



COMAL COUNTY

ENGINEER'S OFFICE

License to Operate On-Site Sewage Treatment and Disposal Facility

Issued This Date: **03/27/2025** Permit Number: **118292**

Location Description: 1108 BLACKBURNIAN
NEW BRAUNFELS, TX 78132

Subdivision: WALDSANGER
Unit: NA
Lot: 82
Block: NA
Acreage: 1.0700

Type of System: Aerobic
Surface Irrigation

Issued to: ASHTON SAN ANTONIO RESIDENTIAL LLC

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

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

Alterations to this permit including, but not limited to:

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

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

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

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

Licensing Authority
Comal County Environmental Health

ENVIRONMENTAL HEALTH INSPECTOR

OS0039964

ENVIRONMENTAL HEALTH COORDINATOR

OS0007722

Comal County Environmental Health OSSF Inspection Sheet

Installer Name: _____

OSSF Installer #: _____

1st Inspection Date: _____

2nd Inspection Date: _____

3rd Inspection Date: _____

Inspector Name: _____

Inspector Name: _____

Inspector Name: _____

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

Inspector Notes:

**Comal County Environmental Health
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
8	SEPTIC TANK Tank(s) Clearly Marked SEPTIC TANK If Single Tank, 2 Compartments Provided with Baffle SEPTIC TANK Inlet Flowline Greater than 3" and " T " Provided on Inlet and Outlet SEPTIC TANK Septic Tank(s) Meet Minimum Requirements		285.32(b)(1) (E)285.91(2)285.32(b)(1) (F)285.32(b)(1)(E) (iii)285.32(b)(1)(E)(ii) (II)285.32(b)(1)(E)(ii) (I)285.32(b)(1)(E) (i)285.32(b)(1) (D)285.32(b)(1)(C) (ii)285.32(b)(1)(C) (i)285.32(b)(1) (B)285.32(b)(1) (A)285.32(b)(1)(E)(iv)				
9	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used		285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)				
10	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped		285.38(d)				
11	SEPTIC TANK Secondary restraint system provided SEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions		285.38(d) 285.38(e)				
12	SEPTIC TANK Tank Volume Installed						
13	PUMP TANK Volume Installed						
14	AEROBIC TREATMENT UNIT Size Installed						
15	AEROBIC TREATMENT UNIT Manufacturer AEROBIC TREATMENT UNIT Model Number						
16	DISPOSAL SYSTEM Absorptive		285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)				
17	DISPOSAL SYSTEM Leaching Chamber		285.33(a)(1) 285.33(a)(3) 285.33(a)(4) 285.33(a)(2)				
18	DISPOSAL SYSTEM Evapo-transpirative		285.33(a)(3) 285.33(a)(4) 285.33(a)(1) 285.33(a)(2)				

**Comal County Environmental Health
OSSF Inspection Sheet**

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

**Comal County Environmental Health
OSSF Inspection Sheet**

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

**Comal County Environmental Health
OSSF Inspection Sheet**

No.	Description	Answer	Citations	Notes	1st Insp.	2nd Insp.	3rd Insp.
40	APPLICATION AREA Distribution Pipe, Fitting, Sprinkler Heads & Valve Covers Color Coded Purple?		285.33(d)(2)(G)(iii)(II) 285.33(d)(2)(G)(iii)(III) 285.33(d)(2)(G)(v) 285.33(d)(2)(G)(iii) 285.33(d)(2)(G)(iv) 285.33(d)(2)(G)(i) 285.33(d)(2)(G)(ii) 285.33(d)(2)(G)(iii)(I)				
41	APPLICATION AREA Low Angle Nozzles Used / Pressure is as required APPLICATION AREA Acceptable Area, nothing within 10 ft of sprinkler heads? APPLICATION AREA The Landscape Plan is as Designed		285.33(d)(2)(G) (i)285.33(d)(2) (A)285.33(d)(2)(F)				
42	APPLICATION AREA Area Installed						
43	PUMP TANK Meets Minimum Reserve Capacity Requirements						
44	PUMP TANK Material Type & Manufacturer						
45	PUMP TANK Type/Size of Pump Installed						



COMAL COUNTY

ENGINEER'S OFFICE

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

Permit Number: 118292
Issued This Date: 02/20/2025
This permit is hereby given to: ASHTON SAN ANTONIO RESIDENTIAL LLC

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

1108 BLACKBURNIAN
NEW BRAUNFELS, TX 78132

Subdivision: WALDSANGER
Unit: NA
Lot: 82
Block: NA
Acreage: 1.0700

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System: Aerobic
Surface Irrigation

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

Call (830) 608-2090 to schedule inspections.

RECEIVED

By Kathy Griffin at 2:24 pm, Jan 16, 2025



COMAL COUNTY
ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

		118292
<i>Date Received</i>	<i>Initials</i>	<i>Permit Number</i>

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

1-16-25

Date

___ COMPLETE APPLICATION Check No. _____ Receipt No. _____

INCOMPLETE APPLICATION (Missing Items Circled, Application Refeused)



COMAL COUNTY
ENGINEERING OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

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

Date 9/24/2024

Permit Number 118292

1. APPLICANT / AGENT INFORMATION

Owner Name ASHTON SAN ANTONIO RESIDENTIAL L
Mailing Address 17319 SAN PEDRO STE, 140
City, State, Zip SAN ANTONIO, TX 78232
Phone # 210-967-3883
Email DWAYNE.VADNAIS@ASHTONWOODS.COM

Agent Name KYLE LENTS
Agent Address 9451 SELMA PARKWAY
City, State, Zip SELMA, TX 78154
Phone # 210-632-0753
Email KYLE@LSWASTEWATER.COM

2. LOCATION

Subdivision Name WALDSANGER SUBDIVISION Unit _____ Lot 82 Block _____
Survey Name / Abstract Number _____ Acreage 1.07
Address 1108 BLACKBURNIAN City NEW BRAUNFELS State TX Zip 78132

3. TYPE OF DEVELOPMENT

Single Family Residential

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

Number of Bedrooms 4

Indicate Sq Ft of Living Area 4225 (less than 4500 FT²)

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

Restaurants, Lounges, Theaters - Indicate Number of Seats _____

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

Travel Trailer/RV Parks - Indicate Number of Spaces _____

Miscellaneous _____

Estimated Cost of Construction: \$ 300,000 (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 Rainwater

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]
Signature of Owner

12/19/24
Date



Planning Materials & Site Evaluation as Required Completed By Nicholas Kolbe

System Description Aerobic Treatment with SPRAY DIST.

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

Tank Size(s) (Gallons) 600 GPD ATU Absorption/Application Area (Sq Ft) 6033 SQFT ABS.

Gallons Per Day (As Per TCEQ Table III) 360

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

Is this property within an incorporated city? Yes No

If yes, indicate the city: _____

By signing this application, I certify that:

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


Signature of Designer

1.16.25
Date



7/C
02

AFFIDAVIT TO THE PUBLIC

THE COUNTY OF COMAL
STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

According to Texas Commission on Environmental Quality Rules for On-Site Sewage Facilities (OSSF's), this document is filed in the Deed Records of Comal County, Texas.

