

# Comal County

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

Issued This Date:	09/05/2019		Permit Number:	109501
Location Description:	1995 NIXON I BOERNE, TX			
	Subdivision: Unit: Lot: Block: Acreage:	Silver Hills 1 91		
Type of System:	Aerobic Surface Irrigation	on		
Issued to:	Russell & Debo	orah Coates		

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

OS0032485

ENVIRONMENTAL HEALTH COORDINA COR 25599

EVVIRONMENTAL HEALTH INSPECTOR

			pection Sheet	
Ist Inspection Date: 08- Inspector Name: Mike 1	Blake	2019 2nd Inspection Date Inspector Name:		Data: 9-5-19 final ame: Connor
Permit#: 109501	£		Address: 1995 Nixon Dr.	Silver Hills
Description STE AND SOIL CONDITIONS & SETBACK DISTANCES Site and Soil Conditions Consistent with Bubmitted Planning Materials		Citations           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)(iii)           285.30(b)(1)(A)(iii)           285.30(b)(1)(A)(iii)           285.30(b)(1)(A)(iii)	Notes	Set Insp. 2nd Insp. 3rd I
ITE AND SOIL CONDITIONS & ETBACK DISTANCES Setback Distances Weet Minimum Standards	1	285.91(10) 285.30(b)(4) 285.31(d)		
EWER PIPE Proper Type Pipe from Structure to Disposal System Cast Iron, Ductile Iron, Sch. 40, 5DR 26)	/	285.32(a)(1)		
EWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	1	285.32(a)(3)		
SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	/	285.32(a)(5)		
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)(C)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii)(ii) 285.32(b)(1)(E)(ii)(ii) 285.32(b)(1)(E)(ii)(ii) 285.32(b)(1)(E)(ii)(ii)		
PRETREATMENT Grease Interceptors if required for commercial		285.34(d)	-19 J.C. vered	

Acady For Couch

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Comal County Environmental Health OSSF Inspection Sheet						final	
Na	Description	Amuser	Citations	Notes	1st insp.	2nd Insp.	3 3 thisp.
40	APPLICATION AREA Distribution Pipe, Pitting, Sprinkler Heads & Valve Covers Color Coded Purple?	1	285.33(d)(2)(G)(iii)(II)285.3 3(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)(1) 285.33(d)(2)(G)(iii)(1)		8/23/19		
41	APPLICATION AREA Low Angle Nozzles Used / Pressure Is as required APPLICATION AREA Acceptable Area, oothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed	01	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)				~
41	APPLICATION AREA Area Installed	1					V
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						

	(		nvironmental Health pection Sheet		
Installer Name: JIM 1st Inspection Date: 08-	Blake	OI9 2nd Inspection Dat	OSSF Installer #: 05 00 185 e:3rd Inspec	tion Date:	· · · · · · · · · · · · · · · · · · ·
Inspector Name: <u>Mike</u> Permit#: 109501		Inspector Name:	Address: 1995 Nixon Dr.	ctor Name:Silver H	1:16
Permit#: 104501	Anwser	Citations	Notes	1st insp. 2nd in	
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)(ii)		8/23/19	
SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards	/	285.91(10) 285.30(b)(4) 285.31(d)			
SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)	/	285.32(a)(1)			
SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	1	285.32(a)(3)			
SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	/	285.32(a)(5)			
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)(F) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(C)(ii) 285.32(b)(1)(E) 285.32(b)(1)(E) 285.32(b)(1)(E)(ii) 285.32(b)(1)(E)(ii) 285.32(b)(1)(E)(ii)(I)			
PRETREATMENT Grease Interceptors if required for commercial		285.34(d)			

MT. 8/23/19 Tamk Set, Leveled Openational Ready For Cover

o. Description	Anwser	Citations	Notes	1st insp.	2nd Insp.	3rd Insp.
SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If SingleTank, 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)(II) 285.32(b)(1)(E)(i) 285.32(b)(1)(E)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(C)(i) 285.32(b)(1)(A) 285.32(b)(1)(E)(iv)				
ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used		285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
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)				
SEPTIC TANK Tank Volume Installed						
PUMP TANK Volume Installed						_
AEROBIC TREATMENT UNIT Size Installed	1		600	\$/23/19		
AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number	1		Nu Water	1		
DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
7 DISPOSAL SYSTEM Evapo- transpirative		285.33(a)(4) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

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

No.	Description	Anwser	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
	EFFLUENT DISPOSAL SYSTEM Utilized Only by Single Family Dwelling EFFLUENT DISPOSAL SYSTEM Topographic Slopes < 2.0% EFFLUENT DISPOSAL SYSTEM Adequate Length of Drain Field (1000 Linear ft. for 2 bedrooms or Less & an additional 400 ft. for each additional bedroom ) EFFLUENT DISPOSAL SYSTEM Lateral Depth of 18 inches to 3 ft. & Vertical Separation of 1ft on bottom and 2 ft. to restrictive horizon and ground water respectfully EFFLUENT DISPOSAL SYSTEM Lateral Drain Pipe (1.25 - 1.5" dia.) & Pipe Holes (3/16 - 1/4" dia. Hole Size ) 5 ft. Apart		285.33(b)(3)(A) 285.33(b)(3)(A) 285.33(b)(3)(B) 285.91(13) 285.33(b)(3)(D) 285.33(b)(3)(F)				
	AEROBIC TREATMENT UNIT Is Aerobic Unit Installed According to Approved Guidelines.	/	285.32(c)(1)		8/23/19		
	AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions	~					
	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.	/					
	PUMP TANK Is the Pump Tank an approved concrete tank or other acceptable materials & construction PUMP TANK Sampling Port Provided in the Treated Effluent Line PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump						
	PUMP TANK Inspection/Clean Out Port & Risers Provided PUMP TANK Secondary restraint system provided PUMP TANK Riser permanently fastened to lid or cast into tank PUMP TANK Riser cap protected against unauthorized intrusions		•				
37							
38	PUMP TANK Secondary restraint system provided						
	PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried						

No.	Description	Anwser	Citations	Notec	1st incp.	2rid Insp	3rd Incp.
	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?	/	285.33(d)(2)(G)(iii)(II)285.3 3(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)		8/23/19		
10	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	1	285.33(d)(2)(G)(i) 285.33(d)(2)(A) 285.33(d)(2)(F)				
z	APPLICATION AREA Area installed						
13	PUMP TANK Meets Minimum Reserve Capacity Requirements						
14	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						



# 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:	109501
Issued This Date:	08/09/2019
This permit is hereby given to:	Russell & Deborah Coates

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

1995 NIXON DR BOERNE, TX 78006

Subdivision: Silver Hills Unit: 1 Lot: 91 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 County requirements.

Call (830) 608-2090 to schedule inspections.

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

Data July 20. 20			
Date July 29, 20	J19		Permit # <u>10950</u>
Owner Name	Russell & Deborah Coates	Agent Name	JB Wastewater Maintenance Providers, Inc
Mailing Address	s 1995 Nixon Drive	Agent Address	P.O. Box 1350
City, State, Zip	Boerne, Texas 78006	City, State, Zip	Helotes. TX 78023
Phone #	210-268-9719 / 469-855-6983	Phone #	210-216-4111
Email	office@jbwastewater.com	Email	office@ibwastewater.com
All corresponde	nce should be sent to: 🗌 Owner 🛛 Agent	Both	Method: 🗌 Mail 🔀 Email
Subdivision Na	me Silver Hills	Unit <u>1</u>	Lot 91 Block
Acreage/Legal	0.9229 Acres		
Street Name/Ad	ddress 1995 Nixon Drive	City Boerne	Zip <u>78006</u>
Type of Develo	ppment:		
Single Fami	ly Residential		eplacing a failing conventional OSSF with n Aerobic OSSF with surface spray.
Type of C	Construction (House, Mobile, RV, Etc.) Existir		
Number	of Bedrooms 3		
Indicate	Sq Ft of Living Area 2,179		RECEIVED
			JUL <b>31 2019</b>
	or Institutional Facility	the required land need	ded for treatment units and disposal area)
	terials must show adequate land area for doubling		COUNTYENGINEER
Type of F		dianta Number Of O	RECEIVED
	Factories, Churches, Schools, Parks, Etc In ints, Lounges, Theaters - Indicate Number of	Casta	
			AUG 01 2019
	otel, Hospital, Nursing Home - Indicate Numb		CNOINEER
	railer/RV Parks - Indicate Number of Spaces		COUNTY ENGINEER
Miscellar	t of Construction: \$ (Stru	cture Only)	
Is any portion of	of the proposed OSSF located in the United S	tates Army Corps of	Engineers (USACE) flowage easement?
🗌 Yes 🛛 N			
(If yes, owner mi	ust provide approval from USACE for proposed OS	SF improvements with	hin the USACE flowage easement)
Source of Wate	er 🛛 Public 🔲 Private Well		
Are Water Sav	ing Devices Being Utilized Within the Resider	ice? 🛛 Yes 🗌 N	10
any material fact property for the construct will no	s. Authorization is hereby given to the permitting purpose of site/soil evaluation and inspection of problem issued until the Floodplain Administrator has p	authority and designat vate sewage facilities. erformed the reviews	I also understand that a permit of authorization to required by the Comal County Flood Damage
Prevention Orde	A attac	7.31.	19
Signature of Ow	ner	Date	Page 1 of 2
			Revised January 201

# **\*\*\* 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 R. Thomas Crav	
System Description Aerobic Treatment with Surface Sprav	
Size of Septic System Required Based on Planning Materials & Soil Evaluation	
Tank Size(s) (Gallons) 353 / 600 / 768       Absorption/Application Area (Sq Ft) 3,772	
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	RECEIVED
(If yes, the planning materials must be completed by a Registered Sanitarian (R.S.) or Professional Engineer (P.E.))	AUG 01 2019
Is there an existing TCEQ approved WPAP for the property?  Yes No	INCINEER
(If yes, the R.S. or P.E. shall certify that the OSSF design complies with all provisions of the existing WPAP.)	OUNTY 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 Penot 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? Xes 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 Pern not be issued for the proposed OSSF until the CZP has been approved by the appropriate regional office.)	nit to Construct will
Is this property within an incorporated city?   Yes  No	
If yes, indicate the city:	
I certify that the information provided above is true and correct to the best of my knowledge.	

homan la Signature of Designer

<u>7-29-19</u> Deta

Page 2 of 2 Revised January 2016

195 David Jonas Dr., New Braunfels, Texas 78132-3760 (830) 608-2090 Fax (830) 608-2078

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.

