

# 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 Drip Irrigation		285.33(c)(3)(A)-(F)				

**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: 118393  
Issued This Date: 03/20/2025  
This permit is hereby given to: W. Kelly Vandever Revocable Trust

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

130 CARTAMA  
SPRING BRANCH, TX 78070

Subdivision: Cascada at Canyon Lake  
Unit: 3  
Lot: 161  
Block: -  
Acreage: 1.3200

#### 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**

# ON-SITE SEWAGE FACILITY APPLICATION

Date \_\_\_\_\_

Permit Number 118393

## 1. APPLICANT / AGENT INFORMATION

Owner Name W. Kelly Vandever, Trustee of Kelly Vandever Revocable Trust

Agent Name Doug Dowlearn R.S.

Mailing Address 1225 Coast Village Ste C

Agent Address 703 Oak Dr.

City, State, Zip Santa Barbara, CA 93108

City, State, Zip Blanco, TX 78606

Phone # \_\_\_\_\_

Phone # 210-878-8100

Email \_\_\_\_\_

Email TXSEPTIC@GMAIL.COM

## 2. LOCATION

Subdivision Name Cascada at Canyon Lake

Unit 3

Lot 161

Block \_\_\_\_\_

Survey Name / Abstract Number \_\_\_\_\_

Acreage 1.3200

Address 130 Cartama

City Spring Branch

State TX

Zip 78070

## 3. TYPE OF DEVELOPMENT

☒ Single Family Residential

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

Number of Bedrooms 3+2

Indicate Sq Ft of Living Area 3120 + 1020

☐ 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: \$ 2,200,000 (Structure Only)

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

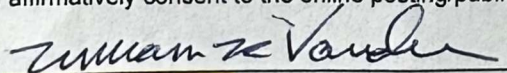
☐ Yes ☒ No (If yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)

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

11-25-2024

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.)

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

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

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

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

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

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

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

(If yes, the R.S. or P.E. shall certify that the OSSF design will comply with all provisions of the proposed CZP. A Permit to Construct will not be issued for the proposed OSSF until the 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

1  
CS  
**COUNTY OF COMAL  
STATE OF TEXAS**



202506003484 02/05/2025 03:16:22 PM 1/1

**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):

CASCADA AT CANYON LAKE, UNIT 3, LOT 161

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

W. KELLY VANDEVER, TRUSTEE OF THE W. KELLY VANDEVER REVOCABLE TRUST

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.

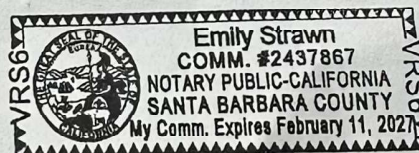
WITNESS BY HAND(S) ON THIS 25<sup>th</sup> DAY OF November, 2024

William K. Vandever  
Owner(s) signature(s)

William K. Vandever / Trustee  
(PRINTED NAME) / TITLE

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 25<sup>th</sup> DAY OF November 2024

Emily Strawn  
Notary Public, State of Texas California  
Notary's Printed Name: Emily Strawn  
My Commission Expires: 2/11/2027



Filed and Recorded  
Official Public Records  
Bobbie Koepf, County Clerk  
Comal County, Texas  
02/05/2025 03:16:22 PM  
TERRI 1 Page(s)  
202506003484



Bobbie Koepf



**REVISED**

11:22 am, Mar 20, 2025



**Clear Choice  
SEPTIC SERVICES**

Contract Holder: Canyon Custom Builders Address: 130 Centerra Spring Branch, TX 78070 Permit: \_\_\_\_\_ Lot: 161  
Subdivision: Cascada at Canyon Lake County: Comal Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
System Type: Aerial-Drip-600 GPD Manufacturer service notes

**Initial Two-Year Service Agreement**

The start date of the six time visit service contract shall begin the date the License to operate (LTO) is issued.

This contract will be in effect FROM: \_\_\_\_\_ TO: \_\_\_\_\_ and will provide the following:

1. An inspection/service call every four months which will include: inspection, adjustments and servicing of the mechanical and electrical components as necessary to ensure that the system functions correctly.
2. An effluent inspection will consist of a visual check for color, turbidity, scum layer in the clarifier and an examination for odors.
3. 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 will be notified and may incur an additional cost.
4. If any incorrect operation is observed the property owner will be contacted immediately of the conditions and a solution must be met at that time or more charges may apply.
5. All parts, warranty or non warranty, freight charges, labor or service calls that have not been paid for, remain the property of CLEAR CHOICE SEPTIC SERVICES and will result in the repossession of parts before end of contract date.
6. The response time to a service call by the Contract Holder regarding concerns of the system will be within 48 hours from the time received. (phone contact is an acceptable response)
7. The signing of this Service Agreement authorizes Clear Choice Septic Services to enter the property to complete all terms of this contract.

Clear Choice Septic Services will complete service of the septic system according to state and manufacturer regulations and the designs approved by the state. Contract holder will be responsible for service calls, labor and shipping costs on any parts under Warranty or exchanged during Warranty, additional fees may apply. All other components will be according to Manufacturer's Warranty and specification.

Attention: Clear Choice Septic Service cannot control quality or amount of effluent that goes into this septic system, we cannot warranty how the system will operate. See manufacturer or installer instructions for suggestions on septic operation. This Service Agreement does not cover cost of service calls, labor, parts or materials that are required for service, failure to maintain access from restricting vegetation, locked gates, unfriendly animals or electrical power to the system may result in a voided contract. Contract will not cover service calls such as sprinklers that are broken, leaking, stopped up or otherwise malfunctioning, sewage flows exceeding the hydraulic/organic design capabilities and the input of non-biodegradable materials (feminine products, sanitary wipes, solvents, grease, oil, paints, etc.) or any usage contrary to the requirements as advised by authorized Maintenance Provider. Inspection dates can be adjusted to allow inspection date under contract to take place of service call. Service call price may be adjusted at Clear Choice Septic Services discretion, without notice. This Contract does not include the pumping of 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 this Contract also include: disconnecting the alarm, restricting ventilation to the aerator, overloading the system above its rated capacity; or flooding by external means. Ground water, rodent, insect or fire ant damage or any other form of unusual abuse is a violation. A renewal Service Contract should be activated 30 days before expiration of existing Contract. We will contact the Contract Holder prior to expiration of existing contract. As we take pleasure in servicing our active/retired military and senior community please have correct identification on hand when signing contract. (expired ID's are not valid) CLEAR CHOICE SEPTIC SERVICES has the right to refuse service to any party for any reason. Funds that have been paid for contract will be applied to any service calls and/or labor. Remaining funds will be distributed at Clear Choices discretion. Contract holders will be notified 30 days before contract is terminated. The signing of this contract is an acknowledgment and agreement of all terms listed above.

Serviced by: Clear Choice Septic Services, 1659 State Hwy 46 W Ste 115-200 New Braunfels, TX 78132  
Phone: 830-624-5839

Justin Trevino Maintenance Provider License # MP0002136

Contract Holder Signature/Property Owner

Date: 2-10-2025

Printed Name

Printed Name

Authorized Maintenance Provider

Date: \_\_\_\_\_

**Date:** 2/17/2025

**Applicant Information:**

**Name:** W. Kelly Vandever, Trustee of Kelly Vandever Revocable Trust

**Address:** 1225 Coast Village Ste C

**City, State & Zip Code:** Santa Barbara, CA 93108

**Phone:**

**Email:**

**Site Evaluator Information:**

**Name:** Douglas R. Dowlearn

**Company:** D.A.D. Services, Inc.

**Address:** 703 Oak Drive

**City, State & Zip:** Blanco, TX 78606

**Phone:** (210)240-2101 **Fax:** (866)260-7687

**Email:** txseptic@gmail.com

**Property Location:**

**Subdivision:** Deer River Phase 1 Lot: 69

**Street/Road Address:** 367 Caribou Dr

**City:** Spring Branch **Zip:** 78070

**Additional Info:** Comal County

**Installer Information:**

Depth	Texture Class	Soil Texture	Structure (For Class III – blocky, platy or massive)	Drainage (Mottles/Water Table)	Restrictive Horizon	Observation
Soil Boring #1 60"	III	0-4" Clay Loam 4"+ limestone	Blocky	<30% Gravel	4"+	Clear surface rock from drainfield area, and ensure there is a minimum of 12" suitable soil between the bottom of drip lines, and the restrictive horizon. Class II soil may need to be imported to maintain the minimum of 12" of soil between bottom of drip lines and restrictive horizon
Soil Boring #2 60"		SAME AS ABOVE				

**DESIGN SPECIFICATIONS**

Application Rate (RA): 0.2

OSSF is designed for: 3 bedroom 3120 Sq. Ft house (300gpd) and 2 bedroom 1020 Sq. Ft casita (180gpd)  
480 gallons per day

An aerobic treatment/drip disposal system is to be utilized based on the site evaluation.

2400 sq. ft. disposal area required

840 gallon per day aerobic treatment unit

Calculations: Absorption Area:  $Q/RA = 480/0.2 = 2400$  Sq. Ft.

**FEATURES OF SITE AREA**

Presence of 100-year flood zone: NO

Existing or proposed water well in nearby area: NO

Presence of adjacent ponds, streams, water impoundments: NO

Presence of upper water shed: NO

Organized sewage service available to lot: NO

I certify that the findings of this report are based on my field observations and are accurate to the best of my ability. The site evaluation and OSSF design are subject to approval by the TCEQ or the local authorized agent. The planning materials and the OSSF design should not be considered final until a permit to construct has been issued.

**Site Evaluator:**

**NAME:** Douglas R. Dowlearn, R.S.

**Signature:**



**License No.** OS9902 – Exp. 6/30/2026

**TDH:** #2432 – Exp. 2/28/2025

**REVISED**

9:10 am, May 09, 2025

**D.A.D SERVICES, INC.**

DOUG DOWLEARN

PO BOX 212, BULVERDE, TX 78163

Designed for:

Vandever W Kelly Revcbl Trst Agrmnt

The installation site is on lot 161 of the Cascada at Canyon Lake 3 Subdivision in Comal County, TX. The proposed OSSF will treat the wastewater from a 3 Bedroom, 3120 sq. ft. residence(300 gpd) along with a 2 Bedroom, 1020 sq. ft. casita(180 gpd). The proposed method of wastewater treatment is aerobic treatment with drip irrigation. This method was chosen because of unsuitable soil conditions.

**PROPOSED SYSTEM:**

A 3" or 4" PVC pipe will discharge from the structure to an Aeris D840 aerobic treatment plant, containing a 500 gallon pre-treatment tank, a 840 gpd aerobic treatment plant, and a 900 gallon pump tank equipped with a 20 gpm submersible pump. The pump is activated by a time controller allowing the distribution 8 times per day with a 10 minute run time per dose, with float switches set to pump 480 gallons per day. A high level audible and visual alarm will activate should the pump fail. Distribution from the pump is through a self flushing 100 micron, 140 mesh disc filter, then through a 1.25" SCH-40 manifold to a 1216 L.F. drip tubing field, with drip lines set approximately two feet apart with 0.61 gph emitters set every two feet, as per the attached schematic. A threaded union will be installed in the pump tank on the supply manifold to the drip field, and a pressure regulator will be installed on the supply manifold to maintain a pressure of 30 psi. A 1.25" SCH-40 return line is installed to continuously flush the system back to the pump tank. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. The placement of the drip tubing will be on soil that has been scarified, and enough class II soil will be added so that there is 12" of soil under the drip tubing. The tubing will be covered with 6" of Class II soil.

