

Coastal Aerobic Systems, LLC
8979 County Road 400
Brazoria, TX 77422

(979) 798-7678
Fax: (979) 798-0861
www.coastalaerobicsystems.com office@coastalaerobicsystems.com



Printed: 12/5/2025
Service Area: BFC
MapKey: 883A

4

Don Smith
321 Buffalo Trail
Lake Jackson, TX 77566

Main: (979) 529-7522
Cell: (979) 529-7522

Contract: 1/1/2025 - 1/1/2026
Due Date: 12/31/2025
Visits Per Contract: 3
Last Visit: 10/3/2025

Email: dhsmith566@yahoo.com

Scheduled 1/28/26 -

Site Address: 319 CR 214 Buffalo Tr. (System #2), Lake Jackson Permit #: 2021-640

Agency: Brazoria County Environmental Health Department ID: 3743
County: Brazoria

Jerry D. Monical #MP0001870 Exp: 11/30/2026

Brand & S#: NuWater -

Aerator & S#: MS Hiblow SN: 523001078 - Hiblow 5/1/24

Provider: Jerry D. Monical
License #: MP0001870

Exp: 11/30/2026

Date: 1-28-26 Tech: DS / DM / JM / AM / SG / MM Maintenance Provider, License #: MP0001870

1. Check Aerator: Op / Non-Op / COS Type: L / DP / CV / MF / Norweco / Jet Norweco: Full / Regular
2. Aerator Filter: NA Cleaned Replaced Schrader Valve: Y / N / Installed PSI reading: ___
3. Electrical Components Water Tight: Yes No Air Sensor: No Yes
4. Aeration Diffuser: NA Checked Changed (Quantity: ___) Acidized diffuser
5. Check Scum Level in Treatment Tank: No Yes (Stirred: Y) Too Thick to Stir
6. Check Turbidity, Clarity and Odor of Water is Acceptable: No Yes
7. Irrigation Pump: Op / Non-Op / COS / NA (Surface / Sub Surface: Cleaned Filter: Disk Spin Filter NA)
8. Sprinkler Heads: Op / Non-Op / COS / NA / Not Visual From Tank Location
9. Disinfection Device: NA Op / Non-Op (Note) / COS Chlorine Residual: 9 (Liquid / Tablet)
10. Check Alarm: Op / Non-Op / COS / NA CP: Inhousing Wall MT On Demand Timer - Override Float: YES NO Pump on demand
11. Check Sludge Levels: 4 " Trash 1 " Aeration 1 " Clarifier 2 " Pump
12. Recommend Tanks Pumped: No Yes (Which ones: Trash / Aeration / Clarifier / Pump)
13. (Can Access) Trash: No Yes Aeration: No Yes Clarifier: No Yes Pump: No Yes
14. Lids Properly Secured: No Yes Lids at Grade: No Yes Evidence of Infiltration: No Yes
15. Inspection Tag Punched: No Yes Lift Station: No Yes Op / Non-Op / COS Location:
16. System Turned On Disconnect Switch: Yes No Note: Pull Breaker

CALL TO SCHEDULE, he will meet us on site

*Drop off inspection at 321 Buffalo Trail

*Mr. Smith lives next door at 321 Buffalo Trail

*3 spks, 2 half spray, 1 full, all 31'R w/ timer *No Disconnect

*JT 5/1/24 replaced aerator & secured alarm float in LS

Site Address: 319 CR 214 Buffalo Tr. (System #2), Lake Jackson

Garry Gana, Inc.
P.O. Box 315
Rosharon, Texas 77583
(281) 235-4201

August 11, 2021

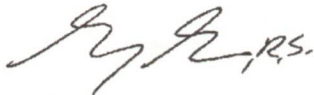
Don Smith
321 Buffalo Trail
Lake Jackson, Texas 77566

Mr. Smith,

Thank you for allowing me to conduct the On-Site Sewage Facility Site Evaluation and Design for this project. You will find enclosed the original application packet that needs to be submitted to the Brazoria County EHD for Approval and Permitting. **This is not your permit to construct the system.**

1. I have provided a blank Affidavit for the property that needs to be signed, notarized and filed with the county deed record prior to permitting. Be sure to get a copy of the filed document to submit with the OSSF application.
2. Please complete the application.
3. You also need to obtain a maintenance contract for the system from your installer to submit with the application.
4. Your Installer will take all completed forms to the Brazoria County Environmental Health Department for submission.

Sincerely,



Garry Gana, R.S.
Registered Sanitarian

Garry Gana, Inc.
P.O. Box 315
Rosharon, Texas 77583
(281) 235-4201

Receipt of Payment

This receipt is for services through August 11, 2021

Paid By:

Don Smith
321 Buffalo Trail
Lake Jackson, Texas 77566

1. OSSF Application Packet for 319 Buffalo Trail, Lake Jackson, Texas	\$500.00
Total Paid	\$500.00

Paid by check # 2824

Property owner is responsible for all review and permitting fees.

AFFIDAVIT TO THE PUBLIC
(TO BE REGISTERED WITH THE BRAZORIA COUNTY CLERK)

THE COUNTY OF BRAZORIA

STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

According to Texas Natural Resource Conservation Commission Rules of On-Site Sewage Facilities, this document is filed in the Deed Records of Brazoria County, Texas.

I

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commissioners on Environmental Quality (TCEQ) to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the TCEQ 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 TCEQ, 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 TNRCC requires a deed recording. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This deed certification is not a representation or warranty by the TCEQ of the suitability of this OSSF, nor does it constitute any guarantee by the TCEQ 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 following described real property lying and being situated in the County of Brazoria, State of Texas, to-wit:

Bull Halo Camp Farms (A0019 SF Assho Div 6), Block A, Lot 28
Brazoria County, Texas

(insert legal description)

The property is owned by _____

This OSSF must be covered by a continuous maintenance contract. All maintenance on this OSSF must be performed by an approved maintenance company, and a signed maintenance contract must be submitted to Brazoria County Environmental Health Department within 30 days after the property has been transferred.