I

The Texas Health & 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, <u>1995 Nixon Drive</u>, Lot 91, Silver Hills, Unit <u>No. 1, Comal County, Texas, according to the map or plat thereof, recorded in Volume 2, Page 34, Map</u> or Plat Records of Comal County, Texas.

Π

The property is owned by Russell S. Coates and Deborah A. Coates

This OSSF must be covered by a continuous maintenance contract for the first two years. After the initial twoyear 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  $3/5^{t}$  Day of AUG 01 2019 COUNTY ENGINEER Russell S. Coates Deborah A. Coates

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 3/S'DAY OF 1u .2019 Notary Public, State of Texas R THOMAS CRAY My Commission Expires August 15, 2019 Thomas Cray Notary/s Printed Name: My Commission Expires: 8-15-19

Filed and Recorded Official Public Records Bobbie Koepp, County Clerk Comal County SSICA Pagels 906026509 Bobbie Keepp

**REVISED** 8:44 am, Sep 09, 2019

## J. B. Wastewater Maintenance Providers, Inc. P.O. Box 1350 Helotes, TX 78023

To: Russell & Deborah Coates

1995 Nixon Drive Boerne, TX 78006

Date: 9/9/2019

www.jbwastewater.com

Phone: (210) 216-4111 Fax: (830) 426-5400 om service@jbwastewater.com

#### Permit #: 109501

**Contract Period** 

Start Date: 9/5/2019 End Date: 9/5/2021

Phone: Site:	Subdivision: Silver Hills 1995 Nixon Drive, Boerne, TX 78006				
County: Installer: Agency:	The second s	Installed: Warranty Ends:	9/5/2019 9/5/2021	J. B. Wastewater Mainte 3 visits per year - one ev 600 gallons per day Map Key: 414, E1	

#### JB Wastewater Maintenance Providers, Inc. Two-Year Initial Service Policy

J. B. Wastewater Maintenance Providers, Inc. to inspect and service your Aerobic Treatment Plant once every four months for a period of two years from the date that this on-site septic facility is first used at no additional charge to the home owner as required by State guidelines, dated June 13, 2001. For a new single family dwelling, this date is the date of sale by the builder. For an existing single family dwelling, this date is the date is the date the notice of approval is issued by the permitting authority.

Before this initial two-year service policy expires, the owner of this OSSF is required to have a new maintenance contract signed. A copy of the new contract shall be submitted to the permitting authority at least 30 days before the current contract expires. If the property owner or maintenance company desire to discontinue the maintenance contract, the maintenance company shall notify, in writing, the permitting authority at least 30 days prior to the date service will cease. If a maintenance company discontinues business, the property owner shall, within 30 days of the termination date, contract with another approved maintenance company and provide the permitting authority with a copy of the newly signed maintenance agreement.

#### **Testing and Reporting**

J.B. Wastewater Maintenance Providers, Inc. shall test and report on this system as required by rule on the following:

1. An Inspection/Service Call every 4 months, which includes inspections, adjustment, and servicing of the mechanical and electrical component parts as necessary to ensure proper function.

2. An effluent quality inspection every 4 months, consisting of a visual check for color, turbidity, scum overflow, and an examination for odors.

3. A sample shall be pulled from the aeration tank every 4 months to determine if there is an excess of solids in the treatment plant. If the test results determine a need for solids removal, the user will bear the cost and responsibility for doing so.

4. If any improper operation is observed which cannot be corrected at the time, the user shall be notified immediately in writing of the conditions and the estimated date of correction.

5. If required, a chlorine residual test will be taken at each visit. (BOD and TSS annually on commercial only.) If a grab test is required, the Owner will be responsible for the cost of the grab test.

The owner is responsible for keeping chlorine (Calcium Hypochlorite, properly labeled for wastewater dis- infection) in the chlorinator as well as the cost of the chlorine.

J.B. Wastewater Maintenance Providers, Inc. who has been certified by the manufacturer of your system, and will be responsible for fulfilling the requirements of this Maintenance Contract, as well as responding to any complaints and/or addressing any concerns by the owner of the system. Concerns and/or complaints will be addressed within 48 hours of the initial contact. Upon expiration of this service policy, our firm will offer a continuing service policy as mandated by State regulations.

**VIOLATIONS OF WARRANTY** including shutting off the electric current to the system for more than 24 hours, disconnecting the alarm system, restricting ventilation to the aerator, overloading the system above its rated capacity, or introducing excessive amounts of harmful matter into the system, or any other form of unusual abuse.

This Policy Does Not Include:

- 1. Pumping Sludge From Unit If Necessary
- 2. Cost Of Additional Service Calls
- 3. Labor Or Materials To Repair The System

The Maintenance Company and the Owner agree to abide by the service policy as stated above.

#### **MAINTENANCE COMPANY:**

(210) 216-4111

J.B. Wastewater Maintenance Providers, Inc. P.O. Box 1350 Helotes, Texas 78023 (210) 216-4111

#### **MANUFACTURER:**

(210) 216-4111Installation Company:J.B. Wastewater Maintenance Providers, Inc.P.O. Box 1350Helotes, Texas 78023

**Permitting Authority:** 

Jimmie W. Blake, Jr. - JB Wastewater Maintenance Providers, Inc.

Service Company Operator License Number: MP0001661

# J. B. Wastewater Maintenance Providers, Inc.

Jim (Wade) Blake, Jr. Class II OSSF Installer P.O. Box 1350 Helotes, Texas 78023

> Office (210) 216-4111 Fax (830) 426-5400

# SITE EVALUATION

# RECEIVED AUG **01** 2019

LOCA	ATION:		Drive, Silver Hills Comal County, Texa			COUNTY ENGINE
			Joinal County, Texe	<u>13</u>		· · · · · · · · · · · · · · · · · · ·
I.	USDA Con	unty Soils Surv	ey Classification:_	Brackett-Com	fort-Real Cor	nplex
п.	Soil Analy (Method and Log		Two soil boring	s located in the r	proposed disp	osal area
ш.			emely stony clay so			
IV.		re Classificatio	on: l Class IbSoil	Class IISoil (	Class III <u>X</u>	Soil Class IV
v.	Soil Struct	ture:	Blocky			
VI.		•	ote any dense clay Rock at approx.			
VII.	Topograp	hy:	3 - 4% slope			
VIII:	Flood Haz	zard: <u>On</u>	-Site Sewage Facili	ty is not located	in a flood pro	one area.
IX. O	verall Site S	Suitability: <u>Su</u>	itable for Aerobic T	reatment with S	urface Spray.	
X. Re	echarge Zon	e: No				
R.	Thomas	a Ceay	July 25,	2019		<u>S0031941</u>
-	Signature	2	Dat	e	R	egistration #



#### STATE MANDATED REGULATION CONCERNING AEROBIC SYSTEMS

NAME:Russell and Deborah CoatesLOCATION:1995 Nixon Drive, Boerne, TX 78006DATE:July 29, 2019

As part of the installation of this system, the Texas Commission On Environmental Quality requires the following:

- 1. The property owner and the aerobic system maintenance contractor shall enter into a 2 year (minimum) full service maintenance contract in which the company will provide periodic inspections for system compliance with effluent standards. This contract will authorize the maintenance company to operate, maintain, and repair the system as needed. The costs of this service will be paid by the system's owner and may be included with the installation of the system. (See the attached Service Policy.)
- 2. The property owner shall submit an affidavit to the County Clerk's Office to be added to the Real Property Deed on which the surface application system is installed. (See the attached <u>AFFIDAVIT TO THE PUBLIC</u>.)
- 3. The maintenance company shall inspect this system as directed in the Service Policy and shall keep accurate records of their findings. These records shall be submitted to the County at the end of the first 2-year service life of the system.

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Jim (Wade) Blake, Jr. Class II OSSF Installer P.O. Box 1350 Helotes, Texas 78023 J. B. Wastewater Maintenance Providers, Inc.

**REVISED** 8:13 am, Aug 23, 2019

> Office (210) 216-4111 Fax (830) 426-5400

# **ON-SITE SEWAGE FACILITY DESIGN**

Revision 2, August 23, 2019

- FOR: Deborah & Russell Coates 1995 Nixon Drive Boerne, TX 78006
- LOCATION: 1995 Nixon Drive Lot 91, Silver Hills, Unit No. 1 Boerne, TX 78006 Comal County

DEVELOPMENT: Existing <u>3</u> bedroom residence with <u>2,179</u> sq. ft. living area. Existing conventional OSSF is failing and will be pumped, collapsed, and filled with soil. Installing a new Aerobic OSSF with surface spray.

ESTIMATE OF WATER CONSUMPTION: <u>240</u> gallons per day.

SEWAGE FACILITY DESCRIPTION: Nu-Water Aerobic Treatment System with timer, chlorinator, sprinkler pump, and sprinkler heads covering a surface application area of 3,844 square feet. The timer is set for spray between midnight and 5:00 A.M.

CALCULATI					
Application A	rea				
Required =	Flow	=	240 Gals./Day	=	3,750 Sq. Ft.
	Soil Appl. Rate		.064 Gals./ Sq.Ft./Day		The second s
ACTUAL AP	PLICATION AREA TO	O BE	COVERED:		
(Radius of Spi	rinkler Head) X (Radiu	us of t	Sprinkler Head) X 3.14	=	Sq. Ft.
One full circle	=	3,216 Sq. Ft.			
One half circle	=	628 Sq. Ft.			
		3,844 Sq. Ft.			

