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: 118746

Issued This Date: 07/03/2025

This permit is hereby given to: JOSE & KRISTIE BERNAL

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

34853 THANKSGIVING TRL
BULVERDE, TX 78163

Subdivision: BELLE OAKS RANCH PHASE II
Unit: 2
Lot: 21
Block: 4
Acreage: 1.0800

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 1:06 pm, Jun 11, 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 4/16/2025 Permit Number 118746

1. APPLICANT / AGENT INFORMATION

Owner Name	JOSE & KRISTIE BERNAL	Agent Name	Nicholas Kolbe
Mailing Address	131 DOVE CREEK DR.	Agent Address	1825 FM 2438
City, State, Zip	COLDSPRING, TEXAS 77331	City, State, Zip	SeguinTX 78155
Phone #	210-325-0023	Phone #	830-708-9065
Email	Kristie Bernal3xyz@Gmail.com	Email	KolbeLandCo@Gmail.com

2. LOCATION

Subdivision Name BELLE OAKS RANCH PHASE II Unit ____ Lot 21 Block 4

Survey Name / Abstract Number ____ Acreage 1.08

Address 34853 THANKSGIVING TRAIL City BULVERDE State TX Zip 78163

3. TYPE OF DEVELOPMENT

☒ Single Family Residential

Type of Construction (House, Mobile, RV, Etc.) SINGLE FAMILY HOME

Number of Bedrooms 5

Indicate Sq Ft of Living Area <4500

☐ 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: $ 750,000.00 (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.

Kristie Bernal Jose Bernal 4-22-2025 4-20-2025

Signature of Owner Date

Revised January 2021

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 Nicholas Kolbe

System Description Aerobic Treatment with SPRAY IRRIGATION

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: BULVERDE

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

Date 6.11.25

AFFIDAVIT TO THE PUBLIC

202506017680 06/10/2025 03:57:02 PM 1/2

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

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):

LOT 21, BLOCK 4, BELLE OAKS RANCH, PHASE II, A SUBDIVISION IN COMAL COUNTY TEXAS

The property is owned by (insert owner's full name): JOSE BERNAL & KRISTIE BERNAL

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 22nd DAY OF April, 2025

Jose Bernal

Kristie Bernall

Owner(s) signature(s)

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS 22nd DAY OF April 2025

Notary Public, State of Texas

CRYSTAL LYNN ACKER
My Notary ID # 129822600
Expires September 7, 2026

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 Koepp, County Clerk
Comal County, Texas
06/10/2025 03:57:02 PM
PRISCILLA 2 Page(s)
202506017680

Bobbie Koepp

Bulldog Septic Services
5361 Gin Rd, Marion Tx 78124
Tel.: (830) 583-7867

Permit# _____

Regulatory Agency Comal

COMMERCIAL INSPECTION & MAINTENANCE AGREEMENT

Regular and continuing Maintenance is the single most important key to the long-term safe and successful operation of surface application systems utilizing aerobic treatment plants. The **OWNER** of an aerobic wastewater treatment system is a **VITAL KEY** to its success or failure and thereby they must accept their responsibilities of its upkeep and maintenance. Bulldog Septic Services hereby enters this maintenance contract to assist the Owner in keeping his/her aerobic system operating properly and safely; and, to keep the owner in compliance with the Texas Commission on Environmental Quality (TCEQ) regulations. (Title 30 Texas Administrative Code, Chapter 285)

INSPECTION OF ITEMS: Items to be inspected include aerators, alarms, chlorine supply and disinfection system, diffusers, distribution systems, drip emitters, sludge volume, chlorine residual, electrical circuitry, filters and pumps.

FREQUENCY OF MAINENANCE INSPECTION: Bulldog Septic Services will perform maintenance inspections to the owner's aerobic wastewater treatment system three (3) times a year at approximately four (4) month intervals. On each report the owner receives, it will indicate when their next schedule maintenance inspection will occur.

REPORTS: A report will be generated during each visit with one (1) copy submitted to the required regulatory agency, one (1) copy sent to the owner of the system and the original maintained in our files. The report will indicate the date the inspection was performed, owners name and address, the items inspected, sampling test results for Chlorine Residual, comments, recommendations, and/or repairs performed.

SAMPLING: A Chlorine Residual sample will be conducted during each maintenance inspection visit. Results will be recorded on each report. For commercial systems only, each year, one (1) Biological Oxygen Demand (BOD) and one (1) Total Suspended Solids (TSS) sample will be taken for laboratory analysis. The owner is responsible for the laboratory cost for these tests. The test results will be submitted to the required regulatory agency.

REPAIRS: The owner of the aerobic wastewater treatment system is responsible for any cost associated with the repair or replacement of the system's components. Any repairs and/or replacement costs will be discussed with and accepted by the owner prior to any work performed by Bulldog Septic Services. Bulldog Septic Services will respond to non-scheduled services within 24 hours. There is additional fee for non-scheduled visits and/or service calls.

FEES: The cost of a maintenance agreement for the system listed below is: $ 500 and is valid for Two year(s). Payment is due at the time of contract signing. Failure to make payment within ten (10) days of date of the contract constitutes a breach of contract, and the appropriate regulatory agency will be notified of the cancellation of the contract. This maintenance agreement does not cover the cost of customer-requested service calls, materials or labor that are due to system or component failure. Non-scheduled visits and/or service calls requested by the owner will be at an additional charge. **Invoices are due upon completion of the work performed and/or receipt of invoices.**

OWNER'S RESPONSIBILITIES:

- The owner of the Aerobic Treatment Unit must maintain sufficient chlorine (tablets or liquid) in the disinfection system at all times.
- The owner must maintain an area free of overgrowth or vegetation around the Aerobic Treatment Unit and sprinklers.
- Make your property accessible (gate unlocked or key/combination provided), and dogs restrained during each visit.
- The owner must follow the manufacturer's recommendations for the system's proper operation, including restricting the disposal of non-biodegradable material, chemicals, solvents, thinners, fuels, grease, oils, etc. that can effect the systems performance and/or pollute the environment.
- The owner must have their system repaired or components replaced immediately by a Certified Provider as needed.
- The owner must have their Aerobic Treatment Unit pumped out by a licensed waste hauler when their system exceeds 65% sludge volume.
- Bulldog Septic Services will advise you when this is necessary by conducting a free annual 30 minute settleometer test.
- The owner should keep fire ants away from the Aerobic Treatment unit and its components. Any damage caused by fire ants is not covered under any warranty. Bulldog Septic Services reserves the right to refuse service to systems infested by fire ants. A Travel charge shall be made for return visits, due to fire ant infestation or animals not restrained.

This contract is valid from: License to Operate through 2 years from License to Operate

Manufacturer: Aeris Model: 600-GPD Serial Number: _____

Owner's Name: Jose & Kristie Bernal Site Address: 34853 Thanksgiving Trail

Mailing Address: 34853 Thanksgiving Trail, Bulverde, TX 78163

Telephone: _____ Cell Phone: 210-325-0023 Work Phone: _____

Email: Kristiebernal3xys@gmail.com Call or Text Before Each Visit? ____ Yes ____ No Gate Code: _____

Signature of Owner	Date	Scott Platt, MP	MP2739 TCEQ License
	June 10, 2025		

OSSF Soil & Site Evaluation

Page 1 (Soil & Site Evaluation) **Date Performed:** 5/27/2025

Property Owner: JOSE & KRISTIE BERNAL

Site Location: 34853 THANKSGIVING TRAIL, BULVERDE TX 78163 Proposed Excavation Depth: NA

REQUIREMENTS:

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: 1 - 2

Depth (Feet)	Texture Class	Gravel Analysis (If Applicable)	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
1 FT.	IV-BLACK				AEROBIC SPRAY
2 FT.	silty CLAY 0-6"				
3 FT.	ROCK AT 6"	GREATER THAN 30%	WELL DRAINED	ROCK	
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 8 %

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) 6/11/2025 (Date) OS0036987 Registration Number and Type

Form # PA3/2-2004-Revised-Final

Page 2 (Soil & Site Evaluation):

Date Performed: 5/27/2025

Site Location: 34853 THANKSGIVING TRAIL, BULVERDE TX 78163 ☐ Subsurface Disposal ☒ Surface Disposal

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: LOT 21, BLK 4 BELLE OAKS RANCH PHASE II

SITE DRAWING

See Design

Form # PA4/2-2004-Revised-Final

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

OSSF DESIGN

Owner: **JOSE & KRISTIE BERNAL**
Location: **34853 THANKSGIVING TRAIL, BULVERDE TX 78163**
Phone:
Date: **4/16/2025**

Development: **Residence with water saving devices** Bedrooms: **5** 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 D600M)**
Trash Tank: 478 gall Aerobic Tank: 461 gpd Pump Tank: 763 gall
Supply Line: **Sch 40, 1" purple (~267')** Check Valve Required: **NO**
Minimum Application Area (A): **= 5625 ft²** ($A = Q/R_i$)

STATE OF TEXAS
Nicholas Kolbe
5115
REGISTERED
PROFESSIONAL SANITARIAN
6·11·25

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

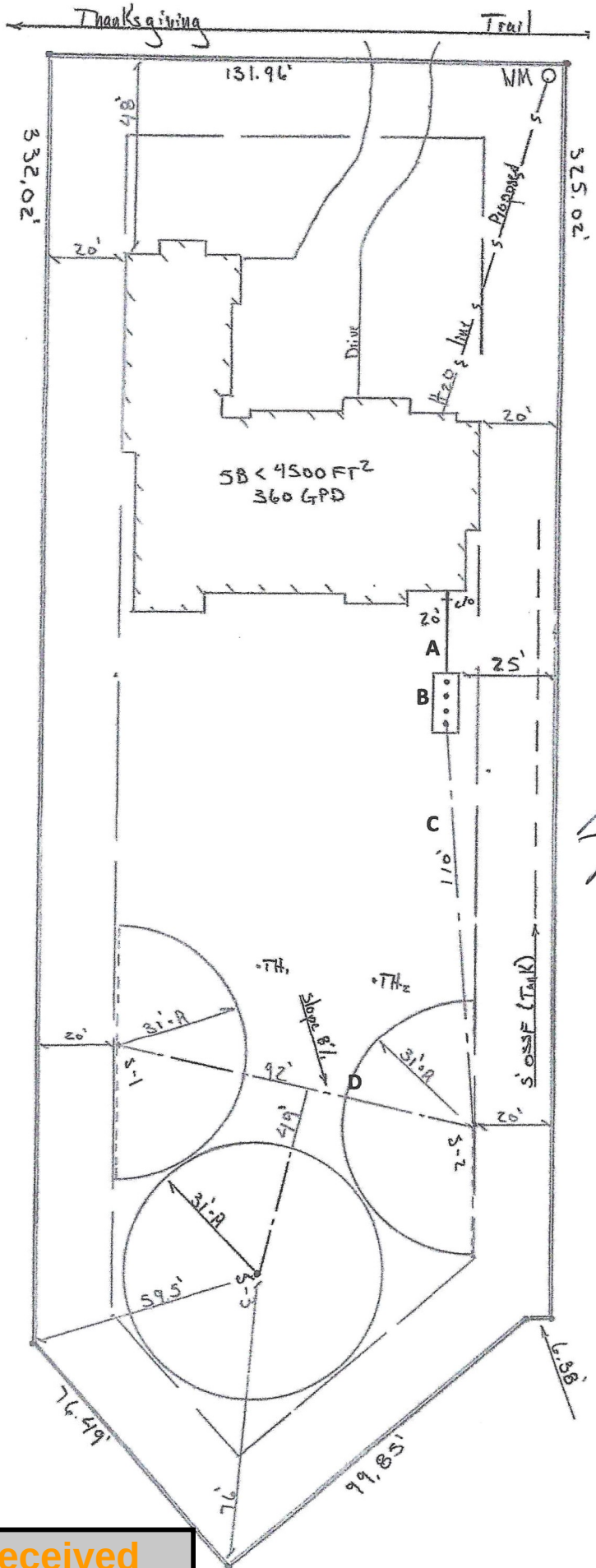
Number	Nozzle	PSI	Pattern	Radius	Area/head	GPM/head	R_i
S1	**#4**	**30**	**180°**	**31 ft**	**1508 ft²**	**3.4**	**0.064**
S2	**#4**	**30**	**180°**	**31 ft**	**1508 ft²**	**3.4**	**0.064**
S3	**#4**	**30**	**360°**	**31 ft**	**3017 ft²**	**3.4**	**0.064**

Overlap Area: **NONE** Actual Application Area: **6033 ft²** GPM: **10.2 GPM**

Pump Requirements: **GPM 10.2 @ 92.37ft TDH** Pump Used: **StaRite, 20 GPM ½ HP**

- **Elevation Head = 5ft**
- **Pressure Head = 30 psi x 2.30 = 69ft**
- **Friction Head of 267ft of 1" Sch 40 = 267ft x 0.0688 = 18.37ft**
- **Total Dynamic Head (TDH) = 5 + 69 + 18.37= 92.37 (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.



