

Comal County Environmental Health

OSSF Inspection Sheet

Installer Name: _____

OSSF Installer #: _____

1st Inspection Date: _____

2nd Inspection Date: _____

3rd Inspection Date: _____

Inspector Name: _____

Inspector Name: _____

Inspector Name: _____

Permit#:

Address:

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

Inspector Notes:

Comal County Environmental Health OSSF Inspection Sheet

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

4/9/25 CA: Revision for septic line sleeving in lieu of waterline sleeving. Remove rocks from spray radius in front. Rear spray radius on left side has shed in spray radius. Will need re inspection fee

**Comal County Environmental Health
OSSF Inspection Sheet**

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

**Comal County Environmental Health
OSSF Inspection Sheet**

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

**Comal County Environmental Health
OSSF Inspection Sheet**

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



COMAL COUNTY

ENGINEER'S OFFICE

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

Permit Number: 116942
Issued This Date: 12/28/2023
This permit is hereby given to: Ricardo Sanchez and Carmen Sims

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

520 CARIBOU DR
SPRING BRANCH, TX 78070

Subdivision: Deer River Phase 2
Unit: 0
Lot: 124
Block: 0
Acreage: 0.0000

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic
Surface Irrigation

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

Call (830) 608-2090 to schedule inspections.



COMAL COUNTY

ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION
CHECKLIST

Staff will complete shaded items

		116942
Date Received	Initials	Permit Number

Instructions:

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

OSSF Permit

- ☒ Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate
- ☒ Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer
- ☒ Planning Materials of the OSSF as Required by the TCEQ Rules for OSSF Chapter 285. Planning Materials shall consist of a scaled design and all system specifications.
- ☒ Required Permit Fee - See Attached Fee Schedule
- ☒ Copy of Recorded Deed
- ☒ Surface Application/Aerobic Treatment System
 - ☒ Recorded Certification of OSSF Requiring Maintenance/Affidavit to the Public
 - ☒ Signed Maintenance Contract with Effective Date as Issuance of License to Operate

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


Signature of Applicant

11.13.23
Date

___ COMPLETE APPLICATION

Check No. _____ Receipt No. _____

INCOMPLETE APPLICATION

___ (Missing Items Circled, Application Refused)



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 _____

Permit Number 116942

1. APPLICANT / AGENT INFORMATION

Owner Name Ricardo Sanches and Carmen Sims
Mailing Address 520 Caribou Dr.
City, State, Zip Spring Branch, TX 78070
Phone # _____
Email _____

Agent Name DAVID WINTERS SEPTICS
Agent Address PO BOX 195
City, State, Zip SPRING BRANCH, TX 78070
Phone # 830-935-2477
Email WINTERSSEPTICS@GVTC.COM

2. LOCATION

Subdivision Name Deer River, Phase 2 Unit _____ Lot Lot 124 Block _____
Survey Name / Abstract Number _____ Acreage _____
Address 520 Caribou Dr. City Spring Branch State TX Zip 78070

3. TYPE OF DEVELOPMENT

☒ Single Family Residential

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

Number of Bedrooms 4

Indicate Sq Ft of Living Area 2128 Sq. Ft.

☐ Non-Single Family Residential

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

Type of Facility _____

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

Restaurants, Lounges, Theaters - Indicate Number of Seats _____

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

Travel Trailer/RV Parks - Indicate Number of Spaces _____

Miscellaneous _____

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

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

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

Source of Water ☒ Public ☐ Private Well ☐ Rainwater

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



Planning Materials & Site Evaluation as Required Completed By _____

System Description _____

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

Tank Size(s) (Gallons) _____ Absorption/Application Area (Sq Ft) _____

Gallons Per Day (As Per TCEQ Table III) _____

(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.



Signature of Designer

Date

11c



202306036326 11/16/2023 10:50:01 AM 1/1

**COUNTY OF COMAL
STATE OF TEXAS**

AFFIDAVIT TO THE PUBLIC

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

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

I
The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on Environmental Quality (TCEQ) to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, give 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 owners 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):

Ricardo Esequiel Sanchez and Carmen Elena Sims

The property is owned by (Insert owner's full name):

Lot 124, DEER RIVER PHASE 2, a subdivision in Comal County, Texas

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 OSSF may be obtained from **Comal County Engineer's Office**.

WITNESS BY HAND(S) ON THIS 16 DAY OF November

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

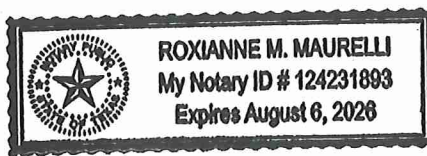
Ricardo Sanchez
Carmen E. Sims
(PRINTED NAME)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 16 DAY OF November

[Signature]
Notary Public, State of Texas

Notary's Printed Name: Roxianne M. Maurelli

My Commission Expires: Aug 6, 26



Filed and Recorded
Official Public Records
Bobbie Koepf, County Clerk
Comal County, Texas
11/16/2023 10:50:01 AM
CHRISTY 1 Page(s)
202306036326



Bobbie Koepf

DAVID WINTERS SEPTICS, LLC
PO BOX 195
SPRING BRANCH, TX 78070
830-935-2477 OFFICE
830-935-2477 FAX
wintersseptics@gvtc.com

Routine Maintenance and Inspection Agreement

This Work-for-Hire Agreement (hereafter referred to as this "Agreement") is entered into, by, and between
RICARDO SANCHEZ AND CARMEN SIMS (referred to as "Client") and David Winters Septic's, LLC, Inc.
(hereafter referred to as "Contractor") located at 520 CARIBOU DR. Date beginning on Issue Date of
and contract ending 2 years from Issue Date of License to Operate License to Operate
By this agreement the Contractor agrees to render professional service, as described herein, and the Client agrees to fulfill the
terms of this Agreement as described herein.

This agreement will provide for all required inspections, testing, and service for your Aerobic Treatment System.
The policy will include the following:

1. Three (3) inspections per year/service calls (at least one every four months), for a total of six (6) over the two-year period, including inspection, adjustment, and servicing of the mechanical, electrical and other applicable component parts to ensure proper function. This includes inspecting control panel, air pumps, air filters, diffuser operation, and replacing or repairing any component not found to be functioning correctly. Any alarm situations affecting the proper function of the Aerobic process will be addressed within a 48-hour time frame. This contract does not include labor on warranty and non-warranty parts.
2. An effluent quality inspection consisting of a visual check of color, turbidity, scum overflow and examination for odors. A test for chlorine residual and pH will be taken and reported as necessary.
3. If any improper operation is observed, which cannot be corrected at the time of the service visit, you will be notified on your inspection report.
4. The Client is responsible for the chlorine tablets and/or liquid chlorine; they must be filled before or during the service visit.
5. Any additional visits, inspections or sample collection required by specific Municipalities, Water/River Authorities, and County Agencies the TCEQ or any other authorized regulatory agency in your jurisdiction will not be covered by this policy.

At the conclusion of the initial service policy, our company will make available, for purchase on an annual basis, a continuing service policy cover NORMAL inspection, maintenance and repair.

The Homeowners Manual must be strictly followed or warranties are subject invalidation. Pumping of sludge build up is not covered by this policy and will result in additional charges.

This agreement does not cover any labor or parts for items which must be replaced due to acts of God, i.e., lightning strikes, high winds, flooding, freezing.

This agreement DOES NOT COVER materials or parts which must be replaced due to misuse or abuse of the system. These include but are not limited to: Sewage flows exceeding the recommended daily hydraulic design capabilities, Disposal of Non-Biodegradable materials, such as chemicals, grease or oil, sanitary napkins, tampons, baby wipes, disposable diapers, Clogs in the line between the house and the tank.

This agreement DOES NOT COVER LABOR OR PARTS for out- of- warranty items.

Service calls made outside of the regular maintenance schedule are subject to a **\$75.00 SERVICE CALL FEE** due at the time of service.

ACCESS BY CONTRACTOR

The contractor or anyone authorized by the contractor may enter the property at reasonable times without prior notice for the purpose of service described above.

First 2 years
included with new

PAYMENT AGREEMENT

The client will pay compensation to the contractor for the services in the amount of install. This compensation shall be payable in one lump sum payment upon acceptance of this agreement. Payments not received within 30 days of the above described due date will be subject to a \$25.00 late penalty.

TERMINATION OF THIS AGREEMENT

Either party may terminate this agreement within 10 days of written notice in the event of substantial failure to perform in accordance with its terms by other party without fault of the terminating party. If this agreement is terminated, the contractor will immediately notify the appropriate health authority.

LIMIT OF LIABILITY

The Contractor will not be liable for indirect, consequential, incidental or punitive damages, whether in contract or any other theory. In no event shall the Contractor's liability for direct damages exceed the price for the services described in this agreement.

Permit # _____

The effective date of this initial maintenance agreement shall be the date the license to operate is issued.

Client

RICARDO SANCHEZ AND CARMEN SIMS

Name

520 CARIBOU DR.

Address

SPRING BRANCH, TX 78070

City/State/Zip Code

Phone

babygirlena11222007@yahoo.com

Email address

Carmen & Ricardo
Signature of Client

Contractor

David Winters Septic's, LLC, Inc.

