Comal County Environmental Health OSSF Inspection Sheet

nstaller Name:	OSSF Installer #:	SSF Installer #:		
1st Inspection Date:	2nd Inspection Date:	3rd Inspection Date:		
Inspector Name:	Inspector Name:	Inspector Name:		

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

Inspector Notes:

Comal County Environmental Health OSSF Inspection Sheet

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No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
8	SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If SingleTank, 2Compartments Provided withBaffle SEPTIC TANK Inlet Flowline Greater than3" and " T " Provided on Inlet and OutletSEPTIC TANK Septic Tank(s) MeetMinimum 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) (i)285.32(b)(1)(E) (i)285.32(b)(1)(C) (ii)285.32(b)(1)(C) (ii)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)				
11	SEPTIC TANK Secondary restraint system providedSEPTIC 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						
	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number						
16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo- transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

^{11/5/24} CH: All dosing pumps and alarms operational, zones 6 and 7 installed to design and operational, require revisions for plumber installed tight line and grease trap, schedule 80 2" dosing line under parking lot and 2200 gal tanks
11/12/24 CH: Flow meters installed, compressors operational, zones 1-5 operational, cover all

Comal County Environmental Health OSSF Inspection Sheet

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
	DISPOSAL SYSTEM Drip Irrigation	Allowei	Citations	Notes	13t 1113p.	Ziiu iiisp.	Sid ilisp.
	DIST COAL STOTENT DITP ITTIGATION		20E 22(a)(2)(A) (E)				
			285.33(c)(3)(A)-(F)				
19	DISPOSAL SYSTEM Soil						
20	Substitution		285.33(d)(4)				
20	DISPOSAL SYSTEM Pumped						
	Effluent		285.33(a)(4) 285.33(a)(3)				
			285.33(a)(1)				
21			285.33(a)(2)				
	DISPOSAL SYSTEM Gravelless Pipe						
	·		285.33(a)(3)				
			285.33(a)(2)				
			285.33(a)(4)				
22			285.33(a)(1)				
22	DISPOSAL SYSTEM Mound		205 22/ 1/51				
			285.33(a)(3) 285.33(a)(1)				
			285.33(a)(1) 285.33(a)(2)				
23			285.33(a)(4)				
23	DISPOSAL SYSTEM Other						
	(describe) (Approved Design)		285.33(d)(6) 285.33(c)(4)				
24			263.33(C)(4)				
	DRAINFIELD Absorptive Drainline 3" PVC						
	or 4" PVC						
25							
	DRAINFIELD Area Installed						
26	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	DDAINEIEID E						
	DRAINFIELD Pipe and Gravel - Geotextile Fabric in Place		285.33(b)(1)(E)				
29			(-/\-/\-/				
	DRAINFIELD Leaching Chambers DRAINFIELD Chambers - Open End						
	Plates w/Splash Plate, Inspection						
	Port & Closed End Plates in Place		285.33(c)(2)				
	(per manufacturers spec.)						
30							
	LOW PRESSURE DISPOSAL						
	SYSTEM Adequate Trench Length						
	& Width, and Adequate Separation Distance between		285.33(d)(1)(C)(i)				
	Trenches						
31							

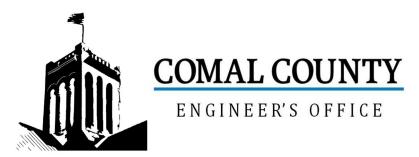
Comal County Environmental Health OSSF Inspection Sheet

No.	Description	Answer	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)				
34	AEROBIC TREATMENT UNIT Inspection/Clean Out Port & Risers Provided AEROBIC TREATMENT UNIT Secondary restraint system provided AEROBIC TREATMENT UNIT Riser permanently fastened to lid or cast into tank AEROBIC TREATMENT UNIT Riser cap protected against unauthorized intrusions						
35	AEROBIC TREATMENT UNIT Chlorinator Properly Installed with Chlorine Tablets in Place.						
36	PUMP TANK Is the Pump Tank an approved concrete tank or other acceptable materials & construction PUMP TANK Sampling Port Provided in the Treated Effluent Line PUMP TANK Check Valve and/or Anti- Siphon Device Present When Required PUMP TANK Audible and Visual High Water Alarm Installed on Separate Circuit From Pump						
	PUMP TANK Inspection/Clean Out Port & Risers Provided PUMP TANK Secondary restraint system provided PUMP TANK Riser permanently fastened to lid or cast into tank PUMP TANK Riser cap protected against unauthorized intrusions						
38	PUMP TANK Secondary restraint system provided						
	PUMP TANK Electrical Connections in Approved Junction Boxes / Wiring Buried						

Comal County Environmental Health OSSF Inspection Sheet

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No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
	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)(iii) 285.33(d)(2)(G)(iii)(I)				
	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)				
	APPLICATION AREA Area Installed						
	PUMP TANK Meets Minimum Reserve Capacity Requirements						
	PUMP TANK Material Type & Manufacturer						
	PUMP TANK Type/Size of Pump Installed						

Special Permit Conditions on Next Page



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

Permit Number: 117684

Issued This Date: 09/19/2024

This permit is hereby given to: JUNIPER VENTURES OF TEXAS, LLC

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

14240 US HWY 281 N

SPRING BRANCH, TX 78070

Subdivision: FISCHERS MARKET #52

Unit: 0
Lot: 2

Block: 0

Acreage: 3.1900

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic

Drip Irrigation

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

Call (830) 608-2090 to schedule inspections.



RE: 14240 US Hwy 281 N Fischers Market #52 Lot 2

Special Permit Conditions for Permit 117684

(Beginning at License to Operate)

A flow meter will be installed on the outflow line of the pump tank. As a condition of the License to Operate readings from this meter must be taken daily and recorded. The recorded daily readings must be submitted to the Comal County Environmental Health Office monthly beginning 30 days after the issuance of the License to Operate and continuing monthly every 30 days for 12 consecutive months. Failure to provide the required meter readings every month as indicated, or if at any time the daily meter readings are shown to exceed the total permitted flow of 2500 gallons per day, the License to Operate will be void and a new permit must be obtained.

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

Thank You,

Brandon Olvera | Designated Representative OS0034792 |
 Comal County | www.cceo.org | f: 830-608-2078 | e: olverb@co.comal.tx.us |





OSSF DEVELOPMENT APPLICATION CHECKLIST

Oldi	r will complete	117684
Date Received	 Initials	Permit Number

Instructions:

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

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

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

180	07/08/2024
Signature of Applicant	Date
COMPLETE APPLICATION Check No Receipt No	INCOMPLETE APPLICATION —— (Missing Items Circled, Application Refeused)

Revised: September 2019

By Brandon Olvera at 11:44 am, Sep 03, 2024



ON-SITE SEWAGE FACILITY APPLICATION

195 DAVID JONAS DR NEW BRAUNFELS, TX 78132 (830) 608-2090

WWW.CCEO.ORG

Date Fe	bruary 8, 2024			Permit Nu	umber 1176	84
1. APPLICANT /	AGENT INFORMATIO	DN -				
Owner Name	JUNIPER VENTUR	ES OF TEXAS, LLC	Agent Name GREG		REG W. JOHNS	ON, P.E.
Mailing Address	P.O. BO	X 310339	Agent Address		170 HOLLOW	
		LS, TX 78131-0339	City, State, Zip	NEV	V BRAUNFELS,	
Phone #		38-1214	Phone #		(830) 905-27	
Email	kbrumley@ji		Email	gr	egjohnsonpe@ya	
2. LOCATION			1 3 3 1		,	
Subdivision Nam	neFISCHER'S	MARKET #52	Ur	nit	_ Lot	Block
		FRED SHAEFERK		A-974	Acreage	3.194
		WY 281			The second secon	
3. TYPE OF DE						
Single Fam	nily Residential					
		obile, RV, Etc.)				
	f Bedrooms					
	q Ft of Living Area					
	Family Residential	*				
		uate land area for doublin	a the required land need	lad for treatm	ant units and disc	ancal area)
		/ GAS STATION / STOI		ieu ioi iieaiii	ient units and disp	oosai area)
		chools, Parks, Etc Indi		onts.		
		- Indicate Number of S				
		Home - Indicate Number				
		te Number of Spaces				
Miscellane	eous					
		1,000,000				
		Flocated in the United S			_	
		ovide approval from USACE	-		the USACE flowag	e easement)
		rivate Well Public	: Well Rainwater	Collection		
4. SIGNATURE						
- The completed a		nal information submitted of er or I possess the approp				
 Authorization is h site/soil evaluation 	on and inspection of priva	itting authority and designate sewage facilities In to construct will not be is				
by the Comal Co	ounty Flood Damage Pres					
Cop	1 10/	352	2/9	12021	_	
Signature of C	wner		Date	west		Page 1 o
						Revised January

#117684

Signature of Designer

RECEIVED

By Brandon Olvera at 4:25 pm, Nov 14, 2024

FISCHER'S MARKET #52, LOT 1

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

COMALCOUNTY ON-SITE SEWAGE FACILITY APPLICATION ENGINEER'S OFFICE

Planning Materials & Site	Evaluation as Required Completed By	GREG W. JOHNSON, P.E.						
System Description	NON-STANDARD; AEROBIC TREA	TMENT AND DRIP IRRIGATION						
Size of Septic System Re	Size of Septic System Required Based on Planning Materials & Soil Evaluation							
Tank Size(s) (Gallons)	3000 GREASE / 1000 TRASH / 1500 GAL LIFT/ 2200 TRASH/2-2200 AERATION/2-2200 EQ/3-1500ATUS/2-2200 PUMP	Absorption/Application Area (Sq Ft) 25,158						
Gallons Per Day (As Per	CEQ Table 111)							
(Sites generating more than	5000 gallons per day are required to obtain a permit t	hrough TCEQ.)						
	• • •	No						
(if yes, the planning materia	Is must be completed by a Registered Sanitarian (R.S.) or Professional Engineer (P.E.))						
Is there an existing TCEC	approved WPAP for the property? 🔲 Yes 🔀	No No						
(if yes, the R.S. or P.E. shall	l certify that the OSSF design complies with all provisi	ons of the existing WPAP.)						
Is there at least one acre	per single family dwelling as per 285.40(c)(1)?	Yes No						
If there is no existing WP	AP, does the proposed development activity requ	uire a TCEQ approved WPAP? 🔲 Yes 🔀 No						
	I certify that the OSSF design will comply with all-prov OSSF until the proposed WPAP has been approved by	sions of the proposed WPAP. A Permit to Construct will not the appropriate regional office.)						
Is the property located ov	ver the Edwards Contributing Zone? X Yes] No						
Is there an existing TCEC	approval CZP for the property? 🔲 Yes 🔀	No						
(if yes, the P.E. or R.S. shall	I certify that the OSSF design complies with all provisi	ons of the existing CZP.)						
If there is no existing CZ	P, does the proposed development activity requir	e a TCEQ approved CZP?						
		isions of the proposed CZP. A Permit to Construct will not be						
issued for the proposed OS	SF until the UP has been approved by the appropriate	TE OF TE+						
Is this property within an	incorporated city? Yes No	·6 * * *.						
If yes, indicate the city:_		GREG W. JOHNSON						
		FIRM #2585						
By signing this application	n, I certify that:							
•	d above is true and correct to the best of my knowledg							
- I affirmatively consent t	o the online posting/public release of my e-mail addres	s associated with this permit application, as applicable.						
/ / / /) No	ovember 12, 2024						

Date

Jon Niermann, *Chairman*Bobby Janecka, *Commissioner*Catarina R. Gonzales, *Commissioner*Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 18, 2024

Mr. Brandon Olvera, Designated Representative Comal County, TCEQ ID No. 620049

Re: Favorable Review of Nonstandard OSSF Design for:

Juniper Ventures of Texas, LLC

14240 US Hwy 281, Spring Branch, Comal County, Texas

OSSF Permit Application Number OSSF- 117684

Dear Mr. Olvera:

We have received your request for a Texas Commission on Environmental Quality (TCEQ) review of the above-referenced nonstandard design on September 4, 2024. Bruce Lesikar of the TCEQ Technical Programs Team conducted the review, as required by 30 Texas Administrative Code (TAC) §285.5(b)(2). **This letter serves as notification that the nonstandard design review is determined to be favorable, as submitted**.

Please be advised this letter is not an approval or an Authorization to Construct. This letter only indicates a favorable assessment based on the submitted planning materials, is generally limited in scope to the treatment and disposal portions of the design, and does not consider any more stringent requirements of the local permitting authority. A thorough review by the applicable permitting authority of the entire submitted planning materials is necessary in order to effectively implement and enforce the requirements in 30 TAC Chapter 285; the Texas Health and Safety Code (THSC) Chapter 366; and the local OSSF order, ordinance, or resolution approved by the TCEQ.

If you have any questions, or if we may be of assistance to you, please contact Bruce Lesikar in the TCEQ Technical Programs Team at (512) 239-0415 or via e-mail at Bruce.Lesikar@tceq.texas.gov.

Sincerely,

Joseph L. Hopkins, P.G.

Technical Programs Team Leader

Voseph L. Hopkins

Texas Commission on Environmental Quality

JLH/BJL

202406025462 08/22/2024 11:00:11 AM 1/1

AFFIDAVIT

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 (OSSFs), this document is filed in the Deed Records of County, Texas.

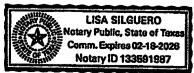
1

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

II

An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code

\$285.91(12) will be installed on the property described as (insert level description): **FISCHERS MARKET #52** BLOCK 2 1 LOT SUBDIVISION UNITAPHASE/SECTION IF NOT IN SUBDIVISION: 3.194 ACREAGE FRED SHAEPERKOETER SURVEY #40, A-974 JUNIPER VENTURES OF TEXAS, LLC The property is owned by (insert owner's full name): 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 ⁹⁷⁰ DAY OF February - MANAGER Owner(s) signature(s) Owner (s) Printed name (s) odney R. Fischer SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 921 DAY OF 20 24 Filed and Recorded lotary Public Signature Official Public Records



Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/22/2024 11:00:11 AM
LAURA 1 Pages(s)
202406025462



CENTRAL TEXAS AEROBICS, INC.

2918 Dauer Ranch Rd. New Braunfels, Tx 78130 Phone (830)303-4065 Fax (830)837-5573 www.septictex.com Email: info@septictex.com

INITIAL State Maintenance and Inspection Agreement (COMMERCIAL)

General (281/FM 306)

This contract (herein referred to as this "Agreement") is entered into by #52 Fischer Market (hereinafter referred to as the "Customer") located at 142.00 US Have 281 Spring Branch Ty 78070. COMAL County and Central Texas Aerobics. Inc.

"Customer") located at 14240 US Hwy 281 Spring Branch, Tx 78070 COMAL County and Central Texas Aerobics, Inc. By this agreement Central Texas Aerobics, Inc. agrees to render professional service, as described herein, and the Customer agrees to fulfill the terms of this Agreement as described herein.

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

- 1. 4 inspections a year (at least one every three months), for a total of 4 over the one-year period including inspection, adjustment, and servicing of the mechanical, electrical, and other applicable component parts to ensure proper function. This includes inspection of control panel, air pumps, air filter, and diffuser operation. Any alarm situation affecting the proper function of the Aerobic process will be addressed within a 48-hour time frame.
- 2. An effluent quality inspection consisting of a visual check for color, turbidity, scum overflow and examination for odors. A test for chlorine residual and pH will be taken and reported as necessary.
- 3. If any improper operation is observed which cannot be corrected at the time of the service visit, you will be notified immediately in writing of the conditions and estimated date and cost of correction.
- 4. Any additional visits, inspections, or sample collections required by specific Municipalities, Water/River Authorities, County Agencies, the TCEQ or any other authorized regulatory agency in your jurisdiction will be covered by this policy.
- 5. Pumping of sludge build-up is not covered by this contract and will result in additional charges. The replacement of parts due to misuse/abuse will not be covered under this contract. The Owner assumes full responsibility for the cost of parts and labor.
- 6. With STATE MAINTENANCE the customer is responsible for the chlorine tablets. They must be filled before the service visit. If not, the service representative will add them, and you will be charged. The use of improper chlorine (such as swimming pool tablets) will VOID all warranties. The Clearstream power's Manual must be strictly followed or warranties are subject to invalidation.

 Initials of Central Texas Aerobics, Inc. X
- 7. If choosing the *EXPANDED CHLORINE PLACEMENT POLICY we will add necessary chlorine tablets and clean filters at each monthly service visit. Service calls and labor are included in this expanded contract (excluding misuse/abuse/over water usage.) If payments are not made on this policy, service will be suspended and Central Texas Aerobics, Inc. will immediately notify the appropriate health authority of this termination.

 Initials of Central Texas Aerobics, Inc. X NOT TAKEN NOT TAKEN
- 8. At the conclusion of the initial service policy, our Company will make available for purchase on an annual basis, a continuing service policy to cover normal inspections, maintenance and repair or an Expanded Chlorine Placement Policy. According to state law, ALL OWNERS OF AEROBIC SEPTIC SYSTEMS MUST maintain a factory authorized service provider for the lifetime of the system.

ACCESS BY CENTRAL TEXAS AEROBICS, Inc.

Central Texas Aerobics, Inc. or anyone authorized by them may enter the property at reasonable times without prior notice for the purpose of the above-described Services. Central Texas Aerobics, Inc. may access the System components including the tanks by means of excavation for the purpose of evaluations if necessary. Soil is to be replaced with the excavated material as best as possible.

PAYMENT FOR SERVICES

STATE MAINTENANCE: The initial (first two years of STATE MAINTENANCE) is included in the price of the septic.

EXPANDED CHLORINE PLACEMENT POLICY: The Owner will pay Central Texas Aerobics, Inc. <u>\$(N/A)</u> annually or \$(N/A) per month, if this additional coverage is selected.

With the *Expanded chlorine placement policy we will come out MONTHLY and chlorinate your aerobic system and clean filters at each service visit. Service calls and labor are included in this expanded contract (excluding misuse/abuse/over water usage.) Parts are offered to you at reduced rates. If payments are not made on this policy, service will be suspended and Central Texas Aerobics, Inc. will immediately notify the appropriate health authority of this termination.

Please INITIAL fiere for this survice X NOT TAKEN

Payments not received within 30 days of the due date will be subject to a \$20.00 late penalty or 15% per month carrying charge, whichever is greater.

TERMINATION OF AGREEMENT:

This agreement may be terminated by either party with ten days' written notice in the event of substantial failure to perform in accordance with its terms by the other party without fault of the terminating party. If this agreement is terminated, Central Texas Aerobics, Inc. will immediately notify the appropriate health authority of the termination.

LIMIT OF LIABILITY:

In no event shall Central Texas Aerobies, Inc. be liable for indirect, consequential, incidental or punitive damages, whether in contract tort or any other theory. In no event shall Central Texas Aerobic Inc.'s liability for direct damages exceeds the price for the services described in this Agreement.

DISPUTE RESOLUTION:

If a dispute between the Customer and Central Texas Aerobics, Inc. arises that cannot be settled in good faith negotiations, then the parties shall choose a mutually acceptable arbitrator and shall share the cost of the arbitration services equally.

ENTIRE AGREEMENT:

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

SEVERABILITY:

If any provision of this Agreement 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 this 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.

OWNER(S) Fischer Market #52 (281/FM 306) 14240 US Hwy 281 Spring Branch, Tx 78070 2 12 2024 Date	SERVICE PROVIDER Central Texas Aerobics, Inc. 2918 Dauer Ranch Rd. New Braunfels, Tx 78130 830-303-4065 WM, Kyle Johnson #Milogo1058 Date
Brand: Clearstream Model# 1500 NCD (3) Serial f	I
County: Comal Permit#	Date Installed:
EFFECTIVE DATE:	EXPIRATION DATE:

*The effective date of this initial maintenance contract shall be the date the License to Operate is issued. The expiration date is one year from the effective date.

CERTIFIED & LICENSED MAINTENANCE PROVIDER: William Kyle Johnson #MP0001058



ON-SITE SEWERAGE FACILIT By Brandon Olvera at 11:51 am, Sep 03, 2024

SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: September 19, 2023 FISCHERS MARKET #52 SUBDIVISION, LOT 1 Site Location: N/A Proposed Excavation Depth: _ Requirements: At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area. Locations of soil boring or dug pits must be shown on the site drawing.

For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the

proposed excavation depth. For surface disposal, the surface horizon must be evaluated.

Describe each soil horizon and identify any restrictive features on the form. Indicate depths where features appear.

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 8"	ш	CLAY LOAM	N/A	NONE OBSERVED	LIMESTONE @ 8"	BROWN
2						
3						
4						
5						

SOIL BORING	NUMBER SUR	FACE EVALUAT	ION			
Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	SAME		AS		ABOVE	
2	-					
3						
4						
5						

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

okason, P.E. 67587-F2585, S.E. 11561

Date

09/19/24

8/21/24, 4:15 PM Task Comments

Comments

Add Comment

Sort ▲

CHENDRY

Probing in the area of the proposed drip fields showed an average of +8" of soil above a restrictive horizon

Close

CCEO COPY

OSSF SOIL EVALUATION REPORT

RECEIVED

Site Evaluator Information:

By Brandon Olvera at 11:52 am, Sep 03, 2024

Date: September 19, 2023

Applicant Information:

Name: JUNIPER VENTURES of TEXAS, LLC.	Name: Greg W. Johnson, P.E., R.S, S.E. 11561		
Address: 3455 IH 35 SOUTH	Address: 170 Hollow Oak		
City: NEW BRAUNFELS State: TEXAS	City: New Braunfels State: Texas		
Zip Code: 78132 Phone: (512) 738-1214	Zip Code: <u>78132</u> Phone & Fax (830)905-2778		
Property Location: Lot 1 Unit Blk Subd. FISCHERS MARKET #52 SUBDIVISION	Installer Information: Name:		
Street Address: 14240 U.S. HWY 281 NORTH	Company:		
City: SPRING BRANCH Zip Code: 78070	Address:		
Additional Info.:	City: State:		
	Zip Code:Phone		
Topography: Slope within proposed disposal area:	5%		
Presence of 100 yr. Flood Zone:	YESNO_X		
Existing or proposed water well in nearby area.	YES NO X		
Presence of adjacent ponds, streams, water impoundments	YES NOX		
Presence of upper water shed	YESNO_X		
Organized sewage service available to lot	YESNO_X		

I HAVE PERFORMED A THOROUGH INVESTIGATION BEING A REGISTERED PROFESSIONAL ENGINEER AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 (REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (EFFECTIVE DECEMBER 29, 2016).

GREG W. JOHNSON, P.E. 67587 - S.E. 11561

DATE

FIRM #2585

By Brandon Olvera at 4:28 pm, Nov 14, 2024

AEROBIC TREATMENT DRIP TUBING SYSTEM DESIGNED FOR: JUNIPER VENTURES OF TEXAS, LLC. 3455 IH35 SOUTH

NEW BRAUNFELS, TX 76548

SITE DESCRIPTION:

Located in Fischer's Market #52 subdivision, Lot 1 in the Fred Schaeferkoeter Survey #40, A-974, being 3.194 acres at 14240 North Highway 281, the proposed system will serve a gas station, convenience store, fast food restaurant (60 seats), with public restrooms situated in an area with shallow Type III soils as described in the Soil Evaluation Report. Native grasses were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOSED SYSTEM:

A three or four inch SCH-40 pipe discharges from the from the restaurant portion of the business to a 3000 grease trap with traffic lid. Flow continues from the grease trap with traffic lid and joins flow from the restrooms and remaining flow into a 1000 gallon trash tank followed by a 1500 gallon Lift station with traffic lid and standard inlet and outlet flow tees. Lift station is fitted with dual Liberty Liberty LE41 pumps controlled by a dual alternating control panel with manual reset and set to dose on demand. The high level audible and visual alarm with manual reset will activate should the pump fail and initiate the resting pump. Flow from the lift station is dosed through a 2" SCH-40 PVC to a 2200 gallon trash tank with standard inlet and outlet flow tees. Continues to two 2200 gallon aeration tanks installed in series. Aeration tanks fitted with a HiBlow HP150 aerator and Thomas air diffusers with a 3/4" PVC drop and two diffusers on each end of each aeration tank. Air diffusers will be located approximately five inches off the bottom of the tank. HiBlow HP150 pump will produce at least 54 cubic feet of air per minute with 2 psi back pressure. Flow continues to two 2200 gallon flow equalization tanks manifolded together at bottom, fitted with dual Liberty LE40 sewage pumps controlled by a dual alternating control panel with manual reset and Omron H3CR-F cycle timer. Equalization tank will accommodate varying flows throughout the day. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the resting pump. Effluent is pumped at rate of 3.5 gallon per minute every hour for 10 minutes to each three 1500 gpd TCEQ/NCF approved aerobic treatment plants in parallel. Flow will be controlled by a ball valve and pressure reducing nipple. A bucket test will be used to calibrate flow to three 1500 gpd TCEO/NSF approved aerobic plants. After treatment flow from the ATUs continues to two 2200 gallon pump tanks, manifolded together at bottom. Dosing will be set to dose each zone each every six hours for 16 minutes. Effluent is pumped through a 1.25" Sch-40 PVC from each pump. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the next resting pump. Effluent is pumped through a 1.25" Sch-40 PVC alternating from each pump to 7 zones controlled by two K-Rain 6000 series indexing valves dosing each zone. A high level audible and visual alarm will activate should the pump fail. Distribution from each pump is through a Tuff Tiger T125 and Model F335 with a self flushing 100 micron disk filter followed by a pressure regulator Model PR40HF. Vacuum breakers installed at the highest point on each manifold will

By Brandon Olvera at 4:28 pm, Nov 14, 2024

prevent siphoning of effluent from higher to lower parts of the field. Check valves on the return line on each field will prevent the pressuring of resting zone. Each zone will be dosed each six hours for 16 minutes. Field area will be scarified and built up with 4" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil. A minimum of twelve inches of soil required between rock and drip tubing.

DESIGN SPECIFICATIONS:

Daily waste flow:60 seat fast food @ 12 gpd =720 gpd & 2 public restrooms @ 265gpd = 530gpd

Calculated Flow Rate: 1250 gpd (Design Rate = 2500 gpd Includes doubling)

Grease Trap size: 3000 gallons with Traffic Lid Trash/Lift Tank: 1000 gallons with Traffic Lid

Lift Tank: 1500 gallons lift tank w/ Dual Liberty LE 41 0.4 hp

Trash Tank: 2200 gallons

Aeration Tank: 2- 2200 gallons fitted w/ HiBlow HP150 aerator & Thomas air diffusers Equalization tank: 4400 gallons w/ Dual effluent pumps (2-2200 gallons manifolded together)

Pump requirement: Dual Liberty Model LE40 0.4 hp sewage pumps

Cycle Timer: Omron H3CR-F cycle timer

Reserve capacity after High Level:420 Gal (>4hrs flow Req'd) Plant Size: 3- 1500 gpd aerobic plant TCEQ/NSF approved

Pump tank size: 4400 gallons with Dual effluent pumps (2-2200 gallons manifolded together)

Reserve capacity after High Level: 420 Gal (>4hrs flow Req'd)

Application Rate: Ra = 0.2 gal/sf

Total absorption area: Q/Ra = 2500 GPD/0.2 = 12,500 sf. (Actual 25,158 sf. Includes doubling)

Total linear feet drip tubing: 12579' Netifim Bioline drip tubing .61 GPH

Pump req'd: 1605'-1956' w/ 803-978 emitters/zone @ 0.61 gph @ 30 psi = 8.16-9.94 gpm Pump requirement: Dual-Franklin FPS E-Series 0.5HP 20 gpm requiring 20 gpm @ 45 psi

Indexing Valves: K-Rain Model 6403 & 6404.

Flow Meters: RG3 PPD-10

Automatic Filters: Tuff Tiger T125 and Model F335

Electronic Timer: Digi-20

Alarm: Audible & visual air pump malfunction alarm & alternating control panel & manual reset.

Water meters on each pump to field.

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

 $MSV = 2 FPS (\Pi d \uparrow 2)/4*7.48 gal/cf*60 sec/min$

 $MSV = 2(3.14159((.55/12)^2)/4)*7.48*60$

MSV = 1.5 gpm PER LINE * 6 LINES = 9 GPM MIN FLOW RATE per pump.

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

 $MSV = 2 \text{ FPS } (\Pi d^{1}2)/4*7.48 \text{ gal/cf*}60 \text{ sec/min}$

 $MSV = 2(3.14159((1.049/12) \uparrow 2)/4)*7.48*60$

MSV = 5.4 GPM

By Brandon Olvera at 4:28 pm, Nov 14, 2024

WASTE FLOW CALCULATIONS:

BOD5 @ 720 gpd x 1200 mg/l x 8.34 #/gal / 1,000,000 = 7.2lbs BOD5 BOD5 @ 530 gpd @ 300 mg/l x 8.34 #/gal / 1,000,000 = 1.3 lbs BOD5 Total BOD5 = 8.5 lbs.

AEROBIC AERATION & ORGANIC LOADING CONSIDERATIONS:

This design utilizes extended aeration to lower the organic loading from the system. Using aeration requirements in Chapter 217 for extended aeration in the tanks are as follows:

Oxygen requirement: 2.2 lbs of Oxygen per 1 lbs of BOD and 500 gal aeration per 1 lbs of BOD5 Efficiency for fine air diffusers are 2-2.5% per foot of depth

HiBlow Each HP-150 generates 5 CFM /58.2 CF/# * 1440 min/d = 123.7 #O2/day

123.7 #O2/day 10% efficiency / 2.2#/lbBOD2 = 5.62 #BOD5 with 3psi backpressure Thomas air diffusers at set at 4' of water 2 psi back pressure w/ additional 1 psi loss through diffuser assembly #BOD5

2-2200 gallon aeration x 0.002 #/gal = 8.8 # BOD5/

Hp-150 generates 123.7#/O2 and reduces $5.62\#BOD5/day \times 2 = 11.24\#BOD5$

Each 1500 gpd plant @ 3.75 #/unit x 3 = 11.25 #BOD5

Total Reduction = 8.8 #(2-2200 aerated tanks) + 11.25(ATU) = 20#BOD5

Actual Reduction 20 #/day >Total #BOD5 8#/day

This system is nonstandard type system. Wastewater is reduced to residential strength prior to entering the Aerobic Treatment Plants. Doubling is included in treatment.

ELECTRICAL COMPONENTS:

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

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 minimum 4 inch layer of sand, sandy loam, clay loam, or pea gravel.
- Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed. Fencing recommended around treatment tanks to limit public access.</p>
- All openings in the tank must be properly sealed to prevent the escape of wastewater, and/or

By Brandon Olvera at 4:28 pm, Nov 14, 2024

to prevent the infiltration of water.

- Tanks must be filled with water for at least 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8 inch per foot from business to tank.

PIPE AND FITTINGS:

All pipes and fittings in this aerobic system shall be schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. The manifold shall be 1" in diameter and be colored purple.

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 alarms are activated.
- All pipe fittings and joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plugging.

MAINTENANCE REQUIREMENTS:

- The maintenance company will verify that the system is operating properly at least every three months and provide on-going maintenance of the installation with BOD5 performed 2 times at three months and nine month the first year.
- Owner will record daily water readings to field daily and submit to Comal County Engineers office monthly for the first twelve months after license to operate.
- The initial contract will be a minimum of two years.
- A maintenance contract will authorize the maintenance company to maintain and repair the system as needed.
- The property 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.

CONSTRUCTION/INSTALLATION NOTES & REQUIREMENTS:

- 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 Facilities set forth by 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 and 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 approved plans and specifications.
- The installer may not alter these plans without the approval from the designer.

- It is the responsibility of the installer to maintain the minimum setback requirements as stated in Chapter §285 On-Site Sewage Facilities.
- No part of the system shall be located within 10 feet of a potable water line. If this is unavoidable, follow Chapter 290.44(e)(4)(B)(iv-v) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. (v) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.

OPERATION AND MANAGEMENT NOTES:

- The OSSF should not be treated as a normal city sewer.
- Do not use the toilet to dispose of cleaning tissue, cigarette butts, or other trash. This
- disposal practice will waste water and also impose an undesirable solid load on the treatment system.
- Water Softeners should not be connected to this system.
- Septic tanks shall be cleaned before sludge accumulates to a point where it approaches the
 bottom of the outlet device. If sludge or scum accumulates to this point, solids will leave the
 tank with the liquid and possibly cause the system to clog resulting in sewage surfacing or
 backing up into the house through plumbing fixtures.
- A regular schedule of cleaning the tanks at least two to three year intervals should be established. Commercial cleaners are equipped to readily perform the cleaning operation.
 Owners of OSSF's shall engage only persons registered with the TCEQ to transport the septic system waste.
- Do not build driveways, storage buildings, or other structures over system components or the disposal field.
- Chemical additives or so-called enzymes are not necessary for the operation of a septic tank. Some of these additives may even be harmful to the systems operation.
- Soaps, detergents, bleaches, drain cleaners, and other household cleaning materials will very seldom affect the operation of the system. However, moderation should be exercised in the use of such materials.

By Brandon Olvera at 4:28 pm, Nov 14, 2024

LANDSCAPING

Drip field area will be Hydro Mulched with grass and drip fields will be maintained with vegetation.

Designed in accordance with Chapter 285, Subchapter D, §285.30, §285.32 Texas Commission on Environmental Quality (Effective December 29, 2016)

Greg W. Johnson, P.E.

No. 67587 / F#2585

170 Hollow Oak

New Braunfels, Texas 78132

(830)905-2778

By Brandon Olvera at 8:16 am, Aug 22, 2024

RE: 14240 US Hwy 281 permit 117684

From: Ted Bryant (ted.bryant@txwaterco.com)

gregjohnsonpe@yahoo.com

jessica.rios@txwaterco.com; heath.woods@txwaterco.com; kbrumley@junipervot.com

Date: Tuesday, August 13, 2024 at 03:10 PM CDT

Hello Greg, please review the attached plans, we have constructed a new 16" water main across the frontage of the property. There are also two new services as shown on the plans. The existing 12" line (shown as 6" on your design) that runs behind the property will be abandoned in place.

Let me know if you have any other questions, thanks,



Ted Bryant Project Manager PO Box 1742 | Canyon Lake, TX 78133 | (830) 358-3390 ted.bryant@txwaterco.com

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From: Jessica Rios < Jessica.Rios@txwaterco.com>

Sent: Tuesday, August 13, 2024 2:53 PM

To: Ted Bryant <Ted.Bryant@txwaterco.com>; Heath Woods <Heath.Woods@txwaterco.com>

Subject: FW: 14240 US Hwy 281 permit 117684

Hi Ted and Heath,

Can you assist with this? I've never seen this type of request before.

Thank you,



Jessica Rios

Water Services Supervisor
PO Box 1742 | Canyon Lake, TX 78133 | 830.312.4600
Direct Office: 830.312.4558 or Cell: 830.327.5168 jessica.rios@txwaterco.com

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From: Greg Johnson <gregjohnsonpe@yahoo.com>

Sent: Tuesday, August 13, 2024 2:43 PM

To: Kirk Brumley < kbrumley@junipervot.com; Ashley Boullioun < Ashley.Boullioun@sjwater.com; Jessica Rios < Jessica.Rios@txwaterco.com;

Subject: 14240 US Hwy 281 permit 117684

CAUTION: This email originated outside the SJWG organization.

Kirk / Ashley / Jessica

See attached

Item 7

We need email or letter allowing us to cross the public water line on design

Thanks

Steve

Send for Greg W. Johnson, P.E., R.S.)

170 Hollow Oak

New Braunfels, TX 78132

Office/Fax (830) 905-2778

Email: gregjohnsonpe@yahoo.com

By Brandon Olvera at 8:16 am, Aug 22, 2024

PUBLIC WATER MAIN EXTENSION

14240 HWY 281, SPRING BRANCH, TX 78070 CONSTRUCTION DOCUMENTS



AREA MAP



LOCATION MAP



JN MAP

SHEET LIST

SHEET NAME

SHEET

C101

COVER SHEET
GENERAL NOTES
PUBLIC WATER MAIN EXTENSION
PUBLIC WATER MAIN PROFILE
TEXAS WATER COMPANY STANDARDS

TWC

APPROVED FOR CONSTRUCTION

DATE_

APPROVED TED BRANT

M&S ENGINEERING ELECTRICAL | CIVIL I MED TATABLE FRAN # P. 1394 | TBPELS FRAN #10168800





PUBLIC WATER MAIN EXTENSION 14240 HW7 281, SPRING BRANCH, TX 78070

DES 2524TWC.001

JOB: 2524TWC.001

DATE: 10 APR 2024

DESION: EX PM: TDS

PEER: DM: TS

REVISIONS:

CEL TAI DESCRIPTION

G001

CONSENT TO ENCROACH

THIS CONSENT TO ENCROACH ("Consent") is made and entered into by and between Pedernales Electric Cooperative, Inc., a Texas electric cooperative corporation ("PEC") and Juniper Ventures of Texas LLC ("Owner"), collectively (the "Parties").

WHEREAS, PEC is the owner of an easement in Comal County, Texas which is recorded in Document number 9706001516 of the official records of Comal County, Texas and a .482 of the acre track of land as described in the Document No. 202306036935 of the Official public records of Comal County Texas, and 2.712 acre of land described as track 18 in Document No. 201806046745 of the Public records of Comal County, Texas ("Easement"); and

WHEREAS, Owner desires to install, construct, operate, reconstruct, repair, and maintain access for an extension of the encroaching septic system ("Encroaching Facility"), as depicted in **Exhibit A**, attached hereto, within the area or boundaries of the Easement ("Easement Area").