The owner will, upon any sale or transfer of the above-described property, request a transfer of the permit for the OSSF to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from Brazoria County Environmental Health Department.

WITNESS MY / OUR HAND(S) on this _____ day of _____ 20_____.

Name(s) of Property Owner(s)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS _____ DAY OF _____ 20_____.

SEAL

Notary Public, State of Texas

Notary's Printed Name/Expiration Date

ON-SITE SEWAGE FACILITY PERMIT APPLICATION
BRAZORIA COUNTY ENVIRONMENTAL HEALTH DEPT
 111 East Locust Bldg A-29, Suite 270 ANGLETON, TX 77515
 HOUSTON (281)756-1600 ANGLETON (979)864-1600 CLUTE (979)388-1600

Permit Number

\$210 Single Family
 \$410 All Others
 New
 Replacement
 Alteration

Type _____
BCEHD USE ONLY

This application will expire one year from the application date if inspection not complete. No refunds once permit is issued.
 Attach Copy of Legal Description (i.e. Deed, Plat, Survey, Appraisal)

PROPERTY OWNER Smith Don
 (NAME ON DEED) (LAST) (FIRST) (INT)

PHONE NUMBERS _____

MAILING ADDRESS 321 Buffalo Trail, Lake Jackson, TX 77566

SITE ADDRESS 319 Buffalo Trail, Lake Jackson, TX 77566 Acres _____

WATER SOURCE Private Public _____ (Name) Water Saving Devices: Yes No

SINGLE FAMILY RESIDENCE: # of Bedrooms 3 Living Area(Sq Ft) 4250 Daily Wastewater Usage Rate 240

COMMERCIAL/MULTI FAMILY: Type _____ # of Employees/Units _____ Days/Wk Occupied _____

DESIGNER Garry Gana, R.S. Reg# 3207 Phone# 281-235-4201

SITE EVALUATOR Garry Gana, R.S. Reg# 10343 Phone# 281-235-4201

INSTALLER _____ Reg# _____ Phone# _____

MAINTENANCE PROVIDER _____ Reg# _____ Phone# _____

TREATMENT UNIT(S): Septic Tank Aerobic Tank # of Tanks/Compartments 4 Size 600 gal

Manufacturer NuWater or Regard Model B550 or Regard

DISPOSAL SYSTEM: Drainfield Area _____ sq ft Trench Depth _____ inches

Gravity 3" with gravel _____ ft 4" with gravel _____ ft Trench width _____ ft Gravel depth _____ ft

8" gravelless _____ ft 10" gravelless _____ ft Leaching Chamber _____ ft/panels

Other Low Pressure Dosing _____ ft Trench width _____ ft Gravel depth _____ inches

Surface Irrigation 6036 sq ft Drip Emitter _____ ft Other _____

I certify that the above statements are true and correct to the best of my knowledge. Authorization is hereby given to the Authorized Agent to enter upon the above described property for the purpose of lot evaluation and inspection of the OSSF. I also acknowledge that inspection of the OSSF is required prior to all components being covered and use of the system.

Signature of Owner (Name on Deed) _____ Date _____

DEPARTMENT USE ONLY BELOW THIS LINE

APPLICATION: APPROVAL DISAPPROVAL DATE _____ INSPECTOR _____ LIC# _____

Well Log or Plugging Reports Required? Yes No Joinder Agreement Required? Yes No Flood Zone Yes No

Brazoria County Appraisal ID # _____ ETJ _____ Flood Plain Info: New Construction Upgrade

Legal Description: SUB _____ Ab _____ Sec _____ Block _____ Lot _____ Precinct _____

Authorization to Construct Provided to Installer: _____ Date: _____ In person Fax Mail By: _____

INSPECTION: APPROVAL DISAPPROVAL DATE _____ INSPECTOR _____ LIC# _____

Final Permit Copies Provided to Installer: _____ Date: _____ In person Fax Mail By: _____

Provided to Maintenance Prov: _____ Date: _____ In person Fax Mail By: _____

PROPOSED OSSF DESIGN

PROPERTY OWNER:

Don Smith

SITE ADDRESS:

319 Buffalo Trail
Lake Jackson, Texas

LEGAL DESCRIPTION:

Buffalo Camp Farms (A0019 S F Austin DIV 6),
Block A, Lot 28

SITE EVALUATION:

Topography:

Slight (less than 4 % slope)

Vegetation:

Natural grasses & vegetation

Site Drainage:

Adequate

100 yr. Flood Plain:

Yes, FIRM Panel 48039C0605K

Water Supply:

Pvt Well

Soil Evaluation:

Class IV Clay from 0 – 36 inches

% Gravel:

0

Application Rate:

0.041 gal/ ft²/day

Indication of Soil Saturation:

No

If yes, depth:

inches

I, Garry Gana, OS 10343, a Registered Site Evaluator, did personally conduct the site evaluation on July 27, 2021.



Garry Gana

DESIGN PERAMETERS:

Structure:

Existing 3 Bedroom, < 2500 ft² SFR w/WSD

Design Flow:

240 gpd

Application Rate:

0.041 gal/ ft²./day

Area Required:

5854 ft²

Area Designed:

6038 ft²

SYSTEM COMPONENTS:

LIFT STATION

Pump Tank:

500 gallon tank

Pump:

Meyers SRM4 or equal

Alarm:

Audio/Visual

Manifold:

2 inch sch 40 pvc

AEROBIC TREATMENT

Pre-treatment Tank:

built-in to treatment unit

Treatment Unit:

NuWater B-550 (600 gpd) or equal

Pump Tank:

768 gallon

Pump:

Meyers 2 NFL or equal.

