Preliminary Field Check For Drip Systems

DATE: 10/15/25

INSPECTOR: Hendry

COMMENTS:

COMAL COUNTY

ENGINEER'S OFFICE

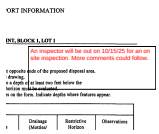
Address: 8932 FM 1863

Legal Description: North Point Lot 1 Block 1

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:

119039.pdf Markup Summary

Efrain Gallegos (1)



Subject: Text Box
Page Label: 8
Author: Efrain Gallegos
Date: 10/14/2025 10:30:58 AM
Status:
Color:
Layer:
Space:

An inspector will be out on 10/15/25 for an on site inspection. More comments could follow.

RECEIVED
By Kathy Griffin at 1:13 pm, Sep 22, 2025

COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

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

Date August 30, 2025 Permit Number 119039

1. APPLICANT / AGENT INFORMATION

Owner Name	6P HOLDINGS, LLC	Agent Name	GREG W. JOHNSON, P.E.
Mailing Address	c/o 2021 W. SH46, #105	Agent Address	170 HOLLOW OAK
City, State, Zip	NEW BRAUNFELS, TX 78132	City, State, Zip	NEW BRAUNFELS, TX 78132
Phone #	210-392-3212	Phone #	830-905-2778
Email	jamesingalls@ink-civil.com	Email	gregjohnsonpe@ yahoo.com

2. LOCATION

Subdivision Name NORTH POINT Unit _____ Lot 1 Block 1

Survey Name / Abstract Number _____ Acreage _____

Address 8932 FM 1863 City SAN ANTONIO State TX Zip 78266

3. TYPE OF DEVELOPMENT

☐ Single Family Residential

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

Number of Bedrooms _____

Indicate Sq Ft of Living Area _____

☒ Non-Single Family Residential

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

Type of Facility OFFICES

Offices, Factories, Churches, Schools, Parks, Etc. - Indicate Number Of Occupants UP TO 50 PPL

Restaurants, Lounges, Theaters - Indicate Number of Seats _____

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

Travel Trailer/RV Parks - Indicate Number of Spaces _____

Miscellaneous _____

Estimated Cost of Construction: $ 800,000 (Structure Only)

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

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

Source of Water ☒ Public ☐ Private Well ☐ Public Well ☐ Rainwater Collection

4. SIGNATURE OF OWNER

By signing this application, I certify that:
- The completed application and all additional information submitted does not contain any false information and does not conceal any material facts. I certify that I am the property owner or I possess the appropriate land rights necessary to make the permitted improvements on said property.
- Authorization is hereby given to the permitting authority and designated agents to enter upon the above described property for the purpose of site/soil evaluation and inspection of private sewage facilities..
- I understand that a permit of authorization to construct will not be issued until the Floodplain Administrator has performed the reviews required by the Comal County Flood Damage Prevention Order.
- I affirmatively consent to the online posting/public release of my e-mail address associated with this permit application, as applicable.

Signature of Owner _____ Date 9-4-25

Revised January 2021

NORTH POINT, BLOCK 1, LOT 1

COMAL COUNTY
ENGINEER'S OFFICE

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 TREATMENT AND DRIP TUBING

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

Tank Size(s) (Gallons) 639 TRASH/1447 EQ//1500ATU/2086 PUMP **Absorption/Application Area (Sq Ft)** 3400

Gallons Per Day (As Per TCEQ Table III) 400

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

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

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

Is there an existing TCEQ approved WPAP for the property? ☒ Yes ☐ No

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

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

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

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

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

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

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

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

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

Is this property within an incorporated city? ☐ Yes ☒ No

If yes, indicate the city: _____

STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

FIRM #2585

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

Signature of Designer

JULY 29, 2025
Date

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.

I

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

_____UNIT/PHASE/SECTION 1 BLOCK 1 LOT NORTH POINT SUBDIVISION

IF NOT IN SUBDIVISION: _____ ACREAGE _____ SURVEY

The property is owned by (insert owner's full name): 6P HOLDINGS, LLC, a Texas limited liability company

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 4th DAY OF September ,20 25

Owner(s) signature(s)

James Ingalls
Owner (s) Printed name (s)

James Ingalls SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 4 DAY OF September ,20 25

Notary Public Signature

JENNIFER HARRISON
Notary Public, State of Texas
Comm. Expires 01-04-2029
Notary ID 130949303

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
09/08/2025 08:03:44 AM
IRENE 1 Pages(s)
202506028875

Bobbie Koepp

WASTEWATER TREATMENT FACILITY MONITORING AGREEMENT

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

NORTH POINT, BLOCK 1, LOT 1

Permit/License Number
Customer 6P HOLDINGS, LLC
Site Address 8932 FM 1863
City SAN ANTONIO Zip 78266
Mailing Address 2021 WEST SH46, #105
County COMAL Map # CCEO PG66, D2
Phone 210-392-3212
Email jamesingalls@ink-civil.com

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

II. Effective Date:

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

III. Termination of Agreement:

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

IV. Services:

Contractor will:

a. Inspect and perform routine upkeep on the On-Site Sewage Facility (hereinafter referred to as OSSF) as recommended by the treatment system manufacturer, and required by state and/or local regulation, for a total of three visits to site per year. The list of items checked at each visit shall be the: control panel, Electrical circuits, timer, Aeration including compressor and diffusers, CFM/PSI measured, lids safety pans, pump, compressor, sludge levels, and anything else required as per the manufacturer.

b. Provide a written record of visits to the site by means of an inspection tag attached to or contained in the control panel.

c. Repair or replace, if Contractor has the necessary materials at site, any component of the OSSF found to be failing or inoperative during the course of a routine monitoring visit. If such services are not covered by warranty, and the service(s) cost less than $100.00, Customer hereby authorizes Contractor to perform the service(s) and bill Customer for said service(s). When service costs are greater than $100.00, or if contractor does not have the necessary supplies at the site, Contractor will notify Customer of the required service(s) and the associated cost(s). Customer must notify Contractor of arrangements to affect repair of system with in two (2) business days after said notification.

d. Provide sample collection and laboratory testing of TSS and BOD on a yearly basis (commercial systems only).

e. Forward copies of this Agreement and all reports to the regulatory agency and the Customer.

f. Visit site in response to Customer's request for unscheduled services within forty-eight (48) hours of the date of notification (weekends and holidays excluded) of said request. Unless otherwise covered by warranty, costs for such unscheduled responses will be billed to Customer.

V. Disinfection:

X _____ RC

Customer's Initials

Contractor's Initials

_____Not required; X required. The responsibility to maintain the disinfection device(s) and provide any necessary chemicals is that of the Customer.

VI. Electronic Monitoring:

Electronic Monitoring is not included in this Agreement.

VII. Performance of Agreement:

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

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

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

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

VIII. Customer's Responsibilities:

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

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

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

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

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

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

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

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

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

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

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

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

IX. Access by Contractor:

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

X. Limit of Liability:

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

XI. Indemnification:

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

X _____

Customer's Initials

RC

Contractor's Initials

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

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

XII. Severability:

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

XIII. Fee for Services:

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

XIV. Payment:

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

XV. Application or Transfer of payment:

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

XVI. Entire Agreement:

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

Rudy Carson

Block Creek Aerobic Services, LLC,
Contractor
MP# 0002036

X _____ Customer Signature

9-5-2025
Date

X _____

Customer's Initials

RC

Contractor's Initials

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

September 9, 2025

Comal County Office of Environmental Health
195 David Jonas Drive
New Braunfels, Texas 78132-3760

RE- SEPTIC DESIGN
8932 FM 1863
NORTH POINT, BLOCK 1, LOT 1
SAN ANTONIO, TX 78266
6P HOLDINGS, LLC

Brandon /Brenda,

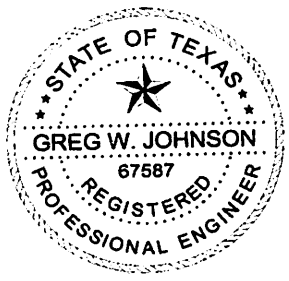
The referenced property is located within the Edwards Aquifer Recharge Zone. This OSSF design will comply with requirements in the WPAP.

Temporary erosion and sedimentation controls should be utilized as necessary prior to construction. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, activities must be suspended immediately and the applicant or his agent must immediately notify the TCEQ Regional Office. After that operations can only proceed after the Executive Director approves required additional engineered impact plans.

Designed in accordance with Chapter 285, Subchapter D, §285.40,285.41, & 285.42, Texas Commission on Environmental Quality (Effective December 29, 2016).

09/09/25

Greg W. Johnson, P.E. No. 67587 / F#2585
170 Hollow Oak
New Braunfels, Texas 78132 - 830/905-2778



ON-SITE SEWERAGE FACILITY
SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: **June 30, 2025**

Site Location: **NORTH POINT, BLOCK 1, LOT 1**

Proposed Excavation Depth: **N/A**

An inspector will be out on 10/15/25 for an on site inspection. More comments could follow.

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.

SOIL BORING NUMBER **SURFACE EVALUATION**

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 – 4"	III	CLAY LOAM	N/A	NONE OBSERVED	LIMESTONE @ 4"	BROWN
1						
2						
3						
4						
5						

SOIL BORING NUMBER **SURFACE EVALUATION**

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0	SAME		AS		ABOVE	
1						
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.

