

# 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:

connection exposed to verify sleeving and connection

## 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)				

12/12/24 CA: Revision for pressure gauge in lieu of regulator system operational field to design no tight lines or sanitary tee existing system not abandoned will need to provide pump receipt and verify crush. Leave tight lines and connection exposed to verify sleeving and connection

3/5/25 CA: Tightline from main structure not sleeved drip lines have become uncovered not connected to detached structure unable to verify seed need pump receipt and re inspection fee Regulator installed

**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						

3/7/25 CA: Field covered and seeded tightline sleeved. Not connected to second structure

4/1/25 CA: Second structure connected

**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: 117702  
Issued This Date: 10/01/2024  
This permit is hereby given to: Salvador Cruz

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

2028 LIVE OAK DR  
CANYON LAKE, TX 78133

Subdivision: Tamarack Shores, Section II  
Unit: -  
Lot: 83-84  
Block: -  
Acreage: 0.4600

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.

RECEIVED

By Kathy Griffin at 11:01 am, Jul 12, 2024



COMAL COUNTY  
ENGINEER'S OFFICE

# OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

		117702
Date Received	Initials	Permit Number

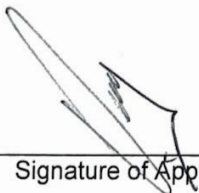
Instructions:

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

06/10/2024

Date

<input type="checkbox"/> COMPLETE APPLICATION Check No. _____ Receipt No. _____
--

<input type="checkbox"/> INCOMPLETE APPLICATION (Missing Items Circled, Application Refeused)
--



COMAL COUNTY  
ENGINEER'S OFFICE

# ON-SITE SEWAGE FACILITY APPLICATION

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

Date \_\_\_\_\_

Permit Number 117702

## 1. APPLICANT / AGENT INFORMATION

Owner Name Salvador Cruz  
Mailing Address 894 Rambling Dr  
City, State, Zip Canyon Lake, TX 78133  
Phone # \_\_\_\_\_  
Email \_\_\_\_\_

Agent Name Doug Dowlearn R.S.  
Agent Address 703 Oak Dr.  
City, State, Zip Blanco, TX 78606  
Phone # 210-878-8100  
Email TXSEPTIC@GMAIL.COM

## 2. LOCATION

Subdivision Name Tamarack Shores, Section II Unit \_\_\_\_\_ Lot 83-84 Block \_\_\_\_\_  
Survey Name / Abstract Number \_\_\_\_\_ Acreage .2296+.2353  
Address 2028 Live Oak City Canyon Lake State TX Zip 78133

## 3. TYPE OF DEVELOPMENT

Single Family Residential

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

Number of Bedrooms 3+3

Indicate Sq Ft of Living Area 1200 +1200

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: \$ EXISTING (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 06/10/2024

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



2/10



202406017677 06/12/2024 04:19:15 PM 1/2

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.

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.

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):

Tamarack Shores, Section II, Lots 83-84

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

Salvador Cruz

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.

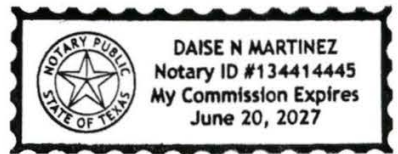
WITNESS BY HAND(S) ON THIS 10<sup>th</sup> DAY OF June, 2024

\_\_\_\_\_  
Owner(s) signature(s)

\_\_\_\_\_  
Salvador Cruz  
(PRINTED NAME) /TITLE

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 10 DAY OF June, 2024

\_\_\_\_\_  
Notary Public, State of Texas  
Notary's Printed Name: Daise Martinez  
My Commission Expires: 06-20-27



**AFFIDAVIT TO THE PUBLIC**

**THE COUNTY OF COMAL**

**STATE OF TEXAS**

Before me, the undersigned authority, on this day personally appeared

**Salvador Cruz**

who after being duly sworn, upon oath states

that he/she is the owner of record of those certain tracts or parcels of land lying and being situated in Comal County, Texas, and being more particularly described as follows:

**Tamarack Shores, Section II, Lots 83-84**

The undersigned further states that the on-site sewage facility for the referenced properties crosses the boundary between the described properties. These properties cannot be sold separately and must be sold as one. Any buyer or transferee is hereby notified of this requirement.

WITNESS BY HAND(S) ON THE 10<sup>th</sup> DAY OF June  
20 24

\_\_\_\_\_  
\_\_\_\_\_

Owner(s) signature(s)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 10<sup>th</sup>

DAY OF June, 2024

Daise Martinez

Notary Public, State of Texas

Notary's Printed Name: Daise Martinez

My Commission Expires: 06-20-27

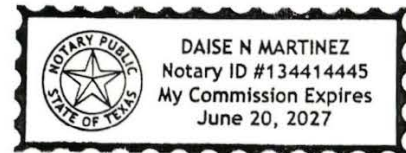
Filed and Recorded  
Official Public Records  
Bobbie Koepf, County Clerk  
Comal County, Texas  
06/12/2024 04:19:15 PM  
LAURA 2 Page(s)  
202406017677



Bobbie Koepf

Instructions:

- 1) Document must be completed and Property Owner(s) signature(s) notarized,
- 2) Record completed document in the Comal County Clerk's Office,
- 3) Submit copy of recorded document to the Comal County Office of Environmental Health



**Baker Septic Service, LLC**  
15375 Cranes Mill Rd., Canyon Lake, TX 78133  
830-899-2971

**Septic System Service Agreement**

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

Name: Salvador Cruz Address: 2028 Live Oak  
Subdivision/ County: Tamarack Shores/Comal City, State, Zip: Canyon Lake, TX 78133  
Permit # \_\_\_\_\_ Model # \_\_\_\_\_ Serial # \_\_\_\_\_  
Phone: 512-738-3946

Initial Two Year Service Agreement  
& Two Year Limited Warranty

One Year Service Agreement

RENEWAL \_\_\_\_\_ NAME TRANSFER \_\_\_\_\_ ANALYSIS \_\_\_\_\_

**Legal Description:**

The Effective date of this initial maintenance contract shall be the date the License to Operate is issued.

For \$ 2000 this contract will be in effect FROM LITIO - 24/1/25 and will provide the following:

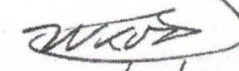

1. An inspection/service call every (4) four months which will include: inspection, adjustments and servicing of the mechanical & electrical components as necessary to insure proper function of the system.
2. An effluent quality inspection consisting of a visual check for color, turbidity, scum, overflow an odor.
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 MAY INCURE AN ADDITIONAL COST.**
4. If any improper operation is observed (which cannot be corrected at that time) the property owner will be notified immediately of the conditions and the estimated cost.
5. The response time to a complaint by the property owner regarding operation of the system, shall be within **48 hours**, from the time of notification. One service call a year, if needed, will be provided with no cost to property owner.
6. **ANY PARTS, WARRANTY OR NON-WARRANTY, FREIGHT CHARGES, LABOR OR SERVICE CALLS DUE NOT PAID FOR REMAIN THE PROPERTY OF BAKER SEPTIC SERVICE, LLC AND COULD RESULT IN REPOSSESSION OF PARTS BY BAKER SEPTIC SERVICE, LLC.**
7. **THE SIGING OF THIS SERVICE AGREEMENT QUTHORIZES BAKER SEPTIC SERVICE, LLC TO ENTER THE PROPETY TO EXECUTE ALL TERMS OF THIS CONTRACT.**

**BAKER SEPTIC SERVICE, LLC, WILL WARRANTY INSTALLAION** of the septic system according to state and county regulations and the designs approved by the county. **HOMEOWNER WILL BE RESPONSIBE FOR SERVICE CALL, LABOR, AND SHIPPING COSTS ON ANY "WARRANTED PARTS" EXCHANGED DURING WARRANTY.** All other component will be according to manufacturer's warranties. **IMPORTANT:** As Baker Septic Service, LLC cannot control what or how much effluent goes into this septic system, we cannot warranty how the system will function. Refer to manufacturers or installers instructions for suggestions on septic operation. This service agreement does not cover the cost of service call, labor or materials that are required or parts out of warranty, the failure to maintain electrical power to the system, sprinklers that are broken, leaking, stopped-up or otherwise mal-functioning; or sewage flows exceeding the hydraulic/organic design capabilities and the input of non-biodegradable materials (solvent, grease, oil, paints, etc.), or any usage contrary to the requirements as advised by authorized service representative. Laboratory test work is available at an additional coast. Chlorine, filters, or parts that are out of warranty are available at a reasonable cost.