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on Environmental Quality (commission) to regulate On-Site Sewage Facilities (OSSFs). Additionally, the Texas Water Code (TWC), § 5.012 and § 5.013, gives the commission primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The commission, under the authority of the TWC and the Texas Health and Safety code, requires owner's to provide notice to the public that certain types of OSSF's are located on specific pieces of property. To achieve this notice, the commission requires a recorded affidavit. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This recorded affidavit is not a representation or warranty by the commission of the suitability of this OSSF, nor does it constitute any guarantee by the commission that the appropriate OSSF was installed.

||

An OSSF requiring maintenance contract, according to 30 Texas Administrative Code §285.91 (12) will be installed on the property described as (insert legal description):

LOT 82 WALDSANGER SUBDIVISION, COMAL COUNTY, TX

The property is owned by (insert owner's full name): ASHTON SAN ANTONIO RESIDENTIAL, LLC

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 18th DAY OF December, 2024

Dwayne Vadnais VP
[Signature]

Owner(s) signature(s)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 18th DAY OF December, 2024

Rose Portillo

Notary Public, State of Texas





This page has been added to comply with the statutory requirement that the clerk shall stamp the recording information at the bottom of the last page.

This page becomes part of the document identified by the file clerk number affixed on preceding pages.

Filed and Recorded
Official Public Records
Bobbie Koepf, County Clerk
Comal County, Texas
01/06/2025 03:45:03 PM
JESS 2 Page(s)
202506000393



Bobbie Koepf

TWO YEAR INITIAL SERVICE POLICY FOR AN
ON SITE SEWAGE FACILITY TREATMENT SYSTEM

Two year service agreement starts the day the county issues the LTO (License to Operate).

System Owner: ASHTON SAN ANTONIO RESIDENTIAL LLC Brand Name: AERIS D-600-M SN: _____

HELOTES LAND & SEPTIC will inspect and service your aerobic system once every 4 (four) months for a period of 2 (two) years from the date that this OSSF is first used, at no additional charge to the customer, as required by state guidelines dated June 13, 2001. For a new single-family dwelling, this date is the date of sale by the builder. For an existing single-family dwelling, this date is the date of notice of approval issued by permitting authority.

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

TESTING AND REPORTING

HELOTES LAND & SEPTIC shall test and report on the system as required by rule on the following:

1. An inspection/service call every four months which includes: inspections, adjustment, and servicing of the mechanical and electrical component parts as necessary to ensure proper function.
2. An effluent quality inspection every 4 months, consisting of: visual check for color, turbidity, scum overflow, and an examination for odors.
3. If required, a sample shall be pulled from the aeration tank every 4 months to determine if there is an excess of solids in the treatment plant. If the test results determine a need for solids removal, user will bear the cost and responsibility for doing so.
4. If any improper operation is observed, which cannot be corrected at the time, the user shall be notified immediately, in writing, of the conditions and the estimated date of correction.
5. If necessary, a chlorine residual test will be taken at each visit (BOD and TSS annually on commercial use, only.)

The owner is responsible for keeping chlorine (calcium hypochlorite properly labeled for wastewater disinfection) in the chlorinator, as well as the cost of the chlorine.

David Wood, whom has been certified by the manufacturer of your system, will be responsible for fulfilling the requirements of this maintenance agreement, as well as responding to any complaints and/or addressing any concerns by the owner of the system. Concerns and/or complaints will be addressed within 24 hours of the initial contact. Upon expiration of the service agreement, our firm will offer a continuing service policy as mandated by state regulations.

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

THIS AGREEMENT DOES NOT INCLUDE PUMPING SLUDGE FROM UNIT WHEN NECESSARY.

The service company and the owner agreed to abide by the service policy as stated above.

Maintenance Provider:
Helotes Land and Septic
18690 Bandera Road
Helotes, TX 78023



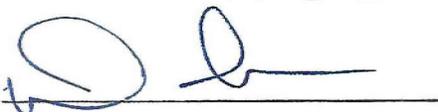
David Wood - License MP0002655

12/26/2024

Date

Customer: ASHTON SAN ANTONIO RESIDENTIAL LLC

Address: HOME SITE: 1108 Blackburnian, NB TX 78132



Date

Date

1/14/24

OSSF Soil & Site Evaluation

12/20/2024

Page 1 (Soil & Site Evaluation)

Date Performed: ____/____/____

Property Owner: ASHTON SAN ANTONIO RESIDENTIAL LLC

Site Location: 1108 BLACKBURNIAN, NEW BRAUNFELS TX 78132 Proposed Excavation Depth: NA

REQUIREMENTS: PROPERTY ID: 472567

At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area. Locations of soil borings 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 disposal field excavation depth. For surface disposal, the surface horizon must be evaluated. Describe each soil horizon and identify any restrictive features on this form. Indicate depths where features appear.

Soil Boring Number: <u>1 - 2</u>					
Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.	IA- ROCK @ 4"	OVER 30%	WELL DRAINED	ROCK	AEROBIC SPRAY
2 FT.					IN EDWARDS AQUIFER RECHARGE ZONE
3 FT.					
4 FT.					
5 FT.					

Soil Boring Number:					
Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.					
2 FT.					
3 FT.					
4 FT.					
5 FT.					

FEATURES OF SITE AREA

- Presence of 100 year flood zone Yes No
- Presence of upper water shed Yes No
- Presence of adjacent ponds, streams, water impoundments Yes No
- Existing or proposed water well in nearby area (within 150 feet) Yes No
- Ground Slope 3-5 %

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


 (Signature of person performing evaluation)

1-16-25
(Date)

OS0036987
Registration Number and Type

Site Location: 1108 BLACKBURNIAN NEW BRAUNFELS TX 78132 Subsurface Disposal Surface Disposal
PROPERTY ID: 472567

Schematic of Lot or Tract

Show:

Compass North, adjacent streets, property lines, property dimensions, location of buildings, easements, swimming pools, water lines, and any other structures where known.

Location of existing or proposed water wells within 150 feet of the property.

Indicate slope or provide contour lines from the structure to the farthest location of the proposed disposal field.

Location of soil boring or excavation pits (show location with respect to a known reference point).

Location of natural, constructed, or proposed drainage ways (ditches, streams, ponds, lakes, rivers, etc.), water impoundment areas, cut or fill bank, sharp slopes and breaks.