P.O. Box 195

Spring Branch, Texas 780170

Office 830-935-2477 Fax 830-935-2477

By: *David Winters*

Signature of Contractor

Maintenance Provider #-MP0001686

OSSF Soil & Site Evaluation

Page 1 (Soil & Site Evaluation)

Date Performed: 11 / 9 / 2023

Property Owner: Ramos Construction

Site Location: 520 Caribou Dr. Spring Branch, TX 78070 Proposed Excavation Depth: N/A

REQUIREMENTS:

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

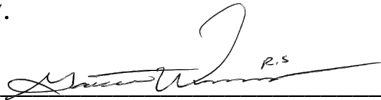
Soil Boring Number:					
Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.	III	<30%	Well Drained	Bedrock 2"-3"	Clay Loam
2 FT.					
3 FT.					
4 FT.					
5 FT.					

Soil Boring Number:					
Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.		SAME	AS	ABOVE	
2 FT.					
3 FT.					
4 FT.					
5 FT.					

FEATURES OF SITE AREA

Presence of 100 year flood zone ☐ Yes ☒ No
Presence of upper water shed ☐ Yes ☒ No
Presence of adjacent ponds, streams, water impoundments ☐ Yes ☒ No
Existing or proposed water well in nearby area (within 150 feet) ☐ Yes ☒ No
Ground Slope 1-2 %

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


(Signature of person performing evaluation)
Form # PA5/030204-Final

11/9/2023
(Date)

OS # 0037882
Registration Number and Type

OSSF Soil & Site Evaluation

Page 1 (Soil & Site Evaluation)

Date Performed: 11 / 9 / 2023

Property Owner: Ramos Construction

Site Location: 520 Caribou Dr. Spring Branch, TX 78070 Proposed Excavation Depth: N/A

REQUIREMENTS:

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


Soil Boring Number:					
Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.	III	<30%	Well Drained	Bedrock 2"-3"	Clay Loam
2 FT.					
3 FT.					
4 FT.					
5 FT.					

Soil Boring Number:					
Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.		SAME	AS	ABOVE	
2 FT.					
3 FT.					
4 FT.					
5 FT.					

FEATURES OF SITE AREA

Presence of 100 year flood zone ☐ Yes ☒ No
Presence of upper water shed ☐ Yes ☒ No
Presence of adjacent ponds, streams, water impoundments ☐ Yes ☒ No
Existing or proposed water well in nearby area (within 150 feet) ☐ Yes ☒ No
Ground Slope 1-2 %

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


(Signature of person performing evaluation)
Form # PA5/030204-Final

11/9/2023
(Date)

OS # 0037882
Registration Number and Type

RECEIVED

By Brandon Olvera at 9:29 am, Dec 28, 2023

GW Designs
Garrett R. Winters
1332 Mountain View DR, Canyon Lake TX

December 19th, 2023

Comal County Engineer's Office
195 David Jonas Drive
New Braunfels, TX 78132

RE- Septic design
520 Caribou Dr.
Spring Branch, TX 78070

Brandon/Brenda

The unique circumstances of this property make it difficult to comply with the 20ft spray setback requirement. I hereby request a variance for the placement of the spray disposal area 10 feet from the property lines, as well as a battery backup timer to be installed to ensure sprayers only spray during the predawn hours. Installing this timer will provide equivalent protection with TCEQ CHAPTER 285 rules Table X. In my professional opinion this variance will not pose a threat to the environment or public health.

Please feel free to contact me with any questions or concerns.

Sincerely,

Garrett R. Winters R.S



GW Septic Designs



On-Site Sewage Facility Application and Design

Prepared By:

Garrett R. Winters

Registered Professional Sanitarian

R.S# 5213



Contact Information

Phone: (210) 854-2673

Email: Gwintersseptics@gmail.com

1332 Mountain View Dr.

Canyon Lake, TX 78133

RECEIVED

By Brandon Olvera at 2:25 pm, Apr 10, 2025

Owner/Site Location

Owner/Builder: Ramos Construction
Address: 520 Caribou Dr. Spring Branch, TX 78070
Subdivision: Deer River Phase 2
Lot: 124

LOT DESCRIPTION

The proposed method of wastewater treatment is aerobic treatment with spray irrigation. The sizing of the OSSF was determined as specified in the Texas Commission on Environmental Quality (TCEQ) CHAPTER 285.33 (C)(2). Water saving devices are assumed for the septic system design. This site is not within the 100-Year flood plain (see site plan). Water to the property will be serviced by a Public Water Supply.

System Summary

This design was performed in conformance with Chapter 285 of Texas Commission on Environmental Quality.

- 600gpd Aerobic treatment unit (Aquaklear AKA600CA)
- Manual 24HR control timer
- 20gpm submersible effluent pump
- SCH40 PVC Sewer pipe
- 1" purple PVC SCH40 supply line
- Liquid Chlorinator
- K-Rain Gear Driven Pop-up Sprinklers not to exceed 40PSI.
- Sprinklers: SEE SITE PLAN
- Visual and audio alarms monitoring high water and aerator failure placed in a noticeable location.

Wastewater Design Flow

Structure: 2,001sf
Bedrooms: 4
Wastewater Usage Rate: 300gpd
Application Rate: 0.064
Application Area Required: 4,688sf.
Actual Application Area: 4,926sf

System Components

Pretreatment Tank: 500gal
Pump Tank: 800gal
Aeration Tank: 600gpd
Pump: C1 20gpm submersible pump (Model no. 20C1-05P4-2W115 or equivalent)
Pump tank reserve minimum: 100gal

Landscaping

The native vegetation in the distribution area should consist of low-level shrubs, plains grass, bluestem, or Bermuda. The entire application area must maintain a ground cover after construction. Exposed rock will be covered when in the application area with fine soil such as sandy loam.

If the slope in the drain field area is greater than 15% or is complex, the area is unsuitable for the disposal method, suitable fill shall be brought into the field area to meet this requirement. Surface application systems may apply treated and disinfected effluent upon areas with existing vegetation. If any ground within the proposed surface application area does not have vegetation, that bare area shall be seeded or covered with sod before system start-up. The vegetation shall be capable of growth before the system start-up.

Potable Water Lines

Potable water lines must be at a minimum distance of 10 feet from OSSF components. If a water line is within 10 feet, it must be sleeved with 2" SCH40 PVC Pipe in order to provide equivalent protection of a 10' separation in compliance with TAC chapter 290, Subchapter D, Rules for Public Drinking Water Systems.

Installation

A 3" or 4" solid-wall SCH40 or SDR 26 PVC pipe with a minimum downward slope of 1/8 inch per foot will be installed between the tank and house. A 2-way cleanout must be included in the line between the house and tank. All piping from house-to-tank and tank-to-drain field must be bedded with class Ib, II, or III soils containing less than 30% gravel. The bottom of the excavation for the tank shall be level and free of large rocks/debris, the tanks shall then be bedded with a 4" layer of sand, sandy loam, 3/4 dust or pea gravel. All openings in the tank are to be sealed to prevent the escape of wastewater.

Electrical Components

All electrical wiring shall conform to the requirements of the National Electric Code (1999) or under any other standards approved by the executive director. Additionally, all external wiring shall be installed in approved, rigid, non-metallic gray code electrical conduit. The conduit shall be buried according to the requirements in the National Electric Code and terminated at a main circuit breaker panel or sub-panel. Connections shall be in approved junction boxes. All electrical components shall have an electrical disconnect within direct vision from the place where the electrical device is being serviced. Electrical disconnects must be weatherproof (approved for outdoor use) and have maintenance lockout provisions.

Maintenance Requirements

The homeowner is primarily responsible for maintaining a properly functioning aerobic treatment system. The installer is responsible for furnishing the homeowner with the installation manual and instructing the homeowner on proper use for this type of OSSF. The following provisions are required by the homeowner:

- A maintenance contract must be maintained for the first 2 years by a licensed maintenance contractor.
- A constant supply of chlorine must be provided to the OSSF system. (Avg. 1gal/month)
- The owner must prohibit the discharge of grease into the OSSF system.
- Keep the spray area mowed and tank area free of ants and weeds.
- Maintain all faucets and toilets inside the home free of leaks.
- Maintaining OSSF Chambers by pumping each of them out every 3-5 years to avoid sludge buildup.

Maintenance Contract

For any OSSF with a pump, the installer shall provide the Designated Representative with proof of an executed two-year full-service maintenance contract as required by the TCEQ. 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 for 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.

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Affidavit

Prior to issuance of a permit, a certified copy of an affidavit must be submitted to the County Clerk's office. The affidavit is a recorded file in reference to the real property deed on which the surface application is installed on the property. 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 OSSF Rules. 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 has been severed from the property.



The following design is intended to follow and meet the TCEQ 30 TAC 285 OSSF Regulations. The performance of this system cannot be guaranteed even though all provisions of 30 TAC 285 have been met or exceeded

FLOOD PLAIN: AFTER CAREFUL EXAMINATION AND STUDY OF AVAILABLE DATA (INCLUDING FEMA PANEL ZONE X (AREA OF MINIMAL FLOOD HAZARD) I HAVE DETERMINED, TO THE BEST OF MY ABILITY, THAT NEITHER THE HOUSE NOR THE SEPTIC IS LOCATED WITHIN THE 100 YEAR FLOOD PLAIN.