**DESIGN SPECIFICATIONS:**

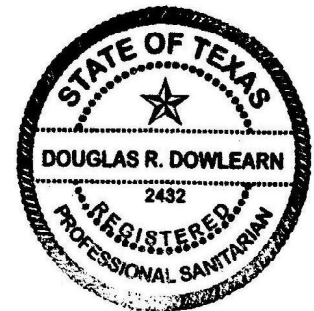
Daily Waste Flow: 480 gpd

Application rate: 0.2

Application area required:  $480/.2 = 2400$  sq. ft.

Application area utilized: 2432 sq. ft.

Pump tank reserve capacity: 160 gal minimum



*Douglas R. Dowlearn*

**SYSTEM COMPONENTS:**

SCH 40 PVC sewer line

Aeris D840

500 gallon pre treatment tank

840 gpd aerobic treatment plant

900 gallon pump tank with timed controls

C1 Series, 20Xgpm - 0.5hp/115V, Model No. 20C1X-05P4-2W115 (or equivalent)

1.25" purple PVC supply line

30 PSI pressure regulator - Model PMR30MF

Netafim Bioline Drip tubing

**LANDSCAPING:**

The native vegetation in the distribution area should consist of low level shrubs, plains grass, bluestem or bermuda. The entire area of the drip disposal must be covered with a ground cover such as grass seed or sod prior to the final inspection.



**RECEIVED**

By Brenda Ritzen at 2:39 pm, Jul 24, 2025

Douglas R. Dowlearn  
D.A.D. Services, Inc.  
PO Box 212  
Bulverde, TX 78163  
(210)240-2101  
[txseptic@gmail.com](mailto:txseptic@gmail.com)

July 23rd, 2025  
Comal County Environmental Health Department  
195 David Jonas Dr.  
New Braunfels, TX 78132-3760  
RE: 130 Cartama(permit #118393) - Pool Water Line Within 10' of ATU Variance Request

To whom it may concern:

I am requesting that an aerobic treatment unit be placed within ten feet of pool water lines in the following manner which provides equivalent protection to the requirements of TAC Chapter 285.91, Table X.

A 40 mil PVC pan liner will be wrapped around the pool lines where the aerobic treatment unit is within 10' of the pool lines. In the event that the aerobic treatment unit and water line(s) is compromised, the liner will prevent effluent from the tank from flowing into the water line; therefore, the water line will not be contaminated.

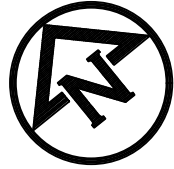
In my professional opinion, this variance will not pose a threat to the environment or public health.

If there are any questions concerning this matter, please contact me at (210)240-2101.

Sincerely,  
Douglas R. Dowlearn, R.S.



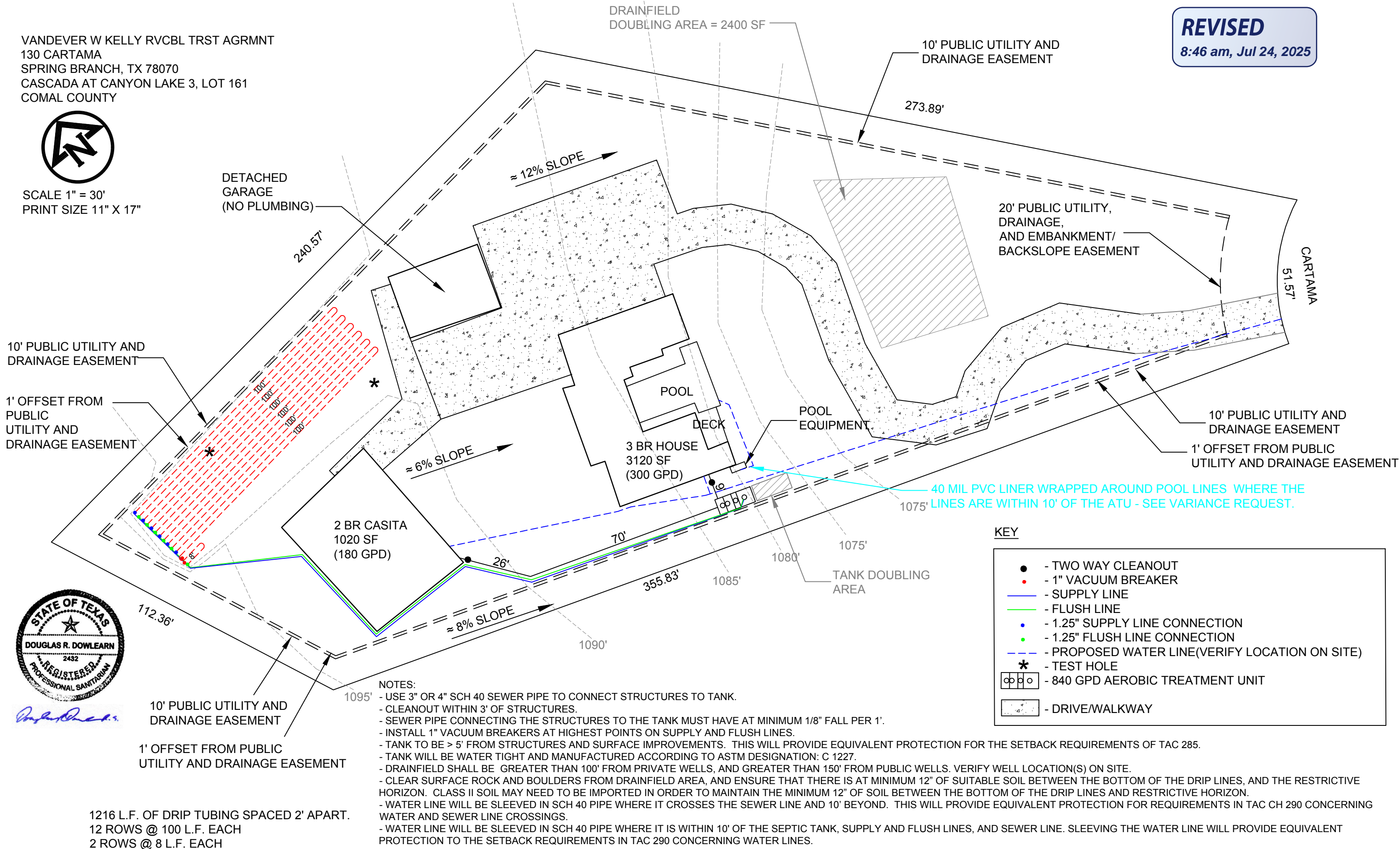
VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



SCALE 1" = 30'  
PRINT SIZE 11" X 17"