This contract does not include the pumping of a tank or of any compartment of a tank, or settlement of soil on or around any part of the system regardless of reason:

**Violations of the warranty also include:** Disconnecting the alarm, restricting ventilation to the aerator, over loading the system above its rated capacity; or flooding by external means. Rodent, insect or Fire Ant damage or any other form of unusual abuse is a violation.

A renewal service contract should be activated (30) thirty days before expiration of existing contract. We will contact property owner prior to expiration of existing contract.

Served by: Baker Septic Service, LLC  
Maintenance Provider: ME00002099   
(x) \_\_\_\_\_ Print Name (x) SALVADOR CRUZ Date: 06/10/2024  
Property Owner Signature  
(x)  Date: 7-11-24 Authorized Service Representative

**Affidavit**

To Whom It May Concern:

I, Salvador Cruz, swear that the statements below are

True for the properties at 2028 Live Oak Dr. Canyon Lake, TX 78133 in

Subdivision Tamarack Shores Section II, lot(s) 83 and 84 in Comal

County, Texas.

The existing 3 bedroom home and the new 3 bedroom home will be lived in by members of the same family.

\_\_\_\_\_  
Signature  
(Sign in front of a notary)

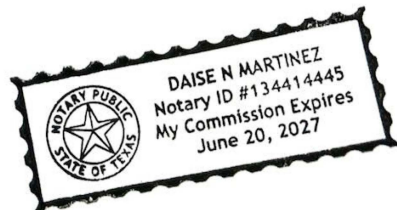
06/10/2024  
Date

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 10<sup>th</sup> DAY OF June 2024

Daise Martier  
Notary Public, State of Texas

Notary's Printed Name: Daise Martinez

My Commission Expires: 06-20-27



**OSSF SOIL EVALUATION REPORT**

**RECEIVED**

By Brandon Olvera at 12:21 pm, Nov 14, 2024

Date: 7/12/2024

**Applicant Information:**

Name: Salvador Cruz  
Address: 894 Rambling Dr  
City, State & Zip Code: Canyon Lake, TX 78133  
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: Tamarack Shores, Section II Lot: 83-84  
Street/Road Address: 2028 Live Oak  
City : Canyon Lake Zip: 78133  
Additional Info: Comal County

**Installer Information:**

Name:  
Company:  
Address:  
City, State & Zip:  
Phone:

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	0-6" Clay/Loam 6"+ Limestone		<30% Gravel	6"+ Limestone	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
Soil Boring #2 60"		Same as above				

**DESIGN SPECIFICATIONS**

Application Rate (RA): 0.2  
OSSF is designed for: Combined 6 Bedroom 2400 Sq. Ft House – Existing 3 BR 1200 SF and New 3 BR 1200 SF  
420 gallons per day  
An aerobic treatment/drip disposal system is to be utilized based on the site evaluation.  
2100 sq. ft. disposal area required  
800 gallon per day aerobic tank  
Calculations: Absorption Area: Q/RA= 420/0.2=2100 Sq. Ft.

**FEATURES OF SITE AREA**

Presence of 100-year flood zone: NO  
Presence of upper water shed: NO  
Existing or proposed water well in nearby area: NO  
Organized sewage service available to lot: NO  
Presence of adjacent ponds, streams, water impoundments: 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 Dowlearn  
Signature:



License No. OS9902 Exp. 6/30/2026  
TDH: #2432 Exp. 2/28/2025

D.A.D SERVICES, INC.  
DOUG DOWLEARN  
PO BOX 212, BULVERDE, TX 78163

**RECEIVED**

By Brandon Olvera at 12:21 pm, Nov 14, 2024

Designed for:  
Cruz Salvador

The installation site is on lots 83 and 84 of the Tamarack Shores Section II Subdivision in Comal County, TX. The proposed OSSF will treat the wastewater from an existing main 3 Bedroom, 1200 sq. ft. house along with a new 3 Bedroom, 1200 sq. ft. detached living quarters, which shall be lived in by a single family. The total number of bedrooms and living square footage between both structures is 6 br, 2400 sq. ft. (420 gpd). The proposed method of wastewater treatment is aerobic treatment with drip irrigation. This method was chosen because of unsuitable soil conditions.

#### **PROPOSED SYSTEM:**

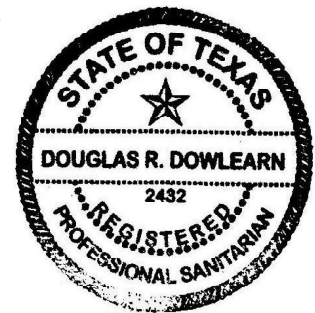
A 3" or 4" PVC pipe will discharge from the structures to a NuWater B-800 aerobic treatment plant, containing a 431 gallon pre-treatment tank, a 800 gpd aerobic treatment plant, and a 854 gallon pump tank equipped with a 20 gpm submersible pump. The pump is activated by a time controller allowing the distribution 8 times per day with a 10 minute run time per dose, with float switches set to pump 420 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" SCH-40 manifold to a 1100 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" 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: 420 gpd  
Application rate: 0.2  
Application area required:  $420/0.2 = 2100$  sq. ft.  
Application area utilized: 2200 sq. ft.  
Pump tank reserve capacity: 140 gal minimum

#### **SYSTEM COMPONENTS:**

SCH 40 PVC sewer line  
NuWater B-800  
    431 gallon pre treatment tank  
    800 gpd aerobic treatment plant  
    854 gallon pump tank with timed controls  
        C1 Series, 20Xgpm - 0.5hp/115V, Model No. 20C1X-05P4-2W115 (or equivalent)  
1" purple PVC supply line  
30 PSI pressure regulator - Model PMR30MF  
Netafim Bioline Drip tubing



*Douglas R. Dowlearn*

#### **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 Brandon Olvera at 8:20 am, Sep 24, 2024

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

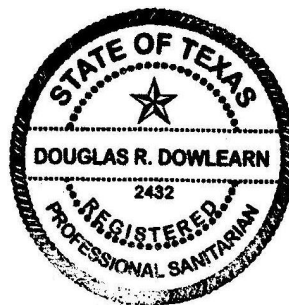
September 19th, 2024  
Comal County Environmental Health Department  
195 David Jonas Dr.  
New Braunfels, TX 78132-3760  
RE: 2028 Live Oak Dr(permit #117702) - Lot 84 Lacking Space for OSSF

To whom it may concern:

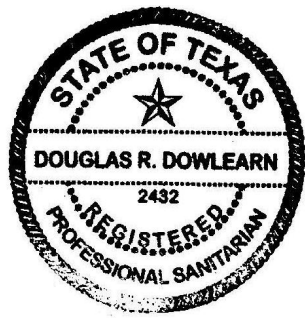
The subject lot(lot 84) is lacking sufficient space to keep the OSSF within this single lot - see attached site plan for details. 2100 square feet of drainfield area is required for the two structures, while the approximate available area for drainfield on this lot is 1923 square feet; therefore, we are lacking approximately 177 square feet of available area to keep the OSSF system on lot 84. Lot 83 is being utilized as well to accommodate the area required to properly size the OSSF system.

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

Sincerely,  
Douglas R. Dowlearn, R.S.