OSSF INFORMATION

- STRUCTURE: 2000SF SINGLE FAMILY RESIDENCE
- BEDROOMS: 4
- DAILY WASTEFLOW: 300GPD
- TANK MANUFACTURER: AQUAKLEAR AKA600CA
- MINIMUM SPRINKLER COVERAGE: 4,688SF
- ACTUAL COVERAGE AREA: 4,926SF

NOTES

- TANK IS TO PLACED AT LEAST 5' FROM STRUCTURES
- ALL POTABLE WATER LINES SHALL BE A MINIMUM OF 10' FROM ANY PART OF THE OSSF
- SEWER LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PIPE WHERE IT IS WITHIN 5' OF OR CROSSES UNDER DRIVEWAYS, STRUCTURES, AND SURFACE IMPROVEMENTS TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.
- A MINIMUM OF 1/4" PER FOOT OF FALL IS REQUIRED FROM STRUCTURE TO ATU
- SPRINKLER HEADS MAY NOT SPRAY WITHIN 10' OF TREES. UNDER NO CIRCUMSTANCE SHALL FOOD CROPS BE PLANTED IN THE SPRAY AREA
- SPRAY RADIUS SHALL MAINTAIN AT LEAST 100' FROM PRIVATE WELLS, 150' FROM PUBLIC WELLS. (TANKS 50' MIN)
- SYSTEM SHALL INCLUDE BOTH AUDIBLE AND VISUAL ALARMS TO INDICATE HIGH WATER AND AIR FAILURE
- THE AMOUNT OF WASTEWATER FLOW OF THE STRUCTURE(S) ON THIS DESIGN SHALL NOT SURPASS THE PERMITTED FLOW RATE
- ANY SURFACE ROCKS SHALL BE COVERED WITH SOIL THAT IS CAPABLE OF GROWTH
- NO SURFACE IMPROVEMENTS ARE TO BE WITHIN THE SPRAY AREA
- THIS DESIGN MEETS ALL REQUIREMENTS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY OSSF REGULATIONS
- THIS SITE PLAN IS EXPRESSLY INTENDED FOR ON-SITE SEWAGE FACILITY (OSSF) USE ONLY AND SHOULD NOT BE UTILIZED OR CONSTRUED FOR SURVEYING PURPOSES. ITS PURPOSE IS TO ACCURATELY REPRESENT THE LAYOUT AND DESIGN OF THE SEWAGE SYSTEM WITHIN THE SPECIFIED PROPERTY BOUNDARIES FOR REGULATORY AND OPERATIONAL COMPLIANCE.

*NOTE
WATER LINE TO BE SLEEVED
W/ SCH40 PVC PIPE WHEN
WITHIN 10FT OF ANY SEPTIC
COMPONENT. DOING SO WILL
PROVIDE EQUIVALENT PROTECTION
WITH TAC CH.290 SUBCHAPTER D
RULES FOR PUBLIC DRINKING WATER
SYSTEMS.

WATER LINE TO BE SLEEVED
WITH 2" SCH40 PVC PIPE 10'
EACH SIDE WHEN CROSSING
OSSF SUPPLY PIPE

SLEEVE SUPPLY LINE
W/ SCH40 PVC PIPE 5' BEYOND
EACH SIDE OF DWAY

AQUAKLEAR
AKA600CA

PREPARED BY: GARRETT R. WINTERS
R.S #5213

OWNER: RAMOS CONSTRUCTION

ADDRESS: 520 Caribou Dr.
Spring Branch, TX 78070
Subdivision: DEER RIVER PHASE 2
LOT: 124

DATE	DESCRIPTION	REV#



SCALE:1"- 30'

DATE: 4/3/2025



Garrett R. Winters
R.S.

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By Brandon Olvera at 2:28 pm, Apr 10, 2025

Revised

04/03/2025 5:56:31 PM

Pump float settings for 300gpd

(Measure from bottom of tank)

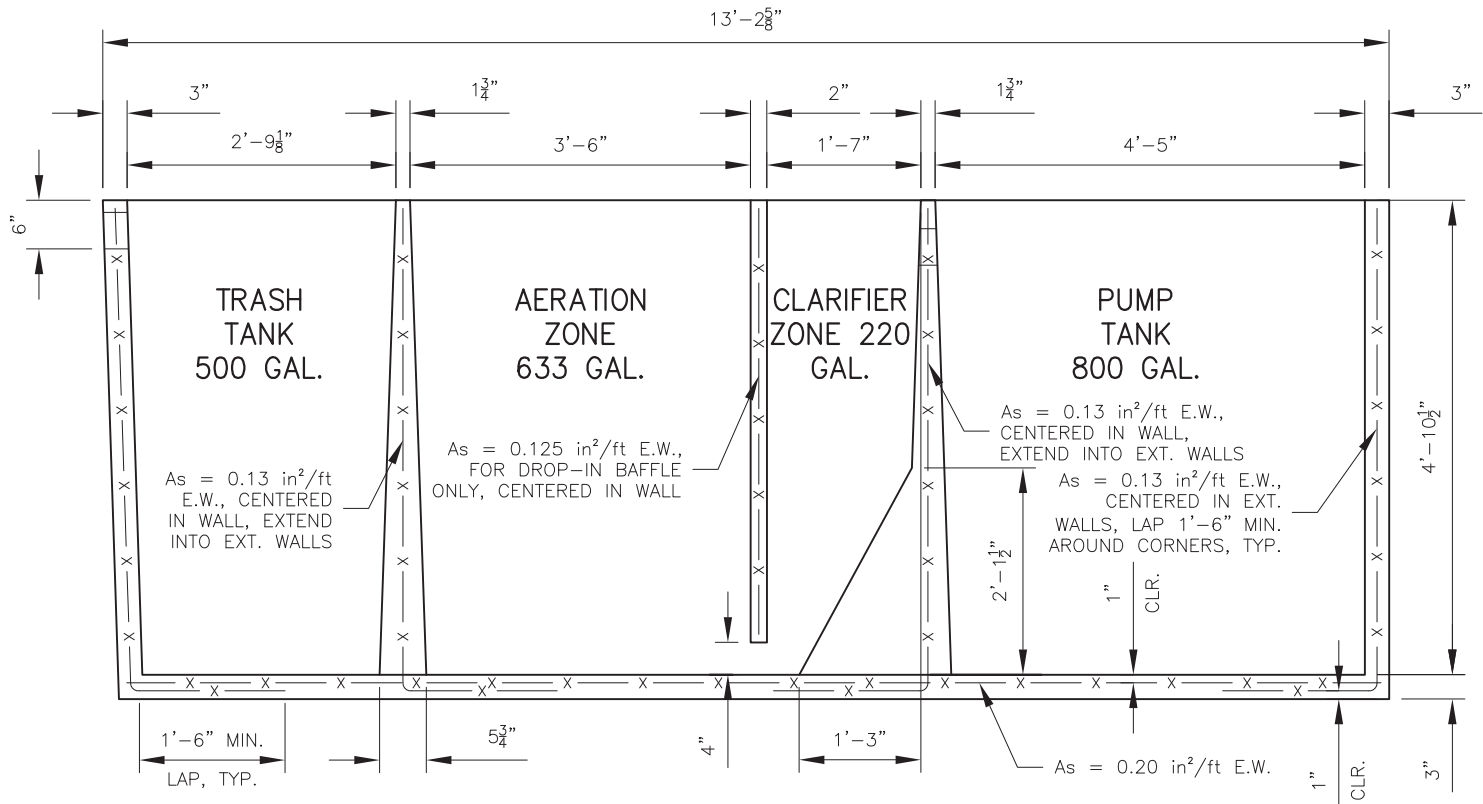
800gal pump tank at 52.5 to bottom outlet = 15.3 gal/in.

Pump ON: 12" (184gal)

Pump OFF: 18" (276gal)

ALARM: 38" (581gal)

220gal reserve capacity



REINFORCING SECTION



Garrett R. Winters R.S.