**REVISED**

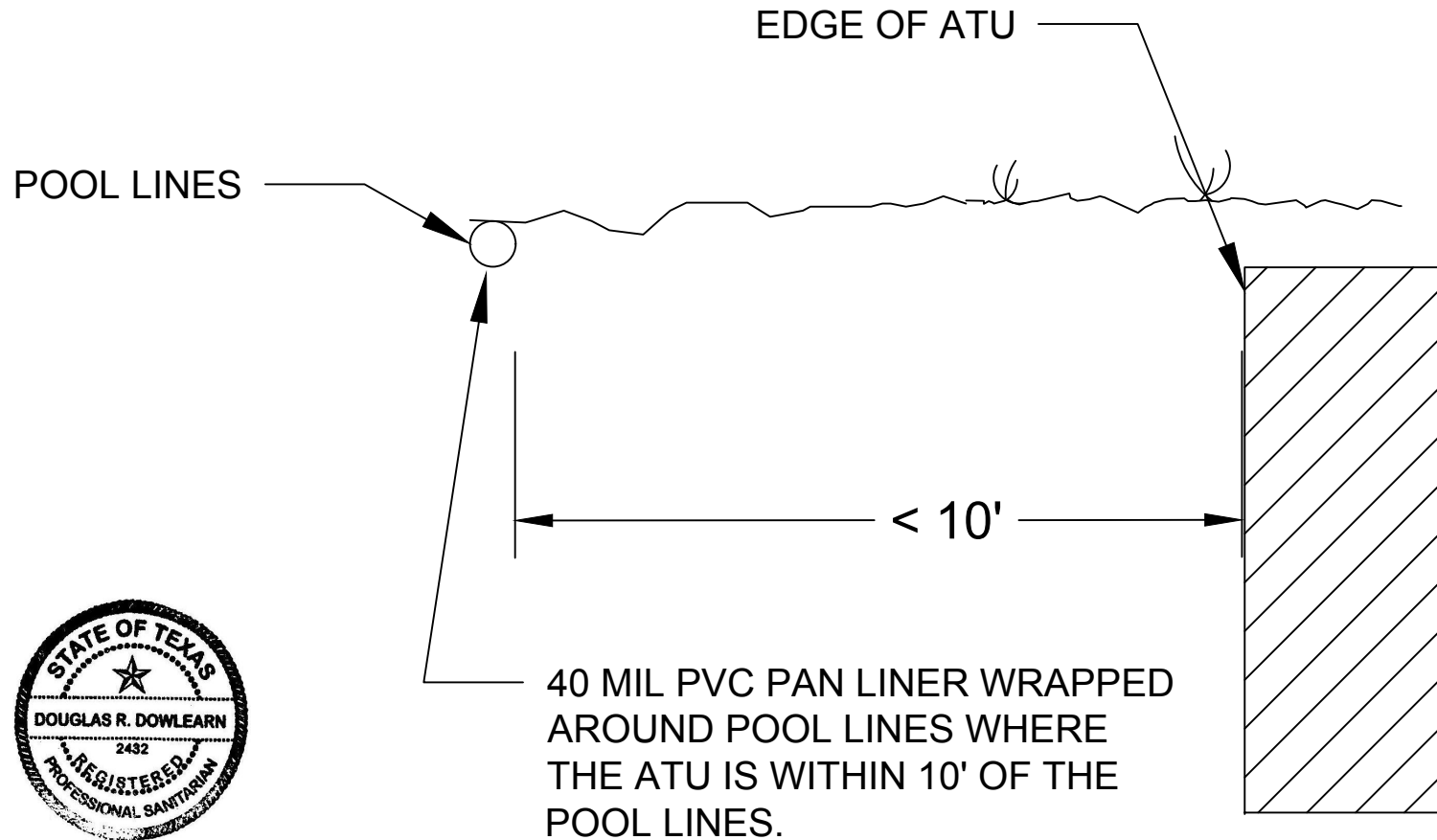
8:46 am, Jul 24, 2025



**REVISED**

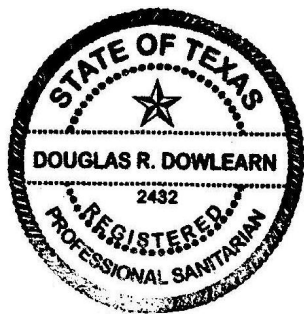
8:46 am, Jul 24, 2025

# PVC PAN LINER DETAILS



*Douglas R. Dowlearn*

**NOTE: NOT TO SCALE**

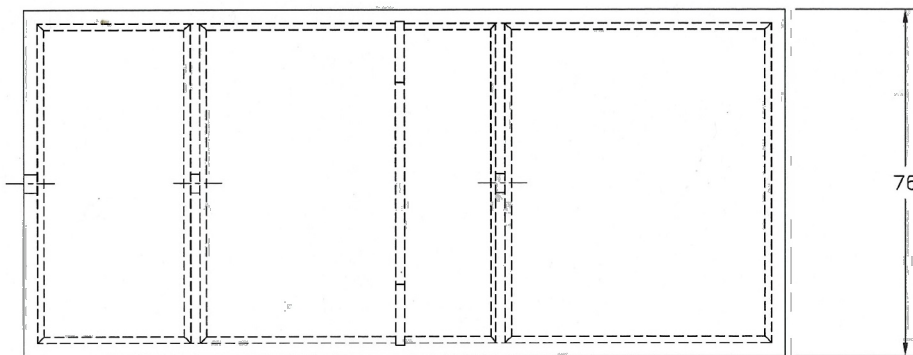


*Douglas R. Dowlearn*

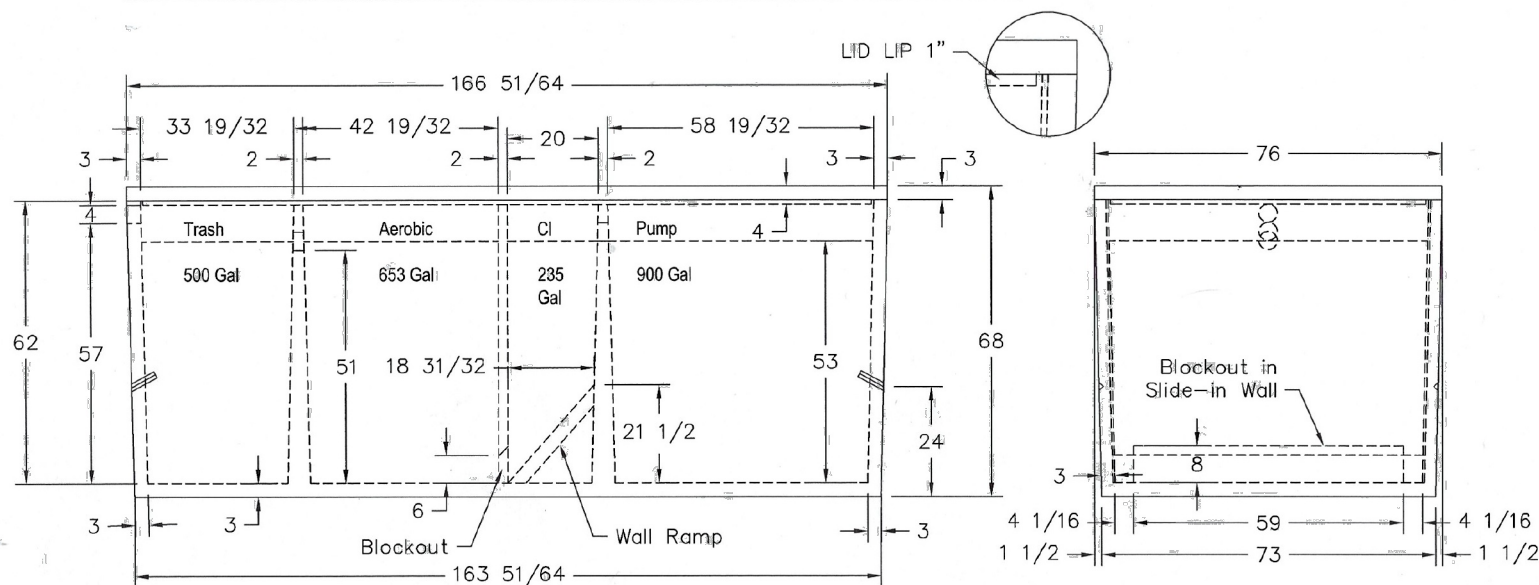
## AERIS D840 TANK SCHEMATIC

**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



WORKING LEVEL = 53"  
16.98 GAL/INCH  
41" - 53" - RESERVE - 203.76 GAL  
12" - 41" - PUMP ON TO ALARM ON - 492.42 GAL  
10" - 12" - PUMP OFF TO PUMP ON - 33.96 GAL  
0 - 10" - SUMP - 169.8 GAL

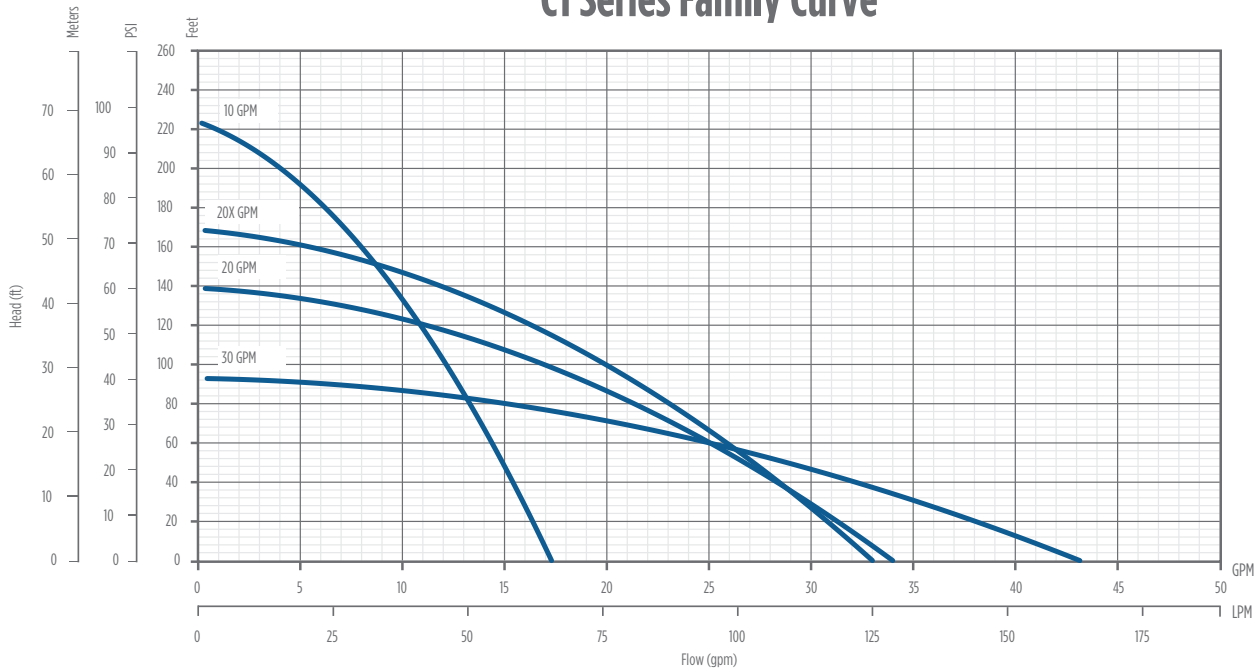
NOTE: SET ON A TIMER TO DOSE 8 TIMES PER DAY AT 10 MINUTES PER DOSE.

This drawing and the information contained herein  
is the exclusive property of Del Zotto of Minnesota, Inc.  
and shall not be reproduced, used or disclosed to  
others except as authorized through written consent  
from Del Zotto of Minnesota, Inc.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ON DIMENSIONS ARE  
FRACTIONS/16  
DECIMALS/10  
ANGLES/1/2  
REMOVE ALL BURRS AND BREAK  
ALL SHARP EDGES.

Del Zotto Products of Minnesota			
1900 County Road #1, Wrentham, MN 55797 218-364-3086 Fax 218-364-3088			
166.8 x 76W x 68T			
Treatment Tank			
SIZE	OWN BY	TAV	REV
B			C
SCALE	DATE	SHEET	1 OF 1
1:24	9/18/20		

## 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
- 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, ½ hp motor
- Fluid flows of 10, 20, and 30 gpm, with a max shut-off pressure of over 100 psi
- Heavy duty 600 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

C1 Series Pumps							
GPM	HP	Volts	Stage	Model No.	Order No.	Length (in)	Weight (lbs)
10	1/2	115	7	10C1-05P4-2W115	90301005	26	17
		230	7	10C1-05P4-2W230	90301010	26	17
20		115	5	20C1-05P4-2W115	90302005	25	16
		230	5	20C1-05P4-2W230	90302010	25	16
20X		115	6	20XC1-05P4-2W115	90302015	26	17
		230	6	20XC1-05P4-2W230	90302020	26	17
30		115	4	30C1-05P4-2W115	90303005	25	16
		230	4	30C1-05P4-2W230	90303010	25	16

Note: All units have 10 foot long SJ00W leads.



**Franklin Electric**

franklinwater.com

M1698 07-14



# C1 SERIES

## CISTERN PUMPS

Designed for use in gray water / filtered effluent service applications, the C1 Series cistern pump provides high performance and long life in less than ideal water conditions. The C1 Series pump is able to pass solids up to 1/8" without having a negative effect on the internal hydraulic components.

The pump's unique bottom suction design allows 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.



**Franklin Electric**

[franklinwater.com](http://franklinwater.com)

**From:** [Ritzen,Brenda](#)  
**To:** [Lauren Dowlearn](#); [Clear Choice Septic Services](#); [Canyon Custom Builders and Landscape](#)  
**Subject:** RE: Permit 118393  
**Date:** Monday, July 28, 2025 3:51:00 PM  
**Attachments:** [image001.png](#)

---

Lauren,

Variance has been approved. They may proceed.

Thank you,



**Brenda Ritzen**

Environmental Health Coordinator  
195 David Jonas Dr.  
New Braunfels, TX 78132  
DR:OS00007722  
830-608-2090  
[www.cceo.org](http://www.cceo.org)

---

**From:** Lauren Dowlearn <txseptic@gmail.com>  
**Sent:** Wednesday, March 19, 2025 10:41 AM  
**To:** Ritzen,Brenda <rabbjr@co.comal.tx.us>; Clear Choice Septic Services <clearchoicess@outlook.com>; Canyon Custom Builders and Landscape <canyoncustombuilders@icloud.com>  
**Subject:** Re: Permit 118393

**This email originated from outside of the organization.**

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

- Comal IT

---

Good morning, please see attached revision and service contract.

Thank you,  
Lauren Dowlearn  
210-878-8100  
D.A.D Services, Inc.  
[www.TexasSuperSeptic.com](http://www.TexasSuperSeptic.com)

On Thu, Mar 13, 2025 at 3:59 PM Ritzen,Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)> wrote:

**From:** [Ritzen,Brenda](#)  
**To:** ["Lauren Dowlearn"](#)  
**Cc:** [Canyon Custom Builders and Landscape](#); [Clear Choice Septic Services](#)  
**Subject:** RE: 118393.pdf  
**Date:** Thursday, July 24, 2025 8:49:00 AM  
**Attachments:** [image001.png](#)

---

Lauren,

It does not appear that your variance request letter came thru. Can you please resend.

Thank you,



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

---

**From:** Lauren Dowlearn <txseptic@gmail.com>  
**Sent:** Wednesday, July 23, 2025 1:06 PM  
**To:** Ritzen,Brenda <rabbjr@co.comal.tx.us>  
**Cc:** Canyon Custom Builders and Landscape <canyoncustombuilders@icloud.com>; Clear Choice Septic Services <clearchoicess@outlook.com>  
**Subject:** Re: 118393.pdf

**This email originated from outside of the organization.**

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

- Comal IT

---

Brenda, please see attached.