WHEREAS, in exchange for the consideration set forth below, PEC has agreed to grant Owner consent to encroach of the Encroaching Facility in the Easement Area subject to the terms and conditions of this Consent.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiently of which is hereby acknowledged, PEC and Owner do hereby agree as follows:

- 1. <u>Incorporation of Recitals.</u> The representations, covenants, and recitations set forth in the foregoing recitals of this Consent are true and correct and are incorporated into the body of this Consent.
- 2. Location of Encroaching Facility. PEC hereby grants a nonexclusive consent to Owner, authorizing Owner to, at is own cost and expense, locate, construct, operate, reconstruct, maintain, and repair the Encroaching Facility within that portion of the Easement Area as generally depicted and described in Exhibit A, subject to the terms and conditions of this Consent. Any modification, alteration, expansion or addition to the Encroaching Facility, or any portion thereof, is prohibited without the prior written consent of PEC. In particular, Owner shall not modify the Encroaching Facility in any manner that results in the Encroaching Facility: (a) occupying more space within the Easement Area than as approved by this Consent; (b) extending further into the Easement Area than as approved by this Consent; or (c) changing the Encroaching Facility's location within the Easement Area to be outside the area approved by this Consent. Owner shall ensure that Owner and any third party and/or contractor of Owner engaged in locating, constructing, reconstructing, maintaining and/or repairing the Encroaching Facility abide by the terms and conditions set forth herein and any permit governing the Encroaching Facility. Owner shall, at its own cost and expense, provide a copy of this Consent to any third party and/or contractor of Owner engaged in locating, constructing, operating, reconstructing, maintaining and/or repairing the Encroaching Facility. Notwithstanding anything to the

contrary herein, nothing in this Consent shall be deemed to waive any applicable requirement of PEC's regulations applicable to the Encroaching Facility, and Owner shall be responsible for obtaining a permit, if required under the appropriate governmental authority ordinances, prior to the installation or construction of the Encroaching Facility.

3. Restrictions on Use of Easement Area. Owner shall use only so much of the Easement Area as may be necessary to construct, operate, reconstruct, maintain, and repair the Encroaching Facility. Owner shall, at its own cost and expense, comply with all applicable laws, including but not limited to existing zoning ordinances, governmental rules and regulations enacted or promulgated by any governmental authority and shall promptly execute and fulfill all orders and requirements imposed by such governmental authorities for the correction, prevention and abatement of nuisances in or upon or connected with said Encroaching Facility. At the conclusion of any construction, Owner shall remove all debris and other materials from the Easement Area and restore the Easement Area to the same condition it was in prior to the commencement of Owner's construction thereon or in proximity thereto.

Owner shall not place trash dumpsters, toxic substances or flammable material in the Easement Area. Further, if the Easement Area has transmission or distribution facilities located thereon, Owner shall not place upon the Easement Area any improvements, including but not limited to, buildings, light standards, fences (excluding barriers installed around transmission towers, if applicable), shrubs, trees or signs unless approved in advance in writing by PEC. Additional general construction limitations on encroachments are described and listed in **Exhibit B**, attached hereto and by reference made a part hereof.

- 4. Maintenance of Encroaching Facility. Owner shall, at Owner's sole cost and expense, maintain the Encroaching Facility in good condition and repair. PEC will not, under any circumstance, be responsible for any costs, whatsoever, of construction, reconstruction, operation, maintenance, repair or removal of the Encroaching Facility. If PEC notifies Owner of any deficiencies in any such construction, reconstruction, operation, maintenance, repair or removal of the Encroaching Facility, Owner shall make the necessary repairs within the earlier of (a) thirty (30) days after the date of such notice or the (b) another date as determined by PEC and Owner in writing. If PEC notifies Owner of any deficiencies in any such construction, reconstruction, operation, maintenance, repair or removal of the Encroaching Facility, and Owner shall thereafter fail to complete such construction, reconstruction, operation, maintenance, repair or removal within the required time period, then PEC may require Owner to promptly remove the Encroaching Facility or contract, at Owner's sole cost and expense, for the construction, reconstruction, operation, maintenance, repair or removal of the Encroaching Facility.
- 5. Removal of Encroaching Facility. PEC is entitled to remove all or a portion of the Encroaching Facility as reasonably necessary to construct, reconstruct, maintain or repair public improvements within the affected Easement Area. PEC will notify Owner of any intent to remove all, or a portion, of the Encroaching Facility, and upon receiving such notice, Owner shall ensure that the requested removal is made within the earlier of (a) thirty (30) days after the date of such notice or (b) another date as determined by PEC and Oner

in writing. If PEC notifies Owner of its intent to remove all, or a portion, of the Encroaching Facility, and Owner shall thereafter fail to complete the removal within the required time period, then PEC may require Licensee to promptly remove the Encroaching Facility. Notwithstanding anything to the contrary herein, if the removal is necessitated by an emergency, no notice is required. If so removed, PEC has no obligation to replace the affected portions of the Encroaching Facility upon completion of such work.

- 6. Risk and Liability. Owner assumes all risks and liability resulting or arising from or relating to Owner's use, the existing condition or location, or existing state of maintenance, repair or operation of the Easement Area. It is further agreed that PEC shall not be liable for any damage to the Encroaching Facility as a result of PEC's use or enjoyment of its Easement. Any PEC property damaged or destroyed by Owner, or its agents, employees, invitees, contractors or subcontractors shall be repaired or replaced by Owner at Owner's expense and payment is due upon Owner's receipt of an invoice from PEC.
- 7. INDEMIFICATION. OWNER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS PEC, ITS OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, CAUSES OF ACTION, LOSS, DAMAGE, LIABILITIES, COSTS AND EXPENSES (INCLUDING ATTORNEY'S FEES AND COURT COSTS) OF ANY AND EVERY KIND OR CHARACTER, KNOWN OR UNKNOWN, FIXED OR CONTINGENT, FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT OR SUFFERED BY ANY PERSON OR PERSONS, INCLUDING CLAIMS BASED ON STRICT LIABILITY, ARISING OUT OF OR IN CONNECTION WITH OWNER'S ACTIONS OR OMISSIONS OR THE ACTIONS OR OMISSIONS OF ITS OFFICERS, AGENTS, ASSOCIATES, EMPLOYEES, CONTRACTORS OR SUBCONTRACTORS OR THE ACTIONS OR OMISSIONS OF ANY OTHER PERSON ENTERING ONTO THE EASEMENT AREA OR THE ENCROACHING FACILITY, INCLUDING THE NEGLIGENT ACTIONS OR OMISSIONS OF PEC, WHEN SUCH ACTIONS OR OMISSIONS RELATE TO OWNER'S USE OF THE EASEMENT AREA
- 8. <u>Default/Termination.</u> If Owner, its employees, agents, representatives, contractors, subcontractors and/or any other third parties for whom Owner is legally responsible, defaults under any of the terms and conditions of this Consent and such default continues for a period of five (5) days after PEC notifies Owner of such default in writing, PEC may, at its sole election and in addition to any other remedies it may exercise, terminate this Consent, and upon such termination, all of Owner's rights hereunder shall cease and terminate. This Consent shall also terminate upon Owner's abandonment of the Encroaching Facility.

[Signature page follows.]

RECEIVED By Brandon Olvera at 11:19 am, Sep 03, 2024

This Consent shall extend to and be binding upon Owner and its successors and assigns and is not to be interpreted as a waiver or any rights held by PEC and its Easement.

Executed this 29 day of August, 2024.

Pedernales Electric Cooperative, Inc.

Name: Eric Villanueva

Title: Electrical Distribution Design and Planning Manager

THE STATE OF TEXAS COUNTY OF (CMa)

BEFORE ME, the undersigned authority, on this day personally appeared Enc Villanueva Electric Distribution + Planning Warager of Pedernales Electric Cooperative, Inc., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that the foregoing instrument was executed for the purposes and consideration therein expressed.

My Commission Expires:

Notary Public in and for

the State of Texas



	Juniper Ventures of Texas LLC
By:	feels
7	

Name: Kirk Brumley
Title: Director of Real Estate

THE STATE OF TEXAS

COUNTY OF COMAL

This instrument was acknowledged before me on August 29, Kirk Brunley of Tuniper Ventures of Texas, 4.6.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 29th day of August 2024.

My Commission Expires:

the State of Texas

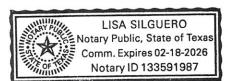
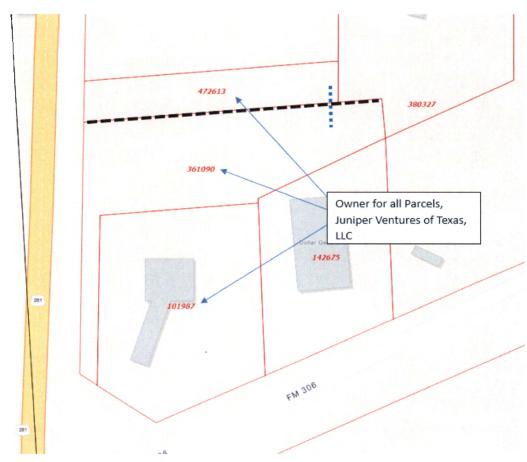




Exhibit A Depiction of Encroaching Facility

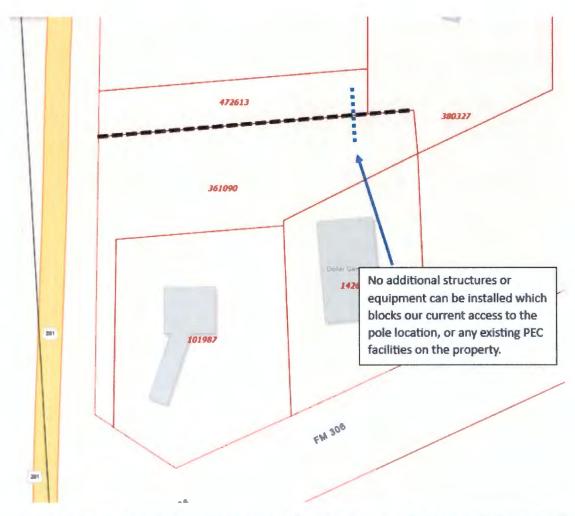


APPROXIMATE AREA OF EXISTING ELECTRIC FAICILITIES:

APPROXIMATE AREA OF ENCROACHMENT: ••••••

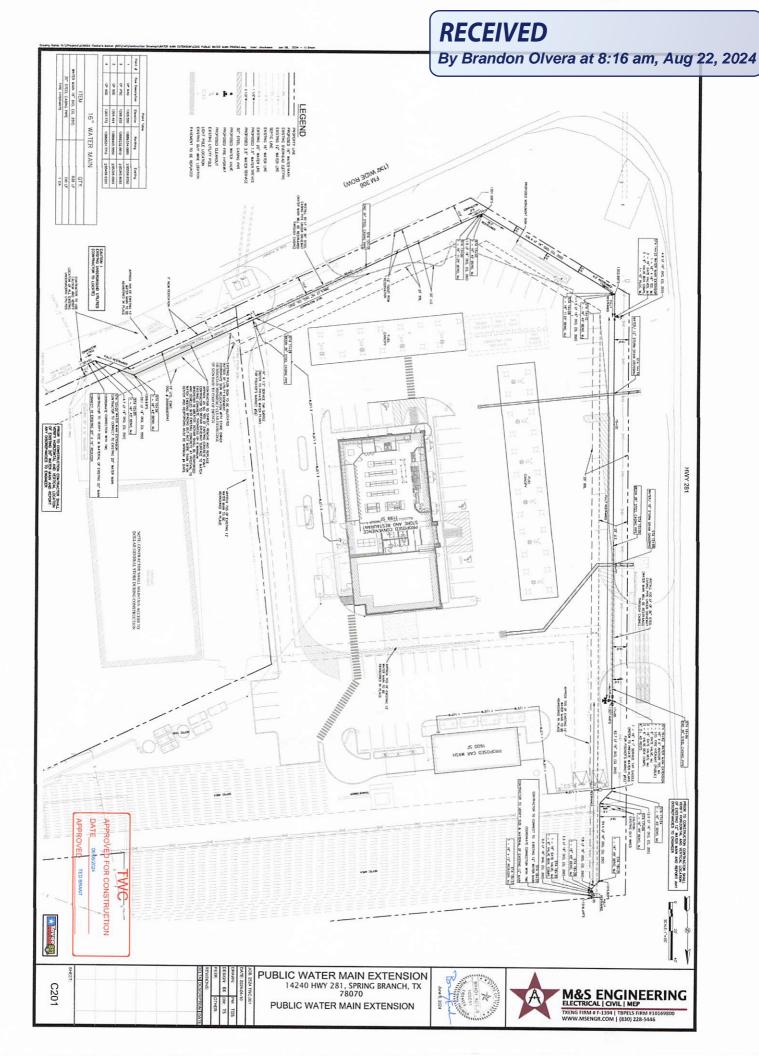
By Brandon Olvera at 11:19 am, Sep 03, 2024

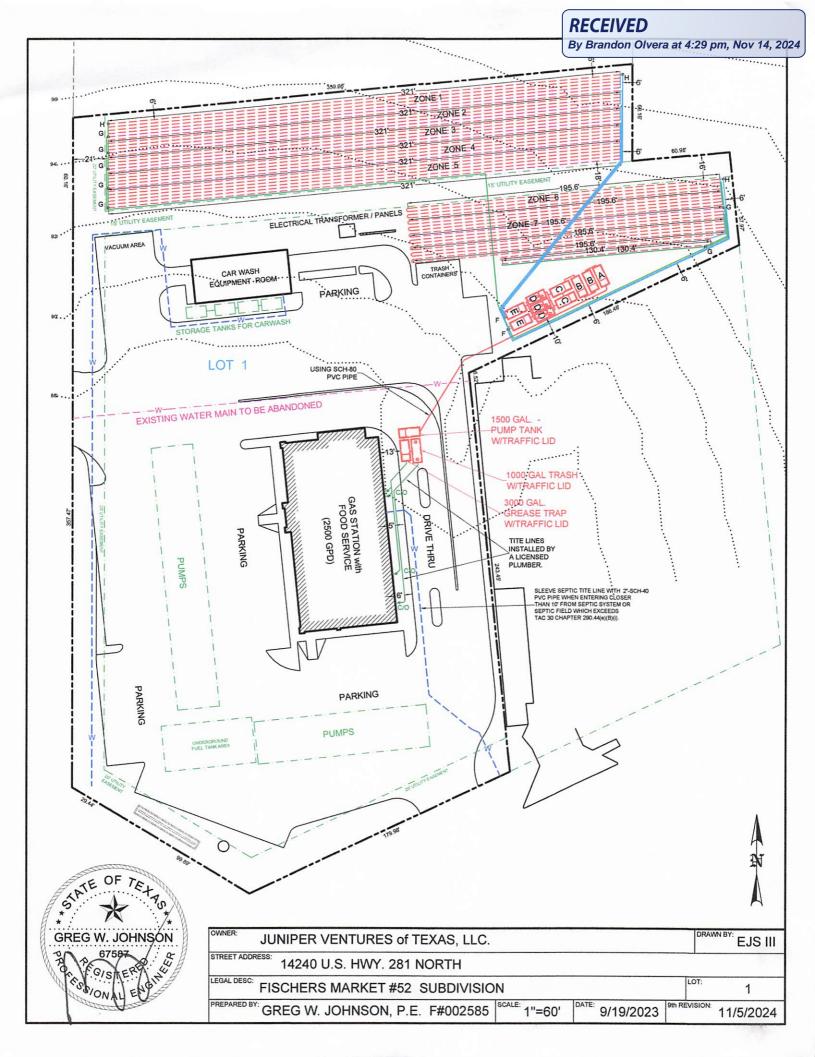
Exhibit B Limitations on PEC Encroachments

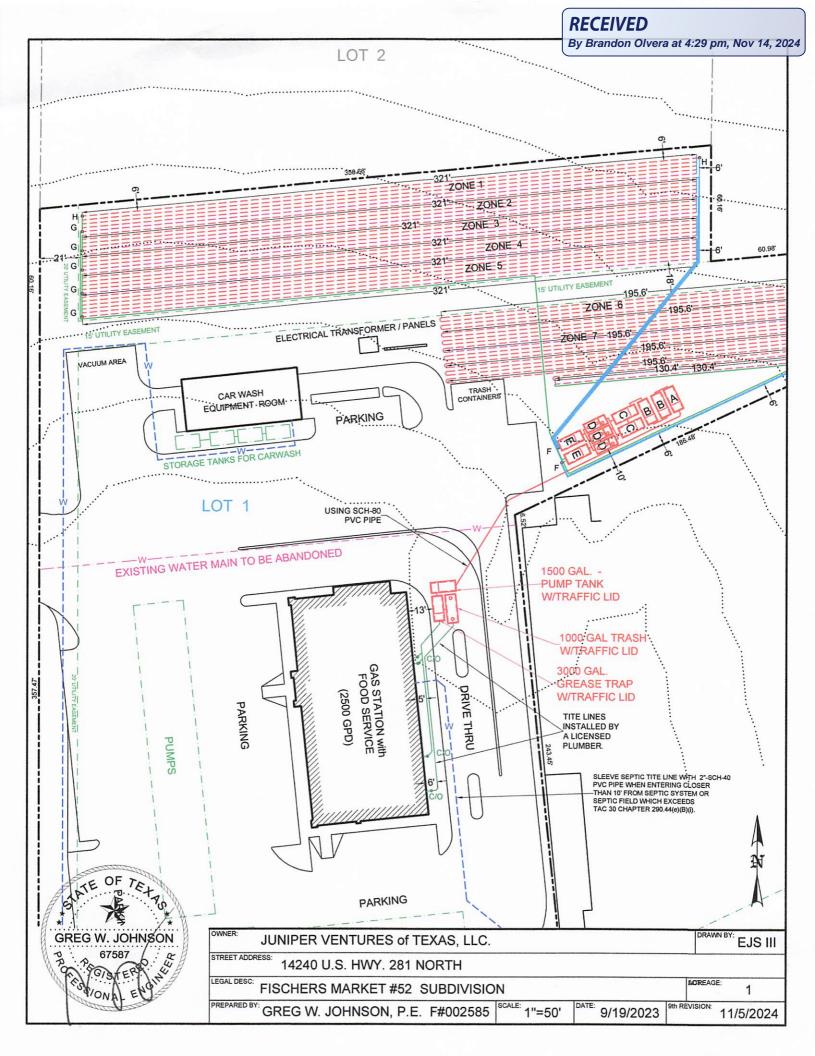


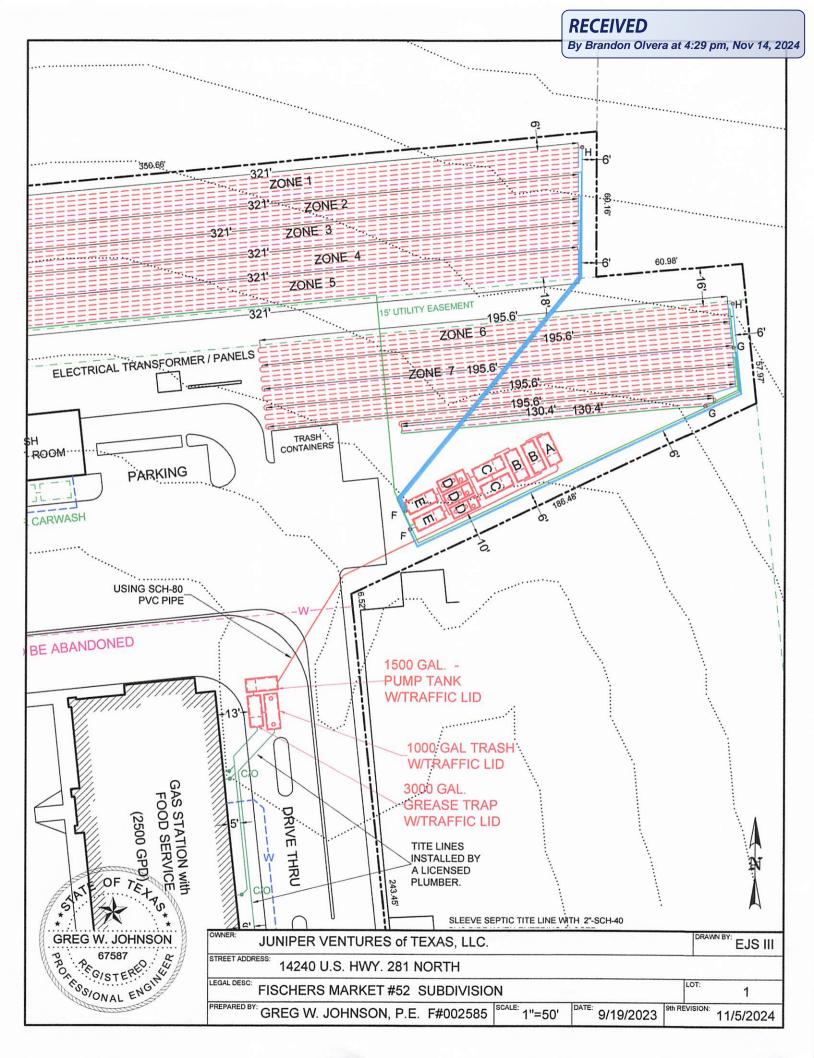
APPROXIMATE AREA OF EXISTING ELECTRIC FAICILITIES:

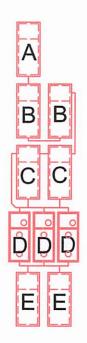
APPROXIMATE AREA OF ENCROACHMENT:











SEPTIC TANK LAYOUT:

A = 2200 GAL. TRASH TANK

B = 2 - 2200 GAL.AERATION TANKS

C = 2 - 2200 GAL. EQUALIZATION

TANKS

D = 3 - 1500 GAL. AEROBIC

TREATMENT PLANTS

E = 2 - 2200 GAL. PUMP TANKS W/DUAL PUMPS

F= K-RAIN INDEXING VALVE - SEE

ATTACHED WRITE UP

G = CHECK VALVE

H = VACUUM BREAKERS

ZONE	DRIP FIELD SIZE	TOTAL
ZONE 1 - 3	1605' EACH ZONE	4815'
ZONE 4 - 5	1926' EACH ZONE	3852'
ZONE 6 - 7	1956' EACH ZONE	3912'
TOTAL FEET	12,579'	
TOTAL SQUA	25,158sf	





JUNIPER VENTURES of TEXAS, LLC. SPEC SHEET					EJS III
STREET AD	14240 U.S. HWY. 281 NORTH				
LEGAL DES	FISCHERS MARKET #52 SUBDIVISIO	N		LOT:	1
PREPARED	GREG W. JOHNSON, P.E. F#002585	SCALE: N.T.S.	DATE: 9/19/2023	9th REVISION:	11/5/2024

TANK NOTES:

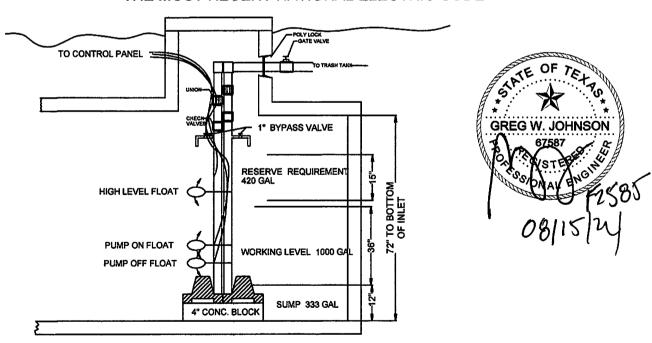
Tanks must be set to allow a minimum of 1/8" per foot fall from building.

Tightlines to the tank shall be SCH-40 PVC.

A two way sanitary tee is required between mobiles and tank.

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

ALL WIRING MUST BE IN COMPLIANCE WITH THE MOST RECENT NATIONAL ELECTRIC CODE

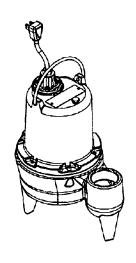


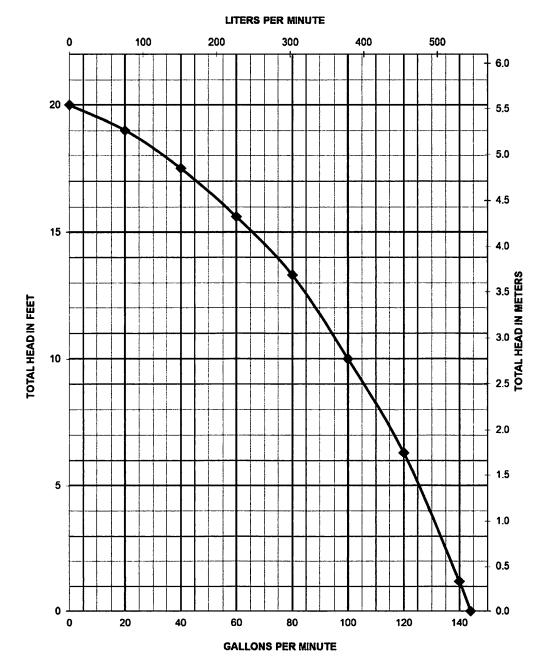
2000 GAL PUMP CHAMBER VOLUME = 27.75 GAL/IN



Pump Specifications

LE40 Series
4/10 HP Submersible Sewage Pump







LE40-Series Electrical Data

MODEL	НР	VOLTAGE	PHASE	SF	FULL LOAD AMPS	LOCKED ROTOR AMPS	THERMAL OVERLOAD TEMP	STATOR WINDING CLASS	CORD LENGTH FT	DISCHARGE	AUTOMATIC
LE41A	4/10	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	WIDE ANGLE
LE41A -2	4/10	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	WIDE ANGLE
LE41AV	4/10	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	VERTICAL SWITCH
LE41AV -2	4/10	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	VERTICAL SWITCH
LE41M	4/10	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	NO
LE41M-2	4/10	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	NO

LE40-Series Technical Data

IMPELLER	VORTEX ENGINEERED POLYMER
SOLIDS HANDLING SIZE	2*
PAINT	POWDER COAT
MAX LIQUID TEMP	60°C 140°F
MAX STATOR TEMP	130°C 266°F
THERMAL OVERLOAD	105°C 221°F
POWER CORD TYPE	WTLS
MOTOR HOUSING	CLASS 25 CAST IRON
VOLUTE	CLASS 25 CAST IRON
SHAFT	STAINLESS
HARDWARE	STAINLESS
ORINGS	BUNA N
MECHANICAL SEAL	UNITIZED CERAMIC CARBON
WEIGHT	40 LBS





WATER & WASTEWATER TREATMENT CONSULTANTS
17230 HUFFMEISTER ROAD ~ CYPRESS, TEXAS 77429-1643
TEL: 281-373-0500 FAX: 281-373-1113

November 1, 2018

Mr. Tony Lofton Gatco Treatment Systems, LP 32111 Rochen Road Waller, TX 77484

Re:

ATSM 1227 Compliance

Dear Tony:

I, <u>D. Ray Young</u>, <u>P.E.</u>, have evaluated the manufacture of the precast concrete tanks listed below and have determined that the tanks meet the requirements of the Material and Manufacture Section and the Structural Design Requirements Section of ASTM 1227.

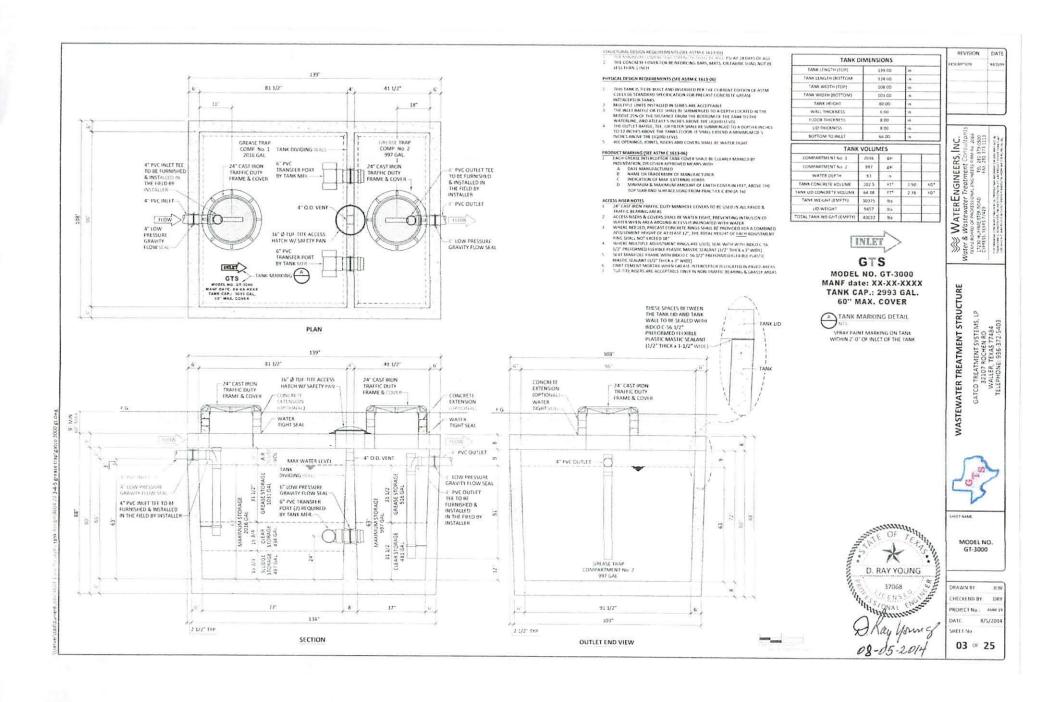
DZ-500R Sep A	DZ-1500-SEP	4000 SEP
DZ-500R-Sep B	DZ-1500-S/P	4000 PUMP
DZ-500R-Pump	DZ-1500-2Comp	4000 2Comp
500 Sep Tank A	DZ-1600-PUMP	4000 S/P
500 Sep Tank B	DZ-1500LP-3Comp	5000 SEP
500 Pump Tank Round	DZ-2000-2Comp	5000 PUMP
600 Pump Tank -1 PC-SQ	DZ-2000-S/P	5000 2Comp
DZ-750R-Sep A	DZ-2000-PUMP	5000 S/P
DZ-750R-Sep B	DZ-2000-SEP	6000 SEP
DZ-750R-Pump	DZ-2250-Pump	6000 PUMP
DZ-750-Sep A	DZ-2250-3Comp	6000 2Comp
DZ-750-Sep B	DZ-2500-2Comp	6000 S/P
DZ-800-Pump	DZ-2400-S/P	GT 1000
DZ-1000LP-S/P	DZ-2400-SEP	GT 1500LP
DZ-1000LP-2Comp	DZ-2600-PUMP	GT 2000
DZ-1250-2Comp	3000 SEP	GT 3000
DZ-1250-S/P	3000 PUMP	GT 4000
DZ-1250-Pump	3000 2Comp	GT 5000
DZ-1250-SEP	3000 S/P	GT 6000

Please contact me directly with any questions or concerns.

Sincerely,

WATERENGINEERS, INC.

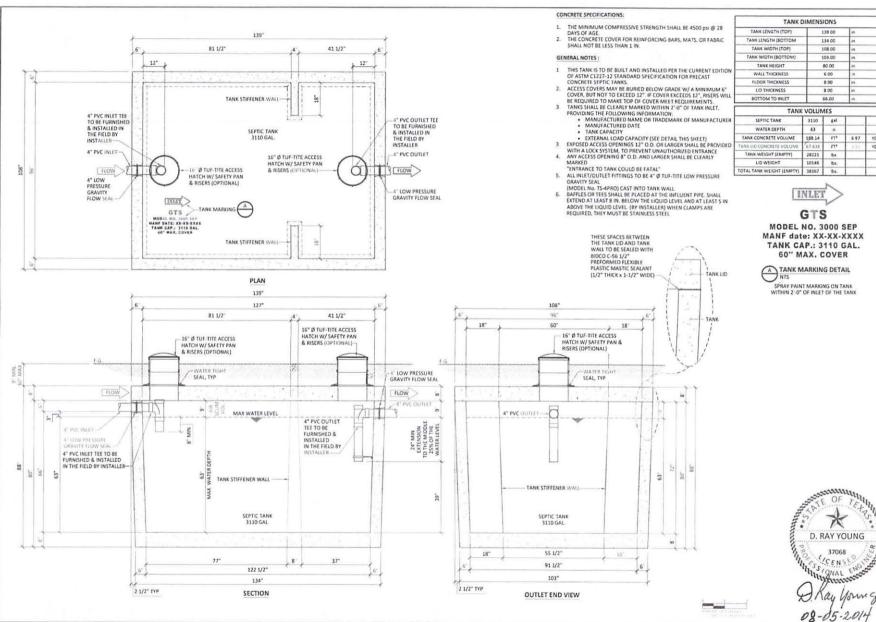
D. Ray Young, P.E.



Grease Interceptor Sizing Worksheet

The Uniform Plumbing Code Formula

Compa	ny JUNIPER VENTURES OF TEXAS, LLC Calcula	ated By GREG W. JOH	INSON, P.	E. Dat	e
		ocation 14240 US HV			04/20/2024
	e six simple steps to determine grease inte				
	No of Meals		C	alculated	
	Per Peak Waste Flow Ret	ention Storage		terceptor	Grease
		ime Factor		Size	Interceptor
Enter					
Calculations	> 80 X 5 X	2.5 X 3	=	3000	3000
Here					
		ep 3 Step 4		Step 5	Step 6
	Number of Meals Per Peak Hour (Reco		NO	tes:	
		als per k Hour			
4	60 X 1.33 =	80			
1	Establishment Type:	Meal Fac	tor		
	Fast Food (45 min)	1.33			
	Restaurant (60 min)	1.00			
	Leisure Dining (90 min)	0.67			
	Dinner Club (120 min)	0.50			
	Waste Flow Rate:		7	tes:	
	Condition	Flow Ra			
2	With a Dishwashing Machine	6 Gallon			
2	Without a Dishwashing Machine	s			
	Single Service Kitchen	2 Gallon			
	Food Waste Disposer Only	1 Gallor			
	Retention Time Commercial Kitchen Waste		No	tes:	
3	Dishwasher	2.5 Hour	.		
3	Single Service Kitchen	2.5 Hour	S		
	Single Service Ritcheri	1.5 Hour	·e		
	Storage Factor	1.0 11001		tes:	
		Storage			
	Kitchen Type	Factor			
	Fully Equipped Commercial				
1	Hours of Operation				
4	8 Hours	1.00			
	12 Hours	1.50			
	16 Hours	2.00			
	24 Hours	3.00			
	Single Service Kitchen	1.50			
E	Calculate Liquid Capacity			tes:	
5	Multiply the values obtained from step		sult is		
	the approximate grease interceptor siz	e for this application			
6	Select Grease Interceptor	connective from ston F		tes:	
6	Using the approximate required liquid		select		
	an appropriate size as recommended by	by the manufacturer.			



	TANK DIMENSIONS								
Ī	TANK LENGTH (TOP)	139 00	in						
Ī	TANK LENGTH (BOTTOM	134.00	in						
	TANK WIOTH (TOP)	108.00	in						
Ī	TANK WIDTH (BOTTOM)	103.00	in.						
	TANK HEIGHT	80.00	in.						
Ī	WALL THICKNESS	€.00	in.						
Ξ	FLOOR THICKNESS	8.00	in						
	LID THICKNESS	8 00	in						
Τ	BOTTOM TO INLET	66.00	in						

TANK	VOLUM	ES		
SEPTIC TANK	3110	gal		
WATER DEPTH	63	n		
TANK CONCRETE VOLUME	188.14	FT*	6 97	YD!
TANK LID CONCRETE VOLUME	67.638	121	2.5%	YD!
TANK WEIGHT (EMPTY)	28221	Ibs		
LID WEIGHT	10146	bs.		
TOTAL TANK WEIGHT (EMPTY)	38367	ths.		

MANF date: XX-XX-XXXX TANK CAP .: 3110 GAL.

WASTEWATER TREATMENT STRUCTURE GATCO 1

REVISION

₩ Water & Waterer Fredment Consultan Water & Wastewater Treatment Consultan That sewe to reportscown twoners new note 1120 www.mstrw.mo. 112 (18.28.319.0000 CRMSS, 110.87.003

MO



MODEL NO. 3000 SEP

DRAWN BY:	JLW
CHECKEND BY:	DRY
PROJECT No.:	4604 19
DATE: 8/	5/2014

04 of 25

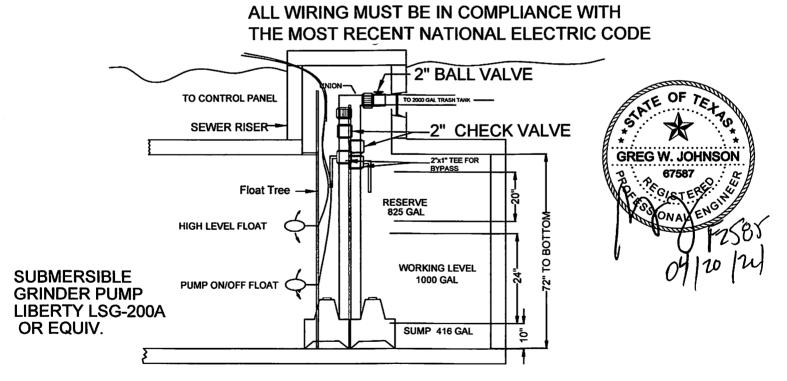
TANK NOTES:

A two way sanitary tee is required between buildings and tank.

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

Tanks must be left uncovered and full of water for inspection by the permitting authority.

Lanyard attached to each pump for servicing.



TYPICAL PUMP TANK CONFIGURATION 3000 GALLON BOX

Liberty Fumps

LSG200-Series

OMNIVORE Grinders

> 2 hp 1-1/4" Discharge

Features:

- New Patented V-Slice[®] cutter technology
- One-piece uni-body casting
 - Stainless steel impeller
- Quick-disconnect power cord
- Internal or external capacitor models available
 - 300 Series SS Rotor Shaft

U.S. Patent # 7,159,806

Year Warranty

ewolwe.