Lot Size: _____ or Acreage: 1.07

SITE DRAWING

See Design

Nicholas Kolbe, R.S. 5115
1825 FM 2438
Seguin, Texas 78155
Mobile (830) 708-9065 KolbeLandCo@Gmail.com

OSSF DESIGN

Owner: **ASHTON SAN ANTONIO RESIDENTIAL LLC**
Location: **1108 BLACKBURNIAN, NEW BRAUNFELS TX 78132**
Phone: NA
Date: **1/15/2025**

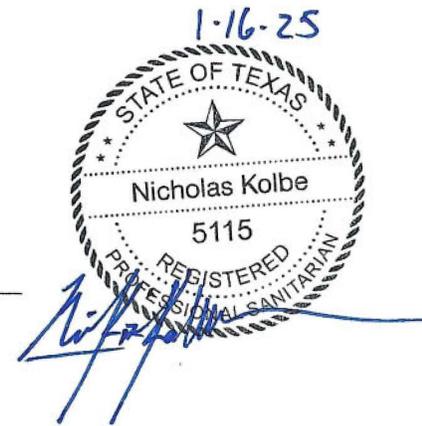
Development: **Residence with water saving devices** Bedrooms: **4** Sq. Ft living: **<4500**
GPD = **360**

Q: **360 gpd** Soil: **Type IA** R_i: **0.064 gall/ft²/day**

Minimum Size Aerobic Treatment Plant Required: **600 GPD**
System Type Designed: **Aerobic/Surface Application (AERIS 600 ATU, D-600-M)**
Trash Tank: 478 gall Aerobic Tank: 461 gpd Pump Tank: 763 gall
Supply Line: **Sch 40, 1" purple (~170')** Check Valve Required: **NO**
Minimum Application Area (A): = **5625 ft²** (A = Q/R_i)

Sprinklers: **K-Rain Super Pro 11003-RCW**

Number	Nozzle	PSI	Pattern	Radius	Area/head	GPM/head	R _i
S1	#4	30	360°	31 ft	3017 ft ²	3.4	0.064
S2	#4	30	180°	31 ft	1508 ft ²	3.4	0.064
S3	#4	30	180°	31 ft	1508 ft ²	3.4	0.064

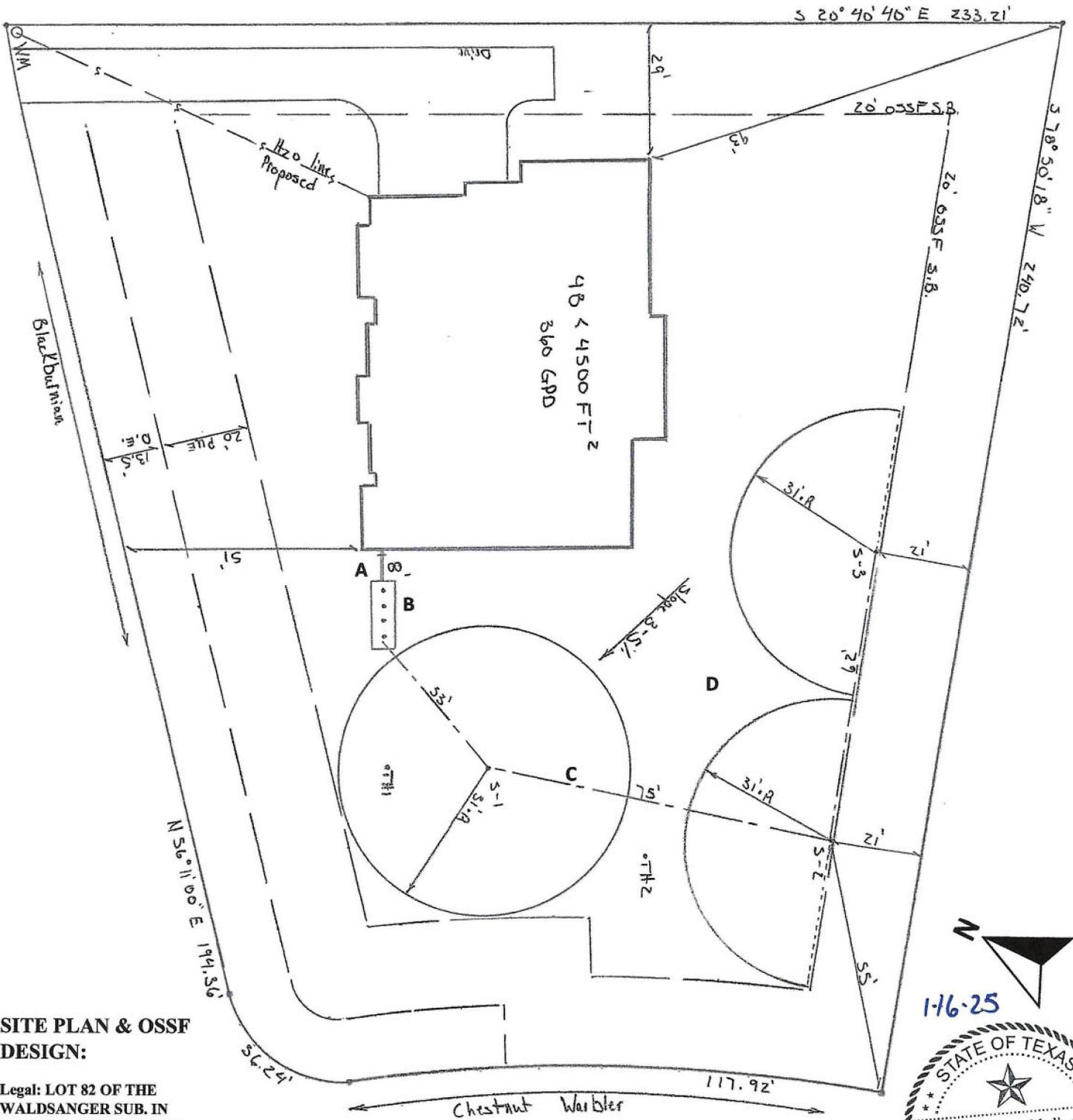


Overlap Area: **0 SQFT** Actual Application Area: **6033 ft²** GPM: **10.2 GPM**

Pump Requirements: **GPM 10.2 @ 85.70ft TDH** Pump Used: **StaRite, 20 GPM ½ HP**

- **Elevation Head = 5ft**
- **Pressure Head = 30 psi x 2.30 = 69ft**
- **Friction Head of 170ft of 1" Sch 40 = 170ft x 0.0688 = 11.70 ft**
- **Total Dynamic Head (TDH) = 5 + 69 + 11.70 = 85.70 (StaRite 20GPM ½ HP)**
- **Timer set to spray between 12:00 AM & 5:00 AM**
- **Liquid chlorinator required**

All design criteria are in accordance with TCEQ, Title 30, TAC Chapter 285, Subchapter D, On-Site Sewage Facilities (Effective December 27, 2012). The above design was based on the best available information and should function properly under normal operating conditions. All changes or modifications made to design must be approved by the below signed designer.



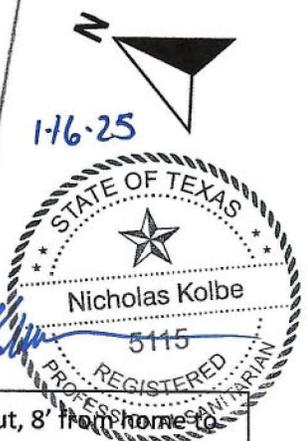
SITE PLAN & OSSF DESIGN:

Legal: LOT 82 OF THE WALDSANGER SUB. IN COMAL COUNTY TEXAS

THIS OSSF DESIGN MEETS THE REQUIREMENTS OUTLINED IN THE CURRENT WPAP #202306024211

INFRASTRUCTURE, OSSF SYSTEM AND HOME DRAWN ARE NOT WITHIN 100 YR FLOOD ZONE. PROPERTY IS IN THE EDWARDS AQUIFER RECHARGE ZONE.