Thank you,  
Lauren Dowlearn  
210-878-8100  
D.A.D Services, Inc.  
[www.TexasSuperSeptic.com](http://www.TexasSuperSeptic.com)

On Mon, Jul 21, 2025 at 2:21 PM Ritzen,Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)> wrote:



**From:** [Ritzen,Brenda](#)  
**To:** [Lauren Dowlearn](#)  
**Cc:** [Canyon Custom Builders and Landscape](#); [Clear Choice Septic Services](#)  
**Subject:** RE: 118393.pdf  
**Date:** Monday, July 21, 2025 2:21:00 PM  
**Attachments:** [image001.png](#)

---

Lauren,

We feel that wrapping the pool lines would give better protection. We have approved a similar variance request where the pool lines were wrapped in 20 mil plastic liner leaving no seems exposed.

Thank you,



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

---

**From:** Lauren Dowlearn <txseptic@gmail.com>  
**Sent:** Monday, July 21, 2025 9:46 AM  
**To:** Ritzen,Brenda <rabbjr@co.comal.tx.us>  
**Cc:** Canyon Custom Builders and Landscape <canyoncustombuilders@icloud.com>; Clear Choice Septic Services <clearchoicess@outlook.com>  
**Subject:** Re: 118393.pdf

**This email originated from outside of the organization.**

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

- Comal IT

---

Good morning, please see attached.

Thank you,  
Lauren Dowlearn  
210-878-8100  
D.A.D Services, Inc.  
[www.TexasSuperSeptic.com](http://www.TexasSuperSeptic.com)

**REVISED**

12:52 pm, Jul 21, 2025

VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



SCALE 1" = 30'  
PRINT SIZE 11" X 17"

DETACHED  
GARAGE  
(NO PLUMBING)

DRAINFIELD  
DOUBLING AREA = 2400 SF

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT



273.89'

20' PUBLIC UTILITY,  
DRAINAGE,  
AND EMBANKMENT/  
BACKSLOPE EASEMENT

CARTAMA  
51.57'

**VOID**

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM  
PUBLIC  
UTILITY AND  
DRAINAGE EASEMENT

240.57'

≈ 12% SLOPE

≈ 6% SLOPE

2 BR CASITA  
1020 SF  
(180 GPD)

POOL

DECK

3 BR HOUSE  
3120 SF  
(300 GPD)

POOL  
EQUIPMENT

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT  
1' OFFSET FROM PUBLIC  
UTILITY AND DRAINAGE EASEMENT

40 MIL PVC LINER ADDED TO SEPARATE  
ATU FROM POOL EQUIPMENT PIPING - SEE VARIANCE REQUEST.

**KEY**

- - TWO WAY CLEANOUT
- - 1" VACUUM BREAKER
- - SUPPLY LINE
- - FLUSH LINE
- - 1.25" SUPPLY LINE CONNECTION
- - 1.25" FLUSH LINE CONNECTION
- - PROPOSED WATER LINE (VERIFY LOCATION ON SITE)
- \* - TEST HOLE
- ⊞⊞⊞ - 840 GPD AEROBIC TREATMENT UNIT
- - DRIVE/WALKWAY

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM PUBLIC  
UTILITY AND DRAINAGE EASEMENT

**NOTES:**

- USE 3" OR 4" SCH 40 SEWER PIPE TO CONNECT STRUCTURES TO TANK.
- CLEANOUT WITHIN 3' OF STRUCTURES.
- SEWER PIPE CONNECTING THE STRUCTURES TO THE TANK MUST HAVE AT MINIMUM 1/8" FALL PER 1'.
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.
- TANK TO BE > 5' FROM STRUCTURES AND SURFACE IMPROVEMENTS. THIS WILL PROVIDE EQUIVALENT PROTECTION FOR THE SETBACK REQUIREMENTS OF TAC 285.
- TANK WILL BE WATER TIGHT AND MANUFACTURED ACCORDING TO ASTM DESIGNATION: C 1227.
- DRAINFIELD SHALL BE GREATER THAN 100' FROM PRIVATE WELLS, AND GREATER THAN 150' FROM PUBLIC WELLS. VERIFY WELL LOCATION(S) ON SITE.
- CLASS II SOIL MAY NEED TO BE IMPORTED IN ORDER TO MAINTAIN THE MINIMUM 12" OF SOIL BETWEEN THE BOTTOM OF THE DRIP LINES AND RESTRICTIVE HORIZON.
- WATER LINE WILL BE SLEEVED IN SCH 40 PIPE WHERE IT CROSSES THE SEWER LINE AND 10' BEYOND. THIS WILL PROVIDE EQUIVALENT PROTECTION FOR REQUIREMENTS IN TAC CH 290 CONCERNING WATER AND SEWER LINE CROSSINGS.
- WATER LINE WILL BE SLEEVED IN SCH 40 PIPE WHERE IT IS WITHIN 10' OF THE SEPTIC TANK, SUPPLY AND FLUSH LINES, AND SEWER LINE. SLEEVE THE WATER LINE WILL PROVIDE EQUIVALENT PROTECTION TO THE SETBACK REQUIREMENTS IN TAC 290 CONCERNING WATER LINES.

1216 L.F. OF DRIP TUBING SPACED 2' APART.  
12 ROWS @ 100 L.F. EACH  
2 ROWS @ 8 L.F. EACH

112.36'

≈ 8% SLOPE

355.83'

1085'

1080'

1075'

TANK DOUBLING  
AREA

1090'

1095'

**REVISED**

12:52 pm, Jul 21, 2025

Douglas R. Dowlearn  
D.A.D. Services, Inc.  
PO Box 212  
Bulverde, TX 78163  
(210)240-2101  
[txseptic@gmail.com](mailto:txseptic@gmail.com)

July 14th, 2025

Comal County Environmental Health Department

195 David Jonas Dr.

New Braunfels, TX 78132-3711

RE: 130 Cartama(permit #118093) Pool Water Line 'within 10' of A/TU Variance Request

To whom it may concern:

I am requesting that an aerobic treatment unit be placed within ten feet of pool water lines in the following manner which provides equivalent protection to the requirements of TAC Chapter 285.91, Table X.

A 40 mil PVC pan liner will be placed between the pool water lines and the aerobic treatment unit. In the event that the aerobic treatment unit and water line(s) is compromised, the liner will prevent effluent from the tank from flowing into the water line; therefore, the water line will not be contaminated.

In my professional opinion, this variance will not pose a threat to the environment or public health.

If there are any questions concerning this matter, please contact me at (210)240-2101.

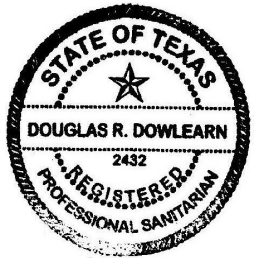
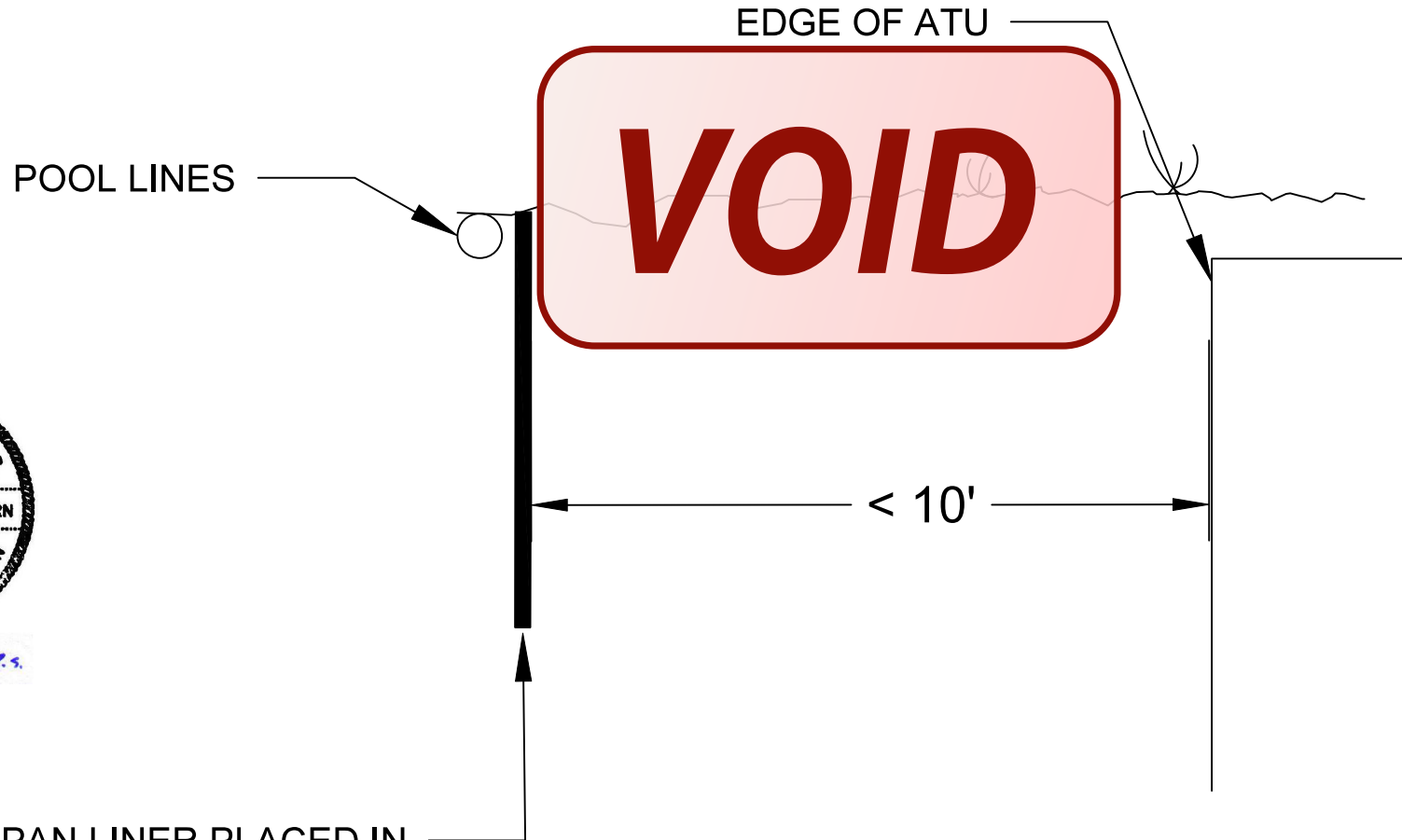
Sincerely,  
Douglas R. Dowlearn, R.S.



**REVISED**

12:52 pm, Jul 21, 2025

# PVC PAN LINER DETAILS



*Douglas R. Dowlearn*

40 MIL PVC PAN LINER PLACED IN  
A TRENCH THAT IS A MINIMUM  
DEPTH OF 16" TO PREVENT  
CONTAMINATION OF THE POOL  
LINES WHERE THE ATU IS WITHIN  
10' OF THE POOL LINES.

**NOTE: NOT TO SCALE**

**From:** [Ritzen,Brenda](#)  
**To:** ["Lauren Dowlearn"](#)  
**Cc:** [Canyon Custom Builders and Landscape](#); [Clear Choice Septic Services](#)  
**Subject:** RE: 118393.pdf  
**Date:** Thursday, July 17, 2025 4:44:00 PM  
**Attachments:** [image001.png](#)

---

Lauren,

Provide a profile detail of how this will be installed and details of the 40 mil pvc pan liner.