N

A = 3" or 4" SCH 40 PVC with 2way Clean Out, 20' from home to tank.

B = 600 GPD ATU (Aeris D-600-M)

C = 267' of Purple SCH 40 1" PVC Spray Distribution Line

D = Spray distribution area, THREE (3) Number 4 spray distribution heads. S-1 & S-2 operating at 180 degrees each, S-3 operating at 360 degrees, all at 3.4 Gallons Per minute flow, 31' radius.

8-26-25

STATE OF TEXAS
Nicholas Kolbe
5115
REGISTERED
PROFESSIONAL SANITARIAN

THIS OSSF DESIGN MEETS THE REQUIREMENTS OUTLINED IN THE CONTRIBUTION ZONE PLAN (CZP) FOR BELLE OAKS RANCH SUBIDIVION IN COMAL COUNTY TEXAS.

JOSE & KRISTIE BERNAL **34853 THANKSGIVING TRAIL** **BULVERDE TX 78163**	
Nicholas Kolbe, R.S. #5115 1825 FM 2438 Seguin, TX 78155	Date: 4/16/2025 Scale: 1"= 70'

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

SITE PLAN & OSSF DESIGN:

Legal: LOT 21, BLOCK 4, BELLE OAKS RANCH PHASE II

Received
Brandon Mark Olvera
11/14/2025 11:00:45 AM

Received
Brandon Mark Olvera
11/14/2025 11:01:10 AM

NOTES

1. ***Septic Design is to accommodate a 5 bedroom, less than 4500 sqft home with 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 600 Aerobic Treatment Unit (Aeris D-600-M), a 600 gpd atu.
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. 20' between home and tank. 2way clean out shall be located no further than 5' from the home. Tank to be placed no closer than 5' to the edge of the home.
4. ***** THE INSTALLERS, AT THEIR DISCRETION, HAVE THE AVAILABILTY TO ROTATE TANK (TURN 90 DEGREES, TURN 180 DEGREES, ETC.) AT IT CURRENTLY DESIGNED LOCATION TO FIT IT APPROPRIATELY ON THE PROPERTY AS LONG AS THE TANK STAYS WITHIN THE SETBACKS OF THE PROPERTY LINES AND DOES NOT CHANGE ITS LOCATION (BACK RIGHT CORNER OF HOME)*****
5. Supply line to sprinklers is purple 1" sch 40, 267'.
6. S1-S3 are K-Rain Proplus low angle sprinklers with #4 nozzles operating @ 30psi, 31' radius. S-1 & S-2 are operating at 180 degrees and S-3 is operating at 360 degrees, all are operating at 3.4 gallons a minute flow, total of 10.2 gallons per minute.
7. There shall be no obstructions within 10' of the sprinkler heads.
8. Audible & visual alarms, external disconnect within site of the pump tank, pump & alarms on separate breakers and external wiring in conduit are required.
9. Timer set to spray between 12:00 AM & 5:00 AM.
10. ***The reserve capacity (1/3) of the daily flow for this system is 120 gallons***
11. Liquid chlorinator required.
12. Any excavations and/or exposed rock in the disposal area shall be covered with topsoil and seasonal grasses shall be seeded over the disposal rea in order to minimize run-off & erosion. Erosion cloth is acceptable.
13. 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.
14. ***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.***
15. ***Waterline shall not run horizonal with any OSSF tightline or 1" purple SCH 40 Distribution line within 10'***
16. ***Septic tank shall stay a minimum of 10' from all potable waterlines or above ground storage tanks.***
17. ***Entirety of septic system is to stay within the setbacks and boundary lines of property as noted on design.***
18. ***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.***

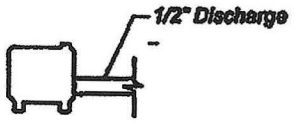
STATE OF TEXAS
Nicholas Kolbe
5115
REGISTERED
PROFESSIONAL SANITARIAN

8-26-25

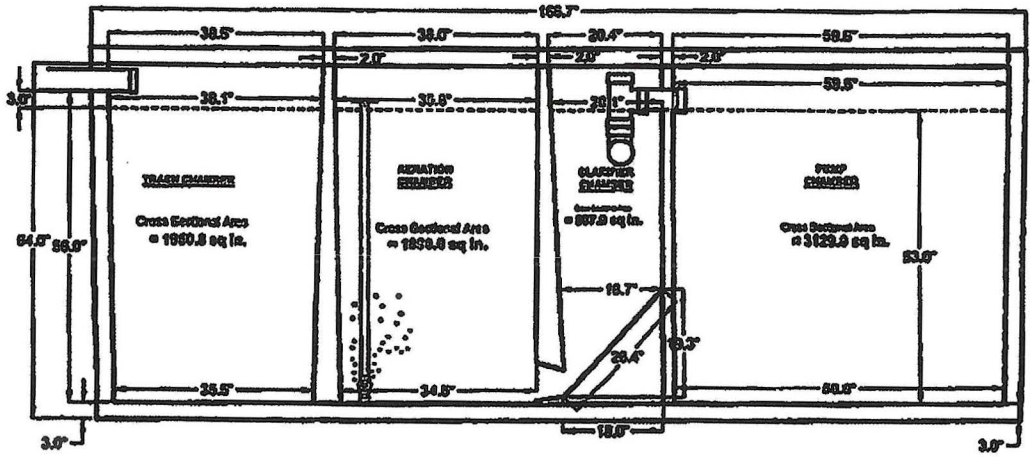
SITE PLAN & OSSF DESIGN:

Legal: LOT 21, BLOCK 4, BELLE OAKS RANCH PHASE II

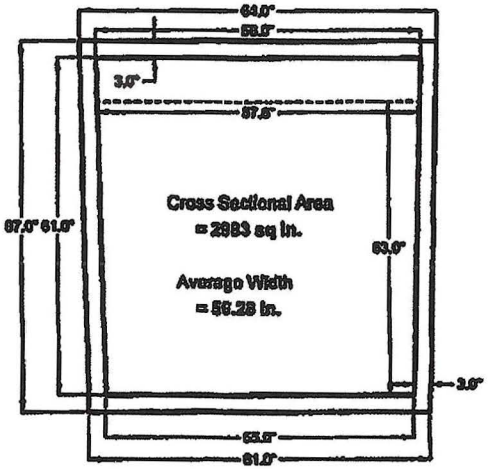
JOSE & KRISTIE BERNAL **34853 THANKSGIVING TRAIL** **BULVERDE TX 78163**	
Nicholas Kolbe, R.S. #5115 1825 FM 2438 Seguin, TX 78155	Date: 4/16/2025 Scale: 1"= 70'



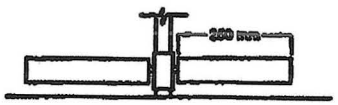
BLOWER



SIDE SECTION VIEW
SCALE: 1" = 3/8"



END SECTION VIEW
SCALE: 1" = 3/8"



DIFFUSER DETAIL
2 - 250 mm
Max flow per diffuser
= 55 liters/minute

TOTAL GALLONS PER DAY USE IS EQUAL TO OR LESS THAN 360
53" = 763 GALLONS = 14.39 GALLONS PER INCH

PUMP OFF = 8" = 115.12 GALLONS
PUMP ON = 16" = 115.12 GALLONS
HIGH WATER ALARM = 42" = 374.14 GALLONS
RESERVE AREA = BOTTOM OF INLET (53") TO HIGH WATER ALARM (42")
11" = 158.29 GALLONS (NEED 120 MINIMUM).

STATE OF TEXAS
Nicholas Kolbe
5115
REGISTERED
PROFESSIONAL SANITARIAN

6-11-25

Title:	Company Name:	Date:
Model D-600-m 600 gallon per day Aerobic Treatment Unit	Aeris Aerobics	2-22-2015

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Aeris Aerobics
Septics for a Greener Tomorrow

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	

GULF COAST TESTING, LLC

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.SPE253 Daily Load Calculations

Office/Mailing | 17170 Perkins Road • Baton Rouge, LA 70810
Phone 225.612.1987 • Fax 225.612.1988
Test Site Address | 14378 Park Avenue • Prairieville, LA 70769
william.daniel@gctla.com

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

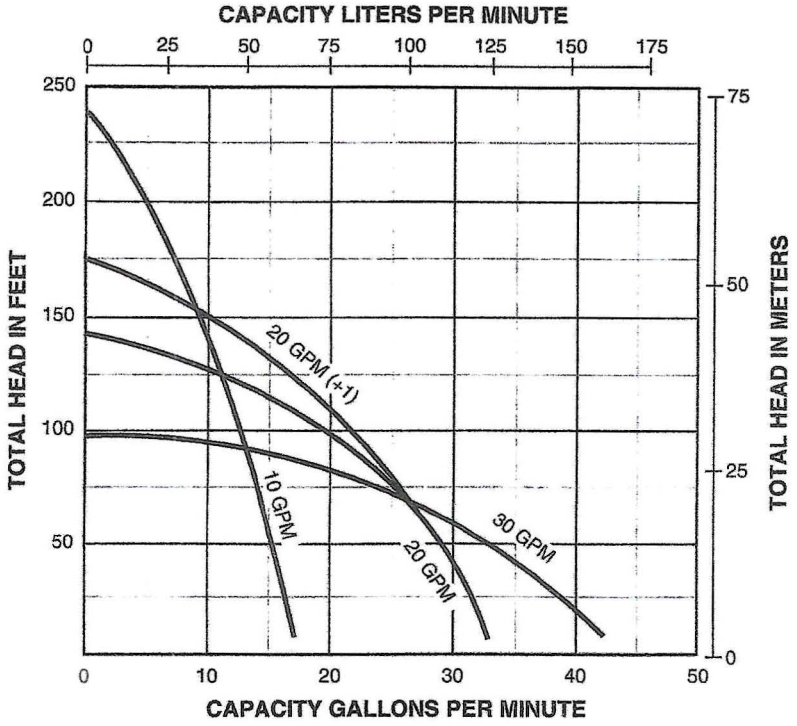
CATALOG NUMBER	HP	MAX. LOAD AMPS	VOLTS	PHASE/ CYCLES	CORD LENGTH	PALLET QUANTITY	WEIGHT (LBS.)
10DOM05221	1/2	5.5	230	1/60	10'	80	16
10DOM05121	1/2	11.0	115	1/60	10'	80	16
20DOM05221	1/2	4.6	230	1/60	10'	80	16
20DOM05121	1/2	9.5	115	1/60	10'	80	16
30DOM05221	1/2	4.6	230	1/60	10'	80	16
30DOM05121	1/2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

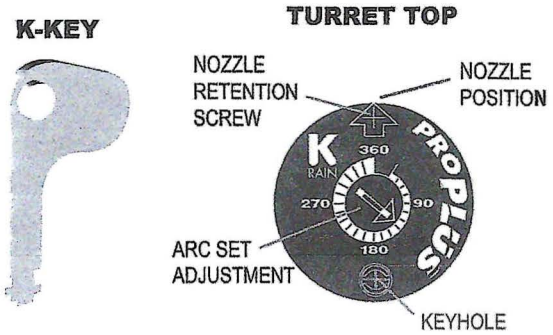
Insert the k-Key in the keyhole on the top of the nozzle turret and turn the key 1/4 turn to insure that the key does not slip out of the keyhole when you pull it up. Firmly pull up the entire spring-loaded riser to access the nozzle socket. Hold the riser assembly with one hand.

