



COMAL COUNTY

ENGINEER'S OFFICE

License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date: **10/16/2019** Permit Number: **108924**

Location Description: **171 BARRETT VW
BLANCO, TX 78606**

Subdivision: **Forest View North**
Unit: **2**
Lot: **147**
Block:
Acreage:

Type of System: **Aerobic
Surface Irrigation**

Issued to: **Lisa & Jeffrey Barrett**

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

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

Alterations to this permit including, but not limited to:

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

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

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

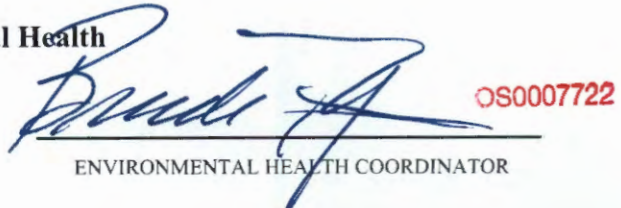
This license to operate is valid for an indefinite period. The holder may transfer it to a succeeding owner, provided the facility has not been remodeled and is functioning properly.

Licensing Authority

Comal County Environmental Health


ENVIRONMENTAL HEALTH INSPECTOR

OS0032485


ENVIRONMENTAL HEALTH COORDINATOR

OS0007722

Comal County Environmental Health OSSF Inspection Sheet

Installer Name: Charles Fonville OSSF Installer #: 050005427
 1st Inspection Date: 5-30-19 2nd Inspection Date: _____ 3rd Inspection Date: 10-16-19 final
 Inspector Name: Connor Inspector Name: _____ Inspector Name: Connor
 Permit#: 108924 Address: Forest View North 171 Barnett View

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)				

tank set level no leaks operational cover all
 Covered JL 10-16-19

**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 Environmental Health OSSF Inspection Sheet

Installer Name: Charles Fonville OSSF Installer #: 050005427

1st Inspection Date: 5-30-19 2nd Inspection Date: _____ 3rd Inspection Date: _____

Inspector Name: Connor Inspector Name: _____ Inspector Name: _____

Permit#: 108924 Address: Forest View North 171 Barrett View

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)				

tank set level no leaks operational cover all

**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	/		<i>Proflo Nuwater Model B-550</i>	/		
16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo-transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

**Comal County Environmental Health
OSSF Inspection Sheet**

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

**Comal County Environmental Health
OSSF Inspection Sheet**

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

**Comal County Environmental Health
OSSF Inspection Sheet**

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Comal County

OFFICE OF COMAL COUNTY ENGINEER

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

Permit Number: 108924
Issued This Date: 04/09/2019
This permit is hereby given to: Lisa & Jeffrey Barrett

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

171 BARRETT VW
BLANCO, TX 78606

Subdivision: Forest View North
Unit: 2
Lot: 147
Block:
Acreage:

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic
Surface Irrigation

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

Call (830) 608-2090 to schedule inspections.



COMAL COUNTY

ENGINEER'S OFFICE

RECEIVED

By rabsah at 2:07 pm, May 07, 2019

May 7, 2019

Jeffrey & Lisa Barrett
317 Chama Trace
Dripping Springs, TX 78620

Re: Street Name Approval Notice

To Whom It May Concern:

Please be advised that Bexar Metro 9-1-1, the United States Postal Service and Comal County Commissioners Court have considered and approved the naming of a private driveway located approximately 500ft west of the intersection of Oakland Dr and Carmel Dr within 78606, Comal County:

Barrett Vw

If you have questions or need further assistance, please let us know.

Sincerely,

Holly Braun
Address Coordinator

Cc:

- ❖ Comal Appraisal District
- ❖ Bexar Metro 9-1-1
- ❖ United States Postal Service
- ❖ PEC



COMAL COUNTY

ENGINEER'S OFFICE

RECEIVED

By rabsah at 2:07 pm, May 07, 2019

May 7, 2019

Jeffrey & Lisa Barrett
317 Chama Trace
Dripping Springs, TX 78620

Re: Physical Address Change Notice

To Whom It May Concern:

Please be advised the physical address for the following property has been established to replace the address previously assigned. The new physical address assigned to the property is as follows:

Property ID	Legal Description	Previous Address (INVALID)	New Assigned Address (VALID)
27239	FOREST VIEW NORTH 2, LOT 147	216 CARMEL DR BLANCO, TX 78606	155 BARRETT VW BLANCO, TX 78606
			171 BARRETT VW BLANCO, TX 78606

Please ensure any utility services established with the previous address are updated to reflect the current address. Please display this address where it is visible from the road with 6" or larger reflective numbers so emergency personnel can easily locate the property should there be an emergency. **Please check with your local post office to verify the correct city and zip code before using the assigned address for mailing purposes.** If you receive mail at a post office box, your mailing address will not change.

If you have questions or need further assistance, please let us know.

Sincerely,

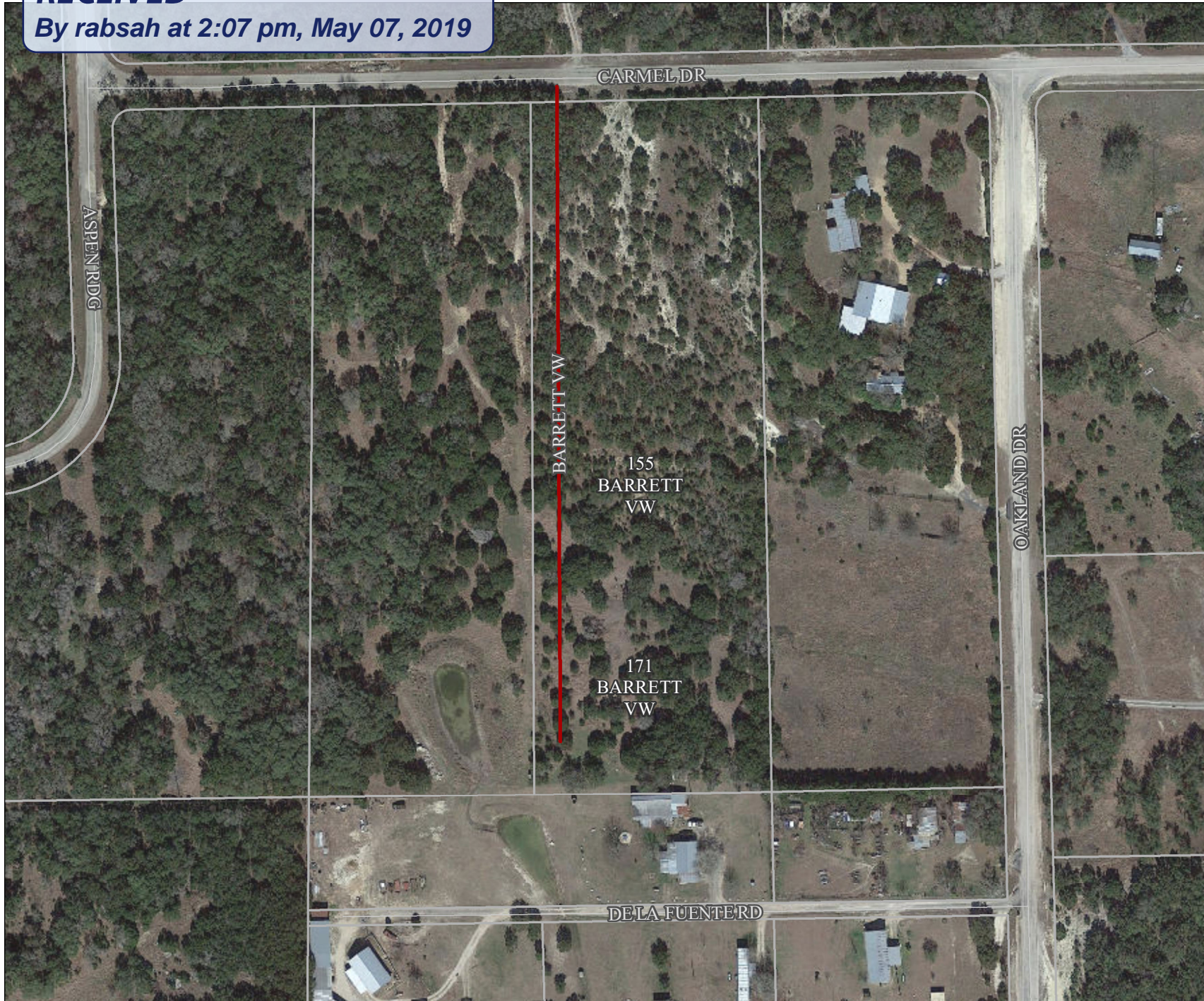
Holly Braun
Address Coordinator

Cc:

- ❖ Comal Appraisal District
- ❖ Bexar Metro 9-1-1
- ❖ United States Postal Service
- ❖ PEC

RECEIVED

By rabsah at 2:07 pm, May 07, 2019



Legend

- Address
- Private Road
- Street Centerline
- Parcel


NOTES:

PROPERTY ID:

27239

LEGAL DESCRIPTION:

FOREST VIEW NORTH 2,
LOT 147

 **SCALE: 1" = 175'**

For information concerning the source of the data, please contact:
Comal County Engineer's Office
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608 - 2090

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

REVISED

11:08 am, May 14, 2019

COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *
APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN
ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

Date 5/13/2019

Permit # 108924

Owner Name Lisa and Jeffrey Barrett
Mailing Address 317 Chama Trace
City, State, Zip Dripping Springs, TX 78620
Phone # 512-743-4677
Email jeffandlisa.barrett@gmail.com

Agent Name Stephen Jetton
Agent Address 2573 Deer Stand Loop
City, State, Zip San Marcos TX 78666
Phone # 512-757-1259
Email stephen.jetton@gmail.com

All correspondence should be sent to: Owner Agent Both Method: Mail Email

Subdivision Name Forest View North 2 Unit _____ Lot 147 Block _____
Acreage/Legal 6.2
Street Name/Address 171 Barrett VW City Blanco Zip 78606

Type of Development:

Single Family Residential

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

Number of Bedrooms 3

Indicate Sq Ft of Living Area 1568

Commercial or Institutional Facility

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

Type of Facility _____

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

Restaurants, Lounges, Theaters - Indicate Number of Seats _____

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

Travel Trailer/RV Parks - Indicate Number of Spaces _____

Miscellaneous _____

Estimated Cost of Construction: \$ _____ (Structure Only)

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

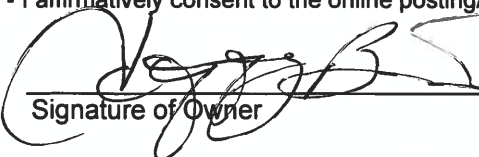
Yes No (If yes, owner must provide approval from USACE for proposed OSSF improvements within the USACE flowage easement)

Source of Water Public Private Well

Are Water Saving Devices Being Utilized Within the Residence? Yes No

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.
- 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

5-13-19
Date

* * * COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH * * *
APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN
ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

Planning Materials & Site Evaluation as Required Completed By Stephen Setton

System Description NEWATER B.550

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

Tank Size(s) (Gallons) 600 BPD Absorption/Application Area (Sq Ft) 3925.0

Gallons Per Day (As Per TCEQ Table III) 240

(Sites generating more than 5000 gallons per day are required to obtain a permit through TCEQ.)

Is the property located over the Edwards Recharge Zone? Yes No

(If yes, the planning materials must be completed by a Registered Sanitarian (R.S.) or Professional Engineer (P.E.))

RECEIVED

MAR 28 2019

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.)

COUNTY ENGINEER

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]
Signature of Designer

3-4-19
Date

2/c



201906009129 03/19/2019 10:33:42 AM 1/2

AFFIDAVIT TO THE PUBLIC

THE COUNTY OF COMAL
STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

According to Texas Commission on Environmental Quality Rules for On-Site Sewage Facilities (OSSF's), 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 (commission) to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the commission primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The commission, under the authority of the TWC and the Texas Health and Safety code, requires owner's to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the commission requires a recorded affidavit. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This recorded affidavit is not a representation or warranty by the commission of the suitability of this OSSF, nor does it constitute any guarantee by the commission that the appropriate OSSF was installed.

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):

FOREST VIEW NORTH 2, LOT 147

RECEIVED
MAR 28 2019

COUNTY ENGINEER

The property is owned by (insert owner's full name): Jeffrey Layne Barrett

This OSSF must be covered by a continuous maintenance contract for the first two years. After the initial two-year service policy, the owner of an aerobic treatment system for a single family residence shall either obtain a maintenance contract within 30 days or maintain the system personally.