Flow Alternator:

Not Required

Sprinklers:
Timer:
Disinfection:

3 – KRain ProPlus or equiv. @ r = 31 ft
Required (1 am - 5 am)
Required

LIFT STATION CALCULATIONS

Volume: 567 gallons
Dimensions:
depth below inlet 46.0"
gallons per inch 12.3
Float Settings (from bottom):
Static Volume: 73.8 gallons pump off 6.00"
Dosing Volume: 73.8 gallons pump on 12.00"
Reserve Capacity: 332.1 gallons alarm on 19.00"

Friction Calculations

Total of 2" sch 40 PVC pipe 200 ft. max.
Flow 10 gpm
Friction Loss due to pipe 0.2 hd-ft./100ft. = 0.4 hd-ft.
Friction Loss including elbows & joints 0.4 hd-ft. x 1.2 = 0.48 head-ft.
Depth of tank 6 feet
Total Head Required 6.48 feet @ 10 gpm
Pump Required Myers SRM4 or equiv.

DISPOSAL AREA CALCULATIONS

Volume: 768 gallons
depth below inlet 53.0"
gallons per inch 14.45 on average (sloped wall tank)

Float Settings (from bottom):
Static Volume: 181.0 gallons pump off 13.00"
Dosing Volume: 240.0 gallons pump on minimum tether, timer controlled
Reserve Capacity: 150.0 gallons alarm on 43.00"

Friction Calculations

psi required to operate sprinkler heads 40
Total of 1 inch sch 40 PVC pipe 300 ft. max
Flow per Zone 9.3 gpm
Friction Loss due to pipe 5.49 hd-ft./100 ft. = 16.5 hd-ft.
Friction Loss including elbows & joints 16.5 hd-ft. x 1.2 = 19.8 head-ft.
Depth of tank 7 feet
Total Head Required 26.8 feet @ 9.3 gpm
Pump Required Myers 2 NFL or equal

IRRIGATION AREA:

The irrigation area shall be covered with grasses, evergreen shrubs, bushes or trees. Plants intended for human consumption shall not be grown inside the irrigation area. Grasses shall be cut as needed to prevent interfering with sprinkler operation. No surface improvements (buildings, sidewalks, driveways, patios, etc.) shall be constructed or placed inside the irrigation area. **Area shall be graded to promote positive drainage and surface water run-off.**

MAINTENANCE:

A maintenance contract shall be maintained for the life of the system. The property owner or occupant shall insure that the system is provided with electricity at all times and that the disinfection unit is supplied with disinfectant. Any suspected malfunction shall be reported to the maintenance company as soon as possible. The property owner or occupant shall operate the on-site sewerage facility according to the owner's manual.

GENERAL NOTES:

- Water conservation measures should be taken to help ensure the proper operation of the on-site sewerage facility.
- Electrical wiring shall be in accordance with the current edition of the National Electric Code.
- Pump shall be rated by the manufacturer to pump sewerage or sewage effluent.
- **Pressure relief/sample valve shall be installed and directed downward inside the pump tank to provide agitation and help prevent extreme septic conditions inside the tank.**

This system is designed to treat and dispose of up to **240** gallons/day. If the system is overloaded or not properly maintained, the designer is not responsible. Assumed loading rates are outlined on Calculation page, if these are exceeded; additional plant capacity, disposal area, etc. will need to be added by the owner at his expense. This system must be installed and maintained in accordance with all standards set by the Texas Commission on Environmental Quality and Local Authorities. This designer does not represent or warrant the material, installation, operation or proper performance of this system for any period of time. Every attempt has been made to accurately depict the location of lines, plant, tanks, sprinklers, etc. Construction realities may necessitate minor design changes. Any major changes will be submitted prior to construction.

Seal



[Handwritten Signature]
Garry Gana, R.S.
18-11-21

Subscriptions
(/portal
/subscriptionHome)

Contact MSC Help
(/portal/resources
/contact)

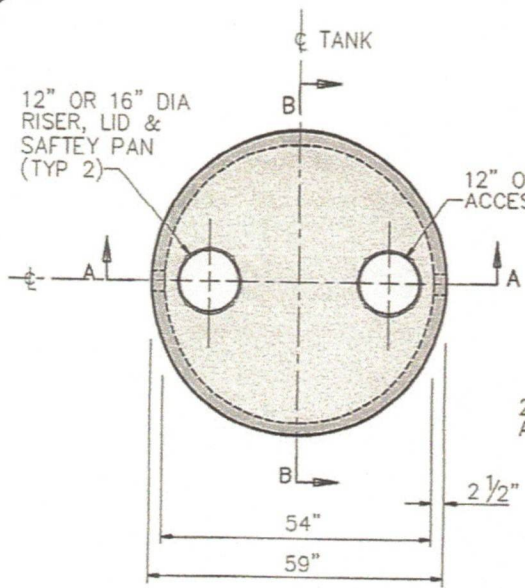
Changes to this FIRM ?

- Revisions (0)
- Amendments (18)
- Revalidations (0)

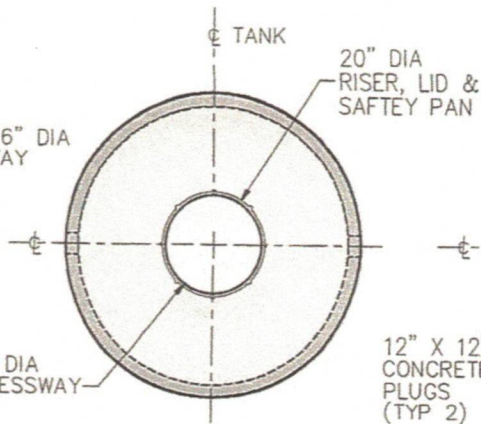
You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMette. If you are a person with a disability, are blind, or have low vision, and need assistance, please contact a map specialist (<https://msc.fema.gov/portal/resources/contact>).