ELECTRICAL WIRING – All wiring must be in complete compliance with 30 Texas Administrative Code 285.34(b)(4) and with the most recent National Electric Code. All electrical components should have an electrical disconnect within direct vision.

# AEROBIC TREATMENT SYSTEM COMPONENTS AND REQUIREMEN

1. Minimum 353 gallon **Pre-Treatment Tank**.

8:13 am, Aug 23, 2019

- 2. **Treatment Plant** 600 GPD TCEQ approved unit.
- 3. Liquid Chlorinator Only a 6% sodium hypochlorite (bleach) solution shall be used. It is the owner's responsibility to ensure that it is functioning properly and has sodium hypochlorite (bleach) IN IT AT ALL TIMES.
- 4. 768 gallon **Pump Tank** with a minimum <sup>1</sup>/<sub>2</sub> horsepower, 18 GPM well pump (Little Giant pump or approved equivalent.)
- 5. **Sprinkler heads** must be impact or gear driven rotary design with a maximum inlet pressure of 40 PSI. Only low angle (13 degree trajectory) nozzles shall be used. All sprinkler heads shall be self-draining type so as to prevent in-line freezing. The exact location of sprinkler heads shall be coordinated between the installer and the property owner so that spray patterns shall not be blocked by trees, etc; a minimum of 10 feet shall be required between any sprinkler head and the base of a tree.
- 6. <u>SURFACE APPLICATION AREA</u> -The area to be sprayed shall have enough topsoil in place to cover the force lines and to support the growth of vegetation. This vegetation shall consist of grasses, evergreen shrubs, bushes, trees or landscaped beds containing mixed flora. Sloped land is acceptable if properly landscaped and terraced to minimize run-off. Distribution pipes and sprinkler heads must provide uniform distribution of treated effluent. The application rate must be adjusted so as to not produce run-off.
- 7. **Affidavit** (signed and notarized) included with this design should be a permanent part of the real property deed. TCEQ requires that it give proper notification to future owners of the continuous maintenance and administrative requirements of this ATS system.

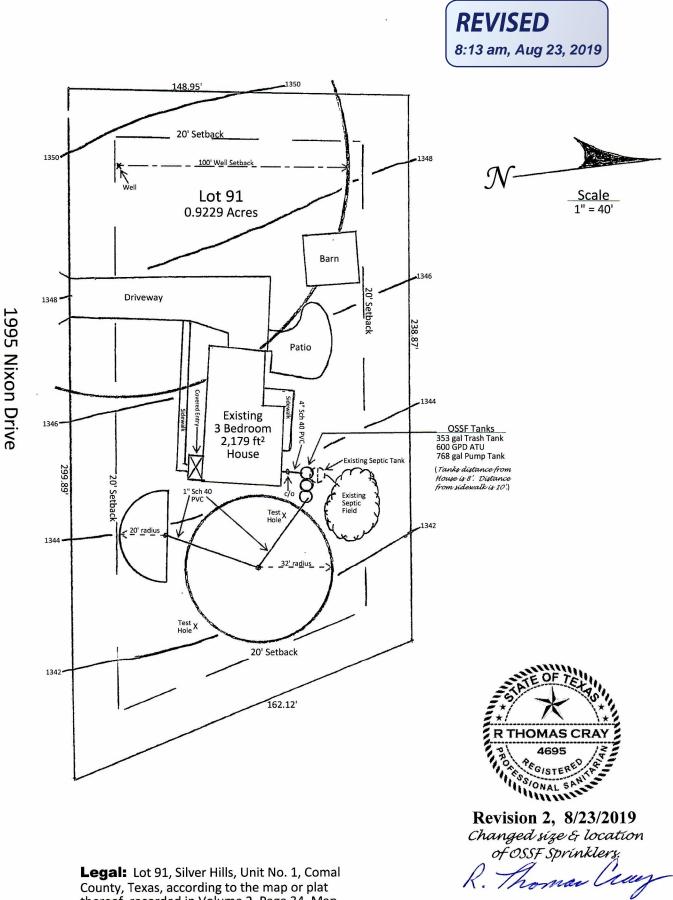
# 8. MAINTENANCE CONTRACT:

At the time of system installation, the contractor will submit to the authorized agent, (County Inspector) a copy of the 2-Year Full Service Maintenance Contract as required by the TCEQ. The Maintenance Company will file a detailed report of the dates and findings of these inspections to the Authorized Agent. This will ensure periodic inspections (at least every 4 months) for system compliance with effluent standards. Correct testing/evaluation of the unit will include periodic measuring of residual chlorine levels and/or fecal coliform analysis, as required by TCEQ. Sludge accumulation will be monitored and the system owner will be notified when tanks require pumping.

- **NOTE: SEE ATTACHMENT** for water treatment equipment and appliances installation requirements. The back flush or discharge from water treatment equipment may be discharged into an On-Site Sewage Facility as provided in this attachment. Effective April 28, 2004.
- **REMARKS:** The contractor may make minor field adjustments to the system with approval of the county regulatory agency. The referenced site has been evaluated and the on-site sewerage facility has been designed generally following the requirements given by the Texas Commission on Environmental Quality. The site evaluation and design are based upon technical information available today. The proper performance of any on-site sewerage facility cannot be guaranteed even though all provisions of the regulations have been met.
- CERTIFICATION: I hereby certify that this sewage facility design submitted conforms to the regulations for private sewage facilities, Comal County, Texas and with proper use, maintenance, and under normal climatic conditions can be expected to function without creating a nuisance.
   Date: August 23, 2019

R. Thomas Cray, Professional Sanitarian #4695





1

thereof, recorded in Volume 2, Page 34, Map and Plat Records of Comal County, Texas.

#### §285.37. ON-SITE SEWAGE FACILITIES AND WATER TREATMENT EQUIPMENT AND APPLIANCES.

(a) Water treatment equipment is defined as an appliance, which includes water softeners and reverse osmosis systems, used to:

(1) alter the mineral content of water;

(2) alter the microbiological content of water;

(3) alter other substances found in water; or

(4) purify water.

RECEIVED AUG 01 2019 COUNTY ENGINEER (b) Back flush or discharge from water treatment equipment installed on or after September 1, 2003, may be discharged into an on site sewage facility (OSSF) as provided in this subsection.

(1) Water softener.

(A) The water softener must regenerate using a demand-initiated regeneration (DIR) control device. The water softener must be clearly labeled as being equipped with a DIR control device as follows:

(i) the label shall be affixed to the outside of the water softener so the label can be easily inspected and read; and

(ii) the label shall provide the name of the company that installed the water softener.

(B) A water softener may be connected to an OSSF with a non-standard or proprietary treatment system only as described in §285.32(c) and (d) of this title (relating to Criteria for Sewage Treatment Systems) if the water softener drain line:

(i) bypasses the treatment system; and

(ii) connects directly to a pump tank if the OSSF has a pump tank or directly to the pipe between the treatment system and the disposal system if no pump tank exists.

(C) An owner may continue to use a water softener that discharges to an OSSF and does not meet the requirements of subparagraph (A) of this paragraph if the water softener was installed before September 1, 2003. An owner must replace any water softener installed before September 1, 2003, with a water softener that meets the requirements of subparagraphs (A) and (B) of this paragraph at such time as:

(i) an owner replaces the existing water softener; or

(ii) an owner or installer installs, alters, constructs, or repairs an OSSF for the structure or property served by the existing water softener.

(2) Reverse osmosis system.

(A) Point-of-use (under sink unit) reverse osmosis systems. The back flush from a point-of-use reverse osmosis system may be discharged into an OSSF without including calculations of the back flush water volume in the OSSF planning materials.

(B) Point-of-entry (whole house unit) reverse osmosis systems. The back flush from a point-of-entry reverse osmosis system may be discharged into an OSSF if:

(i) the owner can demonstrate that the point-of-entry reverse osmosis system does not cause hydraulic overloading of the OSSF; or

(ii) the water volume from the point-of-entry reverse osmosis system is accounted for (added to the usage rate in §285.91(3) of this title (relating to Tables)) by providing calculations of the increase in wastewater volume with the OSSF planning materials.

(3) Water treatment equipment other than water softeners and reverse osmosis systems. If an owner uses water treatment equipment other than water softeners or reverse osmosis systems, the back flush from the water treatment equipment may be discharged into an OSSF if the water volume is added to the OSSF usage rate in §285.91(3) of this title. This water volume calculation must be provided with the OSSF planning materials.

(c) Discharges from all water treatment equipment shall enter the OSSF system through an airgap or an airgap device as required in the Uniform Plumbing Code (2000).