*Douglas R. Dowlearn, R.S.*



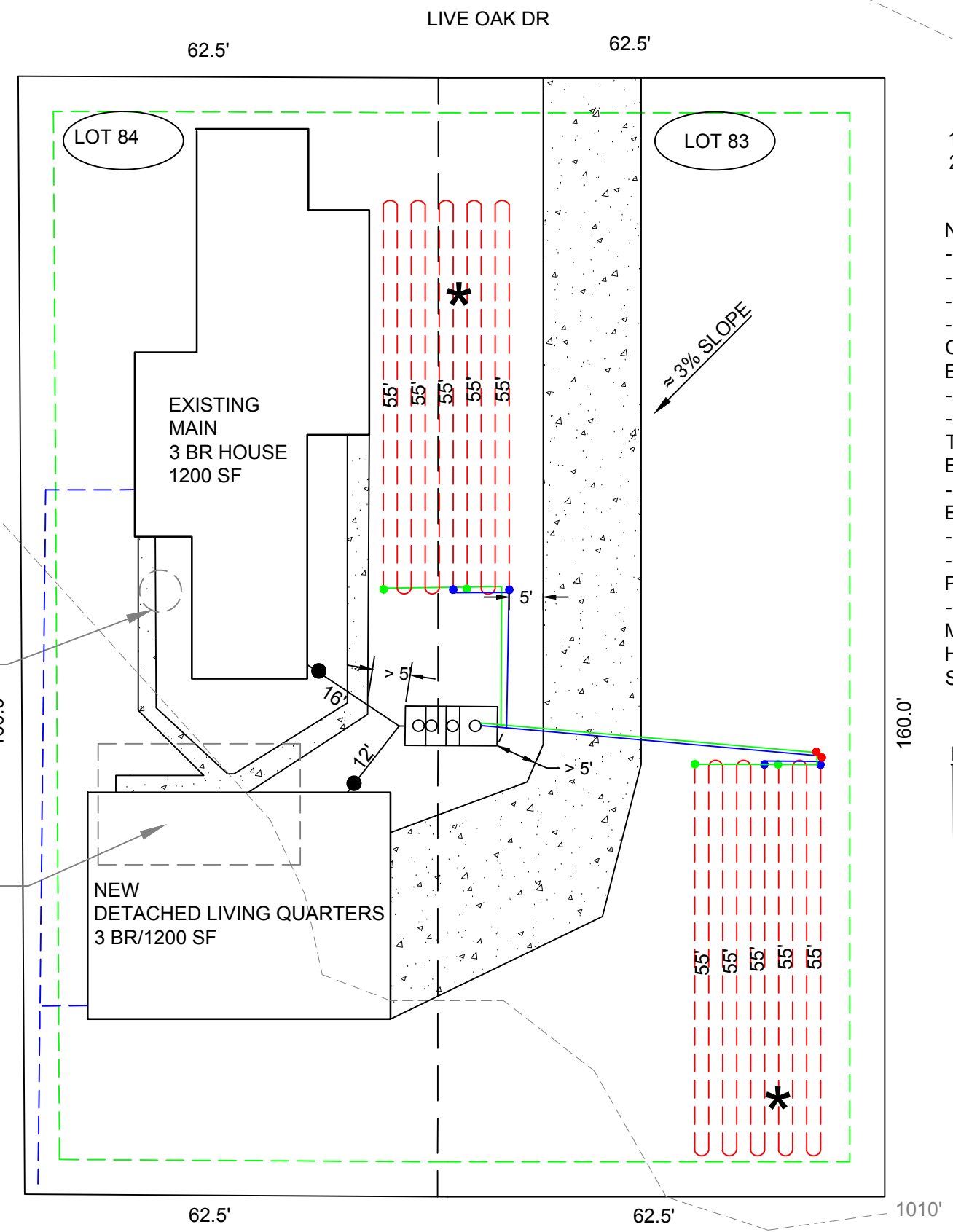
*Douglas R. Dowlearn*

**RECEIVED**  
By Brandon Olvera at 10:49 am, Dec 02, 2024

NOTE: BOTH STRUCTURES SHALL BE LIVED IN BY A SINGLE FAMILY. TOTAL SIZE BETWEEN BOTH STRUCTURES IS 6 BR HOUSE/2400 SF (420 GPD).

PUMP, CRUSH AND FILL EXISTING SEPTIC TANK - VERIFY LOCATION ON SITE ([PERMIT #20358])

ABANDON EXISTING DRAINFIELD - VERIFY LOCATION ON SITE ([PERMIT #20358])



1100 L.F. OF DRIP TUBING SPACED 2' APART.  
20 ROWS @ 55 L.F. EACH

- 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'.
  - SEWER LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PVC WHERE IT IS WITHIN 5' OF OR CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.
  - INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.
  - 1" SCH 40 SUPPLY AND FLUSH LINES WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PIPE WHERE THEY CROSS UNDER SURFACE IMPROVEMENTS, DRIVE, WALKWAY AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.
  - 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.

KEY

●	- TWO WAY CLEANOUT
●	- 1" VACUUM BREAKER
— (blue)	- SUPPLY LINE
— (green)	- FLUSH LINE
● (blue)	- SUPPLY LINE CONNECTION
● (green)	- FLUSH LINE CONNECTION
— (dashed blue)	- WATER LINE (VERIFY LOCATION ON SITE)
— (dashed green)	- 5' OSSF OFFSET FROM PROPERTY LINE
*	- TEST HOLE
⊙ ⊙ ⊙	- 800 GPD AEROBIC TREATMENT UNIT
▭ (stippled)	- DRIVE/WALKWAY

CRUZ SALVADOR  
2028 LIVE OAK DR  
CANYON LAKE, TX 78133  
TAMARACK SHORES SECTION II  
LOT 83 AND 84  
COMAL COUNTY



SCALE 1" = 20'  
PRINT SIZE 11" X 17"



**RECEIVED**

By Brandon Olvera at 12:23 pm, Nov 14, 2024

# Assembly Details

OSSF



*Douglas R. Dowlearn*

**DIMENSIONS:**

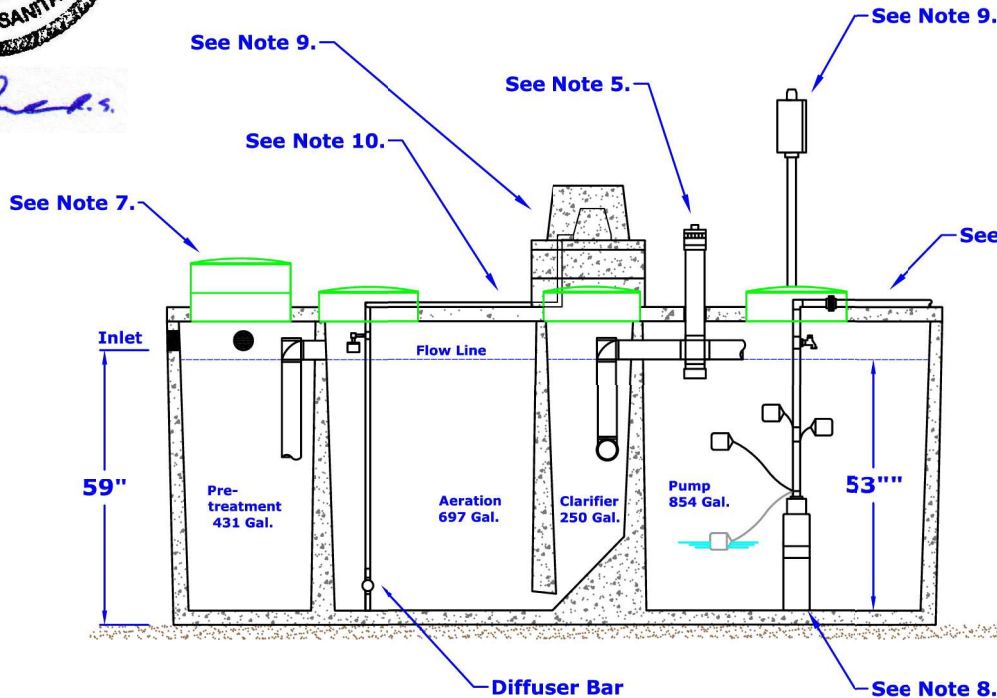
Outside Height: 67"  
Outside Width: 75"  
Outside Length: 164.5"

**MINIMUM EXCAVATION DIMENSIONS:**

Width: 87"  
Length: 177"

**GENERAL NOTES:**

1. Plant structure material to be precast concrete and steel.
2. Maximum burial depth is 30" from slab top to grade.
3. Weight = 16,700 lbs.
4. Treatment capacity is 800 GPD. Pump compartment set-up for a 420 GPD Flow Rate (5 bedroom, < 4,501 sq/ft living area). Please specify for additional set-up requirements. BOD Loading = 2.60 lbs. per day.
5. Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
6. Bio-Robix B-800 Control Center w/ Timer for night spray application. Optional Micro Dose (min/sec) timer available for drip applications. Electrical Requirement to be 115 Volts, 60 Hz, Single Phase, 30 AMP, Grounded Receptacle.
7. 20" Ø access riser w/ lid (Typical 4). Optional extension risers available.
8. 20 GPM 1/2 HP, high head effluent pump.
9. HIBLOW Air Compressor w/ concrete housing.
10. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
11. 1" Sch. 40 PVC pipe to distribution system provided by contractor.
12. 4" min. compacted sand or gravel pad by Contractor



16.11 GALLONS/INCH

43" - 53" - RESERVE - 161.1 GAL

43" - ALARM ON

12" - 43" - WORKING LEVEL - 499.41 GAL

10" - 12" - PUMP OFF TO PUMP ON - 32.22 GAL

0 - 10" - SUMP- 161.1 GAL

**NOTE:**

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

**NuWater B-800  
Aerobic Treatment Plant (Assembled)**

Model: B-800

March, 2010  
By: A.S.

Scale:  
\* All Dimensions subject to allowable specification tolerances.