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REV. NO.	DATE	REVISION																					
PREPARED BY: DELTA SPECIALTY PRECAST CONCRETE ENGINEERS 860 HOOPER ROAD, ENDWELL, NY 13760-1564 PHONE (607) 231-6600 FAX (607) 231-6650			DATE: 09/20/2021 SCALE: N.T.S. PROJECT: AQUAKLEAR WASTEWATER TREATMENT SYSTEM MODEL AKA600CA																				
SHEET TITLE: REINFORCING SECTION			DRWN BY: CCFH CKD BY:																				
CONTRACTOR:			DWG. I.D. RS-02																				
DELTA PROJ. NO.: 2021.750.001			SHT. NO. 2 OF 2																				

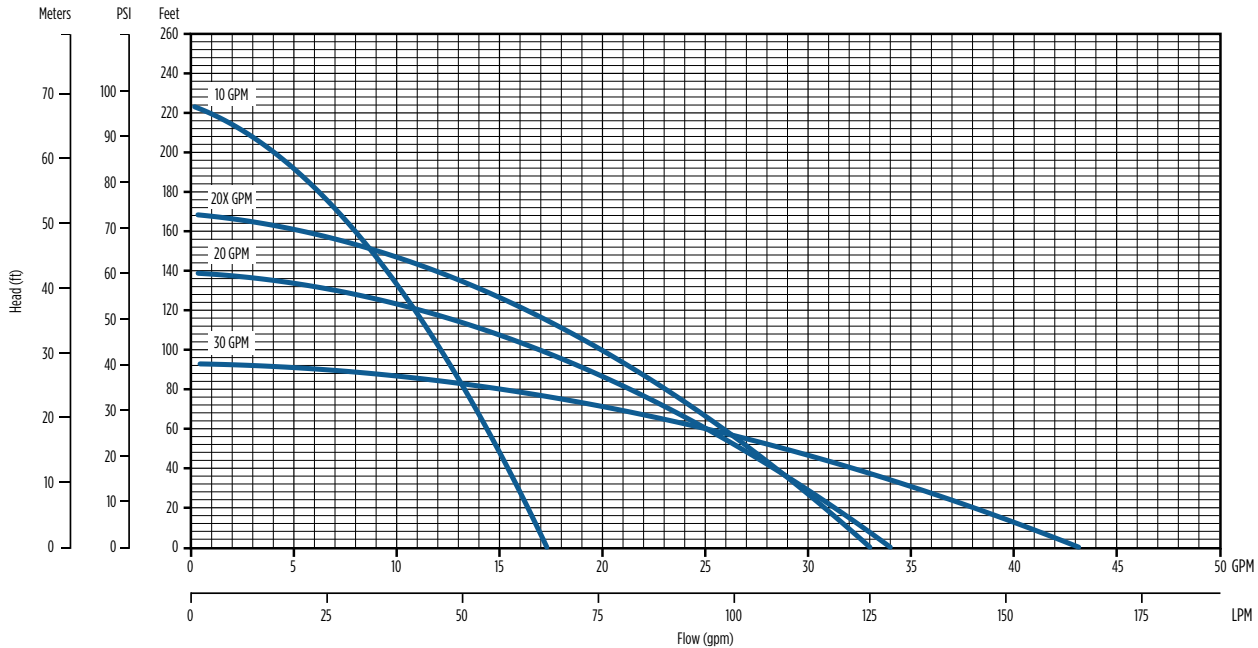
C1 SERIES

CISTERN PUMPS

Designed for use in gray water and filtered effluent service applications, the C1 Series cistern pump provides high performance and long life in less than ideal water conditions. Able to pass solids up to 1/8" without having a negative effect on the internal hydraulic components, the pump features a unique bottom suction design allowing for maximum fluid drawdown without compromising durability or overall life, and it does not require the use of a flow induction sleeve. Intended specifically for use in a cistern or tank, C1 Series pumps are suitable for use in agricultural, residential, and commercial installations.



C1 SERIES FAMILY CURVE



FEATURES

- Supplied with a removable 5" base for secure and reliable mounting
- Bottom suction design
- Robust thermoplastic discharge head design resists breakage during installation and operation
- Standard backflow prevention through a built-in, but removable, check valve.
- Single shell housing design provides a compact unit while ensuring cool and quiet operation
- Hydraulic components molded from high quality engineered thermoplastics
- Optimized hydraulic design allows for increased performance and decreased power usage
- All metal components are made of high grade stainless steel for corrosion resistance
- Available with a high quality 115 V or 230 V, 1/2 hp motor
- Fluid flows of 10, 20, and 30 gpm, with a max shut-off pressure of over 100 psi
- Heavy-duty 300 V 10 foot SJ00W jacketed lead

APPLICATIONS

- Gray water pumping
- Filtered effluent service water pumping
- Water reclamation projects such as pumping from rain catchment basins
- Aeration and other foundation or pond applications
- Agriculture and livestock water pumping

ORDERING INFORMATION

GPM	HP	Volts	Stage	Model No.	Order No.	Length (in)	Weight (lbs)
10	1/2	115	6	10C1-05P4-2W115	90301005	26	17
		230	6	10C1-05P4-2W230	90301010	26	17
20		115	4	20C1-05P4-2W115	90302005	25	16
		230	4	20C1-05P4-2W230	90302010	25	16
20X		115	5	20XC1-05P4-2W115	90302015	26	17
		230	5	20XC1-05P4-2W230	90302020	26	17
30		115	3	30C1-05P4-2W115	90303005	25	16
		230	3	30C1-05P4-2W230	90303010	25	16

NOTE: All units have 10 foot long SJ00W leads

ProPlus®

Tough, proven and advanced.

Features

- Patented Top Arc Set – Allows for wet or dry adjustment in seconds
- Full arc range adjustment from 40° to continuous 360°
- Patented Arc Set Degree Markings – Clearly indicates current watering pattern & simplifies arc set adjustment
- Arc Memory Clutch – Prevents internal gear damage and returns rotor to its prior setting automatically if nozzle turret is forced past its stop
- Patented Reversing Mechanism – Assures continuous reverse and return
- Ratcheting Riser – Allows for easy adjustment of the fixed starting position with a simple turn of the riser
- Rubber Cover – Seals out dirt, increases product durability
- Wide Selection of Nozzles – Including standard and low angle, provides flexibility in system design
- Replaces all standard rotors
- Optional Check Valve – Prevents low head drainage

Specifications

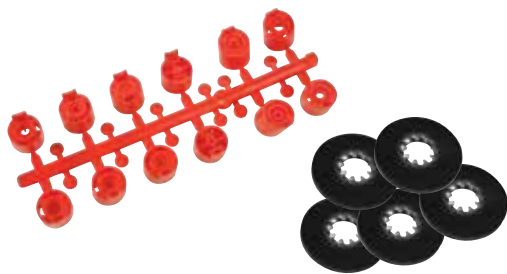
- Arc Adjustment Range: 40° to Continuous 360°
- Flow Range: .5 – 10.0 GPM (1,9 – 37,8 LPM)
- Pressure Rating: 20 – 70 PSI (1,4 – 4,8 bar)
- Precipitation Rate: .12 – 1.01 in/hr (3 – 25,7 mm/hr) (depending on spacing and nozzle used)
- Recommended Spacing: 28' – 44' (8,5 – 13,4 m)
- Radius: 22' – 50' (6,7 – 15,2 m)
- Nozzle Trajectory: 26°
- Low Angle Nozzle Trajectory: 12°
- Standard and Low Angle Nozzles Included

Model

11003 ProPlus®

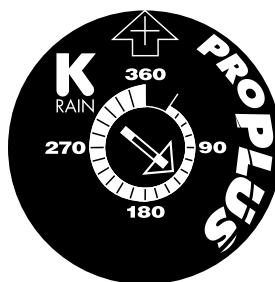
Accessories

See page 24-25



Fast Facts

Inlet:	3/4" (1,9 cm) female thread NPT
Retracted height:	7 1/2" (19 cm)
Riser height:	4 1/4" (10,8 cm)



Easy Arc Setting

Arc Selection: 40° to continuous 360°
Adjust from left start



Performance Data

NOZZLE	PRESSURE PSI	RADIUS Feet	FLOW GPM	PRECIP in/hr	
				■	▲
#0.5	30	28	0.5	.12	.14
	40	29	0.6	.14	.16
	50	29	0.7	.16	.19
	60	30	0.8	.17	.20
#0.75	30	29	0.7	.16	.19
	40	30	0.8	.17	.20
	50	31	0.9	.18	.21
	60	32	1.0	.19	.22
#1.0	30	32	1.3	.24	.28
	40	33	1.5	.27	.31
	50	34	1.6	.27	.31
	60	35	1.8	.28	.33
#2.0	30	37	2.4	.34	.39
	40	40	2.5	.30	.35
	50	42	3.0	.33	.38
	60	43	3.3	.34	.36
#2.5 Pre- installed	30	38	2.5	.33	.38
	40	39	2.8	.35	.41
	50	40	3.2	.39	.44
	60	41	3.5	.40	.46
#3.0	30	38	3.6	.48	.55
	40	39	4.2	.53	.61
	50	41	4.6	.53	.61
	60	42	5.0	.55	.63
#4.0	30	43	4.4	.46	.53
	40	44	5.1	.51	.59
	50	46	5.6	.51	.59
	60	49	5.9	.47	.55
#6.0	40	45	5.9	.56	.65
	50	46	6.0	.55	.63
	60	48	6.3	.53	.61
	70	49	6.7	.54	.62
#8.0	40	42	8.0	.87	1.01
	50	45	8.5	.81	.93
	60	49	9.5	.76	.88
	70	50	10.0	.77	.89