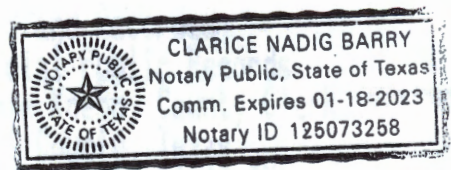
Upon sale or transfer of the above-described property, the permit for the OSSF shall be transferred to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from the Comal County Engineer's Office.

WITNESS BY HAND(S) ON THIS 13 DAY OF February, 2019

[Signature]
Owner(s) signature(s)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 13 DAY OF February, 2019

Clarice Nadig Barry
Notary Public, State of Texas



REVISED

11:07 am, May 14, 2019

Regulatory Authority _____
WASTEWATER TREATMENT FACILITY MONITORING AGREEMENT
Block Creek Aerobic Services, LLC
444 A Old Hwy #9
Comfort, TX 78013
Off. (830) 995-3189
Fax. (830) 995-4051

Permit/License Number 108924
Customer Lisa and Jeffrey Barrett
Site Address 171 Barrett View
City Blanco Texas Zip 78606
Mailing Address 317 Chama Trace
County Comal Map # _____
Phone 512-743-4677
Email jeffandlisa.barrett@gmail.com

I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between _____ (hereinafter referred to as "Customer") and Block Creek Aerobic Service, LLC. By this agreement, Block Creek Aerobic Service, LLC and its employees (hereinafter inclusively referred to as "Contractor") agree to render services at the site address stated above, as described herein, and the Customer agrees to fulfill his/her/their responsibilities, as described herein.

II. Effective Dates: This Agreement commences on _____ and end on _____ for a total of two (2) years (initial agreement) or one (1) year (there after). If this is an initial agreement (new installation), the Customer will notify the Contractor within two (2) business days of the system's first use to establish the date of commencement. If no notification is received by Contractor within ninety (90) days after completion of installation or where county authority mandates, the date of commencement will be the date the "License to operate" (Notice of Approval) was issued by the permitting authority. This agreement may or may not commence at the same time as any warranty period of installed equipment, but in no case shall it extend the specified warranty.

III. Termination of Agreement: This Agreement may be terminated by either party with thirty (30) days written notice for any reason, including for example, substantial failure to perform in accordance with its terms, without fault or liability of the terminating party. If this Agreement is so terminated, Contractor will be paid at the rate of \$75.00 per hour for any work performed and for which compensation has not been received. After the deduction of all outstanding charges, any remaining monies from prepayment for services will be refunded to customer within thirty (30) days. Either party terminating this Agreement for any reason, including non-renewal, shall notify in writing the equipment manufacturer and the appropriate regulatory agency a minimum of thirty (30) days prior to the date of such termination. Nonpayment of any kind shall be considered breach of contract and a termination of contract.

IV. Services: Contractor will:

- a. Inspect and perform routine upkeep on the On-Site Sewage Facility (hereinafter referred to as OSSF) as recommended by the treatment system manufacturer, and required by state and/or local regulation, for a total of three visits to site per year.
- b. Provide a written record of visits to the site by means of an inspection tag attached to or contained in the control panel.
- c. Repair or replace, if Contractor has necessary materials at site, any component of the OSSF to be failing or inoperative during the course of a routine monitoring visit. If such services are not covered by warranty, and services costs are \$100.00, or less. Customer hereby authorizes Contractor to perform the service and bill Customer for said service. When service costs are greater than \$100.00, or if contractor does not have necessary supplies at the site. Contractor will notify Customer of required service(s) and associated cost(s). Customer must notify Contractor of arrangements to affect repair of system with two (2) business days after said notification.
- d. Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).
- e. Forward copies of this Agreement and all reports to the regulatory agency and the Customer.
- f. Visit site in response to Customer's request for unscheduled services within forty-eight (48) hours of the date of notification (weekends and holidays excluded) of said request. Unless otherwise covered by warranty, costs for such unscheduled responses will be billed to Customer.

V. Disinfection: Not required XX required. The responsibility to maintain the disinfection device(s) and provide any necessary chemicals is that of the Customer. _____ (Initial)

V. Electronic Monitoring is not included in this Agreement.

VI. Performance of Agreement: Commencement of performance by Contractor under this Agreement is contingent on the following conditions:

- a. If this is an initial Agreement (new installation):
 - i. Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.
 - ii. Contractor's receipt of payment of the wastewater-monitoring fee in accordance with the terms as described in Section XIV of this Agreement.
- b. If this is not an initial Agreement (existing system):
 - i. Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.
 - ii. Contractor's receipt of payment of the wastewater-monitoring fee in accordance with the terms as described in Section XIV of this Agreement.
- c. If the above conditions are not met, Contractor is not obligated to perform any portion of this Agreement.

VII. Customer's Responsibilities: The customer is responsible for each and all of the following:

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____ Not required; X required. The responsibility to maintain the disinfection device(s) and provide any necessary chemicals is that of the Customer.

VI. Electronic Monitoring:

Electronic Monitoring is not included in this Agreement.

COUNTY ENGINEER

VII. Performance of Agreement:

Commencement of performance by Contractor under this Agreement is contingent on the following conditions:

a. If this is an initial Agreement (new installation):

I. Contractor's receipt of a fully executed original copy or facsimile of this agreement and all documentation requested by Contractor.

If the above conditions are not met, Contractor is not obligated to perform any portion of this Agreement.

VIII. Customer's Responsibilities:

The customer is responsible for each and all of the following:

a. Provide all necessary yard or lawn maintenance and removal of all obstacles, including but not limited to dogs and other animals, vehicles, trees, brush, trash, or debris, as needed to allow the OSSF to function properly, and to allow Contractor safe and easy access to all parts of the OSSF.

b. Protect equipment from physical damage including but not limited to that damage caused by insects.

c. Maintain a current license to operate, and abide by the conditions and limitations of that license, and all requirements for and OSSF from the State and/or local regulatory agency, whichever requirements are more stringent, as well as the proprietary system's manufacturer recommendations.

d. Notify Contactor immediately of any and all alarms, and/or any and all problems with, including failure of, the OSSF.

e. Provide, upon request by Contractor, water usage records for the OSSF so that the Contractor can perform a proper evaluation of the performance of the OSSF.

f. Allow for samples at both the inlet and outlet of the OSSF to be obtained by Contractor for the purpose of evaluating the OSSF's performance. If these samples are taken to a laboratory for testing, with the exception of the service provided under Section IV (d) above, Customer agrees to pay Contractor for the sample collection and transportation, portal to portal, at a rate of \$35.00 per hour, plus the associated fees for laboratory testing.

g. Prevent the backwash or flushing of water treatment or conditioning equipment from entering the OSSF.

h. Prevent the condensation from air conditioning or refrigeration units, or the drains of icemakers, from hydraulically overloading the aerobic treatment units. Drain lines may discharge into the surface application pump tank if approved by system designer.

i. Provide for pumping and cleaning of tanks and treatment units, when and as recommended by Contactor, at Customer's expense.

j. Maintain site drainage to prevent adverse effects on the OSSF.

k. Pay promptly and fully, all Contractor's fees, bills, or invoices as described herein.

IX. Access by Contractor:

Contractor is hereby granted an easement to the OSSF for the purpose of performing services described herein. Contractor may enter the property during Contractor's normal business hours and/or other reasonable hours without prior notice to Customer to perform the Services and/or repairs described herein. Contractor shall have access to the OSSF electrical and physical components. Tanks and treatment units shall be accessible by means of man ways, or risers and removable covers, for the purpose of evaluation as required by State and/or local rules and the proprietary system manufacturer. It is Customers responsibility to keep lids exposed and accessible at all times.

X. Limit of Liability:

Contractor shall not be held liable for any incidental, consequential, or special damages, or for economic loss due to expense, or for loss of profits or income, or loss of use to Customer, whether in contract tort or any other theory. In no event shall Contractor be liable in an amount exceeding the total Fee for Services amount paid by Customer under this Agreement.

XI. Indemnification:

Customer (whether one or more) shall and does hereby agree to indemnify, hold harmless and defend Contractor and each of its successors, assigns, heirs, legal representatives, devisees, employees, agents and/or counsel (collectively "Indemnitees") from and against any and all liabilities, claims, damages, losses, liens, causes of action, suits, fines, judgments and other expenses (including, but not limited to, attorneys' fees and expenses and costs of investigation), of any kind, nature or description, (hereinafter collectively referred to as "Liabilities") arising out of, caused by, or resulting, in whole or in part, from this Agreement.



Customer's Initials



BS

Contractor's Initials

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THIS INDEMNIFICATION APPLIES EVEN IF SUCH LIABILITIES ARE CAUSED BY THE CONCURRENT OR CONTRIBUTORY NEGLIGENCE OR BY THE STRICT LIABILITY OF ANY INDEMNITEE. MAR 28 2019

Customer hereby waives its right of recourse as to any Indemnatee when Indemnification applies, and Customer hereby waives its right of subrogation to the extent such action is required to render such waiver of subrogation effective. Customer shall be subrogated to Indemnitees with respect to all rights Indemnitees may have against third parties with respect to matters as to which Customer provides indemnity and/or defense to Indemnitees. No Indemnification is provided to Indemnitees when the liability or loss results from (1) the sole responsibility of such Indemnatee; or, (2) the willful misconduct of such Indemnatee. Upon irrevocable acceptance of this Indemnification obligation, Customer, in its sole discretion, shall select and pay counsel to defend Indemnitees of and from any action that is subject to this Indemnification provision. Indemnitees hereby covenant not to compromise or settle any claim or cause of action for which Customer has provided Indemnification without the consent of Customer. COUNTY ENGINEER

XII. Severability:

If any provision of the "Proposal and Contract" shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision of the "Agreement" is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.

XIII. Fee for Services:

The Fee for Services does not include any fees for equipment, material, labor necessary for non-warranty repairs, unscheduled inspections, or Customer requested visits to the site.

XIV. Payment:

Full payment is due upon execution of this Agreement (Required of new Customer). For any other service(s) or repair(s) provided by Contractor the Customer shall pay the invoice(s) for said service(s) or repair(s) within thirty (30) days of the invoice date. The Contractor shall mail all invoices on the date of invoice. All payments not received within thirty (30) days from the invoice date will be subject to a \$29.00 late penalty and a 1.5% per month carrying charge, as well as any reasonable attorney's fees, and all collection and court costs incurred by Contractor in collection of unpaid debt(s). Contractor may terminate contract at any time for nonpayment for services. Any check returned to Contractor for any reason will be assessed a \$30.00 return check fee.

XV. Application or Transfer of payment:

The fees paid for this agreement may be transferred to subsequent property owner(s); however, this Agreement is not transferable. Customer shall advise the subsequent property owner(s) of the State requirement that they sign a replacement agreement authorizing Contractor to perform the herein described Services, and accepting Customer's Responsibilities. This replacement Agreement must be signed and received in Contractor's offices within ten (10) business days of date of transfer of property ownership. Contractor will apply all funds received from Customer first to any past due obligation arising from this Agreement including late fees or penalties, return check fees, and/or charges for services or repairs not paid within thirty (30) days of invoice date. Any remaining monies shall be applied to the funding of the replacement Agreement. The consumption of funds in this manner may cause a reduction in the termination date of effective coverage per this Agreement. See Section IV.

XVI. Entire Agreement:

This agreement contains the entire Agreement of the parties, and there are no other conditions in any other agreement, oral or written.

Brent S. Lindstedt

Block Creek Aerobic Services, LLC,
Contractor
MC# 0000042 and MC#0000002

[Handwritten Signature]
Customer Signature

Date

[Handwritten Initials]

Customer's Initials



BS

Contractor's Initials

Southwest Septic Design

On-Site Sewage Facility Application and Design

Prepared For:

**Lisa & Jeffrey Barrett
171 Barrett View
Blanco, Texas
Design 2002619**

Prepared By:

Stephen F. Jetton Revision 5/8/2019
Registered Professional Sanitarian



Stephen Jetton

Stephen F. Jetton • Southwest Septic Design
2573 Deer Stand Loop • San Marcos, Texas 78666 • Fax (512) 392-5645 • Mobile (512) 757-1259
E – Mail stephen.jetton@grandecom.com

Southwest Septic Design

2573 Deer Stand Loop
San Marcos, Texas 78666
Hays County

Fax (512) 392-5645
Mobile (512) 757-1259

Design Report On-Site Sewage facility Aerobic Wastewater Treatment System Utilizing Surface Spray Application

OWNER/SITE LOCATION:

Lisa & Jeffrey Barrett
171 Barrett View
Lot 147, Forrest View North 2
Blanco, Texas

SITE DESCRIPTION & EVALUATION:

A site evaluation indicated class III soils (see attached soil evaluation report). No evidence of shallow groundwater was noted. This property is not within the Edwards Aquifer Recharge Zone, and no recharge features are located within 150 feet of the proposed system. ***All portions of this proposed OSSF will maintain at least a 10' separation from all water lines.*** According to the Federal Emergency Management Agency Flood Insurance Rate Map, this tract is not within zone A, 100-year Floodplain (see attached site plan). Minimum separation distances as stated in §285 TCEQ, On-Site Sewage Facilities, must be maintained.