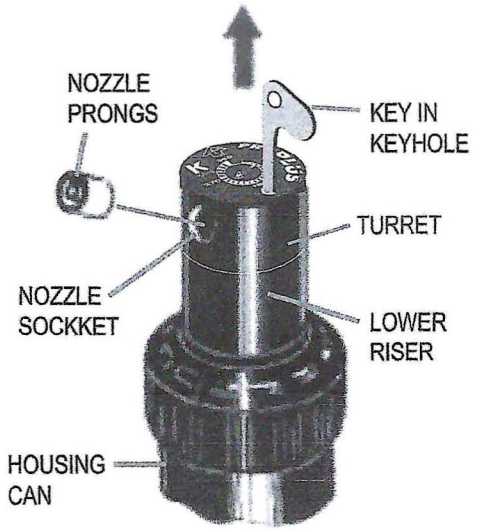
3 ▶ REMOVING THE NOZZLE

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

4 ▶ INSTALLING A NOZZLE

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





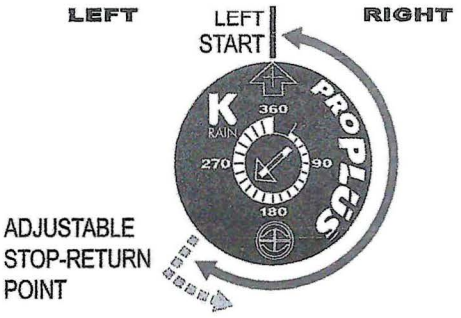
SETTING THE ARC ADJUSTMENT

1 ▶ FINDING THE LEFT START POSITION

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

2 ▶ ORIENTING THE LEFT START POSITION

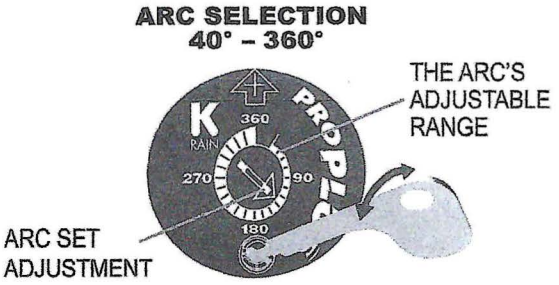
Insert the K-Key in the keyhole on the top of the nozzle turret and turn the key ¼ turn to insure that the key does not slip out of the keyhole when you pull it up. Being careful not to allow the nozzle turret to turn, firmly pull up the entire spring-loaded riser. Hold the lower riser assembly up with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



3 ▶ CHANGING THE ARC

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

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



ProPlus™ Gear Driven Sprinkler Setting Instructions

SPRINKLER INSTALLATION

1 ▶ INSTALL AND BURY

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

2 ▶ INSPECTING THE FILTER

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

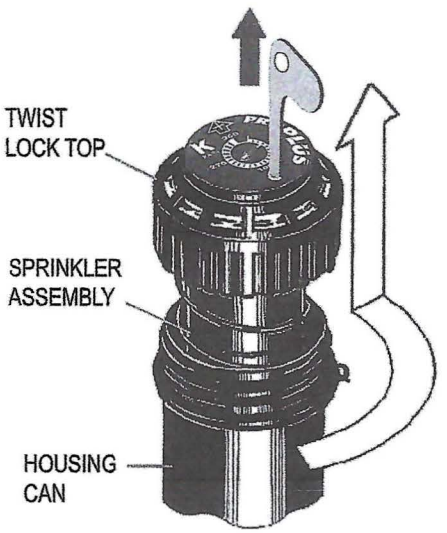
3 ▶ WINTERIZATION TIPS

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

a. Do not exceed 30 PSI.

b. Always introduce air into the system gradually to avoid air pressure surges. Sudden release of compressed air into the sprinkler can cause damage.

c. Each zone should run no longer than 1 minute on air. Sprinklers turn 10 to 12 time faster on air than on water. Over spinning rotors on air can cause damage to the internal components.



PERFORMANCE DATA

NOZZLE	PRESSURE PSI	PRESSURE kPa	PRESSURE Bars	RADIUS Ft.	RADIUS M.	FLOW RATE GPM	FLOW RATE L/M	FLOW RATE M³/H	PRECIP in/hr / mm/hr ■	PRECIP in/hr / mm/hr ▲	PRECIP in/hr / mm/hr ■	PRECIP in/hr / mm/hr ▲
#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 PSI	PRESSURE kPa	PRESSURE Bars	RADIUS Ft.	RADIUS M.	FLOW RATE GPM	FLOW RATE L/M	FLOW RATE M³/H	PRECIP in/hr / mm/hr ■	PRECIP in/hr / mm/hr ▲	PRECIP in/hr / mm/hr ■	PRECIP in/hr / mm/hr ▲
#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.

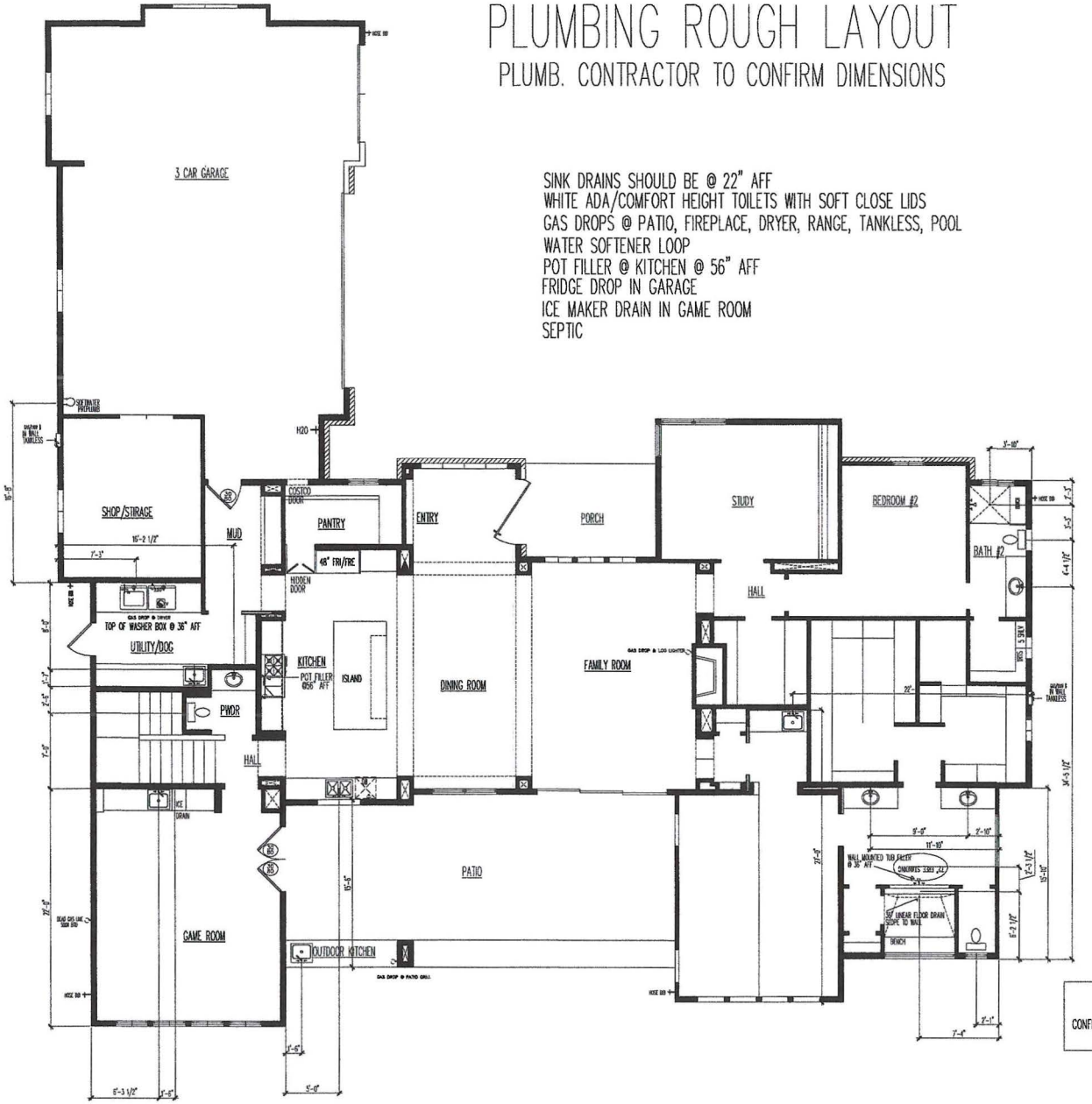
GPM	GPH	⅜"	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	6"	8"	10"
		ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.
1	60	4.25	1.38	.356	.11									
2	120	15.13	4.83	1.21	.38	.10								
3	180	31.97	9.96	2.51	.77	.21	.10							
4	240	54.97	17.07	4.21	1.30	.35	.16							
5	300	84.41	25.76	6.33	1.92	.51	.24							
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.