- A** = 3" or 4" SCH 40 PVC with 2way Clean Out, 8' from home to tank.
- B** = 600 GPD ATU (AERIS D-600-M)
- C** = 170' of Purple SCH 40 1" PVC Spray Distribution Line
- D** = Spray distribution area, THREE (3) Number 4 spray distribution heads. S-1 is operating at 31' radius at 360 degrees while S-2 & S-3 are 31' radiuses operating at 180 degrees.



NOTES

1. **Septic Design is to accommodate a 4 bedroom, less than 4500 sqft home with water saving devices. Home to produce No More than 360 GPD Flow. Over-use of 360 GPD may result in System Failure.**
2. Install an Aerobic Treatment Plant (ATU) as noted on the design. ATU is a AERIS MODEL D-600-M AEROBIC TREATMENT UNIT.
3. Install a 2-way cleanout in a 3" or 4" tightline between the house and the tank, slope 1/8in/ft. Tightline shall be 3" or 4" SCH 40 PVC. 8' between home and tank. 2way clean out shall be located no further than 5' from the home.
4. Supply line to sprinklers is purple 1" sch 40, 170'.
5. S-1 through S-3 are K-Rain Proplus low angle sprinklers with #4 nozzles operating @ 30psi with a 31' spray radius. S-1 is operating at 360 degrees while S-2 & S-3 are operating at 180 degrees.
6. There shall be no obstructions within 10' of the sprinkler heads.
7. Audible & visual alarms, external disconnect within site of the pump tank, pump & alarms on separate breakers and external wiring in conduit are required.
8. Timer set to spray between 12:00 AM & 5:00 AM.
9. **The reserve capacity (1/3) of the daily flow for this system is 120 gallons**
10. Liquid chlorinator required.
11. Any excavations and/or exposed rock in the disposal area shall be covered with topsoil and seasonal grasses shall be seeded over the disposal area in order to minimize run-off & erosion. Erosion cloth is acceptable.
12. No part of the septic system absorption field is within 150' of any sensitive recharge feature. No part of the On-Site Sewage Facility treatment tank is within 50' of any sensitive recharge feature.
13. **Potable waterline to be sleeved in sch 40 PVC to 10' of any element of the OSSF system in order to provide the equivalent protection of a 10' separation in compliance with TAC Chapter 290, Subchapter D, Rules for Public Drinking Water Systems.**
14. **Waterline shall not run horizontal with any OSSF tightline or 1" purple SCH 40 Distribution line within 10'**
15. **Septic tank shall stay a minimum of 10' from all potable waterlines or above ground storage tanks.**
16. **Entirety of septic system is to stay within the setbacks and boundary lines of property as noted on design.**
17. **Design and details written and drawn herein were prepared with the best available information provided to the Registered Sanitarian by the landowner and by ground truth/evaluation.**

1-16-25

SITE PLAN & OSSF DESIGN:

Legal: LOT 82 OF THE WALDSANGER SUB. IN COMAL COUNTY TEXAS

ASHTON SAN ANTONIO RESIDENTIAL LLC	
1108 CHESTNUT WARBLER	
NEW BRAUNFELS TX 78132	
Nicholas Kolbe, R.S. #5115	Date: 1/13/2025
1825 FM 2438	Scale: 1"= 70'
Seguin, TX 78155	



Aeris Aerobics Gallon Per Chamber:

Aeris Systems Chambers:	Trash	Aeration	Clarifier	Pump
D-500m	568	371	197	763
D-600m	478	461	197	763
D-750	355	584	197	763
D-840	552	601	205	919
D-1100	807	836	300	
D-1500		1532	388	



June 4, 2015

Matt Dulworth
Aeris Aerobics
5021 SE McKinney
Rice, TX 75155

Re: Calculation of BOD Removal

Dear Matt,

Aeris Aerobics has requested the maximum amount of BOD removed from their units on a daily basis. NSF/ANSI Standard 40 requires the BOD to average 300 mg/day or less. Based on 300 mg/day, the maximum daily load removed by your units is set forth below:

300 mg/L		
Unit	Capacity gpd	lbs/day
D-500	500	1.3
D-600	600	1.5
D-750	750	1.9
D-840	840	2.1
D-890	890	2.2
D-1100	1100	2.8
D-1250	1250	3.1
D-1500	1500	3.8

Should you have any questions in regard to this letter or require additional information, please do not hesitate to contact me.

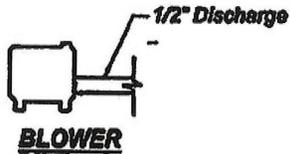
Sincerely yours,

Gulf Coast Testing, Inc.

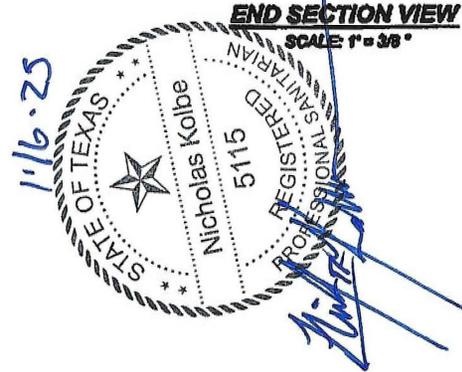
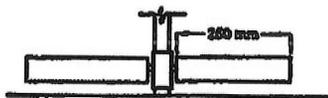
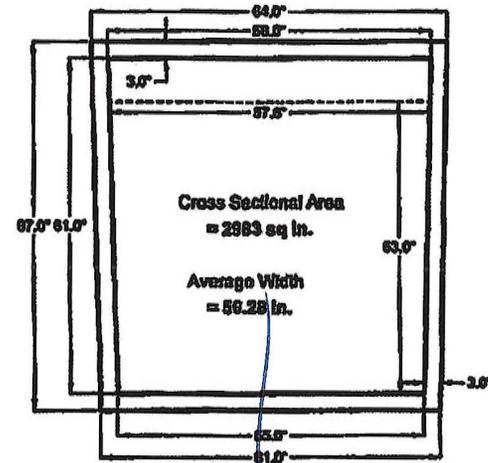
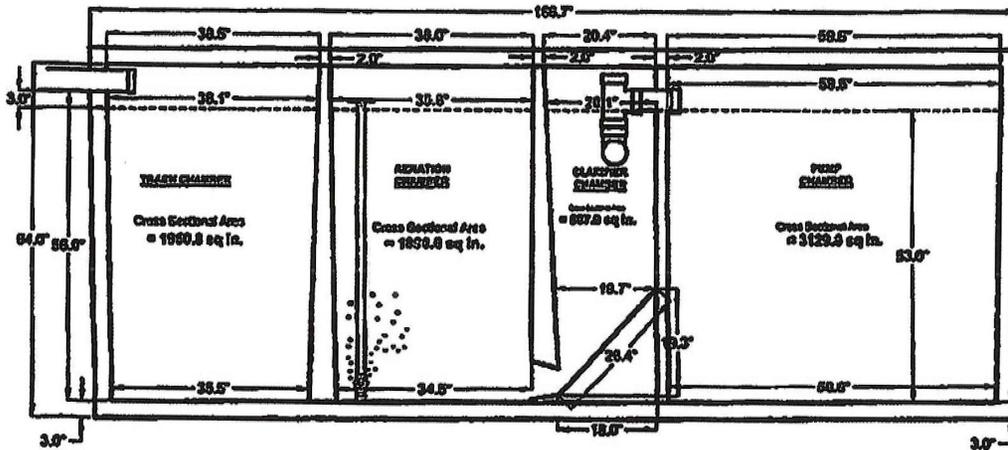
William B. Daniel IV
Program Manager