WASTEWATER DESIGN FLOW:

This design is for a 1568 sq. ft., 3-bedroom single-family residence utilizing low-flow fixtures. This site is serviced by a private water well. The proposed OSSF will be designed to accommodate ***240 gallons per day***, as per TCEQ, On Site Sewage Facilities effective 12-27-2012.

Please Note that this permit will not be valid if final heated square footage exceeds 2499 sq. ft., and/or 3 bedrooms.

AEROBIC TREATMENT SYSTEM DESCRIPTION:

This residence will utilize a Nuwater Aerobic Treatment Plant, Model B-550-PC-400P. A 353-gallon pretreatment/trash tank will precede the 600-gallon per day aerobic treatment tank. Effluent from the aeration tank will flow through a liquid chlorinator (**Model NG 300V 200**) to a 768-gallon pump tank. The pump tank serves as a chlorine contact chamber and a storage tank prior to the treated/chlorinated effluent being discharged to sprinkler heads. The disposal area will consist of ***2 – 25ft. 360°*** radius patterns. The system is considered a “package system”, and will be installed according to manufacturer’s instructions.

Stephen Jetton



Design Specification:

Size of Residence	Primary Living Area	1568 ft ²
Number of Bedrooms		3
Average Expected Flow		240 GPD
Application Rate	0.064 Gal./ft²/Day	0.064
Minimum Application Area	(GPD)/(0.064 Gal./ft²/Day)	3750.00 ft ²
Actual Application Area	3.14(r²) x number of heads	3925.00 ft ²

System Components:

Trash Tank	353 gallon one-compartment
Aeration Tank	600 gallon per day
Pump Tank	768 gallon

Pump Tank:

Pump Tank gallons per inch: 14.49"

Operating Capacity: 14.49" x 17" = 246.33 operating gallons.

Reserve Capacity: 53" usable depth (53 x 14.49 = 768.00) 768.00 – 449.19 = 318.8 reserve gallons.

Pump off	13" Above tank floor	188.37 Gallons
Pump on	14" Above tank floor	202.86 Gallons
Alarm on	31" Above tank floor	449.19 Gallons

Combined capacity of pretreatment and aeration tank is 953-gallons. A 768-gallon, single-compartment pump tank allows for a one-third days flow above the alarm-on level.

Pump and Sprinkler Head Requirements:

Pump: Franklin C1 Series Pump, Model 20C1-05P4-2W115 ½ H.P.

Sprinkler Head: Hunter I20-3RV-2.0LA (equipped with anti-siphon nozzles and purple top).

Nozzle #: **3.0 LA** (Low angle trajectory, 11 degrees), operating at 25 psi, 25ft. radius and 2.5 GPM flow per sprinkler.

Dosing:

Application Flow Rate 2.5 gpm/head x 2 heads = **5.0**

Application Time: 2 doses @ 120 gal/dose / 5.0 gpm = ~ **24 min/dose**

Stephen Jetton



Head Requirements:

Elevation head: 3 (*assumed elevation at top of pump 1185 and highest spray head at 1188*)

Pressure head: 25 psi x 2.31 ft/psi = 57.75 ft

Friction head: 1" Sch. 40 PVC @ 5.0 gpm = 2.13 ft. (80 x 2.13/100 x 1.2) = 2.04

TDH = 3 ft. + 57.75 ft. + 2.04 ft = 61.79 (within pump curve).

A commercial timer must be set to provide two doses a day, one at 1 a.m. and the other at 4 a.m. An unthreaded sampling valve must also be provided. Under the Texas Administrative Code, §285 On-Site Sewage Facilities, this system must be installed with a night timer, set to spray between the hours of 1 am and 5 am.

Alarm System:

An audio/visual high water alarm will be installed on this system. NuWater control panel (SPI-BIO Model 50B138-AAV-PT) with Timed Control with 24hr timer (Grasslin FM/1 Pin Timer) or equal. The alarm/light will be installed in a high visible location close to the pump tank.

Optional Components:

- 40 PSI Pressure Regulator will be used to maintain the 40 PSI to the sprinkler heads. The installer will consult me or G.P. Equipment when purchasing this device. The pressure reducer will be placed in-line between the pump and the spray heads. Additionally this particular spray head is adjustable to help achieve the required radius.
- Pressure Gauge of not less than 45PSI will be installed to regulate flow to the spray field.

Installation Notes:

- Refer to site plan for component placement and follow manufacturer's instructions for installation of treatment plant and aerator.
- All materials and construction methods are required to conform to the standards for Private Sewage Facility's set forth in the Texas Administrative Code, §285 On-Site Sewage Facilities.
- The installer must have a current and valid Texas installer certificate, and is required to have at the minimum an Installer II certification.
- The installer must notify designer and regulatory authority at least 48 hours in advance to schedule required inspections to ensure that the system is installed in accordance with the approved plans and specifications.
- The installer may not alter these plans without the approval of the designer.
- Diversion berms will be place when needed to protect irrigation area from excessive runoff.
- All electrical installation must be in compliance with applicable electric codes.
- All outside electrical components must be placed in electrical conduit.
- It is the responsibility of the installer to maintain the minimum setback requirements as stated in §285 for On-Site Sewage Facilities.

Tank Notes:

- The bottom of the excavation for the tanks shall be level and free of large rocks and debris.

Stephen Jetton



- All tanks are to be set level on a layer, with a minimum thickness of 4 inches, of sand, sandy loam, clay loam, or pea gravel.
- Tank excavations must be backfilled with soil or pea gravel that is free of rock larger than ½ inch in diameter. Class IV soils and gravel larger than ½ inch in diameter are not acceptable for use as backfill material. If the top of a septic tank extends above the ground surface, soil may be mounded over the tank to maintain slope to the drain field.
- Risers are required over all tank openings and must extend to the ground surface.
- Risers shall be permanently fastened to the tank lid.
- The riser lid shall screw down and have a lock or weigh 65lbs.
- A secondary plug, cap, netting, etc. shall be provided below the riser lid.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, or to prevent the infiltration of water.
- Tanks must be filled with water for 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8" per foot from house to tank.
- PVC pipe from house to tank must be at least Sch.40 or SDR 26.

Irrigation & Landscaping Notes:

- Irrigation lines shall be 1" Sch.40 PVC. Sleeve any pipe that crosses under any roads or driveways with Sch.40 PVC.
- Purple Pipe must be used for all irrigation lines.
- Supply lines must be buried at least 6" below finished grade.
- If irrigation area does not have established vegetation, a mixture of winter rye and Bermuda grasses will be seeded to establish seasonal vegetation.
- The installer shall notify property owner prior to removal of any trees that may obstruct the operation of the irrigation system.
- ***All exposed surface rock must be covered with at least 4" of suitable soil***
- ***Vegetation must be established before system is in use.***

Additional Notes:

- Install audio-visual alarm for aerator and pump on separate breakers.
- The high water and air compressor alarms shall be audio/visual and mounted in a place that can be easily seen and heard when the alarms are activated.
- A hose bib must be installed in pump tank at tank inspection port.
- The chlorinator must be constructed to allow a chlorine residual of 1.0 mg/l in the pump tank for the period of time between scheduled inspections.
- The disinfected effluent must obey the standards as stated in §285, TCEQ, On-Site Sewage Facilities. Approved disinfections methods using chlorinated tablets, must use calcium hypochlorite that is properly labeled for wastewater disinfections.

Maintenance Requirements:

- The applicant must furnish to the regulatory authority a valid maintenance contract with a certified maintenance company before a permit will be issued.
- The maintenance company will verify that the system is operating properly and that they will provide on-going maintenance of the installation.
- The initial contract will be a minimum of 2 years.

Stephen Jetton



- A maintenance contract will authorize the Maintenance Company to maintain and repair the system as needed.
- The owner must continuously maintain a signed written contract with a valid maintenance company and shall submit a copy of the contract to the permitting authority at least 30 days prior to the date service will cease.

Affidavit:

- The applicant must file a certified copy of an affidavit at the County clerk's office and filed in reference to the real property deed on which the surface application system is to be installed.
- The affidavit will state that the property shall not be transferred to a new owner without:
 - (1) The new owner being advised that the property contains a surface application system for wastewater disposal;
 - (2) The permit issued to the previous owner of the property being transferred to the new owner in accordance with §285.20(5) of the TCEQ OSSF Rules, i.e.; the permit will be issued in the name of the owner of the OSSF. Permits shall be transferred to the new owner automatically upon legal sale of the OSSF. The transfer of an OSSF permit under this section shall occur upon actual transfer of the property on which the OSSF is located unless the ownership of the OSSF had been severed from the property.
 - (3) The new owners submitting a valid maintenance contract to the permitting authority.

Operation and Management Notes:

- The OSSF should not be treated as a normal city sewer.
- Water conservation practices should be used at all times. Consult your local authorities for more information.
- Run the dishwasher with a full load whenever possible
- Avoid running water continuously when brushing teeth, washing hands, or cleaning food and utensils.
- Repair any water leaks immediately, such as running toilets or leaky faucets.
- The owner is responsible for cleaning and pumping the septic tank, typically every 2 to 3 years depending on system usage.
- Do not use the toilet to dispose of tissue, feminine hygiene products, trash, cigarettes, etc.
- It is recommended that you do not use the garbage disposal and/ or garbage grinders in the facility serviced by this system.
- Household chemicals should be used in moderation.
- According to §285, no water softener will be allowed to enter the OSSF.
- Chemical additives or the so-called enzymes should not be used during the operation of this system. Some of these additives may even be harmful to the facilities operation.
- Do not build driveways, storage buildings, decks, or other structures over the tank or disposal area.
- The OSSF must be protected from coming in contact with vehicular traffic.
- A strong vegetative cover is essential for the proper operation of this system. The property owner is solely responsible for maintaining this vegetation. The irrigation area should be groomed by mowing on a regular basis.
- If you notice a problem with the spray patterns, or any of the alarms are activated, contact your maintenance provider immediately.
- Never place a greater wastewater load on your system than that prescribed by the design of the system (*240 gallons per day*).

Stephen Jetton



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

Stephen Jetton



171 Barrett View Blanco, Texas

Lot 147
Forest View North
Unit No. 2
Comal County, Texas

- A - 3-Bedroom Single Family Residence (1568 sq. ft.).
- B - NuWater Model B-550 Aerobic Treatment Unit.
- C - Hunter 20 Ultra, 25' Radius, Sprinkler Head
Nozzle 3.0 - 25 PSI
- X - Profile Hole

C/O - Two-Way Cleanout

Provide Two-Way Cleanout from House to Tank.
3" or 4" Sch. 40 between House and Tank. Must maintain
a minimum of 1/8" per foot of fall between house and tank.