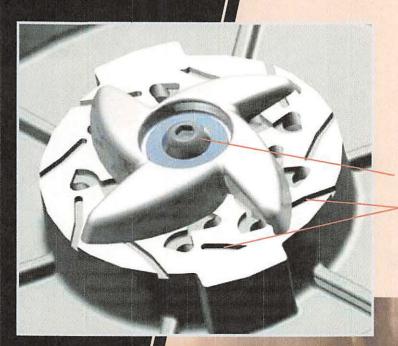
Liberty's LSG200-Series Grinder Pumps meet the demanding needs of commercial and residential sewage applications where difficult solids-handling ability is crucial. The LSG200-Series features a superior cutting system made of hardened 440 stainless steel - Rockwell C 58, for shearing solids into small particles prior to being passed to the discharge by the impeller under high pressure. Applications include individual or groups of homes, motels, schools, shopping centers, lakefront developments and systems requiring high pressure sewage pumping.

LSG200-Series Grinder Pumps

Features:

- 2 hp, heavy-duty motor oil filled, thermally protected
- Upper and lower ball bearings
- One-piece uni-body cast iron housing
- 300 Series SS Rotor Shaft
- 316 Stainless steel impeller
- Dual seals Upper seal is unitized durable silicon carbide. Lower seal is Viton® double-lip. (Lower seal ensures that all debris is kept away from main seal)
- Motor windings insulated to Class B (130°C)
- Advanced V-Slice® cutting system made of hardened 440 stainless steel -- Rockwell C 58
- Horizontal 1-1/4" FNPT Discharge
- Back vanes on impeller and spiraled bottom plate for superior solids clearing
- All stainless steel fasteners
- · Clog-free volute design
- Designed for maximum heat dissipation and cool motor operating temperatures
- Solid state starting circuit no mechanical relay coil
- 25' power cord with Quick-Disconnect
- Piggy back plug with wide angle float (on automatic model) eliminates need for expensive panel

Viton® is a registered trademark of DuPont Dow Elastomers LLC.



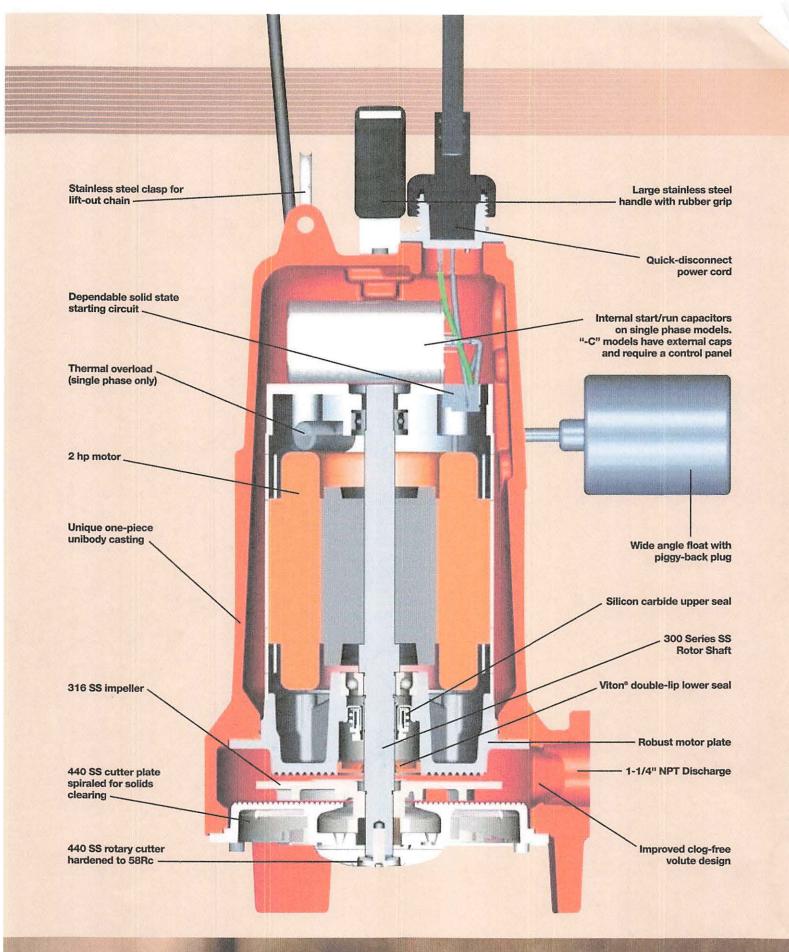
V-Slice® Technology

Superior cutting system provides improved shredding performance over radial cutters. V-pattern provides up to 108 alternated cuts per revolution. Entire cutting system made of 440 stainless steel hardened to 58Rc.

Recessed cutter bolt eliminates wadding

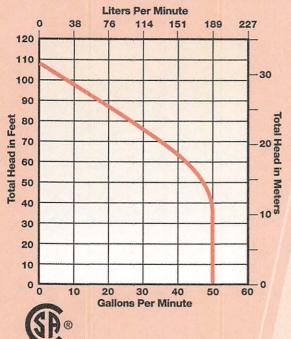
Exclusion cleanout slots and back relief clears debris from under cutter

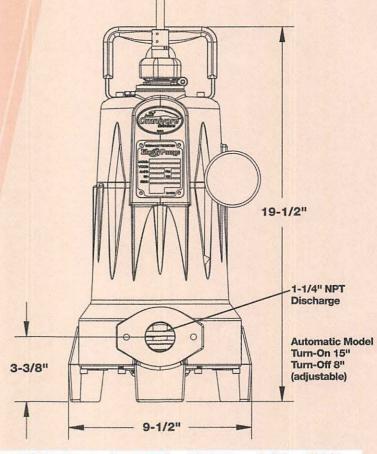
U.S. Patent # 7,159,806



uate: ewolve.

LSG200-Series Specifications





Model	HP	Volts	Phase	HZ	Amps	Locked Rotor Amps	Speed (RPM)	Discharge	Switch	Weight
LSG202A	2	208-230	1	60	15	53	3450	1-1/4"	Yes	86
LSG202M	2	208-230	1	60	15	53	3450	1-1/4"	No	84
LSG202M-C	2	208-230	1	60	15	53	3450	1-1/4"	No	84
LSG203M	2	208-230	3	60	10.6	62	3450	1-1/4"	No	84
LSG204M	2	440-480	3	60	5.3	31	3450	1-1/4"	No	84
LSG205M	2	575	3	60	4.9	31	3450	1-1/4"	No	84

Single phase models are thermally protected. 3-phase models require a properly sized control panel. Maximum fluid temperature 140° F

LSG202M and LSG202A feature internal capacitors and do not require a separate control panel for operation. LSG202M-C features external capacitors, requiring a panel with appropriately sized start and run capacitors.

Options for LSG202M-C: External Cap Grinder

Model Description

K001316 Start/Run Capacitor Kit (for retrofit in existing panels)
SXHC24=3 Simplex NEMA 4X Panel with start/run capacitors
AE24HC=3 Duplex NEMA 4X Panel with start/run capacitors
For complete panel specifications, see SX or AE-series literature.
25' cord standard on all models. LSG202M-C features 35' cord standard.

GR20 Guide Rail Base

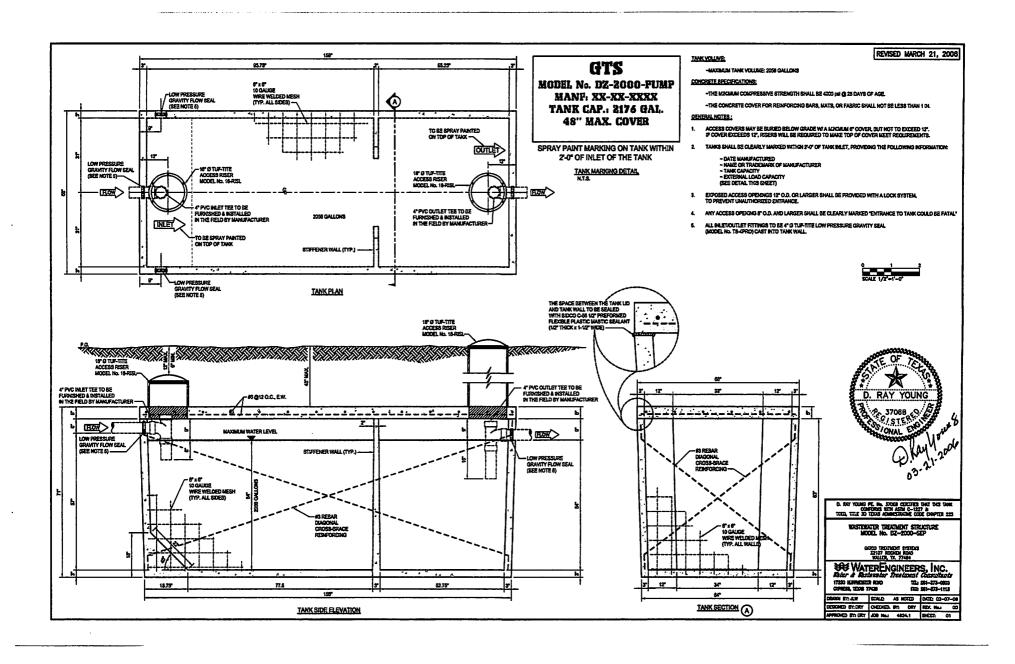


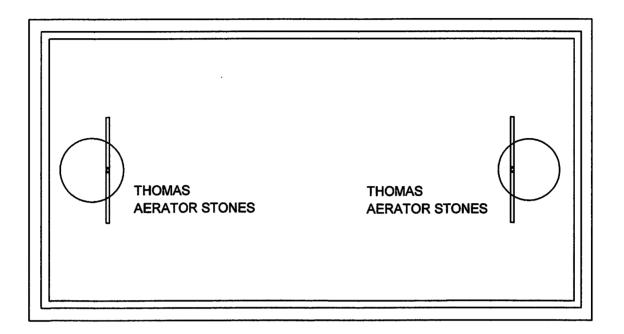


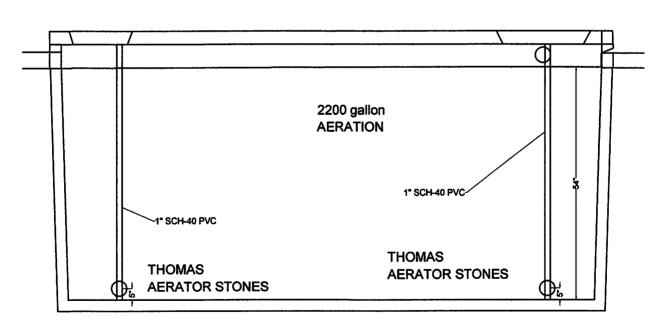


- Cast Iron construction
- Single 1-1/4" guide rail pipe design
- Auto alignment feature (GR20 works only with LSG-Series pumps)
- Upper rail support bracket (GR20 option sold separately)



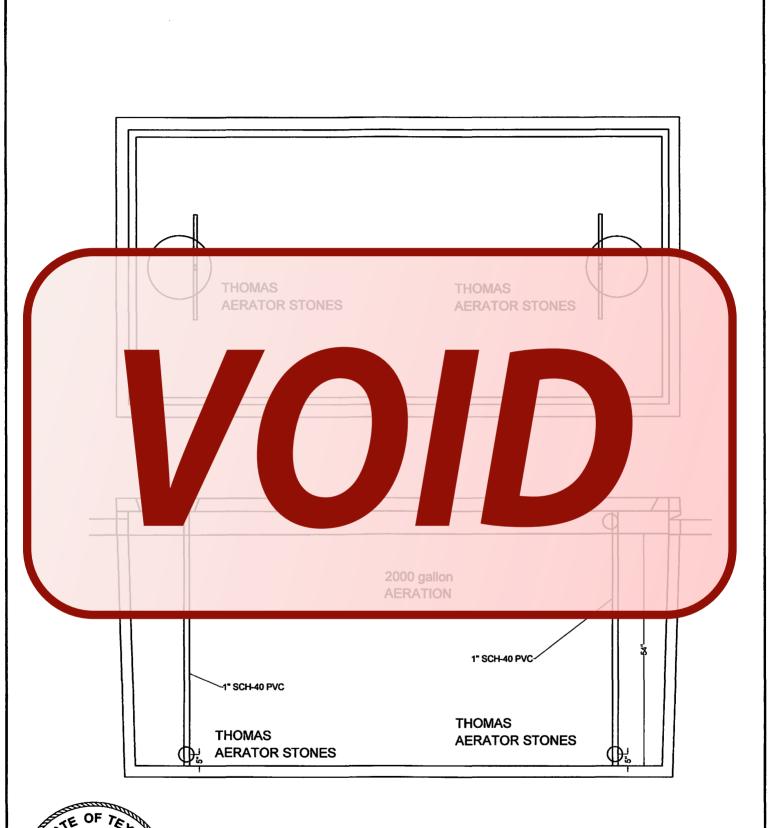








JUNIPER VENTURES OF TEXAS, LLC	DRAW BY		
STREET ADDRESS: 14240 US HWY 281			
SUBDIVISION FISCHERS MARKET #52	^{LOT:} 1	ACRES: 3.19	
PREPARED BY: GREG W. JOHNSON, P.E. F#002585 SCALE: NTS	DATE: 04/14/2024	REVISED: 17/2024	





JUNIPER VENTURES OF TEXAS, LLC	GWJ	
STREET ADDRESS: 14240 US HWY 281		
SUBDIMISION FISCHERS MARKET #52	^{LOT:} 2	ACRES: 3.19
DOEDADED RY: SCALE: DATE:	04/14/2024	REVISED:

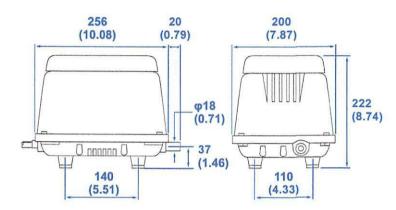


(230 volt only)

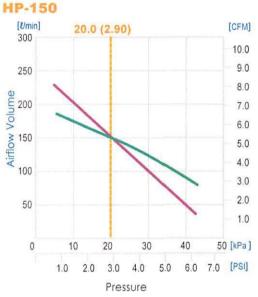
P-150, 200 PRESSURE TYPE

Dimensions

[Unit: mm(inch)]

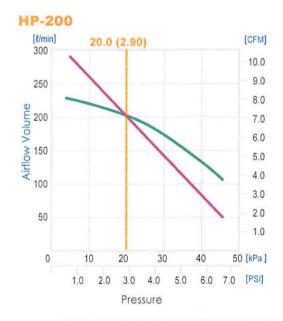


Performance Curves Rated Loading Pressure [kPa(PSI)] - 50Hz --- 60Hz



Specifications

	2200	HP-	150	HP-	200	
Rated Voltage	V	AC100 / 110-120 / 220-240				
Power Supply Frequency	Hz	50	60	50	60	
Rated Loading Pressure	kPa	20.0				
Airflow Volume	ℓ/min	150		200		
Power Consumption	; w	125	155	210	250	
Noise Level	dBA	45	47	46	48	
Weight	; kg	9.0				



- Performance data is representative of typical values. Specifications and performance data are subject to change without notice. Purchaser is responsible for determining suitability for product applications
- . "HIBLOW" is a registered mark of Techno Takatsuki co., Itd.

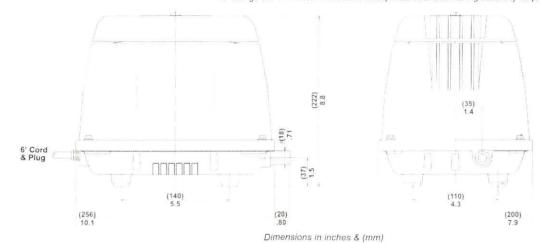
HP Series Linear Pumps

Models HP100, 120, 150 and 200

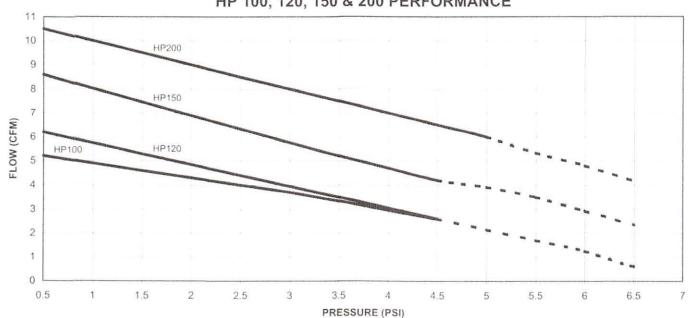


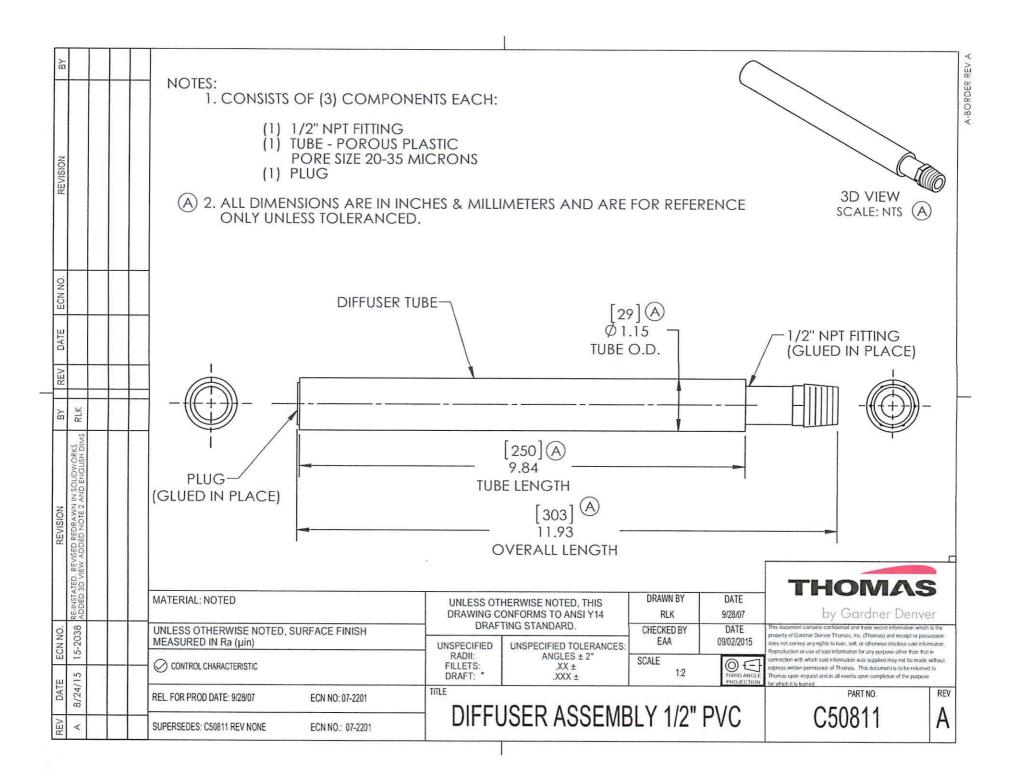
Model Number	HP100-0110	HP120-0110	HP150-0110	HP200-0110
Voltage (Vac)	120	120	120	120
Frequency (Hz)	60	60	60	60
Max. Cont. Pressure (psig)	4.5	4.5	4.5	5
Max. Inter. Pressure (psig)	6.5	7.5	6,5	6.5
Open Flow (c.f.m.)	5.2	6.1	8.6	10.5
Power Consumption (amps)	1.2	2.1	2.1	3.4
Sound Level (dBA@3 ft.)	38	40	48	47
Weight (lbs.)	19	19	20	20
Service Kit # Chambr. Blck.	120PC20011	120PC20011	200PC20011	200PC20011

Performance data noted is representative of typical values. Specifications and performance data are subject to change without notice. Purchaser is responsible for determining suitability for product applications.



HP 100, 120, 150 & 200 PERFORMANCE





TANK NOTES:

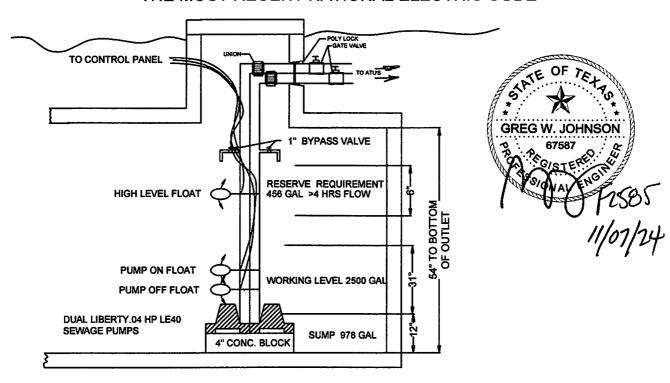
Tanks must be set to allow a minimum of 1/8" per foot fall from building.

Tightlines to the tank shall be SCH-40 PVC.

A two way sanitary tee is required between mobiles and tank.

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

ALL WIRING MUST BE IN COMPLIANCE WITH THE MOST RECENT NATIONAL ELECTRIC CODE



PUMP TANK 4400 GAL PUMP TANK VOLUME = 81.5 GAL/IN

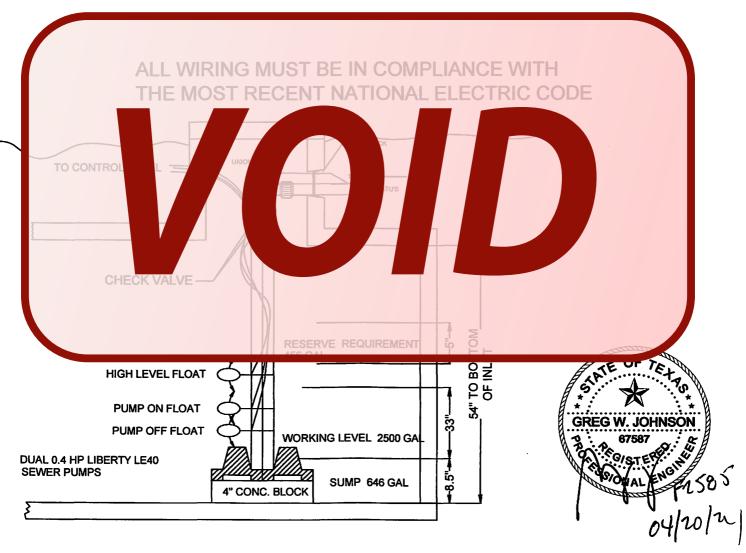
TANK NOTES:

Tanks must be set to allow a minimum of 1/8" per foot fall from building.

Tightlines to the tank shall be SCH-40 PVC.

A two way sanitary tee is required between mobiles and tank.

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

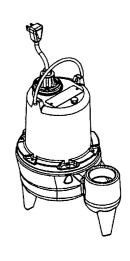


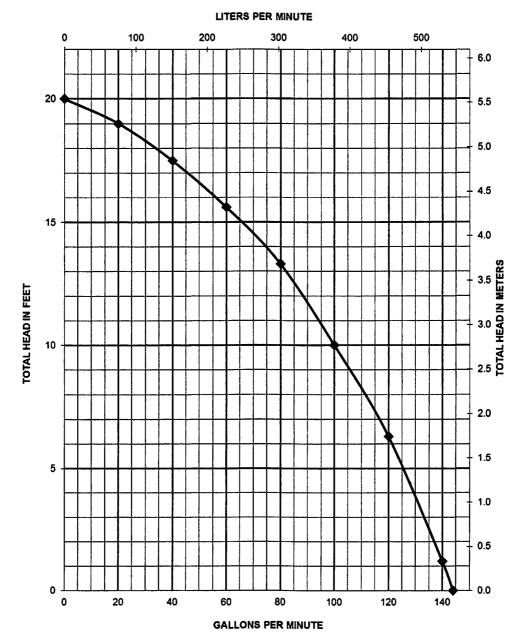
TYPICAL 4000 GAL PUMP TANK
VOLUME = 76 GAL/IN



Pump Specifications

LE40 Series 4/10 HP Submersible Sewage Pump







LE40-Series Electrical Data

MODEL	НР	VOLTAGE	PHASE	SF	FULL LOAD AMPS	LOCKED ROTOR AMPS	THERMAL OVERLOAD TEMP	STATOR WINDING CLASS	CORD LENGTH FT	DISCHARGE	AUTOMATIC
LE41A	4/10	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	WIDE ANGLE
LE41A -2	4/10	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	WIDE ANGLE
LE41AV	4/10	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	VERTICAL SWITCH
LE41AV -2	4/10	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	VERTICAL SWITCH
LE41M	4/10	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	NO
LE41M-2	4/10	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	NO

LE40-Series Technical Data

IMPELLER	VORTEX ENGINEERED POLYMER
SOLIDS HANDLING SIZE	2"
PAINT	POWDER COAT
MAX LIQUID TEMP	60°C 140°F
MAX STATOR TEMP	130°C 266°F
THERMAL OVERLOAD	105°C 221°F
POWER CORD TYPE	WTLS
MOTOR HOUSING	CLASS 25 CAST IRON
VOLUTE	CLASS 25 CAST IRON
SHAFT	STAINLESS
HARDWARE	STAINLESS
ORINGS	BUNA N
MECHANICAL SEAL	UNITIZED CERAMIC CARBON
WEIGHT	40 LBS



Solid-state Multi-functional Timers

H3CR-A

Multiple Operating Modes and Multiple Time Ranges. DIN 48 x 48-mm Multifunctional Timer.

- A wide AC/DC power supply range greatly reduces the number of timer models kept in stock.
- A wide range of applications with multiple operating modes, eight modes for 11-pin models and five modes for 8-pin models.
- · Ecological design with reduced current consumption.
- Easy sequence checking with instantaneous outputs for a zero set value.
- Length of 75 mm or less when panel-mounted with a P3G-08 Socket (H3CR-A8E, 100 to 240 VAC, 100 to 125 VDC)
- · PNP input models available.
- Standards: UL, CSA, NK, LR, CCC, EN 61812-1, and CE Marking.





For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Model Number Structure

■ Model Number Legend

Note: This model number legend includes combinations that are not available. Before ordering, please check the List of Models on page 3 for availability



1. Number of Pins

None: 11-pin models 8: 8-pin models

2. Input Type for 11-pin Models

None: No-voltage input (NPN type)
P: Voltage input (PNP type)

3. Output

None: Relay output (DPDT)

S: Transistor output (NPN/PNP universal use)

E: Relay output (SPDT) with instantaneous relay output (SPDT)

4. Suffix

301: Double time scale (range) models (0.1 s to 600 h)

5. Supply Voltage

100-240AC/100-125DC: 100 to 240 VAC/100 to 125 VDC 24-48AC/12-48DC: 24 to 48 VAC/12 to 48 VDC

24-48AC/DC: 24 to 48 VAC/VDC (Only for H3CR-A8E)

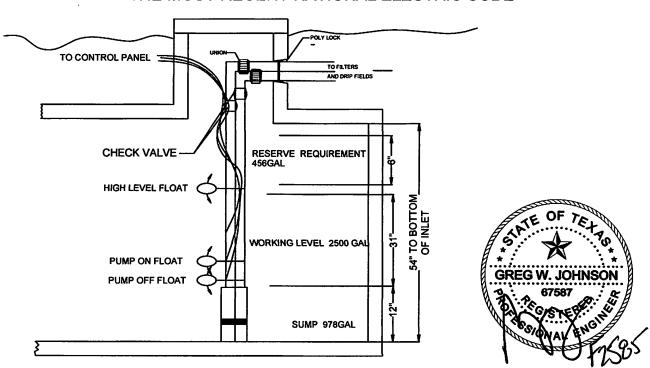
TANK NOTES:

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

Tanks must be left uncovered and full of water for inspection by the permitting authority.

Tanks must be set to allow a minimum of 1/8" per foot fall from the building

ALL WIRING MUST BE IN COMPLIANCE WITH THE MOST RECENT NATIONAL ELECTRIC CODE



FINAL TANK 4400 GAL PUMP TANK VOLUME = 81.5 GAL/IN

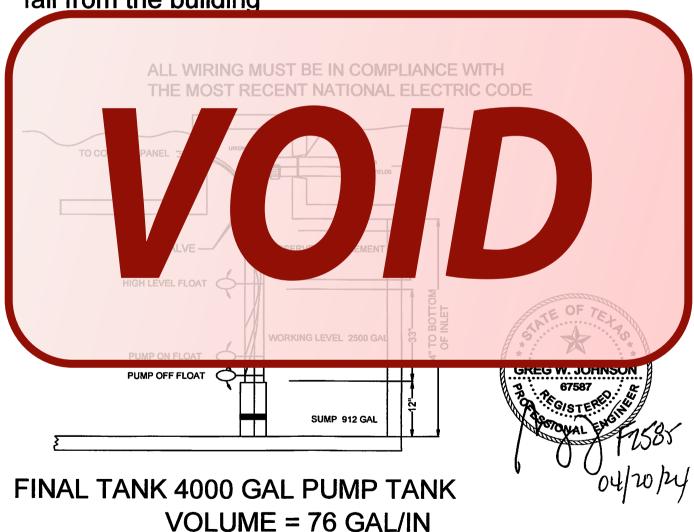
TANK NOTES:

A minimum of 4" of sand, sandy loam, clay loam free of rock shall be placed under and around tanks

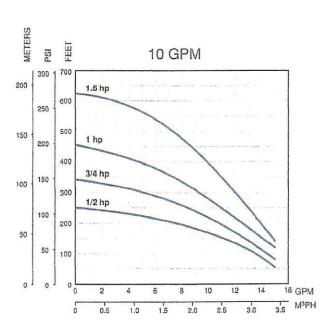
Tanks must be left uncovered and full of water for inspection by the permitting authority.

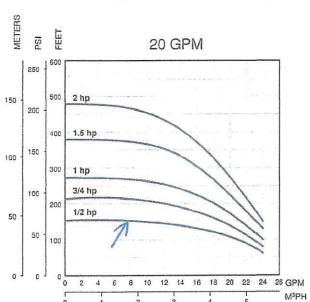
Tanks must be set to allow a minimum of 1/8" per foot

fall from the building



Thermoplastic Performance





Thermoplastic Units Ordering Information

	1/2 - 1.5 H	IP Single-Phase	Units			
Order No.	Model	GPM	HP	Volt	Wire	Wt
94741005	10FE05P4-2W115	10	1/2	115	2	24
94741010	10FE05P4-2W230	10	1/2	230	2	24
94741015	10FE07P4-2W230	10	3/4	230	2	28
94741020	10FE1P4-2W230	10	1	230	2	31
94741025	10FE15P4-2W230	10	1.5	230	2	46
94742005	20FE05P4-2W115	20	1/2	115	2	25
94742010	20FE05P4-2W230	20	1/2	230	2	25
94742015	20FE07P4-2W230	20	3/4	230	2	28
94742020	20FE1P4-2W230	20	1	230	2	31
94742025	20FE15P4-2W230	20	1.5	230	2	40

	Thermoplastic 1/2 - 2 HP Pump Ends							
Order No.	Model	GPM	HP	Volt	Wire	Wt.		
94751005	10FE05P4-PE	10	1/2	N/A	N/A	6		
94751010	10FE07P4-PE	10	3/4	N/A	N/A	7		
94751015	10FE1P4-PE	10	1	N/A	N/A	8		
94751020	10FE15P4-PE	10	1.5	N/A	N/A	12		
94752005	20FE05P4-PE	20	1/2	N/A	N/A	6		
94752010	20FE07P4-PE	20	3/4	N/A	N/A	7		
94752015	20FE1P4-PE	20	1	N/A	N/A	8		
94752020	20FE15P4-PE	20	1.5	N/A	N/A	10		
94752025	20FE2P4-PE	20	2	N/A	N/A	11		

Operating Instructions



Digi 20 Series **One Circuit Electronic** 24 Hour or 7 Day Time Switches



(surface mounting)





Digi 20E (flush mounting)









Time based control of lighting, ventilating, heating, cooling or other electrical loads in commercial and industrial applications. The Digi 20 time switches are programmable for 24hour or 7-day schedules.

The Digi 20A is intended for either surface or rail mounting. The control is completely enclosed in a plastic housing and includes a terminal cover and sub-base for installation and hard wiring.

The Digi 20E is intended for flush (panel) mounting.

All units are supplied with a clear plastic dust cover. They are also available with an enclosure for stand-alone applications. (GM and GMX models)

TECHNICAL DATA

Output-1 SPDT relay with dry contacts Switch Rating: 16A/277VAC resistive

1000W tungsten @ 240VAC; 500W @ 120VAC 1/2 hp @ 120VAC: 1 hp @ 240VAC

100 hour capacitor back-up of memory and display Supply voltages: Separate Models - 24VAC/DC, 120VAC,

208/240VAC, all 50/60Hz (refer to product label)

Shortest switch time-1 minute

Ambient Temperature Range -20°F to 140°F (-28°C to 60°C)

VA required: 120V & 240V models: 4VA

24V model: 2VA @ 24VAC, 1VA @ 24VDC

Screw terminal connections (Digi 20A) 1/4" quick connects (Digi 20E) Accuracy ± 4 minutes per year

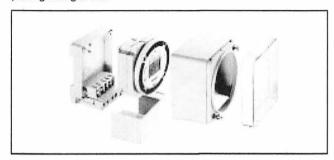
Installation

To the installer:

- 1. Read operating instructions carefully.
- 2. Check the input and output ratings marked on the unit to make sure this product is suitable for your power supply and application.
- 3. Disconnect power supply prior to installation to prevent electrical shock.
- 4. Wire in accordance with National and Local electrical code requirements.

SURFACE MOUNTING-Digi 20A

Remove dust cover, loosen two screws on opposite corners. Remove the housing that surrounds the time switch and the terminal cover away from the base. Remove timer module by pulling straight out.



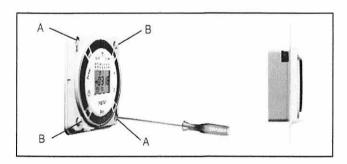
Place screws through 3 mounting holes in base and screw to back panel or wall.

Wire in accordance with instructions. Replace terminal cover and push timer firmly onto base. Now replace housing and secure with screws.

NOTE: The Digi 20A is also suitable for DIN rail mounting. Break out housing part on each side that fits over rail.

PANEL MOUNTING-Digi 20E

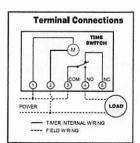
Cut a square hole 2-5/8" x 2-5/8" (66mm x 66mm) in the front of the panel. Insert the time switch through the opening. With a screwdriver, press down and turn outer screws (A) until flanges are in position to fasten the unit in front panel, then release. Insert plugs into holes (B).



Use 1/4" quick connects and make connections in accordance with the wiring diagram shown and applicable code requirements.

WIRING

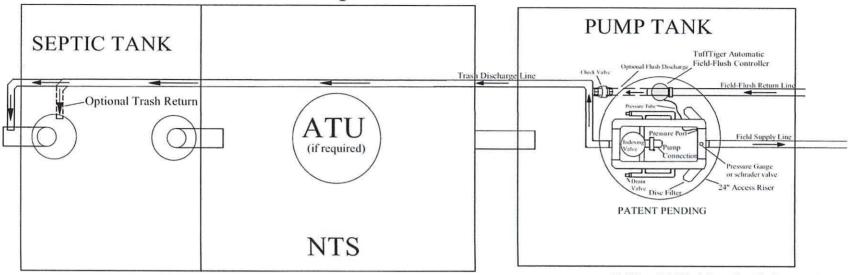
- 1. Disconnect the power.
- 2. Wire input to timer, (, with the proper voltage marked on the unit. Wiring to incorrect voltage will void the warranty.
- 3. Connect wiring according to the wiring diagram. The terminals on the Digi 20A sub-base will accommodate 10 to 24 AWG wire.



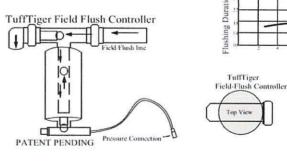
TuffTiger Filter & Field-Flush Controller Installation Detail

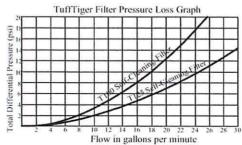
Top View

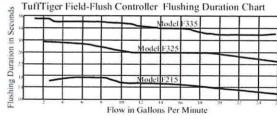
24" Access Riser Installation

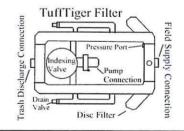












TuffTiger 8413 Parker Rd Houston, TX 77078 866-770-7785

Product information and CAD drawings available at tufftiger.com



PR-HF

PRESSURE REGULATOR - HIGH FLOW

Specifications

The pressure regulator shall be capable of operating at a constant, factory preset, non-adjustable outlet pressure of 10. 15, 20, 25, 30, 40, or 50 PSI (0.69, 1.03, 1.38, 1.72, 2.07, 2.76, or 3.45 bar) with a flow range between 10 - 32 GPM (2271 - 7268 L/hr).

The pressure regulator shall maintain the nominal pressure at a minimum of 5 PSI (0.34 bar) above model inlet pressure and a maximum of 80 PSI (5.52 bar) above nominal model pressure*, Refer to the PRU performance curve to establish specific outlet pressures based on relative inlet pressure and flow rate. Always install downstream from all shut off valves. Recommended for outdoor use only. Not NSF certified.

All pressure regulator models shall be equipped with one of these inlet-x-outlet configurations:

Inlet

1-1/4-inch Female National Pipe Thread (FNPT)

1-1/4-inch Female British Standard Pipe Thread (FBSPT) 1-1/4-inch Female National Pipe Thread (FNPT)

Outlet

1-inch Female National Pipe Thread (FNPT)

1-inch Female British Standard Pipe Thread (FBSPT)

1-1/4-inch Female British Standard Pipe Thread (FBSPT)

The upper housing, lower housing, and internal molded parts shall be of engineering-grade thermoplastics with internal elastomeric seals and a reinforced elastomeric diaphragm. Regulation shall be accomplished by a fixed stainless steel compression spring, which shall be enclosed in a chamber isolated from the normal water passage.