Adopted April 7, 2004

Effective April 28, 2004

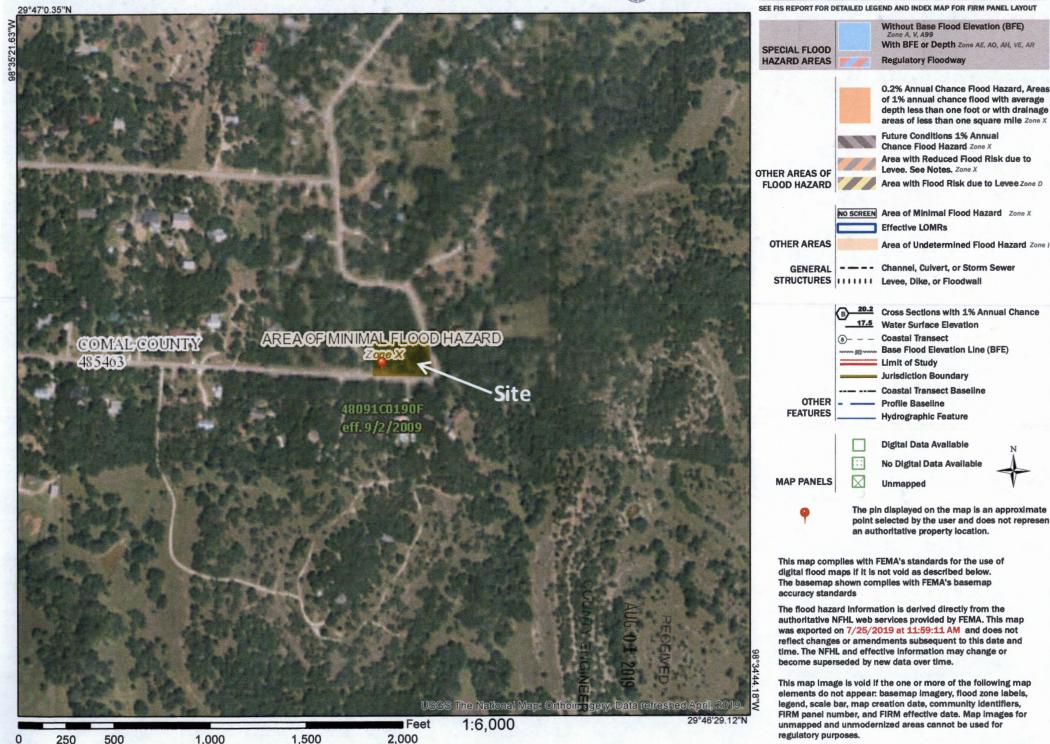
76 Revised March 2013

TCEQ publication RG-472 Chapter 285, On-Site Sewage Facilities

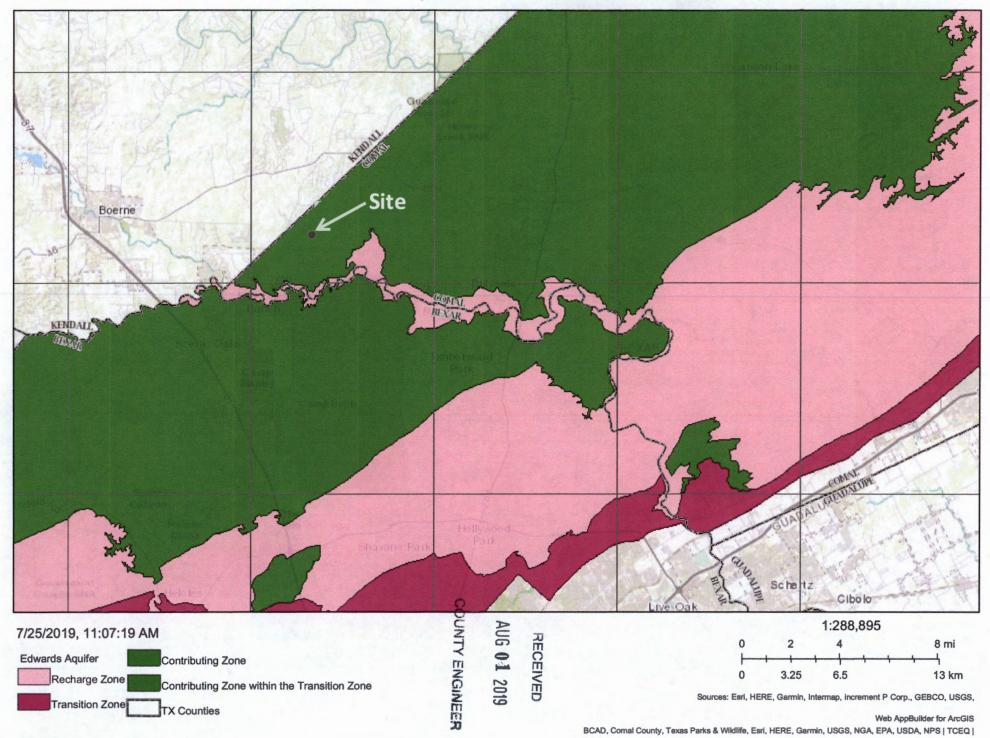
# National Flood Hazard Layer FIRMette



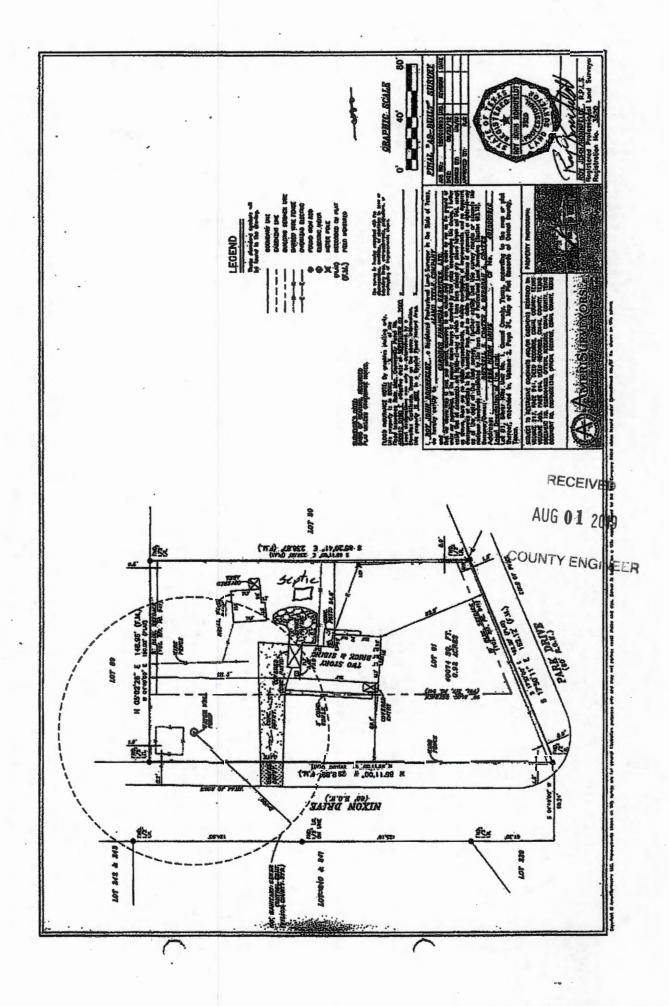
# Legend



# Edwards Aquifer Viewer Custom Print







# JB Wastewater Maintenance Providers, Inc.

P.O. Box 1350

6940 FM 471 N

Helotes, TX 78023

San Antonio, TX 78253

210-216-4111

RECE ED AUG 01 Mike Arismendez Helen Callier Chair Rick Figueroa Ravi Shah COUNTY ENGNEER Thomas F. Butler Vice Chair **Registered Professional Sanitarian** R. THOMAS CRAY JR. License Number: 4695 The person named above is licensed by the Texas Department of Licensing and Regulation. License Expires: January 31, 2020 Brian E. Francis **Executive Director** 

Greg W. Johnson, P.E. 170 Hollow Oak New Braunfels, Texas 78132 830/905-2778

March 28, 2013

Block Creek Concrete Products Attn: Burt Seidensticker 444 A Old #9 Comfort, TX 78013 RECEIVED AUG 01 2019 COUNTY ENGINEER

# **RE: BLOCK CREEK CONCRETE PRODUCTS**

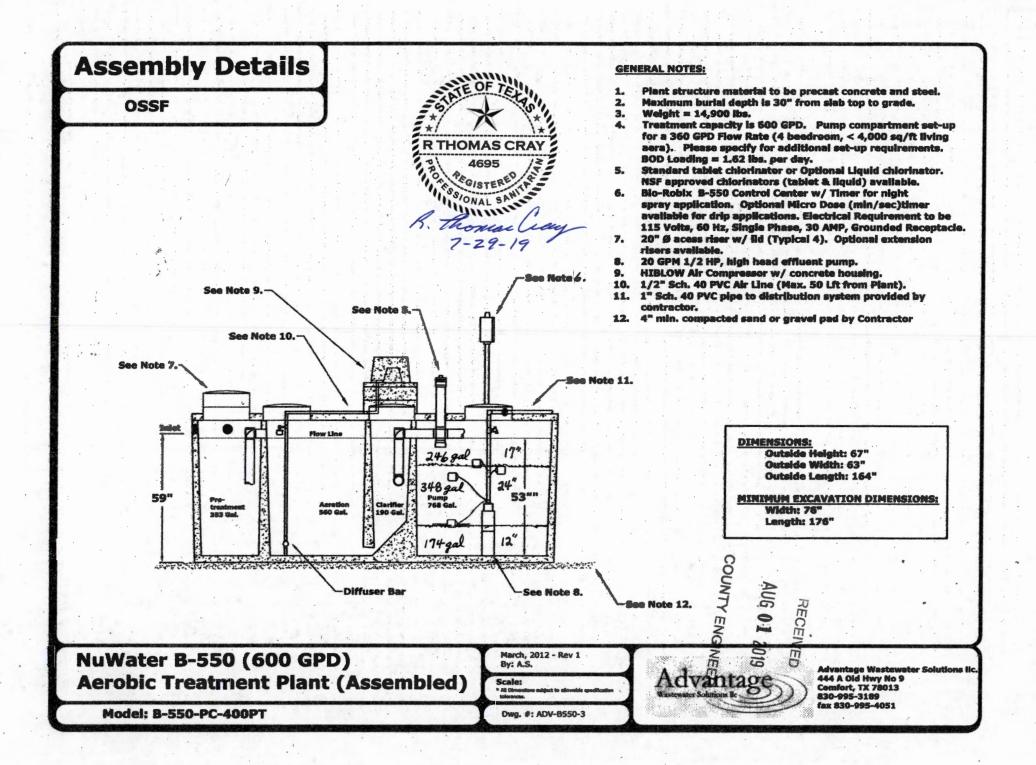
Attached is a schematic for septic tanks manufactured by BLOCK CREEK CONCRETE PRODUCTS. The tanks meet the specifications required by Texas State Code and ASTM Designation C 1227-93a Standard Specification for Precast Concrete septic tanks. Additionally, these tanks meet the specifications required in Chapter 285.32.