Dwg. #: ADV-B800-2



Advantage Wastewater Solutions llc.  
444 A Old Hwy No 9  
Comfort, TX 78013  
830-995-3189  
fax 830-995-4051

# C1 SERIES

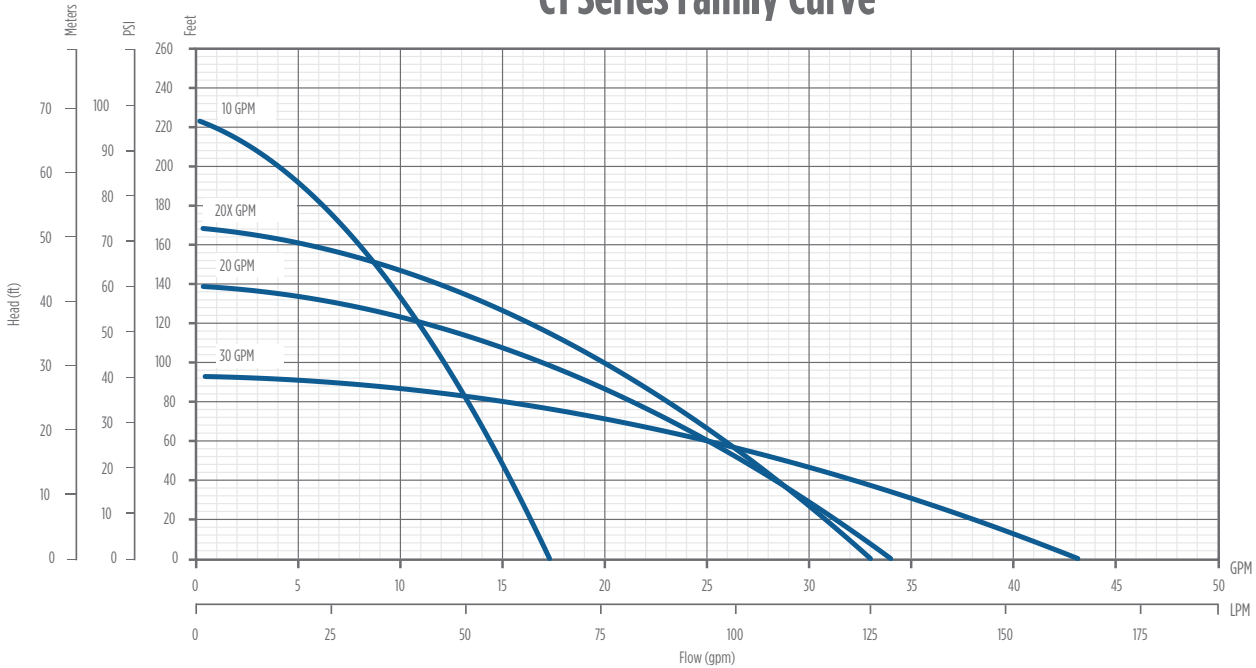
## CISTERN PUMPS

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.



# 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

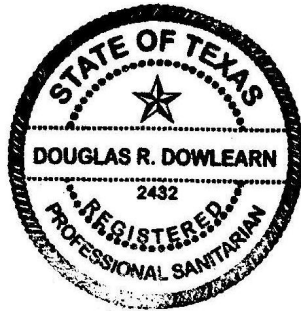
- Gray water pumping
- Filtered effluent service water pumping
- Water reclamation projects such as pumping from rain catchment basins
- Aeration and other foundation or pond applications
- Agriculture and livestock water pumping

## 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.



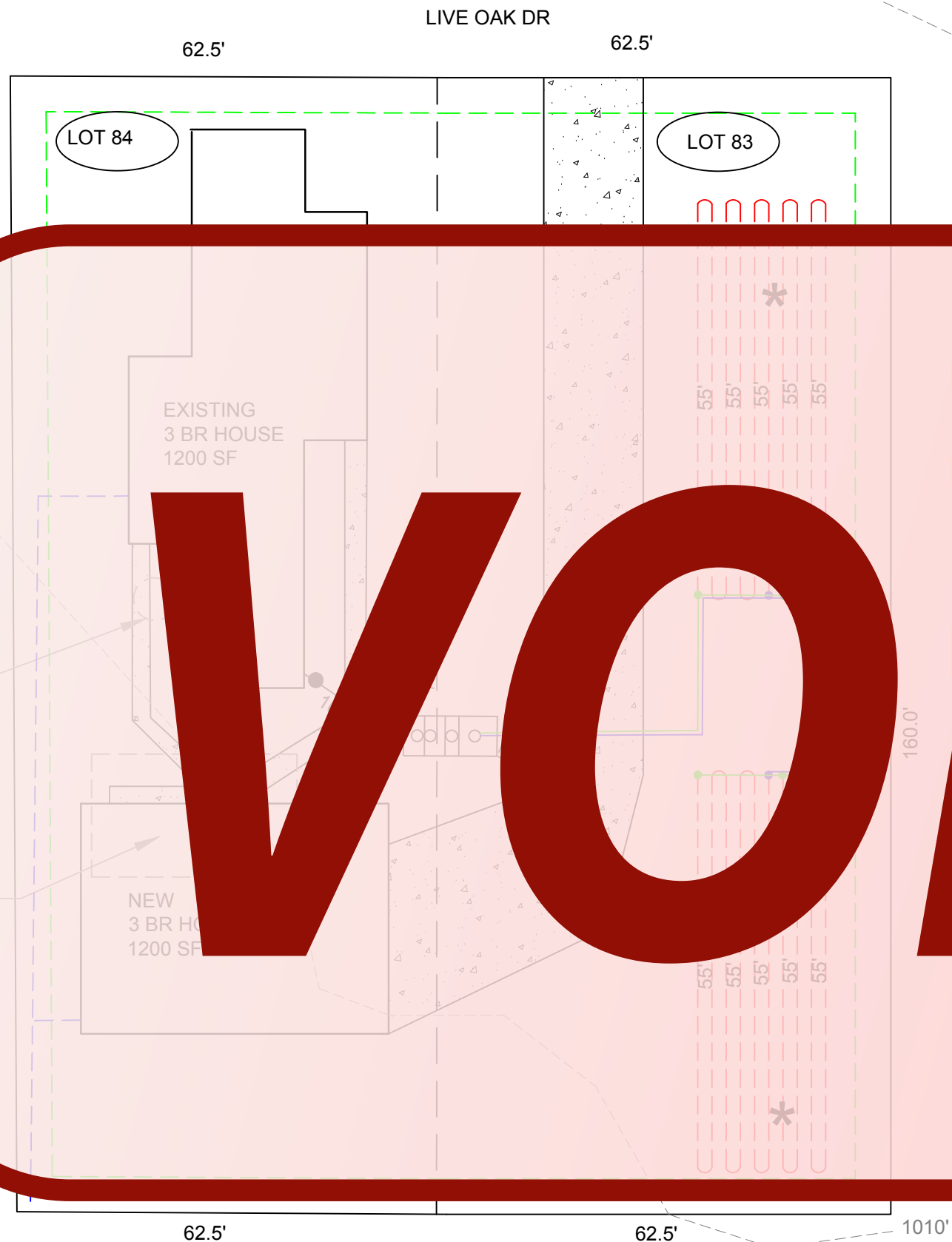


*Douglas R. Dowlearn*

NOTE: BOTH STRUCTURES SHALL BE LIVED IN BY A SINGLE FAMILY. TOTAL SIZE BETWEEN BOTH STRUCTURES IS 6 BR HOUSE/2400 SF (42% DENSITY).

PUMP, CRUSH AND FILTER EXISTING SEPTIC TANK. VERIFY LOCATION ON SITE (PERMIT #20358)

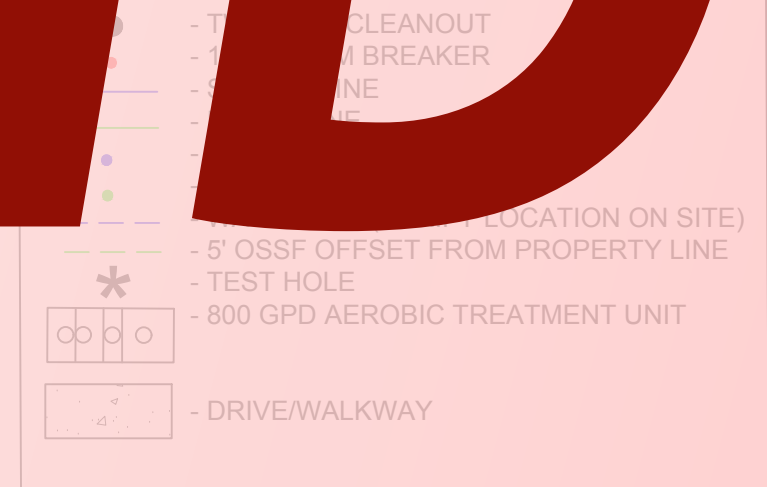
ABANDON EXISTING DRAINAGE FIELD. VERIFY LOCATION ON SITE (PERMIT #20358)