Correspondence: 2015.06.04.8PE253 Daily Load Calculations

Office/Mailing | 17170 Perkins Road • Baton Rouge, LA 70810
Phone 225.612.1987 • Fax 225.612.1988
Test Site Address | 14578 Park Avenue • Prairieville, LA 70769
william.daniel@gctla.com



Q = TO OR LESS THAN 360 GPD BOTTOM OF TANK TO OUTLET = 53"
 GALLONS PER INCH = 14.39
 BOTTOM OF TANK TO PUMP = 8" = 115.16 GALLONS
 PUMP OFF = 12" = 57.58 GALLONS
 PUMP ON = 18" = 86.34 GALLONS
 HIGH WATER ALARM = 44" = 374.14 GALLONS
 HIGH WATER ALARM TO INLET = 9" = 129.51 GALLONS (NEED 120)



Title: **Model D-600-m**
600 gallon per day Aerobic Treatment Unit

Company Name: **Aeris Aerobics**

Date: **2-22-2015**

STA-RITE® ST.E.P Plus D Series

4" multi-stage submersible effluent pumps



The ST.E.P Plus D Series 4" submersible pump in 10, 20 and 30 GPM models dominate with superior "draw-down" capability.

The ST.E.P Plus D Series 4" submersible pump dominates with reduced amp draw.

The ST.E.P Plus D Series 4" submersible pump dominates with cooler and quieter operation.

APPLICATIONS

Clean and Gray Water... for residential, commercial, and agricultural use.

SPECIFICATIONS

Motor – Available in 115 or 230 volt versions. Dry-wound, double ball-bearing, double-seal and thermal overload protected, UL and CSA approved.

Shell – Stainless steel (300 grade)

Discharge – 1-1/4" Fiberglass-reinforced thermoplastic

Discharge Bearing – Nylatron®

Impellers – Acetel

Diffusers – Polycarbonate

Suction Caps – Polycarbonate with stainless steel wear ring

Thrust Pads – Proprietary spec.

Shaft and Coupling – Stainless steel 300 grade

Intake – Fiberglass-reinforced thermoplastic

Intake Screen – Stainless steel

Jacketed Cord – 600 Volt "SJOW" jacketed 10' leads, 2-wire with ground

Agency Listing – CSA

FEATURES

ST.E.P. Plus DOMINATES with a...

Proven Stage System – The proven SignaSeal staging system utilizes a patented ceramic wear surface. When incorporated with STA-RITE's "true" independent floating impellers, dominates with 1st-in-class performance, superior sand handling, and a thrust management staging system with industry exclusive "dry-run" capabilities.

Superior "draw-down" capability – The ST.E.P. Plus Dominates in this class with the lowest draw-down of 4-1/2" (a standard 4" NEMA submersible only draws-down to 13-1/2").

Reduced amp draw – The ST.E.P. Plus Dominates in this class with less energy consumption – over 25% less amp draw (9.5 amps vs. 12.7 amps, 115 volt) than a 4" NEMA submersible, reducing operating costs and extending the service life of float switch contacts.

Cooler and quieter operation – The ST.E.P. Plus Dominates by using the pumped liquid to cool the motor as it passes over the motor. The water passing over the motor dampens the motor noise, eliminating expensive "flow-inducer sleeves" required when using a standard 4" NEMA submersible.

Impellers – Precision molded for perfect balance... ultra smooth for the highest performance and efficiency. Allows for .080" solids.

Shaft – Positive drive, hexagonal 7/16" – 300-grade stainless steel shaft offers generous impeller drive surfaces.

Shaft bearing – Exclusive self-lubricating Nylatron® bearing resists wear surface from sand and abrasives.

Shell – Corrosion resistant 300-grade stainless steel.

ORDERING INFORMATION

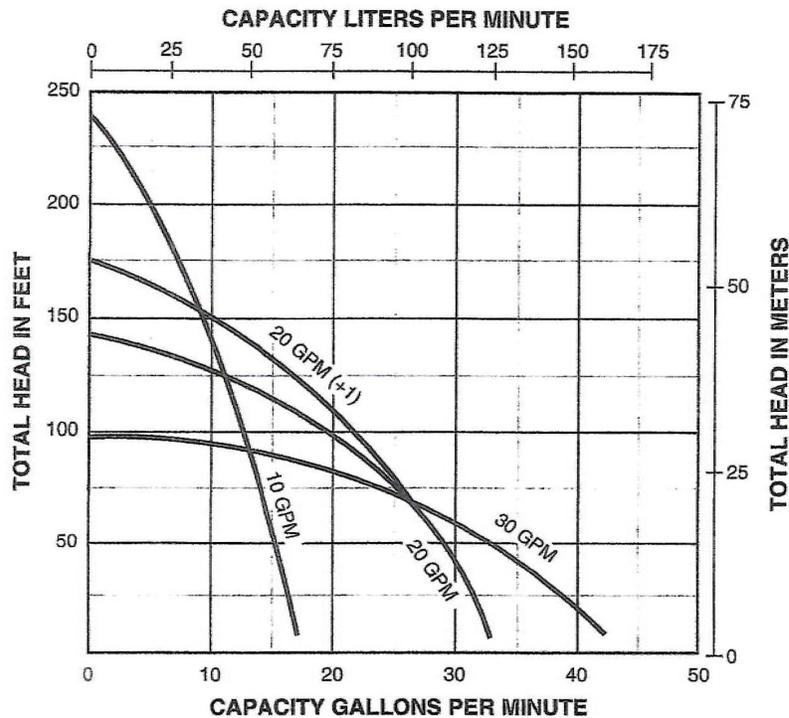
CATALOG NUMBER	HP	MAX. LOAD AMPS	VOLTS	PHASE/ CYCLES	CORD LENGTH	PALLET QUANTITY	WEIGHT (LBS.)
10DOM05221	1/2	5.5	230	1/60	10'	80	16
10DOM05121	1/2	11.0	115	1/60	10'	80	16
20DOM05221	1/2	4.6	230	1/60	10'	80	16
20DOM05121	1/2	9.5	115	1/60	10'	80	16
30DOM05221	1/2	4.6	230	1/60	10'	80	16
30DOM05121	1/2	9.5	115	1/60	10'	80	16
20DOM05221+1	1/2	5.3	230	1/60	10'	80	16
20DOM05121+1	1/2	10.6	115	1/60	10'	80	16

In order to provide the best products possible, specifications are subject to change.