Supply Line: 1" Sch. 40 PVC Purple Pipe

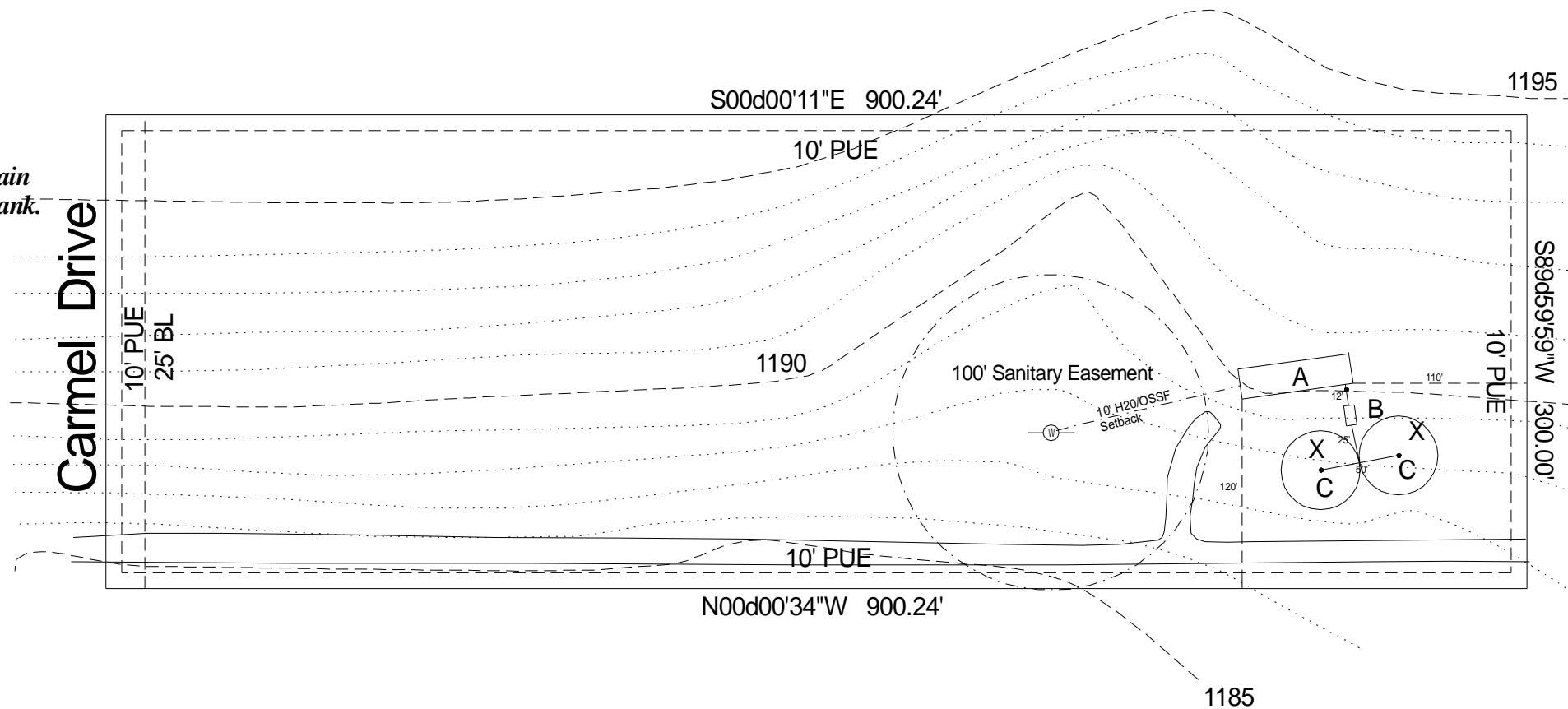
Maintain 10' from all Property Lines.
Maintain 10' from all Potable Water Lines.

*Refer to Tank Detail and Design Notes for more
Information.

*Plans may vary Slightly based on Conditions
Encountered in the Field.

*Trim Trees as Necessary in Application Area.
Trees must maintain at least 10' from Sprinkler
Head.

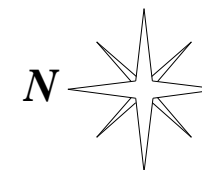
*All Separation and Setback Requirements as Stated in
Chapter 285, TCEQ, On-Site Sewage Facilities, must
be maintained.



*This is not intended to be used as an official
survey. All structures and Contour locations
are approximate.

*Flood Plain Note: This property is not within
the Regulated Flood Plain. Panel 48209C0237F
Dated: 9/2/2005

Stephen Jetto

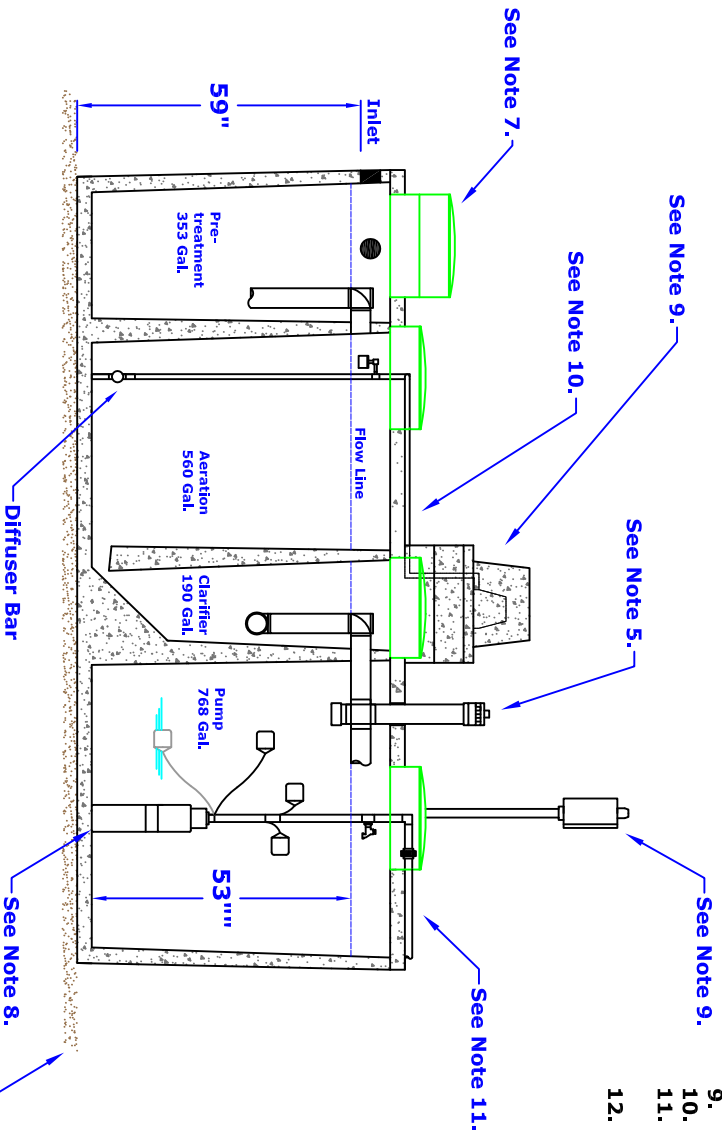


Scale: 1" = 100'

Assembly Details

OSSF

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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 = 14,900 lbs.
4. Treatment capacity is 600 GPD. Pump compartment set-up for a 360 GPD Flow Rate (4 bedroom, < 4,000 sq/ft living area). Please specify for additional set-up requirements. BOD Loading = 1.62 lbs. per day.
5. Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
6. Bio-Robix B-550 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

DIMENSIONS:

Outside Height: 67"
 Outside Width: 63"
 Outside Length: 164"

MINIMUM EXCAVATION DIMENSIONS:

Width: 76"
 Length: 176"

NuWater B-550 (600 GPD) Aerobic Treatment Plant (Assembled)

Model: B-550-PC-400PT

March, 2012 - Rev 1
 By: A.S.

Scales:
 * All Dimensions subject to allowable specification tolerances.

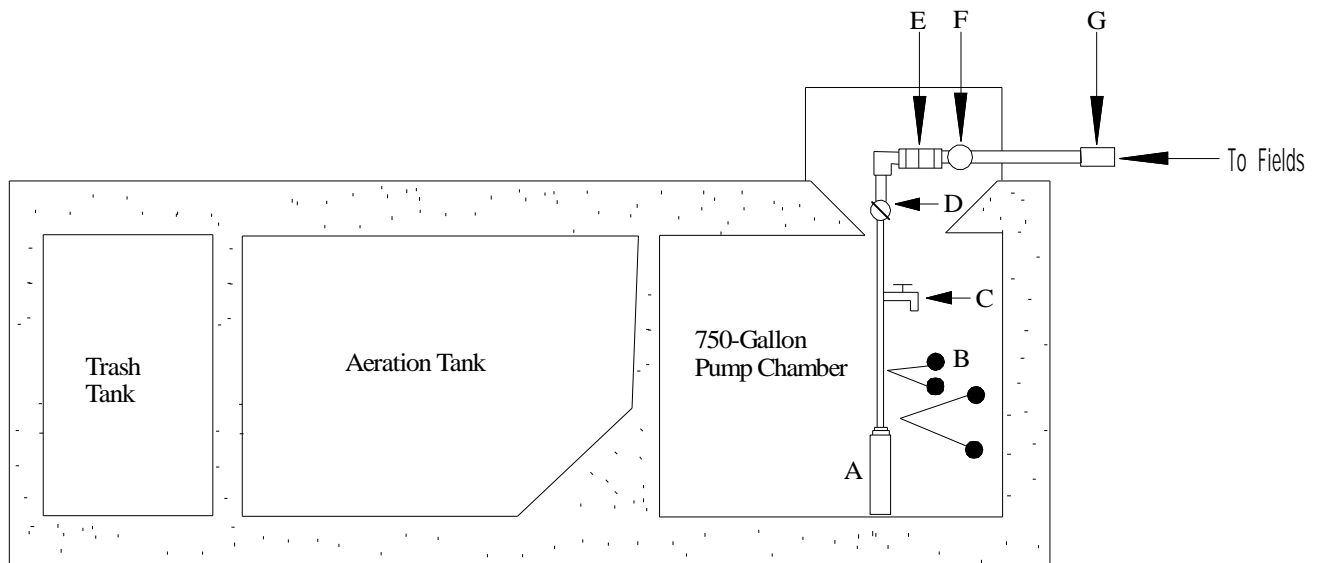
Dwg. #: ADV-8550-3



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

Typical Pump Tank Cross Section

- A - Franklin C1 Series Pump Model 20C1-05PA-2W115 1/2 HP
- B - Wide Angle Mercury Float Switch
- C - Sampling Port
- D - Pressure Regulator
- E - Quick Disconnect Union
- F - 40 PSI Pressure Guage
- G - Check Valve



NuWater B-550 (600 GPD) Aerobic Treatment Plant

Stephen Jetton



Not to Scale

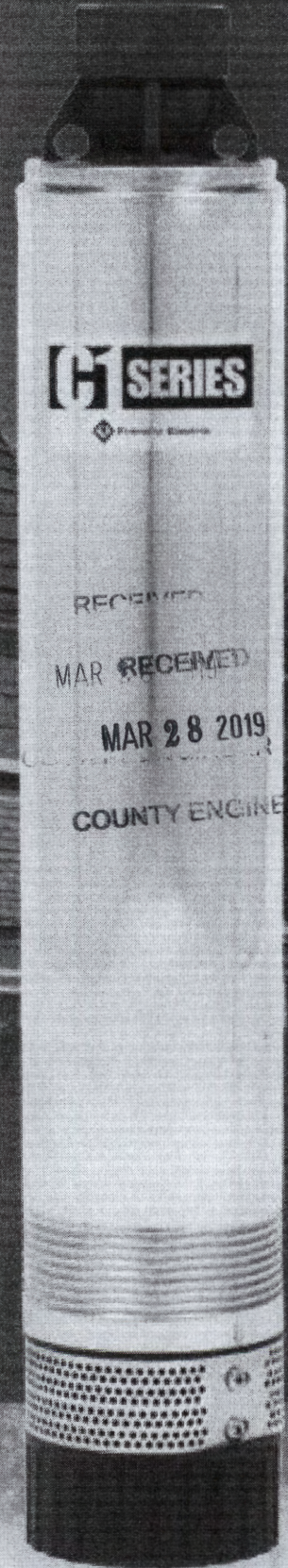


C1 SERIES

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.