PLUMBING ROUGH LAYOUT

PLUMB. CONTRACTOR TO CONFIRM DIMENSIONS

SINK DRAINS SHOULD BE @ 22" AFF
WHITE ADA/COMFORT HEIGHT TOILETS WITH SOFT CLOSE LIDS
GAS DROPS @ PATIO, FIREPLACE, DRYER, RANGE, TANKLESS, POOL
WATER SOFTENER LOOP
POT FILLER @ KITCHEN @ 56" AFF
FRIDGE DROP IN GARAGE
ICE MAKER DRAIN IN GAME ROOM
SEPTIC



PROPOSED SEPTIC
CONFIRM LOCATION PRIOR TO GROUNDS

CONTRACTOR NOTES
WORKING DRAWINGS SHALL NOT BE SCALED. BEFORE PROCEEDING WITH ANY WORK OR ORDERING MATERIALS, THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL VERIFY ALL NOTES AND DIMENSIONS. ANY DISCREPANCIES, OMISSIONS OR ERRORS SHALL BE REPORTED TO THE ARCHITECT. DETAILS AND DRAWINGS OF BUILDERS TRADE AND THE DESIGNER OF RECORD OF THE S.E.P. PLANS FURTHER SUPERSEDE ANY OWNER AND CONTRACTOR WHO IS, THE "DESIGNER" RELIEVES HIMSELF OF LIABILITIES TO THE SAME.
ALL OF THE EXISTING CONCEPTS, WORKING DRAWINGS AND DETAILED PLANS CONTAINED HEREIN REMAIN THE SOLE AND EXCLUSIVE PROPERTY OF QUALITY PLAN SERVICES, LLC. QUALITY PLAN SERVICES, LLC. RESERVES ALL OF THE RIGHTS TO THE SAME. ANY REPRODUCTION OR USE OF THESE PLANS IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF QUALITY PLAN SERVICES, LLC. IS STRICTLY PROHIBITED.
THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE CONSTRUCTION OF THIS PROJECT MEETS ALL LOCAL, JURISDICTIONAL CODES.

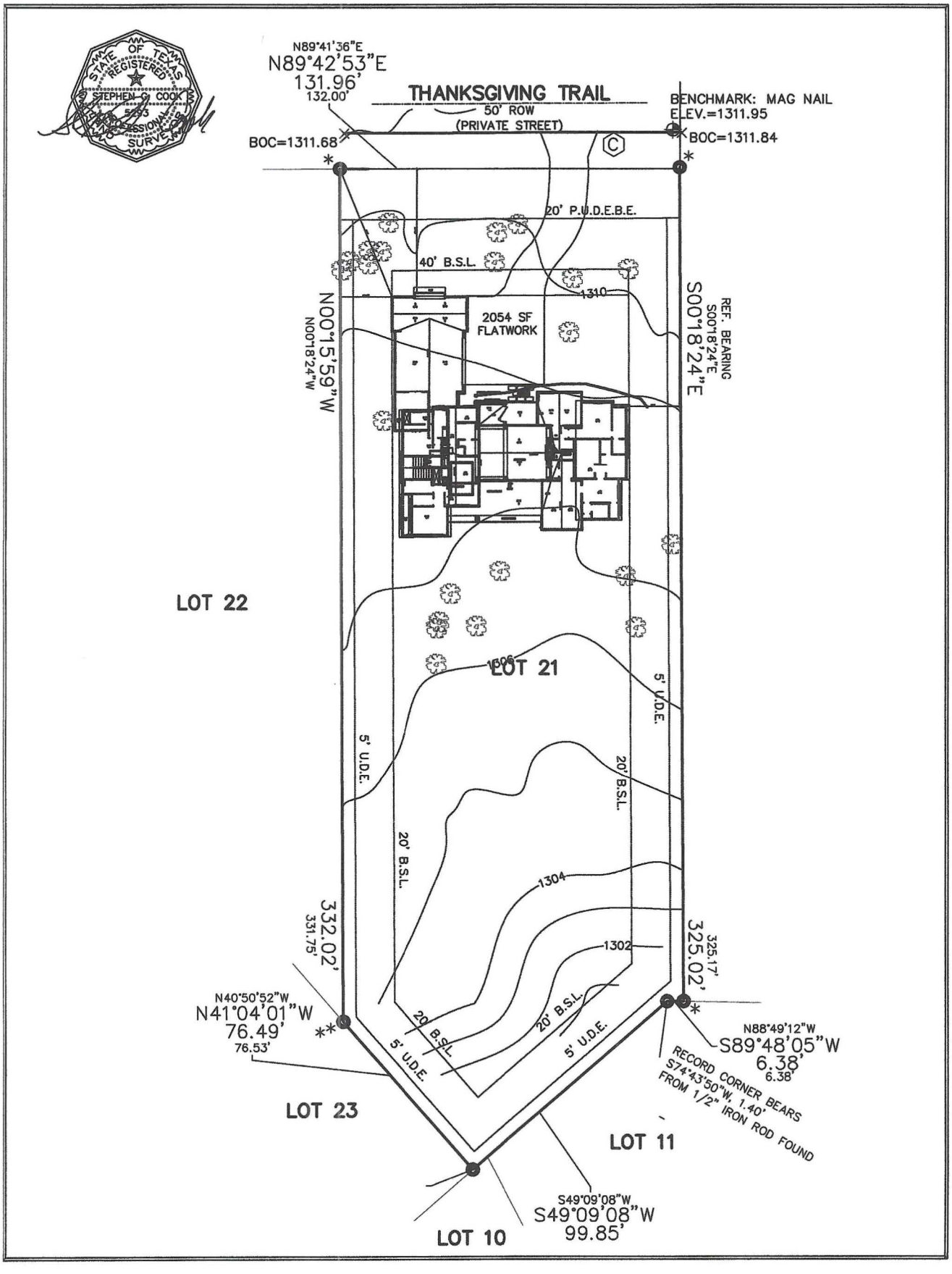
A PERSONALIZED DESIGN FOR
THE BERNAL FAMILY
34853 Friendship Trail
Bulverde, TX 78278

BGA DESIGN + BUILD LLC
SAN ANTONIO, TEXAS
TEL: (830) 660-6324

APPROXIMATE SQUARE FOOTAGE:

1st Floor Living: 3159 SQ. FT.
2nd Floor Living 1092 SQ. FT.
GARAGE: 1,049 SQ. FT.
GARAGE STORAGE: 188 SQ. FT.
REAR PATIO: 506 SQ. FT.
FRONT PATIO: 108 SQ. FT.
TOTAL LIVING: 4251 SQ. FT.

PLAN NO.:
DESIGN BY: BGA
DATE: 2/25/25
SHEET NO. 9 OF 11



A PERSONALIZED DESIGN FOR
THE BERNAL FAMILY
3483S Thanksgiving Trail
Bulverde, TX 78278

BCA DESIGN + BUILD LLC
SAN ANTONIO, TEXAS
TEL: (830) 660-6324

APPROXIMATE REVISIONS FOOTAGES:
1st Floor Living: 2,114 Sq. Ft.
2nd Floor Living: 1,068 Sq. Ft.
Garage Storage: 128 Sq. Ft.
Total Living: 3,182 Sq. Ft.
Total Storage: 128 Sq. Ft.
Total Sq. Ft. Under Roof: 3,310 Sq. Ft.
TOTAL LIVING: 4333 Sq. Ft.

PLAN NO.:
DESIGN BY: BCA
DATE: 2/25/25
SHEET NO. 1 OF 11

DISCLAIMER:
DIMENSIONS ARE NOT TO SCALE. SEPARATE DIMENSIONS MAY VARY AT ANY TIME AND REGARDLESS OF DIMENSIONS ARE NOT TO SCALE. CONTRACTOR MUST VERIFY ALL NOTES AND DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES MUST BE REPORTED TO THE DESIGNER. ALL NOTES AND DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS, DATUMS, LEVELS AND SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCY OR ANY ERROR, OMISSION OR DOUBT MUST BE REPORTED TO THE DESIGNER. THE CONTRACTOR IS TO ENSURE THAT ALL NOTES AND DIMENSIONS ARE CHECKED AND VERIFIED BEFORE ANY WORK IS PROCEEDED WITH. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. ALL DRAWINGS REMAIN THE PROPERTY OF THE DESIGNER. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PERMISSION OF THE DESIGNER. NO DRAWINGS OR DESIGNS MAY BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE PERMISSION OF THE DESIGNER. THE CONTRACTOR IS TO ENSURE THAT ALL NOTES AND DIMENSIONS ARE CHECKED AND VERIFIED BEFORE ANY WORK IS PROCEEDED WITH. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. ALL DRAWINGS REMAIN THE PROPERTY OF THE DESIGNER. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PERMISSION OF THE DESIGNER. NO DRAWINGS OR DESIGNS MAY BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE PERMISSION OF THE DESIGNER. THE CONTRACTOR IS TO ENSURE THAT ALL NOTES AND DIMENSIONS ARE CHECKED AND VERIFIED BEFORE ANY WORK IS PROCEEDED WITH. DO NOT SCALE DRAWINGS. USE FIGURED DIMENSIONS ONLY. ALL DRAWINGS REMAIN THE PROPERTY OF THE DESIGNER. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PERMISSION OF THE DESIGNER. NO DRAWINGS OR DESIGNS MAY BE USED FOR ANY OTHER PROJECT OR PURPOSE WITHOUT THE PERMISSION OF THE DESIGNER.

Comal AD Property Search

Property Details

Account			
Property ID:	427183	**Geographic ID:**	100073011500
Type:	R	**Zoning:**	
Property Use:			
Location			
Situs Address:	34853 THANKSGIVING TRL BULVERDE, TX 78163		
Map ID:	5C	**Mapsco:**	
Legal Description:	BELLE OAKS RANCH PHASE II, BLOCK 4, LOT 21		
Abstract/Subdivision:	100073-2		
Neighborhood:	(382A801) BELLE OAKS RANCH		
Owner			
Owner ID:	1109344		
Name:	BERNAL JOSE & KRISTIE		
Agent:			
Mailing Address:	28226 EVERGREEN COVE LANE FULSHEAR, TX 77441		
% Ownership:	100.0%		
Exemptions:	For privacy reasons not all exemptions are shown online.		

Property Values

Improvement Homesite Value:	$0 (+)
Improvement Non-Homesite Value:	$0 (+)
Land Homesite Value:	$0 (+)
Land Non-Homesite Value:	$161,220 (+)
Agricultural Market Valuation:	$0 (+)
Market Value:	$161,220 (=)
Agricultural Value Loss:?	$0 (-)

HS Cap Loss:	$0 (-)
Circuit Breaker:	$0 (-)

Appraised Value:	$161,220
Ag Use Value:	$0

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: BERNAL JOSE & KRISTIE **%Ownership:** 100.0%

Entity	Description	Market Value	Taxable Value
046	COMAL COUNTY	$161,220	$161,220
046LR	COMAL COUNTY LATERAL ROAD	$161,220	$161,220
CBUL	CITY OF BULVERDE	$161,220	$161,220
SCIS	COMAL ISD	$161,220	$161,220
ES1	(ESD1) COMAL COUNTY EMERGENCY SERVICES DISTRICT NO. 1 (EMS)	$161,220	$161,220
ES5	(ESD5) COMAL COUNTY EMERGENCY SERVICES DISTRICT NO. 5 (FIRE)	$161,220	$161,220
CAD	CAD	$161,220	$161,220