1100 L.F. OF DRIP TUBING SPACED 2' APART. 20 ROWS @ 55 L.F. EACH

- 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 A MINIMUM 1/8" FALL PER 1'.  
- SEWER LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PVC WHERE IT CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.  
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.  
- 1" SCH 40 SUPPLY AND FLUSH LINES WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PIPE WHERE THEY CROSS UNDER SURFACE IMPROVEMENTS, DRIVE, WALKWAY AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.  
- TANK TO BE > 5' FROM STEPS AND SURFACE IMPROVEMENTS. THIS WILL PROVIDE EQUIVALENT PROTECTION UNDER REQUIREMENTS OF TAC 285.  
- TANK TO BE WATER TIGHT AND TESTED ACCORDING TO ASTM DESIGNATION: C 1227.  
- DRIVE AND SHALL BE PROTECTED FROM PRIVATE WELLS, AND GREATERS THAN 150' FROM PUMPS AND WELLS. VERIFY LOCATION(S) AND DEPTH OF ANY EXISTING WELLS.  
- COVER SURFACE FROM BOULDERS FROM FIELD AREA, AND ENSURE THAT THERE IS AT LEAST 2" OF SUITABLE SOIL BETWEEN THE BOTTOM OF THE DRIP LINES, AND THE RESTRICTIVE HORIZONTAL CLASSIFICATION. THIS NEED TO BE IMPROVED IN ORDER TO MAINTAIN THE RESTRICTIVE HORIZONTAL.  
- 5' OSSF OFFSET FROM PROPERTY LINE  
- TEST HOLE  
- 800 GPD AEROBIC TREATMENT UNIT  
- DRIVE/WALKWAY

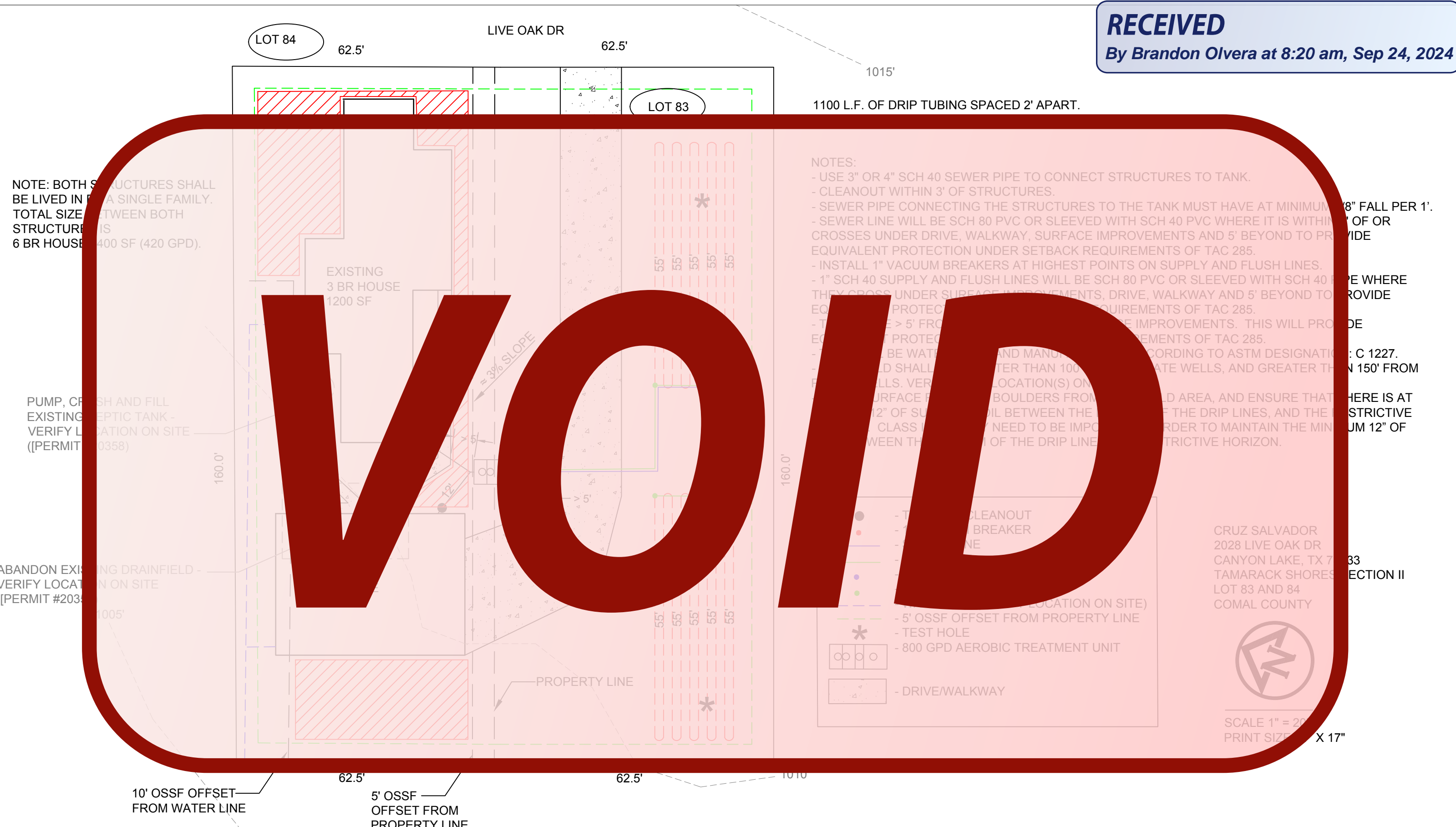
**VOID**



CRUZ SALVADOR  
2028 LIVE OAK DR  
CANYON LAKE, TX 78133  
TAMARACK SUBDIVISION  
LOT 83 AND 84  
COMAL COUNTY



SCALE: 1" = 20'  
PRINT SIZE 11" X 17"



NOTE: BOTH STRUCTURES SHALL BE LIVED IN BY A SINGLE FAMILY. TOTAL SIZE BETWEEN BOTH STRUCTURES IS 1400 SF (420 GPD).

PUMP, FLUSH AND FILL EXISTING SEPTIC TANK - VERIFY LOCATION ON SITE ((PERMIT #0358))

ABANDON EXISTING DRAINFIELD - VERIFY LOCATION ON SITE ((PERMIT #203...))

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'.  
 - SEWER LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PVC WHERE IT IS WITHIN 5' OF OR CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.  
 - INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.  
 - 1" SCH 40 SUPPLY AND FLUSH LINES WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PVC WHERE THEY CROSS UNDER SURFACE IMPROVEMENTS, DRIVE, WALKWAY AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER REQUIREMENTS OF TAC 285.  
 - THE SEWER LINE SHALL BE AT LEAST 5' FROM SURFACE IMPROVEMENTS. THIS WILL PROVIDE EQUIVALENT PROTECTION UNDER REQUIREMENTS OF TAC 285.  
 - ALL SEWER LINES SHALL BE WATER TIGHT AND MANUFACTURED ACCORDING TO ASTM DESIGNATION: C 1227.  
 - ALL SEWER LINES SHALL BE DEEPER THAN 100' FROM EXISTING AND PROPOSED WELLS, AND GREATER THAN 150' FROM EXISTING AND PROPOSED WELLS. VERIFY LOCATION(S) ON SITE.  
 - SURFACE IMPROVEMENTS SHALL BE PROTECTED FROM EXISTING AND PROPOSED WELLS. THERE IS AT LEAST 12" OF SURFACE COVER OVER THE WELLS. VERIFY LOCATION(S) ON SITE.  
 - CLASS 1 SURFACE IMPROVEMENTS SHALL BE IMPROVED IN ORDER TO MAINTAIN THE MINIMUM 12" OF COVER BETWEEN THE WELLS AND THE DRAINFIELD. VERIFY LOCATION(S) ON SITE.  
 - THE DRAINFIELD SHALL BE IMPROVED IN ORDER TO MAINTAIN THE MINIMUM 12" OF COVER BETWEEN THE WELLS AND THE DRAINFIELD. VERIFY LOCATION(S) ON SITE.

LEGEND:

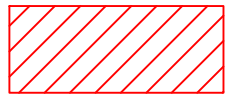
- CLEANOUT
- BREAKER
- LINE
- LOCATION ON SITE
- 5' OSSF OFFSET FROM PROPERTY LINE
- TEST HOLE
- 800 GPD AEROBIC TREATMENT UNIT
- DRIVE/WALKWAY

CRUZ SALVADOR  
2028 LIVE OAK DR  
CANYON LAKE, TX 75753  
TAMARACK SHORES SECTION II  
LOT 83 AND 84  
COMAL COUNTY



SCALE 1" = 20'  
PRINT SIZE 11" X 17"

**LOT 84 OSSF SPACE ANALYSIS**

 - DRAINFIELD AREA AVAILABLE ON LOT 84 IS ≈ 1923 SF. DRAINFIELD AREA REQUIRED IS 2100 SF. WE ARE LACKING ≈ 177 SF OF DRAINFIELD AREA ON LOT 84 TO FIT THE OSSF ENTIRELY ON LOT 84.