Thank you,



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

---

**From:** Lauren Dowlearn <txseptic@gmail.com>  
**Sent:** Thursday, July 17, 2025 12:25 PM  
**To:** Ritzen,Brenda <rabbjr@co.comal.tx.us>  
**Cc:** Canyon Custom Builders and Landscape <canyoncustombuilders@icloud.com>; Clear Choice Septic Services <clearchoicess@outlook.com>  
**Subject:** Re: 118393.pdf

**This email originated from outside of the organization.**

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

- Comal IT

---

Brenda, attached is that variance. Thank you.

Thank you,  
Lauren Dowlearn  
210-878-8100  
D.A.D Services, Inc.  
[www.TexasSuperSeptic.com](http://www.TexasSuperSeptic.com)

On Wed, Jun 4, 2025 at 4:01 PM Ritzen,Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)> wrote:

**REVISED**

4:42 pm, Jul 17, 2025

Douglas R. Dowlearn  
D.A.D. Services, Inc.  
PO Box 212  
Bulverde, TX 78163  
(210)240-2101

[txseptic@gmail.com](mailto:txseptic@gmail.com)

**VOID**

July 14th, 2025

Comal County Environmental Health Department

195 David Jonas Dr.

New Braunfels, TX 78132-3760

RE: 130 Cartama(permit #118393) - Pool Water Line Within 10' of ATU Variance Request

To whom it may concern:

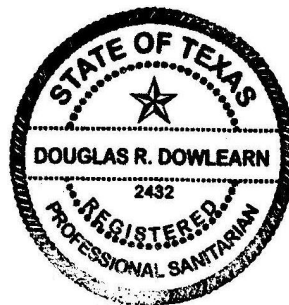
I am requesting that an aerobic treatment unit be placed within ten feet of pool water lines in the following manner which provides equivalent protection to the requirements of TAC Chapter 285.91, Table X.

A 40 mil PVC pan liner will be placed between the pool water lines and the aerobic treatment unit. In the event that the aerobic treatment unit and water line(s) is compromised, the liner will prevent effluent from the tank from flowing into the water line; therefore, the water line will not be contaminated.

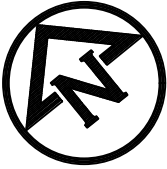
In my professional opinion, this variance will not pose a threat to the environment or public health.

If there are any questions concerning this matter, please contact me at (210)240-2101.

Sincerely,  
Douglas R. Dowlearn, R.S.

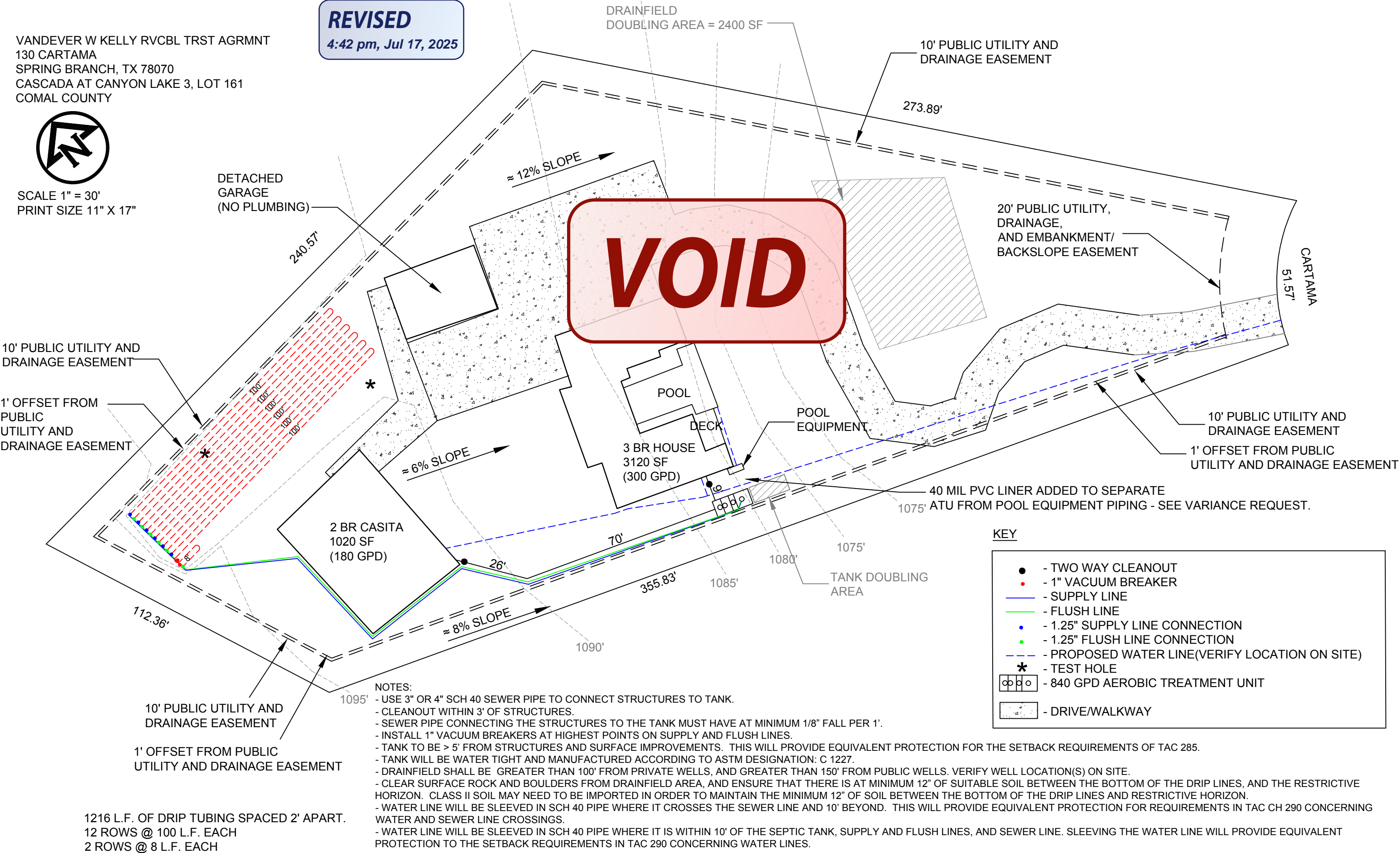


VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



SCALE 1" = 30'  
PRINT SIZE 11" X 17"

**REVISED**  
4:42 pm, Jul 17, 2025





**From:** [Ritzen,Brenda](#)  
**To:** [Lauren Dowlearn](#); [Canyon Custom Builders and Landscape](#); [Clear Choice Septic Services](#)  
**Subject:** RE: 118393.pdf  
**Date:** Wednesday, June 4, 2025 4:01:00 PM  
**Attachments:** [image001.png](#)

---

Lauren,

Since this does not meet the minimum separation distances a variance request is needed with details of the equivalent protection being proposed.

Thank you,



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

---

**From:** Lauren Dowlearn <txseptic@gmail.com>  
**Sent:** Wednesday, June 4, 2025 11:42 AM  
**To:** Ritzen,Brenda <rabbjr@co.comal.tx.us>; Canyon Custom Builders and Landscape <canyoncustombuilders@icloud.com>; Clear Choice Septic Services <clearchoicess@outlook.com>  
**Subject:** Re: 118393.pdf

**This email originated from outside of the organization.**

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

- Comal IT

---

See attached revised design reflecting the liner.

Thank you,  
Lauren Dowlearn  
210-878-8100  
D.A.D Services, Inc.  
[www.TexasSuperSeptic.com](http://www.TexasSuperSeptic.com)

On Thu, Mar 20, 2025 at 11:42 AM Ritzen,Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)> wrote:



**REVISED**

3:54 pm, Jun 04, 2025

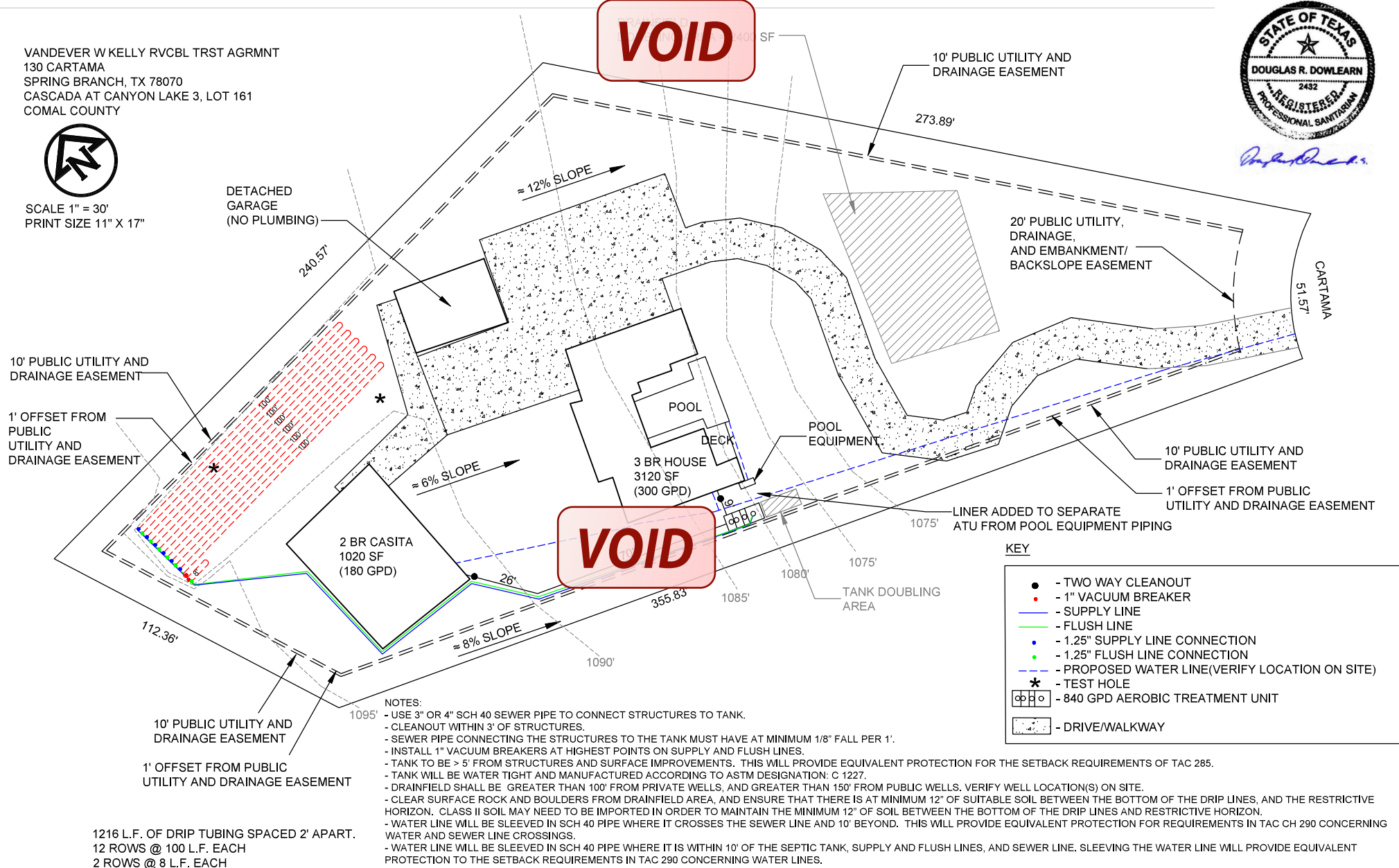
VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