Comal CAD Web Map

4/16/2025, 9:39:06 AM

Parcels

Abstracts

Flood Hazard Area

X - Area of minimal flood hazard

1:1,128

0 0.01 0.01 0.03 mi

0 0.01 0.03 0.05 km

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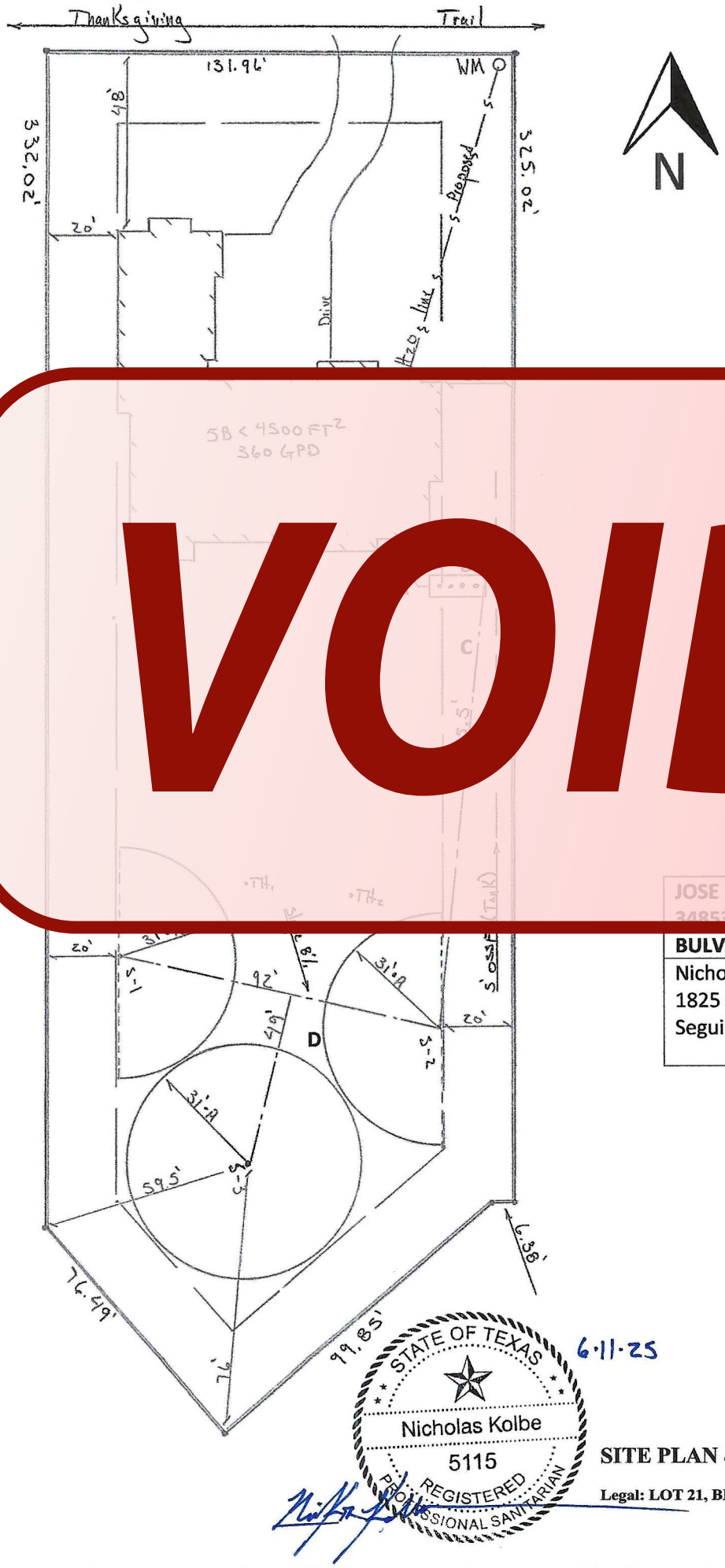
Comal County Appraisal District, BIS Consulting - www.bisconsulting.com

Disclaimer: This product is for informational purposes only and has not been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of boundaries.



A = 3" or 4" SCH 40 PVC with 2way Clean Out, 20' from home to tank.

B = 600 GPD ATU (Aeris D-600-M)

C = 267' of Purple SCH 40 1" PVC Spray Distribution Line

D = Spray distribution area, THREE (3) Number 4 spray distribution heads. S-1 & S-2 operating at 180 degrees each, S-3 operating at 360 degrees, all at 3.4 Gallons Per minute flow, 31' radius.

THE OSSF DESIGN MEETS THE REQUIREMENTS OUTLINED IN THE EDWARDS AQUIFER CONTRIBUTION ZONE PLAN (EAPP) FOR BELLE OAKS RANCH SUBIDIVION IN COMAL COUNTY TEXAS.

VOID

JOSE & KRISTIE BERNAL 34853 THANKSGIVING TRAIL **BULVERDE TX 78163**	
Nicholas Kolbe, R.S. #5115 1825 FM 2438 Seguin, TX 78155	Date: 4/16/2025 Scale: 1"= 70'

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

STATE OF TEXAS
Nicholas Kolbe
5115
REGISTERED
PROFESSIONAL SANITARIAN

6-11-25

SITE PLAN & OSSF DESIGN:

Legal: LOT 21, BLOCK 4, BELLE OAKS RANCH PHASE II

NOTES

1. ***Septic Design is to accommodate a 5 bedroom, less than 4500 sqft home with 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 600 Aerobic Treatment Unit (Aeris D-600-M), a 600 gpd atu.
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. 20' between home and tank. 2way clean out shall be located no further than 5' from the home. Tank to be placed no closer than 5' to the edge of the home.
4. ***** THE INSTALLERS, AT THEIR DISCRETION, HAVE THE AVAILABILTY TO ROTATE TANK (TURN 90 DEGREES, TURN 180 DEGREES, ETC.) AT IT CURRENTLY DESIGNED LOCATION TO FIT IT APPROPRIATELY ON THE PROPERTY AS LONG AS THE TANK STAYS WITHIN THE SETBACKS OF THE PROPERTY LINES AND DOES NOT CHANGE ITS LOCATION (BACK RIGHT CORNER OF HOME)*****
5. Supply line to sprinklers is purple 1" sch 40, 267'.
6. S1-S3 are K-Rain Proplus low angle sprinklers with #4 nozzles operating @ 30psi, 31' radius. S-1 & S-2 are operating at 180 degrees and S-3 is operating at 360 degrees, all are operating at 3.4 gallons a minute flow, total of 10.2 gallons per minute.
7. There sh[illegible] no obstru[illegible] within [illegible] sprinkler h[illegible]
8. Audible [illegible]ual alarm [illegible]erna[illegible] site [illegible] pum[illegible] p[illegible] alarms on separate breakers [illegible] external [illegible]g in[illegible]ut are req[illegible]
9. Timer set [illegible]ray b[illegible]n 12[illegible]M & 5:00 A[illegible]
10. ***The reser[illegible] pac[illegible]3) of [illegible]aily flow fo[illegible] syst[illegible] 120 [illegible]ns***
11. Liquid chl[illegible] to [illegible]ired.
12. Any excav[illegible] or expo[illegible]ck in the [illegible]al a[illegible] all be [illegible]red with [illegible]l and seasonal grasses sha[illegible]ed over th[illegible]al [illegible]der to [illegible]mize [illegible]off & [illegible]. Erosion cloth is acceptable.
13. No part of the septic system absorption field is within 150' of any sensitive recharge feature. No part o[illegible] the On-Site Sewage Facility treatment tank is within 50' of any sensitive recharge feature.
14. ***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.***
15. ***Waterline shall not run horizonal with any OSSF tightline or 1" purple SCH 40 Distribution line within 10'***
16. ***Septic tank shall stay a minimum of 10' from all potable waterlines or above ground storage tanks.***
17. ***Entirety of septic system is to stay within the setbacks and boundary lines of property as noted on design.***
18. ***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.***

VOID

STATE OF TEXAS
Nicholas Kolbe
5115
REGISTERED
PROFESSIONAL SANITARIAN

6-11-25

SITE PLAN & OSSF DESIGN:

Legal: LOT 21, BLOCK 4, BELLE OAKS RANCH PHASE II

JOSE & KRISTIE BERNAL **34853 THANKSGIVING TRAIL** **BULVERDE TX 78163**	
Nicholas Kolbe, R.S. #5115 1825 FM 2438 Seguin, TX 78155	Date: 4/16/2025 Scale: 1"= 70'

201906029154 08/20/2019 09:47:55 AM 1/10

SUBDIVISION PLAT
(PLAT)

NAME OF SUBDIVISION:

BELLE OAKS RANCH PH2

UNOFFICIAL

(Reference #)

PLAT MAP IMAGE(S) LOCATED IN PLAT MAP RECORDS

PREPARED IN THE OFFICE OF THE COMAL COUNTY CLERK

BY: Tammy Kowaldi
Deputy Clerk

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/20/2019 09:47:55 AM
CASHFOUR 10 Page(s)
201906029154

Bobbie Koepp

Through Tax Year
2018

TAX CERTIFICATE

Certificate #
11447

Issued By:
Comal County Tax Office
PO Box 659480
San Antonio, TX 78265-9480

Property Information

Property ID: 77822 Geo ID: 740387000400
Legal Acres: 405.6100
Legal Desc: A-387 SUR-238 M MCVICAR, ACRES 405.61
Situs: 0 BLANCO RD BULVERDE, TX 78163
DBA:
Exemptions:

Owner ID: 5138 100.00%
BELLE OAKS RANCH LTD
322 CARDINAL AVE
SAN ANTONIO, TX 78209-4440

For Entities	Value Information	
CITY OF BULVERDE	Improvement HS:	0
CITY OF BULVERDE TAX CORRECTI	Improvement NHS:	0
COMAL COUNTY	Land HS:	0
COMAL ISD	Land NHS:	0
Credit	Productivity Market:	2,461,010
ESD #1 (EMS)	Productivity Use:	23,120
ESD #5 (FIRE)	Assessed Value	23,120
Lateral Road		
Rural Fire #2		

Property is receiving Ag Use

Current/Delinquent Taxes

This is to certify that, after a careful check of the tax records of this office, the following delinquent taxes, penalties, interest and any known costs and expenses as provided by Tax Code §33.48, are due on the described property for the following taxing unit(s):

Year	Entity	Taxable	Tax Due	Disc./P&I	Attorney Fee	Total Due
Totals:			**0.00**	**0.00**	**0.00**	**0.00**

Effective Date: 08/08/2019 Total Due if paid by: 08/31/2019 0.00

Tax Certificate Issued for:	Taxes Paid in 2018
COMAL COUNTY	68.24
Lateral Road	14.50
CITY OF BULVERDE	0.00
COMAL ISD	321.37
ESD #1 (EMS)	19.68
ESD #5 (FIRE)	23.12

2019 PROPERTY TAXES WILL BE CALCULATED IN OCTOBER 2019 AND ARE DUE WHEN RENDERED. THE LAST DAY TO PAY BEFORE PENALTY AND INTEREST START TO ACCRUE IS JANUARY 31, 2020.

If applicable, the above-described property has/is receiving special appraisal based on its use, and additional rollback taxes may become due based on the provisions of the special appraisal (Comptroller Rule 9.3040) or property omitted from the appraisal roll as described under Tax Code Section 25.21 is not included in this certificate [Tax Code Section 31.08(b)].

Pursuant to Tax Code Section 31.08, if a person transfers property accompanied by a tax certificate that erroneously indicates that no delinquent taxes, penalties or interest are due a taxing unit on the property or that fails to include property because of its omission from an appraisal roll, the unit's tax lien on the property is extinguished and the purchaser of the property is absolved of liability to the unit for delinquent taxes, penalties or interest on the property or for taxes based on omitted property. The person who was liable for the tax for the year the tax was imposed or the property was omitted remains personally liable for the tax and for any penalties or interest.

A tax certificate issued through fraud or collusion is void.

This certificate does not clear abuse of granted exemptions as defined in Section 11.43 Paragraph(1) of the Texas Property Tax Code.