Outlet pressure and flow shall be clearly marked on the outside of each regulator.

The pressure regulator shall carry a two-year manufacturer's warranty on materials, workmanship, and performance. Each pressure regulator shall be water tested for accuracy before departing the manufacturing facility.

The pressure regulator shall be manufactured by Senninger Irrigation in Clermont, Florida. Senninger is a Hunter Industries Company.

Physical

1-1/4" FNPT x 1" FNPT model (shown on right)

1-1/4" FBSPT x 1" FBSPT model

Overall Length

5.6 inches (14.1 cm)

Overall Width

2.9 inches (7.4 cm)

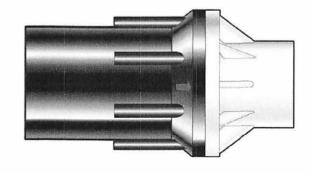
1-1/4" FNPT x 1-1/4" FNPT model

1-1/4" FBSPT x 1-1/4" FBSPT model

Overall Length

5.8 inches (14.7 cm)





^{*} Please consult factory for applications outside of recommended guidelines.



PR-HF

PRESSURE REGULATOR - HIGH FLOW

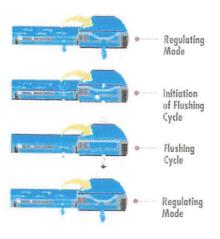
Model Numbers

Model #	Flow Range	Preset Operating Pressure	Maximum Inlet Pressure		
PR-10 HF	10 - 32 GPM	10 PSI	90 psi		
	(2271 - 7268 L/hr)	(0.69 bar)	(6.20 bar)		
PR-15 HF	10 - 32 GPM	15 PSI	95 psi		
	(2271 - 7268 L/hr)	(1.03 bar)	(6.55 bar)		
PR-20 HF 10 - 32 GPM (2271 - 7268 L/hr)		20 PSI (1.38 bar)	100 psi (6.89 bar)		
PR-25 HF	10 - 32 GPM	25 PSI	105 psi		
	(2271 - 7268 L/hr)	(1.72 bar)	(7.24 bar)		
PR-30 HF	10 - 32 GPM	30 PSI	110 psi		
	(2271 - 7268 L/hr)	(2.07 bar)	(7.58 bar)		
PR-40 HF	10 - 32 GPM	40 PSI	120 psi		
	(2271 - 7268 L/hr)	(2.76 bar)	(8.27 bar)		
PR-50 HF	10 - 32 GPM	50 PSI	130 psi		
	(2271 - 7268 L/hr)	(3.45 bar)	(8.96 bar)		



Bioline® Dripperline

Pressure Compensating Dripperline for Wastewater



BioLine's Self-Cleaning, Pressure Compensating Dripper is a fully selfcontained unit molded to the interior wall of the dripper tubing.

As shown at left, BioLine is continuously self-deaning during operation, not just at the beginning and end of a cycle. The result is dependable, clag free operation, year after year.



Product Advantages

The Proven Performer

- · Tens of millions of feet used in wastewater today.
- · Bioline is permitted in every state allowing drip disposal.
- · Backed by the largest, most quality-driven manufacturer of drip products in the U.S.
- Preferred choice of major wastewater designers and regulators.
- Proven track record of success for many years of hard use in wastewater applications.

Quality Manufacturing with Specifications Designed to Meet Your Needs

- Pressure compensating drippers assure the highest application uniformity even on sloped or rolling terrain.
- · Excellent uniformity with runs of 400 feet or more reducing installation costs.
- Highest quality-control standards in the industry: Cv of 0.25 (coefficient of manufacturer's variation).
- · A selection of flows and spacings to satisfy the designer's demand for almost any application rate.

Long-Term Reliability

- Protection against plugging:
 - Dripper inlet raised 0.27" above wall of tubing to prevent sediment from entering dripper.
 - Drippers impregnated with Vinyzene to prevent buildup of microbial slime.
 - Unique self-flushing mechanism passes small particles before they can build up.

Cross Section of Bioline Dripperline



Root Safe

- A physical barrier on each BioLine dripper helps prevent root intrusion.
- Protection never wears out never depletes releases nothing to the environment.
- Working reliably for up to 15 years in subsurface wastewater installations.
- Additional security of chemical root inhibition with Techfilter supplies
 Trifluralin to the entire system, effectively inhibiting root growth to the dripper outlets.



Applications

- · For domestic strength wastewater disposal.
- Installed following a treatment process.
- Can be successfully used on straight septic effluent with proper design, filtration and operation.
- Suitable for reuse applications using municipally treated effluent designated for irrigation water.

Specifications

Wall thickness (mil): 45*

Nominal flow rates (GPH): .4, .6, .9*

Common spacings: 12", 18", 24"*

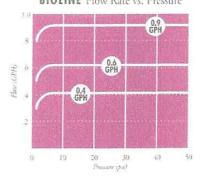
Recommended filtration: 120 mesh

Inside diameter: .570*

Color: Purple tubing indicates non-potable

*Additional flows, spacings, and pipe sizes available by request. Please contact Netafim USA Customer Service for details.

BIOLINE Flow Rate vs. Pressure





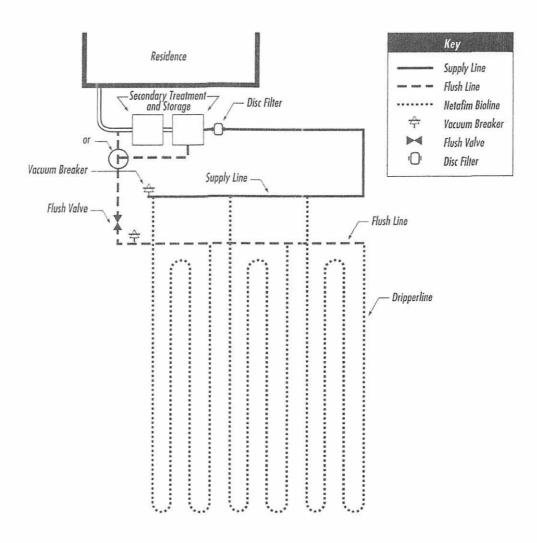
NETAFIM USA 5470 E. Home Ave. • Fresno, CA 93727 888.638.2346 • 559.453.6800 FAX 800.695.4753 www.netafimusa.com

SAMPLE DESIGNS

SINGLE TRENCH LAYOUT

Rectangular field with supply and flush manifold on same side and in same trench;

- · Locate supply and flush manifold in same trench
- · Dripperlines are looped at the end opposite the supply and flush manifolds
- The longest Bioline length should not exceed 400 ft. Drip fields 200 ft. in length might loop the Bioline once; drip dispersal fields under 100 ft. might be looped twice, as illustrated

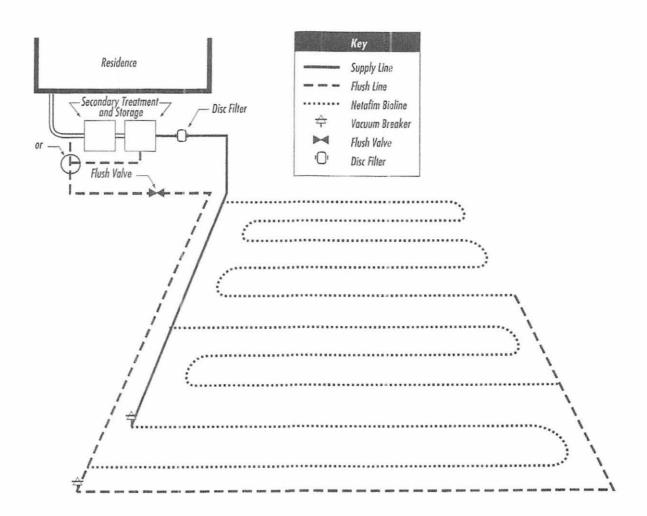


SAMPLE DESIGNS

IRREGULAR FIELD SHAPE LAYOUT

Triangular field with looping and varied positioning of flush manifolds;

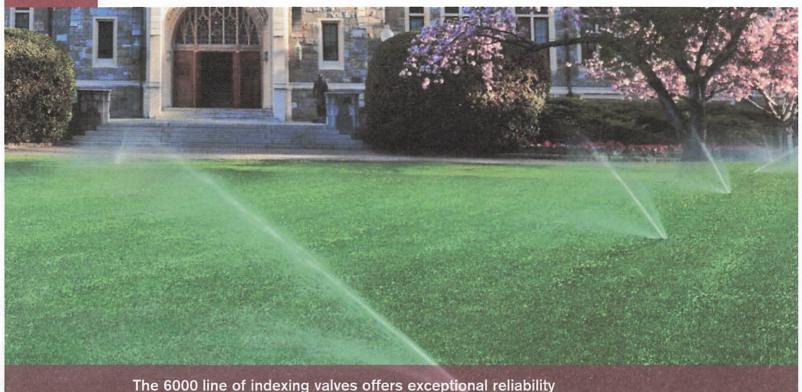
- Can be used when site limitations dictate unequal dripperline length with respect to dispersal field length.
- Loop Bioline tubes in order to increase tube length and reduce the number of connections.
 Attempt to equalize all Bioline run lengths in order to provide an equal field flush
- Flush Manifold may be located on the same or opposite side of supply manifold. In some cases
 it may be necessary to make one or more distal end connection to the flush line on an opposing
 side in order to balance dripperline lengths and limit the number of connections



RECEIVED

By Brandon Olvera at 10:20 am, Oct 22, 2024

6000 SERIES INDEXING VALVE



and durability even under the dirtiest water conditions.

Features and Benefits

- Metal Die-Cast Body Durable, long lasting and capable of high pressure applications.
- Available in 4 and 6 Outlet Models Can easily change from two to six watering zones.
- Simplicity of Design Valves are easily maintained and serviced for long product life.
- Wide Pressure and Flow Operating Range
 - PSI Range: 25–150 (1,7–10,3 bar)
- 15 GPM (57 LPM)
- Ideal for pump-fed systems or high-flow city water systems
- Built-in Atmospheric Vacuum Breaker Releases any vacuum created between the pump and the valve on shut down.





K-Rain Manufacturing Corp.

1640 Australian Avenue Riviera Beach, FL 33404 USA 561.844.1002 FAX: 561.842.9493

1.800.735.7246 | www.krain.com

6000 Series Indexing Valves

With a metal die-cast body, the 6000 valves are capable of high pressure applications and are recommended to be used on pump fed systems or high-flow city water systems. The 6000 is also ideal for onsite wastewater and effluent water applications.

The 6000 valve is available in 4 or 6 outlet models that are cammed for 2 to 6 zone operation. With only one moving part (the stem and disc assembly), the valve is easily serviced and maintained.

The valve requires 15 GPM (57 LPM) with pre-installed stem and disk assembly to operate and works at pressures from 25 to 150 PSI (1,7 to 10,3 bar).

Models

FOUR OUTLET MODELS

6402 Cammed for 2 Zone Operation6403 Cammed for 3 Zone Operation6404 Cammed for 4 Zone Operation

SIX OUTLET MODELS

6605 Cammed for 5 Zone Operation6606 Cammed for 6 Zone Operation

Other options add to part number:

-RCW Reclaimed Water Use

Accessories*

P8003050 Stem/disk Assembly Standard Heavy

(.032-Red) 15 GPM** (57 LPM)

P8003051 Stem/disk Assembly Light

(.028-White) 10 GPM (38 LPM)

P8003052 Stem/disk Assembly Extra Light

(.025-Blue) 6 GPM (23 LPM)

*Color code identified at the bottom of the disk

**Pre-installed

RECEIVED

By Brandon Olvera at 10:20 am, Oct 22, 2024

opecineations

Construction:

Valve Top/Housing: Die Cast Metal Valve Outlets: High Strength ABS Polymer

- Inlet: Threaded 1 1/2" (3,8 cm) NPT Connection
- Outlets: Slip and Glue Connections to 1 1/2" (3,8 cm) PVC Pipe

OPERATING SPECIFICATIONS

- Pressure Rating: 25 150 PSI (1,7 to 10,3 bar)
- Flow Range: 15-150 GPM (57-568 LPM)
- Pressure Loss:

4 OUTLET VALVE

Flow Rate - GPM	20	40	60	80	100
PSI Loss	2.5	3.5	5.0	7.5	10.0
6 OUTLET VALV	E				
Flow Rate - GPM	20	40	60	80	100
PSI Loss	3.0	4.0	6.0	9.0	11.0

DIMENSIONS

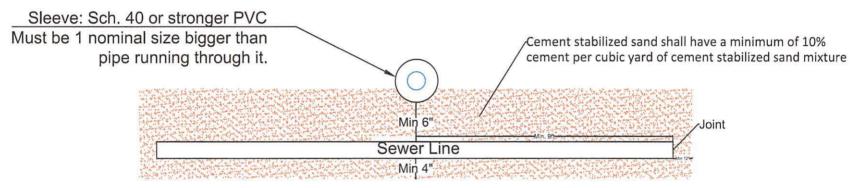
Height: 7" (17,8)Width: 8" (20,3)

Installation Tips

We Recommend the Installation of an Atmospheric Vacuum Breaker Between the Pump and the Valve.



CHAPTER 290 SUBCHAPTER D RULE §290.44 New waterline and sewer line crossing.



TITLE 30 PART 1 CHAPTER 290 SUBCHAPTER D RULE §290.44

(iv) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.

TITLE 30 PART 1 CHAPTER 290 SUBCHAPTER D RULE §290.44

(v) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.



FIRM #2585 4/20/2024 FINAL PLAT ESTABLISHING

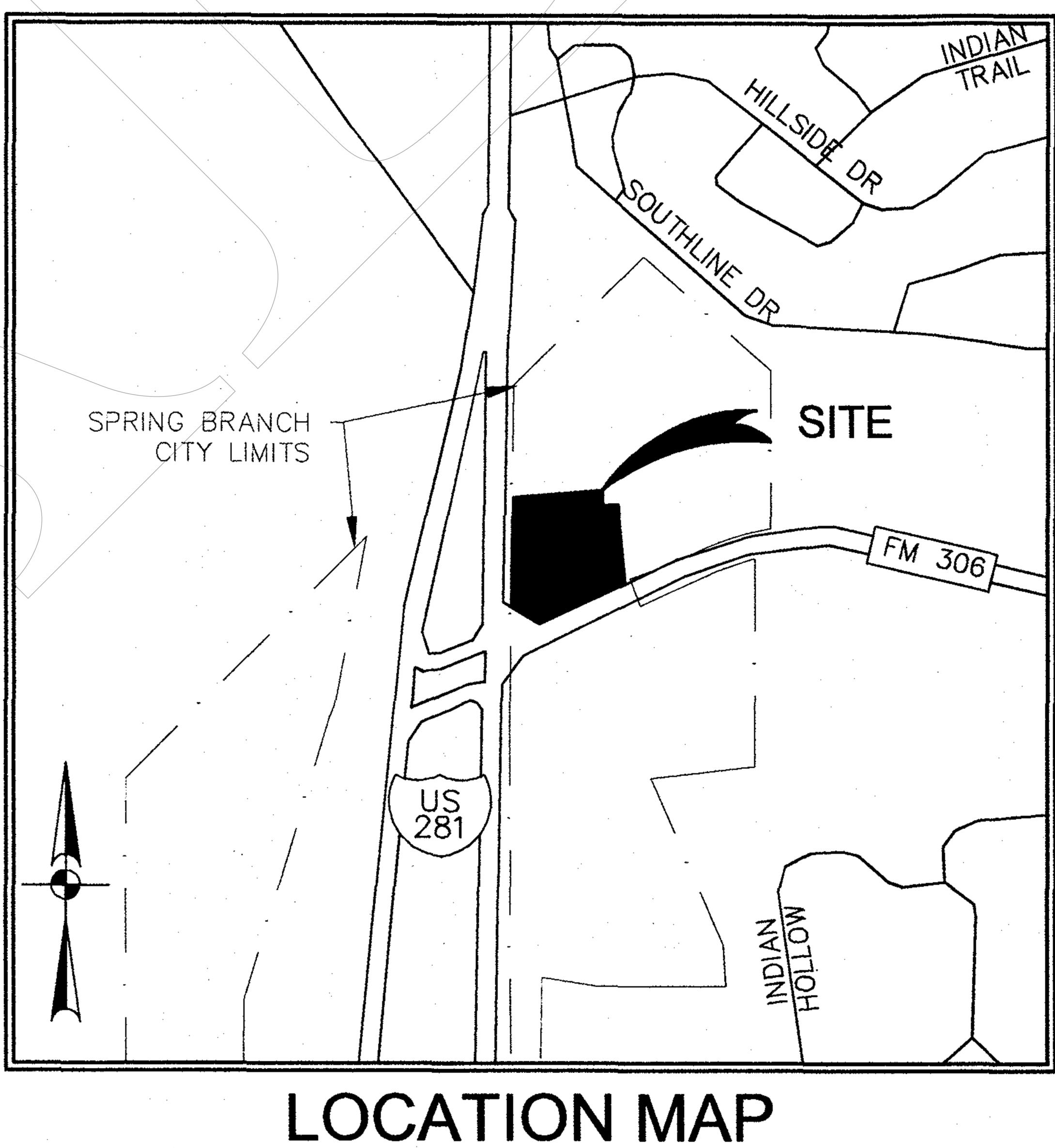
FISCHER'S MARKET # 52 SUBDIVISION

BEING 5.712 ACRES OF LAND SITUATED IN THE F. SCHAEFERKOETER SURVEY NO. 40, ABSTRACT NO. 974, COMAL COUNTY, TEXAS, AND BEING THE REMAINDER OF A 3.00 ACRE TRACT OF LAND AS DESCRIBED IN DOCUMENT NO. 9706001516 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS, AND A 0.482 OF AN ACRE TRACT OF LAND AS DESCRIBED IN DOCUMENT NO. 202306036935 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY TEXAS, AND A 2.712 ACRE TRACT OF LAND DESCRIBED AS TRACT 18 IN DOCUMENT NO. 201806046745 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS

- THE DATE OF PLAT PREPARATION June 13, 2024
- THE PROPERTY DOES LIE WITHIN CITY LIMITS OF SPRING BRANCH, TEXAS
- THE LOT IS PROVIDED WATER TEXAS WATER COMPANY. SEWER IS PROVIDED BY ON-SITE SEPTIC. ELECTRIC SERVICE WILL BE PROVIDED BY PEDERNALES ELECTRIC COOPERATIVE, INC. NO GAS SERVICE WILL BE PROVIDED.
- THE SUBDIVISION IS WITHIN THE COMAL INDEPENDENT SCHOOL DISTRICT.
- . ALL BEARINGS AND COORDINATES SHOWN HEREON ARE IN GRID BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM 1983. DISTANCES SHOWN HEREON ARE SURFACE USING COMBINED SCALE FACTOR OF 1.00015.
- MONUMENTS WERE FOUND OR SET AT EACH CORNER OF THE SURVEY BOUNDARY OF THE SUBDIVISION. MONUMENTS AND MARKERS WILL BE SET WITH 1/2" IRON PIN WITH PLASTIC CAP STAMPED "DAM #5348 PROP. COR." IMMEDIATELY AFTER COMPLETION OF UTILITY INSTALLATION AND STREET CONSTRUCTION UNLESS NOTED OTHERWISE.
- FISCHER'S MARKET #52 SUBDIVISION FALLS WITHIN THE CITY LIMITS OF THE CITY OF SPRING BRANCH.
- FISHER'S MARKET #52 SUBDIVISION ESTABLISHING A TOTAL OF 1 LOTS, WITH 1 BEING
- NO PORTION OF THE SUBDIVISION IS LOCATED WITHIN THE EXISTING SPECIAL FLOOD HAZARD ZONE A, 100-YEAR FLOOD BOUNDARY, AS DEFINED BY THE COMAL COUNTY TEXAS COMMUNITY PANEL NUMBER 48091C0060F, REVISED SEPTEMBER 2, 2009 AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- 10. THIS PROPERTY DOES LIE WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
- 11. THE CITY OF SPRING BRANCH REQUIRES A MINIMUM 25' BUILDING SET-BACK LINE FROM THE ROAD FRONTAGE.
- 12. OWNER/ DEVELOPER IS RESPONSIBLE FOR PREVENTING ANY ADVERSE IMPACT TO THE EXISTING DRAINAGE SYSTEM WITHIN THE HIGHWAY RIGHT-OF-WAY. FOR PROJECTS WITHIN THE EDWARDS AQUIFER RECHARGE OR CONTRIBUTING ZONES, OUTFALLS FOR WATER QUALITY AND / OR DETENTION PONDS TREATING IMPERVIOUS COVER RELATED TO THE DEVELOPMENT, WILL NOT ENCROACH BY STRUCTURE OR GRADING INTO STATE RIGHT-OF-WAY. PLACEMENT OF PERMANENT STRUCTURAL BEST MANAGEMENT PRACTICE DEVICES OR VEGETATIVE FILTER STRIPS WITHIN STATE RIGHT-OF-WAY WILL NOT BE ALLOWED.

TXDOT PLAT NOTES:

- 1. FOR RESIDENTIAL DEVELOPMENT DIRECTLY ADJACENT TO STATE RIGHT-OF-WAY, THE DEVELOPER SHALL BE RESPONSIBLE FOR ADEQUATE SETBACK AND/OR SOUND ABATEMENT MEASURES FOR FUTURE NOISE MITIGATION.
- 2. THE OWNER/DEVELOPER IS RESPONSIBLE FOR PREVENTING ANY ADVERSE IMPACT TO THE EXISTING DRAINAGE SYSTEM WITHIN THE HIGHWAY RIGHT-OF-WAY. OUTFALLS FOR WATER QUALITY AND/OR DETENTION PONDS TREATING IMPERVIOUS COVER RELATED TO THE DEVELOPMENT AND STRUCTURES FOR REDUCTION OF DISCHARGE VELOCITY WILL NOT ENCROACH BY STRUCTURE OR GRADING INTO STATE ROW OR INTO AREAS OF ROW RESERVATION OR DEDICATION. FOR PROJECTS IN THE EDWARDS AQUIFER RECHARGE, TRANSITION OR CONTRIBUTING ZONES, PLACEMENT OF PERMANENT STRUCTURAL BEST MANAGEMENT PRACTICE DEVICES OR VEGETATIVE FILTER STRIPS WITHIN STATE ROW OR INTO AREAS OF ROW RESERVATION OR DEDICATION WILL NOT BE ALLOWED. NO NEW EASEMENTS OF ANY TYPE SHOULD BE LOCATED IN AREAS OF ROW RESERVATION OR
- 3. MAXIMUM ACCESS POINTS TO STATE HIGHWAY FROM THIS PROPERTY WILL BE REGULATED AS DIRECTED BY TXDOT'S, "ACCESS MANAGEMENT MANUAL". THE PROPERTY IS ELIGIBLE FOR MAXIMUM COMBINED TOTAL OF 1 ACCESS POINT ALONG FM 306, BASED ON AN OVERALL PLATTED HIGHWAY FRONTAGE OF APPROXIMATELY 181 LINEAR FEET ALONG FM 306. THE PROPERTY IS ELIGIBLE FOR A MAXIMUM COMBINED TOTAL OF 1 ACCESS POINT ON US HWY 281, BASED ON AN OVERALL PLATTED HIGHWAY FRONTAGE OF APPROXIMATELY 418 LINEAR FEET. WHERE TOPOGRAPHY OR OTHER EXISTING CONDITIONS MAKE IT INAPPROPRIATE OR NOT FEASIBLE TO CONFORM TO THE CONNECTION SPACING INTERVALS, THE LOCATION OF REASONABLE ACCESS WILL BE DETERMINED WITH CONSIDERATION GIVEN TO TOPOGRAPHY, ESTABLISHED PROPERTY OWNERSHIPS, UNIQUE PHYSICAL LIMITATIONS, AND/OR PHYSICAL DESIGN CONSTRAINTS. THE SELECTED LOCATION SHOULD SERVE AS MANY PROPERTIES AND INTERESTS AS POSSIBLE TO REDUCE THE NEED FOR ADDITIONAL DIRECT ACCESS TO THE HIGHWAY. IN SELECTING LOCATIONS FOR FULL MOVEMENT INTERSECTIONS, PREFERENCE WILL BE GIVEN TO PUBLIC ROADWAYS THAT ARE ON LOCAL THOROUGHFARE PLANS.
- 4. IF SIDEWALKS ARE REQUIRED BY APPROPRIATE CITY ORDINANCE, A SIDEWALK PERMIT MUST BE APPROVED BY TXDOT, PRIOR TO CONSTRUCTION WITHIN STATE RIGHT-OF-WAY. LOCATIONS OF SIDEWALKS WITHIN STATE RIGHT OF WAY SHALL BE AS DIRECTED BY
- 5. ANY TRAFFIC CONTROL MEASURES (LEFT-TURN LANE, RIGHT-TURN LANE SIGNAL, ETC.) FOR ANY ACCESS FRONTING A STATE MAINTAINED ROADWAY SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER.

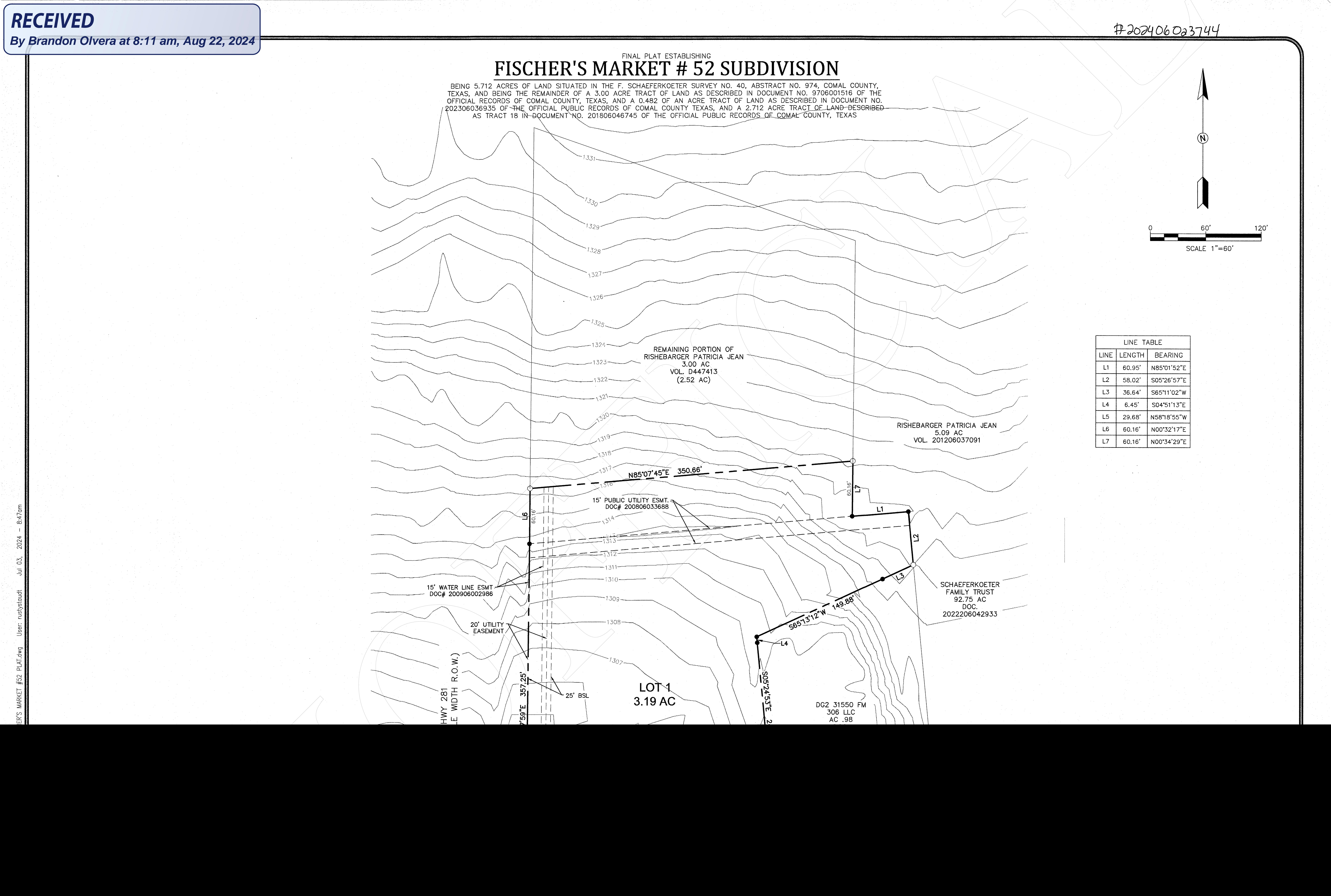


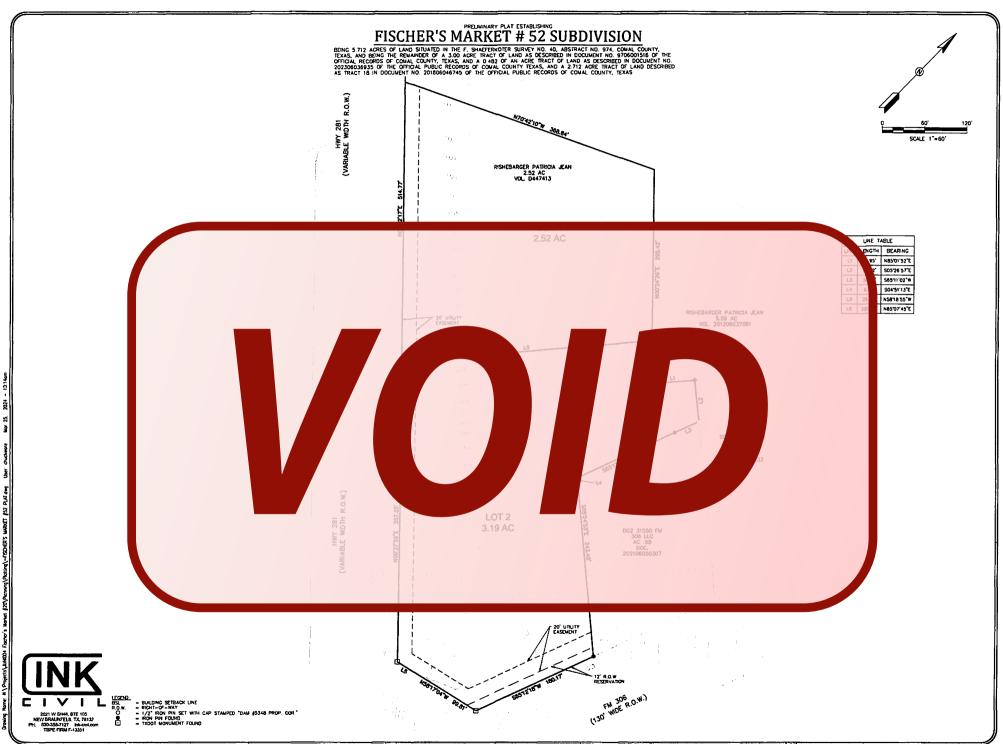
SCALE: 1"=1,000"

KNOW ALL MEN BY THESE PRESENTS

THE OWNER OF THE LAND SHOWN ON THIS PLAT WHOSE NAME IS SUBSCRIBED HERETO, AND IN THROUGH A DULY AUTHORIZED AGENT, HEREBY DEDICATE TO THE USE OF THE PUBLIC FOREVER ALL STREETS, PARKS, WATER COURSES, DRAINS, EASEMENTS, AND PUBLIC PLACES THEREON SHOWN FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED.

9650 US HWY 281







ON-SITE SEWAGE FACILITY APPLICATION

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

Planning Materials & Site	Evaluation as Required Completed By	GREG W. JOHNSON, P.E.
System Description	NON STANDARD; AEROBIC	C TREATMENT AND DRIP TUBING
Size of Septic System Re	quired Based on Planning Materials & Soil E	Evaluation
Tank Size(s) (Gallons)	3000 GREASE / 3000 LIFT / 2000 TRASH / 2-2000 AERATION / 2-2000 EQ /3-1500 ATU'S / 2-2000 PU	
Sallons Per Day (As Per T	CEQ Table 111) 2500	
Sites generating more than	5000 gallons per day are required to obtain a per	rmit through TCEQ.)
the property located over	er the Edwards Recharge Zone? Yes	No No
f yes, the planning material	s must be completed by a Registered Sanitarian	(R.S.) or Professional Engineer (P.E.))
s there an existing TCEQ	approved WPAP for the property? Yes	No No
f yes, the R.S. or P.E. sha	fy that the C esign co	rovisions (existin
s there at least one acre	ingle fa welliy er 285.40	
there is no existing WP	pes t pose elopment acti	equir CEQ red WPAP' Yes No
yes, te R.S or P.E. shall	th OSSF d will comply with	ovis the read WPAP. A to Construct will n
e issue for the proposed C	proposed P has been a	d by propri jonal office
s the p operty located ov	wards Contribute. Yes	
s there an existing TCEQ	approval CZP for the property? Yes	No
	certify that the OSSF design complies with all pr	
there is no em		TOTO SERVICE OF THE VALUE OF TH
	I certify that the OSSF design will comply with all SF until the UP has been approved by the appro	provisions of the proposed CZP. A Permit to Construct will not
		priate reg
s this property within an i	incorporated city?	** * · · ·
f yes, indicate the city:		GREG W. JOHNSON
		FIRM #2585
Description this configuration		UNAL
By signing this application - The information provided	i, I certify that: d above is true and correct to the best of my knov	wledge.
·	•	ddress associated with this permit application, as applicable.
		ADDII 20. 2024
Signature of Designer	Di	APRIL 20, 2024 ate

AFFIDAVIT

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 (TCEQ) 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

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

2) will be installed on the proibed as (insert l BCTION

's full mar The pr

r service policy residen ther obtain a maint 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.

Rodneu R. Fischer - MANAGER Owner(s) signature(s) Owner (s) Printed name (s)

lodney R. Fischer SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 9th DAY OF

20 24

Notary Public Signature

LISA SILGUERO Notary Public, State of Texas Comm. Expires 02-18-2026 Notery ID 133591987

Filed and Recorded Official Public Records **Bobbie Koepp, County Clerk** Comal County, Texas 04/25/2024 01:06:14 PM TRACY 1 Pages(s) 202406012353



AEROBIC TREATMENT DRIP TUBING SYSTEM

DESIGNED FOR: JUNIPER VENTURES OF TEXAS, LLC. 3455 IH35 SOUTH NEW BRAUNFELS, TX 76548

SITE DESCRIPTION:

Located in Fischer's Market #52 subdivision, Lot 2 in the Fred Schaeferkoeter Survey #40, A-974, being 3.194 acres at 14240 North Highway 281, the proposed system will serve a gas station, convenience store, fast food restaurant (60 seats), with public restrooms situated in an area with shallow Type III soils as described in the Soil Evaluation Report. Native grasses were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot

PROPOSED SYSTEM:

a 3000 grease trap with traffic lid. Flow continues from the grease trap with traffic lid and joins flow from the restrooms and remaining flow into a 3000 gallon Lift station with traffic lid and standard o do al alar n m eset will ail and ii he p n tanks in lon a nd ' sers with as air ch end o imately five ers w of the tank feet of air per prod back pressure qualization tanks manifolded together at bottom, fitted with dual Liberty LE40 sewage pumps controlled by a dual alternating control panel with manual reset and Omron H3CR-F cycle timer. Equalization tank will accommodate varying flows throughout the day. A high level audible and visual alarm with manual

aerobic treatment plants in parallel. Flow will be controlled by a ball valve and pressure reducing nipple. A bucket test will be used to calibrate flow to three 1500 gpd TCEQ/NSF approved aerobic plants. After treatment flow from the ATUs continues to two 2000 gallon pump tanks, manifolded together at bottom. Dosing will be set to dose each zone each every six hours for 16 minutes. Effluent is pumped through a 1.25" Sch-40 PVC from each pump. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the next resting pump. Effluent is pumped through a 1.25" Sch-40 PVC alternating from each pump to 7 zones controlled by a electronic solenoid valve. Each zone will be dosed A high level audible and visual alarm will activate should the pump fail. Distribution from each pump is through a Tuff Tiger T125 and Model F335 with a self flushing 100 micron disk filter followed by a pressure regulator Model PR40HF.

Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Check valves on the return line on each field will prevent the pressuring of resting zone. Each zone will be dosed each six hours for 16 minutes. Field area will be scarified and built up with 4" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil. A minimum of twelve inches of soil required between rock and drip tubing.

DESIGN SPECIFICATIONS:

Daily waste flow:80 seat fast food @ 12 gpd =960 gpd & 2 public restrooms @ 160gpd = 320gpd

Calculated Flow Rate: 1280 gpd (Design Rate = 2500 gpd)

Grease Trap size: 3000 gallons with Traffic Lid

Linank: 5000 gallons with Traine Lid

Pump requirement: Dual Liberty LSG200 2.0 hp grinder pumps

Trash Tank: 2000 gallons

Aeration Tank: 2- 2000 gallons fitted w/ HiBlow HP150 aerator & Thomas air diffusers

Equalization tank: 4000 gallons w/ Dual effluent pumps (2-2000 gallons manifolded together)

Pump requirement: Dual Lime Model Lime by sewage ps

Cycle Timer ron H3C ycle

Reserve capa after History Evel; Al (>4hr. Req

Plant Size: 3 0 gpd bic p CEQ/NSF ved

Pump tank sign 100 as will all effluent pages (2 pages) gall nanifolded ther)

Reserve capacity fits the Levy 0 Gal (>4hr v Re

Application R R 2 gal/s

Total absorption $\sqrt{Ra} = 25$ $\sqrt{0.2}$ $\sqrt{0.3}$ $\sqrt{0.3}$

Total linear fee abing: 12,714 ne driving for the driving for

Pump req'd: 1630-1956' w/ 865-978 emitters/zone @ 0.61 gph @ 30 psi - 6.29-9.94 gpm

Pump requirement: Dual-Franklin FPS E-Series 0.5HP 20 gpm requiring 20 gpm @ 45 psi

Flow Meters: RG3 PPD-10

Automatic Filters: Tuff Tiger T125 and Model F335

etronic Timer: Digi-20

Alarm: Audible & visual air pump malfunction alarm & alternating control panel & manual reset. Water meters on each pump to field.