SCALE 1" = 30'  
PRINT SIZE 11" X 17"



*Douglas R. Dowlearn*



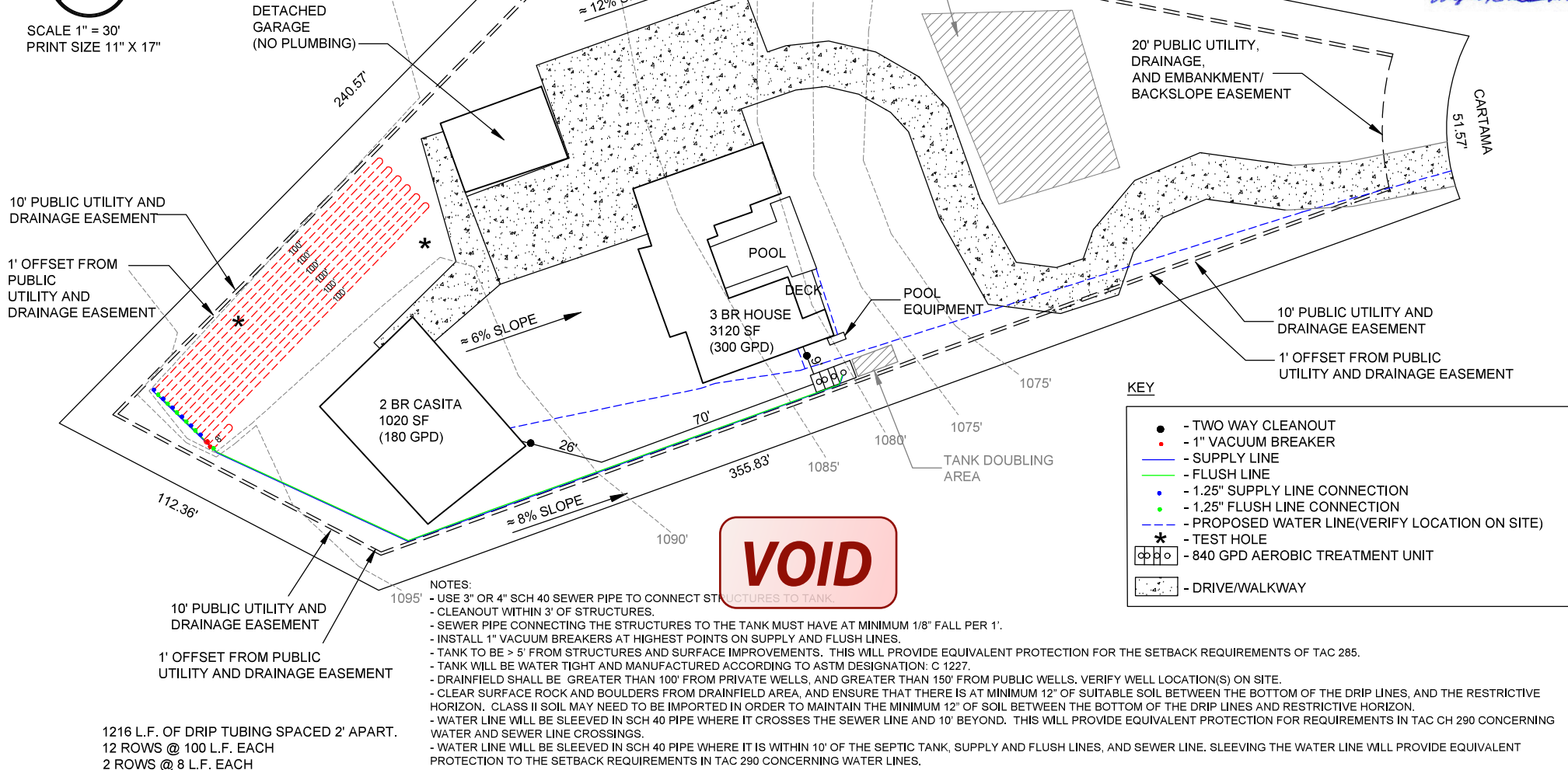
**REVISED**

9:10 am, May 09, 2025

VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



SCALE 1" = 30'  
PRINT SIZE 11" X 17"



**REVISED**

9:10 am, May 09, 2025

SCALE 1" = 16'  
PRINT SIZE 11" X 17"

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM  
PUBLIC  
UTILITY AND  
DRAINAGE EASEMENT



10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM PUBLIC  
UTILITY AND DRAINAGE EASEMENT

**VOID**

2 BR CASITA  
1020 SF  
(180 GPD)

**VOID**

POOL

3 BR HOUSE  
3120 SF  
(300 GPD)

**NOTES:**

- USE 3" OR 4" SCH 40 SEWER PIPE TO CONNECT STRUCTURES TO T
- CLEANOUT WITHIN 3' OF STRUCTURES.
- SEWER PIPE CONNECTING THE STRUCTURES TO THE TANK MUST
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AI
- TANK TO BE > 5' FROM STRUCTURES AND SURFACE IMPROVEMENT
- TANK WILL BE WATER TIGHT AND MANUFACTURED ACCORDING TO

**D.A.D SERVICES, INC.**  
**DOUG DOWLEARN**  
**PO BOX 212, BULLVERDE, TX 78163**  
Vandever Wastewater Treatment Agreement

**VOID**

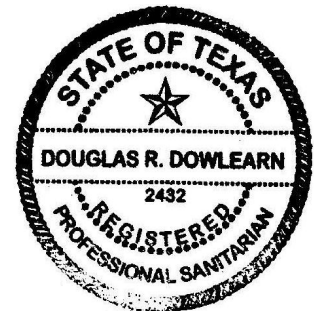
The installation site is on lot 161 of the Cascada at Canyon Lake 3 Subdivision in Comal County, TX. The proposed OSSF will treat the wastewater from a 3 Bedroom, 3120 sq. ft. residence(300 gpd) along with a 2 Bedroom, 1020 sq. ft. casita(180 gpd). The proposed method of wastewater treatment is aerobic treatment with drip irrigation. This method was chosen because of unsuitable soil conditions.

**PROPOSED SYSTEM:**

A 3" or 4" PVC pipe will discharge from the structure to an Aeris D840 aerobic treatment plant, containing a 500 gallon pre-treatment tank, a 840 gpd aerobic treatment plant, and a 900 gallon pump tank equipped with a 20 gpm submersible pump. The pump is activated by a time controller allowing the distribution 8 times per day with a 10 minute run time per dose, with float switches set to pump 480 gallons per day. A high level audible and visual alarm will activate should the pump fail. Distribution from the pump is through a self flushing 100 micron, 140 mesh disc filter, then through a 1.25" SCH-40 manifold to a 1216 L.F. drip tubing field, with drip lines set approximately two feet apart with 0.61 gph emitters set every two feet, as per the attached schematic. A threaded union will be installed in the pump tank on the supply manifold to the drip field, and a pressure regulator will be installed on the supply manifold to maintain a pressure of 30 psi. A 1.25" SCH-40 return line is installed to continuously flush the system back to the pump tank. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. The placement of the drip tubing will be on soil that has been scarified, and enough class II soil will be added so that there is 12" of soil under the drip tubing. The tubing will be covered with 6" of Class II soil.

**DESIGN SPECIFICATIONS:**

Daily Waste Flow: 480 gpd  
Application rate: 0.2  
Application area required:  $480/.2 = 2400$  sq. ft.  
Application area utilized: 2432 sq. ft.  
Pump tank reserve capacity: 160 gal minimum



*Douglas R. Dowlearn*

**SYSTEM COMPONENTS:**

SCH 40 PVC sewer line  
Aeris D840  
500 gallon pre treatment tank  
840 gpd aerobic treatment plant  
900 gallon pump tank with timed controls  
C1 Series, 20Xgpm - 0.5hp/115V, 1600RPM, 2001X-05P4-2W115 (or equivalent)  
1.25" purple PVC supply line  
30 PSI pressure regulator - Model PMR30MF  
Netafim Bioline Drip tubing

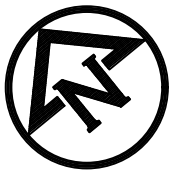
**VOID**

**LANDSCAPING:**

The native vegetation in the distribution area should consist of low level shrubs, plains grass, bluestem or bermuda. The entire area of the drip disposal must be covered with a ground cover such as grass seed or sod prior to the final inspection.



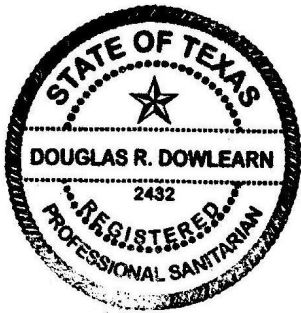
VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



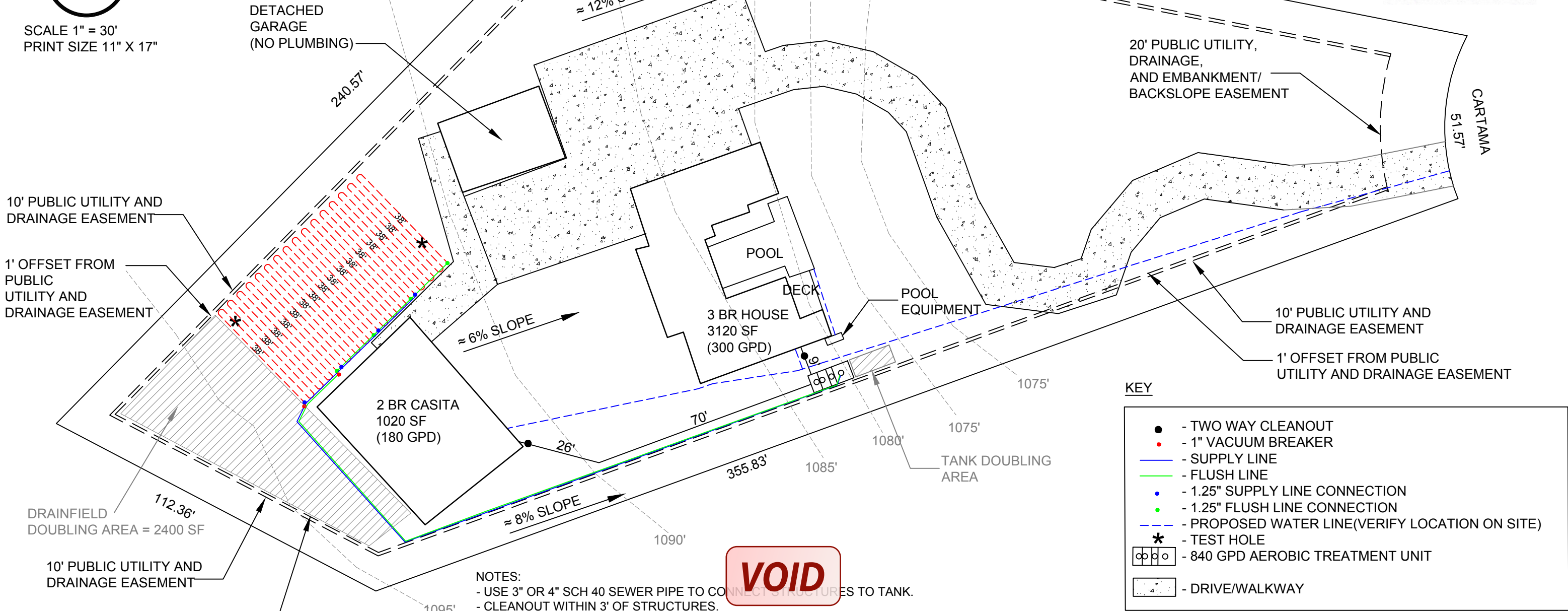
SCALE 1" = 30'  
PRINT SIZE 11" X 17"