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

06/30/25
Date

OSSF SOIL EVALUATION REPORT INFORMATION

Date: July 29, 2025

Applicant Information:

Name: 6P HOLDINGS, LLC.
Address: 2021 WEST SH 46 #105
City: NEW BRAUNFELS State: TEXAS
Zip Code: 78132 Phone: (210) 392-3212

Site Evaluator Information:

Name: Greg W. Johnson, P.E., R.S, S.E. 11561
Address: 170 Hollow Oak
City: New Braunfels State: Texas
Zip Code: 78132 Phone & Fax (830)905-2778

Property Location:

Lot 1 Unit ____ Blk 1 Subd. NORTH POINT
Street Address: 8932 F.M. 1863
City: SAN ANTONIO Zip Code: 78266
Additional Info.: _____

Installer Information:

Name: _____
Company: _____
Address: _____
City: _____ State: _____
Zip Code: _____ Phone _____

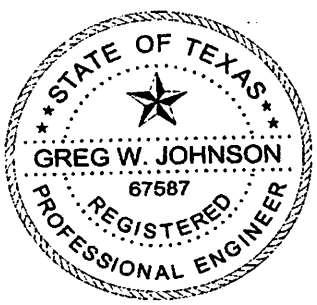
Topography: Slope within proposed disposal area: 1 %

Presence of 100 yr. Flood Zone:	YES ___ NO X
Existing or proposed water well in nearby area.	YES ___ NO X
Presence of adjacent ponds, streams, water impoundments	YES ___ NO X
Presence of upper water shed	YES ___ NO X
Organized sewage service available to lot	YES ___ NO 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

07/29/25
DATE



FIRM #2585

AEROBIC TREATMENT
DRIP TUBING SYSTEM
DESIGNED FOR:
6P HOLDINGS, LLC
2021 SH 46W, SUITE 105
NEW BRAUNFELS, TEXAS 78132

SITE DESCRIPTION:

Located in North Point, Block 1, Lot 1, at 8932 FM 1863, the proposed system will serve offices with up to fifty people situated in an area with shallow Type III soil 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 3 or 4-inch SCH-40 pipe discharges from the offices into a 639 gallon trash / 1447 gallon flow equalization tank fitted with a Liberty LE41 0.4 hp sewage pump controlled by a control panel with timer with NEMA rating of 4X with Omron cycle timer. Effluent is dosed to a NuWater B-1500 1500gpd aerobic plant at a rate of 3 gallons per minute every hour for six minutes. Flow will be controlled by a ball valve and pressure reducing nipple. A bucket test will be used to calibrate flow. After processing flow continues to a 2086 gallon pump tank containing (0.5 HP FPS E-Series-20FE05P4-2W115) well pump. The well pump is activated by a controller with and elapsed time meter and cycle timers, allowing the distribution eight times per day with an 6 minute run time with float setting at 480 gallons. A high level audible and visual alarm will activate should the pump fail. Distribution is through a self flushing 1" Arkal Super Filter 100 micron disc filter then through a 1" SCH-40 manifold to a 3400 sf. drip tubing field, with ***Netifim Bioline*** drip lines set approximately two feet apart with ***0.61 gph*** emitters set every two feet, as per the attached schematic. A pressure regulator Model PMR40MF installed in the pump tank on the manifold to the field will maintain pressure at 40 psi. A 1" SCH-40 return line is installed to continuously flush the system by throttling a 1" ball valve to pump tank. Solids caught in the disc filter are flushed each cycle back to the trash tank. Vacuum breakers installed at the highest point on each manifold will prevent siphoning of effluent from higher to lower parts of the field. Prior to installing the tubing the entire field area will be scarified and built up with 6" of Type II soil. Drip tubing will be laid and field area will be capped with 6" of Type II or Type III soil ***(NOT SAND). A minimum of 12" soil required between drip tubing and rock/tank.*** The field area will be sodded with grass prior to system startup. **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.**

DESIGN SPECIFICATIONS

Daily waste flow: up to 50ppl office @ 8 gpd =400 gpd
Pretreatment tank size: 639 Gal
Equalization tank: 1447 gal w/ Liberty LE40 0.4hp or equivalent
Cycle Timer: Omron H3CR-A cycle timer or equivalent with elapsed time meter and cycle timers
Plant Size: NuWater B-1500 1500 gpd (TCEQ Approved)
Pump tank size: 2086 Gal
Reserve capacity after High Level: 140 Gal (>1/3 day Req'd)
Application Rate: Ra = 0.2 gal/sf
Total absorption area: Q/Ra = 400 GPD/0.20 = 2000 sf. (Actual 3400 sf.)
Total linear feet drip tubing: 1700' ***Netifim Bioline*** drip tubing .61 GPH
Pump requirement: 850 emitters @ .61 gph @ 40 psi = 8.64 gpm
Pump Requirement (cont.): (0.5 HP FPS E-Series-20FE05P4-2W115)
Electronic Timer: Digi-20 or equivalent
Flow Meter : RG3 PPD-10 on supply and return manifold

MINIMUM SCOUR VELOCITY (**MSV**) > 2 FPS
IN DRIP TUBING W/ NOM. DIA. 0.55" ID

MSV = 2 FPS (Πd↑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 * 5 LINES = 7.5 GPM MIN FLOW RATE

IN RETURN MANIFOLD W/ NOM. DIA 1.049" ID

MSV = 2 FPS (Πd↑2)/4*7.48 gal/cf*60 sec/min
MSV = 2(3.14159((1.049/12)↑2)/4)*7.48*60
MSV = 5.4 GPM

WASTE FLOW CALCULATIONS:

BOD5 @ 400 gpd @ 600 mg/l x 8.34 #/gal / 1,000,000 = 2.0 lbs BOD5
NuWater B-1500 1500 GPD aerobic plant provides 3.75# BOD5 organic reduction.

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.
- 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 drip tubing system shall be schedule 40 PVC. All 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.

ADDITIONAL NOTES:

- Install audio-visual alarm for aerator and pump on separate breakers.
- The high water and air compressor alarm 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.
- 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.

- **Water records to be taken daily and submitted monthly to the Comal County Engineers Office for the first year.**

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:

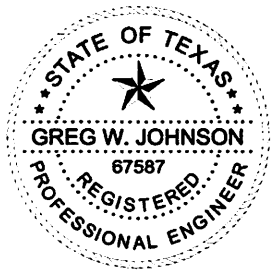
- The OSSF should not be treated as a normal city sewer.
- Do not use the toilet to dispose of cleaning tissue, cigarette butts, or other trash. This
- disposal practice will waste water and also impose an undesirable solid load on the treatment system.

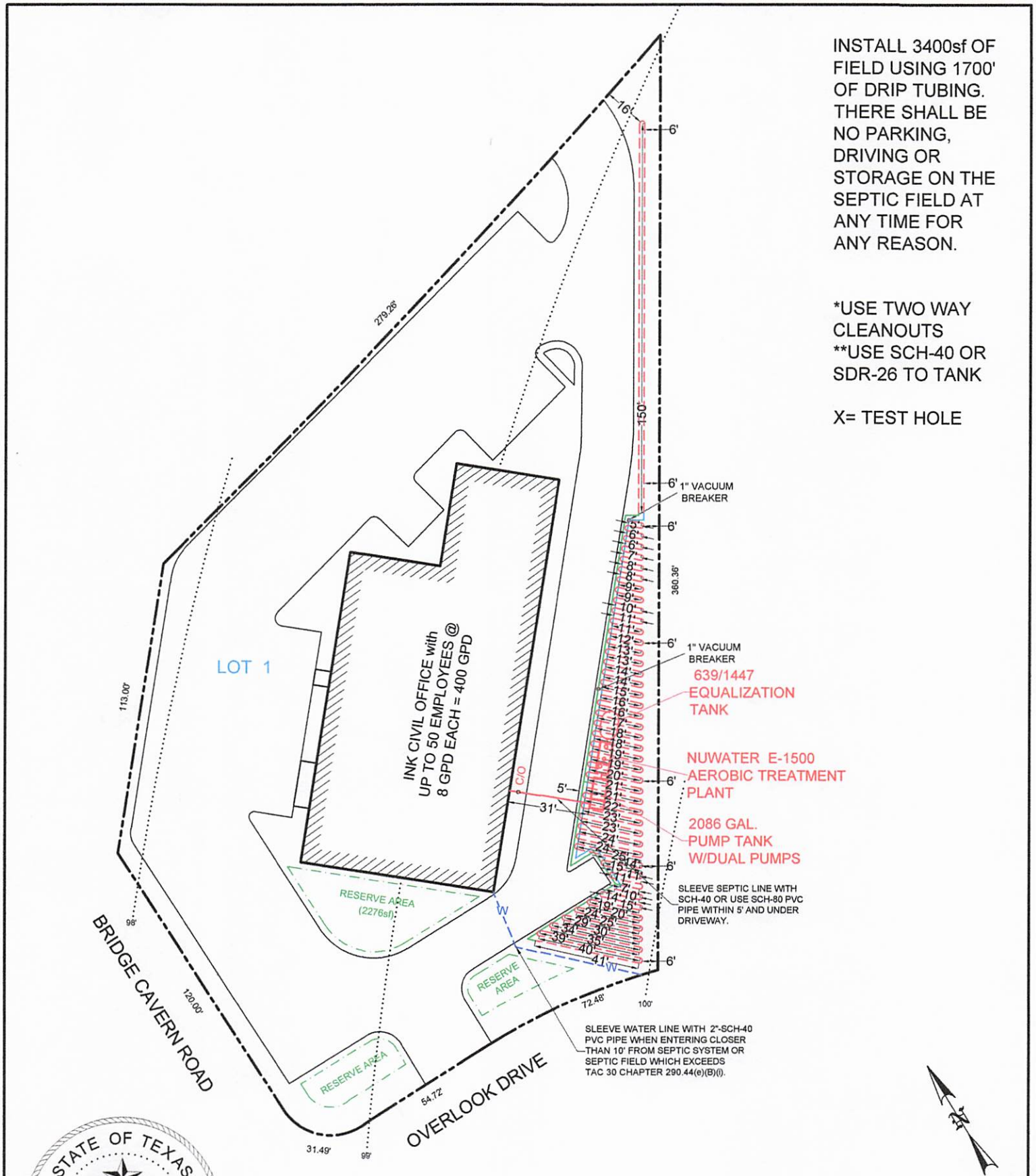
- Water Softeners should not be connected to this system.
- Septic tanks shall be cleaned before sludge accumulates to a point where it approaches the bottom of the outlet device. If sludge or scum accumulates to this point, solids will leave the tank with the liquid and possibly cause the system to 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.