May Be Subject to Court Costs if Suit is Pending

Michelle Poppe
Signature of Authorized Officer of Collecting Office

Date of Issue: 08/08/2019
Requested By: KELLER GARRETT D & TAYLOR
Fee Amount: 10.00
Reference #:

UNOFFICIAL

COMAL COUNTY
TAX OFFICE

Cathy C. Talcott, CTOP, PCC, PCAC
Comal County Tax Assessor-Collector

STATEMENT FROM TAX ASSESSOR-COLLECTOR

Tax Account/Property ID # 416061 Current Year 2019

Physical Address A-387 SUR-238 M MCNICAR, ACRES 245.30

X **The taxes to be imposed by Comal County have not been calculated because the property has not yet been placed on the tax roll for the current year.**

Michelle Poppe
(Signature of tax collector's authorized representative)

8/8/19
Date

Michelle Poppe
(Printed name of authorized representative)

(Taxing Entities Seal or Stamp)

TAX ASSESSOR-COLLECTOR ★ COMAL COUNTY ★

UNOFFICIAL

205 N. Seguin Ave., New Braunfels, TX 78130 • 830-221-1353
talcoc@co.comal.tx.us • www.comalcountytaxoffice.net

SUBDIVISION PLAT
BELLE OAKS RANCH, PHASE II

A 111.96 ACRE TRACT OF LAND, OUT OF THE MARY MCVAR SURVEY NO. 238, ABSTRACT 387, COMAL COUNTY, TEXAS AND BEING A PORTION OF A CALLED 245.3 ACRE TRACT OF LAND AS CONVEYED TO SOUTHERLAND BELLE OAKS RANCH, LLC., OF RECORD IN DOCUMENT NO. 201806033990 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS.

NEW RESIDENTIAL LOTS: 86

NOTES:

1. ACREAGE OF SUBDIVISION = 111.96 ACRES. THE OVERALL AVERAGE DENSITY OF LOTS IN THIS SUBDIVISION IS 1.30 AC/LOT.
2. NO LOTS IN PHASE II ARE ENCROACHED BY SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100 YEAR FLOOD AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP, (FLOOD INSURANCE RATE MAP), COMMUNITY PANEL NO. 48491C0195F. EFFECTIVE DATE SEPTEMBER 26, 2008 FOR COMAL COUNTY, TEXAS.
3. WATER SERVICE FOR THIS SUBDIVISION WILL BE PROVIDED BY CANYON LAKE WATER SERVICE COMPANY (CLWSC).
4. SEWER SERVICE FOR THIS SUBDIVISION WILL BE PROVIDED BY ONSITE SEWAGE FACILITIES.
5. ELECTRIC SERVICE PROVIDED BY PEDERNALES ELECTRIC COOPERATIVE.
6. COMMUNICATIONS SERVICE WILL BE PROVIDED BY GUADALUPE VALLEY TELEPHONE COOPERATIVE
7. POSTAL SERVICE WILL BE PROVIDED BY CLUSTER BOXES ALONG BELLE OAKS BLVD IN PHASE I.
8. UNLESS OTHERWISE NOTED, ALL CORNERS, ANGLES AND POINTS OF CURVATURE ARE MARKED WITH 1/2" IRON RODS WITH MATKINHOOVER CAP.
9. BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM ESTABLISHED FOR THE TEXAS SOUTH CENTRAL ZONE 4204, NORTH AMERICAN DATUM (NAD) OF 1983, SURFACE ADJUSTMENT FACTOR 1.00013. DISTANCES SHOWN HEREON ARE GRID UNITS. VERTICAL DATUM IS BASED ON NAVD88.
10. THIS SUBDIVISION LIES WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE. NO CONSTRUCTION IN THE SUBDIVISION MAY BEGIN UNTIL THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) HAS APPROVED THE CONTRIBUTION ZONE PLAN (CZP) IN WRITING.
11. A TWENTY (20) FOOT PUBLIC UTILITY EMBANKMENT/BACKSLOPE AND DRAINAGE EASEMENT (P.U.D.E.B.E.) IS HEREBY DEDICATED ALONG THE FRONT PROPERTY LINE OF ALL LOTS IN THIS SUBDIVISION IN ADDITION TO THOSE UTILITY AND DRAINAGE EASEMENTS SHOWN ON THE PLAT. THERE IS ALSO HEREBY DEDICATED A FIVE (5) FOOT WIDE UTILITY AND DRAINAGE EASEMENT ADJACENT TO ALL NON-ROADWAY LOT LINES UNLESS OTHERWISE NOTED ON THE PLAT. IF TWO OR MORE LOTS ARE COMBINED AS A SINGLE HOME SITE, THIS EASEMENT SHALL BE RELINQUISHED ALONG THE COMMON LINE OR LINES OF THE COMBINED LOTS SO LONG AS NO UTILITY LINES OR DRAINAGE IMPROVEMENTS ARE LOCATED THEREIN.
12. ALL PUBLIC UTILITY EASEMENTS ARE FOR UTILITY IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO ELECTRIC, GAS, TELEPHONE, AND/OR CATV LINES AND APPURTENANCES.
13. GRANTOR HEREBY DEDICATES TO THE PUBLIC UTILITY EASEMENT AND/OR UTILITY RIGHT-OF-WAY ON THIS PLAT FOR UTILITY PURPOSES.
14. NO STRUCTURE, FENCES, WALLS, OR OTHER OBSTRUCTIONS OF ANY KIND SHALL BE PLACED WITHIN THE LIMITS OF THE DRAINAGE EASEMENTS SHOWN ON THIS PLAT. LANDSCAPING, FENCES, OR OTHER TYPES OF MODIFICATIONS WHICH ALTER THE CROSS-SECTIONS OF THE DRAINAGE EASEMENTS OR DECREASE THE HYDRAULIC CAPACITY OF THE EASEMENT SHALL NOT BE ALLOWED WITHOUT THE APPROVAL OF THE CITY ENGINEER.
15. PROPERTY OWNERS ARE ADVISED THAT THEY ARE RESPONSIBLE FOR MAINTENANCE OF DEDICATED EASEMENTS ON THEIR PROPERTY AND MAY NOT UTILIZE THESE EASEMENTS FOR ANY PURPOSE DETRIMENTAL TO THEIR INTENDED USE (I.E. NO STRUCTURES, SEPTIC TANKS FIELDS, ETC.) GRANTEES OF SAID DEDICATED EASEMENTS RESERVE THE RIGHT OF ACCESS TO SUCH EASEMENTS.
16. A DEVELOPMENT AGREEMENT FOR BELLE OAKS RANCH WAS EXECUTED ON JANUARY 9TH, 2018 AND RECORDED AS DOCUMENT NO. 201806001658 IN THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY. THE DEVELOPMENT IS SUBJECT TO THE CITY OF BULVERDE ORDINANCE IN EFFECT AT THE TIME OF THE DEVELOPMENT AGREEMENT EXECUTION.
17. IT IS HEREBY UNDERSTOOD AND AGREED THAT NON-EXCLUSIVE, PERPETUAL EASEMENTS ARE RESERVED FOR THE INSTALLATION AND MAINTENANCE OF PUBLIC UTILITIES AND ALL NECESSARY APPURTENANCES. WHETHER THESE IMPROVEMENTS ARE INSTALLED UNDERGROUND, OVERHEAD, AND/OR ON THE SURFACE OF THE GROUND WITHIN THE PUBLIC UTILITY EASEMENTS DEDICATED ON THIS PLAT, NOTHING SHALL BE PLACED OR PERMITTED TO REMAIN IN A PUBLIC UTILITY EASEMENT AREA WHICH MAY DAMAGE OR INTERFERE WITH THE INSTALLATION AND MAINTENANCE OF SAID PUBLIC UTILITIES. THE PUBLIC UTILITY EASEMENT AREA OF EACH LOT AND ALL IMPROVEMENTS WITHIN IT SHALL BE MAINTAINED BY THE OWNER OF THE LOT, EXCEPT FOR THOSE FACILITIES FOR WHICH AN AUTHORITY OR PUBLIC UTILITY PURVEYOR IS RESPONSIBLE. PUBLIC UTILITY PURVEYORS AND THEIR EMPLOYEES SHALL HAVE ALL OF THE RIGHTS AND BENEFITS NECESSARY FOR THE FULL ENJOYMENT OF THE RIGHTS HEREIN GRANTED, INCLUDING BUT NOT LIMITED TO INGRESS AND EGRESS FROM PRIVATE ROADS AND EASEMENTS, AND THE RIGHT FROM TIME TO TIME TO CUT ANY AND ALL TREES, UNDERGROWTH AND OTHER OBSTRUCTIONS THAT MAY CAUSE INTERFERENCE WITH THE OPERATION OF SAID PUBLIC UTILITY FACILITIES.
18. THE CITY OF BULVERDE SHALL NOT BE RESPONSIBLE FOR MAINTENANCE OF PRIVATE STREETS, DRIVES, RECREATION AREAS AND OPEN SPACES; THE SUBDIVISION PROPERTY OWNER'S ASSOCIATION SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF PRIVATE STREETS, ROADS, DRIVES, RECREATION AREAS AND OPEN SPACES, AND SAID OWNERS AGREE TO INDEMNIFY AND SAVE HARMLESS THE CITY OF BULVERDE, FROM ALL CLAIMS, DAMAGES AND LOSSES ARISING OUT OF OR RESULTING FROM PERFORMANCE OF THE OBLIGATIONS OF SAID OWNERS SET FORTH IN THIS NOTE.
19. SPECIAL LOT DEDICATION/DESIGNATION:
    - 19.1. LOT 905 IS HEREBY DEDICATED AS PUBLIC RIGHT-OF-WAY WITH THIS PLAT.
    - 19.2. LOT 907 IS DESIGNATED AS OPEN SPACE / DRAINAGE EASEMENT AND IS HEREBY OWNED AND MAINTAINED BY THE POA.
    - 19.3. LOT 1002 IS HEREBY DESIGNATED AS PRIVATE STREET RIGHT-OF-WAY AND PUBLIC UTILITY EASEMENT. LOT 1002 SHALL BE OWNED AND MAINTAINED BY THE POA. ALL STREETS WITHIN LOT 1002 WITHIN THIS SUBDIVISION SHALL PROVIDE FOR RECIPROCAL ACCESS FOR INGRESS AND EGRESS TO ALL OTHER LOT OWNERS AND SUCCESSORS WITHIN THE SUBDIVISION.
20. A PERPETUAL PUBLIC SAFETY AND PUBLIC SERVICE EASEMENT WITHIN THE PRIVATE ROADS FOR THE PURPOSE OF PROVIDING PUBLIC SAFETY SERVICES, POLICE, FIRE AND MEDICAL SERVICES, UTILITY METER READING, CODE ENFORCEMENT, BUILDING INSPECTIONS, SOLID WASTE COLLECTION, PUBLIC SCHOOL TRANSPORTATION, ANY OTHER PUBLIC SERVICES AND ENFORCING THE CITY ORDINANCES; AND GIVING THE CITY AND ITS AUTHORIZED OFFICERS AND DESIGNEES UNINHIBITED INGRESS AND EGRESS OVER, ACROSS AND THROUGH SUCH PRIVATE DRIVES, STREETS, ROADWAYS, AND RIGHTS-OF-WAY FOR THE PURPOSE OF PROVIDING PUBLIC SAFETY SERVICES, POLICE, FIRE AND MEDICAL SERVICES, AND ENFORCING THE PENAL CODE AND CITY ORDINANCES. THE POA SHALL MAINTAIN AT ALL TIMES WITH THE CITY SECRETARY THE CURRENT GATE CODE OR KEY FOR ALL GATES REGULATING ACCESS TO AND FROM THE SUBDIVISION.
21. A DRIVEWAY CULVERT IS REQUIRED FOR ALL DRIVEWAYS WHERE DRAINAGE CONVEYANCE ACROSS THE DRIVEWAY IS REQUIRED.
22. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATION SHOULD BE BUILT AT LEAST ONE FOOT HIGHER THAN THE HIGHEST SPOT ELEVATION THAT IS LOCATED WITHIN FIVE FEET OUTSIDE THE PERIMETER OF THE BUILDING, OR MINIMUM FINISHED FLOOR ELEVATION, WHICHEVER IS HIGHER, AND THE GROUND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF ½" PER FOOT FOR A DISTANCE OF AT LEAST 10 FEET.
23. DRIVEWAYS SHALL TAKE ACCESS OFF OF INTERNALLY PLATTED ROADS AND NOT DIRECTLY OFF OF BLANCO ROAD EXCEPT LOT 1, BLOCK 13.
24. DUE TO FUTURE POTENTIAL WATER SYSTEM MODIFICATIONS, ALL LOTS WITHIN THIS DEVELOPMENT SHALL INSTALL AN INDIVIDUAL PRESSURE REDUCING VALVE ON THE CUSTOMER SIDE OF THE METER. THE INDIVIDUAL PRESSURE REDUCING VALVES SHALL BE OWNED AND MAINTAINED BY THE INDIVIDUAL LOT OWNER.
25. THE LANDSCAPE AND MONUMENT EASEMENT SHALL GRANT ACCESS TO THE POA FOR ENTRANCE, LANDSCAPING / MONUMENTATION CONSTRUCTION AND MAINTENANCE.
26. THE CITY OF BULVERDE MINIMUM FRONT BUILDING SETBACK IS 40' AND MINIMUM REAR AND SIDE BUILDING SETBACKS ARE 20'. EACH LOT IS SUBJECT TO ADDITIONAL POA BUILDING SETBACK RESTRICTIONS.
27. BELLE OAKS RANCH PHASE II DRAINAGE DESIGN WAS BASED ON AN AVERAGE IMPERVIOUS COVER OF 9,300 SF PER LOT. ALL LOTS THAT CONSTRUCT MORE THAN 9,300 SF MAY BE SUBJECT TO ADDITIONAL DRAINAGE ANALYSIS AND DETENTION REQUIREMENTS.