[Go To NFHL Viewer » \(https://hazards-fema.maps.arcgis.com/apps/webap](https://hazards-fema.maps.arcgis.com/apps/webap)

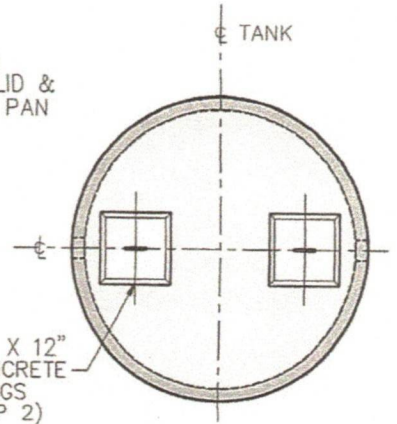




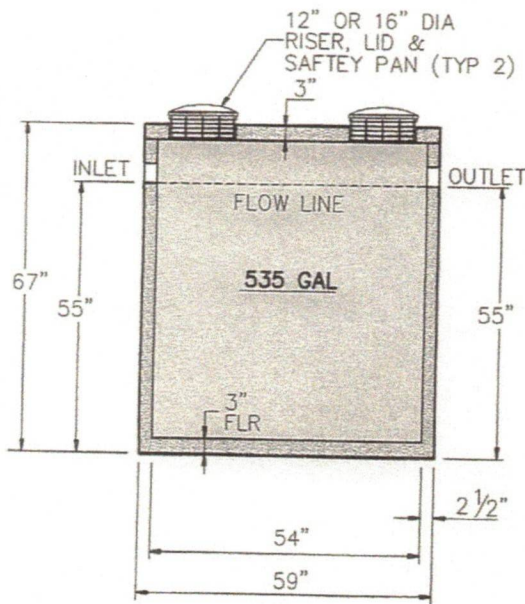
PLAN VIEW
STANDARD SLAB TOP - ST-1
 W/ 2-16" OR 12" ID X 6" HEIGHT
 RISER, LID & SAFETY PAN



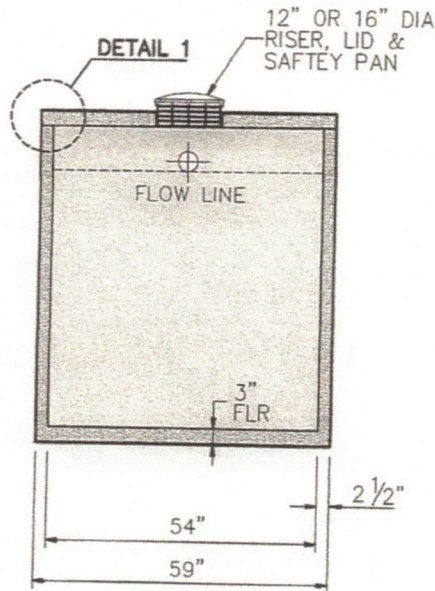
PLAN VIEW
(OPTIONAL) SLAB TOP - ST-2
 W/ 1-20" ID X 6" HEIGHT
 RISER, LID & SAFETY PAN



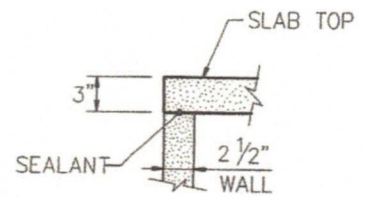
PLAN VIEW
(OPTIONAL) SLAB TOP - ST-3
 W/ 2-12" X 12" CONCRETE
 PLUGS CAST INTO LID



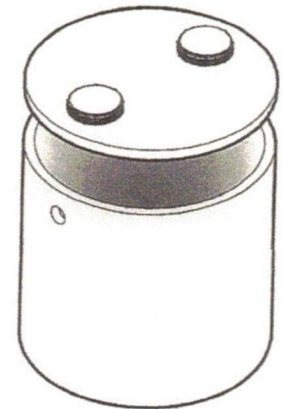
SECTION A-A
 W/ NO OFFSET



SECTION B-B



DETAIL 1



ISOMETRIC

GENERAL NOTES:

- DESIGN SHALL MEET OR EXCEED EXCEED ASTM C-1227 SPECIFICATIONS
- 4000 PSI CONCRETE AT 28 DAYS
- ASTM A615, GRADE 60 REINFORCING
- BAR BENDING AND PLACEMENT PER ACI STANDARDS

NOTE:

APPROX WEIGHTS INCLUDING SLAB TOP & BOTTOM SECTION
 WEIGHT - 4200 LBS
 CAPACITY - 535 GAL
 10.3 GALS PER INCH (APPROX)



"Providing Concrete Environmental Solutions"

9235 Main Street #1
 P.O. Box 507
 Needville, Texas, 77461
 1-888-331-5871

500 GALLON TANK
 (ROUND)
 'B' STYLE - W/ NO OFFSET

NC-004-022

Scale: 1/4"=1'-0"
 * All Dimensions subject to allowable specification tolerances.

Date: 04/10/19

Rev Date:

Approved By: _____ Date: _____

Buoyancy Calculations for NCP 500 gallon Round Pump Tank

Tank Weight: 4200 lb.
Water Weight: 8 lb./gal.
Tank Capacity: 628 gal.
Gallons/inch in NCP 500: 10.3 gal.
Static Water Level: 13 in.
Static Water Capacity: 134 gal.
Static Water Weight: 1072 lb.
Pump Weight: 25 lb.
Weight of Soil = 1.0 - 1.7 grams/cc = 62.4 - 106 lb./cu. ft.
Area of NCP 500 Tank Lid = 18.9 sq. ft.
Weight of 0.75 ft. of soil over tank lid = 62.4 x 18.9 x 0.75
= 885 lb.