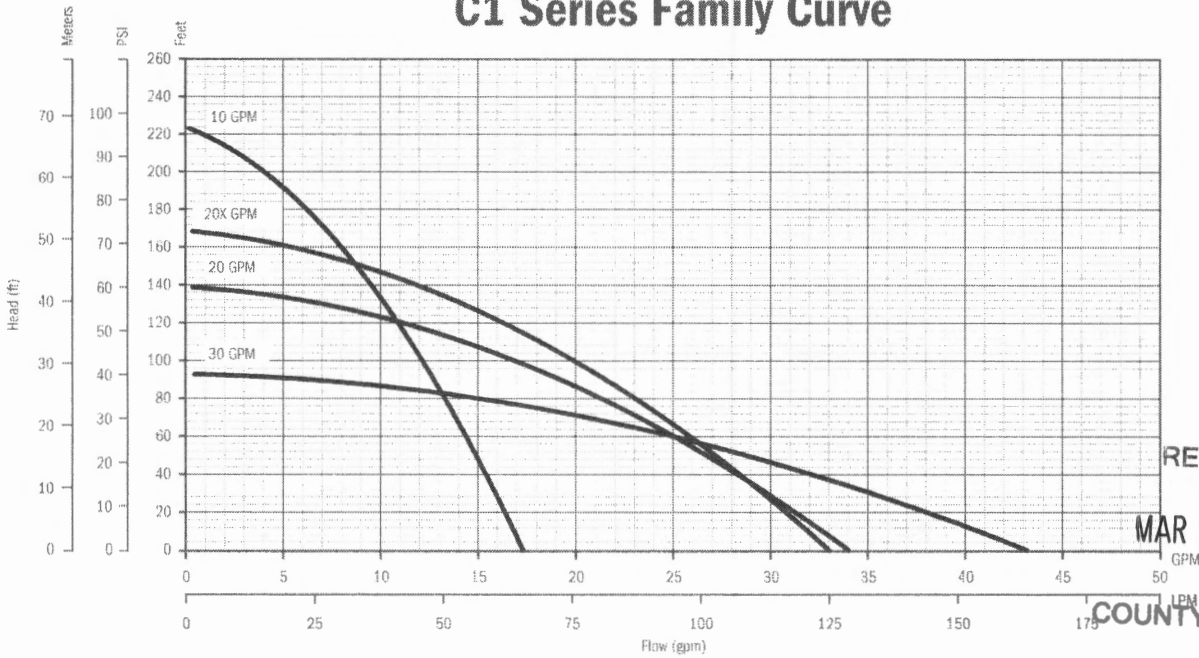
*S Jetton
3-4-19*



Franklin Electric

franklinwater.com

C1 Series Family Curve



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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, 1/2 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

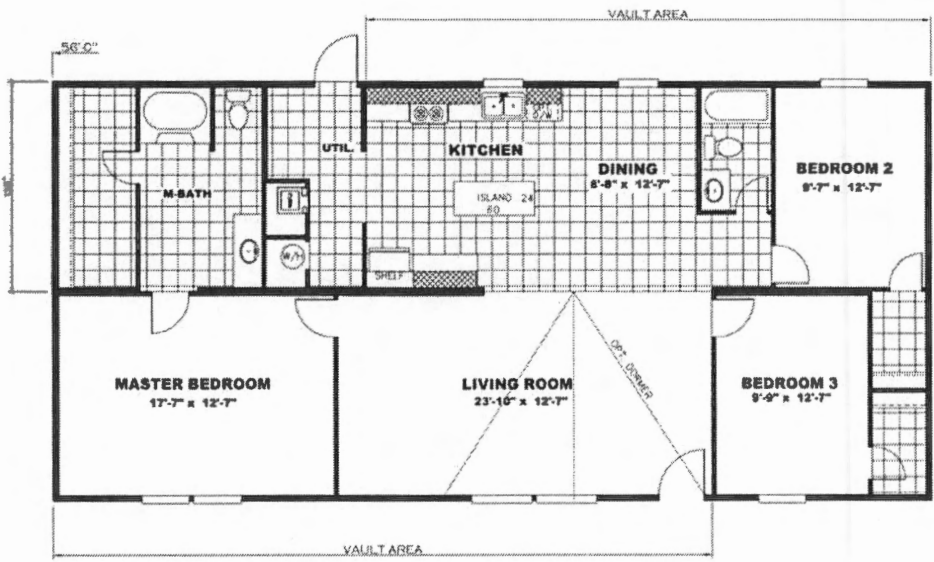
- Gray water pumping
- Filtered effluent service water pumping
- Water reclamation projects such as pumping from rain catchment basins
- Aeration and other foundation or pond applications
- Agriculture and livestock water pumping



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

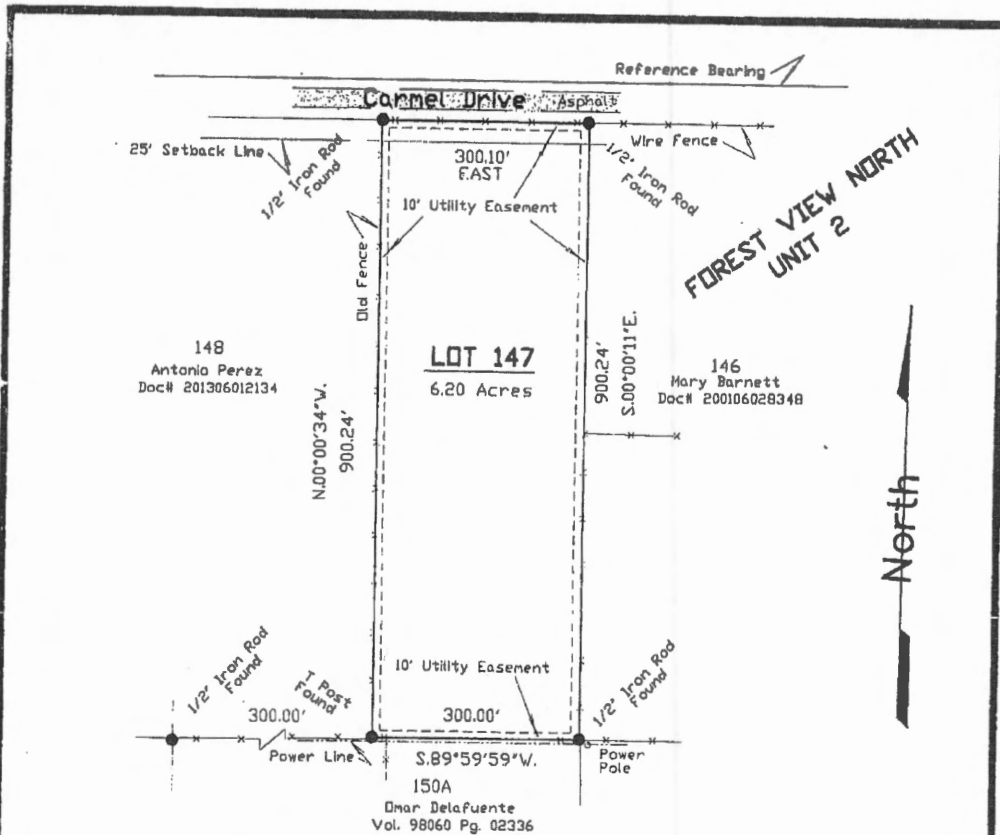
Note: All units have 10 foot long SJ00W leads.



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COUNTY ENGINEER



SURVEY PLAT

of
LOT 147,
FOREST VIEW NORTH, UNIT NO. 2,
COMAL COUNTY, TEXAS

SCALE 1" = 200'
 DECEMBER 12, 2017

ADDRESS: 216 CARMEL DRIVE
 BLANCO, TEXAS 78606

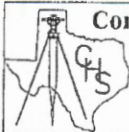
THIS PROPERTY DOES NOT FALL WITHIN THE FEMA
 100-YEAR FLOOD PLANE AS SHOWN ON FEMA MAP
 NO. 48091C0020F DATED SEPT. 2, 2009

I HEREBY CERTIFY THAT THIS SURVEY IS TRUE
 AND CORRECT TO THE BEST OF MY KNOWLEDGE,
 AND IS BASED ON A SURVEY DONE ON THE GROUND,
 UNDER MY DIRECTION AND SUPERVISION, THIS
 THE 12TH DAY OF DECEMBER, 2017

Bill J. Loftis
 BILL J. LOFTIS
 REGISTERED PROFESSIONAL LAND SURVEYOR
 LICENSE NUMBER 5823



FOREST VIEW NORTH, UNIT NO. 2, IS RECORDED IN
 VOLUME 3, PAGES 72-73, MAP OR PLAT RECORDS OF
 COMAL COUNTY, TEXAS
 RESTRICTIVE COVENANTS FILED IN VOLUME 80,
 PAGE 685, AND VOLUME 116, PAGE 3, DEED
 RECORDS OF BLANCO COUNTY, TEXAS
 RIGHT-OF-WAY EASEMENT TO STATE OF TEXAS
 VOLUME 52, PAGE 223, AND VOLUME 52, PAGE 273,
 DEED RECORDS OF BLANCO COUNTY, TEXAS
 EASEMENT TO PEDERNALES ELECTRIC COOP.
 VOLUME 79, PAGE 89, DEED RECORDS OF
 BLANCO COUNTY, TEXAS



Comal Hills Surveying
 3200 Puter Creek Road
 Spring Branch, Texas
 78070
 (830) 228-5571
 cha@grtc.com

DRP: B. Loftis
CHK: Bill Loftis
Job #: 17882-1
Date: 12/12/2017
FD #: 15

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Hernandez, Sandra

From: Hernandez, Sandra
Sent: Thursday, May 9, 2019 8:59 AM
To: 'stephen.jetton@gmail.com'; 'jeffandlisa.barrett@gmail.com'
Subject: 108924 deficiency comment
Attachments: Pages from 108924.pdf

RE: Forest View North, Unit 2, Lot 147

Stephen,

We received revised planning materials yesterday, but still need the following:

- ✓ Have the homeowner revise the address on the permit application and maintenance contract. Revise accordingly and resubmit.

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

Thanks you,

*Sandra Ann Hernandez
Environmental Health Asst.
Comal County Engineer's Office
cceo.org
830-608-2090 (Ext. 3156)*

Hernandez, Sandra

From: Hernandez, Sandra
Sent: Tuesday, April 2, 2019 12:17 PM
To: 'jeffandlisa.barrett@gmail.com'
Subject: 108924 deficiency comment

RE: Forest View North Unit No. 2, Lot 147

Dear property owner,

We received planning materials for the referenced permit application on March 28, 2019 and found those planning materials to be deficient. In order to continue processing this permit, we need the following:

- ✔ It appears that there is discrepancy with the address being used for this property. Please contact Holly Braun, Comal County Address Coordinator for more information at, 830-608-2090.

Thank you,

*Sandra Ann Hernandez
Environmental Health Asst.
Comal County Engineer's Office
cco.org
830-608-2090 (Ext. 3156)*

Hernandez, Sandra

From: Braun,Holly
Sent: Friday, March 29, 2019 9:05 AM
To: Ritzen, Brenda; Hernandez, Sandra
Subject: OSSF - 108923 & 108924
Attachments: Request_For_Naming_A_Private_Driveway.pdf

Brenda, Sandra,

The address 216B & 216C Carmel Dr referenced on OSSF Permit# 108923 & 108924 are not valid addresses; alphanumeric primary addresses are not assigned within Comal County. Comal County requires a shared driveway serving multiple addressed structures be named by the property owner(s) as to create a named private driveway. The existing address 216 Carmel Dr would require a change of address to reflect the approved private driveway.

To move forward with naming the shared private driveway the property owners must complete the attached form. When the form is returned our office will review the proposed road names and forward to Bexar Metro 9-1-1 and the United States Postal Service for approval. The proposed road name is then submitted to the Comal County Commissioners Court for final approval. After the road has been approved the property owners will receive an approval letter with new address assignments and the Comal County Road Department will install a road name sign at the juncture of the driveway.

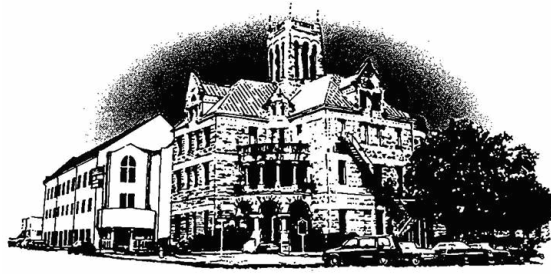
Should you have any questions or require additional information, please contact our office at any time.

Sincerely,



Holly Braum
Address Coordinator
Comal County Engineer's Office
195 David Jonas Drive
New Braunfels, TX 78132
O: 830-608-2090 | F: 830-643-3810
www.cceo.org

VOID



Comal County

OFFICE OF COMAL COUNTY ENGINEER

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

Permit Number: 108924
Issued This Date: 04/09/2019
This permit is hereby given to: Lisa & Jeffrey Barrett

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

216 CARMEL DR
BLANCO, TX 78606

Subdivision: Forest View North
Unit: 2
Lot: 147
Block:
Acreage:

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic
Surface Irrigation

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

Call (830) 608-2090 to schedule inspections.

PERMIT CONDITION - ADDRESS MUST BE APPROVED AND ANY CHANGES UPDATED BEFORE A LICENSE TO OPERATE CAN BE ISSUED.