PEDERNALES ELECTRIC NOTES:

1. ANY PEC MONETARY LOSS RESULTING FROM MODIFICATIONS REQUIRED OF PEC EQUIPMENT, LOCATED WITHIN SAID EASEMENT, DUE TO GRADE CHANGES OR GROUND ELEVATION ALTERATIONS SHALL BE CHARGED TO THE PERSON OR PERSONS DEEMED RESPONSIBLE FOR SAID GRADE CHANGES OR GROUND ELEVATION ALTERATION.
2. PEDERNALES ELECTRIC COOPERATIVE, INC. (PEC) AS PART OF ITS ELECTRIC SYSTEM ARE HEREBY DEDICATED THE EASEMENTS AND RIGHTS-OF-WAY FOR ELECTRIC AND GAS DISTRIBUTION AND SERVICE FACILITIES IN THE AREAS DESIGNATED ON THIS PLAT AS "ELECTRIC EASEMENT", "GAS EASEMENT", "ANCHOR EASEMENT", "SERVICE EASEMENT", "OVERHANG EASEMENT", "UTILITY EASEMENT", AND "TRANSFORMER EASEMENT" FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, RECONSTRUCTING, MAINTAINING, REMOVING, INSPECTING, PATROLLING, AND ERECTING POLES, HANGING OR BURYING WIRES, CABLES, CONDUITS, PIPELINES OR TRANSFORMERS, EACH WITH ITS NECESSARY APPURTENANCES TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER GRANTOR'S ADJACENT LAND, THE RIGHT-OF-WAY AREAS, AND THE RIGHT TO REMOVE FROM SAID LANDS ALL TREES OR PARTS THEREOF, OR OTHER OBSTRUCTIONS WHICH ENDANGER OR MAY INTERFERE WITH THE EFFICIENCY OF SAID LINES OR APPURTENANCES THERETO. IT IS AGREED AND UNDERSTOOD THAT NO BUILDINGS, CONCRETE SLABS, OR WALLS WILL BE PLACED WITHIN SAID EASEMENT AREA.
3. THIS PLAT DOES NOT AMEND, ALTER, RELEASE OR OTHERWISE AFFECT ANY EXISTING ELECTRIC, GAS, WATER, SEWER, DRAINAGE, TELEPHONE, CABLE EASEMENTS OR ANY OTHER EASEMENTS FOR UTILITIES UNLESS THE CHANGES TO SUCH EASEMENTS ARE DESCRIBED BELOW: NONE.
4. CONCRETE DRIVEWAY APPROACHES ARE ALLOWED WITHIN THE FIVE (5) FOOT WIDE ELECTRIC AND GAS EASEMENTS WHEN LOTS ARE SERVED ONLY BY REAR LOT UNDERGROUND ELECTRIC AND GAS FACILITIES.
5. ROOF OVERHANGS ARE ALLOWED WITHIN FIVE (5) FOOT WIDE ELECTRIC AND GAS EASEMENTS WHEN ONLY UNDERGROUND ELECTRIC AND GAS FACULTIES ARE PROPOSED OR EXISTING WITHIN THOSE FIVE (5) FOOT WIDE EASEMENTS.

I, GARRETT D. KELLER, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT NO PORTION OF PHASE I IS ENCROACHED BY SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100 YEAR FLOOD AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP, (FLOOD INSURANCE RATE MAP), COMMUNITY PANEL NO. 48491C0195F. EFFECTIVE DATE SEPTEMBER 26, 2008 FOR COMAL COUNTY, TEXAS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT BULVERDE, COMAL COUNTY, TEXAS, THIS 7th DAY OF August, 2019.

GARRETT D. KELLER
REGISTERED PROFESSIONAL ENGINEER
NO. 111511 STATE OF TEXAS

STATE OF TEXAS
GARRETT D. KELLER
111511
LICENSED
PROFESSIONAL ENGINEER

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

I, KYLE L. PRESSLER, REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON, AND THAT THERE ARE NO APPARENT DISCREPANCIES, CONFLICTS, OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THE ACCOMPANYING PLAT, AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF BULVERDE, TEXAS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT BULVERDE, COMAL COUNTY, TEXAS, THIS 7th DAY OF August, 2019.

KYLE L. PRESSLER
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 6528 STATE OF TEXAS

STATE OF TEXAS
REGISTERED
KYLE L. PRESSLER
6528
PROFESSIONAL
LAND SURVEYOR

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

#201906029154

I, DAN MULLINS, AUTHORIZED AGENT FOR SOUTHERLAND BELLE OAKS, LLC, SOLE OWNER OF THE CERTAIN TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 201806033990 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS, AND DO HEREBY SUBDIVIDE SAID TRACT AS SHOWN HEREON, AND DO HEREBY CONSENT TO ALL PLAT NOTE REQUIREMENTS SHOWN HEREON, AND DO HEREBY DEDICATE TO THE USE OF THE PUBLIC FOREVER ALL EASEMENTS AND PUBLIC PLACES THEREON SHOWN FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED. THIS SUBDIVISION IS TO BE KNOWN AS BELLE OAKS RANCH, PHASE II.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 7th DAY OF August, 2019.

SOUTHERLAND BELLE OAKS, LLC
C/O DAN MULLINS
110 RIVER CROSSING BLVD, STE. 1
SPRING BRANCH, TX 78070

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

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED DAN MULLINS, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 7th DAY OF August, 2019.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES ON: 11-30-22

GABRIELLE ELIZABETH KINSEY
Notary Public, State of Texas
Comm. Expires 11-30-2022
Notary ID 131811011

STATE OF TEXAS
COUNTY OF COMAL

I, HONORABLE BOBBIE KOEPP, COUNTY CLERK FOR COMAL COUNTY, DO HEREBY CERTIFY THAT THIS PLAT WAS FILED FOR RECORD IN MY OFFICE ON THE 20 DAY OF August, A.D., 2019, AT 9:47 A.M. AND DULY RECORDED THE 20 DAY OF August, A.D., 2019 AT 9:47 A.M. IN THE RECORDS OF MAPS AND PLATS IN SAID OFFICE, OF SAID COUNTY, IN

DOCUMENT # 201906029154 IN TESTIMONY WHEREOF WITNESS MY HAND AND OFFICIAL SEAL OF OFFICE

THIS 20 DAY OF August, A.D. 2019.

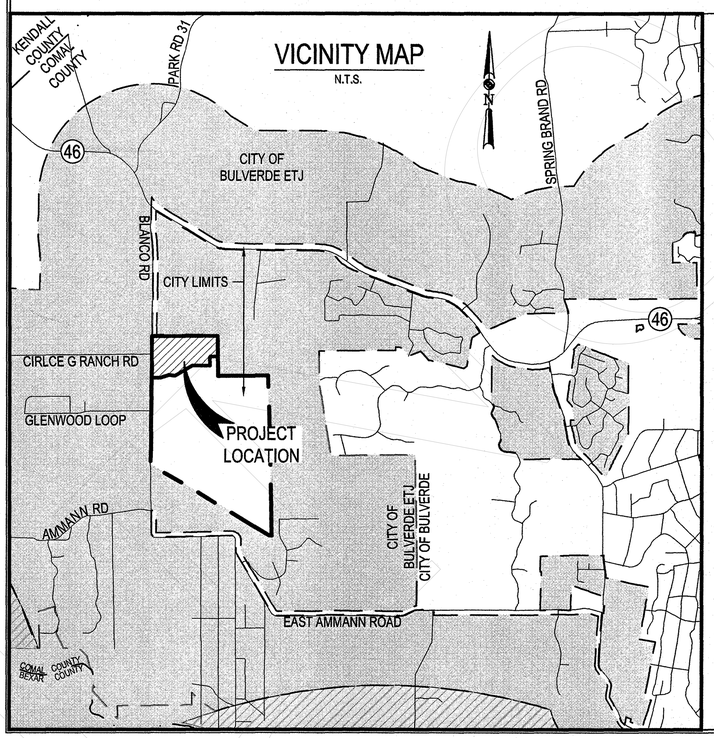
COUNTY CLERK
COMAL COUNTY, TEXAS
BY: Tammy Kowalski
DEPUTY TO COUNTY CLERK

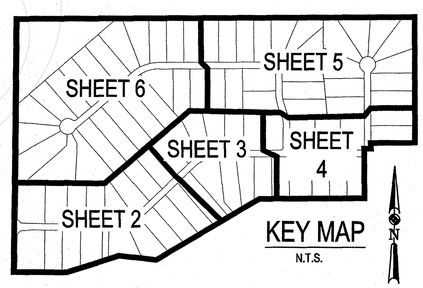
COUNTY COURT OF COMAL COUNTY, TEXAS

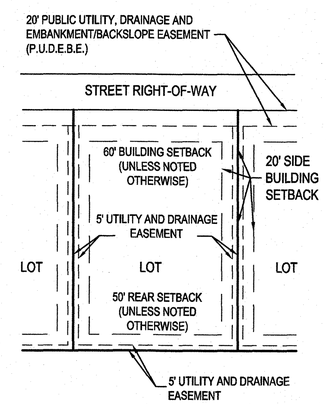
THIS PLAT OF BELLE OAKS RANCH, PHASE II HAS BEEN SUBMITTED TO AND CONSIDERED BY THE CITY PLANNING AND ZONING COMMISSION OF THE CITY OF BULVERDE, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