Total Downward Force = Tank + Static Water + Pump + Soil (in lbs)
= 4200 + 1072 + 25 + 885
= **6182 lb.**

Total Upward Force = (Tank Capacity - Static Water Capacity) x 8 lb./gal.
= (628 - 134) x 8
= **3952 lb.**

Tank Buoyancy w/ 13 in. water = Total Downward Force - Total Upward Force
= 6182 - 3952
= **2230 lb. of downward force**

The NCP 500 Gallon Pump tank will not pose a floatation hazard during high water events when a static water level of 13 inches is maintained inside of the tank and the tank is covered with at least 9 inches of soil.

Seal



Garry Gana, R.S.

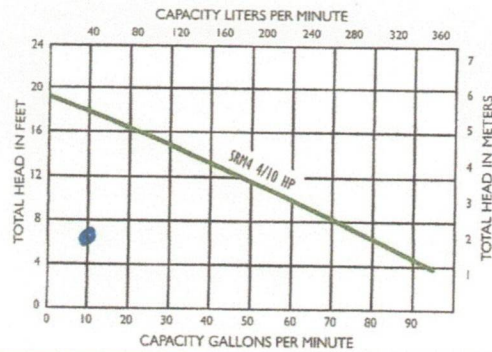
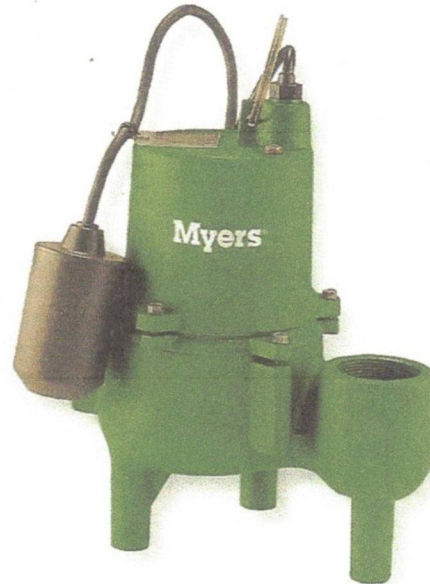
3-26-21

SRM4

4/10 HP Sewage Pump

SPECIFICATIONS

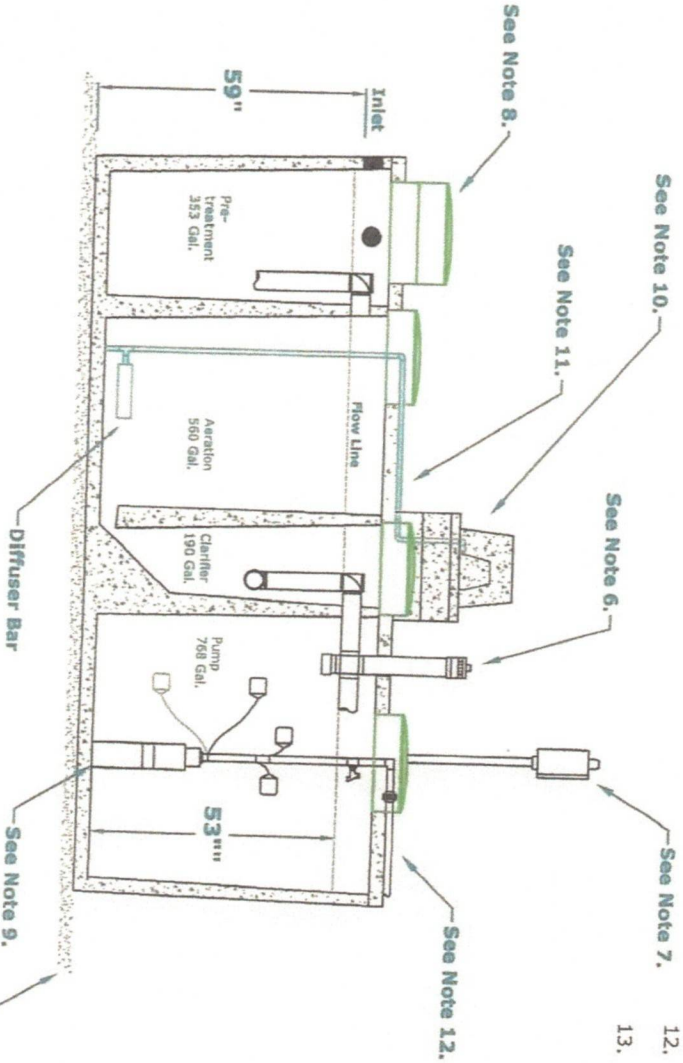
Applications	Sewage, High-Capacity Sump, Effluent	
Capacities	95 GPM	360 LPM
Shut-off Head	19'	5.8 m
Solids Handling	2"	50.8 mm
Liquids Handling	septic effluent and sewage	
Intermittent Liquid Temp.	up to 140°F	up to 60°C
Motor Electrical Data	4/10 HP, shaded pole, 115V, 12A, 1Ø, 60Hz, 230V, 6A, 1Ø, 60Hz	
Acceptable pH Range	5-9	
Discharge, NPT	2"	50.8 mm
Housing	heavy cast iron	
Power Cord	10' (20' optional)	
Impeller	recessed, thermoplastic	
Volute Case	cast iron	
Shaft Seal	type IIA, carbon & ceramic	