*** COMAL COUNTY OFFICE OF ENVIRONMENTAL HEALTH ***
APPLICATION FOR PERMIT FOR AUTHORIZATION TO CONSTRUCT AN
ON-SITE SEWAGE FACILITY AND LICENSE TO OPERATE

Date 2/13/2019

VOID

Permit # 108924

Owner Name <u>Lisa & Jeffrey Barrett</u>	Agent Name _____
Mailing Address <u>317 Chama Trace</u>	Agent Address _____
City, State, Zip <u>Dripping Springs, TX 78620</u>	City, State, Zip _____
Phone # <u>512-749-4677</u>	Phone # _____
Email <u>jeffandlisa.barrett@gmail.com</u>	Email _____

All correspondence should be sent to: Owner Agent Both Method: Mail Email

Subdivision Name Forest View North 2 Unit _____ Lot 147 Block _____
Acreage/Legal 6.2 acres
Street Name/Address 216C Carmel Dr City Blanco Zip 78606

Type of Development:

Single Family Residential

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

Number of Bedrooms 3

Indicate Sq Ft of Living Area 1568

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Commercial or Institutional Facility

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

Type of Facility _____

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

Restaurants, Lounges, Theaters - Indicate Number of Seats _____

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

Travel Trailer/RV Parks - Indicate Number of Spaces _____

Miscellaneous _____

Estimated Cost of Construction: \$ _____ (Structure Only)

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

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

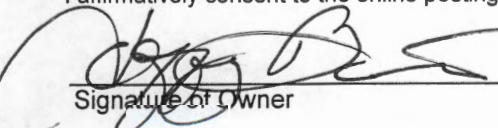
Source of Water Public Private Well

Are Water Saving Devices Being Utilized Within the Residence? Yes No

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.
- 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 Ordinance.
- I affirmatively consent to the online posting/public notice and email address associated with this permit application, as applicable.

VOID


Signature of Owner

2-13-19
Date

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WASTEWATER TREATMENT FACILITY MONITORING AGREEMENT

Regulatory Authority _____
Block Creek Aerobic Services, LLC
444 A Old Hwy #9
Comfort, TX 78013
Off. (830) 995-3189
Fax. (830) 995-4051

Permit/License Number _____
Customer Jeffrey Barrett
Site Address 2160 Carmel Dr
City Blanco Zip 78606
Mailing Address 317 Chama Trace Dripping Springs TX
County _____ Map # _____
Phone 512-743-4677
Email jeffandlisa.barrett@gmail.com 78620

COUNTY ENGINEER

I. General: This Work for Hire Agreement (hereinafter referred to as "Agreement") is entered into by and between Jeffrey Barrett (hereinafter referred to as "Customer") and Block Creek Aerobic Services, LLC. By this agreement, Block Creek Aerobic Services, LLC and its employees (hereinafter inclusively referred to as "Contractor") agree to render services at the site address stated above, as described herein, and the Customer agrees to fulfill his/her/their responsibilities, as described herein.

II. Effective Date:

This Agreement commences on _____ and ends on _____ for a total of two (2) years (initial agreement) or one (1) year (thereafter). If this is an initial agreement (new installation), the Customer shall notify the Contractor within two (2) business days of the system's first use to establish the date of commencement. If no notification is received by Contractor within ninety (90) days after completion of installation or where county authority mandates, the date of commencement will be the date the "License to operate" (Notice of Approval) was issued by the permitting authority. This agreement may ~~may not commence~~ at the same time as any warranty period of installed equipment, but in no case shall it extend the specified

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III. Termination of Agreement:

This Agreement may be terminated by either party for any reason, including for example, substantial failure of either party to perform in accordance with the terms of this Agreement, without fault or liability of the terminating party. The terminating party must provide written notice to the non-terminating party thirty (30) days prior to the termination of this Agreement. If this Agreement is terminated, Contractor will be paid at the rate of \$75.00 per hour for any work performed and for which compensation has not been received. After the deduction of all outstanding charges, any remaining monies from prepayment for services will be refunded to customer within thirty (30) days of termination of this Agreement. Either party terminating this Agreement for any reason, including non-renewal, shall notify in writing the equipment manufacturer and the appropriate regulatory agency a minimum of thirty (30) days prior to the date of such termination. Nonpayment of any kind shall be considered breach of contract and a termination of contract.

IV. Services:

Contractor will:

- a. Inspect and perform routine upkeep on the On-Site Sewage Facility (hereinafter referred to as OSSF) as recommended by the treatment system manufacturer, and required by state and/or local regulation, for a total of three visits to site per year. The list of items checked at each visit shall be the: control panel, Electrical circuits, timer, Aeration including compressor and diffusers, CFM/PSI measured, lids safety pans, pump, compressor, sludge levels, and anything else required as per the manufacturer.
- b. Provide a written record of visits to the site by means of an inspection tag attached to or contained in the control panel.
- c. Repair or replace, if Contractor has the necessary materials at site, any component of the OSSF found to be failing or inoperative during the course of a routine monitoring visit. If such services are not covered by warranty, and the service(s) cost less than \$100.00, Customer hereby authorizes Contractor to perform the service(s) and bill Customer for said service(s). When service costs are greater than \$100.00, or if contractor does not have the necessary supplies at the site, Contractor will notify Customer of the required service(s) and the associated cost(s). Customer must notify Contractor of arrangements to affect repair of system within two (2) business days after said notification.
- d. Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).
- e. Forward copies of this Agreement and all reports to the regulatory agency and the Customer.
- f. Visit site in response to Customer's request for unscheduled services within forty-eight (48) hours of the date of notification (weekends and holidays excluded) of said request. Unless otherwise covered by warranty, costs for such unscheduled responses will be billed to Customer.

V. Disinfection:

JB

Customer's Initials

VOID



BS

Contractor's Initials

VOID

Southwest Septic Design

On-Site Sewage Facility Application and Design

Prepared For:
VOID

Lisa & Jeffrey Barrett
216C Carmel Drive
Blanco, Texas

Design 2002619

Prepared By:

Stephen F. Jetton 
Registered Professional Sanitarian

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3-4-19

COPIES

Stephen F. Jetton • Southwest Septic Design
2573 Deer Stand Loop • San Marcos, Texas 78881 • Phone (512) 392-5645 • Mobile (512) 757-1259
E – Mail stephen.jetton@granddesign.com

VOID

VOID

Southwest Septic Design

2573 Deer Stand Loop
San Marcos, Texas 78666
Hays County

Fax (512) 392-5645
Mobile (512) 757-1259

Design Report On-Site Sewage facility Aerobic Wastewater Treatment System Utilizing Surface Spray Application

OWNER/SITE LOCATION:

Lisa & Jeffrey Barrett
216C Carmel Drive
Lot 147, Forrest View North 2
Blanco, Texas

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SITE DESCRIPTION & EVALUATION:

A site evaluation indicated class III soils (see attached site evaluation report). No evidence of shallow groundwater was noted. This property is located within the Edwards Aquifer Recharge Zone, and no recharge features are located within 150 feet of the proposed system. **All portions of this proposed OSSF will maintain at least a 10' separation from all water lines.** According to the Federal Emergency Management Agency Flood Insurance Rate Map, this tract is not within zone A, 100-year Floodplain (see attached site plan). Minimum separation distances as stated in §285 TCEQ, On-Site Sewage Facilities, must be maintained.

VOID

WASTEWATER DESIGN FLOW:

This design is for a 1568 sq. ft., 3-bedroom single-family residence utilizing low-flow fixtures. This site is serviced by a private water well. The proposed OSSF will be designed to accommodate **240 gallons per day**, as per TCEQ, On Site Sewage Facilities effective 12-27-2012.

Please Note that this permit will not be valid if final heated square footage exceeds 2499 sq. ft., and/or 3 bedrooms.

AEROBIC TREATMENT SYSTEM DESCRIPTION:

This residence will utilize a Nuwater Aerobic Treatment Plant, Model B-550-PC-400P. A 353-gallon pretreatment/trash tank will precede the 600-gallon per day aerobic treatment tank. Effluent from the aeration tank will flow through a liquid chlorinator (**Model NG 300V 200**) to a 768-gallon pump tank. The pump tank serves as a chlorine contact chamber and a storage tank prior to the treated/chlorinated effluent being discharged to sprinkler heads. The disposal area will consist of **2 - 25ft. 360°** radius patterns. The system is considered a "package system", and will be installed according to manufacturer's instructions.

VOID



S. Jetton
3-28-19

VOID**Design Specification:**

Size of Residence	<i>Primary Living Area</i>	1568 ft ²
Number of Bedrooms		3
Average Expected Flow		240 GPD
Application Rate	<i>0.064 Gal./ft²/Day</i>	0.064
Minimum Application Area	<i>(GPD)/(0.064 Gal./ft²/Day)</i>	3750.00 ft ²
Actual Application Area	<i>3.14(r²) x number of heads</i>	3925.00 ft ²

System Components:

Trash Tank	353 gallon one-compartment
Aeration Tank	600 gallon per day
Pump Tank	768 gallon

Pump Tank:

Pump Tank gallons per inch: 14.49"

Operating Capacity: 14.49" x 17" = 246.33

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Reserve Capacity: 53" usable depth (53 x 14.49 = 768.00) 768.00 – 449.19 = 318.8 reserve gallons.

<i>Pump off</i>	13" Above tank floor	188.37 Gallons
<i>Pump on</i>	14" Above tank floor	202.86 Gallons
<i>Alarm on</i>	31" Above tank floor	449.19 Gallons

Combined capacity of pretreatment and aeration tank is 953-gallons. A 768-gallon, single-compartment pump tank allows for a one-third days flow above the alarm-on level.

Pump and Sprinkler Head Requirements:

Pump: Franklin C1 Series Pump, Model 20C1-05P4-2W115 ½ H.P.

Sprinkler Head: Hunter I20-3RV-2.0LA (equipped with anti-siphon nozzles and purple top).

Nozzle #: **3.0 LA** (Low angle trajectory, 11 degrees), operating at 25 psi, 25ft. radius and 2.5 GPM flow per sprinkler.

Dosing:

Application Flow Rate 2.5 gpm/head x 2 heads = **5.0**

Application Time: 2 doses @ 120 gal/dose / 5.0 gpm = ~ **24 min/dose**

VOID

2 JFD
3-4-19

Head Requirements:

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Elevation head: 3 (assumed elevation at top of pump 1185 and highest spray head at 1188)

Pressure head: 25 psi x 2.31 ft/psi = 57.75 ft

Friction head: 1" Sch. 40 PVC @ 5.0 gpm = 2.13 ft. (80 x 2.13/100 x 1.2) = 2.04

TDH = 3 ft. + 57.75 ft. + 2.04 ft = 61.79 (within pump curve).

A commercial timer must be set to provide two doses a day, one at 1 a.m. and the other at 4 a.m. An unthreaded sampling valve must also be provided. Under the Texas Administrative Code, §285 On-Site Sewage Facilities, this system must be installed with a night timer, set to spray between the hours of 1 am and 5 am.

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Alarm System:

An audio/visual high water alarm will be installed on this system. NuWater control panel (SPI-BIO Model 50B138-AAV-PT) with Timed Control with 24hr timer (Grasslin FM/1 Pin Timer) or equal. The alarm/light will be installed in a visible location close to the pump tank.

VOID

Optional Components:

- 40 PSI Pressure Regulator will be used to maintain the 40 PSI to the sprinkler heads. The installer will consult me or G.P. Equipment when purchasing this device. The pressure reducer will be placed in-line between the pump and the spray heads. Additionally this particular spray head is adjustable to help achieve the required radius.
- Pressure Gauge of not less than 45PSI will be installed to regulate flow to the spray field.

Installation Notes:

- Refer to site plan for component placement and follow manufacturer's instructions for installation of treatment plant and aerator.
- All materials and construction methods are required to conform to the standards for Private Sewage Facility's set forth in the Texas Administrative Code, §285 On-Site Sewage Facilities.
- The installer must have a current and valid Texas installer certificate, and is required to have at the minimum an Installer II certification.
- The installer must notify designer and regulatory authority at least 48 hours in advance to schedule required inspections to ensure that the system is installed in accordance with the approved plans and specifications.
- The installer may not alter these plans without the approval of the designer.
- Diversion berms will be place when needed to protect irrigation area from excessive runoff.
- All electrical installation must be in compliance with applicable electric codes.
- All outside electrical components must be placed in electrical conduit.
- It is the responsibility of the installer to maintain the minimum setback requirements as stated in §285 for On-Site Sewage Facilities.

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Tank Notes:

- The bottom of the excavation for the tanks shall be level and free of large rocks and debris.



- All tanks are to be set level on a layer, with a minimum thickness of 4 inches, of sand, sandy loam, clay loam, or pea gravel.
- Tank excavations must be backfilled with pea gravel that is free of rock larger than 1/2 inch in diameter. Class IV soils and gravel larger than 1/2 inch in diameter are not acceptable for use as backfill material. If the top of a septic tank extends above the ground surface, soil may be mounded over the tank to maintain slope to the drain field.
- Risers are required over all tank openings and must extend to the ground surface.
- Risers shall be permanently fastened to the tank lid.
- The riser lid shall screw down and have a lock or weigh 65lbs.
- A secondary plug, cap, netting, etc. shall be provided below the riser lid.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, or to prevent the infiltration of water.
- Tanks must be filled with water for 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8" per foot from house to tank.
- PVC pipe from house to tank must be at least Sch.40 or SDR 26.