STA-RITE® ST.E.P Plus D Series

4" multi-stage submersible effluent pumps

PUMP PERFORMANCE



PUMP PERFORMANCE (CAPACITY IN GALLONS PER MINUTE)													
PUMP MODEL	FLOW RATE (GPM)	PSI											
		0	10	20	30	40	50	60	70	80	90	100	110
10DOM05221	10			15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0	
10DOM05121	10			15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0	
20DOM05221	20			30.0	26.0	21.5	14.2	4.4					
20DOM05121	20			30.0	26.0	21.5	14.2	4.4					
30DOM05221	30		38.5	33.3	25.8	16							
30DOM05121	30		38.5	33.3	25.8	16							
20DOM05221+1	20 + 1			30	27.5	24	20	13.5	6				
20DOM05121+1	20 + 1			30	27.5	24	20	13.5	6				

PUMP PERFORMANCE (CAPACITY IN LITERS PER MINUTE)													
PUMP MODEL	FLOW RATE (LPM)	BAR											
		.69	1.38	2.07	2.76	3.45	4.13	4.82	5.51	6.20	6.89	7.58	110
10DOM05221	37.85			56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8	
10DOM05121	37.85			56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8	
20DOM05221	75.7			113.6	98.4	81.4	53.7	16.7					
20DOM05121	75.7			113.6	98.4	81.4	53.7	16.7					
30DOM05221	113.55		145.7	126.0	97.7	60.6							
30DOM05121	113.55		145.7	126.0	97.7	60.6							
20DOM05221+1	75.7 + 1			113.4	103.9	90.7	75.6	51.0	22.6				
20DOM05121+1	75.7 + 1			113.4	103.9	90.7	75.6	51.0	22.6				

ProPlus™ Gear Driven Sprinkler Setting Instructions

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

CHANGING A NOZZLE

1 ► REMOVING THE NOZZLE RETENTION SCREW

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

2 ► PULL UP THE RISER

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

3 ► REMOVING THE NOZZLE

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

4 ► INSTALLING A NOZZLE

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

SETTING THE ARC ADJUSTMENT

1 ► FINDING THE LEFT START POSITION

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

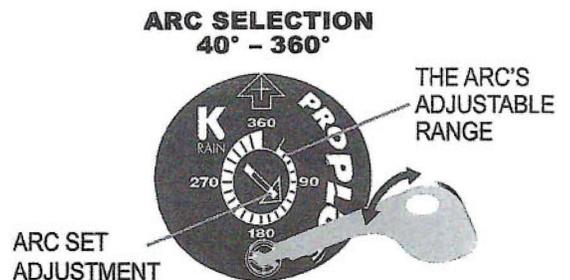
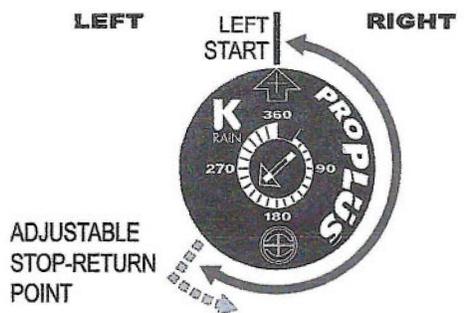
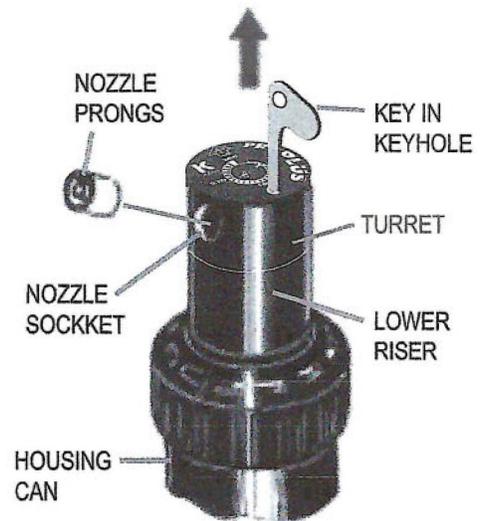
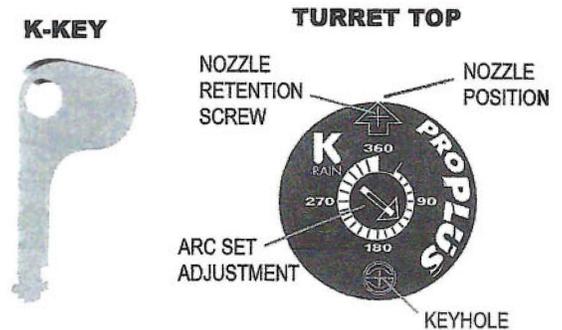
2 ► ORIENTING THE LEFT START POSITION

Insert the K-Key in the keyhole on the top of the nozzle turret and turn the key 1/4 turn to insure that the key does not slip out of the keyhole when you pull it up. Being careful not to allow the nozzle turret to turn, firmly pull up the entire spring-loaded riser. Hold the lower riser assembly up with one hand. Now turn only the lower riser clockwise or counter-clockwise until the nozzle arrow is pointing where you want the sprinkler to begin spraying.

3 ► CHANGING THE ARC

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

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



ProPlus™ Gear Driven Sprinkler Setting Instructions

SPRINKLER INSTALLATION

1 ► INSTALL AND BURY

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

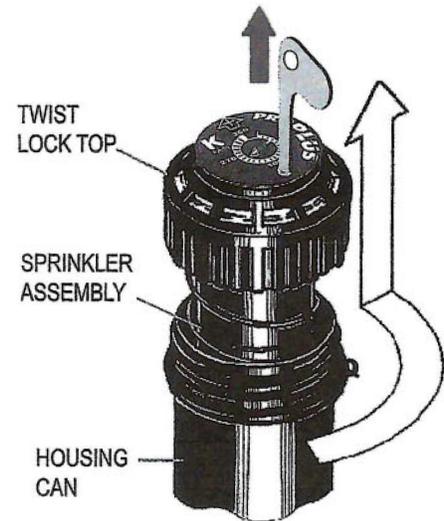
2 ► INSPECTING THE FILTER

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

3 ► WINTERIZATION TIPS

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

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



PERFORMANCE DATA

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

LOW ANGLE PERFORMANCE DATA

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

*All precipitation rates calculated for 180° operation.
For the precipitation rate for a 360° sprinkler, divide by 2.



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

© K-RAIN Manufacturing Corp.
Part Number: 1100519 Rev. 01



ITT

GOULDS PUMPS
Residential Water Systems

Friction Loss

SCH 40 – PLASTIC PIPE: FRICTION LOSS (IN FEET OF HEAD) PER 100 FT.