FEATURES

- Power for versatile applications
- Residential septic tank sewage
- Large sumps
- ETL Listed
- Long-lasting performance
- Oil-filled motor for maximum heat dissipation and continuous bearing lubrication
- Recessed vortex impeller for free flow of liquids, solids up to 2" diameter
- Rotary shaft seal has carbon and ceramic faces for positive seal
- Thermal overload protection with automatic reset

M9029SSE



- GENERAL NOTES:**
1. Plant structure material to be precast concrete and steel.
 2. Maximum burial depth is 30" from slab top to grade.
 3. Weight = 14,900 lbs.
 4. Treatment capacity is 600 GPD.
 5. BOD Loading = 1.62 lbs. per day.
 6. Standard tablet chlorinator or Optional Liquid chlorinator, NSF approved chlorinators (tablet & liquid) available.
 7. NuWater B-550 Control Center w/ Timer for night spray application. Optional Micro Dose (ml/hy/sec) timer available for drip applications. Electrical Requirement to be 115 Volts, 60 Hz, Single Phase, 30 AMP, Grounded Receptacle. 20" Ø access riser w/ lid (Typical 4). Optional extension risers available.
 8. 20 GPM 1/2 HP, high head effluent pump.
 9. HIBLOW Air Compressor w/ concrete housing.
 10. 1/2" Sch. 40 PVC Air Line (Max. 50 Lft from Plant).
 11. 1" Sch. 40 PVC pipe to distribution system provided by contractor.
 12. 4" min. compacted sand or gravel pad by Contractor.
 - 13.

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

MINIMUM EXCAVATION DIMENSIONS:
 Width: 76"
 Length: 176"

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

Model: B-550-PC-400PT

March, 2012
 By: A.S.

Scale:
 * All Dimensions subject to alternate specification tolerances.

Dwg. #: NC-B550-3



Flotation Calculations

Model: B-550 & B-550NR

Description: NuWater 600 GPD Aerobic Treatment & Nitrogen Reduction Units

Given

Weight of Structure w/ Slab Top:	14,880 lbs.
Weight of Water:	62.4 pcf
Weight of Soil:	110 pcf
Volume of Structure at Flow Line:	Pretreatment Compartment = 353 gal. Aeration Compartment = 560 gal. Clarifier Compartment = 190 gal. Pump Compartment = 15" static volume 209 gal.

A. Weight of unit at operating condition "Down Forces":

- | | |
|-------------------------------------|--|
| I. Structure Weight w/ Liquid: | Unit weight + (total volume/7.48 gals/cu ft)x62.4 lb/ft ³
14,880 lbs + (1312 /7.48)x62.4 = 25,825 lbs. |
| II. Weight of soil: (2" overburden) | (L x W x H) x 110 pcf
(13.67'x5.25'x2/12) x 110 lb/ft ³ = 1,316 lbs. |
| III. Total Weight: | Structure weight w/ Liquid + Total Soil Weight
25,825 lb + 1316 lb = 27,141 lbs. |

B. Weight of water displacement "Up Forces":
(at 69" depth of bury) (L x W x H) x 62.4
(5.25'x13.67'x5.75')x62.4 lb/ft³ = 25,750 lbs.

C. Factor of Safety (FS): Required FS: ≥1

$$\frac{\text{Down Forces/Up Forces}}{27,141 / 25,750} = 1.05$$

When the FS = 1 the "down forces" will equal the "up force" and the structure will be in equilibrium.

When the FS is less than 1 the "up force" will be greater than the "down forces" and floating will occur.

X When the FS is greater than 1 the "up force" will be less than the "down forces" and floating will not occur.

Conclusion:

Total unit weight at operating condition "down Forces" of 27,141 lbs. is greater than the weight of water displacement "up forces" 25,750 lbs. therefore the upward forces causing floatation will not control.

Minimum burial depth:

For functional purposes the structure must be buried 2" below grade.

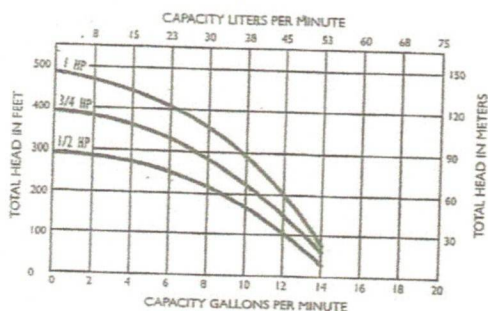
Seal:



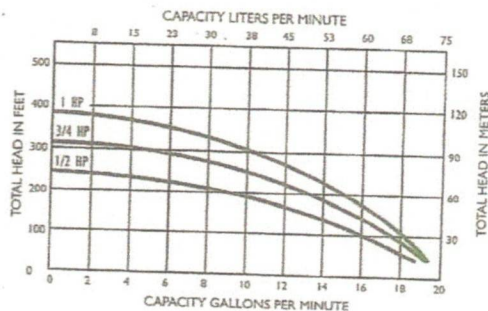
[Handwritten Signature]
8-7-16

2NFL AND J-BE SERIES PERFORMANCE

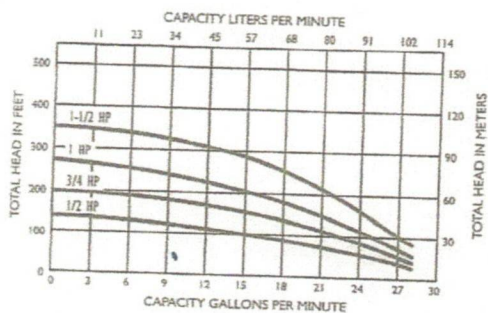
8 GPM



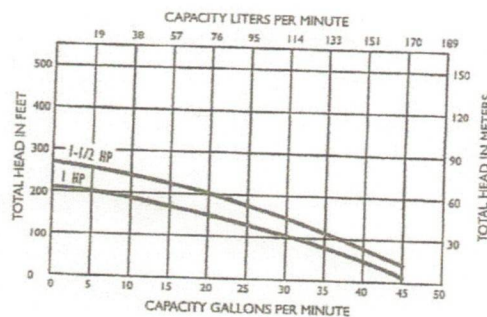
12 GPM



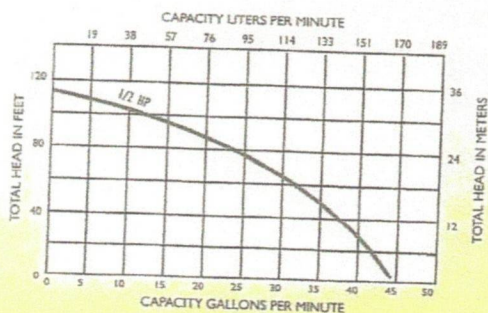
20 GPM



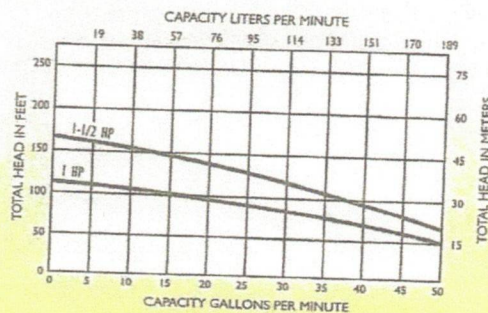
25 GPM



30 GPM



35 GPM



M9027SSE

**K-RAIN PROPLUS MODEL 11003-RCW:
ADJUSTABLE ARC AND FULL-CIRCLE
GEAR DRIVEN SPRINKLER FOR
ONSITE WASTEWATER SYSTEMS**

The sprinkler shall be of the gear-driven, rotary type, capable of covering an area of 22' to 44' (6.71 to 13.41 M) radius at nozzle pressure of 30 to 70 PSI (2.0 to 5.0 bar) with a discharge rate of 1.5 to 8.6 GPM (5.67 to 32.51 LPM). The sprinkler shall come supplied with not less than four (4) numerically coded interchangeable nozzles. Sprinkler nozzle trajectory shall be 12°. The sprinkler shall have a stainless steel radius adjustment screw.

The sprinkler shall provide both part and full circle adjustment from 40° to 360°. Sprinkler coverage pattern shall be indicated by degree graduations and an arrow located on top of the sprinkler, which shall rotate to correspond with arc selected. True full circle operation by continuous forward rotation shall be achieved by alignment of the indication arrow with the "360°" position locator marked on the top cover. The sprinkler shall have a friction-clutch mechanism to allow for 360°+ forward or reverse movement of nozzle turret without damage to the internal gear components. The sprinkler shall incorporate an "arc memory clutch" feature to allow original arc pattern to be automatically resumed following disturbance of nozzle turret setting.

The sprinkler shall have a minimum of 5-inch (12.5 cm) pop-up stroke. The sprinkler shall have a 3/4-inch female thread inlet.

The sprinkler shall carry a two-year trade warranty against manufacturing defects.

MODELS

11003-RCW ProPlus Standard

EASY ARC SETTING

Arc Selection 40° to Continuous 360°



Adjust From Left Stop

SPECIFICATIONS

- Inlet: 3/4" Threaded NPT
- Arc Adjustment Range: 40° to Continuous 360°
- Flow Range: 1.5 - 8.6 GPM
- Pressure Rating: 7 - 70 PSI
- Precipitation Rate: .02 to 1.7 Inches Per Hour (Depending on Spacing and Nozzle Used)
- Overall Height (Popped Down): 7 1/2"
- Recommended Spacing: 22' to 40'
- Radius: 22' to 44'
- Low Angle Nozzle Trajectory: 12°
- Low Angle Nozzle: Installed 3 GPM
- Riser Height: 5"

PROPLUS RCW PERFORMANCE DATA

LOW ANGLE DATA			
Nozzle	Pressure PSI	Radius Ft	Flow GPM
#1	30	22'	1.5
	40	24'	1.7
	50	26'	1.8
	60	28'	2.0
#3	30	29'	3.0
	40	32'	3.1
	50	35'	3.3
	60	37'	3.8
#4	30	31'	3.4
	40	34'	3.9
	50	37'	4.4
	60	38'	4.7
#6	40	38'	6.5
	50	40'	7.3
	60	42'	8.0
	70	44'	8.6

METRIC					
Nozzle	Pressure kPa	Pressure Bars	Radius Meters	Flow Rate L/M	Flow Rate M ³ /H
#1	207	2.04	6.71	5.67	.34
	275	2.72	7.32	6.43	.39
	344	3.40	7.92	6.80	.41
	413	4.08	8.53	7.56	.46
#3	207	2.04	8.84	11.34	.68
	275	2.72	9.75	11.72	.71
	344	3.40	10.67	13.23	.80
	413	4.08	11.28	14.36	.87
#4	207	2.04	9.45	12.85	.78
	275	2.72	10.36	14.74	.89
	344	3.40	11.28	16.63	1.00
	413	4.08	11.58	17.77	1.07
#6	275	2.72	11.58	24.57	1.68
	344	3.40	12.19	27.59	1.66
	413	4.08	12.80	30.24	1.82
	482	4.76	13.41	32.51	1.96

Data represents test results in zero wind. Adjust for local conditions. Radius may be reduced with nozzle retention screw.