Designed in accordance with Chapter 285, Subchapter D, §285.30 and §285.40 Texas Commission on Environmental Quality (Effective September 1, 2023)

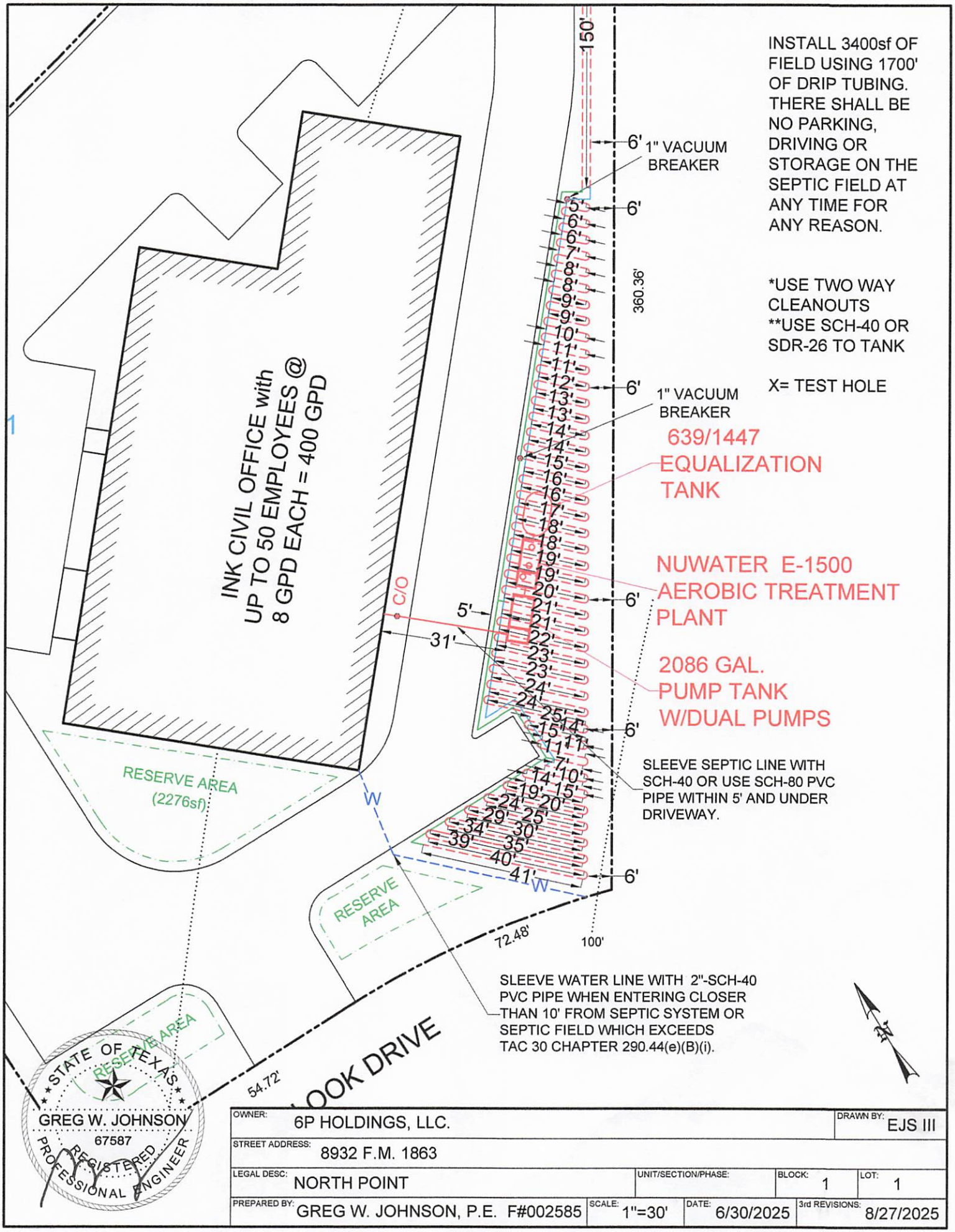
8/27/2[illegible]

Greg W. Johnson, P.E. No. 67587 F# 2585
170 Hollow Oak
New Braunfels, Texas 78132
830/905-2778





OWNER: 6P HOLDINGS, LLC.					DRAWN BY: EJS III
STREET ADDRESS: 8932 F.M. 1863					
LEGAL DESC: NORTH POINT		UNIT/SECTION/PHASE:		BLOCK: 1	LOT: 1
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=50'	DATE: 6/30/2025	3rd REVISIONS: 8/27/2025		



OWNER: 6P HOLDINGS, LLC.				DRAWN BY: EJS III	
STREET ADDRESS: 8932 F.M. 1863					
LEGAL DESC: NORTH POINT		UNIT/SECTION/PHASE:	BLOCK: 1	LOT: 1	
PREPARED BY: GREG W. JOHNSON, P.E. F#002585	SCALE: 1"=30'	DATE: 6/30/2025	3rd REVISIONS: 8/27/2025		

Advantage
Wastewater Solutions llc

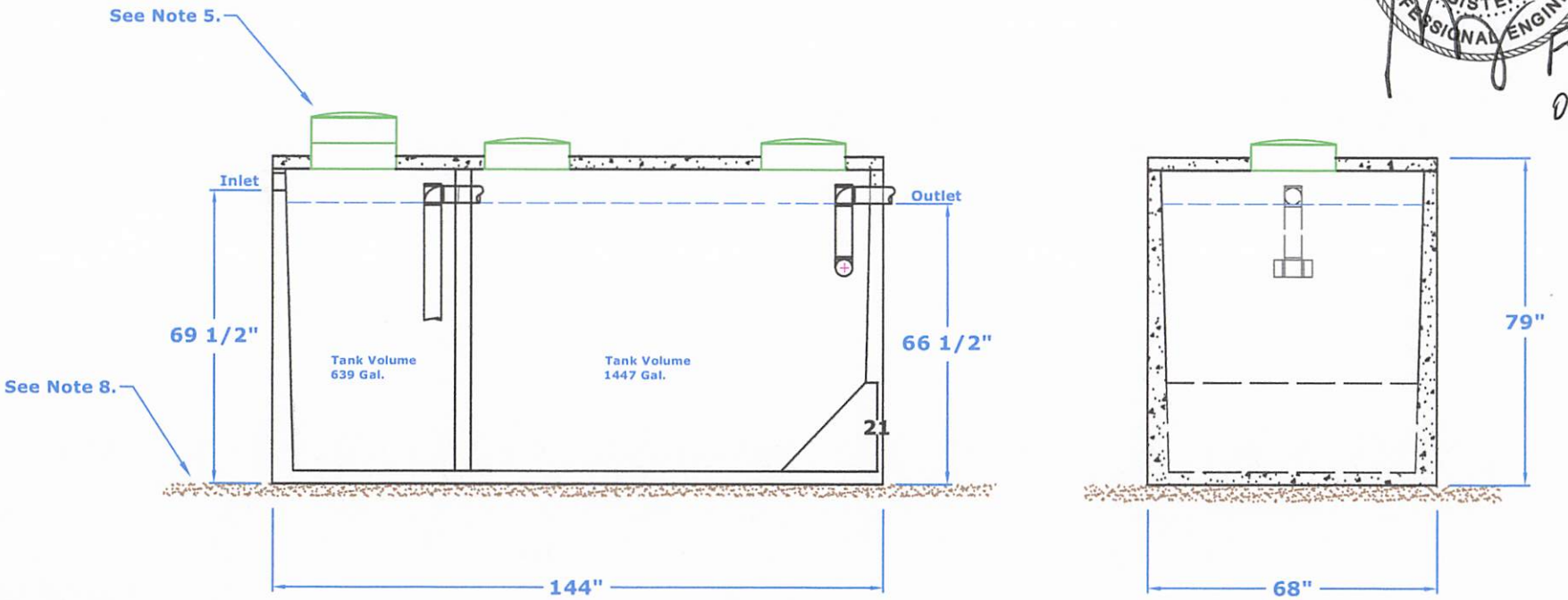
GENERAL NOTES:

1. Tank structure material to be precast concrete and steel.
2. Maximum burial depth is 30" from slab top to grade.
3. Weight = 16,600 lbs.
4. Tank capacity is 2,086 Gal. (639 trash/1447 EQ tank)
5. 20" Ø acess riser w/ lid (Typical 3). Optional extension risers available.
6. 4" min. compacted sand or gravel pad by Contractor

MINIMUM EXCAVATION DIMENSIONS:
Width: 80"
Length: 156"

STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

F2585
06/30/25



2086 gallon tank
639 trash / 1447 EQ tank

Model: 2086 gallon

November 2011
By: gwj

Scale:
* All Dimensions subject to allowable specification tolerances.

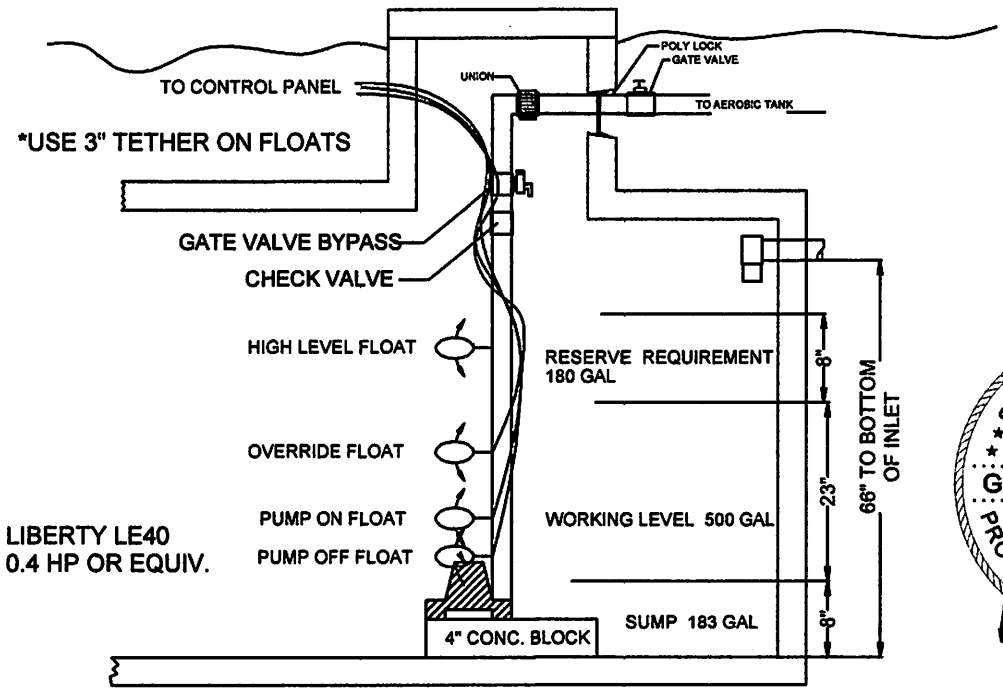
Dwg. #: 2086 tank

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

TANK NOTES:

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



07/29/21

EQUALIZATION TANK 1447 GAL PUMP TANK

VOLUME = 22.97 GAL/IN

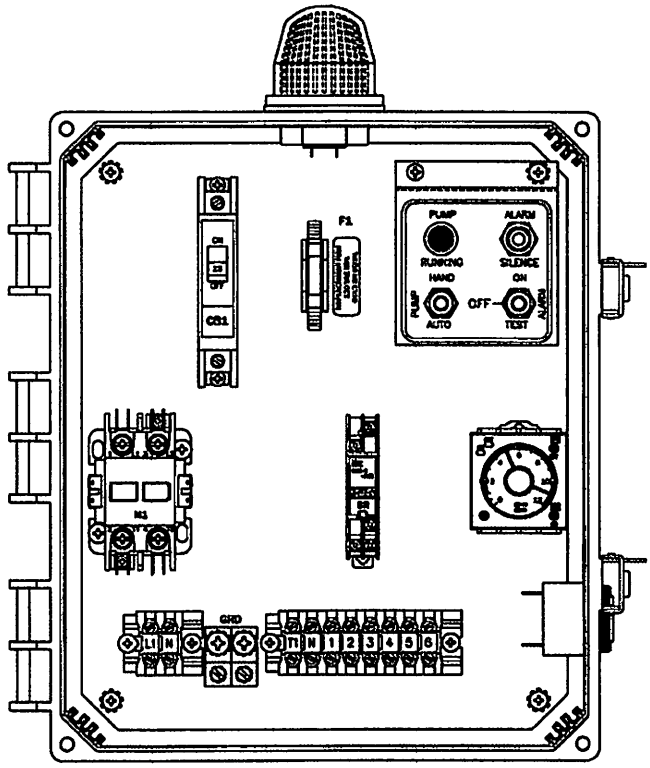
SEPTIC PRODUCTS INC

CONTROL PANEL

"50A801" Model Simplex 115V 1 Phase Time Dosing Panel

Features & Benefits

- Circuit Breakers for Pump Circuit
- Definite Purpose Motor Contactor
- Easy to Access Terminal Block
- Alarm Silence & On-Off-Test Switches
- Externally Mounted Audible Alarm
- Pump Hand-Off-Auto Switch
- Pump Running Light
- Repeat Cycle Timer
- Large External Alarm Light
- Control Circuit Fuse Protection
- Ground Lugs
- Color Coded Internal Wiring
- Rugged Weather Resistant Hinged Poly Enclosure w/Sst Latches
- Built and Labeled to UL 508A Standard w/Nema 4x Rating
- Provided with Wiring Schematic and Detailed Connection Diagram for Installer
- Mounting Feet for Enclosure



(Standard 50A801 Model Shown)

Available Options(*)

- Fiberglass Enclosure
- IEC Motor Contactor
- Flasher
- Dead Front Inner Door
- Auxiliary Alarm Contacts
- Elapsed Timer Meter
- Event or Cycle Counter
- Mercury or Mechanical Float Switches for the Pumps and High Water Alarm Circuits

*Note: Consult the factory for other available options. Also some options may require an increase in the enclosure size.

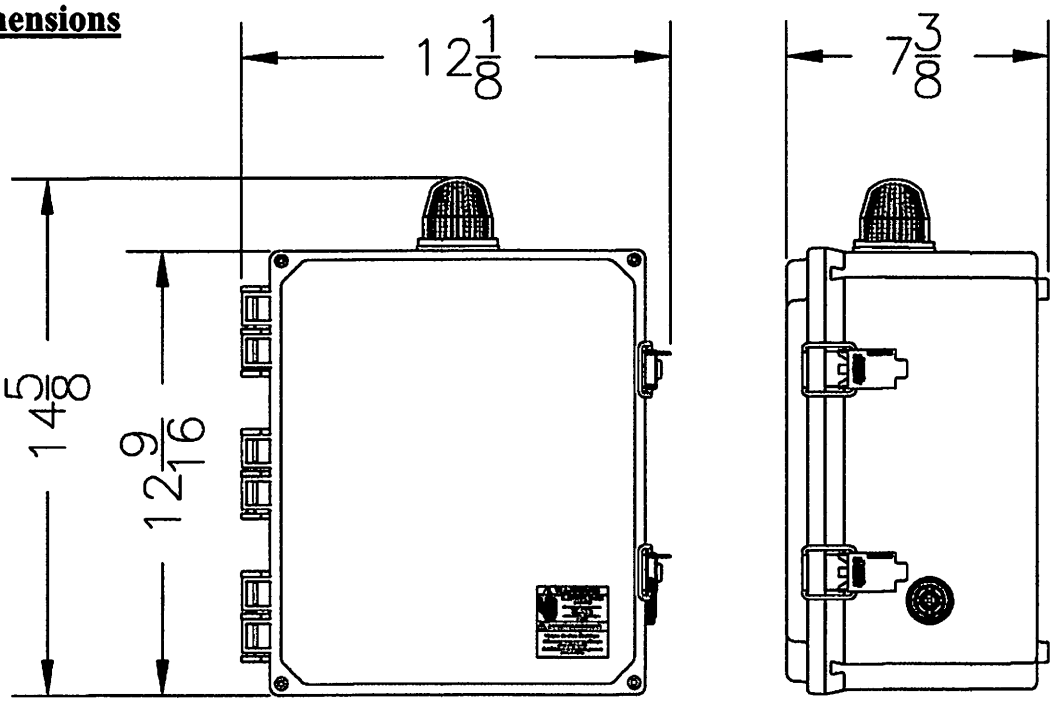
Septic Products, Inc. 1378 Twp Rd Ashland, Ohio 44805 Ph: (419)282-5933 Fax: (419)282-5943

SEPTIC PRODUCTS INC

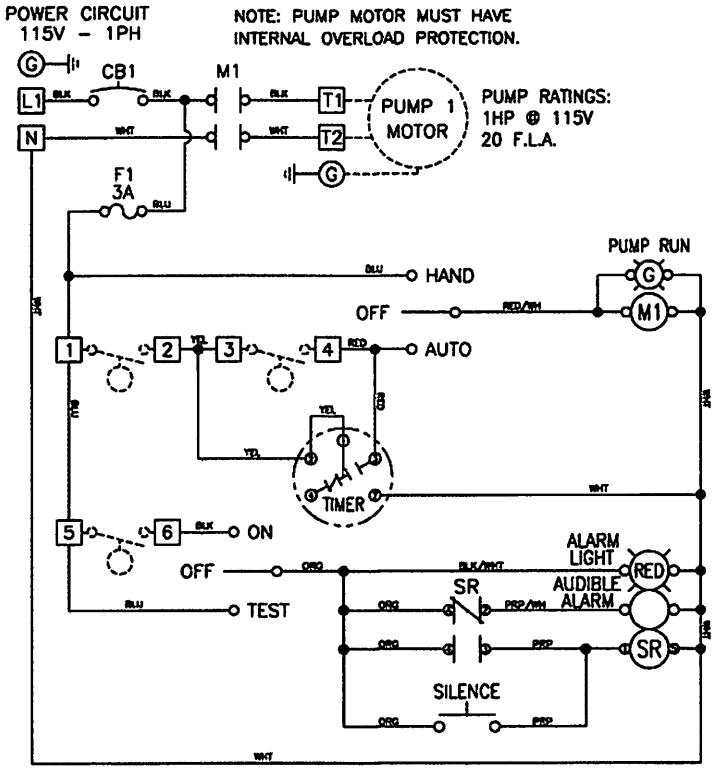
CONTROL PANEL

"50A801" Model Simplex 115V 1 Phase Time Dosing Panel

Panel Dimensions



Panel Schematic



Septic Products, Inc. 1378 Twp Rd 743 Ashland, Ohio 44805 Ph: (419)282-5933 Fax: (419)282-5943

Operating Instructions

GRASSLIN
TIME & ENERGY CONTROLS

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

Digi 20A
(surface mounting)

Digi 20E
(flush mounting)

FILE: E83486

APPLICATION

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 24-hour 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

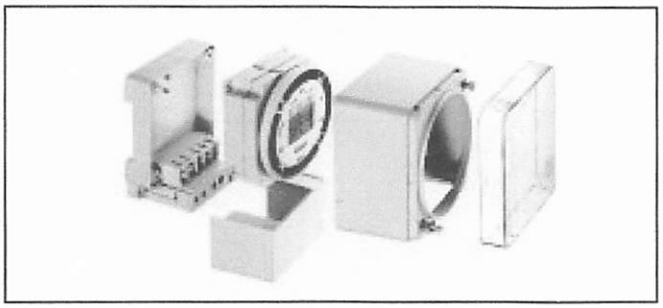
Installation

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.



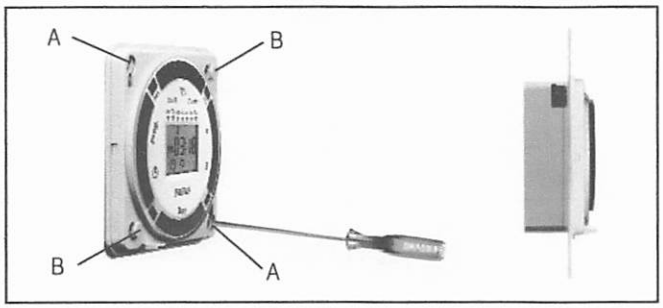
Place screws through 3 mounting holes in base and screw to back panel or wall.

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

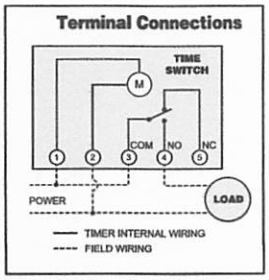
Cut a square hole 2-5/8" x 2-5/8" (66mm x 66mm) in the front of the panel. Insert the time switch through the opening. With a screwdriver, press down and turn outer screws (A) until flanges are in position to fasten the unit in front panel, then release. Insert plugs into holes (B).



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

WIRING

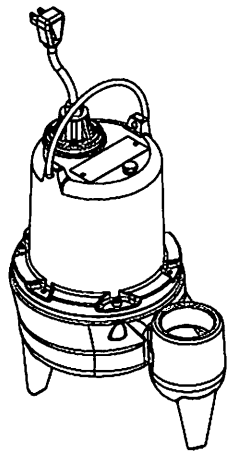
1. Disconnect the power.
2. Wire input to timer, (, with the proper voltage marked on the unit. Wiring to incorrect voltage will void the warranty.
3. Connect wiring according to the wiring diagram. The terminals on the Digi 20A sub-base will accommodate 10 to 24 AWG wire.