**REVISED**  
11:18 am, Mar 20, 2025

**VOID**



*Douglas R. Dowlearn*



**NOTES:**

- USE 3" OR 4" SCH 40 SEWER PIPE TO CONNECT STRUCTURES TO TANK.
- CLEANOUT WITHIN 3' OF STRUCTURES.
- SEWER PIPE CONNECTING THE STRUCTURES TO THE TANK MUST HAVE AT MINIMUM 1/8" FALL PER 1'.
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.
- TANK TO BE > 5' FROM STRUCTURES AND SURFACE IMPROVEMENTS. THIS WILL PROVIDE EQUIVALENT PROTECTION FOR THE SETBACK REQUIREMENTS OF TAC 285.
- TANK WILL BE WATER TIGHT AND MANUFACTURED ACCORDING TO ASTM DESIGNATION: C 1227.
- DRAINFIELD SHALL BE GREATER THAN 100' FROM PRIVATE WELLS, AND GREATER THAN 150' FROM PUBLIC WELLS. VERIFY WELL LOCATION(S) ON SITE.
- CLEAR SURFACE ROCK AND BOULDERS FROM DRAINFIELD AREA, AND ENSURE THAT THERE IS AT MINIMUM 12" OF SUITABLE SOIL BETWEEN THE BOTTOM OF THE DRIP LINES, AND THE RESTRICTIVE HORIZON. CLASS II SOIL MAY NEED TO BE IMPORTED IN ORDER TO MAINTAIN THE MINIMUM 12" OF SOIL BETWEEN THE BOTTOM OF THE DRIP LINES AND RESTRICTIVE HORIZON.
- WATER LINE WILL BE SLEEVED IN SCH 40 PIPE WHERE IT CROSSES THE SEWER LINE AND 10' BEYOND. THIS WILL PROVIDE EQUIVALENT PROTECTION FOR REQUIREMENTS IN TAC CH 290 CONCERNING WATER AND SEWER LINE CROSSINGS.
- **WATER LINE WILL BE SLEEVED IN SCH 40 PIPE WHERE IT IS WITHIN 10' OF THE SEPTIC TANK, SUPPLY AND FLUSH LINES, AND SEWER LINE.** SLEEVED THE WATER LINE WILL PROVIDE EQUIVALENT PROTECTION TO THE SETBACK REQUIREMENTS IN TAC 290 CONCERNING WATER LINES.

**VOID**

1216 L.F. OF DRIP TUBING SPACED 2' APART.  
32 ROWS @ 38 L.F. EACH

**REVISED**  
11:18 am, Mar 20, 2025

SCALE 1" = 16'  
PRINT SIZE 11" X 17"

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM  
PUBLIC  
UTILITY AND  
DRAINAGE EASEMENT



*Douglas R. Dowlearn*

DRAINFIELD  
DOUBLING AREA = 2400 SF

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM PUBLIC  
UTILITY AND DRAINAGE EASEMENT

**VOID**

≈ 6% SLOPE

2 BR CASITA  
1020 SF  
(180 GPD)

3 BR HOUSE  
3120 SF  
(300 GPD)

POOL

DEC

**VOID**

≈ 8% SLOPE

NOTES:

- USE 3" OR 4" SCH 40 SEWER PIPE TO CONNECT STRU
- CLEANOUT WITHIN 3' OF STRUCTURES.
- SEWER PIPE CONNECTING THE STRUCTURES TO THE
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS C
- TANK TO BE > 5' FROM STRUCTURES AND SURFACE IN
- TANK WILL BE WATER TIGHT AND MANUFACTURED AC

**From:** [Ritzen,Brenda](#)  
**To:** ["Lauren Dowlearn"](#); [Clear Choice Septic Services](#); [Canyon Custom Builders and Landscape](#)  
**Subject:** RE: Permit 118393  
**Date:** Thursday, March 20, 2025 11:42:00 AM  
**Attachments:** [image001.png](#)

---

Lauren,

Permit file updated.

Thank you,



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

---

**From:** Lauren Dowlearn <txseptic@gmail.com>  
**Sent:** Wednesday, March 19, 2025 10:41 AM  
**To:** Ritzen,Brenda <rabbjr@co.comal.tx.us>; Clear Choice Septic Services <clearchoicess@outlook.com>; Canyon Custom Builders and Landscape <canyoncustombuilders@icloud.com>  
**Subject:** Re: Permit 118393

**This email originated from outside of the organization.**

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

- Comal IT

---

Good morning, please see attached revision and service contract.

Thank you,  
Lauren Dowlearn  
210-878-8100  
D.A.D Services, Inc.  
[www.TexasSuperSeptic.com](http://www.TexasSuperSeptic.com)

On Thu, Mar 13, 2025 at 3:59 PM Ritzen,Brenda <[rabbjr@co.comal.tx.us](mailto:rabbjr@co.comal.tx.us)> wrote:

**From:** [Ritzen,Brenda](#)  
**To:** [Lauren Dowlearn](#)  
**Subject:** Permit 118393  
**Date:** Thursday, March 13, 2025 3:59:00 PM  
**Attachments:** [image001.png](#)

---

**Re: W. Kelly Vandever, Trustee of Kelly Vandever Revocable Trust  
Cascada at Canyon Lake Unit 3 Lot 161  
Application for Permit for Authorization to Construct an On-Site  
Sewage Facility (OSSF)**

**Lauren :**

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

- 1. During our preliminary review it was discovered that the system installation has already commenced. State regulations do not allow any installation of the on-site sewage facility to commence until after the permit to construct has been issued. Be advised that no further installation may proceed until after the permit to construct has been issued.**
- ✓ 2. The property owner and maintenance provider signatures are both needed on the 2 year initial maintenance contract.**
- ✓ 3. The designer must address the pool equipment which is located within 10 ft. of the tank and show the pool location and its associated water lines on the design.**
- 4. Revise as needed and resubmit.**

**Thank you,**





---

**Brenda Ritzen**

Environmental Health Coordinator

195 David Jonas Dr.

New Braunfels, TX 78132

DR:OS00007722

830-608-2090

[www.cceo.org](http://www.cceo.org)

---

**VOID**

**Clear Choice  
SEPTIC SERVICES**

**Contract Holder:** Canyon Custom Builders **Address:** 130 Cartama Spring Branch, TX 78070 **Permit:** \_\_\_\_\_ **Lot:** 161  
**Subdivision:** Cascada at Canyon Lake **County:** Comal **Phone:** \_\_\_\_\_ **Email:** \_\_\_\_\_  
**System Type:** Aeris-Drip-600 GPD **Manufacturer service notes**

**Initial Two-Year Service Agreement**

The start date of the six-time visit service contract shall begin the date the License to operate(LTO) is issued.  
This contract will be in effect **FROM:** \_\_\_\_\_ **TO :** \_\_\_\_\_ and will provide the following:

1. An inspection/service call every four months which will include: inspection, adjustments and servicing of the mechanical and electrical components as necessary to ensure that the system functions correctly.
2. An effluent inspection will consist of a visual check for color, turbidity, scum layer in the clarifier and an examination for odors.
3. **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 will be notified and may incur an additional cost.
4. If any incorrect operation is observed the property owner will be contacted immediately of the conditions and a solution must be met at that time or more charges may apply.
5. All parts, warranty or non-warranty, freight charges, labor or service calls that have not been paid for, remain the property of CLEAR CHOICE SEPTIC SERVICES and will result in the repossession of parts before end of contract date.
6. The response time to a service call by the Contract Holder regarding concerns of the system will be within 48 hours from the time received. (phone contact is an acceptable response)
7. The signing of this Service Agreement authorizes Clear Choice Septic Services to enter the property to complete all terms of this contract.

Clear Choice Septic Services will complete service of the septic system according to state and manufacturer regulations and the designs approved by the state. Contract holder will be responsible for service calls, labor and shipping costs on any parts under Warranty or exchanged during Warranty, additional fees may apply. All other components will be according to Manufacturer's Warranty and specification.

**Attention:** Clear Choice Septic Service **cannot** control quality or amount of effluent that goes into this septic system, **we cannot** warranty how the system will operate. See manufacturer or installer instructions for suggestions on septic operation. **This Service Agreement does not cover cost of service calls, labor, parts or materials that are required for service, failure to maintain access from restricting vegetation, locked gates, unfriendly animals or electrical power to the system may result in service being refused.** Contract will not cover service calls such as sprinklers that are broken, leaking, stopped up or otherwise malfunctioning, sewer line issues, the hydraulic/organic design capabilities and the input of non-biodegradable materials (feminine products, sanitary wipes, solvents, grease, oil, paints, etc.), or any usage contrary to the requirements as advised by authorized Maintenance Provider. Inspection dates can be adjusted to allow inspection date under contract to take place of service call. Service call price may be adjusted at Clear Choice Septic Services discretion, without notice. This Contract does not include the pumping of 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 this Contract also include: disconnecting the alarm, restricting ventilation to the aerator, overloading the system above its rated capacity; or flooding by external means. Ground water, rodent, insect or fire ant damage or any other form of unusual abuse is a violation. A renewal Service Contract should be activated 30 days before expiration of existing Contract. We will contact the Contract Holder prior to expiration of existing contract. As we take pleasure in servicing our active/retired military and senior community please have correct identification on hand when signing contract. (expired ID's are not valid) CLEAR CHOICE SEPTIC SERVICES has the right to refuse service to any party for any reason. Funds that have been paid for contract will be applied to any service calls and or labor. Remaining funds will be distributed at Clear Choices discretion. Contract holders will be notified 30 days before contract is terminated. The signing of this contract is an acknowledgment and agreement of all terms listed above.