Performance Data, Metric

NOZZLE	PRESSURE Bar	RADIUS Meters	FLOW L/M	PRECIP mm/hr	
				■	▲
#0.5	2,1	8,5	1,9	3	4
	2,8	8,8	2,3	4	4
	3,4	8,8	2,7	4	5
	4,1	9,1	3,0	5	5
#0.75	2,1	8,8	2,7	4	5
	2,8	9,1	3,0	4	5
	3,4	9,4	3,4	5	5
	4,1	9,8	3,8	5	6
#1.0	2,1	9,8	4,9	6	7
	2,8	10,1	5,7	7	8
	3,4	10,4	6,1	7	8
	4,1	10,7	6,8	7	8
#2.0	2,1	11,3	9,1	9	10
	2,8	12,2	9,5	8	9
	3,4	12,8	11,4	8	10
	4,1	13,1	11,4	8	9
#2.5 Pre- installed	2,1	11,6	9,5	8	10
	2,8	11,9	10,6	9	10
	3,4	12,2	12,1	10	11
	4,1	12,5	13,3	10	12
#3.0	2,1	11,6	13,6	12	14
	2,8	11,9	15,9	13	15
	3,4	12,5	17,4	13	15
	4,1	12,8	19,0	14	16
#4.0	2,1	13,1	16,7	12	13
	2,8	13,4	19,3	13	15
	3,4	14,0	21,2	13	15
	4,1	14,9	22,4	12	14
#6.0	2,8	13,7	22,4	14	17
	3,4	14,0	22,7	14	16
	4,1	14,6	23,9	13	15
	4,8	14,9	25,4	14	16
#8.0	2,8	12,8	30,3	22	26
	3,4	13,7	32,2	21	24
	4,1	14,9	36,0	19	22
	4,8	15,2	37,9	20	23

Low Angle Performance Data

NOZZLE	PRESSURE PSI	RADIUS Feet	FLOW GPM	PRECIP in/hr	
				■	▲
#1.0	30	22	1.2	.48	.55
	40	24	1.7	.57	.66
	50	26	1.8	.51	.59
	60	28	2.0	.49	.57
#3.0	30	29	3.0	.69	.79
	40	32	3.1	.58	.67
	50	35	3.5	.55	.64
	60	37	3.8	.53	.62
#4.0	30	31	3.4	.68	.79
	40	34	3.9	.65	.75
	50	37	4.4	.62	.71
	60	38	4.7	.63	.72
#6.0	40	38	6.5	.87	1.00
	50	40	7.3	.88	1.01
	60	42	8.0	.87	1.01
	70	44	8.3	.86	0.99

Low Angle Performance Data, Metric

NOZZLE	PRESSURE Bar	RADIUS Meters	FLOW L/M	PRECIP mm/hr	
				■	▲
#1.0	2,1	6,7	4,5	12	14
	2,8	7,3	6,4	14	17
	3,4	7,9	6,8	13	15
	4,1	8,5	7,6	12	14
#3.0	2,1	8,8	11,4	18	20
	2,8	9,8	11,7	15	17
	3,4	10,7	13,2	14	16
	4,1	11,3	14,4	14	16
#4.0	2,1	9,4	12,9	17	20
	2,8	10,4	14,8	17	19
	3,4	11,3	16,7	16	18
	4,1	11,6	17,8	16	18
#6.0	2,8	11,6	24,6	22	25
	3,4	12,2	27,7	22	26
	4,1	12,8	30,3	22	26
	4,8	13,4	32,6	22	25

*All precipitation rates calculated for 180° operation. For the precipitation rate for a 360° sprinkler, divide by 2.

How to Specify with Options

MODEL	OPTION
11003	-CV Check valve
	-LA Low angle nozzle
	-NN No nozzle
	-RCW Reclaimed water use

Example: 11003-RCW-CV

LBC Manufacturing ***“EZ-Tank”***

GRAVITY FLOW Liquid **Bleach Chlorinator**

US Patent Pending

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P.O. Box 454
Fayetteville, TEXAS 78940
(979) 826-0139 off.

www.liquidchlorinator.com

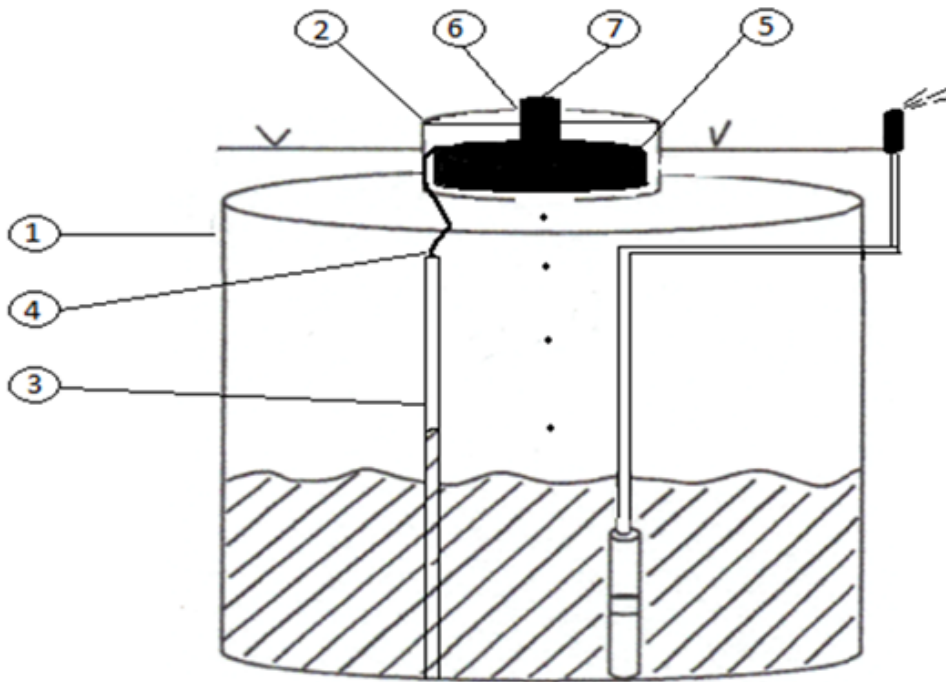


THIS PRODUCT WAS EVALUATED AS A
CHLORINE DISINFECTION DEVICE AND MEETS OR
EXCEEDS THE APPLICABLE REQUIREMENTS OF
STANDARD 46

RECOMMENDED INSTALLATION INSTRUCTIONS

**** LBC Manufacturing recommends installation by TCEQ licensed and trained installers. ****

1. Locate the Aerobic System Holding/Pump tank
2. Remove the green access lid mounting screws and remove green access lid.
3. Install vertical sensing pipe into Holding/Pump tank. Ensure sensing pipe is resting on the bottom of the Holding/Pump tank. Cut the sensing pipe off below the top of the Holding/Pump tank lid, and secure the sensing pipe to remain vertical in the Holding/Pump tank
4. Using PVC Cleaner and PVC glue, attach the barb fitting adapter (supplied on the end of EZ-Tanks vinyl tubing) to the sensing pipe.
5. Place the EZ-Tank reservoir inside the holding tank access riser. (EZ-Tank reservoir rests on the secondary safety lid inside the holding tank access riser. If the holding tank access riser does not have a secondary safety lid, replace with new access riser that accommodates the secondary safety lid to code.)
6. Next, drill 4.25 inch hole in center of holding tank access lid. (this allows the fill lid to be accessed without having to reopen the holding tank lid) Next, Re-Install holding tank access lid and replace mounting and safety screws.
7. Open EZ-Tank gasketed fill lid. Fill with 6% -10% sodium hypochlorite. Once filled, Replace the gasketed fill lid ensuring a firm secure seal. (If the fill lid is not tightened securely, a vacuum will not form and reservoir will empty sodium hypochlorite contents into Holding/Pump tank prematurely.)



CHLORINE DISINFECTION DEVICE PERFORMANCE

The LBC MFG “EZ-Tank” is a proven disinfection device that meets the applicable requirements of NSF standard 46 for Chlorine disinfection devices. The EZ-Tank is listed as a certified chlorine disinfection device for secondary treated effluent. Certification requires the device to be used with 6-10% sodium hypochlorite (household bleach) The EZ-Tank Disinfection device is a gravity flow product that applies disinfectant to a holding tank as the water level rises thus giving the ultimate amount of contact time for the disinfectant to work.

THE LIQUID CHLORINATION PROCESS

LBC Manufacturing designed and built the “EZ-Tank” to provide years of trouble-free service. It is constructed from durable Polyethylene material which can withstand the corrosive nature of Sodium Hypochlorite (Household Bleach). It has been tested to NSF/ANSI Std 46 and has proven to function more consistently, at a lower operating cost, than any other disinfection method.

The basic function of the Liquid Bleach Chlorinator is to introduce disinfectant to the effluent water in the Holding/Pump tank as the effluent enters. The longer the contact time the disinfectant has to interact with pathogens, the better it disinfects. The ideal method is maximum contact time for minimal pathogen survival.

LIQUID CHLORINATOR OPERATION AND MAINTENANCE

It is the Owner's *Responsibility* to operate and maintain the Liquid Chlorinator to the best of their ability.

If Service is required, refer to the Data/Service Plate located on the Fill Lid of the Liquid Chlorinator.

The Liquid Chlorinator uses 6-10% Sodium Hypochlorite (Household Bleach). Do not use any other products and or chemicals other than specified. Always maintain a constant supply of disinfectant / Bleach in the Chlorinator Housing at all times. The rate of disinfectant/Bleach usage will vary with individual homeowner water usage. If disinfectant usage increases or decreases, call the service provider.