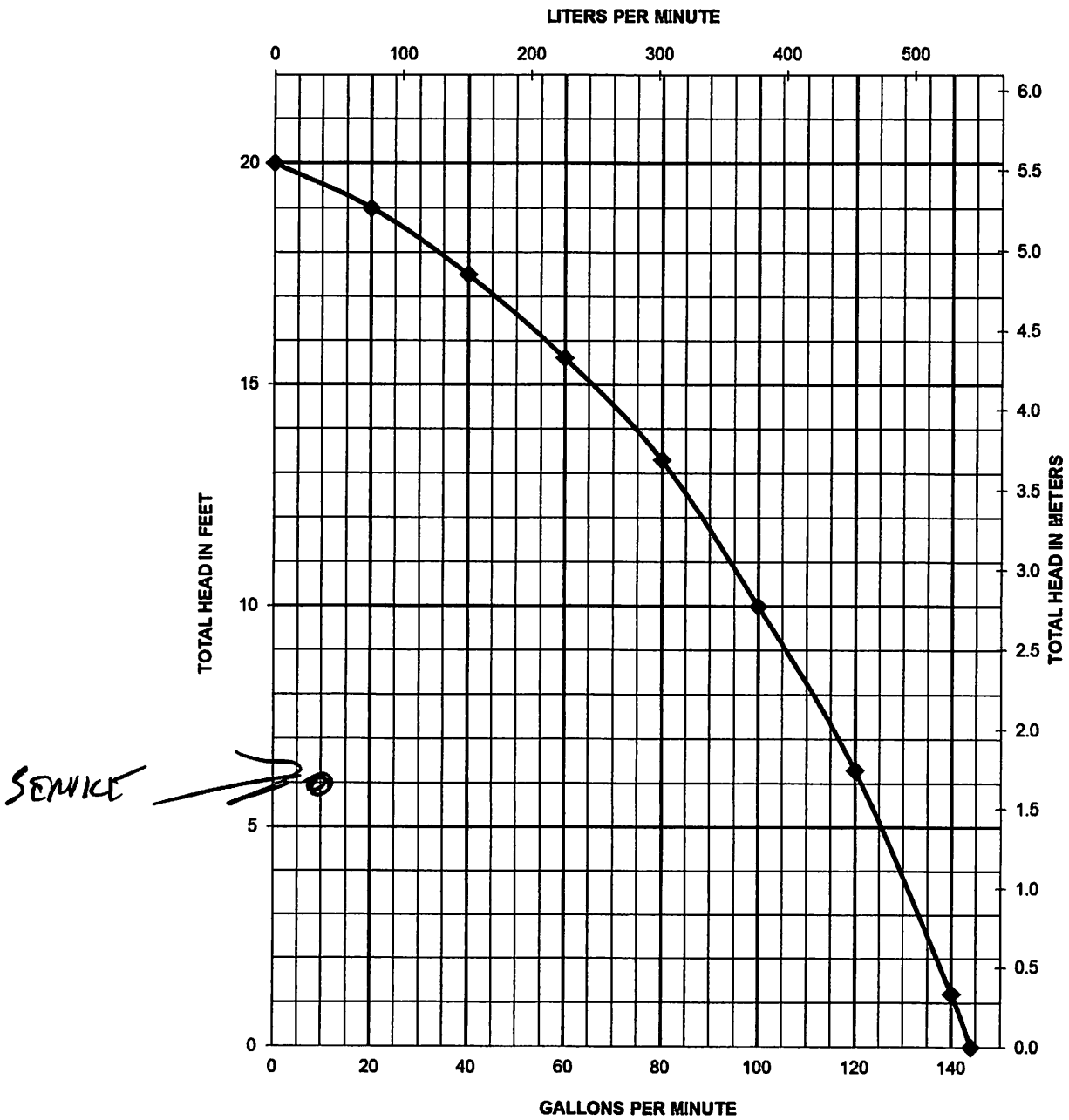


Liberty Pumps®

Pump Specifications

LE40 Series
4/10 HP Submersible Sewage Pump





SERVICE

Liberty Pumps

Advantage
Wastewater Solutions llc

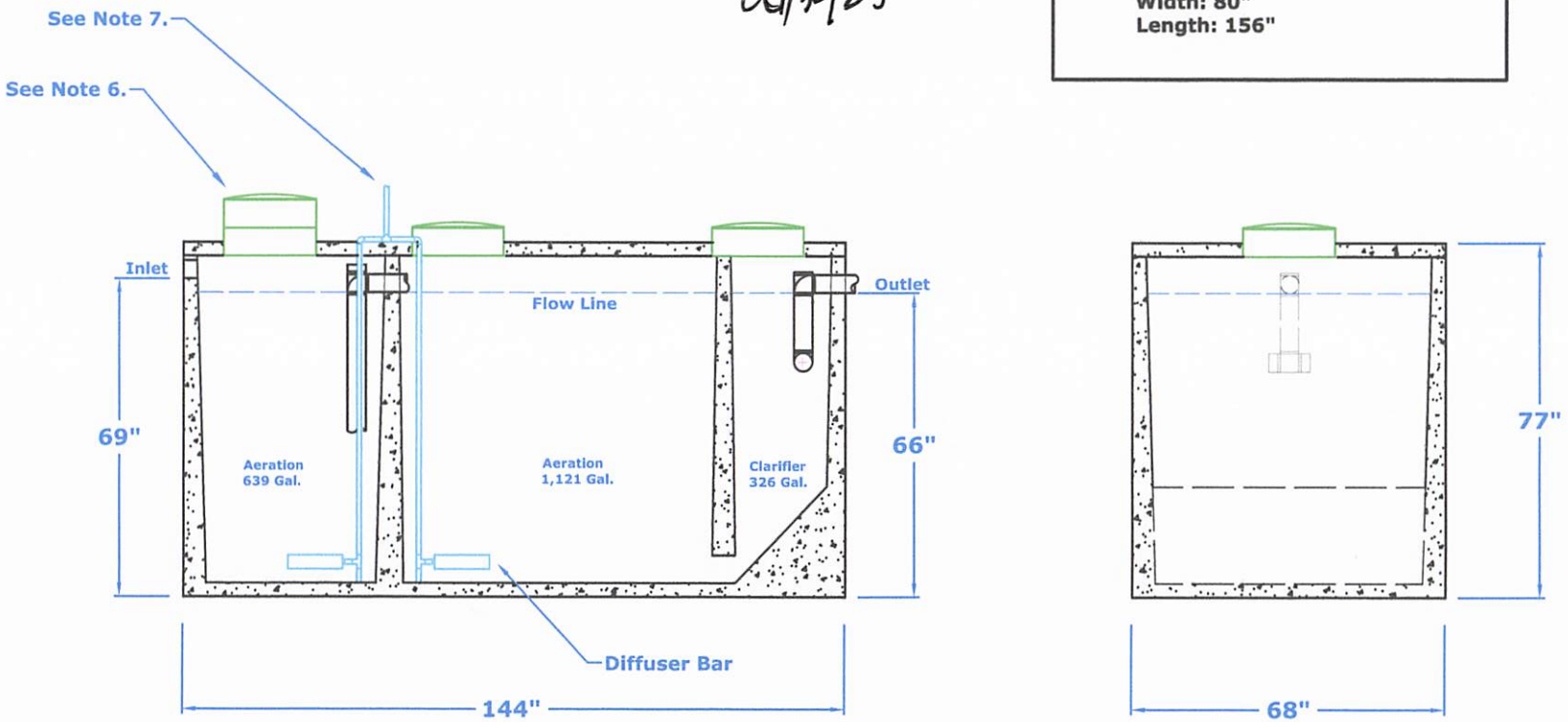
STATE OF TEXAS
GREG W. JOHNSON
67587
REGISTERED
PROFESSIONAL ENGINEER

F-2585
06/30/25

GENERAL NOTES:

1. Plant structure material to be precast concrete and steel.
2. Maximum burial depth is 30" from slab top to grade.
3. Weight = 16,600 lbs.
4. Treatment capacity is 1,500 GPD.
5. BOD Loading = 4.50 lbs. per day.
6. 20" Ø acess riser w/ lid (Typical 3). Optional extension risers available.
7. 1" Sch. 40 PVC Air Line to NuWater B-1500 Air Compressor (Max. 50 Lft from Plant).
8. Requires minimum 1,000 gallon trash tank unless otherwise specified by engineering.

MINIMUM EXCAVATION DIMENSIONS:
Width: 80"
Length: 156"



NuWater B-1500 Duel Aeration Aerobic Treatment Plant

Model: B-1500

July, 2010
By: A.S.

Scale:
* All Dimensions subject to allowable specification tolerances.

Dwg. #: ADV-B1500-2

Advantage
Wastewater Solutions llc

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

TANK NOTES:

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

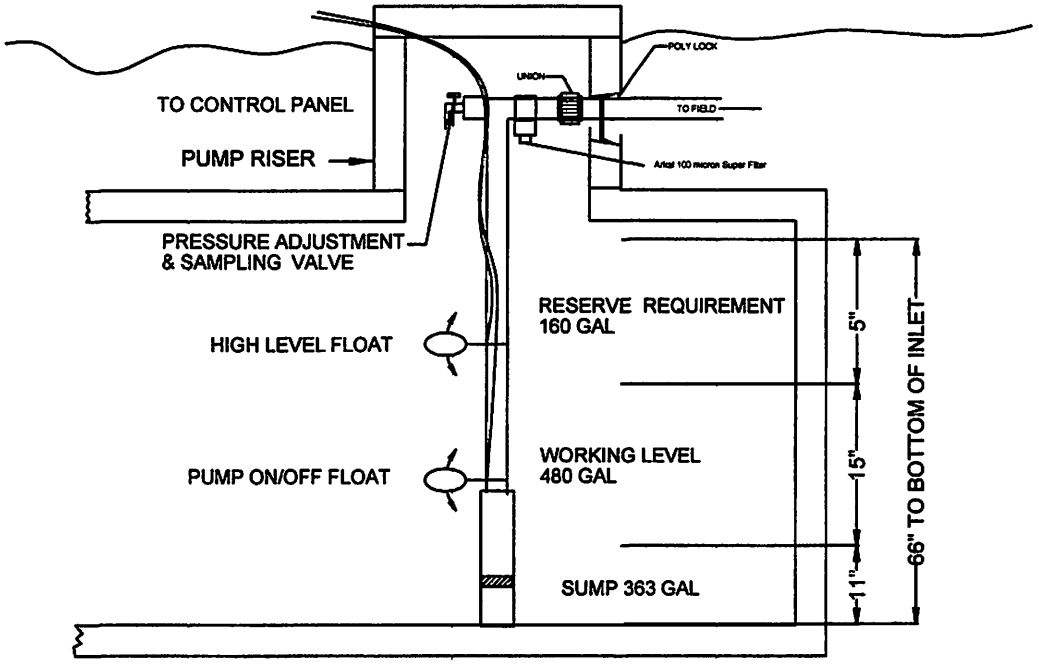
Tightlines to the tank shall be SCH-40 PVC.