**Serviced by: Clear Choice Septic Services, 1659 State Hwy 46 W Ste 115-200 New Braunfels, TX 78132**  
**Phone: 830-624-5859**

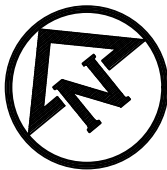
**Justin Trevino Maintenance Provider License # MP0002136**

\_\_\_\_\_  
Contract Holder Signature/Property Owner

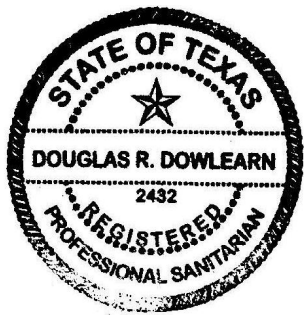
\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Authorized Maintenance Provider

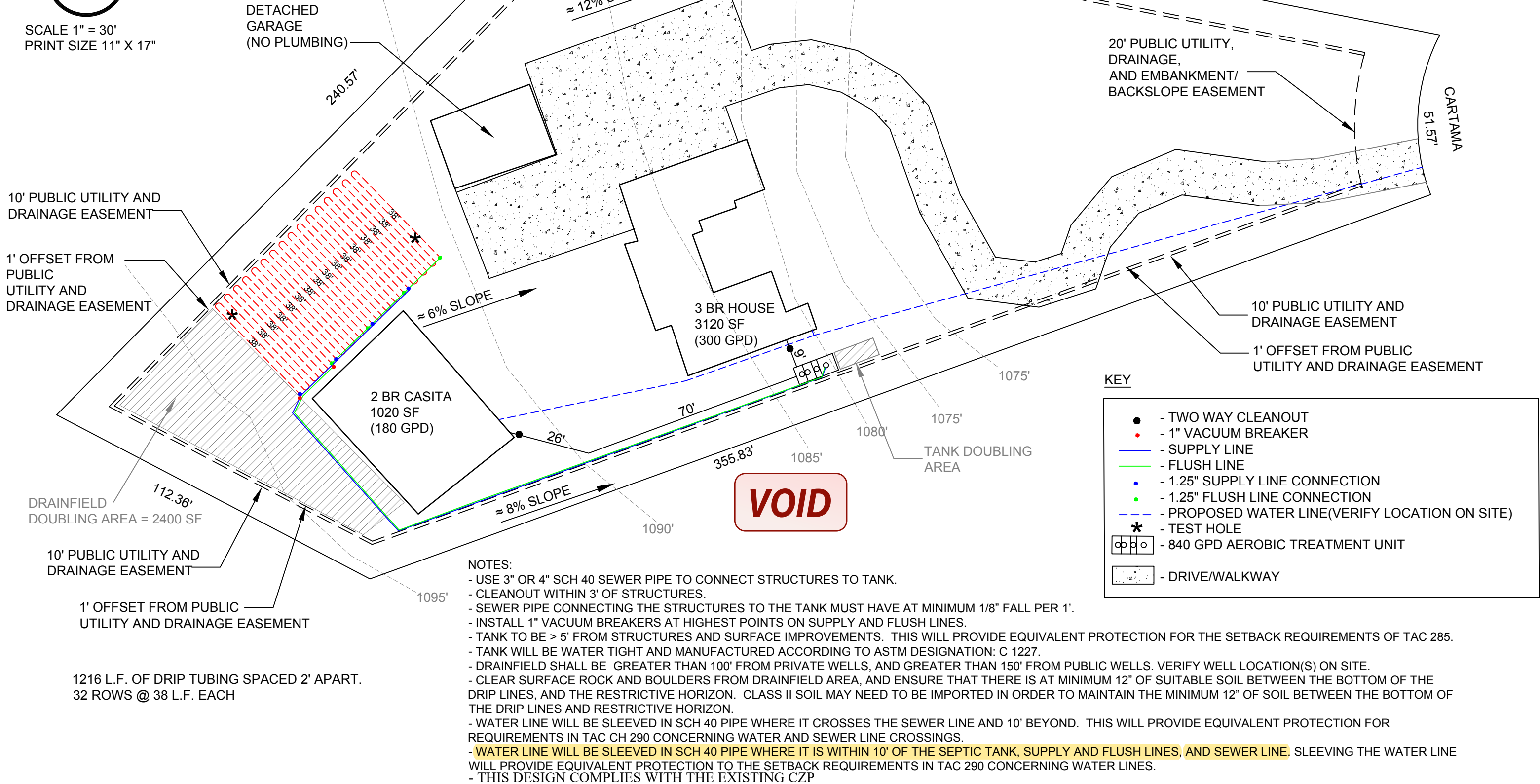
VANDEVER W KELLY RVCBL TRST AGRMNT  
130 CARTAMA  
SPRING BRANCH, TX 78070  
CASCADA AT CANYON LAKE 3, LOT 161  
COMAL COUNTY



SCALE 1" = 30'  
PRINT SIZE 11" X 17"



*Douglas R. Dowlearn*





SCALE 1" = 16'  
PRINT SIZE 11" X 17"

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM  
PUBLIC  
UTILITY AND  
DRAINAGE EASEMENT



*Douglas R. Dowlearn*

DRAINFIELD  
DOUBLING AREA = 2400 SF

10' PUBLIC UTILITY AND  
DRAINAGE EASEMENT

1' OFFSET FROM PUBLIC  
UTILITY AND DRAINAGE EASEMENT

**VOID**

≈ 6% SLOPE

2 BR CASITA  
1020 SF  
(180 GPD)

3 BR HOUSE  
3120 SF  
(300 GPD)

≈ 8% SLOPE

**VOID**

NOTES:

- USE 3" OR 4" SCH 40 SEWER PIPE TO CONNECT STRUCTURES
- CLEANOUT WITHIN 3' OF STRUCTURES.
- SEWER PIPE CONNECTING THE STRUCTURES TO THE DRAINFIELD
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS OF SEWER PIPE
- TANK TO BE > 5' FROM STRUCTURES AND SURFACE IMPERVIOUS
- TANK WILL BE WATER TIGHT AND MANUFACTURED ACCORDING TO

ORT 47328 NC/cs

## Warranty Deed

**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.

**Date:** August 17, 2021

**Grantor:** Stadler & Leatham Development, LLC, a Texas limited liability company

**Grantor's Mailing Address:** 32335 US Hwy 281 North, Bulverde, Comal County, Texas 78163

**Grantee:** W. Kelly Vandever, Trustee of the W. Kelly Vandever Revocable Trust Agreement

**Grantee's Mailing Address:** 1225 Coast Village Rd., Ste. C, Santa Barbara, CA 93108

**Consideration:** Ten and no/100 (\$10.00) Dollars and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

**Property (including any improvements):** Lots, 130, 132, 133, 134, 157 and 161 of CASCADA AT CANYON LAKE, UNIT 3, a subdivision in Comal County, Texas according to the plat recorded in Document No. 201306037835 of the Map and Plat Records of Comal County, Texas.

**Reservations from and Exceptions to Conveyance and Warranty:** This conveyance, however, is made and accepted subject to the following matters, to the extent same are in effect at this time: any and all restrictions, covenants, assessments, reservations, outstanding mineral interests held by third parties, conditions, and easements, if any, relating to the hereinabove described property, but only to the extent they are still in effect and shown of record in the hereinabove mentioned County and State or to the extent that they are apparent upon reasonable inspection of the property; and to all zoning laws, regulations and ordinances of municipal and/or other governmental authorities, if any, but only to the extent they are still in effect and relating to the hereinabove described property.

The Contract between Grantor as the Seller and Grantee as the Buyer, if any, may contain limitations as to warranty or other agreed matters; to the extent that the Contract provides for any such limitations or other agreed matters to survive closing and this conveyance, then such limitations or other agreed matters are hereby deemed incorporated by reference. The warranty of title contained in this Deed is hereby expressly excluded from the limitations or other agreed matters referenced in this paragraph.

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.



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

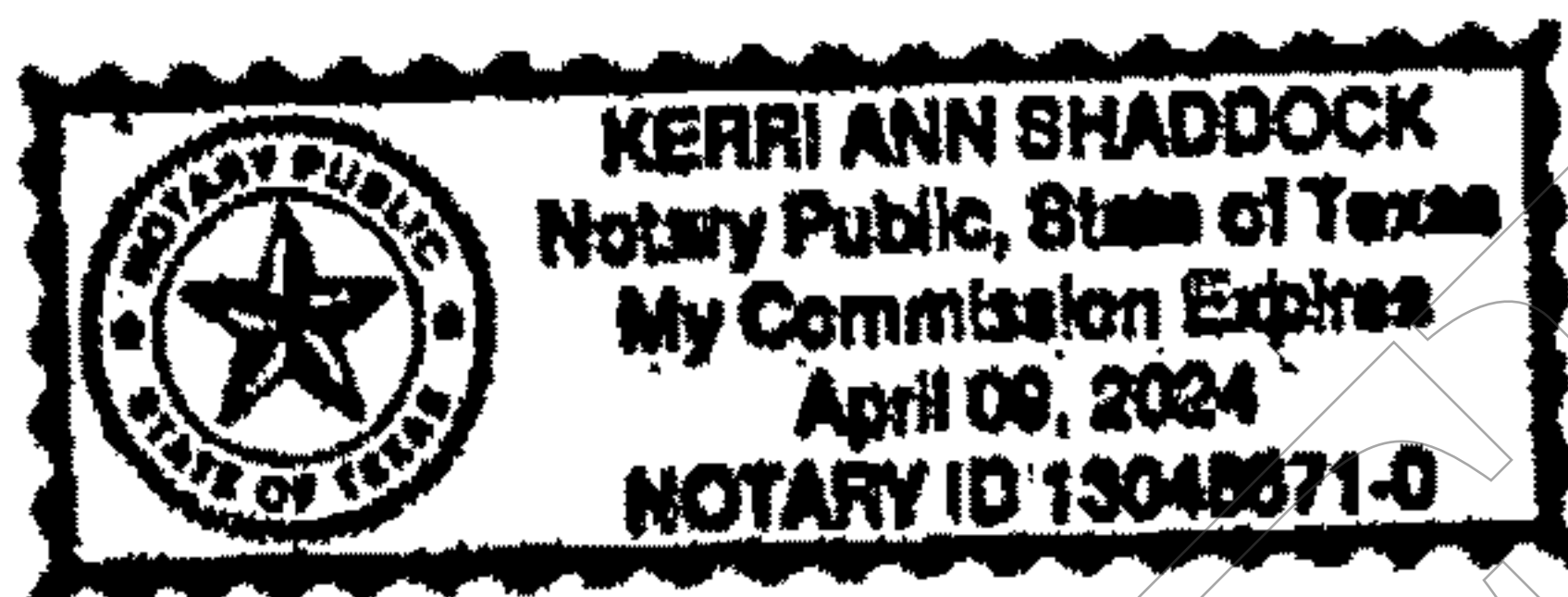
Stadler & Leatham Development, LLC,  
a Texas limited liability company

By:   
Raymond S. Stadler, Manager

STATE OF TEXAS \*

COUNTY OF Comal \*

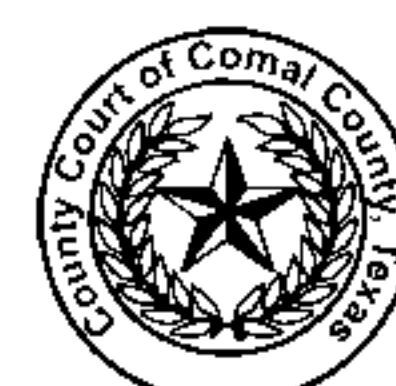
This instrument was acknowledged before me on this 18 day of August 2021, by Raymond S. Stadler, Manager, Stadler & Leatham Development, LLC, a Texas limited liability company, on behalf of said limited liability company.



  
Notary Public, State of Texas

AFTER RECORDING RETURN TO:  
W. Kelly Vandever  
1225 Coast Village Rd., Ste C  
Santa Barbara, CA 93108

Filed and Recorded  
Official Public Records  
Bobbie Koepp, County Clerk  
Comal County, Texas  
08/19/2021 09:23:49 AM  
CHRISTY 2 Pages(s)  
202106043814



Bobbie Koepp



RECEIVED

By Kathy Griffin at 11:12 am, Feb 18, 2025



COMAL COUNTY  
ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION  
CHECKLIST

Staff will complete shaded items

--	--

Date Received

Initials

118393

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.

William K. Vandusen  
Signature of Applicant

11-25-2024  
Date

___ COMPLETE APPLICATION	
Check No. _____	Receipt No. _____

___ INCOMPLETE APPLICATION (Missing Items Circled, Application Refused)	
--	--