If flood waters, ants, chemicals etc.. other than Sodium Hypochlorite, enters the Chlorinator Housing, call for service.

****** Always use Personal Protective Equipment when Filling or Servicing the Chlorinator******

MONTHLY : Open the Chlorinator Fill Lid and Visually Inspect the liquid level the chlorine reservoir. Maintain a constant supply of Sodium Hypochlorite (Household Bleach) in the Chlorinator Housing and reservoir at all times. Check Sprinkler discharge for Chlorine residual. If Service is required, refer to the Data/Service Plate located on the Fill Lid of the chlorinator reservoir

PERIODICALLY: Open the Chlorinator Fill Lid and Visually Inspect the Chlorinator for debris such as dirt, grass clippings etc. Check Sprinkler discharge for Chlorine residual. If Service is required, refer to the Data/Service Plate located on the Fill Lid of the Chlorinator reservoir.

YEARLY: Visually inspect the Chlorinator Housing for any damage from lawnmowers, etc.
Remove dirt/ant build up , grass, etc. from Chlorinator Housing Fill Lid. Check Sprinkler discharge for Chlorine residual.
If Service is required, refer to the Data/Service Plate located on the Fill Lid of the Chlorinator reservoir

FOR INTERMITTENT PERIODS OR EXTENDED PERIODS OF NON-USE




The EZ_Tank is designed to function under normal use or Intermittent periods of use. If periods of non use exceed 6 months , drain Chlorinator Housing and refill with 6-10% Sodium Hypochlorite. If Service is required, refer to the Data/Service Plate located on the Fill Lid of the Chlorinator reservoir.




ArcGIS Web Map





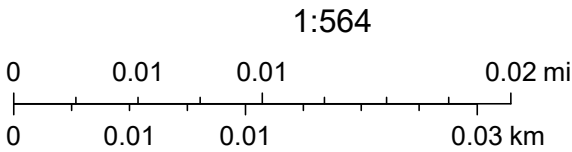
11/9/2023, 4:39:10 PM

Permits

-  Septic
-  Piprow/Driveway
-  Floodplain

-  Utility
-  TCEQ Contributing Zone
-  Parcels

-  Streets
- Addresses
-  County Maintained Roads



Olvera,Brandon

From: Olvera,Brandon
Sent: Tuesday, December 19, 2023 3:18 PM
To: Nicole Barnes
Subject: 116942

RE: 520 Caribou Dr.

Deer River 2

Lot 124

Property Owner & Agent,

We received planning materials for the referenced permit application and found those planning materials to be deficient. To continue processing this permit, we need the following:



1. Show the property dimensions on the site plan.
2. On the variance request, indicate that the battery backup is your equivalent protection.
3. Revise accordingly and resubmit.

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

Thank You,

Note: Beginning January 1, 2024 our reinspection fees will be changing to \$150.00. Permit fee includes 3 inspections, \$150 each additional inspection

Brandon Olvera | Designated Representative OS0034792 | Comal County | www.cceo.org

195 David Jonas Dr, New Braunfels, TX-78132 | t: 830-608-2090 | f: 830-608-2078 | e: olverb@co.comal.tx.us

GW Designs
Garrett R. Winters
1332 Mountain View DR, Canyon Lake TX

November 10th, 2023

Comal County Engineer's Office
195 David Jonas Drive
New Braunfels, TX 78132

RE- Septic design
520 Caribou Dr.
Spring Branch, TX 78070

Brandon/Brenda

The unique circumstances of this property make it difficult to comply with the 20ft spray setback requirement. I hereby request a variance for the placement of the spray disposal area 10 feet from the property line, as well as a battery backup timer to be installed to ensure sprayers only spray during the predawn hours. This setback complies with TCEQ Chapter 291.10, Subchapter X. I am a professional engineer on this variance and not posing a threat to the environment or public health.

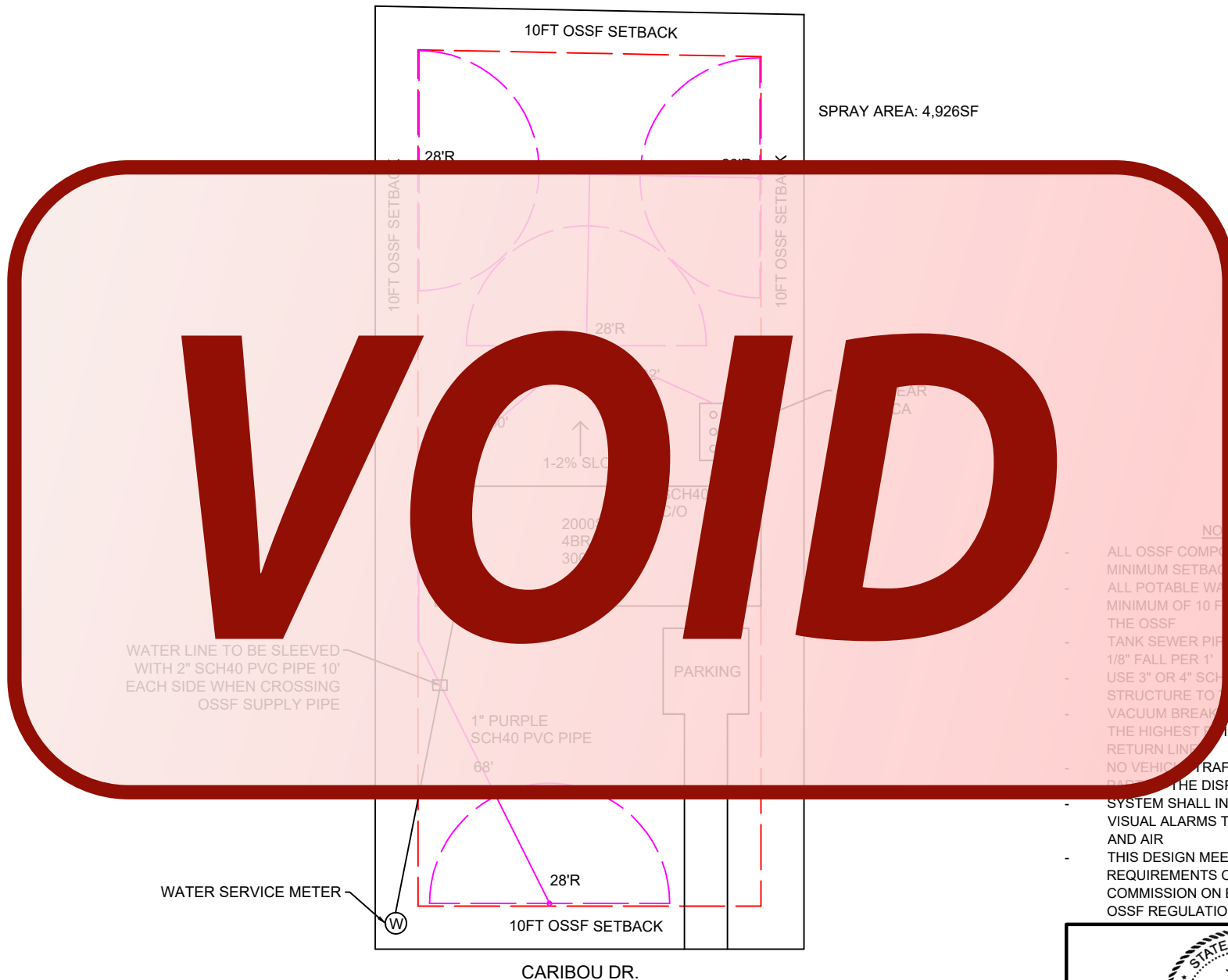
Please feel free to contact me with any questions or concerns.

Sincerely,

Garrett R. Winters R.S.



A handwritten signature in black ink, appearing to read "Garrett Winters", followed by the initials "R.S." in a smaller, handwritten font.



- NOTES**
- ALL OSSF COMPONENTS SHALL MAINTAIN A MINIMUM SETBACK DISTANCE OF 5'
 - ALL POTABLE WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE OSSF
 - TANK SEWER PIPES MUST HAVE AT MINIMUM 1/8" FALL PER 1'
 - USE 3" OR 4" SCH40 PIPE TO CONNECT STRUCTURE TO TANK
 - VACUUM BREAKERS ARE TO BE PLACED AT THE HIGHEST POINT ON THE SUPPLY AND RETURN LINES
 - NO VEHICLE TRAFFIC IS TO BE ON ANY PART OF THE DISPOSAL AREA
 - SYSTEM SHALL INCLUDE AUDIO AND VISUAL ALARMS TO INDICATE HIGH WATER AND AIR
 - THIS DESIGN MEETS ALL OF REQUIREMENTS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY OSSF REGULATIONS



Garrett R. Winters R.S.