Please contact me should you have any questions.

Respectfully yours,

Johnson, P.E., F#2585 Greg V 3 20 2013

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# WE SERIES 1/2 HP

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# APPLICATIONS

- High head filter effluent Filtered effluent service Aeration
- Ornamental fountains
   Water fountains

# FEATURES

- Franklin Electric submersible motor
- Heavy duty, 300 V, 10' (3 m) SJOW motor stripped leads
- Removable built-in check valve
- Non-corrosive thermoplastic discharge and motor brackets
- Proven "PPO" staging allows close tolerances and increased performance
- High quality top bearing for maximum durability and years of reliable service
- Hex rubber bearing has extra-large surface for shaft stability and multiple flow channels for keeping particles away from bearing surfaces
- Stainless steel up thrust washer prevents excessive wear in service applications
- cCSAus listed

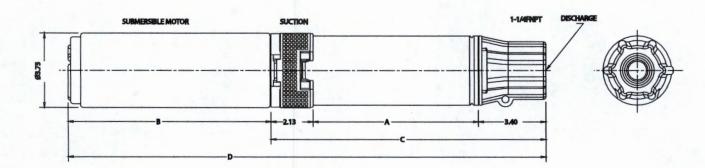
Performance (GPM @ Height in Feet) Amps Well Size Item No Model HP Volts Watts Wires FLA Start 50' 100' 150' 200' 250' WE10G05P4-21 64.4 2 4" 15 13 10 7 2 1/2 115 60 10 670 558221 558222 WE10G05P4-22 1/2 230 60 5 23.2 670 2 4" 15 13 10 7 2 -WE20G05P4-21 1/2 115 60 10 64.4 670 2 4" 26 20 8 \_ 558223 5 23.2 670 2 4" 26 20 8 -WE20G05P4-22 1/2 230 60 -558224 64.4 670 4" 32 14 558225 WE30G05P4-21 1/2 115 60 10 2 \_ -\_ 2 4" 14 \_ --5 23.2 670 32 WE30G05P4-22 1/2 230 60 558226

# SERIES SPECIFICATIONS



# WE SERIES 1/2 HP

# **ENGINEERING DATA**



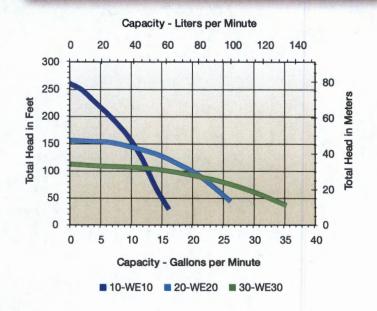
Model	A	В	C	D
2-Wire 10 gpm	7"	9.38"	12.53"	21.91"
	17.78 cm	23.83 cm	31.83 cm	55.65 cm
2-Wire 20 gpm	9"	9.38"	14.53"	23.91"
	22.86 cm	23.83 cm	36.91 cm	60.73 cm
2-Wire 30 gpm	6.5"	9.38"	12.03"	21.41"
	16.51 cm	23.83 cm	30.56 cm	54.38 cm

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# PERFORMANCE DATA



# CONSTRUCTION

Motor Housing	Stainless steel		
Impeller Material	Celcon		
Diffuser	Glass-filled PPO		
Power Cord	10' SJOW		
Check Valve	Celcon		
Fasteners	Stainless steel		
Shaft	Stainless steel		
Bearings	PEEK		
Discharge	Glass-filled polypropylene		

Spec Sheet 995119

# **ProPlus™ Gear Driven Sprinkler Setting Instructions**

NOTE: The *ProPlus* is factory preset with a 90° arc setting, and includes a pre-installed #2.5 nozzle.

## **CHANGING A NOZZLE**

#### **1** ► REMOVING THE NOZZLE RETENTION SCREW

Use your K-Key or a small flat blade screwdriver to remove the nozzle retention screw by turning counter-clockwise to remove and clockwise to re-install.

#### **2**▶ PULL UP THE RISER

Insert the k-Key in the keyhole on the top of the nozzle turret and turn the key 1/4 turn to insure that the key does not slip out of the keyhole when you pull it up. Firmly pull up the entire spring-loaded riser to access the nozzle socket. Hold the riser assembly with one hand.

#### **3**► REMOVING THE NOZZLE

With the nozzle retention screw removed, insert the K-Key into the slot directly under the nozzle "prongs" at the top of the mozzle. Now, turn the key 1/4 turn to "hook" the nozzle and pull the nozzle out.

#### **4**► INSTALLING A NOZZLE

Press the desired nozzle into the nozzle socket. Make sure the nozzle number is visible and the nozzle "prongs" are up. Then, re-install the nozzle retention screw. **NOTE:** The nozzle retention screw is also a break-up screw and used to adjust the distance of the spray.

## SETTING THE ARC ADJUSTMENT

#### **1** ► FINDING THE LEFT START POSITION

Place your finger on the top center of the nozzle turret. Rotate the turret to the right until it stops and then back to the left until it stops. Notice the position of the nozzle arrow. This is the "Left Start" position. The sprinkler will begin spraying from this position and rotate clockwise until it reaches the right Adjustable Stop-Return Point.

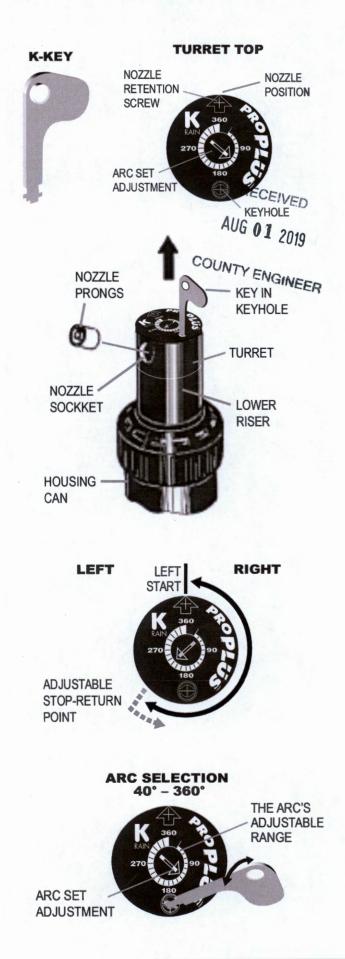
#### **2** ORIENTING THE LEFT START POSITION

Insert the K-Key in the keyhole on the top of the nozzle turret and turn the key ¼ turn to insure that the key does not slip out of the keyhole when you pull it up. Being careful not to allow the nozzle turret to turn, firmly pull up the entire spring-loaded riser. Hold the lower riser assembly up with one hand. Now turn only the lower riser clockwise or counter-clockwise until the nozzle arrow is pointing where you want the sprinkler to begin spraying.

#### **3** CHANGING THE ARC

Insert the K-Key or a small flat blade screwdriver into the Arc Set Adjustment slot. Turn clockwise to increase the arc or counter-clockwise to decrease the arc.

WHEN SET AT 360°, THE *PROPLUS* WILL ROTATE CONTINUOUSLY IN A CLOCKWISE DIRECTION.



# **ProPlus™ Gear Driven Sprinkler Setting Instructions**

#### SPRINKLER INSTALLATION

#### **1** ► INSTALL AND BURY

Do not use pipe dope. Thread the sprinkler on the pipe. Bury the sprinkler flush to grade. **NOTE:** Gear driven sprinklers and pop-up sprays should not be installed on the same watering zone.

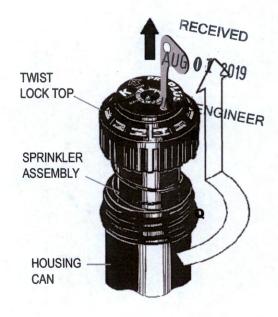
#### **2**► INSPECTING THE FILTER

Unscrew the top and lift the complete sprinkler assembly out of the housing can. The filter is located on the bottom of the sprinkler assembly and can be easily pulled out, cleaned and re-installed.

#### **3**► WINTERIZATION TIPS

When using an air compressor to remove water from the system please note the following:

- a. Do not exceed 30 PSI.
- b. Always introduce air into the system gradually to avoid air pressure surges. Sudden release of compressed air into the sprinkler can cause damage.
- c. Each zone should run no longer than 1 minute on air. Sprinklers turn 10 to 12 time faster on air than on water. Over spinning rotors on air can cause damage to the internal components.