HOW TO SPECIFY

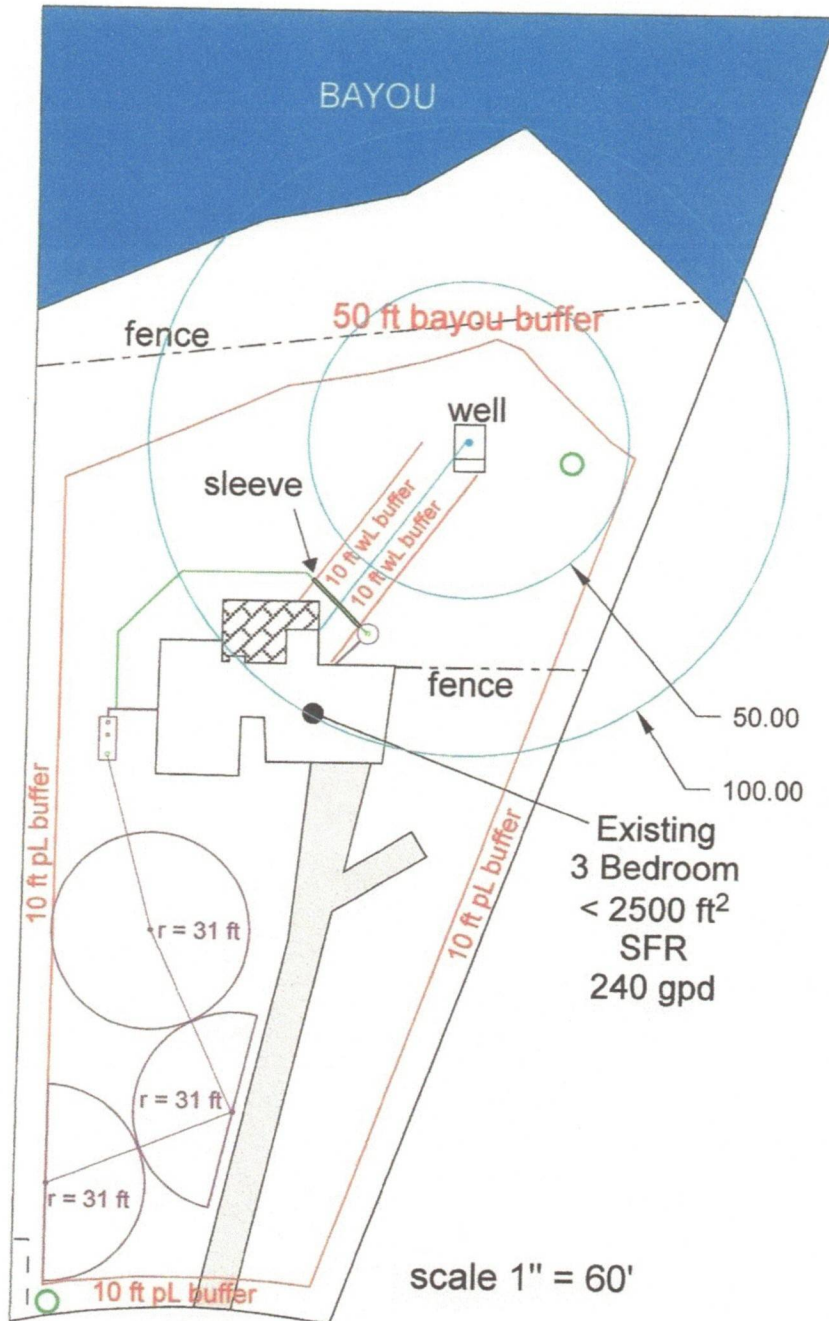
11003-RCW

Model



IRRIGATION SOLUTIONS WORLDWIDE™

K-Rain Manufacturing Corp.
1640 Australian Avenue
Riviera Beach, FL 33404 USA
PH: 1-561-844-1002 FAX: 1-561-842-9493
1-800-735-7246
EMAIL: krain@k-rain.com
WEB: http://www.k-rain.com

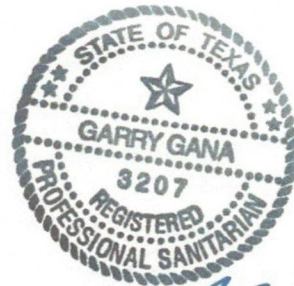


319 BUFFALO TRIAL

○ = soil test site
by Site Evaluator

This property does
lie within the 100 year
floodplain

This property exhibits less
than 4% slope across
its entire area



G. Gana
8-11-21

Sample Testing and Reporting Record

Date test performed: 12-16-21 Routine Repair Other _____

Owners Name: Don Smith
 Property (OSSF) Address: 319 Buffalo Trail, Lake Jackson, Texas
 Person Performing Inspection: Jason Ludwig
 Maintenance Provider: Sure'Nuff Septic Services, 3744 CR 126 Van Vleck, Texas 979 557-3017

<u>Inspected Items</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators	✓	_____
Filters	✓	_____
Irrigation Pumps	✓	_____
Recirculation Pumps	N/A	_____
Disinfection Device	✓	_____
Chlorine Supply	_____	✓
Electrical Circuits	✓	_____
Distribution System	✓	_____
Sprayfield Vegetation/Seeding (if applicable)	✓	_____
Other as Noted _____	_____	_____

Repairs to the system (list all components replaced):
None required

Tests required and results:

	<u>Test</u>	<u>Required Results</u>	<u>Test Method</u>
	Yes / No	mg/l, mpn/100 ml, or trace	
BOD (Grab)	No	_____	_____
TSS (Grab)	No	_____	_____
Cl ₂ (Grab)	Yes	0	DPD
Fecal Coliform	No	_____	_____

Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings): _____

General comments or recommendations:
System was in good working condition. There was 4.5" of sludge in the pump tank

Access ports secured after the maintenance and inspection activities were completed: Yes No

Signature:  **Jason Ludwig**
 TCEQ#MP0002278