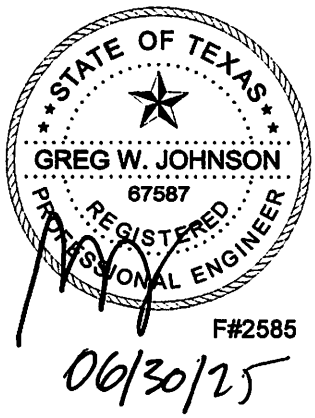
A two way sanitary tee is required between residence and tank.

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.

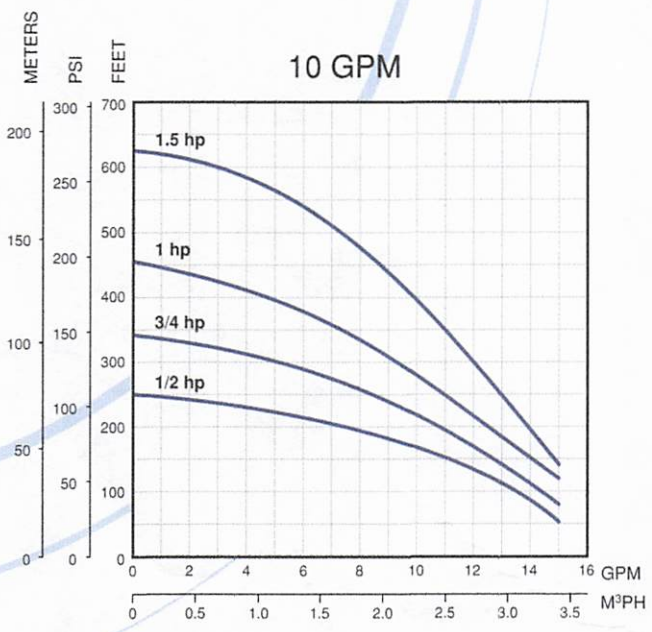
ALL WIRING MUST BE IN COMPLIANCE WITH
THE MOST RECENT NATIONAL ELECTRIC CODE

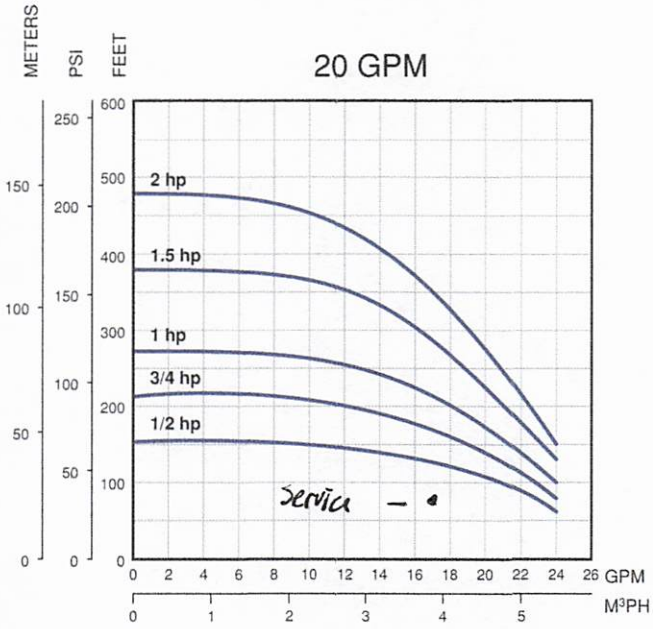




TYPICAL PUMP TANK CONFIGURATION
2086 GALLON PUMP TANK

Thermoplastic Performance





Thermoplastic Units Ordering Information

1/2 - 1.5 HP 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

Perpetual® Low Lead Meters
Positive Displacement Cold Water Meters

5/8" (DN 15mm), 3/4" (DN 20mm), 1" (DN 25mm)

Meter Transceiver Register (MTR) - AMR/AMI

Meter Transceiver Register (MTR) - AMR/AMI

Perpetual® PD - Bottom

Direct Read

Model		PPD 05	PPD 07	PPD 08S	PPD 08L	PPD 10
Size		**5/8 x 1/2"**	**5/8x3/4"**	**3/4"**	**3/4"**	**1"**
Low Flow	USGPM	1/4 (.25)	1/4 (.25)	1/2 (.5)	1/2 (.5)	3/4 (.75)
Continuous	USGPM	15	15	20	20	25
High Flow	USGPM	20	20	30	30	50
Extreme High Flow (Intermittent)	USGPM	28	28	35	35	65
Max. Pressure Plastic Bottom	P.S.I.	150	150	150	150	150
Max. Pressure Brass Bottom	P.S.I.	150	150	150	150	150
Max. Pressure Cast Iron Bottom	P.S.I.	150	150	150	150	150
Operating temature	Deg. F	33°-80°	33°-80°	33°-80°	33°-80°	33°-80°
Length	Inches	7- 1/2"	7- 1/2"	7 -1/2"	9"	10- 3/4"
Height	inches	4 -13/16"	4 -13/16"	5- 1/2"	5- 1/2"	6- 7/8"
Weight	Pounds	3.4LBS	3.4LBS	6.4LBS	6.4LBS	11.2LBS
Ends		Threaded	Threaded	Threaded	Threaded	Threaded

* **Due to continuous research and product enhancement, RG3 Meter Company reserves the right the change product or system specifications without notice, except to the extent an outstanding contractual obligation exists.**

2912 South Access Rd.
Longview, TX 75602
PH: 903-753-3456
Fax: 903-753-5678
RG3METER.COM

Arkal 1" Super Filter

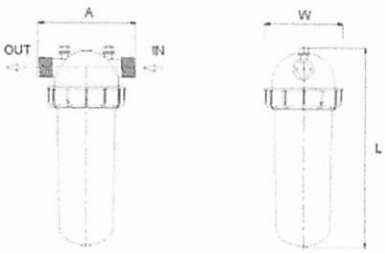
Catalog No. 1102 0_ _ _

Features

- A "T" shaped filter with two 1" male threads.
- A "T" volume filter for in-line installation on 1" pipelines.
- The filter prevents clogging due to its enlarged filtering area that collects sediments and particles.
- Manufactured entirely from fiber reinforced plastic.
- A cylindrical column of grooved discs constitutes the filter element.
- Spring keeps the discs compressed.
- Screw-on filter cover.
- Filter discs are available in various filtration grades.

Technical Data

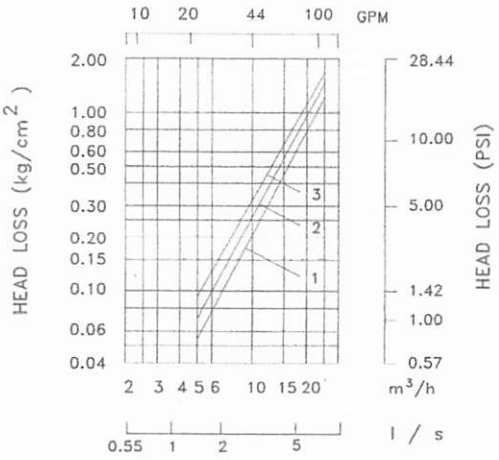
Inlet/outlet diameter	1" BSPT (male) 25.0 mm – nominal diameter 33.6 mm – pipe diameter (O. D.)	1" NPT (male)
Maximum pressure	10 atm	145 psi
Maximum flow rate	8 m^3/h (1.7 l/sec)	35 gpm
General filtration area	500 cm^2	77.5 in^2
Filtration volume	600 cm^3	37 in^3
Filter length L	340 mm	13 13/32"
Filter width W	130 mm	5 3/32"
Distance between end connections A	158 mm	6 7/32"
Weight	1.420 kg	3.13 lbs.
Maximum temperature	70° C	158 °F
pH	5-11	5-11



Filtration Grades

Blue (400 micron / 40 mesh)
Yellow (200 micron / 80 mesh)
Red (130 micron / 120 mesh)
Black (100 micron /140 mesh)
Green (55 micron)

Head Loss Chart



PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

Specifications

The pressure regulator shall be capable of operating at a constant, factory preset, non-adjustable outlet pressure of 6, 10, 12, 15, 20, 25, 30, 35, 40, 50, or 60 PSI (0.41, 0.69, 0.83, 1.03, 1.38, 1.72, 2.07, 2.41, 2.76, 3.45, or 4.14 bar) with a flow range between:

4 - 16 GPM (909 - 3634 L/hr) for 6 - 10 PSI models or
2 - 20 GPM (454 - 4542 L/hr) for 12 - 60 PSI models.

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	Outlet
¾-inch Female National Pipe Thread (FNPT)	¾-inch Female National Pipe Thread (FNPT)
1-inch Female National Pipe Thread (FNPT)	1-inch Female National Pipe Thread (FNPT)
1-inch Female British Standard Pipe Thread (FBSPT)	1-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 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

3/4" FNPT x 3/4" FNPT model *(shown on right)*

Overall Length 5.2 inches (13.1 cm)

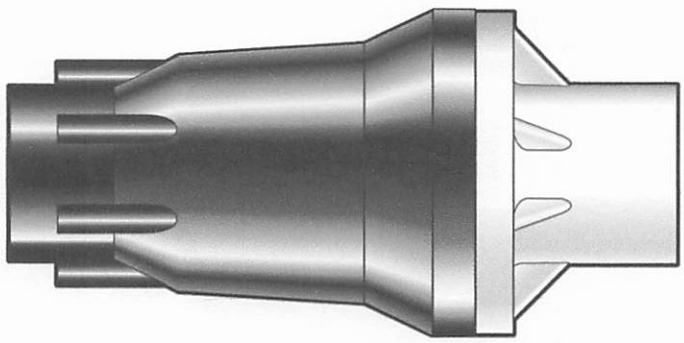
Overall Width 2.5 inches (6.4 cm)

1" FNPT x 1" FNPT model

1" FBSPT x 1" FBSPT model

Overall Length 5.8 inches (14.6 cm)

Overall Width 2.5 inches (6.4 cm)



* Please consult factory for applications outside of recommended guidelines.