# COMAL COUNTY

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ENGINEER'S OFFICE

RE: ***2028 Live Oak  
Tamarack Shores Section II  
Lot 83-84***

Dear Property Owner & Agent,

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

- ✓ Our office will be conducting a site visit on 08-14-2024.
- ✓ Demonstrate that no OSSF can fit on the same property as the single-family dwelling.
- 3. Revise accordingly and resubmit.

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

Thank You,

| **Brandon Olvera** | **Designated Representative OS0034792** |

| Comal County | [www.cceo.org](http://www.cceo.org) | f: 830-608-2078 | e: [olverb@co.comal.tx.us](mailto:olverb@co.comal.tx.us) |

## Olvera,Brandon

---

**From:** Olvera,Brandon  
**Sent:** Tuesday, September 24, 2024 8:29 AM  
**To:** Lauren Dowlearn  
**Cc:** Joshua Cruz  
**Subject:** RE: 117702

Good Morning.

The file has been updated.



Label which structure is the main residence, and which structure is the detached living.



Maintain the separation distance for the property lines 285.91(10) Table X.

- a. The Tank has a 5 ft separation distance from the property line.
- b. Sewer line with watertight joints have a 5ft. separation distance from property lines.
3. Revise accordingly and resubmit.

Thank You,

| **Brandon Olvera** | **Designated Representative OS0034792** | Comal County | [www.cceo.org](http://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 |

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 of single family wellhead protection area (SHA) under 285.40(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 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 R.S. or P.E. 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



**OSSF SOIL EVALUATION REPORT INFORMATION**

**Date:** 7/12/2024

**Applicant Information:**

**Name:** Salvador Cruz  
**Address:** 894 Rambling Dr  
**City, State & Zip Code:** Canyon Lake, TX 78133  
**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:** Tamarack Shores, Section II Lot: 83-84  
**Street/Road Address:** 2028 Live Oak  
**City :** Canyon Lake **Zip:** 78133  
**Additional Info:** Comal County

**Installer Information:**

**Name:**  
**Company:**  
**Address:**  
**City, State & Zip:**  
**Phone:**

Depth	Texture Class	Soil Texture	Structure (For Class III - blocky, platy or massive)	Drainage (Mottles/Water Table)	Restrictive Horizon	Observation
Soil Boring #1 60"	Clay/Ls Lime			<30%		<div style="border: 1px solid black; padding: 5px;"> <p>CLEAR SURFACE ROCK AND Boulders FROM DRAINAGE FIELD 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</p> </div>
Soil Boring #2 60"	Clay/Ls Lime					

**VOID**

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 Dowlearn  
**Signature:**

**License No. OS9902 Exp. 6/30/2026**  
**TDH: #2432 Exp. 2/28/2025**



**D.A.D SERVICES, INC.**  
DOUG DOWLEARN  
PO BOX 212, BULVERDE, TX 78163

Designed for:  
Cruz Salvador

The installation site is on lots 83 and 84 of the Tamarack Shores Section II Subdivision in Comal County, TX. The proposed OSSF will treat the wastewater from an existing 3 Bedroom, 1200 sq. ft. house along with a new 3 Bedroom, 1200 sq. ft. house which shall be lived in by a single family. The total number of bedrooms and living square footage between both structures is 6 br, 2400 sq. ft. (420 gpd). The proposed method of wastewater treatment is aerobic treatment with drip irrigation. This method was chosen because of unsuitable soil conditions.

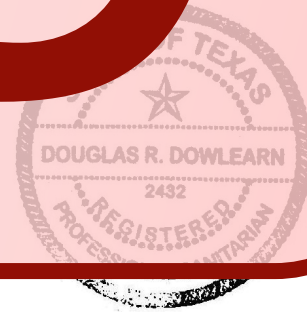
**PROPOSED SYSTEM:**

A 3" or 4" PVC pipe will discharge from the structures 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 20 gallons per day. A high level additive and a float 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" SCH-40 manifold to a 1100 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" SCH-40 return line will be installed to the pre-treatment tank by cycling a ball valve. Solids caught in the spin filter will flush back to the pre-treatment tank through vacuum breakers installed at the highest point on the manifold. The manifold will provide siphoning of effluent from the manifold to lower ends of the field. The placement of the drip tubing will be in soil that has been selected, although Class II soil will be added so that the depth is 12" of soil under the tubing. The tubing will be covered with 2" of Class II soil.

**VOID**

**DESIGN SPECIFICATIONS:**

Daily Waste Flow: 420 gpd  
Application rate: 0.2 gpd/sq. ft.  
Application area required:  $420 / 0.2 = 2100$  sq. ft.  
Application area utilized: 2200 sq. ft.  
Pump tank reserve capacity: 140 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)

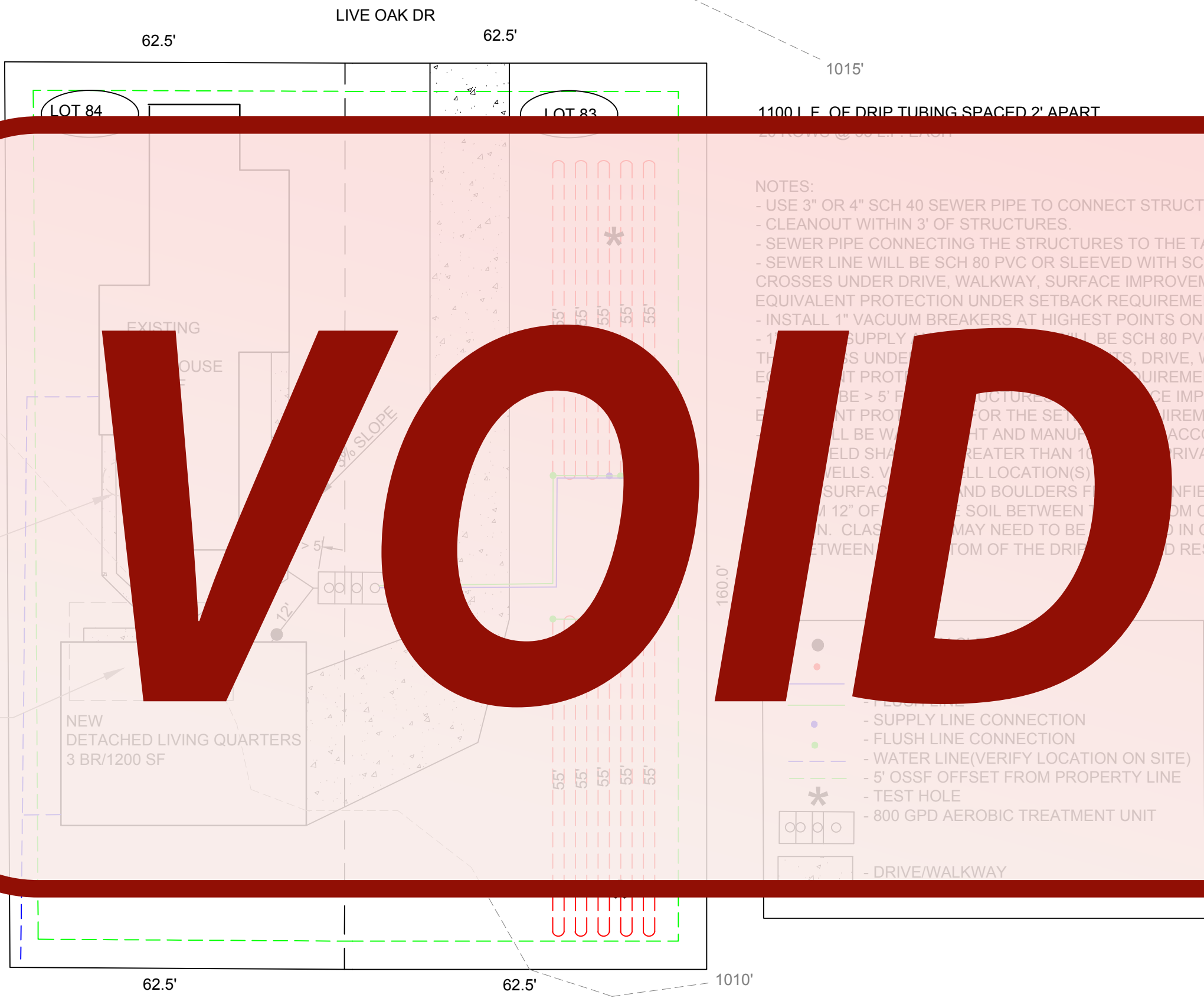
1" purple PVC supply line  
30 PSI pressure regulator - Model PMR30MF  
Netafim Bioline Drip tubing

**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.



*Brandon Olvera*



NOTE: BOTH STRUCTURES SHALL BE LIVED IN BY A SINGLE FAMILY. TOTAL SIZE BETWEEN BOTH STRUCTURES IS 6 BR HOUSE/2400 SF (1000 GPD).