#### PERFORMANCE DATA

NOZZLE	PRE	ESSU	RE	RAD	DIUS	FLOW RATE			PRECIP in/hr / mm/hr			
	PSI	kPa	Bars	Ft.	М.	GPM	L/M	M <sup>3</sup> /H				
#0.5	30	207	2.1	28	8.5	0.5	1.9	0.11	0.12	0.14	3	4
	40	276	2.8	29	8.8	0.6	2.3	0.14	0.14	0.16	3	4
	50	345	3.5	29	8.8	0.7	2.7	0.16	0.16	0.19	4	5
	60	414	4.1	30	9.1	0.8	3.0	0.18	0.17	0.20	4	5
#0.75	30	207	2.1	29	8.8	0.7	2.7	0.16	0.16	0.19	4	5
	40	275	2.8	30	9.1	0.8	3.0	0.18	0.17	0.20	4	5
	50	344	3.4	31	9.4	0.9	3.4	0.20	0.18	0.21	5	5
	60	413	4.1	32	9.8	1.0	3.8	0.23	0.19	0.22	5	6
#1.0	30	207	2.1	32	9.8	1.3	4.9	0.30	0.24	0.28	6	7
	40	275	2.8	33	10.1	1.5	5.7	0.34	0.27	0.31	7	8
	50	344	3.4	34	10.4	1.6	6.1	0.36	0.27	0.31	7	8
	60	413	4.1	35	10.7	1.8	6.8	0.41	0.28	0.33	7	8
#2.0	30	207	2.1	37	11.3	2.4	9.1	0.55	0.34	0.39	9	10
	40	275	2.8	40	12.2	2.5	9.5	0.57	0.30	0.35	8	9
	50	344	3.4	42	12.8	3.0	11.4	0.68	0.33	0.38	8	10
	60	413	4.1	43	13.1	3.3	11.4	0.68	0.34	0.36	8	9
2.5 Pre- installed	30 40 50 60	207 275 344 413	2.1 2.8 3.4 4.1	38 39 40 41	11.6 11.9 12.2 12.5	2.5 2.8 3.2 3.5	9.5 10.6 12.1 13.3	0.57 0.64 0.73 0.80	0.33 0.35 0.39 0.40	0.38 0.41 0.44 0.46	8 9 10 10	10 10 11 12
#3.0	30	207	2.1	38	11.6	3.6	13.6	0.82	0.48	0.55	12	14
	40	275	2.8	39	11.9	4.2	15.9	0.96	0.53	0.61	14	16
	50	344	3.4	41	12.5	4.6	17.4	1.05	0.53	0.61	13	15
	60	413	4.1	42	12,8	5.0	19.0	1.14	0.55	0.63	14	16
#4.0	30	207	2.1	43	13.1	4.4	16.7	1.00	0.46	0.53	12	13
	40	275	2.8	44	13.4	5.1	19.3	1.16	0.51	0.59	13	15
	50	344	3.4	46	14.0	5.6	21.2	1.27	0.51	0.59	13	15
	60	413	4.1	49	14.9	5.9	22.4	1.34	0.47	0.55	12	14
#6.0	40	276	2.8	45	13.7	5.9	22.4	1.34	0.56	0.65	14	16
	50	344	3.4	46	14.0	6.0	22.7	1.36	0.55	0.63	14	16
	60	413	4.1	48	14.6	6.3	23.9	1.43	0.53	0.61	13	15
	70	482	4.8	49	14.9	6.7	25.4	1.52	0.54	0.62	14	16
#8.0	40	276	2.8	42	12.8	8.0	30.3	1.82	0.87	1.01	22	26
	50	344	3.4	45	13.7	8.5	32.2	1.93	0.81	0.93	21	24
	60	413	4.1	49	14.9	9.5	36.0	2.16	0.76	0.88	19	22
	70	482	4.8	50	15.2	10.0	37.9	2.27	0.77	0.89	20	23

#### LOW ANGLE PERFORMANCE DATA

NOZZLE	PRESSURE			RADIUS		FLOW RATE		PRECIP in/hr / mm/hr				
	PSI	kPa	Bars	Ft.	М.	GPM	L/M	M <sup>3</sup> /H				
#1.0	30	207	2.1	22	6.7	1.2	4.5	.27	0.48	0.55	12	14
	40	276	2.8	24	7.3	1.7	6.4	.39	0.57	0.66	14	17
	50	345	3.4	26	7.9	1.8	6.8	.41	0.51	0.59	13	15
	60	414	4.1	28	8.5	2.0	7.6	.45	0.49	0.57	12	14
#3.0	30	207	2.1	29	8.8	3.0	11.4	.68	0.69	0.79	17	20
	40	276	2.8	32	9.8	3.1	11.7	.70	0.58	0.67	15	17
	50	345	3.4	35	10.7	3.5	13.2	.80	0.55	0.64	14	16
	60	414	4.1	37	11.3	3.8	14.4	.86	0.53	0.62	14	16
#4.0	30	207	2.1	31	9.4	3.4	12.9	.77	0.68	0.79	17	20
	40	276	2.8	34	10.4	3.9	14.8	.89	0.65	0.75	17	19
	50	345	3.4	37	11.3	4.4	16.7	1.00	0.62	0.71	16	18
	60	414	4.1	38	11.6	4.7	17.8	1.07	0.63	0.72	16	18
#6.0	40	275	2.8	38	11.6	6.5	24.6	1.48	0.87	1.00	22	25
	50	344	3.4	40	12.2	7.3	27.7	1.66	0.88	1.01	22	26
	60	413	4.1	42	12.8	8.0	30.3	1.82	0.87	1.01	22	26
	70	482	4.8	44	13.4	8.6	32.6	1.96	0.86	0.99	22	25

\*All precipitation rates calculated for 180° operation.

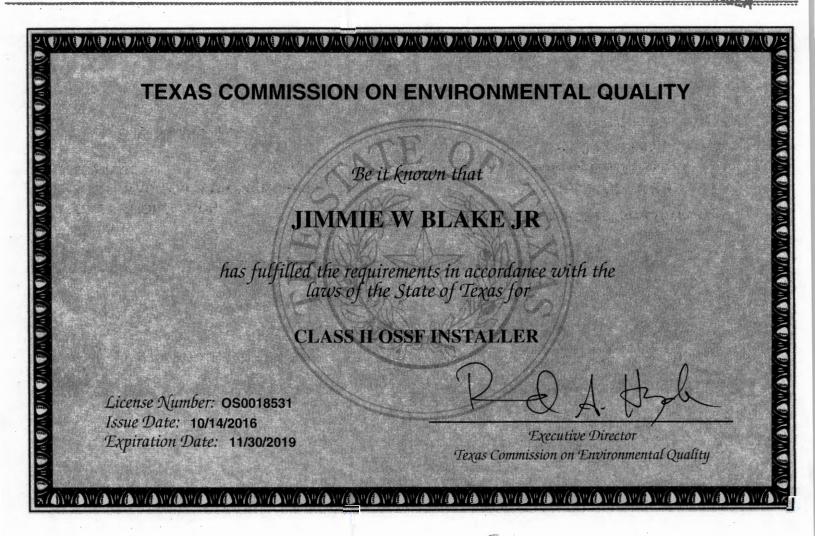
For the precipitation rate for a 360° sprinkler, divide by 2.

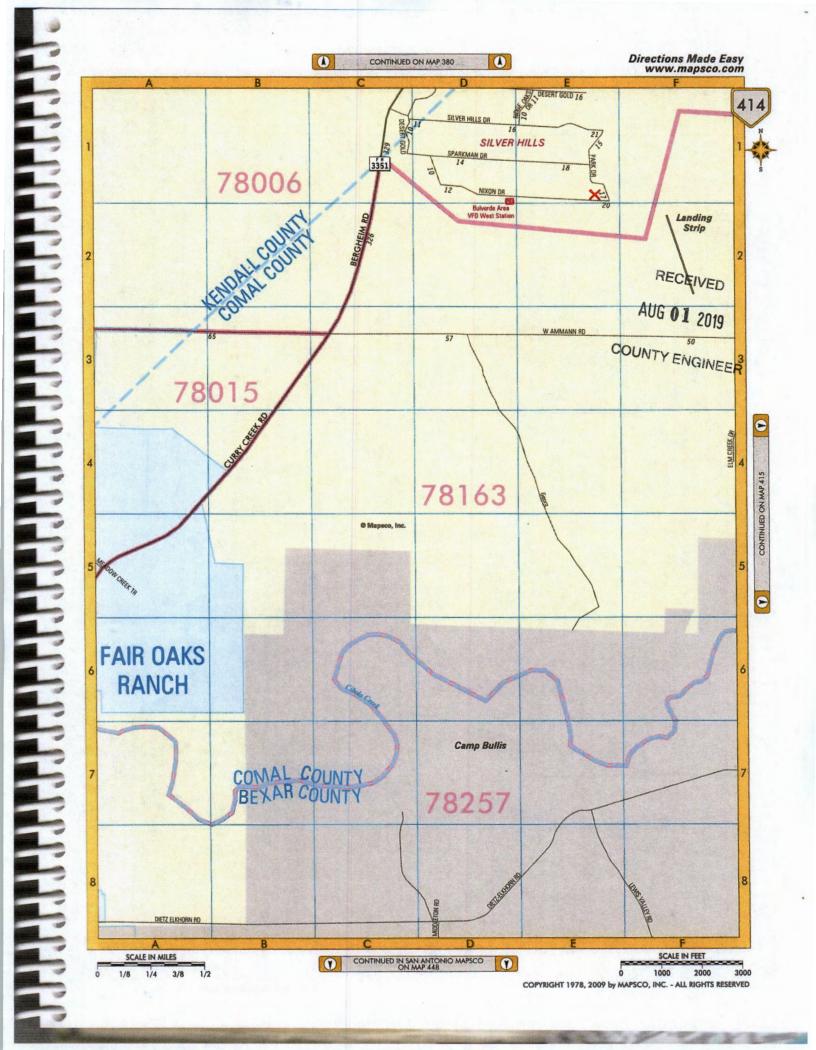


K-RAIN MANUFACTURING CORP. 1640 Australian Avenue Riviera Beach, FL 33404 USA PH: 561.844.1002 / 1.800.735.7246 FAX: 561.842.9493 www.krain.com

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## J. B. Wastewater Maintenance Providers, Inc. P.O. Box 1350 Helotes, TX 78023



Date: 7/30/2019

#### To: Russell & Deborah Coates 1995 Nixon Drive Boerne, TX 78006

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COUN Prove: (210) 216-4111 Fax: (836)-246-5400 www.jbwastewater.com service@jbwastewater.com

**Contract Period** 

Start Date: 8/15/2019 End Date: 8/15/2021

Phone: Subdivision: Silver Hills Site: 1995 Nixon Drive, Boerne, TX 78006	
County: Comal	J. B. Wastewater Maintenance Providers, Inc.
Installer: J. B. Wastewater Maintenance Provider Agency: Comal County Environmental	3 visits per year - one every 4 months 600 gallons per day
Mfg/Brand: Enviro-Flo, Inc. / Nu Water B-550	Map Key: ID: 18514

#### JB Wastewater Maintenance Providers, Inc. Two-Year Initial Service Policy

J. B. Wastewater Maintenance Providers, Inc. to inspect and service your Aerobic Treatment Plant once every four months for a period of two years from the date that this on-site septic facility is first used at no additional charge to the home owner as required by State guidelines, dated June 13, 2001. For a new single family dwelling, this date is the date of sale by the builder. For an existing single family dwelling, this date is the date the notice of approval is issued by the permitting authority.

