
| | | | | |

* PLEASE MAINTAINE AROUND SYSTEM, GRASS, SPRAY FOR ANTS. Thank you.

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Mikle 3

Date of completion: 09-30-24 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walter Chapman

**Countryside Construction, Inc.**
**300 Chapman Parkway, Canyon Lake, TX. 78133**
**Phone: 830-899-2615**

# Septic System Service Agreement

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

**Name: BRIAN & JILL FERRANTE** **Address: 1365 POWDER RIDGE**
**Sub-Div./County: VINTAGE OAKS, COMAL** **NEW BRUANFELS, TX 78132**
**Permit #: 116949 DRIP Model #: AERIS 840 Serial #:**
**Phone: 408-781-3612 (BRIAN) 408-472-4915 (JILL)**

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

Legal Description: **LT 2214, VINTAGE OAKS, COMAL**

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: 1/16/2024 TO: 1/16/2026** and will provide the following:

- An inspection every (4) four months which will include: Servicing of the mechanical & electrical components as necessary to ensure system is functioning as engineer designed, pulling and cleaning the aerator shaft, cleaning compressor air filters, 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 Licensee #OS0002929-OSSF** **Maintenance Provider Licensee #MP0000035**

(X) _____ (X) BRIAN FERRANTE 4-13-24
Property Owner Signature Print Name Date

Walker Chapman 4-16-24
Walker Chapman Date Authorized Service Representative

*(revised 08/13/2020*

COUNTRYSIDE CONSTRUCTION, INC.
300 CHAPMAN PARKWAY
CANYON LAKE, TX 78133

Phone: 830-899-2615
Fax: 830-899-6662

# TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1.Inspection Date: January 16,2025 Installed: 1/16/2024 Service Expires:1/16/2026

BILLING ADDRESS:
BRIAN & JILL FERRANTE
1365 POWDER RIDGE
NEW BRAUNFELS, TX 78132

PHYSICAL ADDRESS:
1365 POWDER RIDGE
NEW BRUANFELS, TX 78132

TELEPHONE: 408-781-3612 (BRIAN)
ALT. PHONE: 408-472-4915 (JILL)
GATE CODE:
SUBDIVISION: VINTAGE OAKS MFG: AERIS 840

LOT: LT 2214,

PERMIT#: 116949
COUNTY: COMAL
SN:
MAPSCO: N/A

NOTES:
TYPE OF SYSTEM: DRIP

| Inspected Item: | Operational | Inoperative |
|---|---|---|
| Aerators 3CFM/Compressors PSI Record Pressure Reading | 1.5 | |
| Filters | ✓ | |
| Irrigation Pumps | ✓ | |
| Recirculation Pumps | N/A | |
| Disinfection Device | ✓ | |
| Chlorine Supply | ✓ | |
| Electrical Circuits | ✓ | |
| Distribution System | ✓ | |
| Sprayfield Vegetation | N/A | |
| Back Flush Drip Field, if applicable | ✓ | |
| Other as Noted | | |

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

Checked Compressor

Cleaned air filter, and micron

Checked Chlorine

Floats and Back Flushed

set timer

SYSTEM OPERATING AS DESIGNED? (Y)N

Access Posts are Secured (Yes) No

3. Tests required and results:

| | Required | | Results | Test |
|---|---|---|---|---|
| | Yes | No | mg/l mpn/100mi or Trace | Method |
| BOD(Grab) | | | | |
| TSS(Grab) | | ✓ | Clear | grab |
| Cl(Grab) | ✓ | | 1.0 | grab |
| Fecal Coliform | | | | |
| | | | | |

Copies of this report have been forwarded to the following: COMAL county / homeowner.

Maintenance Technician: Mikle 3

Date of completion: 1-27-25 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walker Chapman

**COUNTRYSIDE CONSTRUCTION, INC.**
**300 CHAPMAN PARKWAY**
**CANYON LAKE, TX 78133**

**Phone: 830-899-2615**
**Fax: 830-899-6662**

# TESTING AND REPORTING RECORD

This Testing and Reporting Record shall be completed, signed and dated after each inspection.

1. Inspection Date: **February 21,2025** Installed: 2/21/2024 Service Expires:2/21/2026

BILLING ADDRESS:
**EDWARD & KRISTIN LUCERO**
**2476 GEORGE PASS**
**CANYON LAKE, TX 78133**

PHYSICAL ADDRESS:
**2476 GEORGE PASS**
**CANYON LAKE, TX 78133**

TELEPHONE: **707-580-0210**
ALT. PHONE:
GATE CODE: **#1286**
SUBDIVISION: **THE ENCLAVE** MFG: **CLEARSTREAM-600**
LOT: **LT 66,**
PERMIT#: **116496**
COUNTY: **COMAL**
SN: **22070464**
MAPSCO: **N/A**

NOTES:
TYPE OF SYSTEM: **SPRAY**

| Inspected Item: | Operational | Inoperative |
|---|---|---|
| Aerators SCFM/Compressors PSI Record Pressure Reading | 2.0 | |
| Filters | / | |
| Irrigation Pumps | / | |
| Recirculation Pumps | N/A | |
| Disinfection Device | / | |
| Chlorine Supply | / | |
| Electrical Circuits | / | |
| Distribution System | / | |
| Sprayfield Vegetation | / | |
| Back Flush Drip Field, if applicable | N/A | |
| Other as Noted | | |

2. Action taken or Repairs or Needed repairs to system (list all components replaced):

CHECKED pump, Alarms, sprinklers, FLOATS, chlorine, Compressor/FILTER

**SYSTEM OPERATING AS DESIGNED? (Y)/N**

| | | |
|---|---|---|
| Access Posts are Secured | (Yes) | No |

3. Tests required and results:

| | Required | | Results | Test |
|---|---|---|---|---|
| | Yes | No | mg/1 mpn/100mi or Trace | Method |
| BOD(Grab) | | | | |
| TSS(Grab) | | / | | |
| C1(Grab) | / | | | |
| Fecal Coliform | | | | |
| | | | | |

**Copies of this report have been forwarded to the following: COMAL county / homeowner.**

Maintenance Technician: Thomas 11

Date of completion: 2/24/25 Start Job Time: _____ Stop Job Time: _____

Maintenance Provider: Walden Chapman