PUMP, CRUSH AND EXISTING SEPTIC TANK - VERIFY LOCATION ON SITE (PERMIT #20358)

ABANDON EXISTING DRAINAGE FIELD - VERIFY LOCATION ON SITE (PERMIT #20358)

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'.  
 - SEWER LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PVC WHERE IT IS WITHIN 5' OF OR CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.  
 - INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.  
 - 1" SUPPLY LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PIPE WHERE IT CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.  
 - 1/2" FLUSH LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PIPE WHERE IT CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.  
 - WATER LINE SHALL BE WELDED STEEL PIPE WITH FLANGES AND MANUFACTURED TO ACCORDING TO ASTM DESIGNATION: C 1227.  
 - ALL WELDS SHALL BE WELDED TO A DEPTH OF 100% OF THE PIPE WALL THICKNESS. PRIVATE WELLS, AND GREASE INTERCEPTORS SHALL BE LOCATED AT LEAST 150' FROM THE RESTRICTIVE HORIZON.  
 - SURFACE IMPROVEMENTS SHALL BE MAINTAINED AND BOULDERS FROM THE RESTRICTIVE HORIZON TO THE RESTRICTIVE HORIZON.  
 - MINIMUM 12" OF CLEARANCE SHALL BE MAINTAINED BETWEEN THE RESTRICTIVE HORIZON AND THE RESTRICTIVE HORIZON.  
 - RESTRICTIVE HORIZON SHALL BE MAINTAINED AT ALL TIMES.

- SUPPLY LINE CONNECTION
- FLUSH LINE CONNECTION
- WATER LINE (VERIFY LOCATION ON SITE)
- 5' OSSF OFFSET FROM PROPERTY LINE
- TEST HOLE
- 800 GPD AEROBIC TREATMENT UNIT
- DRIVE/WALKWAY

CRUZ SALVADOR  
 2028 LIVE OAK DR  
 CANYON LAKE, TX 78133  
 TAMARACK GROVES SECTION II  
 LOT 83 AND 84  
 COMAL COUNTY



SCALE 1" = 20'  
 PRINT SIZE 11" X 17"

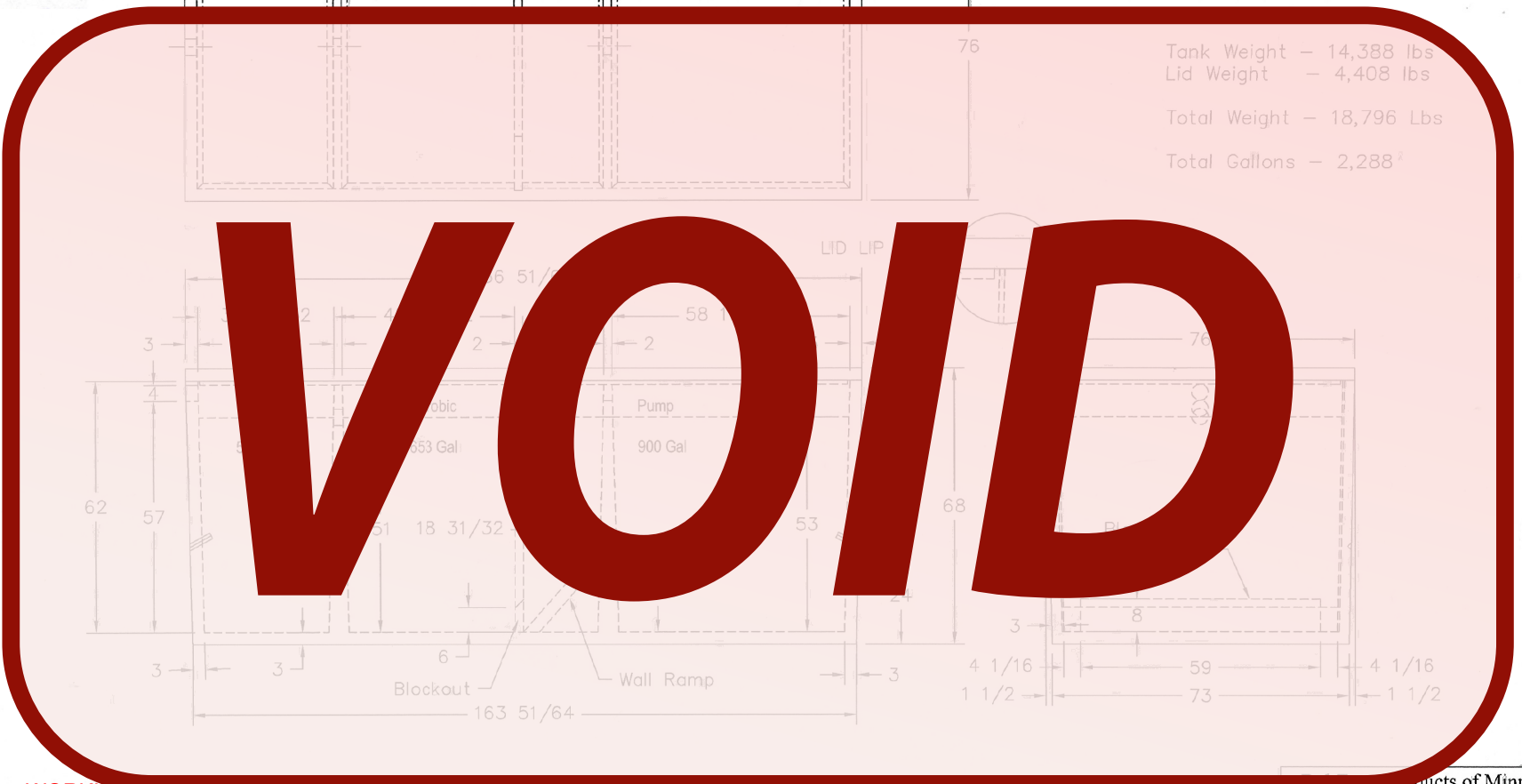


*Douglas R. Dowlearn*

# 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<sup>2</sup>

- WORKING LEVEL = 55
- 16.98 GAL/INCH
- 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 Ditzel of Minnesota, Inc. and shall not be reproduced, used or disclosed to anyone except as authorized through written consent from Ditzel of Minnesota, Inc.

<small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ON DIMENSIONS FRACTIONS/16 DECIMALS/100 ANGLES/1/2° REMOVE ALL BURRS AND BREAK ALL SHARP EDGES.</small>		<b>Products of Minnesota</b> 1900 County Road #1, Wrentham, MN 55787 218-364-3086 Fax 218-364-3088 <b>166.8 x 76W x 68T Treatment Tank</b>	
<small>SIZE</small> B	<small>OWN BY</small> TAV	<small>DWG NO.</small> DTT168-Sx76x68	<small>REV</small> C
<small>SCALE</small> 1:24		<small>DATE</small> 9/18/20	<small>SHEET</small> 1 OF 1