Before this initial two-year service policy expires, the owner of this OSSF is required to have a new maintenance contract signed. A copy of the new contract shall be submitted to the permitting authority at least 30 days before the current contract expires. If the property owner or maintenance company desire to discontinue to discont

#### **Testing and Reporting**

J.B. Wastewater Maintenance Providers, Inc. shall test and report on this system as required by rule on the following: 1. An Inspection/Service Call every 4 months, which includes inspections, adjustment, and servicing of the mechanical and electrical component parts as necessary to ensure proper function.

2. An effluent quality inspection every 4 months, consisting of a visual check for color, turbidity, scum overflow, and an examination for odors.

3. A sample shall be pulled from the aeration tank every 4 months to determine if there is an excess of solids in the treatment plant. If the test results determine a need for solids removal, the user will bear the cost and responsibility for doing so.

4. If any improper operation is observed which cannot be corrected at the time, the user shall be notified immediately in writing of the conditions and the estimated date of correction.

5. If required, a chlorine residual test will be taken at each visit. (BOD and TSS annually on commercial only.) If a grab test is required, the Owner will be responsible for the cost of the grab test.

The owner is responsible for keeping chlorine (Calcium Hypochlorite, properly labeled for wastewater dis- infection) in the chlorinator as well as the cost of the chlorine.

J.B. Wastewater Maintenance Providers, Inc. who has been certified by the manufacturer of your system, and will be responsible for fulfilling the requirements of this Maintenance Contract, as well as responding to any complaints and/or addressing any concerns by the owner of the system. Concerns and/or complaints will be addressed within 48 hours of the initial contact. Upon expiration of this service policy, our firm will offer a continuing service policy as mandated by State regulations.

VIOLATIONS OF WARRANTY including shutting off the electric current to the system for more than 24 hours, disconnecting the alarm system, restricting ventilation to the aerator, overloading the system above its rated capacity, or introducing excessive amounts of harmful matter into the system, or any other form of unusual abuse.



This Policy Does Not Include:

- 1. Pumping Sludge From Unit If Necessary
- 2. Cost Of Additional Service Calls
- 3. Labor Or Materials To Repair The System

The Maintenance Company and the Owner agree to abide by the service policy as stated above.

**MAINTENANCE COMPANY:** 

**MANUFACTURER:** 

J.B. Wastewater Maintenance Providers, Inc. P.O. Box 1350 Helotes, Texas 78023 (210) 216-4111

**Installation Company:** J.B. Wastewater Maintenance Providers, Inc. P.O. Box 1350 Helotes, Texas 78023 (210) 216-4111

**Permitting Authority:** 

VOID e W. Blake, Jr. - JB Wastewater Maintenance Providers, Inc.

System Owner

RECEIVED AUG 01 2019

130

Service Company Operator License Number: MP0001661

B Wastewater Maintenance Providers, Inc.

Jim (Wade) Blake, Jr. Class II OSSF Installer P.O. Box 1350 Helotes, Texas 78023

Office (210) 216-4111 Fax (830) 426-5400

# **ON-SITE SEWAGE FACILITY DESIGN**

July 29, 2019

VOID

FOR: Russell & Deborah Coates 1995 Nixon Drive Boerne, TX 78006

LOCATION: 1995 Nixon Drive Lot 91, Silver Hills, Unit No. 1 Boerne, TX 78006 Comal Coupty RECEIVED AUG **01** 2019

COUNTY ENGINEER



DEVELOPMENT: Existing <u>Bedroom</u> sidence with <u>2,179</u> sq. ft. living area. Existing conventional OSSF is failing and will be pumped, collapsed, and filled with soil. Installing a new Aerobic OSSF with surface spray.

ESTIMATE OF WATER CONSUMPTION: <u>240</u> gallons per day.

SEWAGE FACILITY DESCRIPTION: Nu-Water Aerobic Treatment System with timer, chlorinator, sprinkler pump, and sprinkler heads covering a surface application area of 3,772 square feet. The timer is set for spray between midnight and 5:00 A.M.

CALCULAT Application					
Required =	Flow	=	240 Gals./Day	=	3,750 Sq. Ft.
	Soil Appl. Rate		.064 Gals./ Sq.Ft./Day		

ACTUAL APPLICATION AREA TO BE COVERED:		
(Radius of Sprinkler Head) X (Radius of Sprinkler Head) X 3.14	=	Sq. Ft.
One full circle sprinkler head, with a 25 foot radius	=	1,963 Sq. Ft.
One full circle sprinkler head, with a 24 foot radius	=	1,809 Sq. Ft.
Total		3,772 Sq. Ft.

ELECTRICAL WIRING – All wiring must be in complete compliance with 30 Texas Administrative Code 285.34(b)(4) and with the most recent National Electric Code. All electrical components should have an electrical disconnect within direct vision.

# OMPONENTS AND REQUIREMENTS: RECEIVED

## 1.

AEROBIC TREATM

- Minimum 353 gallon Pre-1 VOID Treatment Plant - 600 GPD TCEQ approved unit. 2.
- Liquid Chlorinator Only a 6% sodium hypochlorite (bleach) solution shall be used sty is the 3. owner's responsibility to ensure that it is functioning properly and has sodium hypochloriter (bleach) IN IT AT ALL TIMES.
- 768 gallon **Pump Tank** with a minimum <sup>1</sup>/<sub>2</sub> horsepower, 18 GPM well pump (Little Giant pump 4. or approved equivalent.)
- 5. Sprinkler heads must be impact or gear driven rotary design with a maximum inlet pressure of 40 PSI. Only low angle (13 degree trajectory) nozzles shall be used. All sprinkler heads shall be self-draining type so as to prevent in-line freezing. The exact location of sprinkler heads shall be coordinated between the installer and the property owner so that spray patterns shall not be blocked by trees, etc; a minimum of 10 feet shall be required between any sprinkler head and the base of a tree.
- 6. SURFACE APPLICATION AREA - The area to be sprayed shall have enough topsoil in place to cover the force lines and to support the growth of vegetation. This vegetation shall consist of grasses, evergreen shrubs, bushes, trees or landscaped beds containing mixed flora. Sloped land is acceptable if properly landscaped and terraced to minimize run-off. Distribution pipes and sprinkler heads must provide uniform distribution of treated effluent. The application rate must be adjusted so as to not produce run-off.
- Affidavit (signed and notarized) incl 7. property deed. TCEQ requires that maintenance and administrative require

this design should be a permanent part of the real VOID notification to future owners of the continuous ATS system.

#### 8. **MAINTENANCE CONTRACT:**

At the time of system installation, the contractor will submit to the authorized agent, (County Inspector) a copy of the 2-Year Full Service Maintenance Contract as required by the TCEO. The Maintenance Company will file a detailed report of the dates and findings of these inspections to the Authorized Agent. This will ensure periodic inspections (at least every 4 months) for system compliance with effluent standards. Correct testing/evaluation of the unit will include periodic measuring of residual chlorine levels and/or fecal coliform analysis, as required by TCEQ. Sludge accumulation will be monitored and the system owner will be notified when tanks require pumping.

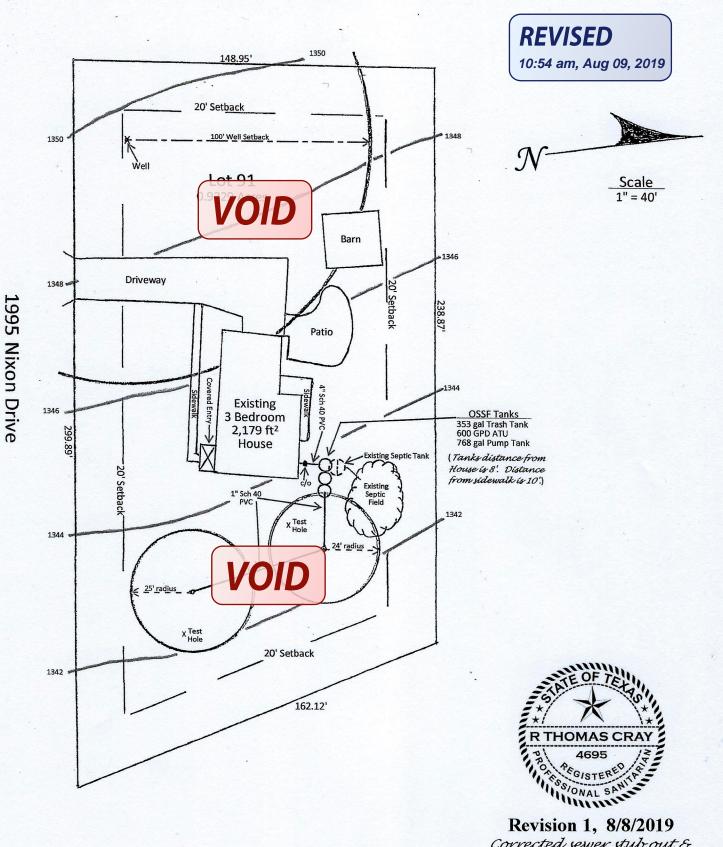
- NOTE: SEE ATTACHMENT for water treatment equipment and appliances installation requirements. The back flush or discharge from water treatment equipment may be discharged into an On-Site Sewage Facility as provided in this attachment. Effective April 28, 2004.
- **REMARKS:** The contractor may make minor field adjustments to the system with approval of the county regulatory agency. The referenced site has been evaluated and the on-site sewerage facility has been designed generally following the requirements given by the Texas Commission on Environmental Quality. The site evaluation and design are based upon technical information available today. The proper performance of any on-site sewerage facility cannot be guaranteed even though all provisions of the regulations have been met.
- CERTIFICATION: I hereby certify that this sewage facility design submitted conforms to the regulations for private sewage facilities, Comal County, Texas and with proper use, maintenance, and under normal climatic conditions can be expected to function without creating a nuisance.