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

 $MSV = 2 \text{ FPS } (\Pi d \uparrow 2)/4*7.48 \text{ gal/cf*}60 \text{ sec/min}$

 $MSV = 2(3.14159((.55/12)\uparrow 2)/4)*7.48*60$

MSV = 1.5 gpm PER LINE * 6 LINES = 9 GPM MIN FLOW RATE per pump.

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

 $MSV = 2 \text{ FPS } (\Pi d \uparrow 2)/4*7.48 \text{ gal/cf*}60 \text{ sec/min}$

MSV = 2(3.14159((1.049/12)12)/4)*7.48*60

MSV = 5.4 GPM

WASTE FLOW CALCULATIONS:

BOD5 @ 960 gpd x 1200 mg/l x 8.34 #/gal / 1,000,000 = 7.21bs BOD5 BOD5 @ 320 gpd @ 300 mg/l x 8.34 #/gal / 1,000,000 = 0.8 lbs BOD5 Total BOD5 = 8 lbs. Required reduction to 130 mg/ltr = 7 lbs BOD5

AEROBIC AERATION & ORGANIC LOADING CONSIDERATIONS:

This design utilizes extended aeration to lower the organic loading from the system. Using aeration requirements in Chapter 217 for extended aeration in the tanks are as follows:

Oxygen requirement: 2.2 lbs of Oxygen per 1 lbs of BOD and 500 gal aeration per 1 lbs of BOD5 Efficiency for fine air diffusers are 2-2.5% per foot of depth

HiBlow Each HP-150 generates 5 CFM /58.2 CF/# * 1440 min/d = 123.7 #O2/day

123.7 #O2/day 10% efficiency / 2.2#/lbBOD2 = 5.62 #BOD5 with 3psi backpressure Thomas air diffusers at set at 4' of water 2 psi back pressure w/ additional 1 psi loss through diffuser assembly #BOD5

2-2000 gallon aeration x 0.002 #/gal = 8# BOD5/

Hp-150 generates 123.7#/O2 and reduces 5.62# BOD5/day x 2 = 11.24# BOD5

Each 1500 g ant @ 3.7 iit x 3

Total Reduct 8 #(200 ated TU) =1 #BO

Actual Redu 19.25 >Tr SOD5 8#/ Req Red 17 #/day

This system is not an experimental and the control of the content of the content

ELECTRICA ONEN'

All electrical was all conform a squire & of the fional trie C (9) or under any other stand approved by the sector. In a squire wiring shall be installed in approved, rigid, non-metallic electrical conduit. The conduit shall be buried according to the requirements in the National Electric Code and terminated at a main circuit breaker panel or sub-panel. Connections shall be in approved junction boxes. All electrical components shall have an electrical disconnect within direct vision from the place where the electrical device is being serviced. Electrical disconnects must be weathernroof (approved for outdoor use) and have maintenance lockout provisions.

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 minimum 4 inch layer of sand, sandy loam, clay loam, or pea gravel.
- Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed. Fencing recommended around treatment tanks to limit public access.</p>
- All openings in the tank must be properly sealed to prevent the escape of wastewater, and/or

to prevent the infiltration of water.

- Tanks must be filled with water for at least 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8 inch per foot from business to tank.

PIPE AND FITTINGS:

All pipes and fittings in this aerobic system shall be schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. The manifold shall be 1" in diameter and be colored purple.

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 alarms are activated.
- All pipe fittings and joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plug;

Public Wate Cross

ublic water/ or line sing sing sing to Cha 190. B (in the content of the water main steral sees a listing potal aterline, one segment of the steral shall be content of the water main steral sees a listing potal aterline, one segment of the water main steral sees a listing potal aterline, wastewater main steral shall be at least name of the water main steral. In a steral main shall be at least name above the line wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. (v) Where cement stabilized sand shall have a minimum of 10% cement per subjective of the segment stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement per subjective stabilized sand shall have a minimum of 10% cement stabilized sand shall have a minimum of 10% cement stabilized sand shall have a minimum of 10% cement stabilized sand shall have a minimum of 10% cement stabilized sand shall shall be su

yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.

MAINTENANCE REQUIREMENTS:

- The maintenance company will verify that the system is operating properly at least every three months and provide on-going maintenance of the installation with BOD5 performed 2 times at three months and nine month the first year.
- The initial contract will be a minimum of two years.
- A maintenance contract will authorize the maintenance company to maintain and repair the system as needed.

• The property 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.

CONSTRUCTION/INSTALLATION NOTES & REQUIREMENTS:

- 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 Facilities set forth by 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 and 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 approved plans and specifications.
- The aller may ter the four the a val fr
- It is responsi of the latter than the latter
- No post the sem scale located will 10 of a post exact like if this is unawable two Charles 290.44(e)(4) v-vi are a postable water crosses a new sest stated will vater main or ral, segment the water lipe shall be center and show perpendition to the steward nesuch the ejoints of the water main or later. Sole water shall the center line of the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe

bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.

OPERATION AND MANAGEMENT NOTES:

- The OSSF should not be treated as a normal city sewer.
- Do not use the toilet to dispose of cleaning tissue, cigarette butts, or other trash. This
- disposal practice will waste water and also impose an undesirable solid load on the treatment system.

- Water Softeners should not be connected to this system.
- Septic tanks shall be cleaned before sludge accumulates to a point where it approaches the bottom of the outlet device. If sludge or scum accumulates to this point, solids will leave the tank with the liquid and possibly cause the system to clog resulting in sewage surfacing or backing up into the house through plumbing fixtures.
- A regular schedule of cleaning the tanks at least two to three year intervals should be established. Commercial cleaners are equipped to readily perform the cleaning operation. Owners of OSSF's shall engage only persons registered with the TCEQ to transport the septic system waste.
- Do not build driveways, storage buildings, or other structures over system components or the disposal field.
- Chemical additives or so-called enzymes are not necessary for the operation of a septic tank. Some of these additives may even be harmful to the systems operation.
- Soaps, detergents, bleaches, drain cleaners, and other household cleaning materials will very seldom affect the operation of the system. However, moderation should be exercised in the use of such materials.

LANDSCA G

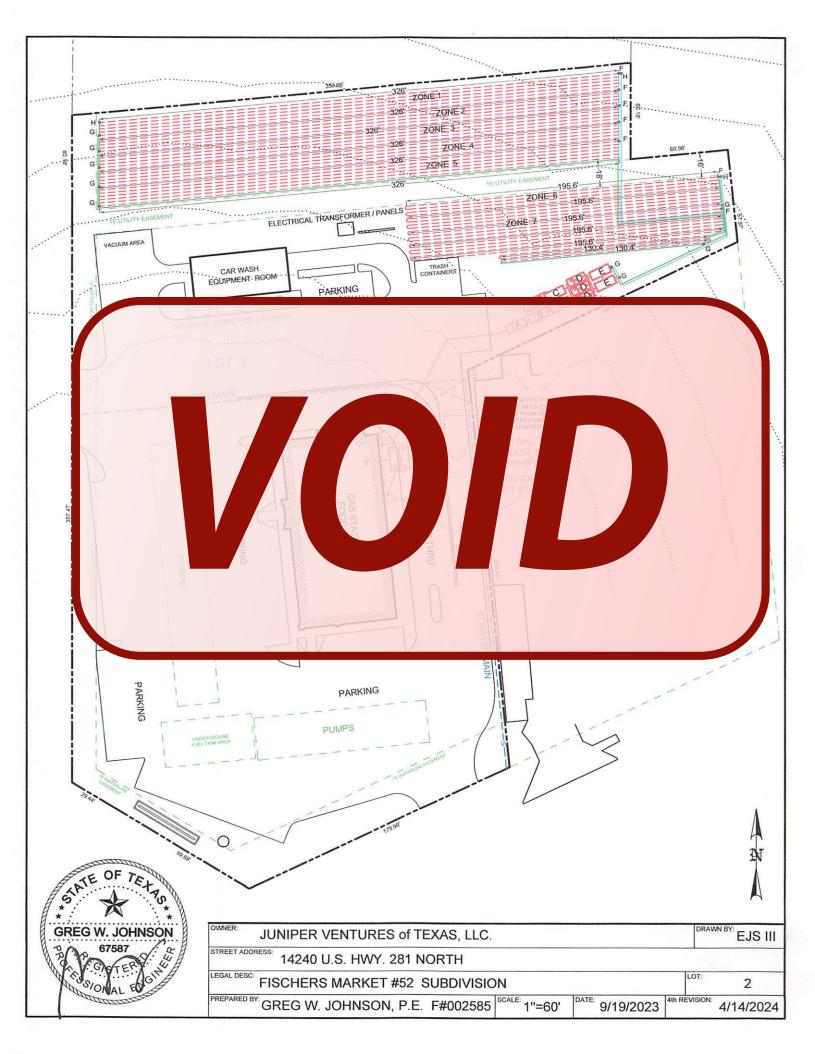
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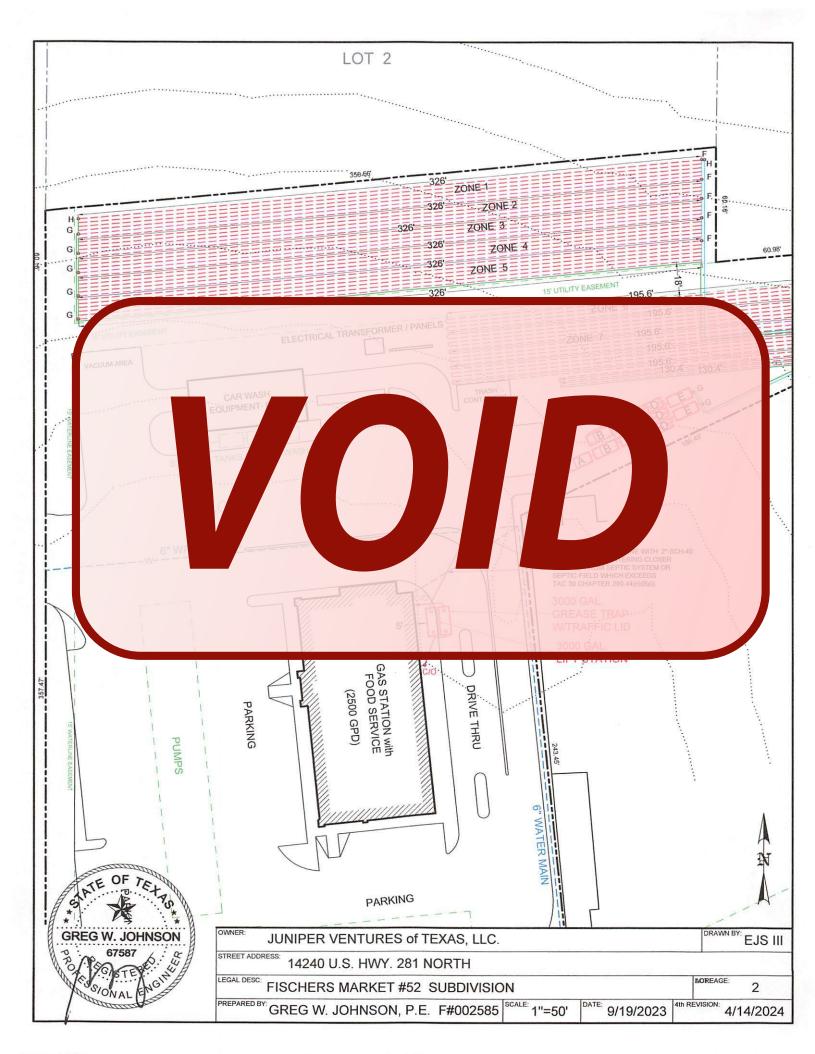
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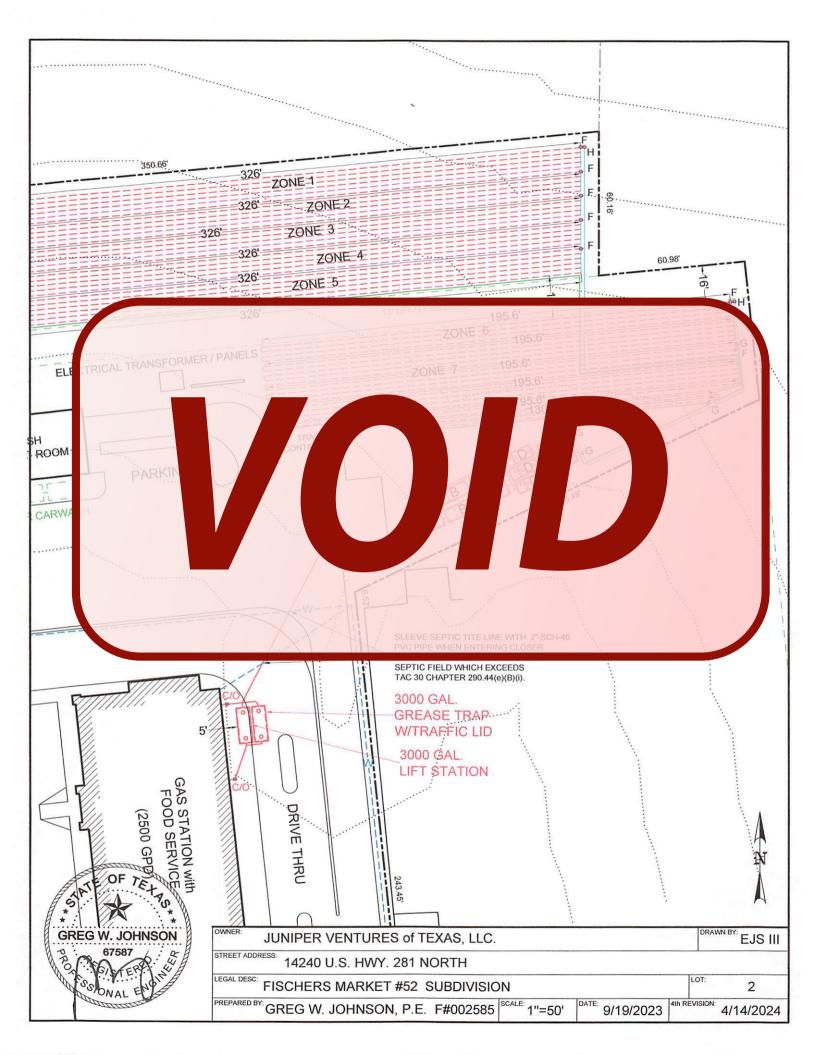
Greg W. Johnson, P.E. No. 67587 / F#2585

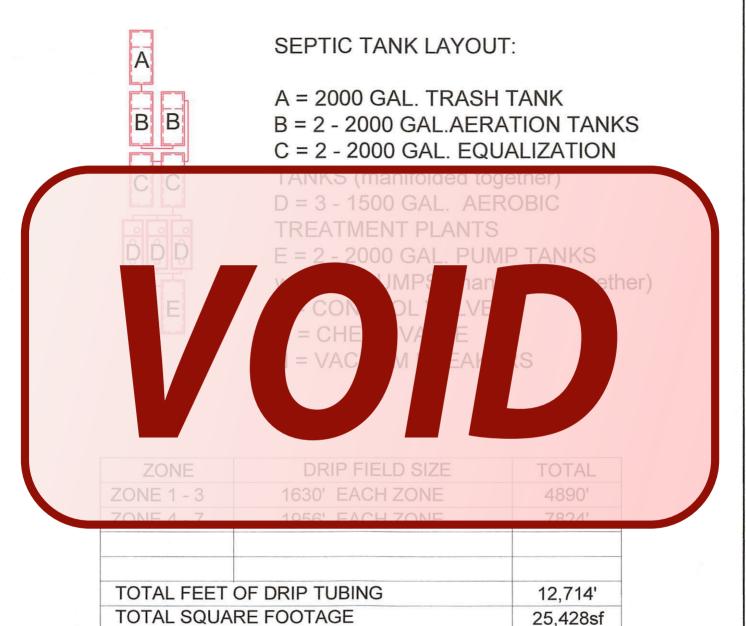
New Braunfels, Texas 78132 (830)905-2778

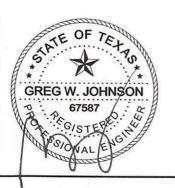












OWNER:

JUNIPER VENTURES of TEXAS, LLC. SPEC SHEET DRAWN BY: EJS III





ON-SITE SEWAGE FACILITY APPLICATION

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

Date Feb	ruary 8, 2024		Permit Number 117684			
1. APPLICANT /	AGENT INFORMATION					
Owner Name	JUNIPER VENTURES OF TEXAS, LLC	Agent Name				
	P.O. BOX 310339	Agent Name	GREG W. JOHNSON, P.E.			
-	NEW BRAUNFELS, TX 78131-0339	City, State, Zip	170 HOLLOW OAK			
Phone #	512-738-1214	Phone #	NEW BRAUNFELS, TX 78132 (830) 905-2778			
Email	kbrumley@junipervot.com	Email	gregjohnsonpe@yahoo.com			
2. OCATION			gregorinsonpote, anotherin			
ubdivision Name	FISCHER'S MARKET #52		t Lot ² Block			
urvey Name / At		OETER SURVEY #40, A				
ddress	14240 US HWY 281	City SPRING PI	PANCH TX Zip 78070			
. TYPE OF DEVI	ENT					
Single Famil	ly ential					
Type of Cor	nst (Hour file, F					
Number of B	Bei					
Indicate Sq	Ft 19					
Non-Single	Fan					
(Planning ma	terla w adequate lan	equired	d sposal area)			
Type of Fac		<u> </u>				
	s, Lounges, Theaters - Indicate Number of S					
	I, Hospital, Nursing Home - Indicate Number	of Beds				
	er/RV Parks - Indicate Number of Spaces					
Miscellaneo	ous					
Fatimated Ocea	10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	101				
	of Construction: \$ 1,000,000					
	f the proposed OSSF located in the United S to (If yes, owner must provide approval from USACE if					
Source of Water	The state of the s	- Common				
4. SIGNATURE O		VVeil Railwater Ct	Silection			
By signing this applied - The completed app		foes not contain any false iate land rights necessary	information and does not conceal any material to make the permitted improvements on said			
 Authorization is he site/soil evaluation I understand that a by the Comal Cour 	nty Flood Damage Prevention Order.	sued until the Floodplain A	Administrator has performed the reviews required			
- I affirmatively cons	ent to the online posting/public release of my e-m	ail address associated wit	th this permit application, as applicable.			
Side of the same	f. pul	2/9/	2024			
Signature of Ow	ner	Date	Page 1 of 2 Revised January 2021			

#117684

RECEIVED

By Brandon Olvera at 8:12 am, Aug 22, 2024

FISCHER'S MARKET #52, LOT 2

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

ON-SITE SEWAGE FACILITY APPLICATION

COMALCOUNTY ENGINEER'S OFFICE

Planning Materials & Site Evaluation as Required Completed B	y GREG W. JOHNSON, P.E.
System Description NON-STANDARD; AERO	BIC TREATMENT AND DRIP IRRIGATION
Size of Septic System Required Based on Planning Materials &	Soil Evaluation
Tank Size(s) (Gallons) 3000 GREASE / 1000 TRASH/ 2000 LIFT / 2000 TANK / 2-2000 EQ /3-1500 ATU'S / 2-2	
Gallons Per De (As Per ICEQ Table 111) 2500 DESIGN RA	TE
(Sites generating more than 5000 gallons per day are required to obtain	in a permit through TCEQ.)
Is the preperty located over the Edwards Recharge Zone?	Yes No No
(if yes, the planning material be completed a Regi	(R.S.) or siona
Is there an existing TCEQ are eved W or the verty?	
(if yes, the R.S. or P.E. shall describe that the SF described by SF described by the state of t	h a sion e exis PAP.)
Is there a least one acre per glandly dwell as per 285.	
If there is no existing WPAP expressed	y requ TCE(Yes No
(if yes, the R.S or P.E. shall certain that the OSSF design with	with all-provisions of the proposed of AP. A Permit to Construct will of
be issued or 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 X No
(if yes, the P.E. or R.S. shall certify that the OSSF design complies with	
If there is no existing CZP, does the proposed development act	ivity 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 UP has been approved by the	appropriate reg
Is this property within an incorporated city? Xes No	6 * *
If yes, indicate the city: SPRING BRANC	H GREG W. JOHNSON
	FIRM #2585
By signing this application, I certify that:	
- The information provided above is true and correct to the best of n	ny knowledge.
- I affirmatively consent to the online posting/public release of my e-	mail address associated with this permit application, as applicable.
///	August 15, 2024
Signature of Designer	Date

ON-SITE SEWERAGE FACILITY SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: September 19, 2024

Site Location:	3.194	4 ACRES OUT OF	THE FRED SHA	AEFERKOETER S	SURVEY No. 40, 2	A-974
Proposed Excavati		V/A				-
Locations For subsu proposed Des	two soil excavations s of soil boring or durface disposal, soil excavation depth. Feach soil horizon at NUMBER_SURI	ug pits must be show evaluations must be For surface disposal.	wn on the site drawing the performed to a department of the surface horizon the surface horizon the surface on the surface of	ing. pth of at least two fe n must be evaluated	eet below the	
D pth (leet)	Texture	Soil	Gravel	Drainage (No. 11 s/ Wa ole)	Restrictive	Observations
0 8" 1 2 - 3 - 4 5		A FO	N/A	C RVEI	IMESTOR @ 8"	BROWN
SOIL BORING	NUMBER					
Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 2 3 4 5	SAME		AS		ABOVE	

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

Greg W. Johnson, P.E. 67587-F2585, S.E. 11561

Date

OSSF SOIL EVALUATION REPORT INFORMATION

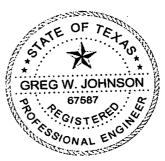
Date: September 19, 2023
Applicant Information:

	Site Evaluator Information:				
Name: JUNIPER VENTURES of TEXAS, LLC.	Name: Greg W. Johnson, P.E., R.S, S.E. 11561				
Address: 3455 IH 35 SOUTH	Address: 170 Hollow Oak				
City: NEW BRAUNFELS State: TEXAS	City: New Braunfels State: Texas				
Zip Code: 78132 Phone: (512) 738-1214	City: New Braunfels State: Texas Zip Code: 78132 Phone & Fax (830)905-2778				
Property Location: LotUnit Blk Subd. <u>FISCHERS Marke</u>	Installer Information: Name:				
Street Address: 14240 U.S. HWY 281 NORTH	Company:				
City: SPRING BRANCH Zin Code: 7807	O Address				
Additional Info.: 3.194 ACRES OUT OF THE FRED	City: State:				
SH ÆFERKOETER SURVEY No. 40, A-974	Zip Code:Phone				
Pres nce of 100 yr. Flood Zone: Existing or proposed up to well in new trea. Pres nce of adjacent land, streams and important land. Pres nce of upper was sed. Organized sewage serve available solution.	YES NO X YES X VES X ES D X				

I HAVE PERFORMED A THOROUGH INVESTIGATION BEING A REGISTERED PROFESSIONAL ENGINEER AND SITE EVALUATOR IN ACCORDANCE WITH CHAPTER 285, SUBCHAPTER D, §285.30, & §285.40 (REGARDING RECHARGE FEATURES), TEXAS COMMISSION OF ENVIRONMENTAL QUALITY (EFFECTIVE DECEMBER 29, 2016).

GREG W. JOHNSON, P.E. 67587 - S.E. 11561

09/19/23 DATE



FIRM #2585

RECEIVEDBy Brandon Olvera at 8:14 am, Aug 22, 2024

AEROBIC TREATMENT DRIP TUBING SYSTEM DESIGNED FOR: JUNIPER VENTURES OF TEXAS, LLC. 3455 IH35 SOUTH NEW BRAUNFELS, TX 76548

SITE DESCRIPTION:

Located in Fischer's Market #52 subdivision, Lot 2 in the Fred Schaeferkoeter Survey #40, A-974,

convenience store, fast food restaurant (60 seats), with public restrooms situated in an area with shallow Type III soils as described in the Soil Evaluation Report. Native grasses were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOS YSTEN

A three or t portio narges fi ow continu ase 1 ip w h/20ow into a 1 allo mair nd ou atio itted iberty LE41 dual al le and vi ump. Flow t 40 PVC to a 2000 gallon trash tank with standard inlet and outlet flow tees. Continues to two 2000 gallon aeration tanks installed in series. Aeration tanks fitted with a HiBlow HP150 aerator and Thomas air diffusers with a 3/4" PVC drop and two diffusers on each end of each aeration tank. Air diffusers will be

flow equalization tanks manifolded together at bottom, fitted with dual Liberty LE40 sewage pumps controlled by a dual alternating control panel with manual reset and Omron H3CR-F cycle timer. Equalization tank will accommodate varying flows throughout the day. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the resting pump. Effluent is pumped at rate of 3.5 gallon per minute every hour for 10 minutes to each three 1500 gpd TCEQ/NCF approved aerobic treatment plants in parallel. Flow will be controlled by a ball valve and pressure reducing nipple. A bucket test will be used to calibrate flow to three 1500 gpd TCEQ/NSF approved aerobic plants. After treatment flow from the ATUs continues to two 2000 gallon pump tanks, manifolded together at bottom. Dosing will be set to dose each zone each every six hours for 16 minutes. Effluent is pumped through a 1.25" Sch-40 PVC from each pump. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the next resting pump. Effluent is pumped through a 1.25" Sch-40 PVC alternating from each pump to 7 zones controlled by a electronic solenoid valve. Each zone will be dosed A high level audible and visual alarm will activate should the pump fail. Distribution from each pump is through a Tuff Tiger T125 and Model F335 with a self flushing 100 micron disk filter followed by a pressure

By Brandon Olvera at 8:14 am, Aug 22, 2024

regulator Model PR40HF. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Check valves on the return line on each field will prevent the pressuring of resting zone. Each zone will be dosed each six hours for 16 minutes. Field area will be scarified and built up with 4" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil. A minimum of twelve inches of soil required between rock and drip tubing.

DESIGN SPECIFICATIONS:

Daily waste flow:60 seat fast food @ 12 gpd =720 gpd & 2 public restrooms @ 265gpd = 530gpd

arculated Flow Rate . 1230 gpd (Design Rate - 2300 gpd includes doubling)

Grease Trap size: 3000 gallons with Traffic Lid

Trash/Lift Tank: 1000 gallons with Traffic Lid / 2000 gallons lift tank

Pump requirement: Dual Liberty LE 41 0.4 hp

Trash Tank: 2000 gallons

Aeration 2- 2000 s fitted w HP150 t br & liffusers

Equalization in the second of the second of

Pump request. Dy oert sel LE40 p sev pump

Cycle Time mron R-F timer

Reserve carry af and Land 20 Gal (>4 ow d)

Dlant Sizer 100 corch at TCEON and

Pump tank: 4 gallons Dual effly ump 2000 ons man; 1 together)

Reserve cap er High Le 30 Ge es flor q'd)

Application ka = 0.2 gal/sh

Total absorption area: Q/Ra = 2500 GPD/0.2 = 12,500 sf. (Actual 25,428 sf. Includes doubling)

Total linear feet drip tubing: 12,714' Netifim Bioline drip tubing .61 GPH

Pump req'd: 1630'-1956' w/ 865-978 emitters/zone @ 0.61 gph @ 30 psi = 8.29-9.94 gpm Pump requirement: Dual-Franklin FPS E-Series 0.5HP 20 gpm requiring 20 gpm @ 45 psi

Motors , DC2 DDD 10

Automatic Filters: Tuff Tiger T125 and Model F335

Electronic Timer: Digi-20

Alarm: Audible & visual air pump malfunction alarm & alternating control panel & manual reset.

Water meters on each pump to field.

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

 $MSV = 2 \text{ FPS } (\Pi d \uparrow 2)/4*7.48 \text{ gal/cf*}60 \text{ sec/min}$

 $MSV = 2(3.14159((.55/12)^{2})/4)*7.48*60$

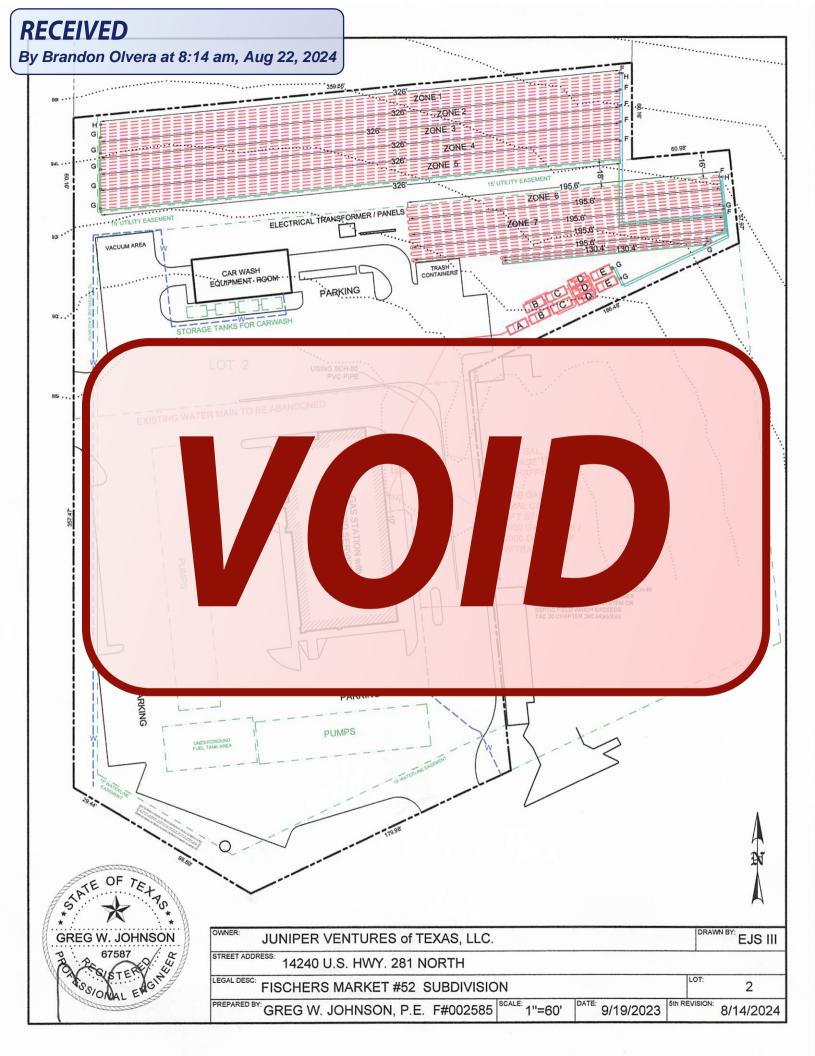
MSV = 1.5 gpm PER LINE * 6 LINES = 9 GPM MIN FLOW RATE per pump.

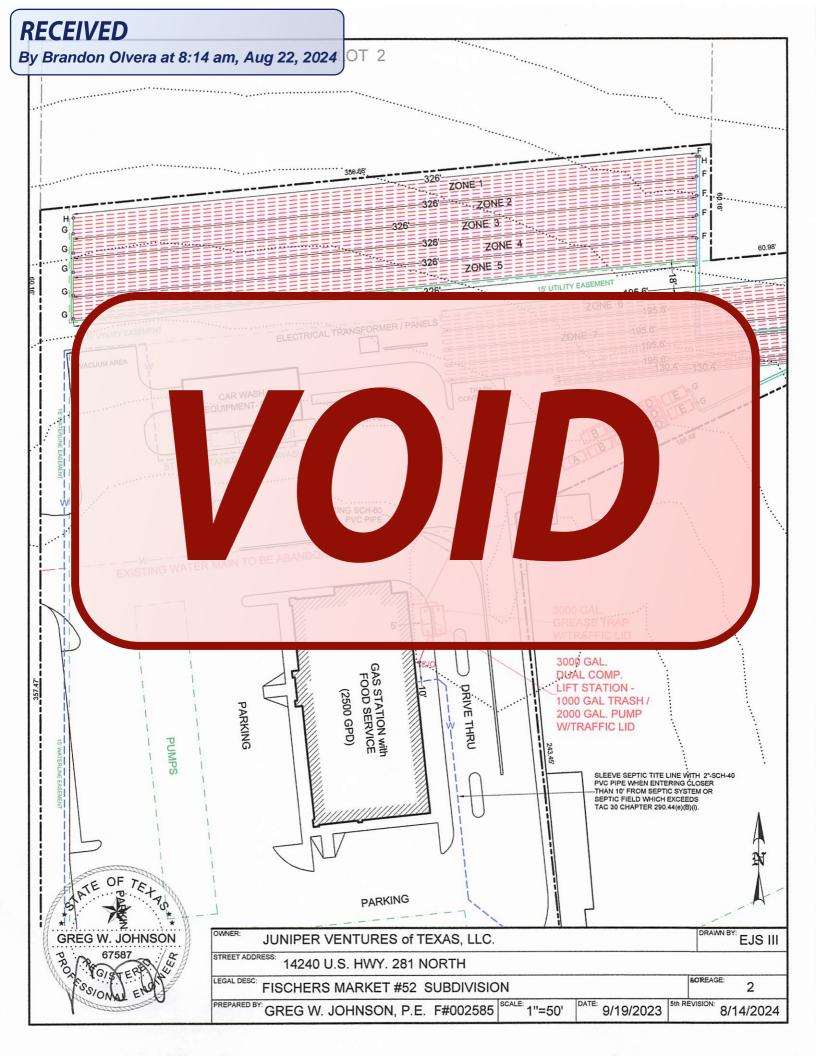
IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

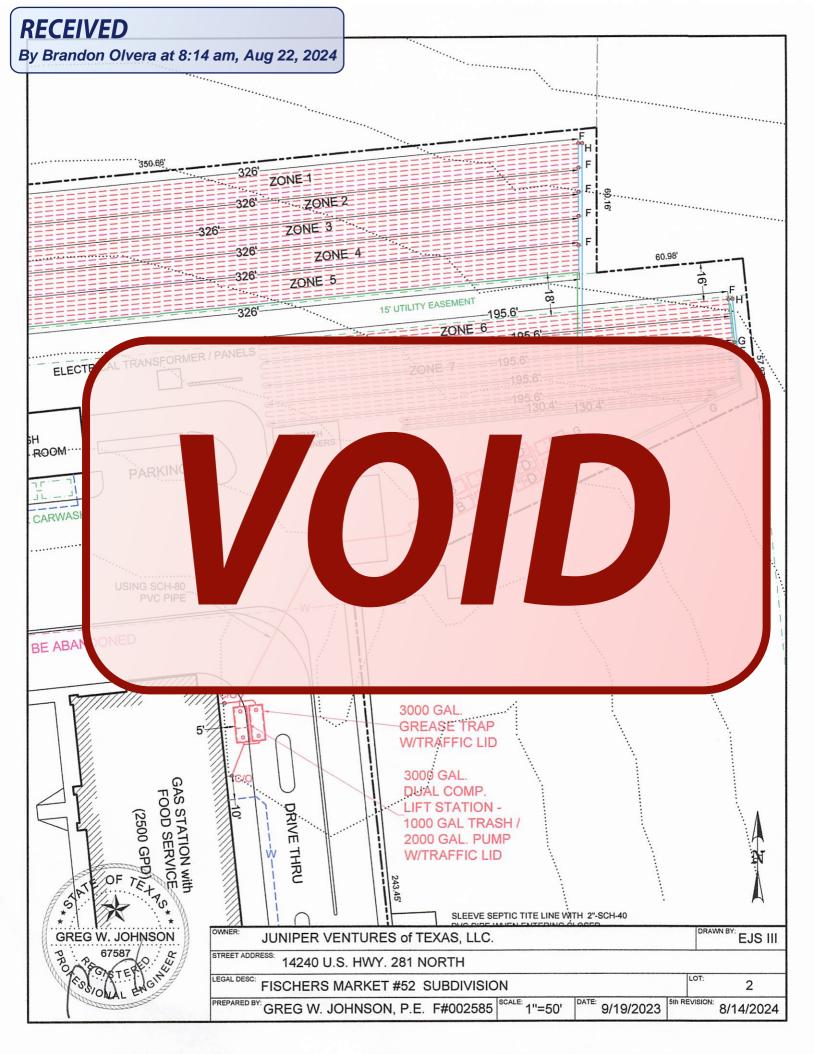
 $MSV = 2 FPS (\Pi d \uparrow 2)/4*7.48 gal/cf*60 sec/min$

 $MSV = 2(3.14159((1.049/12) \uparrow 2)/4)*7.48*60$

MSV = 5.4 GPM







By Brandon Olvera at 8:14 am, Aug 22, 2024



SEPTIC TANK LAYOUT:

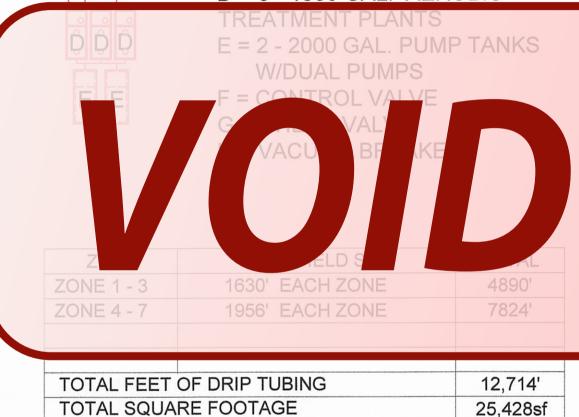
A = 2000 GAL. TRASH TANK

B = 2 - 2000 GAL.AERATION TANKS

C = 2 - 2000 GAL. EQUALIZATION

TANKS

D = 3 - 1500 GAL. AEROBIC







OWNER:	JUNIPER VENTURES of TEXAS, LLC.	SPEC SHEET	DRAV	EJS III
STREET AD	14240 U.S. HWY. 281 NORTH			
LEGAL DES	FISCHERS MARKET #52 SUBDIVISION		LOT:	2
PREPARED	BY: GREG W. JOHNSON, P.E. F#002585 SCALE: N.T	Γ.S. DATE: 9/19/2023 5th F	REVISION:	8/14/2024

By Brandon Olvera at 8:14 am, Aug 22, 2024

WASTE FLOW CALCULATIONS:

BOD5 @ 720 gpd x 1200 mg/l x 8.34 #/gal / 1,000,000 = 7.2lbs BOD5 BOD5 @ 530 gpd @ 300 mg/l x 8.34 #/gal / 1,000,000 = 1.3 lbs BOD5 Total BOD5 = 8.5 lbs.