GPM	GPH	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"
		ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.
1	60	4.25	1.38	.356	.11									
2	120	15.13	4.83	1.21	.38	.10								
3	180	31.97	9.96	2.51	.77	.21	.10							
4	240	54.97	17.07	4.21	1.30	.35	.16							
5	300	84.41	25.76	6.33	1.92	.51	.24							
6	360		36.34	8.83	2.69	.71	.33	.10						
8	480		63.71	15.18	4.58	1.19	.55	.17						
10	600		97.52	25.98	6.88	1.78	.83	.25	.11					
15	900			49.68	14.63	3.75	1.74	.52	.22					
20	1,200			86.94	25.07	6.39	2.94	.86	.36	.13				
25	1,500				38.41	9.71	4.44	1.29	.54	.19				
30	1,800					13.62	6.26	1.81	.75	.26				
35	2,100					18.17	8.37	2.42	1.00	.35	.09			
40	2,400					23.55	10.70	3.11	1.28	.44	.12			
45	2,700					29.44	13.46	3.84	1.54	.55	.15			
50	3,000						16.45	4.67	1.93	.66	.17			
60	3,600						23.48	6.60	2.71	.93	.25			
70	4,200							8.83	3.66	1.24	.33			
80	4,800							11.43	4.67	1.58	.41			
90	5,400							14.26	5.82	1.98	.52			
100	6,000								7.11	2.42	.63	.08		
125	7,500								10.83	3.80	.95	.13		
150	9,000									5.15	1.33	.18		
175	10,500									6.90	1.78	.23		
200	12,000									8.90	2.27	.30		
250	15,000										3.36	.45	.12	
300	18,000										4.85	.63	.17	
350	21,000										6.53	.84	.22	
400	24,000											1.08	.28	
500	30,000											1.66	.42	.14
550	33,000											1.98	.50	.16
600	36,000											2.35	.59	.19
700	42,000												.79	.26
800	48,000												1.02	.33
900	54,000												1.27	.41
950	57,000													.46
1000	60,000													.50

NOTE: See page 5 for website addresses for pipe manufacturers – there are many types of new plastic pipe available now.

THIS DRAWING IS FOR ILLUSTRATION PURPOSES ONLY. IT DOES NOT REPRESENT A BOUNDARY OR PROPERTY SURVEY. THE LICENSED SURVEYOR IS TO VERIFY THAT ALL INFORMATION CONTAINED HEREIN IS ACCURATE PRIOR TO PLACING HOUSE PINS.

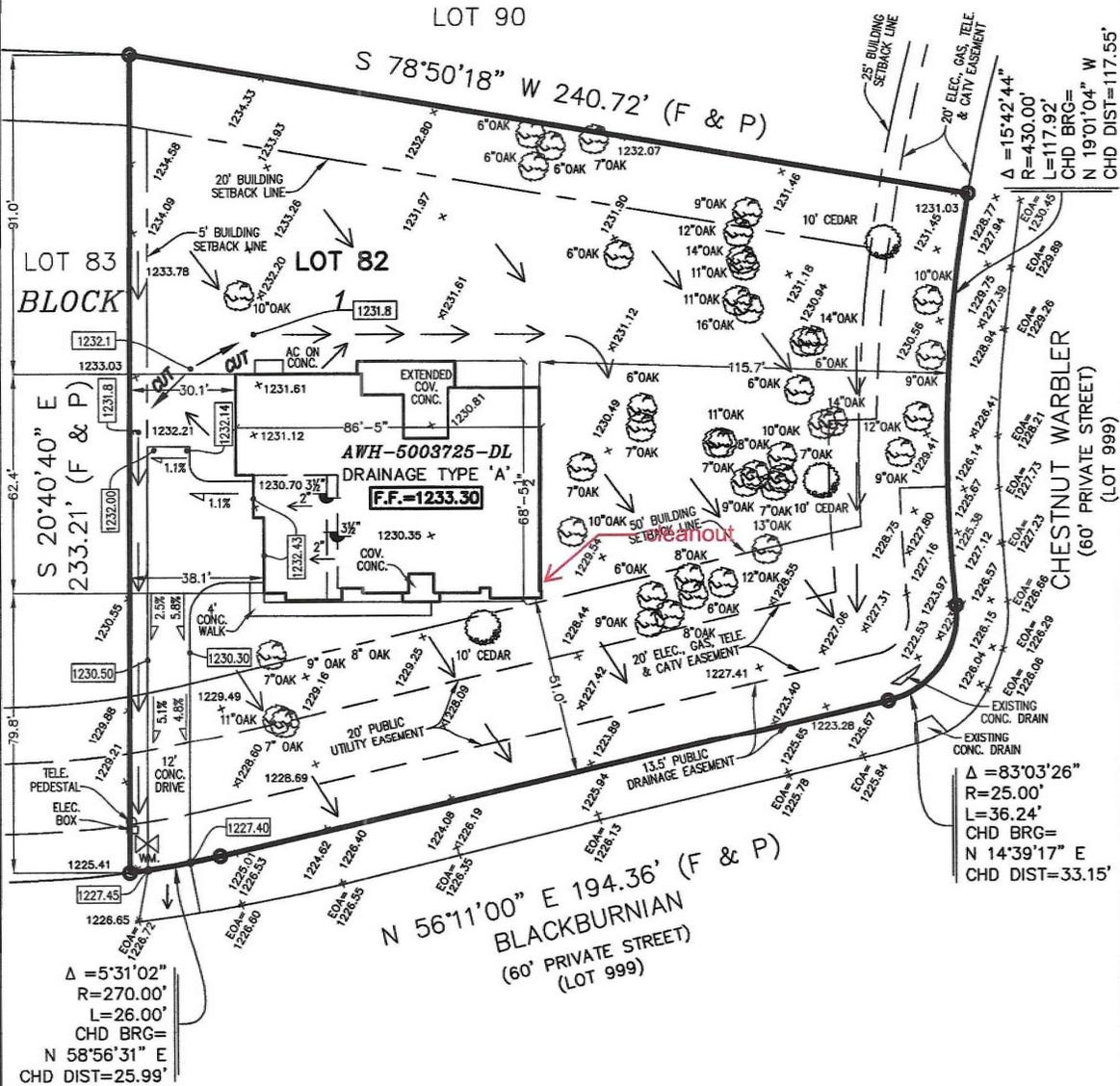
Provide positive drainage away from slab perimeter. The slab surface shall be a minimum of 8 inches above the surrounding outside finished grade. The ground should be sloped down a minimum of 6" in the first five feet and any resulting swale shall have a minimum slope of 1.0%.

NOTE: UTILITIES WILL POSSESS A 6' WIDE SERVICE EASEMENT TO THE DWELLING ALONG THE SERVICE LINE TO THE SERVICE ENTRANCE. THIS EASEMENT WILL VARY DEPENDING UPON LOCATION OF DWELLING AND SERVICE.

PRIVATE STREETS ARE ALSO ACCESS, DRAINAGE AND PUBLIC UTILITIES EASEMENTS

- LEGEND:
- = SHEET FLOW
 - ▲— = DRAINAGE SWALE
 - 100.0 = EXISTING ELEVATION
 - 100.0 = FINISHED ELEVATION
 - T.O.C. = TOP OF CURB
 - GUT. = GUTTER
 - FF = FINISHED FLOOR
 - ∥ = WOOD FENCE
 - COV. = COVERED
 - CONC. = CONCRETE
 - TELE. = TELEPHONE
 - ELEC. = ELECTRIC
 - CATV = CABLE TELEVISION
 - AC = AIR CONDITIONER
 - (F) = FIELD BEARING
 - (P) = PLAT BEARING
 - Δ = DELTA ANGLE
 - CHD BRG = CHORD BEARING
 - CHD DIST = CHORD DISTANCE

NORTH
SCALE: 1" = 40'



DOCUMENT NUMBER: 202306035765, PLAT RECORDS

AREAS	
FLATWORK	2,300 SQ. FT.
APPROACH	212 SQ. FT.
TOTAL	2,512 SQ. FT.
FRONT SOD	2,711 SQ. YD.
REAR SOD	1,919 SQ. YD.
SLAB AREA	5,201 SQ. FT.
LOT AREA	43,691 SQ. FT.