PREPARED BY: GARRETT R. WINTERS
R.S #5213

OWNER: Ramos Construction

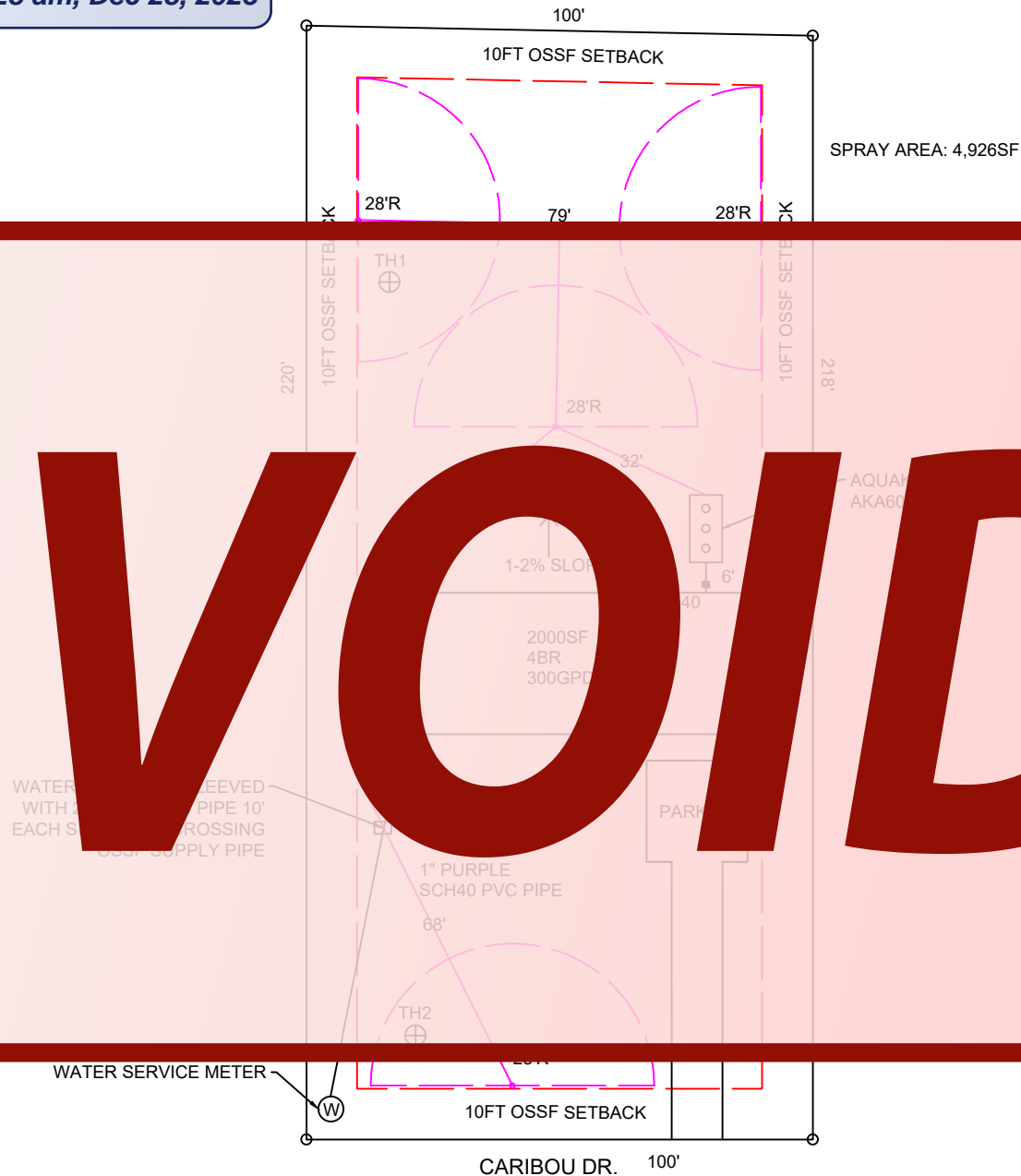
ADDRESS: 520 Caribou Dr.
Spring Branch, TX 78070
Deer River Phase 2
Lot: 124

SCALE: 1" = 35'

DATE: 11/9/2023

RECEIVED

By Brandon Olvera at 9:28 am, Dec 28, 2023



- NOTES**
- ALL OSSF COMPONENTS SHALL MAINTAIN A MINIMUM SETBACK DISTANCE OF 5' FROM ANY ADJACENT LOT OR STREET.
 - ALL POTABLE WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE OSSF.
 - TANK SEWER PIPE MUST HAVE AT MINIMUM 1/8" FALL PER 1'.
 - USE 3" OR 4" SCH40 PIPE TO CONNECT STRUCTURE TO TANK.
 - VACUUM BREAKERS ARE TO BE PLACED AT THE HIGHEST POINT ON THE SUPPLY AND RETURN LINES.
 - NO VEHICLE TRAFFIC IS TO BE ON ANY PART OF THE DISPOSAL AREA.
 - SYSTEM SHALL INCLUDE A LOW AND HIGH WATER AND AIR VISUAL ALARMS TO INDICATE HIGH WATER AND AIR.
 - THIS DESIGN MEETS ALL OF THE REQUIREMENTS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY OSSF REGULATIONS.

REVISED
12/19/2023



PREPARED BY: GARRETT R. WINTERS
R.S #5213

ADDRESS: 520 Caribou Dr.
Spring Branch, TX 78070
Deer River Phase 2
Lot: 124

SCALE: 1" = 35'

DATE: 11/9/2023

OWNER: Ramos Construction

Owner/Site Location

Owner/Builder: Ramos Construction

Address: 520 Caribou Dr. Spring Branch, TX 78070

Subdivision: Deer River Phase 2

Lot: 124

LOT DESCRIPTION

The proposed method of wastewater treatment is aerobic treatment with spray irrigation. The sizing of the OSSF was determined as specified in the Texas Commission on Environmental Quality (TCEQ) CHAPTER 285.33 (C)(2).

Water saving devices are assumed for the septic system design. This site is not within the 100-Year flood plain (see site plan). Water to the property will be serviced by a Public Water Supply.

System Summary

This design was performed in conformance with Chapter 285 of Texas Commission on Environmental Quality

- 600gpd Aerobic treatment unit (Aquaklear AKA600CA)
- Manual 24HR control timer
- 20gpm submersible effluent pump
- SCH40 PVC Sewer pipe
- 1" purple PVC SCH40 supply line
- Liquid Fertilizer
- 2 K-Rotor Gear Driven Sprinkler Heads (40PSI)
- Sprinkler Head 180 Degree Radius Spraying at 28ft
- Visual and audio alarm monitoring high water alarm for replacement of noticeable alarm.

Wastewater Design

Structure: 2,000gal

Bedrooms: 4

Wastewater Usage: 600gpd

Application Rate:

Application Area: 4,688sf.

Actual Application Area: 4,926sf

System Components

Pretreatment Tank: 500gal

Pump Tank: 800gal

Aeration Tank: 600gpd

Pump: C1 20gpm submersible pump (Model no. 20C1-05P4-2W115 or equivalent)

Pump tank reserve minimum: 100gal

Landscaping

The native vegetation in the distribution area should consist of low-level shrubs, plains grass, bluestem, or Bermuda. The entire application area must maintain a ground cover after construction. Exposed rock will be covered when in the application area with fine soil such as sandy loam.

If the slope in the drain field area is greater than 15% or is complex, the area is unsuitable for the disposal method, suitable fill shall be brought into the field area to meet this requirement. Surface application systems may apply treated and disinfected effluent upon areas with existing vegetation. If any ground within the proposed surface application area does not have vegetation, that bare area shall be seeded or covered with sod before system start-up. The vegetation shall be capable of growth before the system start-up.

Potable Water Lines

Potable water lines must be at a minimum distance of 10 feet from OSSF components. If a water line is within 10 feet, it must be sleeved with 2" SCH40 PVC Pipe in order to provide equivalent protection of a 10' separation in compliance with TAC chapter 290, Subchapter D, Rules for Public Drinking Water Systems.

Installation

A 3" or 4" solid-wall SCH40 or SDR 26 PVC pipe with a minimum downward slope of 1/8 inch per foot will be installed between the tank and house. A 2-way cleanout must be included in the line between the house and tank. All piping from house-to-tank and tank-to-drain field must be bedded with class Ib, II, or III soils containing less than 30% gravel. The bottom of the excavation for the tank shall be level and free of large rocks/debris, the tanks shall then be bedded with a 4" layer of sand, sandy loam, 3/4 dust or pea gravel. All openings in the tank are to be sealed to prevent the escape of wastewater.

Electrical Components

All electrical wiring shall conform to the requirements of the National Electric Code (1999) or under any other standards approved by the executive director. Additionally, all external wiring shall be installed in approved, rigid, non-metallic gray code electrical conduit. The conduit shall be buried according to the requirements in the National Electric Code and terminated at a main circuit breaker panel or sub-panel. Connections shall be in approved junction boxes. All electrical components shall have an electrical disconnect with direct vision from the place where the electrical device is being serviced. Disconnects must be readily accessible (not covered for outdoor use) and have maintenance lockout provisions.