AEROBIC AERATION & ORGANIC LOADING CONSIDERATIONS:

This design utilizes extended aeration to lower the organic loading from the system. Using aeration requirements in Chapter 217 for extended aeration in the tanks are as follows:

Oxygen requirement: 2.2 lbs of Oxygen per 1 lbs of BOD and 500 gal aeration per 1 lbs of BOD5

afficiency for fine air diffusers are 2-2.5% per foot of depth

HiBlow Each HP-150 generates 5 CFM /58.2 CF/# * 1440 min/d = 123.7 #O2/day
123.7 #O2/day 10% efficiency / 2.2#/lbBOD2 = 5.62 #BOD5 with 3psi backpressure
Thomas air diffusers at set at 4' of water 2 psi back pressure w/ additional 1 psi loss through
diffuser assembly #BOD5

This system no identity ystem. We ater iduce residentic ngth prior to entering the confirmation of the prior of the prior

ELECTRIC OMPONENTS

All electrical wiring shall conform to the requirements of the National Electric Code (1999) or under any other standards approved by the executive director. Additionally, all external wiring shall be installed in approved, rigid, non-metallic electrical conduit. The conduit shall be buried according to the requirements in the National Electric Code and terminated at a main circuit breaker panel.

an electrical disconnect within direct vision from the place where the electrical device is being serviced. Electrical disconnects must be weatherproof (approved for outdoor use) and have maintenance lockout provisions.

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 minimum 4 inch layer of sand, sandy loam, clay loam, or pea gravel.
- Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes
 access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall
 have risers over the port openings which extend to a minimum of two inches above grade.
 A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap
 to prevent tank entry if the cap is unknowingly damaged or removed. Fencing recommended
 around treatment tanks to limit public access.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, and/or

By Brandon Olvera at 8:14 am, Aug 22, 2024

to prevent the infiltration of water.

- Tanks must be filled with water for at least 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8 inch per foot from business to tank.

PIPE AND FITTINGS:

All pipes and fittings in this aerobic system shall be schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. The manifold shall be 1" in diameter and be colored purple.

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 alarms are activated.
- All a fittings a lints show with approximation of solv terms are a line of preventing control of the solv terms are a line of preventing control of the solv terms are a line of the solvet terms are a line of the sol

MAINTEN CE UIR NTS:

- The nt ce com will verify the m is ating proy t least every three and prov egoing r many the in ation w. D5 performed 2 time the months to the first result of the many the many the interpretation of the many the many
- Owner record daily was seen ags to field and and seen and County Engineers office monthly for the first twelve months after license to operate.
- The initial contract will be a minimum of two years.
- A maintenance contract will authorize the maintenance company to maintain and repair the system as needed.
- The property 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.

CONSTRUCTION/INSTALLATION NOTES & REQUIREMENTS:

- 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 Facilities set forth by 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 and 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 approved plans and specifications.
- The installer may not alter these plans without the approval from the designer.

RECEIVED By Brandon Olvera at 8:14 am, Aug 22, 2024

- It is the responsibility of the installer to maintain the minimum setback requirements as stated in Chapter §285 On-Site Sewage Facilities.
- No part of the system shall be located within 10 feet of a potable water line. If this is unavoidable, follow Chapter 290.44(e)(4)(B)(iv-v) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the

rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. (v) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cell stabilized and shall have a minimum of least 2.5 bags of cell per cubic 1 of v years and loose where the property of the aminimum of least 2.5 bags of cell per cubic 1 of v years and loose was the result of the property of t

OPERATI MANA ENT NO

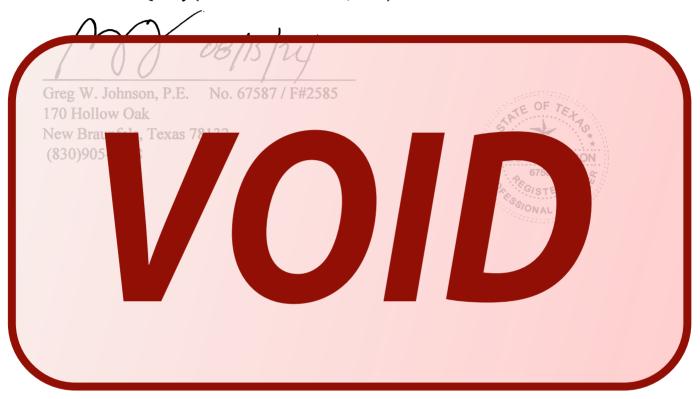
- The hould not b mal ci wer.
- Do not the toilet to dispersion of the toilet to dispersion of the trash. This
- disposal practice will waste water and also impose an undesirable solid load on the treatment system.
- Water Softeners should not be connected to this system.
- bottom of the outlet device. If sludge or scum accumulates to a point, where it approaches are bottom of the outlet device. If sludge or scum accumulates to this point, solids will leave the tank with the liquid and possibly cause the system to clog resulting in sewage surfacing or backing up into the house through plumbing fixtures.
- A regular schedule of cleaning the tanks at least two to three year intervals should be established. Commercial cleaners are equipped to readily perform the cleaning operation. Owners of OSSF's shall engage only persons registered with the TCEQ to transport the septic system waste.
- Do not build driveways, storage buildings, or other structures over system components or the disposal field.
- Chemical additives or so-called enzymes are not necessary for the operation of a septic tank. Some of these additives may even be harmful to the systems operation.
- Soaps, detergents, bleaches, drain cleaners, and other household cleaning materials will very seldom affect the operation of the system. However, moderation should be exercised in the use of such materials.

RECEIVEDBy Brandon Olvera at 8:14 am, Aug 22, 2024

LANDSCAPING

Drip field area will be covered with Curlex and heavily seeded or sodded with grass and drip fields will be maintained with vegetation.

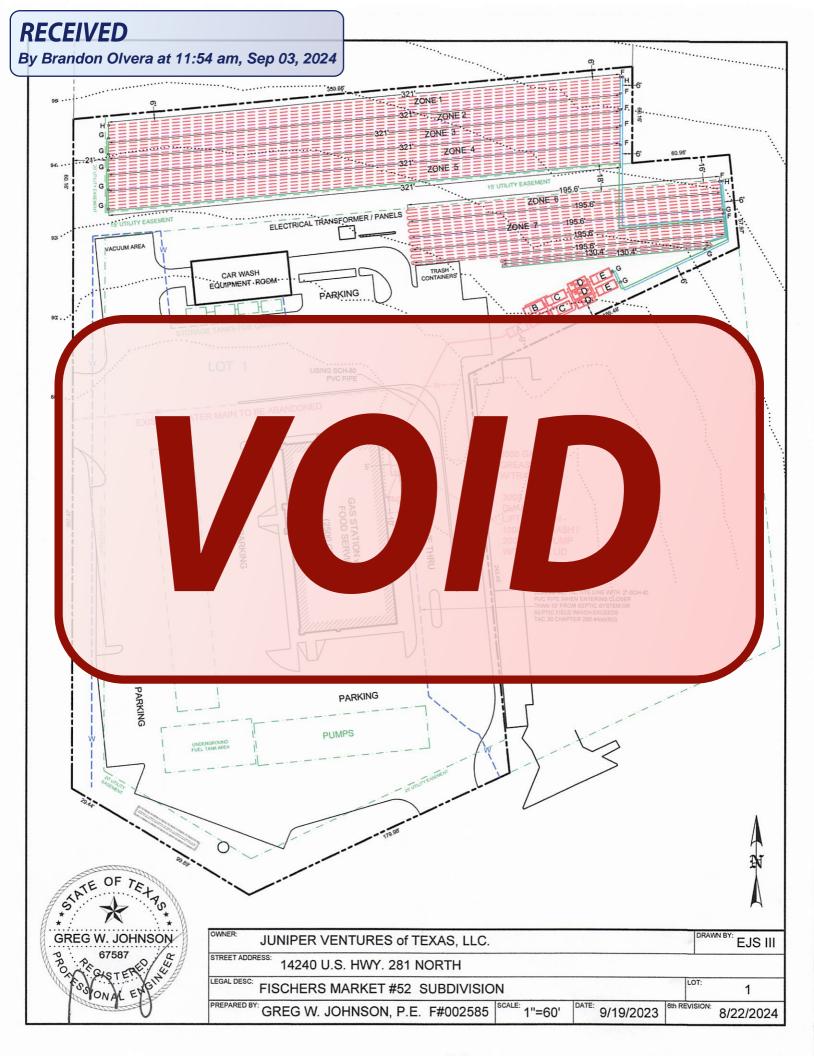
Designed in accordance with Chapter 285, Subchapter D, §285.30, §285.32 Texas Commission on Environmental Quality (Effective December 29, 2016)

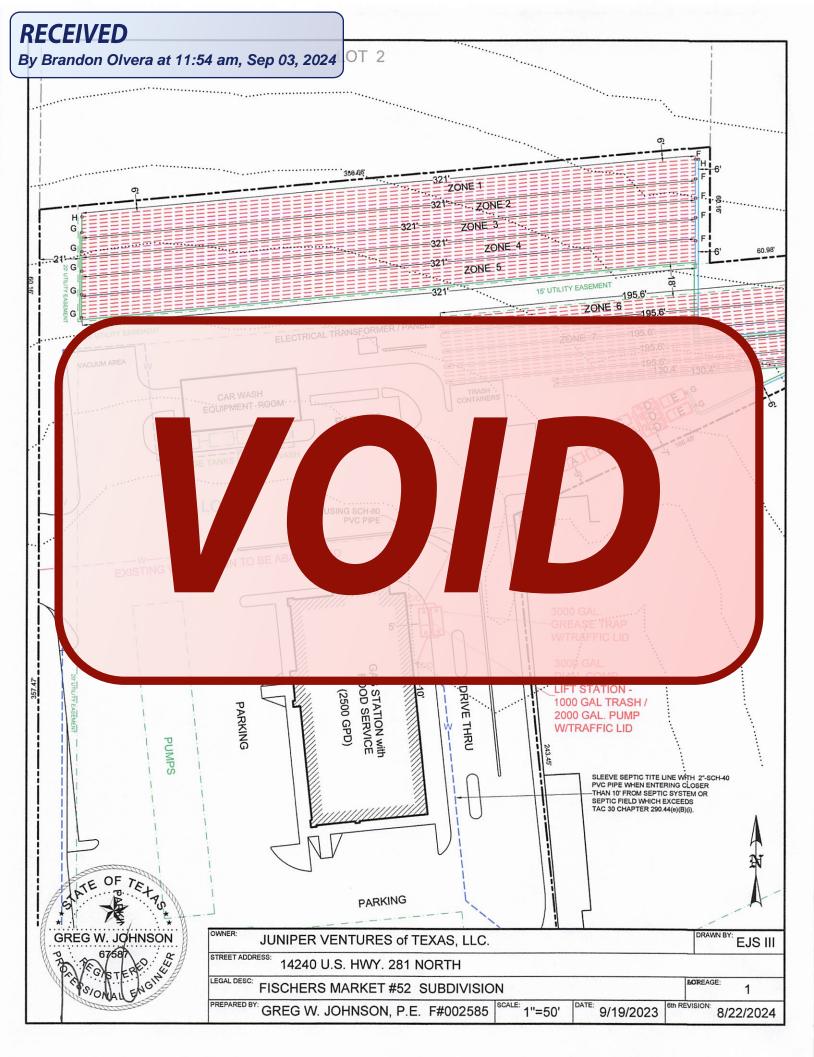


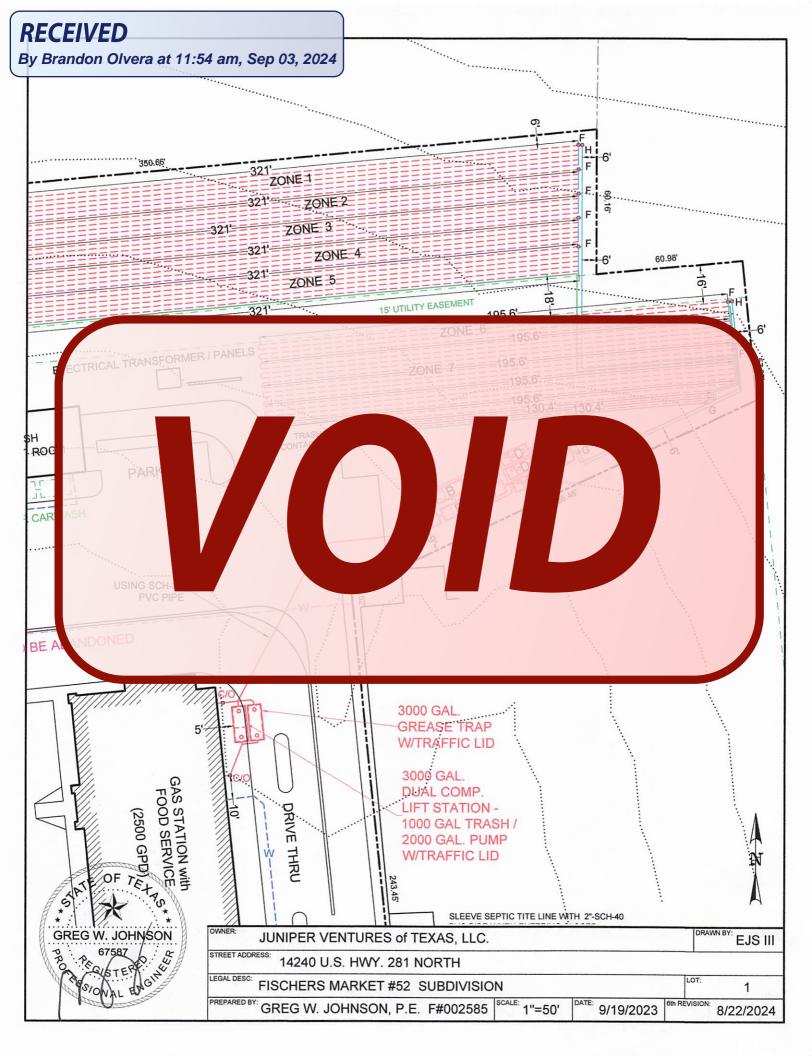
Grease Interceptor Sizing Worksheet

The Uniform Plumbing Code Formula

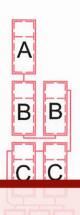
Company	JUNIPER VENTUR	RES OF TEXAS, LLC	C			EG W. JOHNSC		Dat	04/20/2024
		RKET #52, LOT 2				240 US HWY 2	91		0412012024
ow these si		to determine g	rea	se interceptor	siz	е.			10010
	No of Meals Per Peak Hours	Waste Flow Rate	7	Retention Time	1 1	Storage Factor	Inte	culated rceptor Size	Grease Interceptor
Enter alculations > Here	80	X 5	×	2.5	x	3	= 3	000	3000
11010	Step 1	Step 2		Step 3		Step 4	Si	tep 5	Step 6
1 wa	Est nme Fas d (45 Res nt (6) Leis ining Dinry ub (aste i Raf Cone With Withol	Meal Factor X 1.33 nt Ty 5 mir	,				Notes	S:	
(a)		Kitchen Waste Dishwas e Kitchen	shei	r		2.5 Hours	Note:	s.	
		e d Commercial Hours of Opera	tion			Storage Factor	Notes	s:	
4.	,	8 Hours 12 Hours 16 Hours 24 Hours				1.00 1.50 2.00 3.00 1.50			
5		alues obtained t ate grease inter					Note:		
6	Using the app	roximate requir e size as recom				•	1		







By Brandon Olvera at 11:54 am, Sep 03, 2024



SEPTIC TANK LAYOUT:

A = 2000 GAL. TRASH TANK

B = 2 - 2000 GAL.AERATION TANKS

C = 2 - 2000 GAL. EQUALIZATION

TANKS

TREATMENT PLANTS

E = 2 - 2000 GAL. PUMP TANKS

W/DUAL PUMPS



ZONE	DRIP FIELD SIZE	TOTAL
ZONE 1 - 3	1605' EACH ZONE	4815'
ZONE 4 - 5	1926' EACH ZONE	3852'
ZONF 6 - 7	1956' FACH ZONE	3912'

TOTAL FEET	OF DRIP TUBING	12,579'
TOTAL SQUAF	RE FOOTAGE	25,158sf



OWNER:	JUNIPER VENTURES of TEXAS, LLC.	SPEC SHEET	DRAV	EJS III
STREET AD	14240 U.S. HWY. 281 NORTH			
LEGAL DES	FISCHERS MARKET #52 SUBDIVISION		LOT:	1
PREPARED	BY: GREG W. JOHNSON, P.E. F#002585 SCALE: N.T.	S DATE: 9/19/2023 6th R	EVISION:	8/22/2024

Olvera, Brandon

From: Olvera, Brandon

Sent: Tuesday, September 3, 2024 11:41 AM **To:** Greg Johnson; Ritzen, Brenda; Kirk Brumley

Subject: RE: 14240 US HWY 281 N - JUNIPER VENTURES 117684

Good Mo

has been updated. The letter from PEC mentions that they are not liable in the case that the need to use assement. What equivalent protection are you purposing for the supply and return line going through the easement?

Thank You,

| Brandon Olvera | Designated Representative OS0034792 | Comal County | www.cceo.org | 195 David Jonas Dr, New Braunfels, TX-78132 | t: 830-608-2090 | f: 830-608-2078 | e: olverb@co.comal.tx.us

August 13, 2024

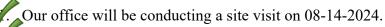
Permit: 117684



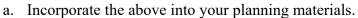
RE: 14240 US Hwy 281

Dear Property Owner & Agent,

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



As a condition of the License to Operate readings from this meter must be taken daily and recorded. The recorded daily readings must be submitted to the Comal County Environmental Health Office monthly beginning 30 days after the issuance of the License to Operate and continuing monthly every 30 days for 12 consecutive months.



I Am not seeing a subdivision called Fischer Market #52.

- a. Provide the recorded plat for this subdivision.
- Application states 60 seats, planning materials state 80 seats.
- Does the purposed GPD include the service station per vehicle? 285.91(3) Table III What are you purposing for the distribution line underneath the parking lot/driveway? 285.91(10)
- Provide a release of easement for the supply and return line going through the utility easement.
- 8. Revise accordingly and resubmit.

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

Thank You,



Comal County www.cceo.org f: 830-608-2078 e: olverb@co.comal.tx.us

Olvera, Brandon

From: Olvera, Brandon

Sent: Wednesday, September 4, 2024 8:13 AM

To: Donna Cosper; OSSF

Subject: 117684 **Attachments:** 117684.pdf

Permit: **117784**

Address: 14240 US Hwy 281

Fischer's Markey #52

Lot 1

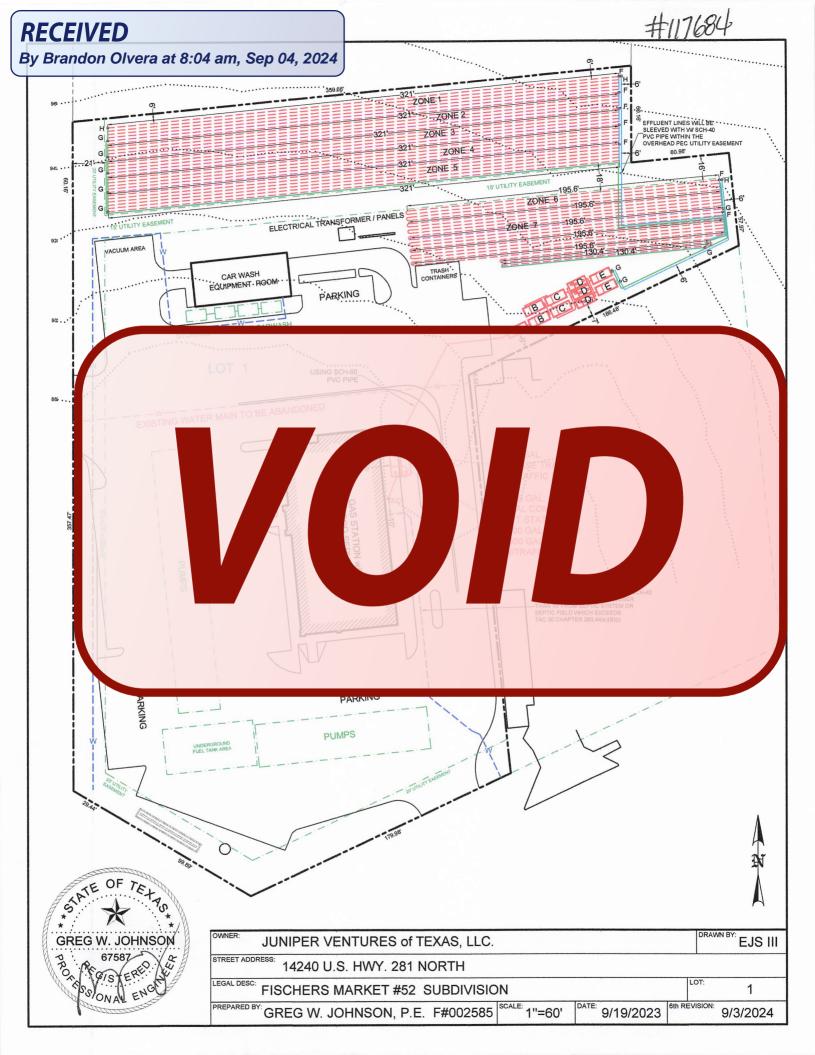
Good Morning,

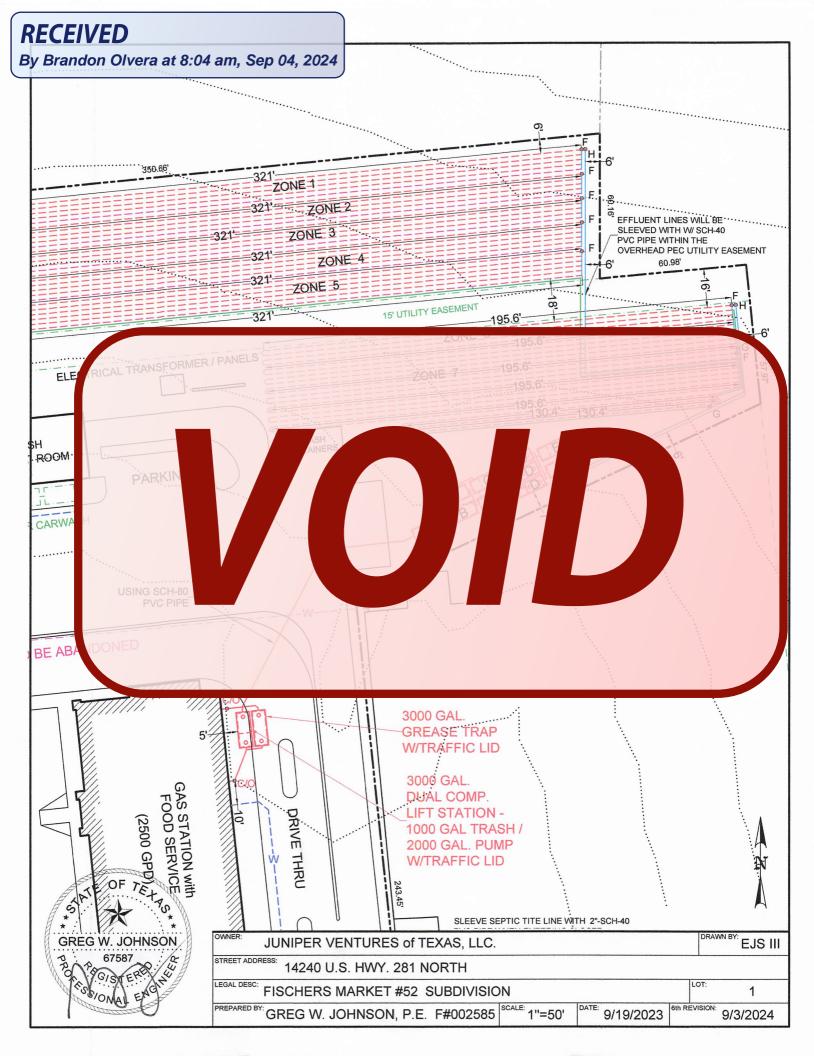
Our office is submitting this permit to TCEQ for nonstandard/high-strength wastewater. Attached is the pdf of the permit, or the link below will take you to the online version.

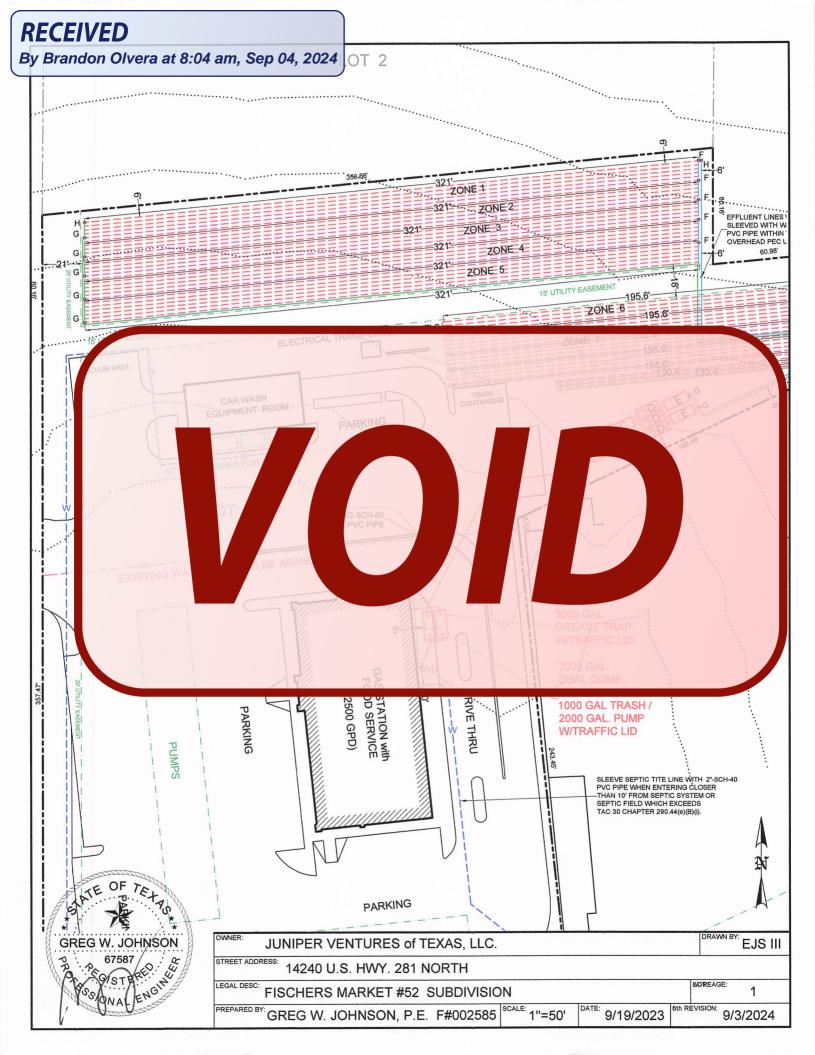
https://cceo.org/environmental/documents/septic_permits/117684.pdf

Thank You,

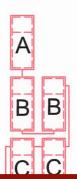
| Brandon Olvera | Designated Representative OS0034792 | Comal County | www.cceo.org | 195 David Jonas Dr, New Braunfels, TX-78132 | t: 830-608-2090 | f: 830-608-2078 | e: olverb@co.comal.tx.us







By Brandon Olvera at 8:04 am, Sep 04, 2024



SEPTIC TANK LAYOUT:

A = 2000 GAL. TRASH TANK

B = 2 - 2000 GAL.AERATION TANKS

C = 2 - 2000 GAL. EQUALIZATION

TANKS



ZONE	DRIP FIELD SIZE	TOTAL
ZONE 1 - 3	1605' EACH ZONE	4815'
ZONE 4 - 5	1926' EACH ZONE	3852'
ZONE 6 - 7	1956' EACH ZONE	3912'

TOTAL FEET	OF DRIP TUBING	12,579'
TOTAL SQUA	RE FOOTAGE	25,158sf



JUNIPER VENTURES of TEXAS, LLC.	SPEC SHEET	DRAWN BY: EJS III
STREET ADDRESS: 14240 U.S. HWY. 281 NORTH		
LEGAL DESC:	TL.	.OT:



#117684

RECEIVED

By Brandon Olvera at 11:45 am, Sep 03, 2024

ON-SITE SEWAGE FACILITY APPLICATION

FISCHER'S MARKET #52, LOT |

195 DAVID JONAS DR NEW BRAUNFELS, TX 78132 (830) 608-2090

- Circle		WWW CCEO ORG
Planning Materials & Site	e Evaluation as Required Completed By_	GREG W. JOHNSON, P.E.
System Description	NON-STANDARD; AEROBIC	C TREATMENT AND DRIP IRRIGATION
Size of Septic System R	equired Based on Planning Materials & So	il Evaluation
Tank Size(s) (Gallons)_	3000 GREASE / 1000 TRASH/ 2000 LIFT / 2000 TRAS AERATION / 2-2000 EQ /3-1500 ATU'S / 2-2000	
Gallons P Day (As Per	TCEQ Table 111) 2500 DESIGN RATE	
(Sites generating more than	n 5000 gallons per day are required to obtain a	permit through TCEQ.)
Is the property located o	ver the Edwards Recharge Zone? Yes	s No
(if ye, the planning ma	must be con by a R	an (R.S.) ression
Is there an existing TO (if ye , the R.S. or P.E. s	pprover IP for operty?	pvisio the ex NPAP.)
Is there at least one ac	si amily d as per 285	i)? es [o
If there is no existing W (if ye, the R.S or P.E. shabe is ued for the proposed	the proposed WPAF has been appropriate the proposed WPAF has been appropriate the proposed with the pr	all-property of the appropriate regional office.)
Is the property located o	ver the Edwards Contributing Zone? X	es No
Is there and the P.F. or P.S. ohe	U contife that the OCCE design complice with all	Association of the existing OZD)
If there is no existing CZ (if yes, the R.S. or P.E. sha issued for the proposed OS	III certify that the OSSF design complies with all IP, does the proposed development activity all certify that the OSSF design will comply with SSF until the UP has been approved by the apprincerporated city? Yes No	require a TCEQ approved CZP? Yes No all provisions of the proposed CZP. A Permit to Construct will not be
By signing this application	n, I certify that:	

- The information provided above is true and correct to the best of my knowledge
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

Signature of Designer Date

August 15, 2024

Date

By Brandon Olvera at 11:52 am, Sep 03, 2024

AEROBIC TREATMENT DRIP TUBING SYSTEM DESIGNED FOR: JUNIPER VENTURES OF TEXAS, LLC. 3455 IH35 SOUTH NEW BRAUNFELS, TX 76548

SITE DESCRIPTION:

Located in Fischer's Market #52 subdivision, Lot 1 in the Fred Schaeferkoeter Survey #40, A-974, being 3.194 acres at 14240 North Highway 281, the proposed system will serve a gas station, convenience store, fast food restaurant (60 seats), with public restrooms situated in an area with shall

aroughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

PROPOSED SYSTEM:

A three or four f the business to grant port a 3000 grease) gal let an ya tivat ugh a Aeration ta and two diffu end of e rusers will be located approximately five inches off the bottom of the tank. HiBlow HP150 pump will produce at least 54 cubic feet of air per minute with 2 psi back pressure. Flow continues to two 2000 gallon flow equalization tanks manifolded together at bottom, fitted with dual Liberty LE40 sewage pumps ontrolled by a dual alternating control panel with manual reset and Omron H3CR-F cycle timer.

visual alarm with manual reset will activate should the pump fail and initiate the resting pump. Effluent is pumped at rate of 3.5 gallon per minute every hour for 10 minutes to each three 1500 gpd TCEQ/NCF approved aerobic treatment plants in parallel. Flow will be controlled by a ball valve and pressure reducing nipple. A bucket test will be used to calibrate flow to three 1500 gpd TCEQ/NSF approved aerobic plants. After treatment flow from the ATUs continues to two 2000 gallon pump tanks, manifolded together at bottom. Dosing will be set to dose each zone each every six hours for 16 minutes. Effluent is pumped through a 1.25" Sch-40 PVC from each pump. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the next resting pump. Effluent is pumped through a 1.25" Sch-40 PVC alternating from each pump to 7 zones controlled by a electronic solenoid valve. Each zone will be dosed A high level audible and visual alarm will activate should the pump fail. Distribution from each pump is through a Tuff Tiger T125 and Model F335 with a self flushing 100 micron disk filter followed by a pressure

By Brandon Olvera at 11:52 am, Sep 03, 2024

regulator Model PR40HF. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Check valves on the return line on each field will prevent the pressuring of resting zone. Each zone will be dosed each six hours for 16 minutes. Field area will be scarified and built up with 4" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil. A minimum of twelve inches of soil required between rock and drip tubing.

DESIGN SPECIFICATIONS:

Daily waste flow:60 seat fast food @ 12 gpd =720 gpd & 2 public restrooms @ 265gpd = 530gpd

Calculated Flow Rate: 1250 gpd (Design Rate = 2500 gpd Includes doubling)

Grease Trap size: 3000 gallons with Traffic Lid

Tradit Lift Tank: 1000 gallons with Traffic Lid / 2000 gallons lift tank

ump requirement: Dual Liberty LE 41 0.4 hp

Trash Tank: 2000 gallons

Aeration Tank: 2- 2000 gallons fitted w/ HiBlow HP150 aerator & Thomas air diffusers

Equalization tank: 4000 gallons w/ Dual effluent pumps (2-2000 gallons manifolded together)

Pump require : Dual Lil Model sewage ps

Cycle Timer: on H3CV ycle

Reserve capace fter Hi vel: Al (>4hrs Req

Plant Size: 3- gpd ic pl CEO/NSF ved

Pump tank size 00 g as with all effluent p (2) gal nanifolde ther

Reserve capacianter in Level 1 Gal (>4hr Re

Application Ra 2 2 gal/sf

Total absorption //Ra = 250 00 sf. ual 2 doubling)

Pump req'd: 1630'-1956' w/ 865-978 emitters/zone @ 0.61 gph @ 30 psi = 8.29-9.94 gpm

Pump requirement: Dual-Franklin FPS E-Series 0.5HP 20 gpm requiring 20 gpm @ 45 psi

Flow Meters: RG3 PPD-10

Automatic Filters: Tuff Tiger T125 and Model F335

Elecus

Alarm: Audible & visual air pump malfunction alarm & alternating control panel & manual reset. Water meters on each pump to field.

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

 $MSV = 2 \text{ FPS } (\Pi d \uparrow 2)/4*7.48 \text{ gal/cf*} 60 \text{ sec/min}$

 $MSV = 2(3.14159((.55/12)^{2})/4)*7.48*60$

MSV = 1.5 gpm PER LINE * 6 LINES = 9 GPM MIN FLOW RATE per pump.

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

 $MSV = 2 FPS (\Pi d \uparrow 2)/4*7.48 gal/cf*60 sec/min$

 $MSV = 2(3.14159((1.049/12) \uparrow 2)/4)*7.48*60$

MSV = 5.4 GPM

By Brandon Olvera at 11:52 am, Sep 03, 2024

WASTE FLOW CALCULATIONS:

BOD5 @ 720 gpd x 1200 mg/l x 8.34 #/gal / 1,000,000 = 7.2lbs BOD5 BOD5 @ 530 gpd @ 300 mg/l x 8.34 #/gal / 1,000,000 = 1.3 lbs BOD5 Total BOD5 = 8.5 lbs.

AEROBIC AERATION & ORGANIC LOADING CONSIDERATIONS:

This design utilizes extended aeration to lower the organic loading from the system. Using aeration requirements in Chapter 217 for extended aeration in the tanks are as follows:

Oxygen requirement: 2.2 lbs of Oxygen per 1 lbs of BOD and 500 gal aeration per 1 lbs of BOD5

Efficiency for fine air diffusers are 2-2.5% per foot of depth

HiBlow Each HP-150 generates 5 CFM /58.2 CF/# * 1440 min/d = 123.7 #O2/day
123.7 #O2/day 10% efficiency / 2.2#/lbBOD2 = 5.62 #BOD5 with 3psi backpressure
Thomas air diffusers at set at 4' of water 2 psi back pressure w/ additional 1 psi loss through
diffuser assembly #BOD5

2-2000 a aeration $\frac{12 \#/gs^2}{2 + 1}$ $\frac{5}{4}$ April $\frac{5}{4}$ $\frac{5}{4}$ April $\frac{5}{4}$ $\frac{$

Each 150 d plant 75 # 3 = 11. DD5

Total Recognition $= 9 \times 100 \text{ a}$ = 1 tanks = 1 ATV = 9.25 DS

Actual Region #/da stal #BOD5

This system in Indard system. W ater educe residentia light prior to entering the e

ELECTRI COMPONEN

All electrical wiring shall conform to the requirements of the National Electric Code (1999) or under any other standards approved by the executive director. Additionally, all external wiring shall be installed in approved, rigid, non-metallic electrical conduit. The conduit shall be buried according to the requirements in the National Electric Code and terminated at a main circuit breaker panel or with nearly Contractions shall be in contracted in the National Electric Code.

an electrical disconnect within direct vision from the place where the electrical device is being serviced. Electrical disconnects must be weatherproof (approved for outdoor use) and have maintenance lockout provisions.