SITE PLAN OF
1108 BLACKBURNIAN
LOT 82 BLOCK 1
WALDSANGER
SUBDIVISION
COMAL COUNTY, TEXAS

DRAWN BY: H.B. DATE: 11/4/2024 REVISED: 12/3/2024



SINCLAIR LAND
SURVEYING, INC.

3411 MAGIC DRIVE
SAN ANTONIO, TEXAS 78229
210-341-4518
TBPELS FIRM NO.10089000
JOB NUMBER: S-202475291

Property Details

Account

Property ID: 472567 **Geographic ID:** 560191003500
Type: R **Zoning:**

Property Use:

Location

Situs Address: 1108 BLACKBURNIAN NEW BRAUNFELS, TX 78132

Map ID: 5G **Mapsco:**

Legal Description: WALDSANGER, LOT 82

Abstract/Subdivision: 560191

Neighborhood: (420D201) WALDSANGER

Owner

Owner ID: 993171

Name: ASHTON SAN ANTONIO RESIDENTIAL LLC

Agent: 928062

Mailing Address: 17319 SAN PEDRO AVE STE 140
SAN ANTONIO, TX 78232-1412

% Ownership: 100.0%

Exemptions: For privacy reasons not all exemptions are shown online.

Property Values

Improvement Homesite Value: N/A (+)

Improvement Non-Homesite Value: N/A (+)

Land Homesite Value: N/A (+)

Land Non-Homesite Value: N/A (+)

Agricultural Market Valuation: N/A (+)

Market Value: N/A (=)

Agricultural Value Loss: ? N/A (-)

HS Cap Loss: ? N/A (-)

Circuit Breaker: ? N/A (-)

Appraised Value: N/A

Ag Use Value: N/A

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: ASHTON SAN ANTONIO RESIDENTIAL LLC

Entity	Description	Market Value	Taxable Value
046	COMAL COUNTY	N/A	N/A
046LR	COMAL COUNTY LATERAL ROAD	N/A	N/A
EDW	Edwards Water	N/A	N/A
SCIS	COMAL ISD	N/A	N/A
ES1	(ESD1) COMAL COUNTY EMERGENCY SERVICES DISTRICT NO. 1 (EMS)	N/A	N/A
CAD	CAD	N/A	N/A
ZZZ	Credit	N/A	N/A
ES4	(ESD4) COMAL COUNTY EMERGENCY SERVICES DISTRICT NO. 4 (FIRE)	N/A	N/A

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.

SPECIAL WARRANTY DEED

Filed By:
Texas Investors Title
116 W Blanco Rd., Ste 101
Boerne, TX 78006

THE STATE OF TEXAS

§
§
§

COUNTY OF COMAL

GF# 20210338D

CW-BIGBEE, LLC, a Texas limited liability company ("Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration to Grantor, in hand paid by ASHTON SAN ANTONIO RESIDENTIAL, L.L.C., a Texas limited liability company ("Grantee"), whose mailing address is 17319 San Pedro, Ste. 140, San Antonio, Texas 78232, the receipt and sufficiency of which are hereby acknowledged by Grantor, has GRANTED, SOLD, AND CONVEYED and, by these presents, does GRANT, SELL, AND CONVEY unto Grantee, subject to all of the reservations, exceptions, and other matters set forth or referred to herein, the following described real property, together with all improvements thereon, if any, and all appurtenances pertaining thereto, including but not limited to, all right, title, and interest of Grantor in and to adjacent streets, easements, and rights-of-way; strips and gores; rights of ingress and egress thereto; all permits, approvals, privileges, and entitlements appurtenant thereto; and utility capacities, including prepaid impact fees, associated therewith (collectively, the "Property"), to-wit:

The real property described on Exhibit "A" attached hereto and incorporated herein for all purposes.

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging unto Grantee, and Grantee's successors or assigns, forever; and, subject to all of the matters set forth or referred to herein, Grantor does hereby bind itself and its successors to WARRANT AND FOREVER DEFEND all and singular the Property unto Grantee, Grantee's successors and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof, by, through, or under Grantor, but not otherwise; provided, however, that this conveyance is made by Grantor and accepted by Grantee subject to (a) the validly existing and enforceable rights, interests, and estates of third parties in connection with the items described in Exhibit "B" attached hereto and made part hereof for all purposes; and (b) all liens securing the payment of taxes or assessments for the current and all subsequent years, except for any taxes or other assessments based on change in use or ownership, including, without limitation, rollback taxes, which remain the obligation of Grantor.

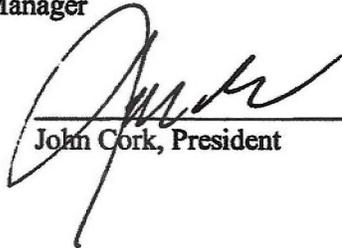
Ad valorem taxes with respect to the Property for the current year have been prorated as of the date hereof.

EXECUTED AND DELIVERED to be effective ~~April 11~~ ^{June 6}, 2024.

GRANTOR:

CW-BIGBEE, LLC,
a Texas limited liability company

By: **CW-Trophy, LLC,**
a Texas limited liability company,
its Manager

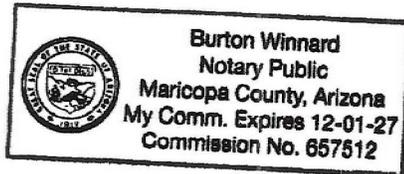
By: 

John Cork, President

STATE OF ARIZONA §
 §
COUNTY OF MARICOPA §

This instrument was acknowledged before me on the 3rd day of JUNE, 2024, by John Cork, President of CW-TROPHY, LLC, a Texas limited liability company and the Manager of CW-BIGBEE, LLC, a Texas limited liability company, on behalf of said entities.

(seal)





Notary Public, State of ARIZONA

EXHIBIT "A"

LEGAL DESCRIPTION OF REAL PROPERTY

Lots 27, 32, 33, 77, 82, 86, 87, 88, 100 and 117, WALDSANGER, a subdivision in Comal County, Texas, according to the plat thereof recorded under Document No. 202306035765, Official Public Records of Comal County, Texas.

EXHIBIT "B"

LIST OF PERMITTED EXCEPTIONS

1. Building setback lines, easements and other matters as set out and/or created as shown on the Plat recorded under Document No. 202306035765, Official Public Records of Comal County, Texas.
2. Terms, conditions, stipulations, easements and assessments contained in Declaration of Covenants, Conditions and Restrictions for Waldsanger, recorded under Document No. 202306035766, as amended and restated under Document No. 202406001603, and as amended under Document No. 202406012335, all of the Official Public Records of Comal County, Texas.
3. Terms, conditions, stipulations and provisions contained in Maintenance Agreement dated November 9, 2023, recorded on November 9, 2023, under Document No. 202306035768, Official Public Records of Comal County, Texas.

**Filed and Recorded
Official Public Records
Bobbie Koeppe, County Clerk
Comal County, Texas
06/06/2024 10:30:00 AM
LAURA 4 Pages(s)
202406017042**



Bobbie Koeppe