PMR-MF

PRESSURE-MASTER REGULATOR - MEDIUM FLOW

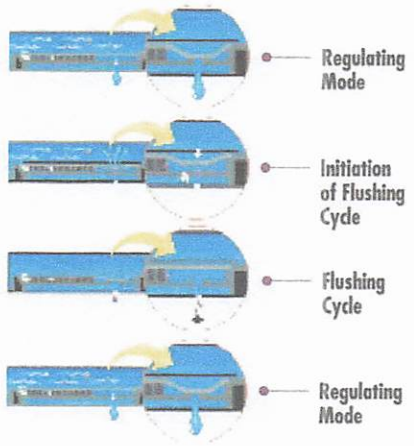
Model Numbers

Model #	Flow Range	Preset Operating Pressure	Maximum Inlet Pressure
PMR-6 MF	4 - 16 GPM (909 - 3634 L/hr)	6 PSI (0.41 bar)	80 psi (5.51 bar)
PMR-10 MF	4 - 16 GPM (909 - 3634 L/hr)	10 PSI (0.69 bar)	90 psi (6.20 bar)
PMR-12 MF	2 - 20 GPM (454 - 4542 L/hr)	12 PSI (0.83 bar)	90 psi (6.20 bar)
PMR-15 MF	2 - 20 GPM (454 - 4542 L/hr)	15 PSI (1.03 bar)	95 psi (6.55 bar)
PMR-20 MF	2 - 20 GPM (454 - 4542 L/hr)	20 PSI (1.38 bar)	100 psi (6.89 bar)
PMR-25 MF	2 - 20 GPM (454 - 4542 L/hr)	25 PSI (1.72 bar)	105 psi (7.24 bar)
PMR-30 MF	2 - 20 GPM (454 - 4542 L/hr)	30 PSI (2.07 bar)	110 psi (7.58 bar)
PMR-35 MF	2 - 20 GPM (454 - 4542 L/hr)	35 PSI (2.41 bar)	115 psi (7.93 bar)
PMR-40 MF	2 - 20 GPM (454 - 4542 L/hr)	40 PSI (2.76 bar)	120 psi (8.27 bar)
PMR-50 MF	2 - 20 GPM (454 - 4542 L/hr)	50 PSI (3.45 bar)	130 psi (8.96 bar)
PMR-60 MF	2 - 20 GPM (454 - 4542 L/hr)	60 PSI (4.14 bar)	140 psi (9.65 bar)

NETAFIM™

Bioline® Dripperline

Pressure Compensating Dripperline for Wastewater



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

As shown at left, BioLine is continuously self-cleaning during operation, not just at the beginning and end of a cycle. The result is dependable, clog 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.

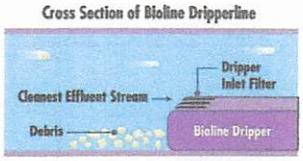
Quality Manufacturing with Specifications Designed to Meet Your Needs

- 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"*

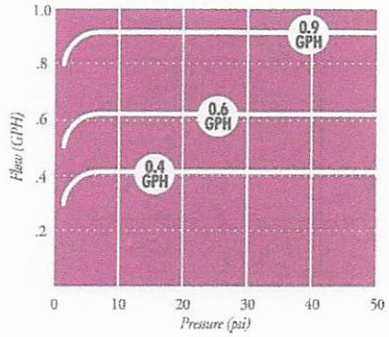
Recommended filtration: 120 mesh

Inside diameter: .570*

Color: Purple tubing indicates non-potable source

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

BIOLINE Flow Rate vs. Pressure



NETAFIM™

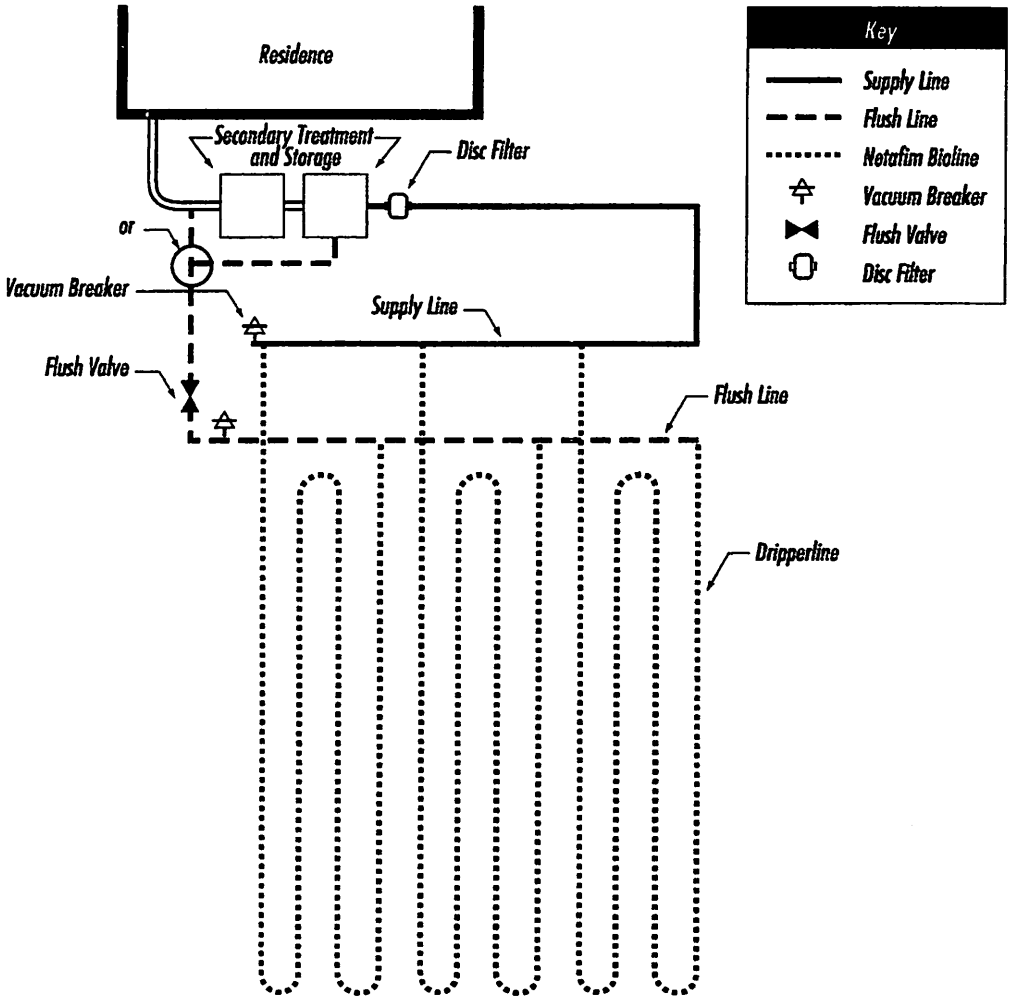
NETAFIM USA
5470 E. Home Ave. • Fresno, CA 93727
888.638.2346 • 559.453.6800
FAX 800.695.4753
www.netafimusa.com

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



COMAL COUNTY
ENGINEER'S OFFICE

August 9, 2024

Catherine Haegelin, E.I.T.
INK Civil
via e-mail: catherinehaegelin@ink-civil.com

Re: FM 1863 6P Holdings Tract- WPAP On-Site Sewage Facility Suitability Letter, within Comal County, Texas

Dear Ms. Haegelin:

In accordance with TAC §213.5(b)(4)(F)(ii), Comal County has found that the entire referenced site is suitable for the use of private sewage facilities based on the following information submitted to our office on August 8, 2024:

- The Geologic Assessment, prepared by Professional Service Industries, Inc.
- The Water Pollution Abatement Plan application prepared by James Ingalls, P.E.

According to TAC §285.42(a), if any recharge feature is discovered during construction of an OSSF, all regulated activities near the feature shall be suspended immediately. The owner shall immediately notify the TCEQ San Antonio office of the discovery of the feature. All activities regulated under TAC §213 shall not proceed near the feature until Comal County, in conjunction with the TCEQ San Antonio office, has reviewed and approved a plan proposed to protect the feature, the structural integrity of the OSSF, and the water quality of the aquifer. The plan shall be sealed, signed, and dated by a professional engineer.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

David C. Vollbrecht

David C. Vollbrecht, P.E.
Comal County Assistant Engineer

cc: Scott Haag, Comal County Commissioner Precinct No. 2

195 David Jonas Dr, New Braunfels, Texas, 78132 – Phone (830) 608-2090

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 1, 2024

Mr. James Ingalls, P.E.
6P Holdings, LLC.
2021 SH 46 W., Ste. 105
New Braunfels, Texas, 78132

Re: Approval of a Water Pollution Abatement Plan (WPAP)
Ink Civil FM 1863 Office; Located southeast of FM 1863 and FM 3009; Bulverde ETJ, Comal County, Texas
Edwards Aquifer Protection Program ID: 13001989, Regulated Entity No. RN112040837

Dear Mr. Ingalls:

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by INK Civil on behalf of the applicant, 6P Holdings, LLC. on September 6, 2024. Final review of the application was completed after additional material was received on October 17, 2024 and October 30, 2024.

As presented to the TCEQ, the application was prepared in general compliance with the requirements of 30 Texas Administrative Codes (TAC) Chapter §213. The permanent best management practices (BMPs) and measures represented in the application were prepared by a Texas licensed professional engineer (PE). All construction plans and design information were sealed, signed, and dated by a Texas licensed PE. Therefore, the application for the construction of the proposed project and methods to protect the Edwards Aquifer are **approved,** subject to applicable state rules and the conditions in this letter.

This approval expires two years from the date of this letter, unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been officially requested. This approval or extension will expire, and no extension will be granted if more than 50 percent of the project has not been completed within ten years from the date of this letter.

The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed in accordance with 30 TAC §50.139.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 1.32-acres. The project will include one (1) office building and associated parking. The impervious cover will be 1.02-acres (77.27 percent). According to a letter dated, August 9, 2024, signed by Mr. David C. Vollbrecht, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, one (1) Jellyfish filter model, designed using the TCEQ technical guidance, *RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices,* will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 916 pounds of TSS generated from the 1.02-acres of impervious cover. The approved permanent BMPs and measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The permanent BMPS shall be operational prior to occupancy or use of the proposed project. Inspection, maintenance, repair, and retrofit of the permanent BMPs shall be in accordance with the approved application.

GEOLOGY

According to the Geologic Assessment (GA) included with the application, the surficial unit of the site is the basal nodular member of the Kainer Formation. No sensitive geologic features were identified in the GA. The site assessment conducted on October 9, 2024, by TCEQ staff determined the site to be generally as described by the GA.

STANDARD CONDITIONS

1. The plan holder (applicant) must comply with all provisions of 30 TAC Chapter §213 and all technical specifications in the approved plan. The plan holder should also acquire and comply with additional and separate approvals, permits, registrations or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, Dam Safety, Underground Injection Control) as required based on the specifics of the plan.

2. In addition to the rules of the Commission, the plan holder must also comply with state and local ordinances and regulations providing for the protection of water quality as applicable.