Date: July 29, 2019

R. Thomas Cray, Professional Sanitarian #4695



AUG 01 2019



**Legal:** Lot 91, Silver Hills, Unit No. 1, Comal County, Texas, according to the map or plat thereof, recorded in Volume 2, Page 34, Map and Plat Records of Comal County, Texas.

Revision 1, 8/8/2019 Corrected sewer stub out & existing tank & drainfield location. Moved new OSSF Tanks to line up with stub out. Noted distance of OSSF Tanks to house & sidewalk.

Thomas Ciang

# Ritzen, Brenda

From:	Ritzen, Brenda
Sent:	Wednesday, August 7, 2019 1:36 PM
То:	'Tom Cray'
Subject:	Permit 109501

Re: Russell & Deborah Coates Silver Hills Unit 1 Lot 91 Application for Permit for Authorization to Construct an On-Site Sewage Facility

Tom,

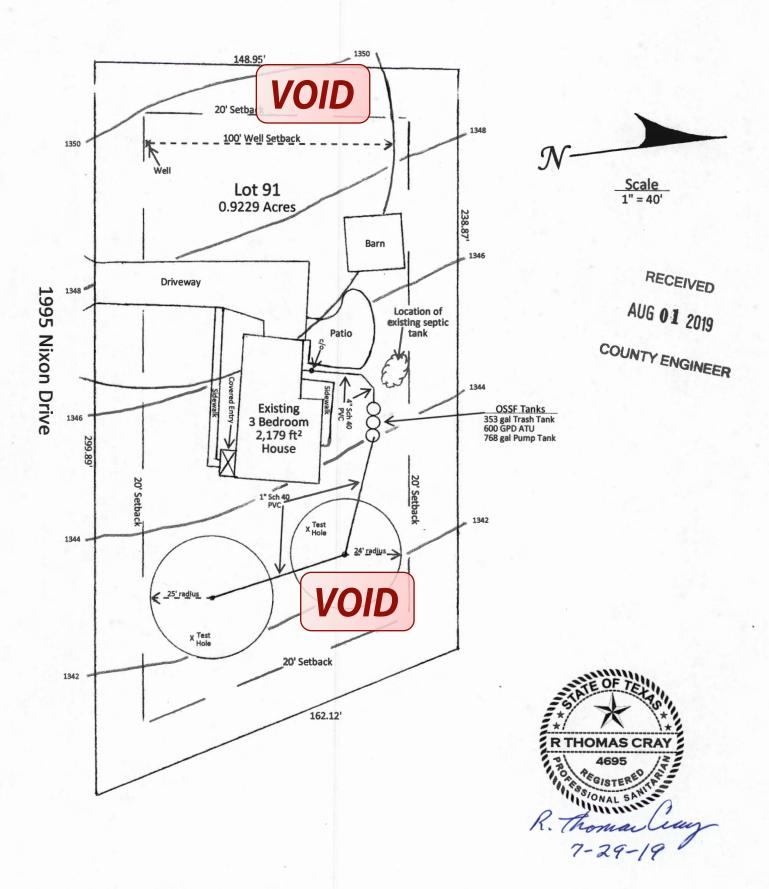
The following information is needed before I can continue processing the referenced permit submittal:

Indicate the separation distances from the sewer pipe to the sidewalk and the patio.

2. Revise as needed and resubmit.

Thank you,

Brenda Ritzen, OS0007722 Environmental Health Coordinator Comal County Engineers Office 195 David Jonas Drive New Braunfels, Texas 78132 830-608-2090 www.cceo.org



**Legal:** Lot 91, Silver Hills, Unit No. 1, Comal County, Texas, according to the map or plat thereof, recorded in Volume 2, Page 34, Map and Plat Records of Comal County, Texas.

nty, Texas.

# **Comal CAD**

Property Search > 57240 COATES RUSSELL S & DEBORAH Tax Year: 2019 A for Year 2019

# Property

Account				
Property ID:	57240	Legal Description	n: SILVER HILLS 1, LOT 91	n het kennen med het gehandelikkelik der sonn mit pilder pilt diffen die produktionerieren e
Geographic ID:	500760009100	Zoning:		
Туре:	Real	Agent Code:		
Property Use Code:				
Property Use Description:				Prov
Location	1			RECEIVED
Address:	1995 NIXON DR BOERNE, TX 78006	Mapsco:		RECEIVED AUG <b>01</b> 2019
Neighborhood:	SILVER HILLS	Map ID:	5B	
Neighborhood CD:	414D101			
Owner				
Name:	COATES RUSSELL S & DEB	ORAH A Owner ID:	920755	að far far se sænnað sende de affrændets som en skille far som en far far som en frederadet far som
Mailing Address:	1995 NIXON DR BOERNE, TX 78006-5838	% Ownership:	100.000000000%	
		Exemptions:	HS	
aluaa				
alues				
(+) Improvement Home	site Value: +	\$195,640		
(+) Improvement Non-H	Iomesite Value: +	\$0		
(+) Land Homesite Value	e: +	\$31,470		
(+) Land Non-Homesite	Value: +	\$0 Ag/	Timber Use Value	
(+) Agricultural Market	Valuation: +	\$0	\$0	
(+) Timber Market Valua	ation: +	\$0	\$0	
(=) Market Value:	=	\$227,110		
(-) Ag or Timber Use Va	lue Reduction: -	\$0		
( // 0				
(=) Appraised Value:	=	\$2.27,110		
(-) HS Cap:	_	\$6,989		
(=) 115 Cap.		<i>40,505</i>		
(=) Assessed Value:	=	\$220,121		
axing Jurisdiction				
	RUSSELL S & DEBORAH	Δ.		
		<b>^</b>		
	0000000%			
Total Value: \$227,1	10			



ATC-BULVERDE

# 4013000916

<sup>201286922781</sup> <sup>91793/2912</sup> <sup>681,43,36</sup> <sup>691</sup> <sup>1/2</sup> 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.

> 12023906 WARRANTY DEED WITH VENDOR'S LIEN

Date:	June 28, 201	2	
Grantor:	Joe L. Scott	and Linda V. Scott	RECEIVED
Grantor's M	ailing Address:		
			AUG 01 2019
Grantee:	Grantee: Russell S. Coates and Deborah A. Coates		
Grantee's M	lailing Address:	1995 Nixon Boerne, TX 78006	COUNTY ENGINEER

Consideration: Cash and note of even date executed by Grantee and payable to the order of Gardner Financial Services, Ltd. ("Lender") in the principal amount of TWO HUNDRED TWENTY FOUR THOUSAND THREE HUNDRED SIXTY AND NO/100THS Dollars (\$224,360.00). The note is secured by a first and superior vendor's lien and superior title retained in this deed and by a first-lien deed of trust dated the same date as this deed in favor of Lender.

Property (including any improvements):

Lot 91, Silver Hills Unit No.1, Comal County, Texas, according to the map or plat thereof, recorded in, Volume 2, Page 34, Map or Plat Records of Comal County, Texas.

**Reservations from Conveyance: None** 

Exceptions to Conveyance and Warranty:

All ad valorem taxes for the current and all subsequent years, zoning ordinances and utility district assessments, if any, applicable to and enforceable against the Property and all conditions, covenants, options, restrictions, easements, charges and liens for assessments, setbacks, encroachments, reservations, and mineral reservations affecting the Property that are shown in the Real Property Records 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 there to in any way belonging, to have and to hold it to Grantee and Grantee's heirs, successors, and assigns fonever. Grantor binds Grantor and Grantor's heirs and successors to warrant and forever defend all and singular the Property to Grantee and Grantee's heirs, successors, and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty.

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

Lender, at Grantee's request, has paid in cash to Grantor that portion of the purchase price of the Property that is evidenced by the note. The first and superior vendor's lien against and superior title to the Property are retained for the benefit of Lender and are transferred to Lender without recourse against Grantor.

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

Scott

Linda V. Scott

RECEIVED

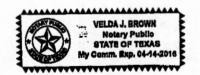
AUG 01 2019

STATE OF COUNTY OF

ine This instrument was acknowledged before me on the , by Joe L. Scott and Linda V. Scott D 0

Notary Public, State of

AFTER RECORDING RETURN TO: Costes, Russell S. 1995 Nixon eme, TX 78006



Filed and Recorded Official Public Records Joy Streater, County Clerk Comai County, Texas 67/63/2012 69:43:35 RM DARLA 2 Page(s) 201205022761

Jey Stracter

## J. B. Wastewater Maintenance Providers, Inc. P.O. Box 1350 Helotes, TX 78023

Phone: (210) 216-4111 Date: 9/15/2021 Fax: (830) 426-5400 service@jbwastewater.com www.jbwastewater.com Printed Notice of Expiration Cutomer ID: 18514 To: Zeb Paulsen Owner Phone: (913) 963-2535 1995 Nixon Drive Boerne, TX 78006 County: Comal Installed: 9/5/2019 Ref No: #19-18 Customer's Email: zrpaulsen@isecinc.com Site: 1995 Nixon Drive Boerne, TX 78006 **Contract Dates** Permit: 109501 Start: 9/5/2019 Comal County Environmental End: 9/5/2021 MFG/Brand/Serial#: Enviro-Flo, Inc.-Nu Water Total Fee: \$300.00 B-550-

Dear Homeowner,

This letter is to remind you that your Maintenance Contract for your aerobic septic system is about to Expire or Has Expired. Please contact our office to have an updated Contract sent to you.

Once we receive payment and the completed contract we will forward a copy to the authorizing agency. If you would like one for your records please let us know.

If you have any questions, please contact our office at (210) 216-4111. Thank you, we appreciate your business.

Sincerely,

Jimmie W. Blake, Jr.