VOID

Irrigation & Landscaping Notes:

- Irrigation lines shall be 1" Sch.40 PVC. Sleeve any pipe that crosses under any roads or driveways with Sch.40 PVC.
- Purple Pipe must be used for all irrigation lines.
- Supply lines must be buried at least 6" below finished grade.
- If irrigation area does not have established vegetation, a mixture of winter rye and Bermuda grasses will be seeded to establish seasonal vegetation.
- The installer shall notify property owner prior to removal of any trees that may obstruct the operation of the irrigation system.
- *All exposed surface rock must be covered with at least 4" of suitable soil*
- *Vegetation must be established before system is in use.*

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Additional Notes:

- Install audio-visual alarm for aerator and pump on separate breakers.
- The high water and air compressor alarms shall be audio/visual and mounted in a place that can be easily seen and heard when the alarms are activated.
- A hose bib must be installed in pump tank at tank inspection port.
- The chlorinator must be constructed to allow a chlorine residual of 1.0 mg/l in the pump tank for the period of time between scheduled inspections.
- The disinfected effluent must obey the standards as stated in §285, TCEQ, On-Site Sewage Facilities. Approved disinfections methods using chlorinated tablets, must use calcium hypochlorite that is properly labeled for wastewater disinfections.

Maintenance Requirements:

- The applicant must furnish to the regulatory authority a valid maintenance contract with a certified maintenance company before a permit will be issued.
- The maintenance company will verify that the system is operating properly and that they provide on-going maintenance of the installation.
- The initial contract will be a minimum of one year.

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S. Jetton
3-4-19



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- A maintenance contract will authorize a maintenance company to maintain and repair the system as needed.
- The owner must continuously maintain a signed written contract with a valid maintenance company and shall submit a copy of the contract to the permitting authority at least 30 days prior to the date service will cease.

Affidavit:

- The applicant must file a certified copy of an affidavit at the County clerk's office and filed in reference to the real property deed on which the surface application system is to be installed.
- The affidavit will state that the property shall not be transferred to a new owner without:
 - (1) The new owner being advised that the property contains a surface application system for wastewater disposal;
 - (2) The permit issued to the previous owner of the property being transferred to the new owner in accordance with §285 of the CEQ OSSF Rules, i.e.; the permit will be issued in the name of the owner of the OSSF. Permits shall be transferred to the new owner automatically upon legal sale of the OSSF. The transfer of an OSSF permit under this section shall occur upon actual transfer of the property on which the OSSF is located unless the ownership of the OSSF had been severed from the property.
 - (3) The new owners submitting a valid maintenance contract to the permitting authority.

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Operation and Management Notes:

- The OSSF should not be treated as a normal city sewer.
- Water conservation practices should be used at all times. Consult your local authorities for more information.
- Run the dishwasher with a full load whenever possible
- Avoid running water continuously when brushing teeth, washing hands, or cleaning food and utensils.
- Repair any water leaks immediately, such as running toilets or leaky faucets.
- The owner is responsible for cleaning and pumping the septic tank, typically every 2 to 3 years depending on system usage.
- Do not use the toilet to dispose of tissue, feminine hygiene products, trash, cigarettes, etc.
- It is recommended that you do not use the garbage disposal and/ or garbage grinders in the facility serviced by this system.
- Household chemicals should be used in moderation.
- According to §285, no water softener will be allowed to enter the OSSF.
- Chemical additives or the so-called enzymes should not be used during the operation of this system. Some of these additives may even be harmful to the facilities operation.
- Do not build driveways, storage buildings, decks, or other structures over the tank or disposal area.
- The OSSF must be protected from coming in contact with vehicular traffic.
- A strong vegetative cover is essential for the proper operation of this system. The property owner is solely responsible for maintaining this vegetation. The irrigation area should be groomed by mowing on a regular basis.
- If you notice a problem with the spray patterns, or any of the alarms are activated, contact your maintenance provider immediately.
- Never place a greater wastewater load on the system than that prescribed by the design of the system (240 gallons per day).

VOID

S. Jetton
3-4-19



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

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*S. Jetton
3-28-19*



216C Carmel Drive Blanco, Texas

Lot 147
Forest View North
Unit No. 2
Comal County, Texas

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- A - 3-Bedroom Single Family Residence (1568 sq. ft.).
- B - NuWater Model B-550 Aerobic Treatment Unit.
- C - Hunter 20 Ultra, 25' Radius, Sprinkler Head Nozzle 3.0 - 25 PSI

C/O - Two-Way Cleanout

Provide Two-Way Cleanout from House to Tank. 3" or 4" Sch. 40 between House and Tank. Must maintain a minimum of 1/8" per foot of fall between house and tank.

Supply Line: 1" Sch. 40 PVC Purple Pipe

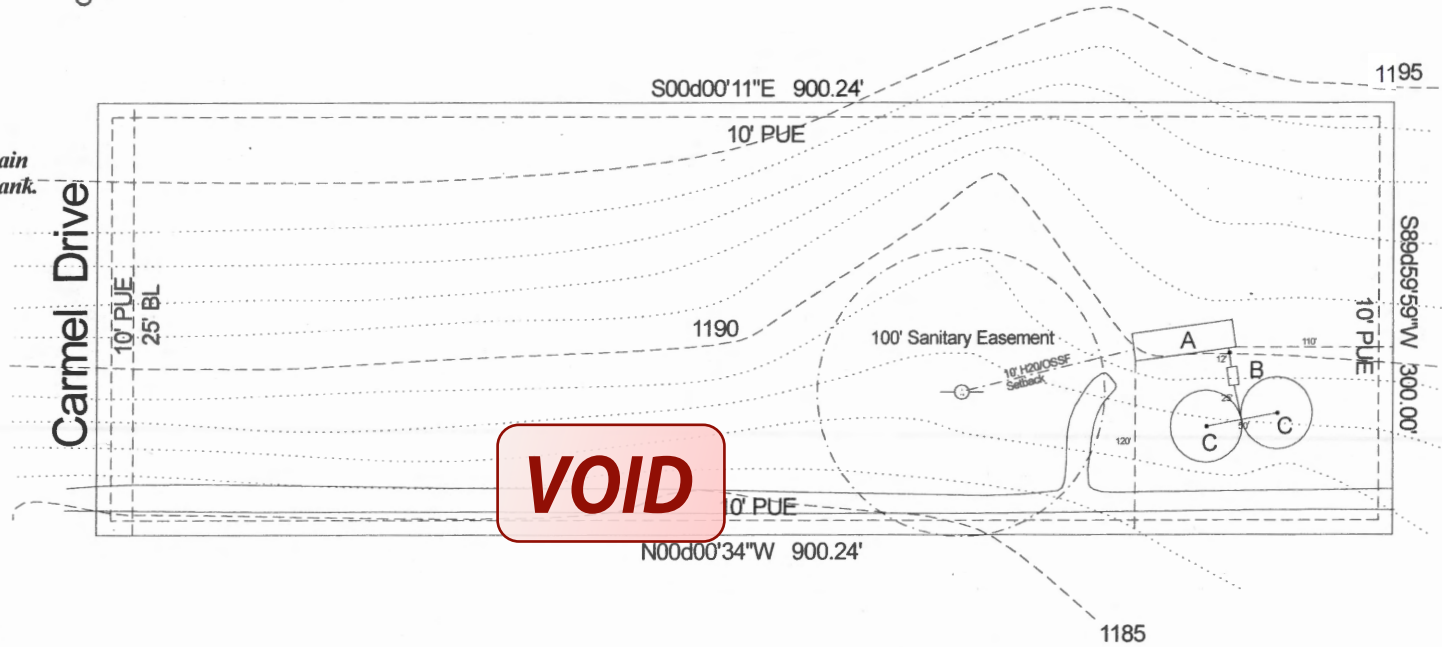
Maintain 10' from all Property Lines.
Maintain 10' from all Potable Water Lines.

*Refer to Tank Detail and Design Notes for more Information.

*Plans may vary Slightly based on Conditions Encountered in the Field.

*Trim Trees as Necessary in Application Area. Trees must maintain at least 10' from Sprinkler Head.

*All Separation and Setback Requirements as Stated in Chapter 285, TCEQ, On-Site Sewage Facilities, must be maintained.



VOID



Scale: 1" = 100'

*Flood Plain Note: This property is not within the Regulated Flood Plain. Panel 48209C0237F
Dated: 9/2/2005

VOID

*This is not intended to be used as an official survey. All structures and Contour locations are approximate.

Assembly Details

OSSF

VOID

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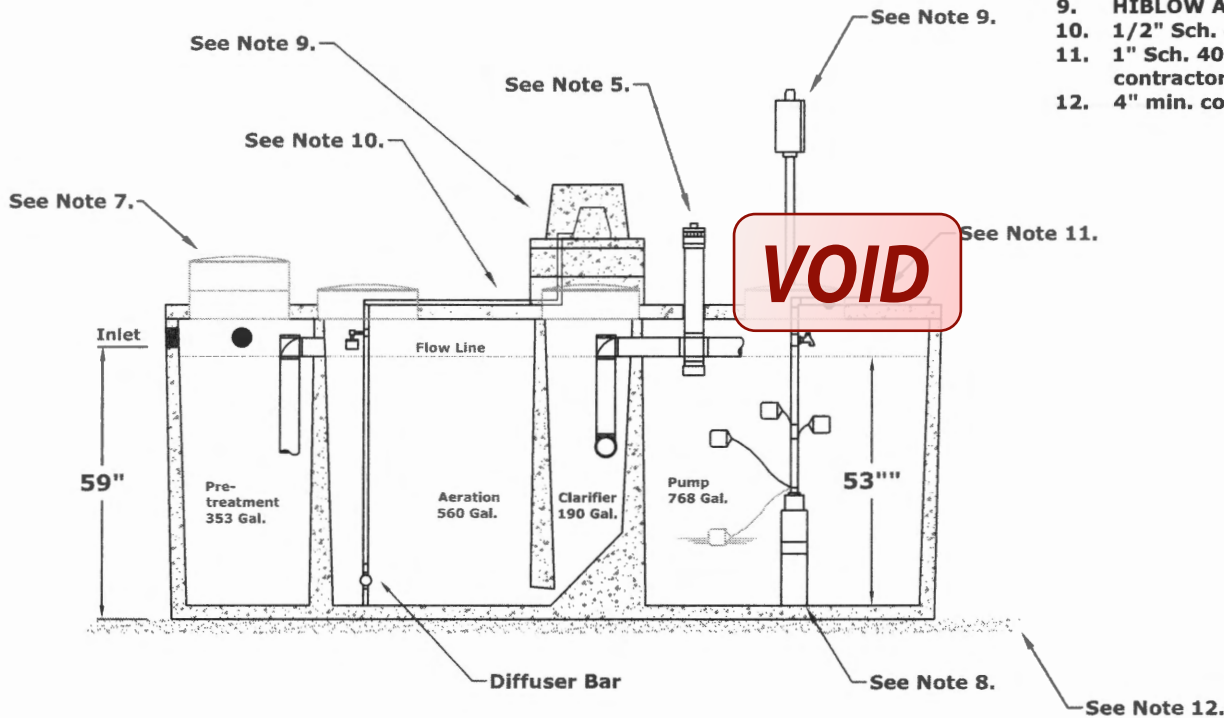
MAR 28 2019

COUNTY ENGINEER



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 = 14,900 lbs.
4. Treatment capacity is 600 GPD. Pump compartment set-up for a 360 GPD Flow Rate (4 bedroom, < 4,000 sq/ft living area). Please specify for additional set-up requirements. BOD Loading = 1.62 lbs. per day.
5. Standard tablet chlorinator or Optional Liquid chlorinator. NSF approved chlorinators (tablet & liquid) available.
6. Bio-Robix B-550 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



DIMENSIONS:

Outside Height: 67"
 Outside Width: 63"
 Outside Length: 164"

MINIMUM EXCAVATION DIMENSIONS:

Width: 76"
 Length: 176"

**NuWater B-550 (600 GPD)
 Aerobic Treatment Plant (Assembly)**

Model: B-550-PC-400PT

March, 2012 - Rev 1

By: A.S.