Maintenance Requirements

The homeowner is primarily responsible for maintaining a properly functioning aerobic treatment system. The installer is responsible for providing the homeowner with a written manual and instructing the homeowner on proper use for the use of OSSF. The following provisions are required by the homeowner:

- A maintenance contract must be maintained for the first two years of licensed maintenance operator.
- A constant supply of brine must be provided to the OSSF system (e.g. 1gpm).
- The owner must prohibit the discharge of grease into the OSSF system.
- Keep the spray area mowed and tank area free of ants and weeds.
- Maintain all faucets and toilets inside the home free of leaks.
- Maintaining OSSF Chambers by pumping each of them out every 3-5 years to avoid sludge buildup.

Maintenance Contract

For any OSSF with a pump, the installer shall provide the Designated Representative with proof of an executed two-year full-service maintenance contract as required by the TCEQ. 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 for 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

Prior to issuance of a permit, a certified copy of an affidavit must be submitted to the County Clerk's office. The affidavit is a recorded file in reference to the real property deed on which the surface application is installed on the property. 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 OSSF Rules. The permit will be issued in the name of the owner of the OSSF. Permits shall be transferred to the new owner automatically upon the sale of the property. Transfer of an OSSF permit under this section shall occur at the time of the sale of the property on which the permit is located unless the ownership of the OSSF has been severed from the property.

VOID

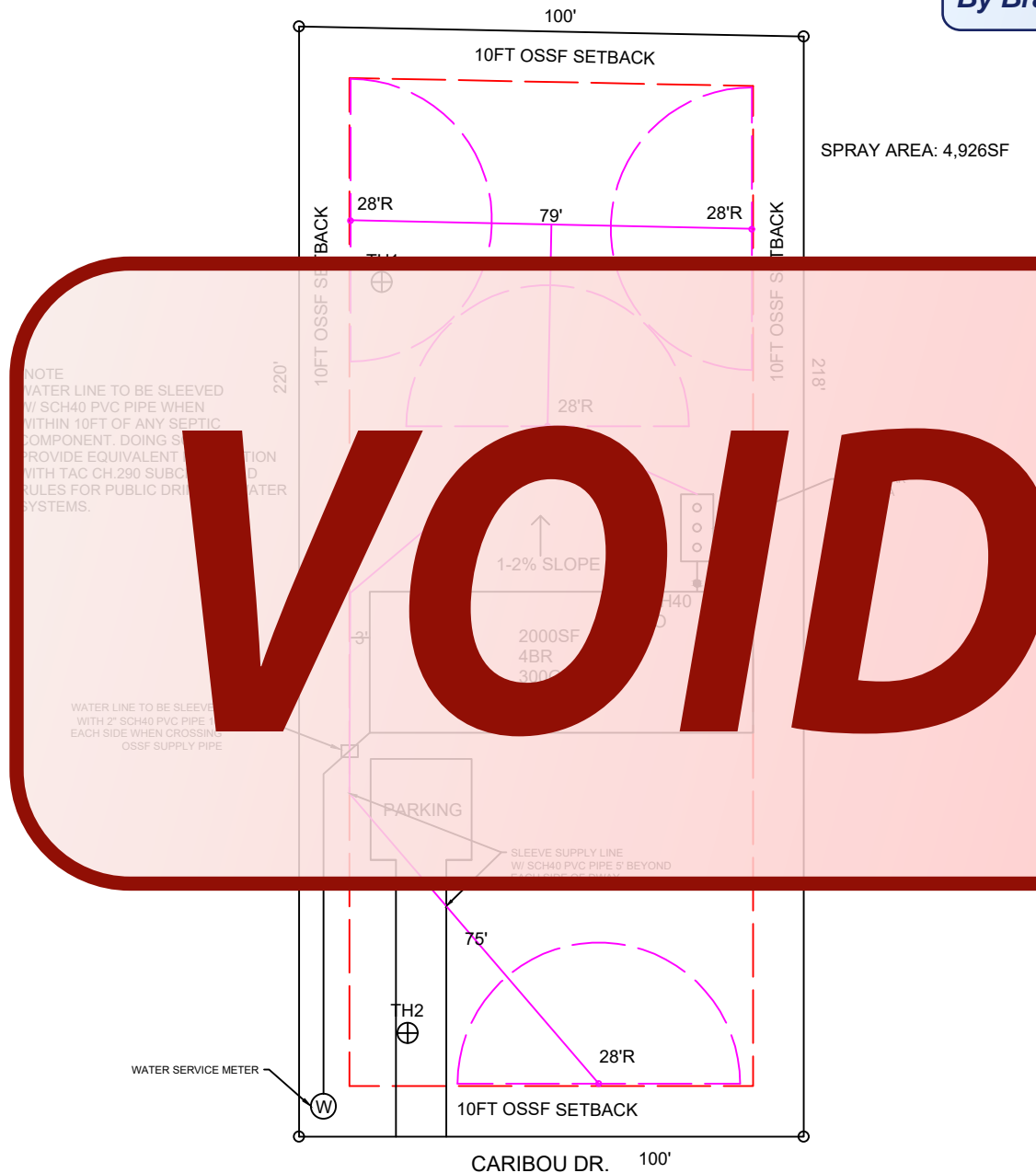


Garrett Winters R.S.

The following design is intended to follow and meet the TCEQ 30 TAC 285 OSSF Regulations. The performance of this system cannot be guaranteed even though all provisions of 30 TAC 285 have been met or exceeded

RECEIVED

By Brandon Olvera at 9:59 am, Jan 10, 2024



SPRAY AREA: 4,926SF

NOTES

- ALL OSSF COMPONENTS SHALL MAINTAIN A MINIMUM SETBACK DISTANCE OF 5'
- ALL POSSIBLE WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE OSSF
- TANK SLOW DOWN PIPE MUST HAVE AT MINIMUM 1/8" FALL PER 1'
- USE 2" OR 4" SCH40 PIPE TO CONNECT STRUCTURE TO TANK
- VACUUM BREAKERS ARE TO BE PLACED AT THE HIGHEST POINT ON THE SUPPLY AND RETURN LINES
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PREPARED BY: GARRETT R. WINTERS
R.S #5213

OWNER: Ramos Construction

ADDRESS: 520 Caribou Dr.
Spring Branch, TX 78070
Deer River Phase 2
Lot: 124

SCALE: 1" = 35'

DATE: 11/9/2023



REVISED
1/9/2024

Garrett R. Winters R.S.

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 with Vendor's Lien

Date: **11th day of October, 2023**

Grantor: **Eli A. Strasimirofski, an unmarried man**

Grantor's Mailing Address: **P.O. Box 29823, San Antonio, TX 78229**

Grantee: **Ricardo Esequiel Sanchez and Carmen Elena Sims, husband and wife**

Grantee's Mailing Address: **520 Caribou Dr., Spring Branch, TX 78070**

Consideration: Cash and a note of even date executed by Grantee and payable to the order of **Triad Manufactured Home Financial Services, Inc.** in the principal amount of **\$252,509.00**. The note is secured by a first and superior vendor's lien and superior title retained in this deed in favor of **Triad Manufactured Home Financial Services, Inc.**, and by a first-lien deed of trust of even date from Grantee to **The Law Office of Robert W. Buchholz, PC**, Trustee. **Triad Manufactured Home Financial Services, Inc.**, at Grantee's request, has paid in cash to Grantor that portion of the purchase price of the Property that is evidenced by the note. The first and superior vendor's lien against and superior title to the Property are retained for the benefit of **Triad Manufactured Home Financial Services, Inc.** and are transferred to **Triad Manufactured Home Financial Services, Inc.** without recourse against Grantor.

Property (including any improvements):

Lot 124, DEER RIVER PHASE 2, a subdivision in Comal County, Texas, according to the map or plat thereof recorded under in Volume 8, Pages 359-361, of the Map and Plat Records of Comal County, Texas.

Reservations from Conveyance: **None.**

Exceptions to Conveyance and Warranty:

This conveyance is made and accepted subject to all restrictions, covenants, conditions, rights-of-way, assessments, outstanding royalty and mineral reservations and easements, if any, affecting the above described property that are valid, existing and properly of record as of the date hereof and subject, further, to taxes for the year **2023** and subsequent years.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells, and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns forever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

The vendor's lien against and superior title to the Property are retained until each note described is fully paid according to its terms, at which time this deed will become absolute.

When the context requires, singular nouns and pronouns include the plural.

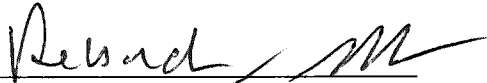


Eli A. Strasimirofski

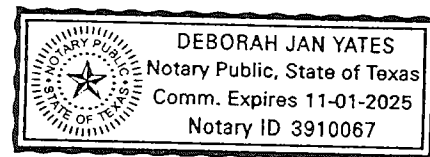
STATE OF TEXAS
COUNTY OF BEXAR

Before me, a Notary Public, on this day personally appeared Eli A. Strasimirofski, known to me or proved to me through photo ID to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 11th day of October, 2023.



Notary Public Signature



After recording, please return to:

Ricardo Esequiel Sanchez and Carmen Elena Sims
520 Caribou Dr.
Spring Branch, TX 78070

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
10/12/2023 08:37:59 AM
LAURA 2 Pages(s)
202306032581

KTGAH-23-1619

PAGE 2 OF 2