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 minimum 4 inch layer of sand, sandy loam, clay loam, or pea gravel.
- Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes
 access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall
 have risers over the port openings which extend to a minimum of two inches above grade.
 A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap
 to prevent tank entry if the cap is unknowingly damaged or removed. Fencing recommended
 around treatment tanks to limit public access.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, and/or

By Brandon Olvera at 11:52 am, Sep 03, 2024

to prevent the infiltration of water.

- Tanks must be filled with water for at least 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8 inch per foot from business to tank.

PIPE AND FITTINGS:

All pipes and fittings in this aerobic system shall be schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. The manifold shall be 1" in diameter and be colored purple.

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 alarms are activated.
- All fittings are at shall with approvalent gent. Clipper type ters are remarks the shall burrs a great pure g possible plug.

MAINTEN CE UIRE NTS:

- The late a compared vill verify the synthesis of groperly ast every three production of the synthesis of the
- Own ecord daily was a field day and substitute of field
- The initial contract will be a minimum of two years.
- A maintenance contract will authorize the maintenance company to maintain and repair the system as needed.
- 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.

CONSTRUCTION/INSTALLATION NOTES & REQUIREMENTS:

- 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 Facilities set forth by 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 and 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 approved plans and specifications.
- The installer may not alter these plans without the approval from the designer.

By Brandon Olvera at 11:52 am, Sep 03, 2024

- It is the responsibility of the installer to maintain the minimum setback requirements as stated in Chapter §285 On-Site Sewage Facilities.
- No part of the system shall be located within 10 feet of a potable water line. If this is unavoidable, follow Chapter 290.44(e)(4)(B)(iv-v) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment
 - required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for stewater main or lateral. The use of brown coloring in cement stabilized sand for stewater main or lateral. The use of brown coloring in cement stabilized sand for stewater main or lateral. The use of brown coloring in cement stabilized sand for stewater main or lateral.

OPERATIO ND N AGE AT NOTE

- The C sho ot be ed as a norr ty s
- Do no the let to design of cleaning sugar retter to or other. This
- dispos y will wa ter and a post ndes solid lo he treatment system
- Water sers should not be seed to this em.
- Septic tanks shall be cleaned before sludge accumulates to a point where it approaches the bottom of the outlet device. If sludge or scum accumulates to this point, solids will leave the tank with the liquid and possibly cause the system to clog resulting in sewage surfacing or backing up into the house through plumbing fixtures.
- A regular schedule of cleaning the tanks at least two to three year intervals should be established. Commercial cleaners are equipped to readily perform the cleaning operation.
 Owners of OSSF's shall engage only persons registered with the TCEQ to transport the septic system waste.
- Do not build driveways, storage buildings, or other structures over system components or the disposal field.
- Chemical additives or so-called enzymes are not necessary for the operation of a septic tank. Some of these additives may even be harmful to the systems operation.
- Soaps, detergents, bleaches, drain cleaners, and other household cleaning materials will very seldom affect the operation of the system. However, moderation should be exercised in the use of such materials.

By Brandon Olvera at 11:52 am, Sep 03, 2024

GREG W. JOHNSON

LA DSCAPING

Ap field area will be covered with Curlex and heavily seeded or sodded with grass and drip fields vill be maintained with vegetation.

Designed in accordance with Chapter 285, S. L. hapter D, §285, 20, §285, 20 Toyas Commission on

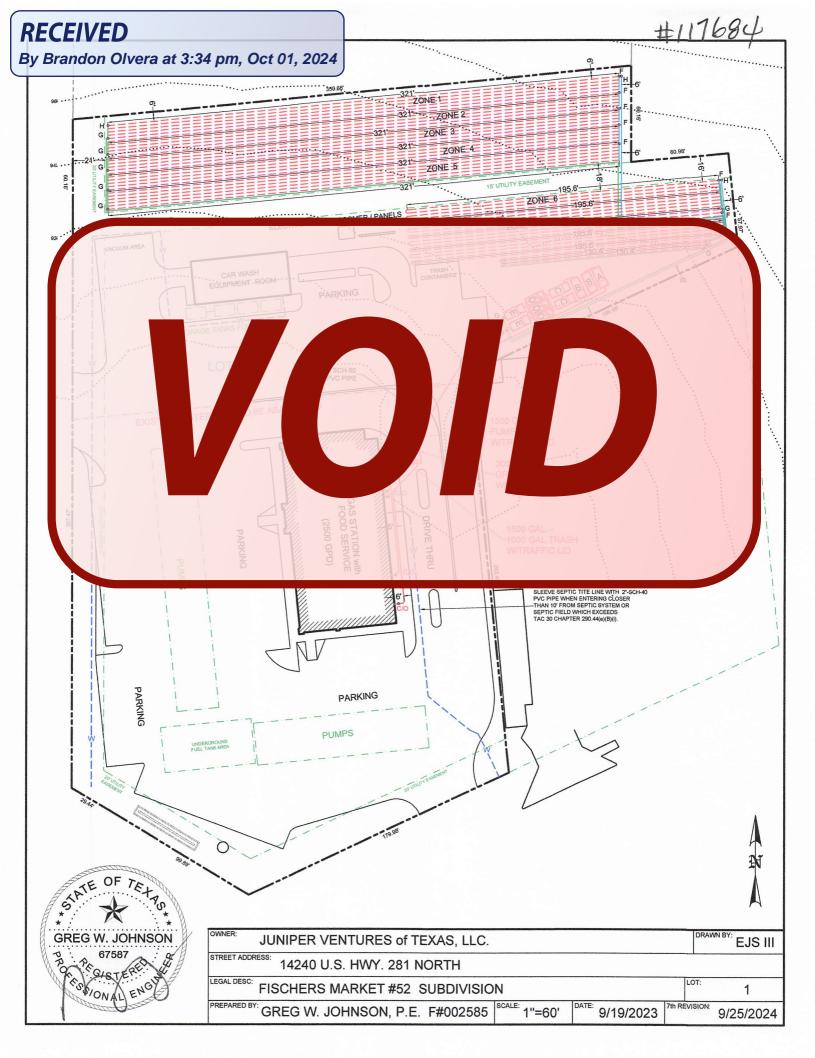
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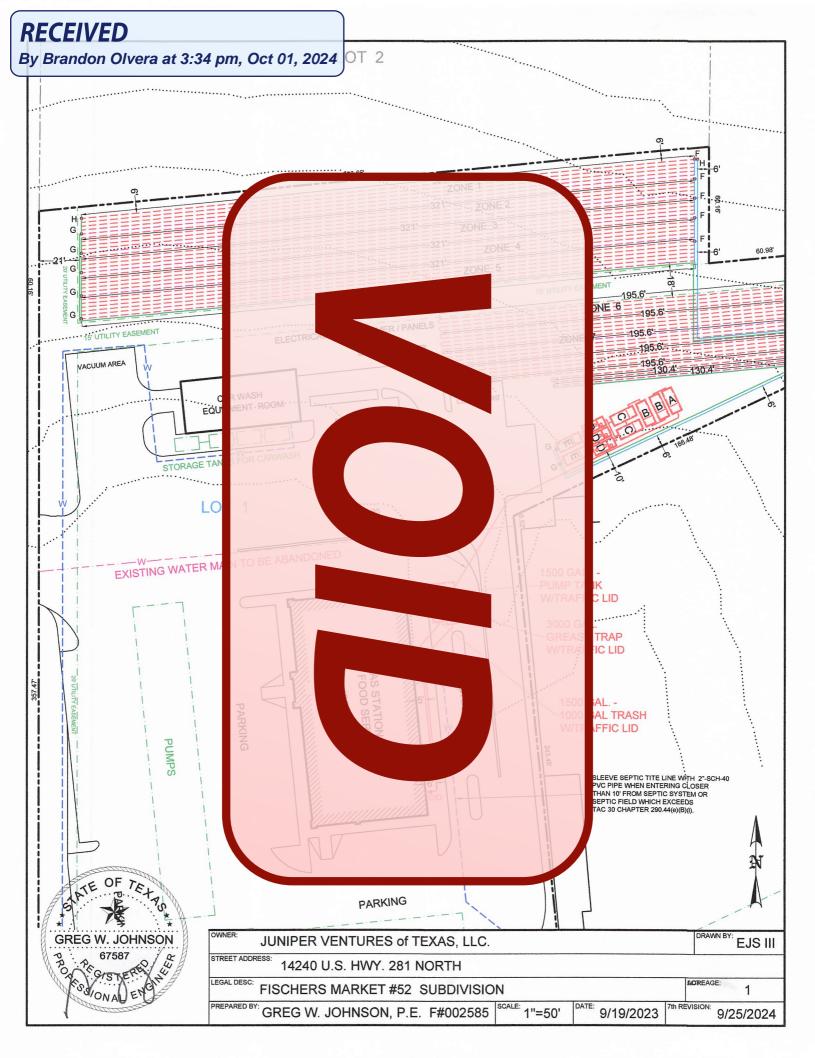
Greg W. Johnso No. 67. F#2585

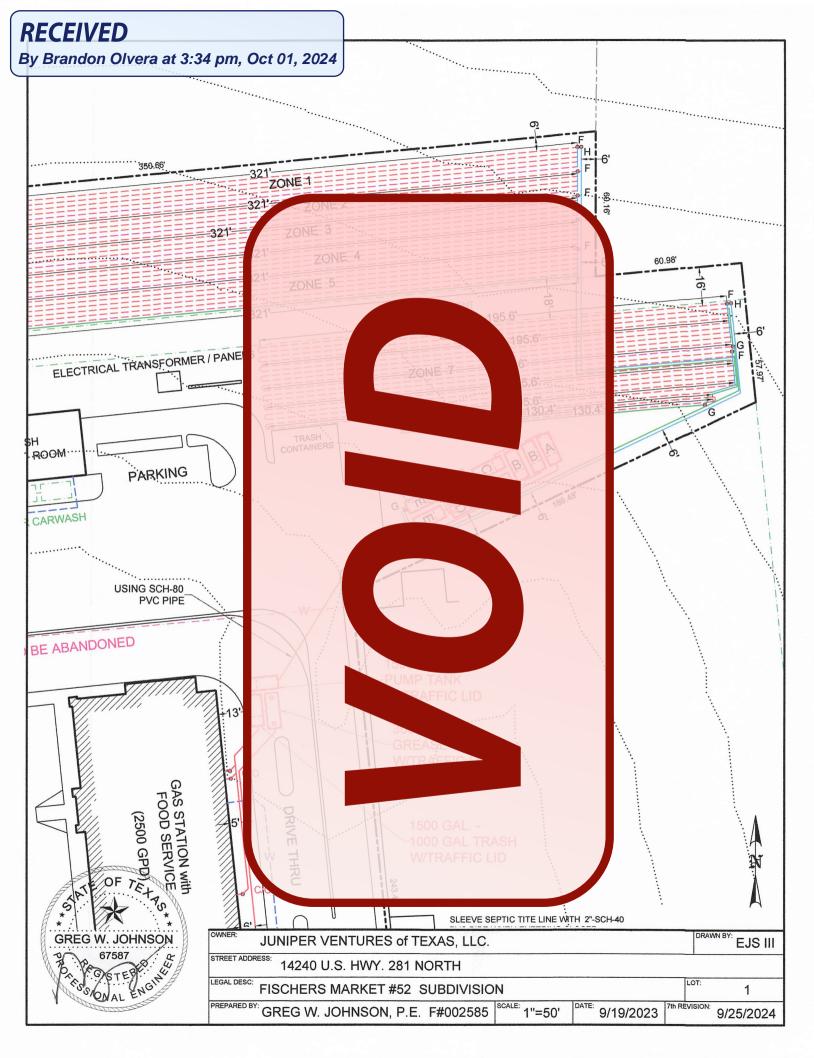
70 Hollow Oak

New Braunfels, Texas 78132

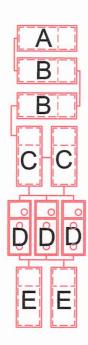
(830)905-2778







By Brandon Olvera at 3:34 pm, Oct 01, 2024



SEPTIC TANK LAYOUT:

A = 2000 GAL. TRASH TANK

B = 2 - 2000 GAL.AERATION TANKS

C = 2 - 2000 GAL. EQUALIZATION

TANKS

D = 3 - 1500 GAL. AEROBIC

TREATMENT PLANTS

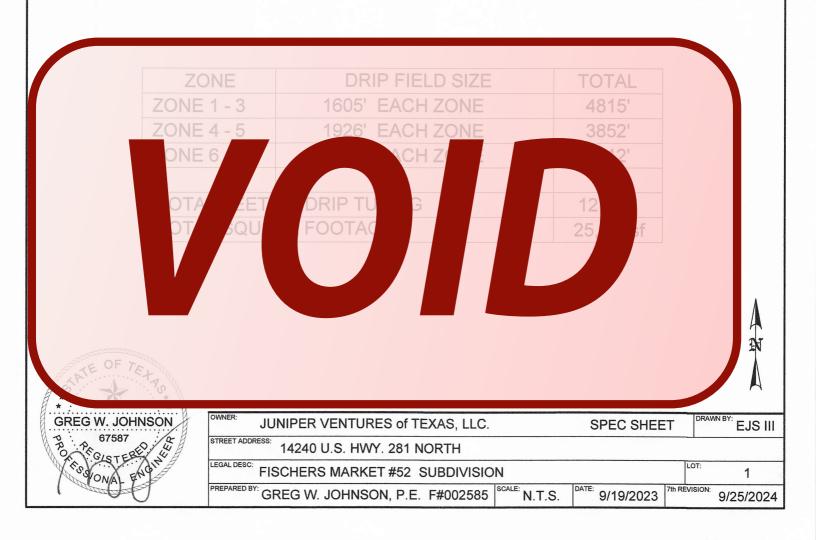
E = 2 - 2000 GAL. PUMP TANKS

W/DUAL PUMPS

F = CONTROL VALVE

G = CHECK VALVE

H = VACUUM BREAKERS



RECEIVEDBy Brandon Olvera at 10:05 am, Oct 22, 2024

AEROBIC TREATMENT DRIP TUBING SYSTEM DESIGNED FOR: JUNIPER VENTURES OF TEXAS, LLC. 3455 IH35 SOUTH NEW BRAUNFELS, TX 76548

SITE DESCRIPTION:

Located in Fischer's Market #52 subdivision, Lot 1 in the Fred Schaeferkoeter Survey #40, A-974, being 3.194 acres at 14240 North Highway 281, the proposed system will serve a gas station, convenience store, fast food restaurant (60 seats), with public restrooms situated in an area with shallow Type III soils as described in the Soil Evaluation Report. Native grasses were found throughout this property. An aerobic treatment plant utilizing drip irrigation was chosen as the most appropriate system to serve the conditions on this lot.

ROPOSED SYSTEM:

A three or four inch SCH-40 pipe discharges from the from the restaurant portion of the business to a 3000 grease trap with traffic lid. Flow continues from the grease trap with traffic lid and joins flow from the restrooms and remaining flow into a 1000 gallon trash tank followed by a 1500 gallon Lift station with a fic lid and to hard inlet a relet flow tee. Lift station is a with dual Liberty Liberty LE40 anps control by a control of the pump fail and initial terest aumy with from the station dose bugh a 2" 40 PVC to a 2000 gallon that at this and inlet and set flowes. It in use to 2000 gallon aeration tanks at a serie ration tank dw. HiB HP150 are and Thomas air diffusers will be locate a similarly to these bottoms of the HiB HP150 are and Thomas will be locate at least a soic feet of air and the pump fail and into the qualization tanks manifolded together at bottom, fitted with dual Liberty LE40 sewage pumps controlled by a dual alternating control panel with manual reset and Omron H3CR-F cycle timer. Equalization tank will accommodate varying flows throughout the day. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the resting pump.

TCEQ/NCF approved aerobic treatment plants in parallel. Flow will be controlled by a ball valve and pressure reducing nipple. A bucket test will be used to calibrate flow to three 1500 gpd TCEQ/NSF approved aerobic plants. After treatment flow from the ATUs continues to two 2000 gallon pump tanks, manifolded together at bottom. Dosing will be set to dose each zone each every six hours for 16 minutes. Effluent is pumped through a 1.25" Sch-40 PVC from each pump. A high level audible and visual alarm with manual reset will activate should the pump fail and initiate the next resting pump. Effluent is pumped through a 1.25" Sch-40 PVC alternating from each pump to 7 zones controlled by two K-Rain 6000 series indexing valves dosing each zone. A high level audible and visual alarm will activate should the pump fail. Distribution from each pump is through a Tuff Tiger T125 and Model F335 with a self flushing 100 micron disk filter followed by a pressure regulator Model PR40HF. Vacuum breakers installed at the highest point on each manifold will

By Brandon Olvera at 10:05 am, Oct 22, 2024

prevent siphoning of effluent from higher to lower parts of the field. Check valves on the return line on each field will prevent the pressuring of resting zone. Each zone will be dosed each six hours for 16 minutes. Field area will be scarified and built up with 4" of Type II or Type III soil, then the drip tubing will be laid and capped with 6" of Type II or Type III soil. A minimum of twelve inches of soil required between rock and drip tubing.

DESIGN SPECIFICATIONS:

Daily waste flow:60 seat fast food @ 12 gpd =720 gpd & 2 public restrooms @ 265gpd = 530gpd

Calculated Flow Rate: 1250 gpd (Design Rate = 2500 gpd Includes doubling)

Grease Trap size: 3000 gallons with Traffic Lid Trash/Lift Tank: 1000 gallons with Traffic Lid

Lift Tank: 1500 gallons lift tank w/ Dual Liberty LE 41 0.4 hp

Trash Tank: 2000 gallons

Aeroi T 1 0 0000 11 Cu 1 /HD1 HD150 . 0 TI 1100

qualization tank: 4000 gallons w/ Dual effluent pumps (2-2000 gallons manifolded together)

Pump requirement: Dual Liberty Model LE40 0.4 hp sewage pumps

Cycle Timer: Omron H3CR-F cycle timer

Reserve capacity after High Level: 420 Gal (>4hrs flow Req'd)

Plant Size: 2-1600 gpd agashin plant TCTT SISF approved

Pump tank and 4000 gal with many mps (00 gal d together)

Reserve cap after F Leve Gal (>4 ow R

Application Ra = gal/s

Total absorp area area GPD/0.2 = 0 si stual 28 sf. Incl doubling)

Total linear f riv ng: 12 Netifim B dri ling PH

Pump req'd: $\frac{b}{a}$ $\frac{$

Pump require val-Frank E-S 5HP pm r ing 20 0, 45 ps

Indexing Valve Rain Model

Flow Meters: RG3 PPD-10

Automatic Filters: Tuff Tiger T125 and Model F335

Electronic Timer: Digi-20

Alarm: Audible & visual air pump malfunction alarm & alternating control panel & manual rese

Was Cald

MINIMUM SCOUR VELOCITY (MSV) > 2 FPS

IN DRIP TUBING W/ NOM. DIA. 0.55" ID

 $MSV = 2 FPS (\Pi d \uparrow 2)/4*7.48 gal/cf*60 sec/min$

 $MSV = 2(3.14159((.55/12)\uparrow 2)/4)*7.48*60$

MSV = 1.5 gpm PER LINE * 6 LINES = 9 GPM MIN FLOW RATE per pump.

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

 $MSV = 2 \text{ FPS } (\Pi d \uparrow 2)/4*7.48 \text{ gal/cf*}60 \text{ sec/min}$

MSV = 2(3.14159((1.049/12)12)/4)*7.48*60

MSV = 5.4 GPM

By Brandon Olvera at 10:05 am, Oct 22, 2024

WASTE FLOW CALCULATIONS:

BOD5 @ 720 gpd x 1200 mg/l x 8.34 #/gal / 1,000,000 = 7.2lbs BOD5 BOD5 @ 530 gpd @ 300 mg/l x 8.34 #/gal / 1,000,000 = 1.3 lbs BOD5 Total BOD5 = 8.5 lbs.

AEROBIC AERATION & ORGANIC LOADING CONSIDERATIONS:

This design utilizes extended aeration to lower the organic loading from the system. Using aeration requirements in Chapter 217 for extended aeration in the tanks are as follows:

Oxygen requirement: 2.2 lbs of Oxygen per 1 lbs of BOD and 500 gal aeration per 1 lbs of BOD5 Efficiency for fine air diffusers are 2-2.5% per foot of depth

123.7 #O2/day 10% efficiency / 2.2#/lbBOD2 = 5.62 #BOD5 with 3psi backpressure Thomas air diffusers at set at 4' of water 2 psi back pressure w/ additional 1 psi loss through diffuser assembly #BOD5

2-2000 gallon aeration x 0.002 #/gal = 8# BOD5/

Hp-150 grantes 123.74/02 and reduce 624 BOD5/days 2 = 11.244 BOD5

Each 1500 plant @ #/ur 30D5

Total Red n = 8 # aer anks) + (ATU 9.25) D5

Actual Red on 19 day al #BOD5 ay

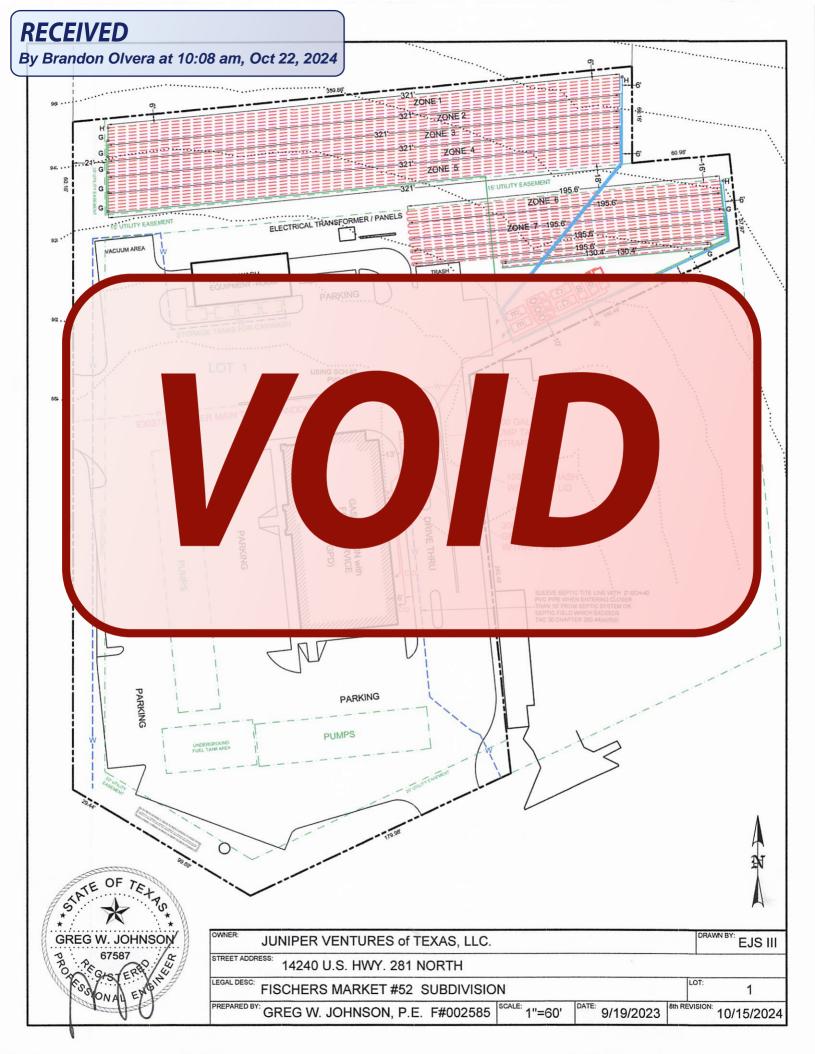
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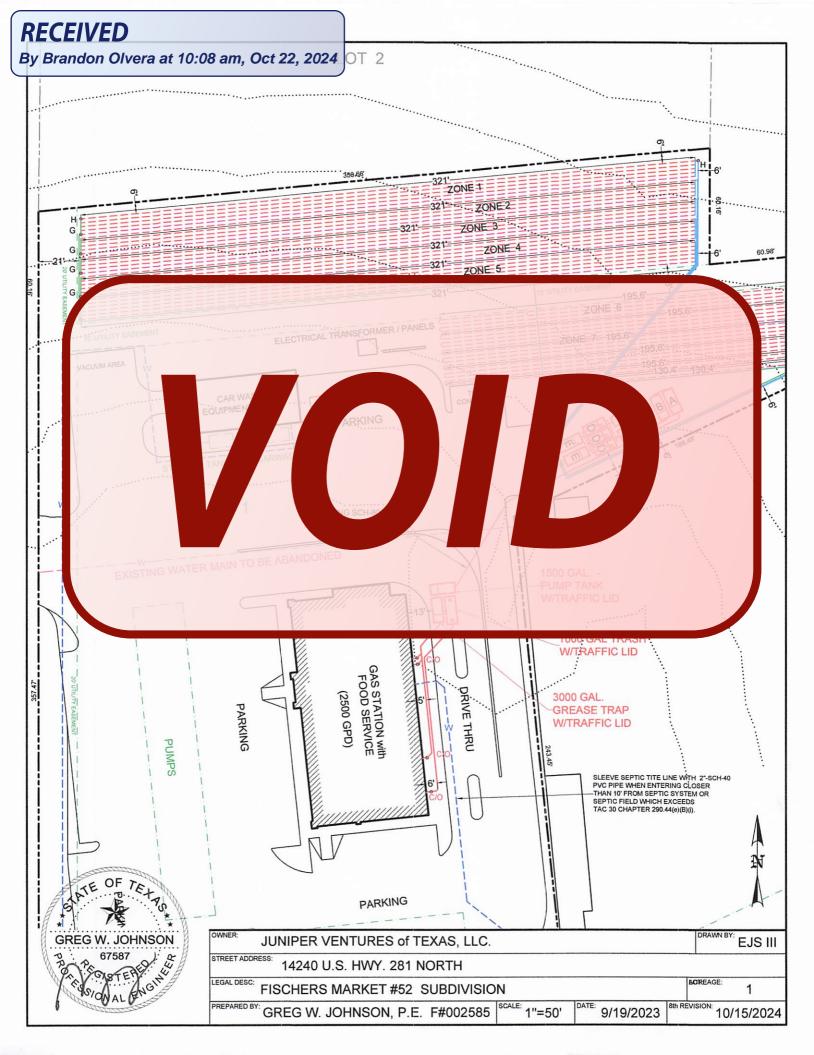
ELECTRIC

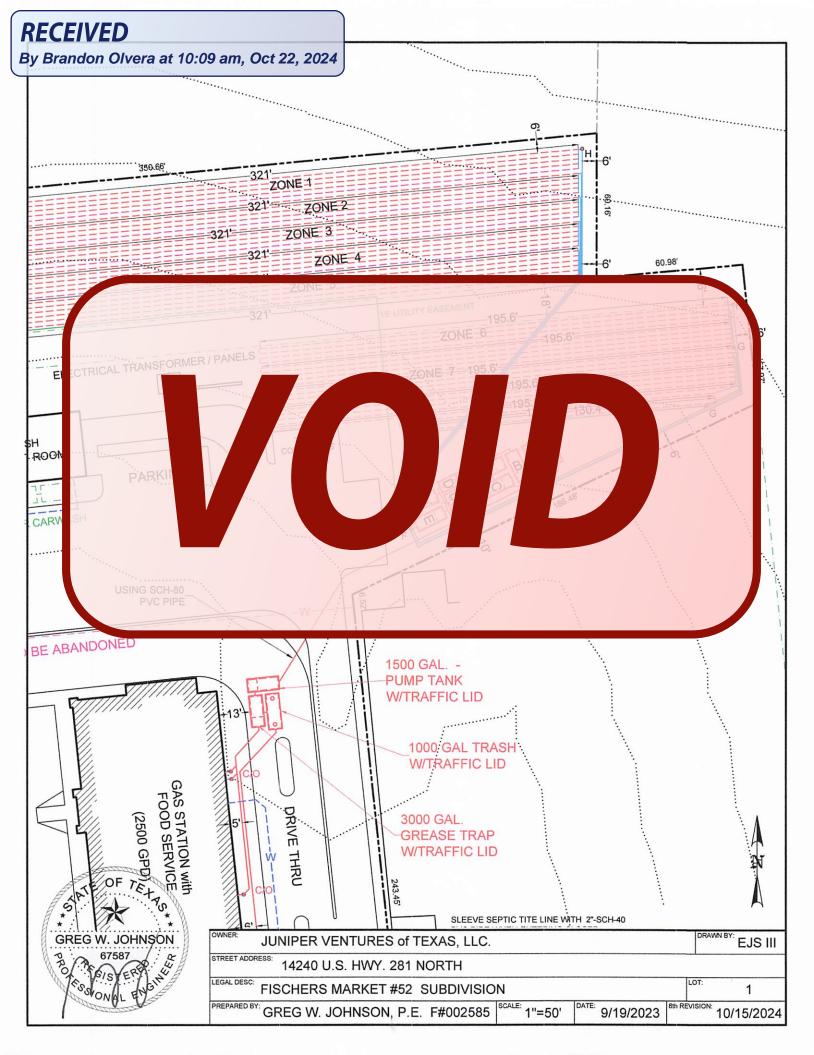
All electrical and shall conform the ements of the National State of the executive director. Additionally, all external wiring shall be installed in approved, rigid, non-metallic electrical conduit. The conduit shall be buried according to the requirements in the National Electric Code and terminated at a main circuit breaker panel or sub-panel. Connections shall be in approved junction boxes. All electrical components shall have an electrical disconnects must be weatherproof (approved for outdoor use) and have maintenance lockout provisions.

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 minimum 4 inch layer of sand, sandy loam, clay loam, or pea gravel.
- Risers are required on tank inspection ports as per 30 TAC 285.38 (9/1/2023). This includes access limitation (<65lbs lid or hardware secured lid), inspection and cleanout ports shall have risers over the port openings which extend to a minimum of two inches above grade. A secondary plug, cap, or other suitable restraint system shall be provided below the riser cap to prevent tank entry if the cap is unknowingly damaged or removed. Fencing recommended around treatment tanks to limit public access.
- All openings in the tank must be properly sealed to prevent the escape of wastewater, and/or







By Brandon Olvera at 10:09 am, Oct 22, 2024



SEPTIC TANK LAYOUT:

A = 2000 GAL. TRASH TANK

B = 2 - 2000 GAL.AERATION TANKS

O 2 2000 OAL. EQUALIZATION

TANKS

D = 3 - 1500 GAL. AEROBIC



ZONE	DRIP FIELD SIZE	TOTAL
ZONE 1 - 3	1605' EACH ZONE	4815'
ZONE 4 - 5	1926' EACH ZONE	3852'
ZONE 6 - 7	1956' EACH ZONE	3912'
TOTAL FEET C	OF DRIP TUBING	12,579'
TOTAL SQUAF	RE FOOTAGE	25,158sf





OWNER:	JUNIPER VENTURES of TEXAS, LLC.	SPEC SHEET	DRAWN	EJS III
STREET AL	14240 U.S. HWY. 281 NORTH			
LEGAL DES	FISCHERS MARKET #52 SUBDIVISION		LOT:	1
PREPARED	OBY: GREG W. JOHNSON, P.E. F#002585 SCALE: N.T.S.	DATE: 9/19/2023 8th	REVISION: 1	0/15/2024

By Brandon Olvera at 10:05 am, Oct 22, 2024

to prevent the infiltration of water.

- Tanks must be filled with water for at least 24 hours to test for leaks and structural integrity.
- The tanks must be set low enough to have fall of at least 1/8 inch per foot from business to tank.

PIPE AND FITTINGS:

All pipes and fittings in this aerobic system shall be schedule 40 PVC. All joints shall be sealed with approved solvent-type PVC cement. The manifold shall be 1" in diameter and be colored purple.

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
 - call be easily seen and heard when alarms are activated.
- All pipe fittings and joints shall be sealed with approved solvent-type PVC cement. Clipper type cutters are recommended to prevent PVC burrs during cutting of pipes causing possible plugging.

MAINTEN CE REOV MEN

- The tenance pany one the sys is op ag page at least every three aths are vide soing man and the sys inst on with 5 performed three aths are month as the month of the sys inst on with 5 performed three aths are month.
- Owned the daily readings to dail do sul to Comal (ry Engineers office at the first velve month are the set of the set
- The ir ract will minimum vo v
- A main the contract which is a main that the system and dedd.
- The property 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.

CONSTRUCTION/INSTALLATION NOTES & REQUIREMENTS:

- 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 Facilities set forth by 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 and 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 approved plans and specifications.
- The installer may not alter these plans without the approval from the designer.

RECEIVEDBy Brandon Olvera at 10:05 am, Oct 22, 2024

- It is the responsibility of the installer to maintain the minimum setback requirements as stated in Chapter §285 On-Site Sewage Facilities.
- No part of the system shall be located within 10 feet of a potable water line. If this is unavoidable, follow Chapter 290.44(e)(4)(B)(iv-v) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. (v) Where cement stabilized sand bedding is

cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the lentification of pressure and stabilized sand for wastewater main or lateral bedding is recommended for the lentification.

OPERATION ND N AGE AT NOT

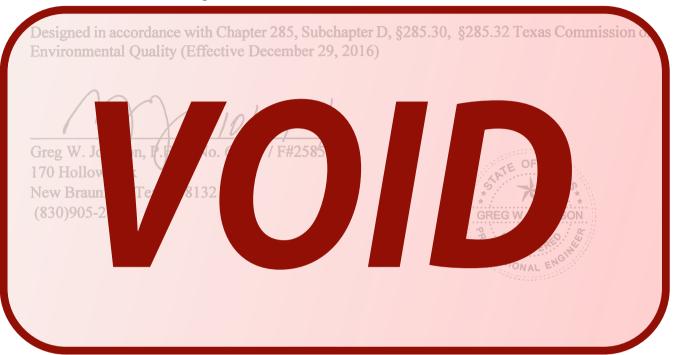
- The F sho of b ded as a non city r.
- Do n e the let to se of clean ssue arette is, or other h. This
- dispo re will w vater and a spos unde le solid lo the treatment
- Water ers should not a to this tem.
- Septic tanks shall be cleaned before sludge accumulates to a point where it approaches the bottom of the outlet device. If sludge or scum accumulates to this point, solids will leave the tank with the liquid and possibly cause the system to clog resulting in sewage surfacing or backing up into the house through plumbing fixtures.

established. Commercial cleaners are equipped to readily perform the cleaning operation. Owners of OSSF's shall engage only persons registered with the TCEQ to transport the septic system waste.

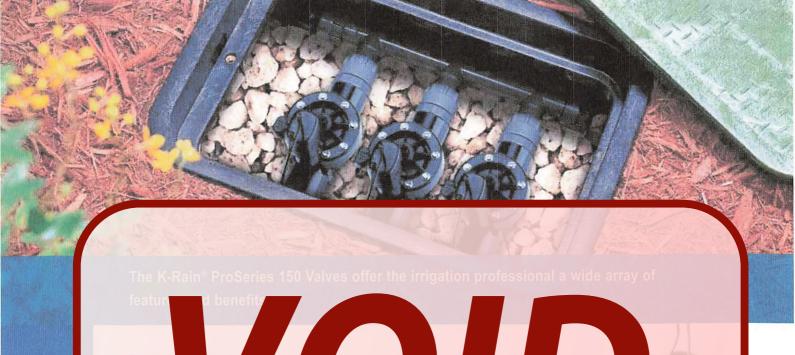
- Do not build driveways, storage buildings, or other structures over system components or the disposal field.
- Chemical additives or so-called enzymes are not necessary for the operation of a septic tank. Some of these additives may even be harmful to the systems operation.
- Soaps, detergents, bleaches, drain cleaners, and other household cleaning materials will very seldom affect the operation of the system. However, moderation should be exercised in the use of such materials.

LANDSCAPING

Drip field area will be covered with Curlex and heavily seeded or sodded with grass and drip fields will be maintained with vegetation.



PROSERIES 150



Features enefit

- Heavy orroy d UV F It PVC Construction of the life valve.
- Manual Screw for manual operation
- Manual harmonic eed through Soleno. Or manual operation without discharging water outside the valve.
- Captured Plunger Allows for the solenoid to be removed without losing the internal plunger.
- Flow Control Option Allows for precise flow adjustment
- Allows for easy cleaning of the metering pin without disassembling the valve.

1-1/2" and 2" Models

- Removable Inlet Cap Allows for easy conversion from globe to angle-style valve.
- Heavy Duty Santoprene® Diaphragm Unique design improves durability of diaphragm.

Jar-Top Models

- Threaded Jar-Top Allows for quick removal of the cap for easy servicing after installation.
- Glass-Filled Nylon Screw Cap Increased durability.