VOID

subject to allowable specification

Dwg. #: ADV-B550-3



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

Typical Pump Tank Cross Section

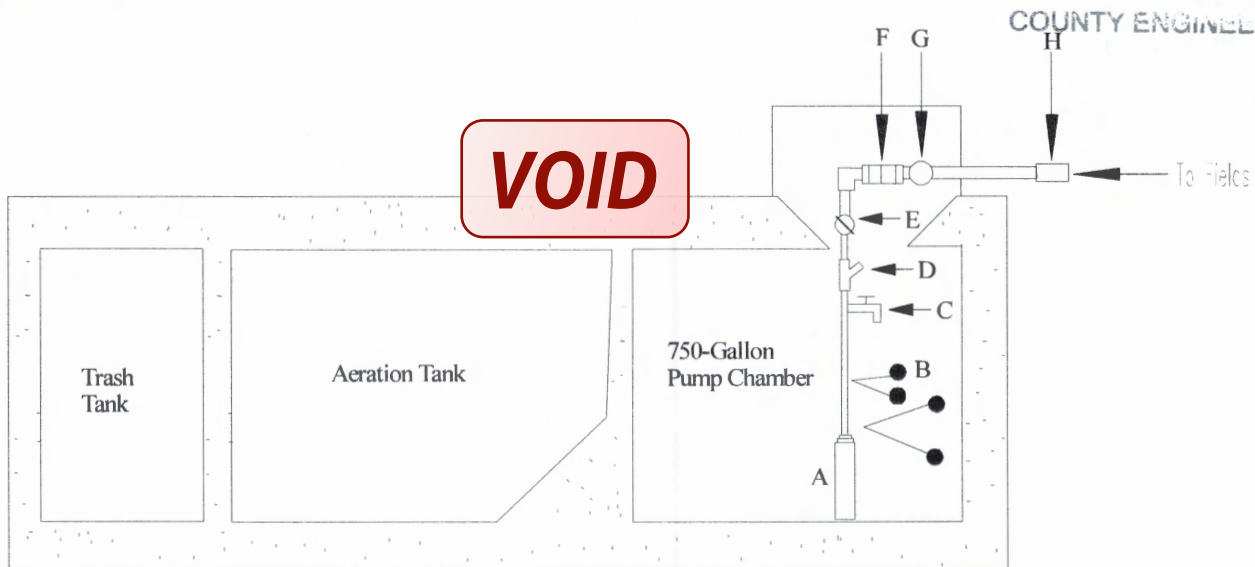
VOID

- A - Franklin C1 Series Pump Model 20C1-05PA-2W115 1/2 HP
- B - Wide Angle Mercury Float Switch
- C - Sampling Port
- D - 150 Mesh Filter (Part #12140032)
- E - Pressure Regulator
- F - Quick Disconnect Union
- G - 40 PSI Pressure Gauge
- H - Check Valve

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MAR 28 2019

COUNTY ENGINEER



NuWater B-550 (600 GPD) Aerobic Treatment Plant

VOID



Not to Scale

*S. Jett
3-4-19*

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MAR 28 2019

Capital Title
GF# 10-350103-BV

Warranty Deed with Vendor's Lien

COUNTY ENGINEER

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: May 24, 2018

Grantor: Kandee Jo Walker as successor Trustee of the The Fredricksen Family Trust and Kandee Jo Walker, as Independent Executrix of the Estate of Joseph R. Fredricksen, Deceased under Probate Cause No. 2016PCB0403, Comal County, Texas

Grantor's Mailing Address: 805 Secretariat Drive, Schertz, Texas 78108

Grantee: Lisa F. Barrett and husband, Jeffrey L. Barrett

Grantee's Mailing Address: 317 Chama Trace, Dripping Spring, Texas 78620

Consideration:

Cash and other good and valuable consideration along with a note of even date executed by Grantee and payable to the order of Lone Star Capital Bank, N.A. in the principal amount of \$60,000.00 (Sixty Thousand and 00/100 Dollars). The note is secured by a first and superior vendor's lien and superior title retained in this deed in favor of Lone Star Capital Bank, N.A. and by a first-lien deed of trust of even date from Grantee to Danny L Buck, trustee.

Property (including any improvements):

Lot 147, Forest View North Unit No. 2, an Addition in Comal County, Texas, according to the Map or Plat recorded in Volume 3, Page 72, Map and Plat Records of Comal County, Texas.

Reservations from Conveyance: None

Exceptions to Conveyance and Warranty:

This conveyance, however, is made and accepted subject to any and all restrictions, encumbrances, easements, covenants and conditions, if any, relating to the hereinabove described property as the same are filed for record in the County Clerk's Office of Comal County, Texas.

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

RECEIVED

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 ~~stated~~ ^{MAR 28 2019} the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

The vendor's lien against and superior title to the Property are retained until each note described is fully paid according to its terms, at which time this deed will become absolute. The Vendor's Lien and Superior Title herein retained are hereby transferred, assigned, sold and conveyed to Lone Star Capital Bank, N.A. the payee of such Note, and the successors and assigns of such payee. COUNTY ENGINEER

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

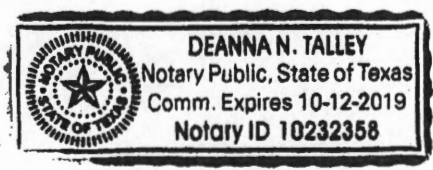
EXECUTED this 24 day of May, 2018.

Kandee Jo Walker as successor Trustee of the The Fredricksen Family Trust and Kandee Jo Walker, as Independent Executrix of the Estate of Joseph R. Fredricksen, Deceased under Probate Cause No. 2016PCB0403, Comal County, Texas

By: Kandee Jo Walker
Kandee Jo Walker, Independent Executor

THE STATE OF Texas §
COUNTY OF Comal §

The foregoing instrument was acknowledged before me on the 24 day of May, 2018 by Kandee Jo Walker as successor Trustee of the The Fredricksen Family Trust and Kandee Jo Walker, as Independent Executrix of the Estate of Joseph R. Fredricksen, Deceased under Probate Cause No. 2016PCB0403, Comal County, Texas.



[Signature]
NOTARY PUBLIC, STATE OF

AFTER RECORDING, RETURN TO:
317 Chama Trace
Dripping Springs, TX
78620

PREPARED IN THE LAW OFFICE OF
Shaddock & Associates, P. C.
2400 N. Dallas Parkway, Ste. 560
Plano, Texas 75093

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
05/29/2018 09:12:15 AM
LAURA 2 Pages(s)
201806020572



Bobbie Koepp

Block Creek Concrete Products, LLC
444 A Old Hwy No 9
Comfort, TX 78013

Phone: (830) 995-3189
Fax: (830) 995-4051

To: Jeff & Lisa Barrett
171 Barrett View
Blanco, TX 78606

Printed: 2/10/2020
Site: 171 Barrett View
Blanco, TX 78606
(512) 743-4677

Permit #: **108924**
Agency: Comal County
County: Blanco Sub:
Mfg / Brand: Advantage Wastewater LLC - Nu Water
Treatment Type: Aerobic With Chlorine System S/N: B35577
Disposal: Surface Application

Customer ID: 6780
Contract Dates: 10/16/2019 - 10/16/2021
Scheduled Date: 2/16/2020 Inspection 1 of 6
Installed: 5/15/2019
Warranty End: 5/15/2021
GPS Coordinates - Latitude: 30.01718 Longitude: -98.30508

Service Type: Scheduled Inspection

This counts as a type of "Scheduled Inspection"
Entered By: **Jose Luis Ramos**

Visit Date: **2/10/2020** Time In: 2:50pm Out: 3:05pm

Method: Grab

Technician: Jose Luis Ramos

Maint. Provider: Rudy Carson

Aerators: Operational
Filters: Operational
Irrigation Pumps: Operational
Disinfection Device: Operational
Chlorine Supply: Operational
Chlorine Residual: .45

Sludge Levels
For Tank 1: 4"
For Tank 2: 0"
For Tank 3: 0"

CFM: 2.6

Air Filter: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational
Distribution System: Operational
Sprayfield Veg: Operational

Color: Good
Odor: Good

Alarm: Operational

PSI Pressure: 3.2

Comments

Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Scum in pretreatment is trace. - Cleaned compressor filter. - Secured system in the on position with a lock bolt.

Insp ID #: 89653

Provider: **Rudy Carson**

Technician: **Jose Luis Ramos**

License #: MIP0002036

License #: MT0001770

Expires: 9/30/2022


Rudy Carson



Block Creek Concrete Products, LLC
444 A Old Hwy No 9
Comfort, TX 78013

Phone: (830) 995-3189

Fax: (830) 995-4051

To: Jeff & Lisa Barrett
171 Barrett View
Blanco, TX 78606

Printed: 10/1/2020
Site: 171 Barrett View
Blanco, TX 78606
(512) 743-4677

Permit #: **108924**

Customer ID: 6780

Agency: Comal County

Contract Dates: 10/16/2019 - 10/16/2021

County: Blanco

Sub:

Scheduled Date: 10/16/2020

Inspection 3 of 6

Mfg / Brand: Advantage Wastewater LLC - Nu Water

Installed: 5/15/2019

Treatment Type: Aerobic With Chlorine System S/N: B35577

Warranty End: 5/15/2021

Disposal: Surface Application

GPS Coordinates - Latitude: 30.01718 Longitude: -98.30508

Service Type: Scheduled Inspection

This counts as a type of "Scheduled Inspection"

Visit Date: 10/1/2020

Time In: 4:20pm

Out: 4:35pm

Entered By: Ronnie W Krampota

Method: Grab

Technician: Ronnie W Krampota

Maint. Provider: Rudy Carson

Aerators: Operational

Sludge Levels

Filters: Operational

For Tank 1: 5

Irrigation Pumps: Operational

For Tank 2: 8

Disinfection Device: Operational

For Tank 3: 0"

Chlorine Supply: Operational

Chlorine Residual: 0.43mg/L

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good

Odor: Good

Alarm: Operational

Comments

Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Secured system in the on position with a lock bolt - Checked sprinklers - Reset timer - Customer needs to add bleach its low - Scum in pretreatment is 3"

Insp ID #: 99389

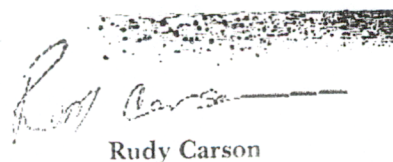
Provider: **Rudy Carson**

Technician: Ronnie W Krampota

License #: MP0002036

License #: MT0001175

Expires: 7/31/2023



Rudy Carson



Block Creek Concrete Products, LLC
444 A Old Hwy No 9
Comfort, TX 78013

Phone: (830) 995-3189
Fax: (830) 995-4051

To: Jeff & Lisa Barrett
171 Barrett View
Blanco, TX 78606

Printed: 6/30/2021
Site: 171 Barrett View
Blanco, TX 78606
(512) 743-4677

Permit #: 108924

Agency: Comal County
County: Blanco Sub:
Mfg / Brand: Advantage Wastewater LLC - Nu Water
Treatment Type: Aerobic With Chlorine System S/N: B35577
Disposal: Surface Application

Customer ID: 6780
Contract Dates: 10/16/2019 - 10/16/2021
Scheduled Date: 6/16/2021 Inspection 5 of 6
Installed: 5/15/2019
Warranty End: 5/15/2021
GPS Coordinates - Latitude: 30.01718 Longitude: -98.30508

Service Type: Scheduled Inspection

✓ This counts as a type of "Scheduled Inspection"

Visit Date: 6/30/2021

Time In: 3:20pm

Out: 3:35pm

Entered By: Ronnie W Krampota

Method: Grab

Technician: Ronnie W Krampota

Maint. Provider: Rudy Carson

Aerators: Operational

Filters: Operational

Irrigation Pumps: Operational

Disinfection Device: Operational

Chlorine Supply: Operational

Chlorine Residual: 0.30mg/L

Sludge Levels

For Tank 1: 11

For Tank 2: 18

For Tank 3: 0"

CFM: 2.8

Air Filter: Good

Tank Lid / Riser: Secured

Electric Circuits: Operational

Distribution System: Operational

Sprayfield Veg: Operational

Color: Good

Odor: Good

Alarm: Operational

PSI Pressure: 3.4

Comments

✓ Service Completed

- Technician Secured the Tank Lid and/or Riser prior to leaving location. - Secured system in the on position with a lock bolt -
Checked sprinklers - Reset timer - Scum in pretreatment is trace - Cleaned compressor filter - Customer needs to add bleach

Insp ID #: 110827

Provider: **Rudy Carson**

Technician: Ronnie W Krampota

License # MP0002036

License #: MT0001175

Expires: 7/31/2023