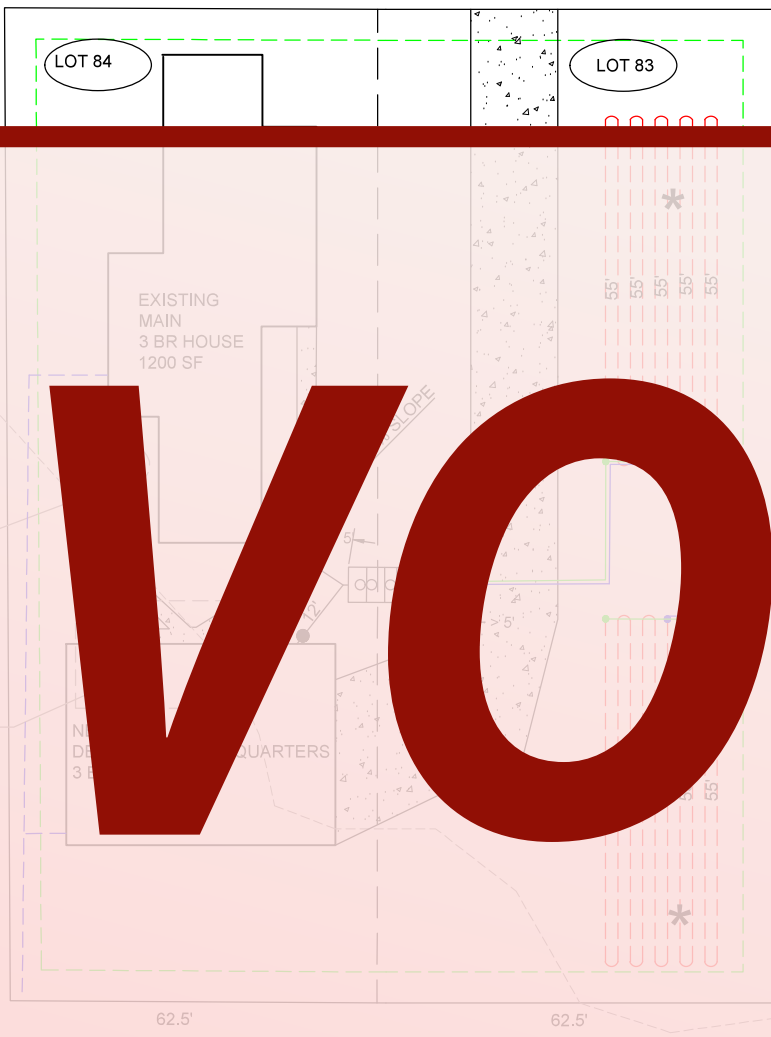
**RECEIVED**

By Brandon Olvera at 12:23 pm, Nov 14, 2024



*Brandon Olvera*

62.5' LIVE OAK DR 62.5' 1015'



1100 L.F. OF DRIP TUBING SPACED 2' APART.  
20 ROWS @ 55 L.F. EACH

NOTE: BOTH STRUCTURES SHALL BE LIVED IN BY A SINGLE FAMILY. TOTAL SIZE BETWEEN BOTH STRUCTURES SHALL BE 1200 SF (420 GPD).

- 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'.
- SEWER LINE WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PVC WHERE IT IS WITHIN 5' OF OR CROSSES UNDER DRIVE, WALKWAY, SURFACE IMPROVEMENTS AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.
- INSTALL 1" VACUUM BREAKERS AT HIGHEST POINTS ON SUPPLY AND FLUSH LINES.
- 1" SCH 40 SUPPLY AND FLUSH LINES WILL BE SCH 80 PVC OR SLEEVED WITH SCH 40 PIPE WHERE THEY CROSS UNDER SURFACE IMPROVEMENTS, DRIVE, WALKWAY AND 5' BEYOND TO PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.
- TANK TO BE > 5' FROM STRUCTURES AND SURFACE IMPROVEMENTS. THIS WILL PROVIDE EQUIVALENT PROTECTION UNDER SETBACK REQUIREMENTS OF TAC 285.
- TANK SHALL BE WATER TIGHT ACCORDING TO ASTM DESIGNATION A1065.
- DRAINAGE SHALL BE TO PRIVATE WELLS, AND GREATER THAN 10' FROM STRUCTURES.
- PUMP, CRUSH AND FILL EXISTING SEPTIC TANK - VERIFY LOCATION ON SITE ((PERMIT #20358))
- ABANDON EXISTING DRAINFIELD - VERIFY LOCATION ON SITE ((PERMIT #20358))
- CRUZ SALVADOR 2028 LIVE OAK DR CANYON LAKE, TX 78131 SECTION II TAMARACK SHORES SUBDIVISION II LOT 83 AND 84 COMAL COUNTY
- SCALE 1" = 20' PRINT SIZE 11" X 17"

**VOID**

- TWO CLEANOUT
- 1" VACUUM BREAKER
- SURFACE IMPROVEMENT
- FLUSH CONNECTION
- FRESH WATER CONNECTION
- VENT LINE
- 800 GPD TREATMENT UNIT
- DRIVE/WALKWAY

**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**

**Date:** October 15, 2021

**Grantor:** GUILLERMO ESCOBEDO, a single man

**Grantor's Mailing Address:** 1081 Rocky Creek Dr. Canyon Lake, TX 78133

**Grantee:** SALVADOR CRUZ, a married person owning, occupying and claiming other property as homestead

**Grantee's Mailing Address, and after Recording, Return to:** 894 Rambling Drive, Canyon Lake, TX 78133

**Consideration:** Cash and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

**Property (including any improvements):**

Lots 83 and 84, TAMARACK SHORES, SECTION II, a subdivision in Comal County, Texas, according to the map or plat thereof recorded in Volume 4, Pages 8-9 of the Map and Plat Records, Comal County, Texas.

**Reservations from Conveyance:** None

**Exceptions to Conveyance and Warranty:** Validly existing easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded and validly existing instruments, other than conveyances of the surface fee estate, that affect the Property; and taxes for 2021, which Grantee assumes and agrees to pay, but not subsequent assessments for that and prior years due to change in land usage, ownership, or both, the payment of which Grantor assumes.

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.

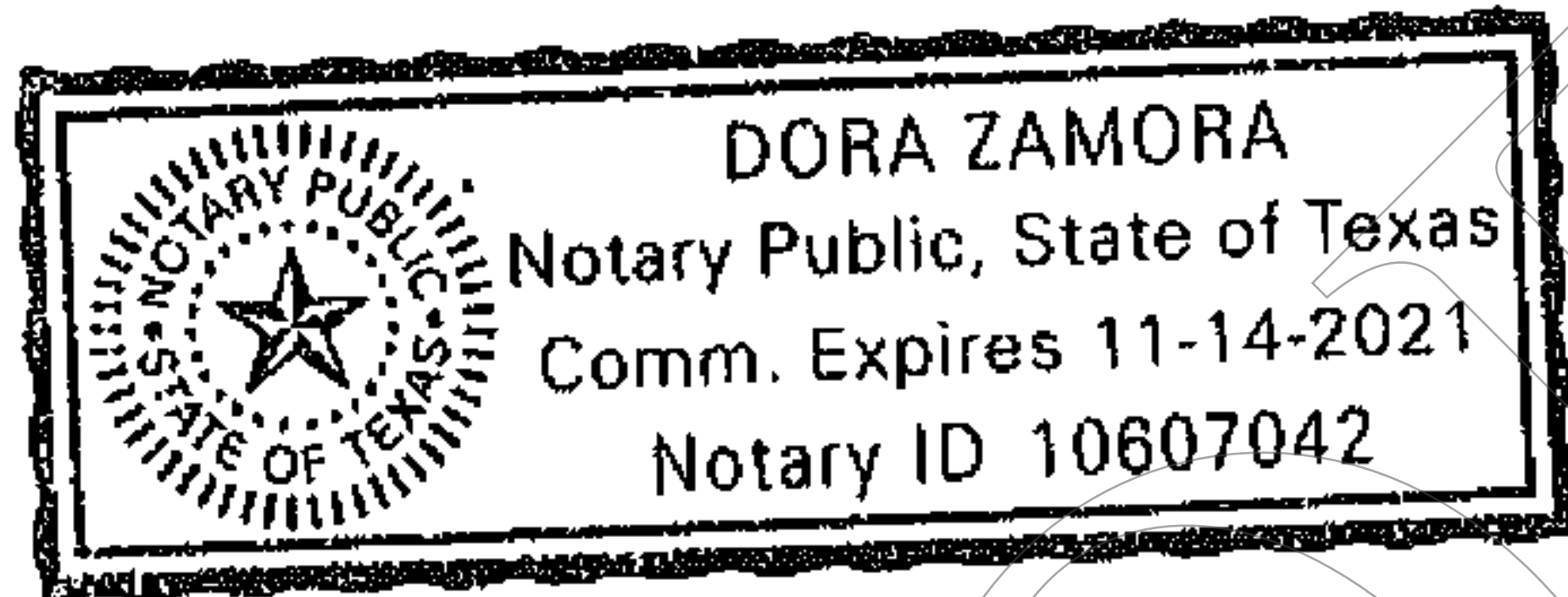
The Contract between Grantor as the Seller and Grantee as the Buyer, if any, may contain limitations as to warranty or other agreed matters; to the extent that such Contract provides for limitations or other agreed matters that will survive the closing and this conveyance, then such limitations or other 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.


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

  
\_\_\_\_\_  
GUILLERMO ESCOBEDO

STATE OF TEXAS )  
COUNTY OF Comal )

This instrument was acknowledged before me on October 15, 2021 by GUILLERMO ESCOBEDO.



  
\_\_\_\_\_  
Notary Public, State of Texas

**Filed and Recorded  
Official Public Records  
Bobbie Koepf, County Clerk  
Comal County, Texas  
10/18/2021 10:06:34 AM  
TERRI 2 Pages(s)  
202106054160**

 *Bobbie Koepf*