K-Rain Manufacturing Corp. 1640 Australian Avenue Riviera Beach, FL 33404 USA 561.844.1002 FAX: 561.842.9493

1.800.735.7246 | www.krain.com



Specifications

OPERATING; 1" (2,5 cm) MODELS

■ Pressure Rating: 10 – 150 PSI (0,7 – 10,3 bar)

Flow Range: .5 – 30 GPM (18,9 – 113,6 LPM)

7101 PROSERIES 150 1" (2,5 cm) VALVE

Flow Rate - GPM	5	10	15	20	30
PSI Loss	2.9	2.1	1.8	3.0	5.0

7101-FC PROSERIES 150 1" (2,5 cm) VALVE

Flow Rate - GPM	5	10	15	20	30
PSI Loss	6	4,1	4.1	3.1	6.0

PROSERIES 150 1" (2,5 cm) VALVE WITH JAR-TOP

Flow Rate - GPM	5	10	15	20	30
PSI Loss	3.3	3.9	2.9	3.2	6.1

Pressure range: 10-150 psi (0,7 a 10,3 bar

OPERATING: 1-1/2" & 2" (3.8 & 5 cm) MODELS

Pressure Rating: 20 – 150 PSI (1,4 – 10,3 bar)

■ Flow B 0 – 120 GPM 454, 2 L

		· .	
	1 4 4 /OT /O (V/C
	1-1/2 (3)		VE

Flow Rate -	20	50	50
PSI Loss - 0	3.0	2.3 2	5.5
PSI Loss - A	2	1.9 2	4.4
222222		1111/1	

PROSERIE	7	V				
Flow Rate - G	, ,	30	50		100	
PSI Loss - Glo						
PSI Loss - Angle	1.9			2.1	3.2	4.6

Pressure range: 20-150 psi (1.4 a 10.3 har

ELECTRICAL SPECIFICATIONS

- Standard Solenoid: 24V AC 60
- Inrush Current: .43 Amps
- Holding Current: .25 Amps

DIMENSIONS

- 1" Models: Height: 5 1/4" (13,3 cm),
 Width: 3 1/8" (7,95 cm), Length: 5" (12,7 cm)
- 1" Flow Control Models: Height: 5 7/8" (14,9 cm),
 Width: 3 1/8" (7,95 cm), Length: 5" (12,7 cm)
- 1" Jar-Top Models: Height: 5 1/4" (13,3 cm),
 Width: 3" (7,6 cm), Length: 4 3/8" (11,1 cm)
- 1-1/2" Models: Height: 8" (20,3 cm),
 Width: 4-1/4" (10,8 cm), Length: 5-1/2" (14 cm)
- 2" Models: Height: 8-7/8" (22,6 cm),
 Width: 4-7/8" (12,4 cm), Length: 6-1/3" (16,1 cm)

Other options add to part number:

-9VDC

9 Volt DC Solenoid

Manual External Bleed Screw

The 1", 1 1/2" and 2" (2,5, 3,8 and 5 cm) models feature a removable external bleed screw and metering pin to simplify cleaning and maintenance. With the External Bleed Screw, manual operation during start up is easy.







No Tools Required

The K Pain Jar Ton valve allows for quick and easy servicing

after installation



Models

7101-SL 1" (2,5 cm) Female Slip

7101-BSP 1" (2,5 cm) Female Thread, BSP

7101-BSP-FC 1" (2,5 cm) Female Thread, BSP with Flow Control

7101-FC 1" (2,5 cm) Female Thread, NPT with Flow Control

7101-SL-FC 1" (2,5 cm) Female Slip with Flow Control

7101-J 1" (2,5 cm) Female Thread Jar-Top, NPT

7101-J-SL 1" (2,5 cm) Female Slip Jar-Top

7101-J-BSP 1" (2,5 cm) Female Thread Jar-Top, BSP

7101-J-MXB 1" (2,5 cm) Male Thread x 1" (2,5 cm) Barb Jar-Top

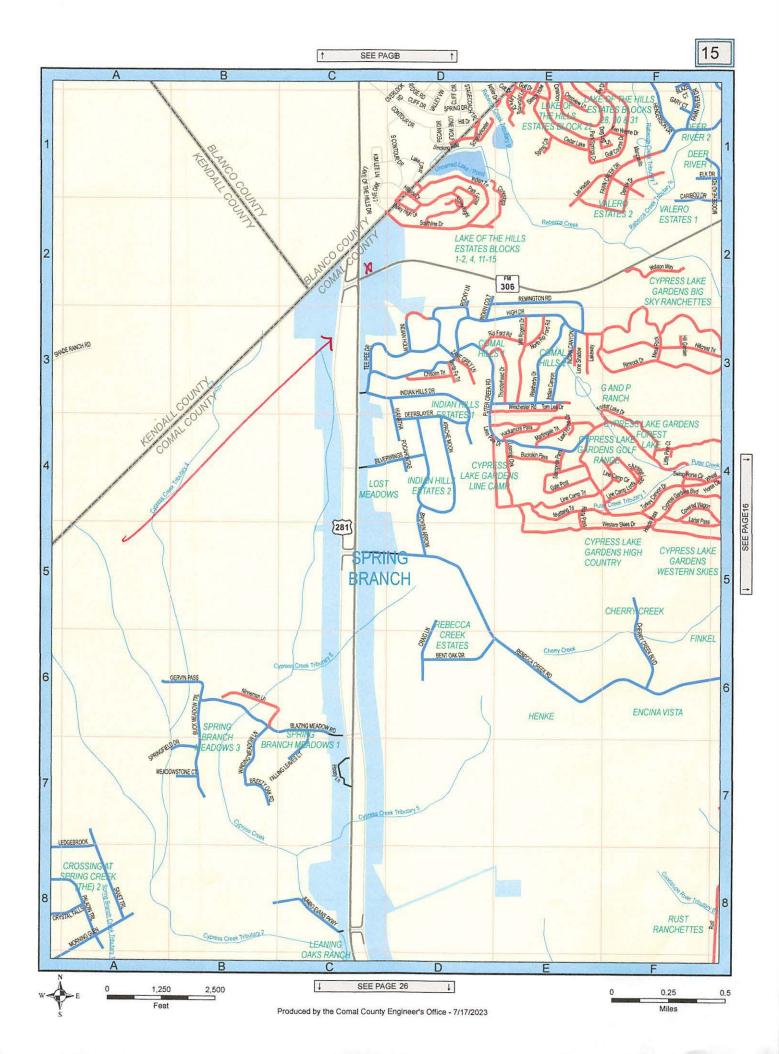
7115 1 1/2" (3,8 cm) Female Thread

7115-BSP 1 1/2" (3,8 cm) Female Thread, BSP

7102 2" (5 cm) Female Thread

7102-BSP 2" (5 cm) Female Thread, BSP





Olvera, Brandon

From: Olvera, Brandon

Sent: Tuesday, October 1, 2024 3:57 PM

To: **Greg Johnson**

Cc: Chasity Schneider; Kyle Johnson

Subject: RE: 14240 US HWY 281N - JUNIPER VENTURES #117684

Good Afte

has been updated. Update all the planning materials to match the new site plan.

Thank You,

Brandon Olvera | Designated Representative OS0034792 | Comal County | www.cceo.org 195 David Jonas Dr, New Braunfels, TX-78132 | t: 830-608-2090 | f: 830-608-2078 | e:

olverb@co.comal.tx.us

#117684

RECEIVED

By Brandon Olvera at 9:51 am, Oct 22, 2024

FISCHER'S MARKET #52, LOT |

195 DAVID JONAS DR NEW BRAUNFELS, TX 78132 (830) 608-2090 <u>WWW CCEO ORG</u>

ON-SITE SEWAGE FACILITY APPLICATION



Planning Materials & Site I	Evaluation as Required Completed By	GREG W. JOHNSON, P.E.
System Description	NON-STANDARD; AEROBIC TRI	EATMENT AND DRIP IRRIGATION
, ,	uired Based on Planning Materials & Soil Eva	
Tank Size(s) (Gallons)	00 GREASE / 1000 TRASH/ /5 00 LIFT / 2000 TRASH / 2-2 AERATION / 2-2000 EQ /3-1500 ATU'S / 2-2000 PUMP	Absorption/Application Area (Sq Ft) 25,428
Gallons Per Port	ASSA PROJONI PARP	
(Sites governating more than 5	6000 gallons per day are required to obtain a permi	it through TCEQ.)
Is the property located ove	er the Edwards Recharge Zone? Yes	No
(if yes the planning material)	lust be complete by a Register Parian (R.	(S.) of Bession (S.E.))
Is the e an existing TC	proved for perty?	
(if yes the R.S. or P.E. sh	tify that SSF complies with pvi	isic he exist NPAP.)
Is the e at least one acre	sin mily dv as per 285.4)?	es [a o
If there is no existing WF	ine propos elopmer ity re	a TCF proved Y Yes No
(if yes the R.S or P.E. shall be iss ed for the proposed C.	at the OSSF de the all-proposed WPA.	s of the A Permit to Construct will not appropriate regional office.)
Is the roperty located over	er the Edwards Contributing Zone? X Yes	No
Is there are visting TCFO	approval CZP for the property? Yes	1 No
(if yes, the P.E. or R.S. shall o	certify that the OSSF design complies with all provi	isions of the existing CZP.)
If there is no existing CZP.	does the proposed development activity requ	uire a TCEQ approved CZP? TYes No
(if yes, the R.S. or P.E. shall o	certify that the OSSF design will comply with all pro F until the UP has been approved by the appropris	ovisions of the proposed CZP. A Permit to Construct will not be
		GREG W. JOHNSON
If yes, indicate the city:	SPRING BRANCH	67587 E O GOSTERO FIRM #2585
By signing this application,	I certify that:	
·	above is true and correct to the best of my knowled	-
- I affirmatively consent to t	the online posting/public release of my e-mail addre	ess associated with this permit application, as applicable.
\mathcal{L}^{\prime}		August 15, 2024
Signature of Designer	Date	

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GENERAL WARRANTY DEED

STATE OF TEXAS §

KNOW ALL PERSONS BY THESE PRESENTS:

COUNTY OF COMAL §

GRANTOR: PATRICIA JEAN RISHEBARGER

P. O. Box 461022

San Antonio, Texas 78246-1022

GRANTEE: JUNIPER VENTURES OF TEXAS, LLC, a Texas limited liability company

P. O. Box 310339

New Braunfels, Texas 78131-0339

That Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) cash and other good and valuable consideration to it in hand paid by Grantee, the receipt of which is hereby acknowledged and confessed has GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL and CONVEY, unto the Grantee, the Property described herein to wit:

BEING 0.482 of an acre of land situated in the Fred Shaeferkoeter Survey No. 40, Abstract No. 974, Comal County, Texas, and being out of a called 3.00 acre tract of land, as conveyed to Patricia Rishebarger and recorded in Document No. 9706001516, of the Official Records of Comal County, Texas, and said 0.482 of an acre tract of land being more particularly described by metes and bounds in Exhibit "A" attached hereto, together with (i) any and all improvements, buildings and fixtures situated on the Land (the "Improvements"); and (ii) all right, title and interest of Grantor, if any, in and to any and all appurtenances, strips or gores, roads, easements, streets, alleys, drainage facilities and rights-of-way bounding the Land, all utility capacity, utilities, water rights, licenses, permits, and entitlements, if any, and all other rights and benefits attributable to the Land, and all rights of ingress and egress thereto (collectively, the "Additional Interests"). The Land, the Improvements and any Additional Interests are hereinafter collectively referred to as the "Property").

TO HAVE AND TO HOLD the above described Property together with, all and singular, the rights and appurtenances thereto in any wise belonging, unto the said Grantee, its heirs and assigns forever; and Grantor does hereby bind herself, and her heirs, executors and administrators, to warrant and forever defend all and singular, the said Property unto the said Grantee, its heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

THIS CONVEYANCE IS MADE AND ACCEPTED by Grantee SUBJECT TO (i) taxes for the current year, which have been prorated as of the date of closing, the payment of which Grantee assumes; (ii) all subsequent tax assessments for the current year, the payment of which Grantee assumes; (iii) validly existing zoning laws, regulations and ordinances of municipal and/or other governmental authorities that affect the Property and (v) Survey dated November 7, 2023, prepared by Drew A. Mawyer, RPLS# 5348.

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

EXECUTED effective this 21st day of November, 2023.

GRANTOR:

PATRICIA JEAN RISHEBARGER

ACKNOWLEDGMENT

STATE OF TEXAS

COUNTY OF Bexas

This General Warranty Deed was acknowledged before me on the 215^t day of November, 2023, by PATRICIA JEAN RISHEBARGER.



NOTARY PUBLIC, STATE OF TEXAS



METES AND BOUNDS DESCRIPTION FOR A 0.482 OF AN ACRE TRACT

EXHIBIT "A"

BEING 0.482 OF AN ACRE OF LAND SITUATED IN THE F. SHAEFERKOTER SURVEY NO. 40, ABSTRACT NO. 974, COMAL COUNTY, TEXAS, AND BEING OUT OF A CALLED 3.00 ACRE TRACT OF LAND, AS CONVEYED TO PATRICIA RISHEBARGER AND RECORDED IN DOCUMENT NO. 9706001516, OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS, AND SAID 0.482 OF AN ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a ½" iron rod found in the East line of U.S. 281 North, and being the Northwest corner of a 1.12 acre tract of land as conveyed to Juniper Ventures of Texas, LLC in Document No. 201806046745 of the Official Public Records of Comal County, Texas, and being the Southwest corner of said 3.00 acre tract of land, and being the Southwest corner of this herein described 0.482 of an acre tract of land;

THENCE departing said 1.12 acre tract of land, and with the Easterly Right-Of-Way line of US 281, N 00° 32' 17" E, a distance of 60.16 feet to a ½" iron rod with yellow plastic cap stamped "DAM #5348 PROP. COR.", set for the Northwest corner of this herein described 0.482 of an acre tract of land;

THENCE departing the Easterly Right-of-Way line of said US 281 North, and across and through said 3.00 acre tract of land, N 85° 07' 45" E, a distance of 350.66 feet to a ½" iron rod with a yellow plastic cap stamped "DAM #5348 PROP. COR." set in the Westerly line of a 6.09 acre tract of land as described in Document No. 201206037091 of the Official Public Records of Comal County, Texas, for the Northeast corner of this herein described 0.482 of an acre tract of land:

THENCE with the common line of said 3.00 acre tract of land and said 6.09 acre tract of land, S 00° 34' 29" W, a distance of 60.16 feet to a 1/2" iron rod found for an interior Southwesterly corner of said 6.09 acre tract of land, the Southeast corner of said 3.00 acre tract of land, in the Northerly line of said 1.12 acre tract of land, and being the Southeast corner of this herein described 0.482 of an acre tract of land;

EXHIBIT "A"

THENCE with the common line of said 3.00 acre tract of land, and said 1.12 acre tract of land, S 85° 07' 45" W, a distance of 350.62 feet to the POINT OF BEGINNING and containing 0.482 of an acre of land.

Bearings based on the Texas State Plane Coordinate System, Texas South Central Zone (4204), North American Datum 1983.

Exhibit prepared this the 7th day of November, 2023.

Drew & Mawyer

Registered Professional Land Surveyor No. 5348

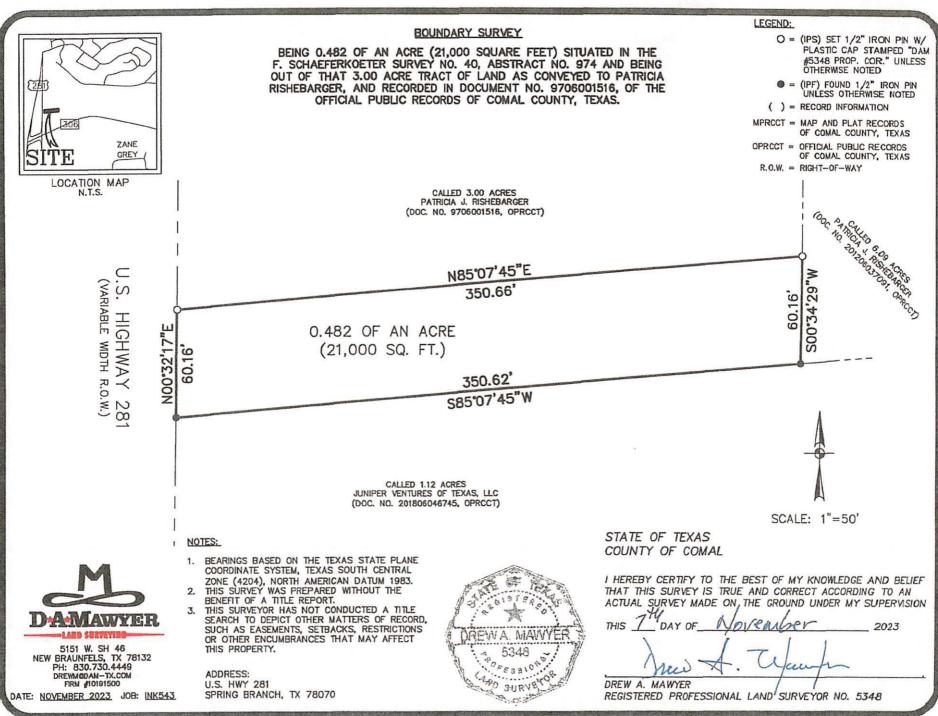
TBPLS Firm Registration #10191500

5151 W. SH 46, NEW BRAUNFELS, TX 78132 INK555- Shell 306-0.482 OF AN ACRE



Filed and Recorded Official Public Records Bobbie Koepp, County Clerk Comal County, Texas 11/22/2023 02:14:42 PM LAURA 4 Pages(s) 202306036935







METES AND BOUNDS DESCRIPTION FOR A 0.482 OF AN ACRE TRACT

BEING 0.482 OF AN ACRE OF LAND SITUATED IN THE F. SHAEFERKOTER SURVEY NO. 40, ABSTRACT NO. 974, COMAL COUNTY, TEXAS, AND BEING OUT OF A CALLED 3.00 ACRE TRACT OF LAND, AS CONVEYED TO PATRICIA RISHEBARGER AND RECORDED IN DOCUMENT NO. 9706001516, OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS, AND SAID 0.482 OF AN ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a ½" iron rod found in the East line of U.S. 281 North, and being the Northwest corner of a 1.12 acre tract of land as conveyed to Juniper Ventures of Texas, LLC in Document No. 201806046745 of the Official Public Records of Comal County, Texas, and being the Southwest corner of said 3.00 acre tract of land, and being the Southwest corner of this herein described 0.482 of an acre tract of land;

THENCE departing said 1.12 acre tract of land, and with the Easterly Right-Of-Way line of US 281, N 00° 32' 17" E, a distance of 60.16 feet to a ½" iron rod with yellow plastic cap stamped "DAM #5348 PROP. COR.", set for the Northwest corner of this herein described 0.482 of an acre tract of land;

THENCE departing the Easterly Right-of-Way line of said US 281 North, and across and through said 3.00 acre tract of land, N 85° 07' 45" E, a distance of 350.66 feet to a ½" iron rod with a yellow plastic cap stamped "DAM #5348 PROP. COR." set in the Westerly line of a 6.09 acre tract of land as described in Document No. 201206037091 of the Official Public Records of Comal County, Texas, for the Northeast corner of this herein described 0.482 of an acre tract of land;

THENCE with the common line of said 3.00 acre tract of land and said 6.09 acre tract of land, S 00° 34′ 29" W, a distance of 60.16 feet to a ½" iron rod found for an interior Southwesterly corner of said 6.09 acre tract of land, the Southeast corner of said 3.00 acre tract of land, in the Northerly line of said 1.12 acre tract of land, and being the Southeast corner of this herein described 0.482 of an acre tract of land;

THENCE with the common line of said 3.00 acre tract of land, and said 1.12 acre tract of land, S 85° 07' 45" W, a distance of 350.62 feet to the POINT OF BEGINNING and containing 0.482 of an acre of land.

Bearings based on the Texas State Plane Coordinate System, Texas South Central Zone (4204), North American Datum 1983.

Exhibit prepared this the 7th day of November, 2023.

Drew A Mawyer

Registered Professional Land Surveyor No. 5348

TBPLS Firm Registration #10191500

5151 W. SH 46, NEW BRAUNFELS, TX 78132 INK555- Shell 306-0.482 OF AN ACRE

201806046745 12/06/2018 03:59:02 PM 1/46

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

SPECIAL WARRANTY DEED

STATE OF TEXAS

88

COUNTIES OF COMAL.

KNOW ALL MEN BY THESE PRESENTS:

KERR, GUADALUPE AND BEXAR §

Effective Date:

December 6, 2018

Grantor:

Fischer's Market Investments, LLC, a Texas limited liability company

Grantor's Mailing Address:

3455 IH 35 South

New Braunfels, Texas 78131

Grantee:

Juniper Ventures of Texas LLC, a Texas limited liability company

Grantee's Mailing Address:

500 Dallas Street, Suite 210

Houston, Texas 77002

Attn: Laura Styslinger, Director, FSM Strategy & Business Development

Consideration: \$10.00, other good and valuable consideration, the receipt and sufficiency of which are

hereby acknowledged and agreed

Property:

Those certain tracts of land as more particularly described on Exhibit "A" attached hereto and made a part hereof for all purposes (the "Land") together with any and all buildings, improvements and fixtures situated on the Land (the "Improvements"); and all right, title and interest of Grantor, if any, in and to any and all minerals, alleys, appurtenances, strips or gores, roads, easements, streets, and rights-of-way bounding the Land; all utility capacity, water rights, licenses, permits, entitlements, and bonds, if any, and all other rights and benefits attributable to the Land, including, but not limited to, Grantor's rights and obligations under any lease of all or any portion of the Land; and all rights of ingress and egress thereto (collectively, the "Additional Interests") (the Land, Improvements, and any Additional Interests, hereinafter collectively called the "Property").

Reservations from Conveyance:

None.

Exceptions to Conveyance and Warranty (the "Exceptions"): This conveyance is made and accepted subject to the matters more particularly described on Exhibit "B" attached hereto and made a part hereof (the "Permitted Exceptions").

FOR THE CONSIDERATION, the receipt and adequacy of which is admitted and stipulated by Grantor, and subject to the Permitted Exceptions herein contained, together with all and singular the

rights and appurtenances thereto in anywise belonging, Grantor has GRANTED, SOLD and CONVEYED and hereby does GRANT, SELL and CONVEY the Property to Grantee, to have and to hold, forever. Grantor does hereby bind Grantor and Grantor's successors and assigns to WARRANT AND FOREVER DEFEND all and singular the Property unto the Grantee and Grantee's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof when the claim is by, through, or under Grantor, but not otherwise, except as to the Permitted Exceptions herein contained.

The interests conveyed herein are conveyed by Grantor, and accepted by Grantee, in its present "as is, where is, with all faults" condition.

Grantor and Grantee have prorated the real property taxes for the current year as of the Date and therefore, real property taxes for the current year and subsequent years, and subsequent taxes and assessments by any taxing authority for prior years due to change in land use or ownership, are hereby assumed by the Grantee.

The terms Grantor, Grantee and pronouns referring to them include the plural as the context requires.

[Remainder of Page Intentionally Left Blank]

EXECUTED the date acknowledged below to be effective as of the date first set forth above.

GRANTOR:

FISCHER'S MARKET INVESTMENTS, LLC, a

Texas limited liability company

By:

Rodney R. Fischer, Manager

STATE OF TEXAS

§ §

COUNTY OF BEXAR

This instrument was acknowledged before me on the 5th day of December by Rodney R. Fischer, Manager of Fischer's Market Investments, LLC, on behalf of said entity.

, 2018

ROBERT BLAKE WERNER
Notary Public, State of Texas
My Commission Expires
October 16, 2019

Notary Public, State of Texas

AFTER RECORDING, PLEASE RETURN TO:

J. Patrick Rouse Langley & Banack, Inc. 745 E. Mulberry, Suite 700 San Antonio, Texas 78212

- found 1/2" rebar with no identification for a deflection point on the northwestern boundary of this tract, the north corner of said 0.772 acre tract and said LOT 3, BLOCK 1, the west corner of said LOT 1R, BLOCK 1;
- THENCE North 44°28'04" East for 143.69 feet continuing along the northwestern boundary of this tract, the northwestern boundary of said LOT 1R, BLOCK 1, the southeastern ROW of KLEIN ROAD to a found TX DOT monument for the cutback ROW, connecting the southeastern ROW of KLEIN ROAD with the southwestern ROW of FM 725;
- THENCE South 87°56'36" East for 80.19 feet along the northern boundary of this tract and said LOT 1R, the southern said cutback ROW to found 1/2" rebar with no identification for the northeast corner of this tract and said LOT 1R, BLOCK 1, on the southwestern ROW of FM 725;
- THENCE by a curve to the left having an arc length of 226.35 feet (R=11519.20', D=01°07'33", CB=South 41°22'00" East, CH=226.34') along a northeastern boundary of this tract, the northeastern boundary of said LOT 1R, BLOCK 1, the southwestern ROW of FM 725 to a found 1/2" rebar with no identification for the east corner of said LOT 1R, BLOCK 1, the north corner of said LOT 2R, BLOCK 1, on the southwestern ROW of FM 725;
- THENCE by a curve to the left having an arc length of 174.91 feet (R=11519.20', D=00°52'12", CB=South 42°05'28" East, CH=174.90'), along a northeastern boundary of this tract, the northeastern boundary of said LOT 2R, BLOCK 1, the southwestern ROW of FM 725 to the POINT OF BEGINNING.

CONTAINING: 2.832 acres of land.

Tract 18, Pit Stop Food Mart No. 20, 14240 HWY 281 North, Spring Branch, TX 78070:

BEING 1.211 acres (52,753 sqft) of land situated in the FRED SCHAEFERKOETER SURVEY No. 40, ABSTRACT 974, COMAL COUNTY, TEXAS, said 1.211 acre tract being that same tract to MIDTEX OIL LP, called 1.212 acres recorded in Document No. 200806034877, Official Public Record Comal County, Texas (OPRCCT), said 1.211 acre tract being more particularly described by metes and bounds as follows:

- BEGINNING at a found TXDOT Monument with brass cap for the north corner of the northeast ROW line of the intersection of US HIGHWAY 281 (120' ROW WIDTH) and FARM-TO-MARKET 306 (130' ROW WIDTH) for the west corner of this described tract;
- THENCE North 00°37′59" East, along the east ROW line of said US HIGHWAY 281, the west line of this described tract, a distance of 357.25 feet to a found 1/2 inch iron rebar for the southwest corner of that certain 3.00 acre tract conveyed by deed to PATRICIA J. LOOMIS, as recorded in Document No. 9706001516 OPRCCT, for the northwest corner of this described tract, from which a found TXDOT Monument with brass cap for the northwest corner of said Loomis tract bears North 00°33′53" East a distance of 450.21 feet;

THENCE along the north line of this described tract, the following two (2) courses and distances:

 North 85°07'45" East, along the south line of said Loomis tract, a distance of 350.62 feet to a found 1/2 inch iron rebar for the southeast corner of said Loomis tract, the upper

- southwest corner of that certain remaining tract of land, originally called 143.89 acres, as recorded in Document No. 200806007256 OPRCCT:
- North 85°01′52″ East, along a south line of said remaining tract, a distance of 60.96 feet
 to a found 1/2 inch iron rebar with plastic cap stamped "LANDMARK SURVEYING" for an
 interior corner of said remaining tract, for the northeast corner of this described tract;

THENCE South 05°26'57" East, along the west line of said remaining tract, the east line of this described tract, a distance of 58.02 feet to a found 1/2 inch rebar for the northeast corner of LOT 1, SAAB-DOLLAR GENERAL SUBDIVISION, as recorded in Document No. 200606002843 OPRCCT, the southeast corner of this described tract, from which a found 1/2 inch iron rebar for the southeast corner of said LOT 1 bears South 05°23'43" East a distance of 249.97 feet;

THENCE along the north and west lines of said LOT 1, the southeast and east lines of this described tract, the following three (3) courses and distances:

- South 65°11′02" West, a distance of 36.64 feet to a found 3/8 inch iron rebar with plastic cap stamped "RPLS 4543";
- South 65°13'12" West, a distance of 149.88 feet to a found 1/2 inch iron rebar for the northwest corner of said Lot 1, for an interior corner of this described tract;
- South 04°51′13" East, a distance of 6.45 feet to a found 1/2 inch iron rebar with plastic cap stamped "LANDMARK SURVEYING" for the northeast corner of that certain 1.50 acre tract conveyed by deed to MIDTEX OIL, LP, recorded in Document No. 200106006797 OPRCCT, for an ell corner of this described tract;

THENCE along the north and west lines of said 1.50 acre tract, the south and east line of this described tract, the following two (2) courses and distances:

- 1. South 85°14'37" West, a distance of 223.78 feet to a point for the northwest corner of said 1.50 acre tract, an interior corner of this described tract;
- South 00°34′30″ West, a distance of 246.94 feet to a found 1/2 inch iron rebar for the west corner of said 1.50 acre tract, the southeast corner of this described tract;

THENCE North 58°18'53" West, along the said northeast ROW line of the intersection of US Highway 281 and FM 306, the southwest line of this described tract, a distance of 29.68 feet to the POINT OF BEGINNING.

CONTAINING: 1.211 acres (52,753 sqft) of land.

And:

BEING 1.501 acres (65,386 sqft) of land situated in the FRED SCHAEFERKOETER SURVEY No. 40,
ABSTRACT 974, COMAL COUNTY, TEXAS, said 1.501 acre tract being that same tract to MIDTEX OIL LP,
called 1.50 acres recorded in Document No. 200106006797 OPRCCT, said 1.501 acre tract being more
particularly described by metes and bounds as follows:

BEGINNING at a found 1/2 inch iron rebar on the northeast ROW line of the intersection of US HIGHWAY 281 (120' ROW WIDTH) and FARM-TO-MARKET 306 (130' ROW WIDTH) for the south

corner of that certain 1.212 acre tract conveyed by deed to MIDTEX OIL, LP recorded in Document No. 200806034877 OPRCCT, for the west corner of this described tract, from which a found TXDOT Monument with brass cap for the north corner of the northeast ROW line of the intersection of said US HIGHWAY 281 and said FM 306, the west corner of said 1.212 acre tract, bears North 58°18′53″ West, a distance of 29.68 feet;

THENCE along the east and south lines of the said 1.212 acre tract, the west and north lines of this described tract, the following two (2) courses and distances:

- 1. North 00°34'30" East, a distance of 246.94 feet to a set 1/2" rebar with plastic cap stamped "OPEN RANGE FS 10194063" for an ell corner of the said 1.212 acre tract, the northwest corner of this described tract:
- 2. North 85°14'37" East, a distance of 223.78 feet to a found 1/2 inch iron rebar with plastic cap stamped "LANDMARK SURVEYING" in the west line of LOT 1, SAAB-DOLLAR GENERAL SUBDIVISION, as recorded in Document No. 200606002843 OPRCCT, for an ell corner of said 1.212 acre tract, for the northeast corner of this described tract, from which a 1/2 inch iron rebar found for an interior corner of said 1.212 acre tract, the northwest corner of said LOT 1, bears North 04°51'13" East, a distance of 6.45 feet;
- THENCE South 05°24′53″ East, along the west line of said LOT 1, the east line of this described tract, a distance of 243.48 feet to a found 3/8 inch iron rebar located in the north ROW line of said FM 306, for the southwest corner of said LOT 1, for the southeast corner of this described tract, from which a found "MAG" nail for the southeast corner of said LOT 1 bears North 65°13′18″ East a distance of 186.49 feet;
- THENCE South 65°12'18" West, along the north ROW line of said FM 306, the southeast line of this described tract, a distance of 180.17 feet to a found TXDOT Monument with brass cap for the south corner of the said northeast ROW line of the intersection of US Highway 281 and FM 306, for the south corner of this described tract;
- THENCE North 58°16′56" West, along the said northeast ROW line of the intersection of US Highway 281 and FM 306, the southwest line of this described tract, distance of 99.80 feet to the **POINT OF BEGINNING**.

CONTAINING: 1.501 acres (65,386 sqft) of land.

Tract 19, Pit Stop Food Mart No. 21, 527 West Cevallos, San Antonio, TX 78207:

BEING 0.448 acres (19,498 sq ft) of land and being a portion of LOT 15, NEW CITY BLOCK 919, W. CEVALLOS SUBDIVISION as recorded in Volume 5580, Page 212, Deed and Plat Records of Bexar County, Texas (DPRBCT), BEXAR COUNTY, TEXAS, said 0.448 acre tract consisting of that same tract to 2 RF ENTERPRISES LIMITED, called 0.448 acres recorded in Document No. 20060129020, Official Public Records Bexar County, Texas (OPRBCT), said 0.448 acre tract being more particularly described by metes and bounds as follows:

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GENERAL WARRANTY DEED

STATE OF TEXAS \$ \$ KNOW ALL PERSONS BY THESE PRESENTS: COUNTY OF COMAL \$

GRANTOR: PATRICIA JEAN RISHEBARGER
P. O. Box 461022
San Antonio, Texas 78246-1022

GRANTEE: JUNIPER VENTURES OF TEXAS, LLC, a Texas limited liability company P. O. Box 310339

New Braunfels, Texas 78131-0339

That Grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) cash and other good and valuable consideration to it in hand paid by Grantee, the receipt of which is hereby acknowledged and confessed has GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL and CONVEY, unto the Grantee, the Property described herein to wit:

BEING 0.482 of an acre of land situated in the Fred Shaeferkoeter Survey No. 40, Abstract No. 974, Comal County, Texas, and being out of a called 3.00 acre tract of land, as conveyed to Patricia Rishebarger and recorded in Document No. 9706001516, of the Official Records of Comal County, Texas, and said 0.482 of an acre tract of land being more particularly described by metes and bounds in Exhibit "A" attached hereto, together with (i) any and all improvements, buildings and fixtures situated on the Land (the "Improvements"); and (ii) all right, title and interest of Grantor, if any, in and to any and all appurtenances, strips or gores, roads, easements, streets, alleys, drainage facilities and rights-of-way bounding the Land, all utility capacity, utilities, water rights, licenses, permits, and entitlements, if any, and all other rights and benefits attributable to the Land, and all rights of ingress and egress thereto (collectively, the "Additional Interests"). The Land, the Improvements and any Additional Interests are hereinafter collectively referred to as the "Property").

TO HAVE AND TO HOLD the above described Property together with, all and singular, the rights and appurtenances thereto in any wise belonging, unto the said Grantee, its heirs and assigns forever; and Grantor does hereby bind herself, and her heirs, executors and administrators, to warrant and forever defend all and singular, the said Property unto the said Grantee, its heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

THIS CONVEYANCE IS MADE AND ACCEPTED by Grantee SUBJECT TO (i) taxes for the current year, which have been prorated as of the date of closing, the payment of which Grantee assumes; (ii) all subsequent tax assessments for the current year, the payment of which Grantee assumes; (iii) validly existing zoning laws, regulations and ordinances of municipal and/or other governmental authorities that affect the Property and (v) Survey dated November 7, 2023, prepared by Drew A. Mawyer, RPLS# 5348.

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

EXECUTED effective this 25 day of November, 2023.

GRANTOR:

PATRICIA JEAN RISHEBARGER

ACKNOWLEDGMENT

COUNTY OF BEXAS

This General Warranty Deed was acknowledged before me on the <u>21st</u> day of <u>November</u>, 2023, by PATRICIA JEAN RISHEBARGER.



NOTARY PUBLIC, STATE OF TEXAS



METES AND BOUNDS DESCRIPTION FOR A 0.482 OF AN ACRE TRACT

EXHIBIT "A"

BEING 0.482 OF AN ACRE OF LAND SITUATED IN THE F. SHAEFERKOTER SURVEY NO. 40, ABSTRACT NO. 974, COMAL COUNTY, TEXAS, AND BEING OUT OF A CALLED 3.00 ACRE TRACT OF LAND, AS CONVEYED TO PATRICIA RISHEBARGER AND RECORDED IN DOCUMENT NO. 9706001516, OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS, AND SAID 0.482 OF AN ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a ½" iron rod found in the East line of U.S. 281 North, and being the Northwest corner of a 1.12 acre tract of land as conveyed to Juniper Ventures of Texas, LLC in Document No. 201806046745 of the Official Public Records of Comal County, Texas, and being the Southwest corner of said 3.00 acre tract of land, and being the Southwest corner of this herein described 0.482 of an acre tract of land;

THENCE departing said 1.12 acre tract of land, and with the Easterly Right-Of-Way line of US 281, N 00° 32' 17" E, a distance of 60.16 feet to a ½" iron rod with yellow plastic cap stamped "DAM #5348 PROP. COR.", set for the Northwest corner of this herein described 0.482 of an acre tract of land:

THENCE departing the Easterly Right-of-Way line of said US 281 North, and across and through said 3.00 acre tract of land, N 85° 07' 45" E, a distance of 350.66 feet to a ½" iron rod with a yellow plastic cap stamped "DAM #5348 PROP. COR." set in the Westerly line of a 6.09 acre tract of land as described in Document No. 201206037091 of the Official Public Records of Comal County, Texas, for the Northeast corner of this herein described 0.482 of an acre tract of land:

THENCE with the common line of said 3.00 acre tract of land and said 6.09 acre tract of land, S 00° 34' 29" W, a distance of 60.16 feet to a ½" iron rod found for an interior Southwesterly corner of said 6.09 acre tract of land, the Southeast corner of said 3.00 acre tract of land, in the Northerly line of said 1.12 acre tract of land, and being the Southeast corner of this herein described 0.482 of an acre tract of land;

EXHIBIT "A"

THENCE with the common line of said 3.00 acre tract of land, and said 1.12 acre tract of land, S 85° 07' 45" W, a distance of 350.62 feet to the POINT OF BEGINNING and containing 0.482 of an acre of land.

Bearings based on the Texas State Plane Coordinate System, Texas South Central Zone (4204), North American Datum 1983.

Exhibit prepared this the 7th day of November, 2023.

Drew & Mawyer

Registered Professional Land Surveyor No. 5348

TBPLS Firm Registration #10191500

5151 W. SH 46, NEW BRAUNFELS, TX 78132

INK555- Shell 306-0.482 OF AN ACRE



Filed and Recorded Official Public Records Bobbie Koepp, County Clerk Comal County, Texas 11/22/2023 02:14:42 PM LAURA 4 Pages(s) 202306036935