Prior to Commencement of Construction:

3. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the plan holder must submit to the EAPP proof of recordation of notice in the county deed records, with the volume and page number(s) of the county record. A description of the property boundaries shall be included in the deed recordation in the county deed records. TCEQ form, Deed Recordation Affidavit (TCEQ-0625), may be used.

4. The plan holder of any approved Edwards Aquifer protection plan must notify the EAPP and obtain approval from the executive director prior to initiating any modification to the activities described in the referenced application following the date of the approval.

5. The plan holder must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the EAPP no later than 48 hours prior to commencement of the regulated activity. Notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.

6. Temporary erosion and sedimentation (E&S) controls as described in the referenced application, must be installed prior to construction, and maintained during construction. Temporary E&S controls may be removed when vegetation is established, and the

construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

7. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring or gravel. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation.

During Construction:

8. This approval does not authorize the installation of temporary or permanent aboveground storage tanks on this project that will have a total storage capacity of five hundred gallons or more of static hydrocarbons or hazardous substances without prior approval of an Aboveground Storage Tank facility application.

9. If any sensitive feature is encountered during construction, replacement, or rehabilitation on this project, all regulated activities must be **immediately** suspended near it and notification must be made to TCEQ EAPP staff. Temporary BMPs must be installed and maintained to protect the feature from pollution and contamination. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality.

10. All water wells, including injection, dewatering, and monitoring wells shall be identified in the geologic assessment and must be in compliance with the requirements of the Texas Department of Licensing and Regulation 16 TAC Chapter §76 and all other locally applicable rules, as appropriate.

11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

12. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge must be filtered through appropriately selected BMPs.

13. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

14. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

15. Owners of permanent BMPs and temporary measures must ensure that the BMPs and measures are constructed and function as designed. A Texas licensed PE must certify in

writing that the **permanent** BMPs or measures were constructed as designed. The certification letter must be submitted to the EAPP within 30 days of site completion.

16. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property or the ownership of the property is transferred to the entity. A copy of the transfer of responsibility must be filed with the executive director through the EAPP within 30 days of the transfer. TCEQ form, Change in Responsibility for Maintenance on Permanent BMPs and Measures (TCEQ-10263), may be used.

The holder of the approved Edwards Aquifer protection plan is responsible for compliance with Chapter §213 and any condition of the approved plan through all phases of plan implementation. Failure to comply with any condition within this approval letter is a violation of Chapter §213 and is subject to administrative rule or orders and penalties as provided under §213.10 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. Upon legal transfer of this property, the new owner is required to comply with all terms of the approved Edwards Aquifer protection plan.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Hunter Patterson of the Edwards Aquifer Protection Program at (210) 403-4026 or the regional office at 512-339-2929.

Sincerely,

Monica Reyes

Monica Reyes, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

MR/hhp

cc: Mr. Shane Klar, P.E., INK Civil

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

WARRANTY DEED WITH VENDOR'S LIEN

STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF COMAL §

Corridor Title Co. GF# 23-1283-V

THAT SNC GENERATIONS LLC, a Texas limited liability company ("Grantor"), for and in consideration of the sum of TEN DOLLARS ($10.00) and other valuable consideration to the undersigned in hand paid by the Grantee herein named, the receipt of which is hereby acknowledged, and the further consideration of the execution and delivery by 6P HOLDINGS LLC, a Texas limited liability company ("Grantee"), of that one certain promissory note of even date herewith (the "Note") in the principal sum of $360,000.00, payable to the order of FROST BANK ("Lender"), as therein specified, providing for acceleration of maturity and for attorney's fees, the payment of the Note being secured by the vendor's lien herein retained, and being additionally secured by a deed of trust of even date herewith to DAN J. GUARINO, TRUSTEE, has GRANTED, SOLD AND CONVEYED, and by these presents does GRANT, SELL AND CONVEY unto Grantee the real property (the "Property") described as follows, to-wit:

> Lot 1, Block 1, NORTH POINT SUBDIVISION, a subdivision in Comal County, Texas, according to the map or plat of record in Volume 4, Page 67, of the Map and Plat Records of Comal County, Texas.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging, unto Grantee, Grantee's heirs, executors, successors and assigns forever; and Grantor does hereby bind Grantor, Grantor's heirs, executors, successors and assigns, to WARRANT AND FOREVER DEFEND all and singular the said premises unto Grantee, Grantee's heirs, executors, successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

This conveyance, however, is made and accepted subject to any and all restrictions, reservations, easements, exceptions, covenants and conditions, if any, applicable to and enforceable against the Property as shown by the records of Comal County, Texas.

But it is expressly agreed that the Vendor's Lien, as well as Superior Title in and to the Property, is retained against the Property, premises and improvements until the Note and all interest thereon are fully paid according to the face, tenor, effect and reading thereof, when this Deed shall become absolute.

THAT Lender, at the instance and request of Grantee, having advanced and paid in cash to Grantor herein that portion of the purchase price of the Property as is evidenced by the Note, the Vendor's Lien, together with the Superior Title to the Property, is retained herein for the benefit of Lender and the same are hereby TRANSFERRED AND ASSIGNED to Lender, its successors and assigns, without recourse on Grantor.

Current ad valorem taxes on the Property having been prorated, the payment thereof is assumed by Grantee.

EXECUTED effective as of July 12, 2023.

GRANTOR:

SNC GENERATIONS LLC
a Texas limited liability company

By: _____
Diego A. Lopez, Manager

Address of Grantee:

1816 San Marcos Trl
New Braunfels TX 78132

STATE OF TEXAS §
§
COUNTY OF Comal §

This instrument was acknowledged before me this 10th day of July, 2023 by Diego A. Lopez, Manager of SNC GENERATIONS LLC, a Texas limited liability company, on behalf of said limited liability company.

ASHLEY LINDSEY
My Notary ID # 131358653
Expires November 20, 2025

_____
Notary Public, State of Texas

AFTER RECORDING, RETURN TO:

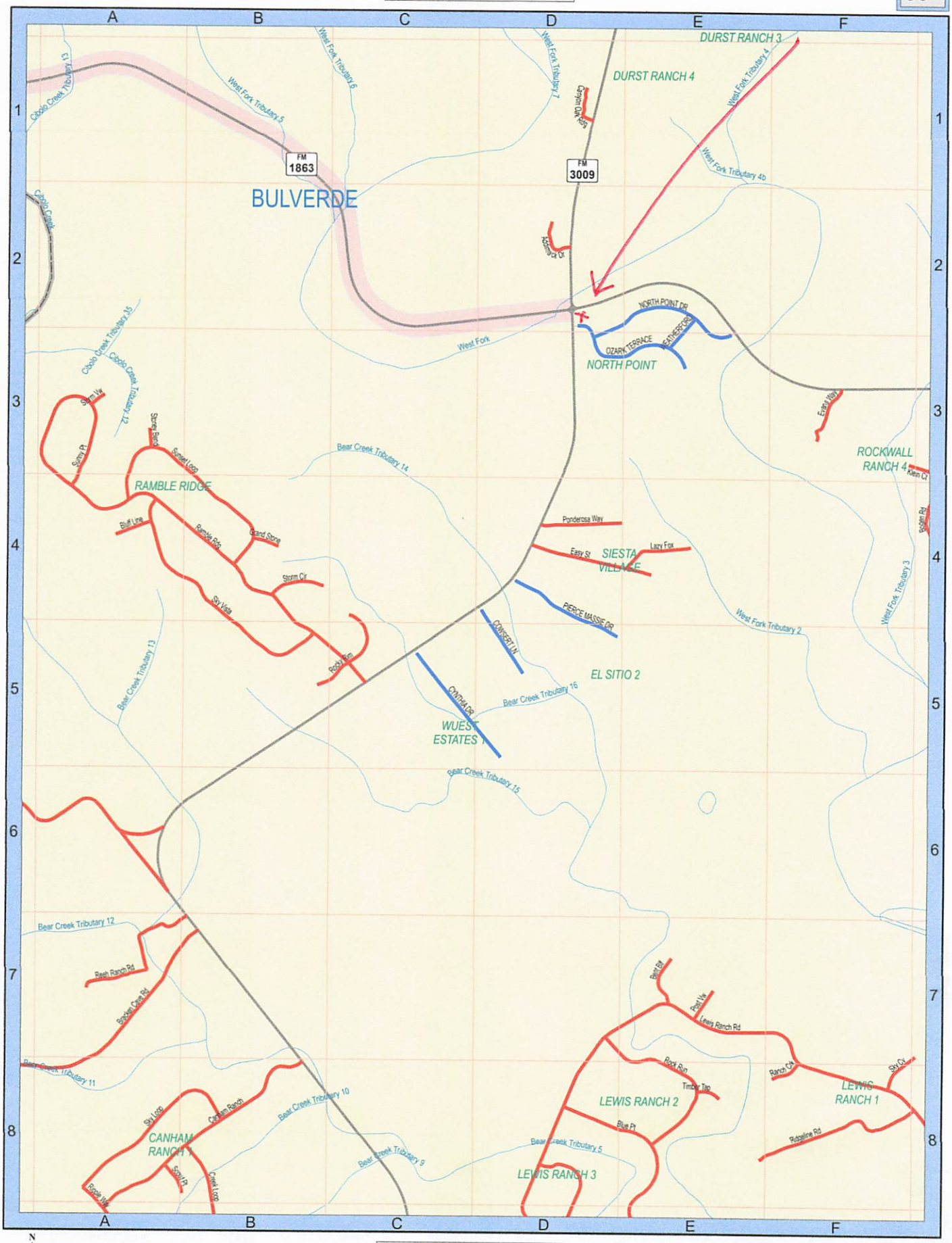
CORRIDOR TITLE, LLC

23-1283-N

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
07/12/2023 02:24:22 PM
TERRI 2 Pages(s)
202306022044

Bobbie Koepp

SEE PAGE65



SEE PAGE67

SEE PAGE74

N W E S

0 1,250 2,500
Feet

0 0.25 0.5
Miles

Produced by the Comal County Engineer's Office - 7/17/2023

RECEIVED
By Kathy Griffin at 1:13 pm, Sep 22, 2025

COMAL COUNTY
ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

Date Received	Initials	Permit Number
		119039

Instructions:

Place a check mark next to all items that apply. For items that do not apply, place "N/A". This OSSF Development Application Checklist **must** accompany the completed application.

OSSF Permit

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

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

Signature of Applicant

09/20/2025
Date

___ COMPLETE APPLICATION

Check No. _____ Receipt No. _____

INCOMPLETE APPLICATION
—— (Missing Items Circled, Application Refeused)

Revised: September 2019