DATED THIS 20th DAY OF August, YEAR 2019

BY: Dickie Lubel
CHAIRPERSON

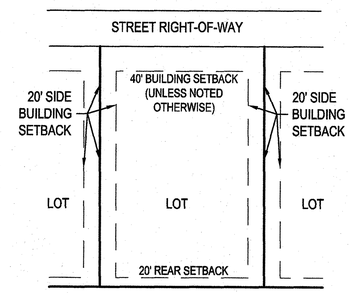






TYPICAL LOT EASEMENTS & POA BUILDING SETBACKS

N.T.S. (ESTABLISHED ON ALL LOTS)



CITY OF BULVERDE TYPICAL MINIMUM SETBACKS

N.T.S. (ESTABLISHED ON ALL LOTS)

OWNER/DEVELOPER:
SOUTHERLAND BELLE OAKS, LLC
C/O DAN MULLINS
110 RIVER CROSSING BLVD, STE.1
SPRING BRANCH, TX 78070
OFF: (512) 847-5263
FAX: (830) 885-5248
DMULLINS@SOUTHLP.COM

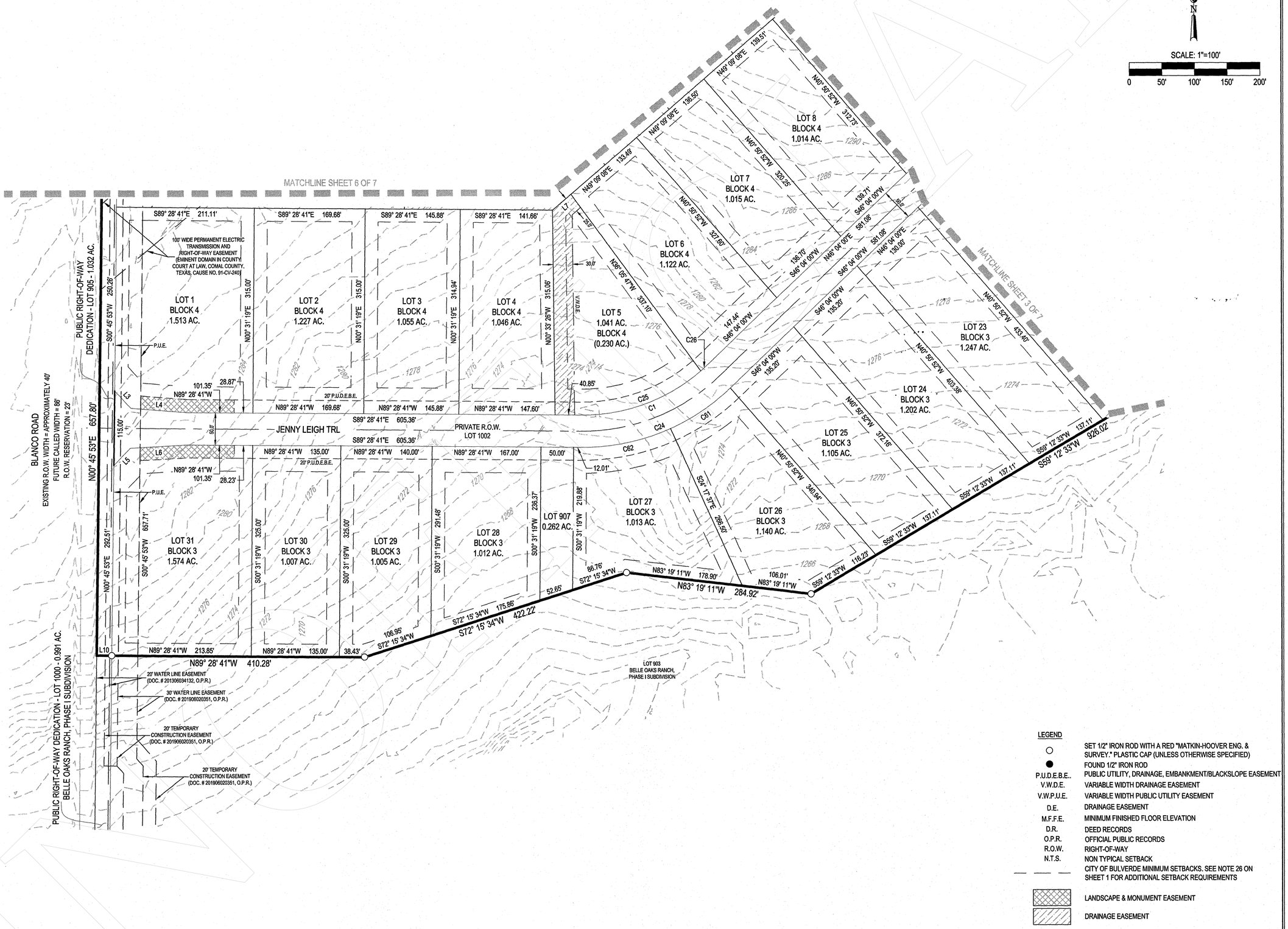
SURVEYOR:
MATKIN HOOVER
ENGINEERING & SURVEYING
C/O KYLE L. PRESSLER, R.P.L.S.
8 SPENCER ROAD, SUITE 300
BOERNE, TEXAS 78006
OFF: (830) 249-0600
FAX: (830) 249-0099
KYLE.PRESSLER@MATKINHOOVER.COM

AGENT/PREPARER:
MATKIN HOOVER
ENGINEERING & SURVEYING
C/O GARRETT D. KELLER, P.E.
8 SPENCER ROAD, SUITE 100
BOERNE, TEXAS 78006
OFF: (830) 249-0600
FAX: (830) 249-0099
GKELLER@MATKINHOOVER.COM

MATKINHOOVER ENGINEERING & SURVEYING
8 SPENCER ROAD SUITE 100
BOERNE, TEXAS 78006
OFFICE: 830.249.0600
CONTACT@MATKINHOOVER.COM
3303 SHELL ROAD SUITE 3
GEORGETOWN, TEXAS 78628
OFFICE: 512.868.2244
TEXAS REGISTERED ENGINEERING FIRM F-004512 SURVEYING FIRM F-10024000

DATE: AUGUST 6, 2019
MHE JOB NO. - 2969.02
MHS JOB NO. - 17-4180

201906029154



LEGEND

○	SET 1/2" IRON ROD WITH A RED "MATKIN-HOOVER ENG. & SURVEY." PLASTIC CAP (UNLESS OTHERWISE SPECIFIED)
●	FOUND 1/2" IRON ROD
P.U.D.E.B.E..	PUBLIC UTILITY, DRAINAGE, EMBANKMENT/BLACKSLOPE EASEMENT
V.W.D.E.	VARIABLE WIDTH DRAINAGE EASEMENT
V.W.P.U.E.	VARIABLE WIDTH PUBLIC UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
M.F.F.E.	MINIMUM FINISHED FLOOR ELEVATION
D.R.	DEED RECORDS
O.P.R.	OFFICIAL PUBLIC RECORDS
R.O.W.	RIGHT-OF-WAY
N.T.S.	NON TYPICAL SETBACK
— — —	CITY OF BULVERDE MINIMUM SETBACKS. SEE NOTE 26 ON SHEET 1 FOR ADDITIONAL SETBACK REQUIREMENTS
	LANDSCAPE & MONUMENT EASEMENT
	DRAINAGE EASEMENT

SUBDIVISION PLAT
BELLE OAKS RANCH, PHASE II

OWNER/DEVELOPER:
SOUTHERLAND BELLE OAKS, LLC
C/O DAN MULLINS
110 RIVER CROSSING BLVD, STE.1
SPRING BRANCH, TX 78070
OFF: (512) 847-5263
FAX: (830) 885-5248
DMULLINS@SOUTHLP.COM

SURVEYOR:
MATKIN HOOVER
ENGINEERING & SURVEYING
C/O KYLE L. PRESSLER, R.P.L.S..
8 SPENCER ROAD, SUITE 300
BOERNE, TEXAS 78006
OFF: (830) 249-0600
FAX: (830) 249-0099
KYLE.PRESSLER@MATKINHOOVER.COM

AGENT/PREPARER:
MATKIN HOOVER
ENGINEERING & SURVEYING
C/O GARRETT D. KELLER, P.E.
8 SPENCER ROAD, SUITE 100
BOERNE, TEXAS 78006
OFF: (830) 249-0600
FAX: (830) 249-0099
GKELLER@MATKINHOOVER.COM

MATKINHOOVER ENGINEERING & SURVEYING
8 SPENCER ROAD SUITE 100
BOERNE, TEXAS 78006
OFFICE: 830.249.0600
CONTACT@MATKINHOOVER.COM
3303 SHELL ROAD SUITE 3
GEORGETOWN, TEXAS 78628
OFFICE: 512.868.2244
TEXAS REGISTERED ENGINEERING FIRM F-004512 SURVEYING FIRM F-10024000

DATE: JUNE 20, 2019
MHE JOB NO. - 2969.02
MHS JOB NO. - 17-4180

201906029154

SCALE: 1"=100'

0 50' 100' 150' 200'

LEGEND

○	SET 1/2" IRON ROD WITH A RED "MATKIN-HOOVER ENG. & SURVEY." PLASTIC CAP (UNLESS OTHERWISE SPECIFIED)
●	FOUND 1/2" IRON ROD
P.U.D.E.B.E..	PUBLIC UTILITY, DRAINAGE, EMBANKMENT/BLACKSLOPE EASEMENT
V.W.D.E.	VARIABLE WIDTH DRAINAGE EASEMENT
V.W.P.U.E.	VARIABLE WIDTH PUBLIC UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
M.F.F.E.	MINIMUM FINISHED FLOOR ELEVATION
D.R.	DEED RECORDS
O.P.R.	OFFICIAL PUBLIC RECORDS
R.O.W.	RIGHT-OF-WAY
N.T.S.	NON TYPICAL SETBACK
— — —	CITY OF BULVERDE MINIMUM SETBACKS. SEE NOTE 26 ON SHEET 1 FOR ADDITIONAL SETBACK REQUIREMENTS
▨	LANDSCAPE & MONUMENT EASEMENT
▨	DRAINAGE EASEMENT

SUBDIVISION PLAT
BELLE OAKS RANCH, PHASE II

OWNER/DEVELOPER:
SOUTHERLAND BELLE OAKS, LLC
C/O DAN MULLINS
110 RIVER CROSSING BLVD, STE.1
SPRING BRANCH, TX 78070
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GEORGETOWN, TEXAS 78628
OFFICE: 512.868.2244
TEXAS REGISTERED ENGINEERING FIRM F-004512 SURVEYING FIRM F-10024000

DATE: JUNE 20, 2019
MHE JOB NO. - 2969.02
MHS JOB NO. - 17-4180

GENERAL WARRANTY DEED

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

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

THAT THE UNDERSIGNED, **CHAD AYRES WARREN AND OFELIA WARREN, HUSBAND AND WIFE**, hereinafter referred to as "Grantor," whether one or more, for and in consideration of the sum of TEN DOLLARS ($10.00) cash, and other good and valuable consideration in hand paid by the Grantee, herein named, the receipt and sufficiency of which is hereby fully acknowledged and confessed, has GRANTED, SOLD and CONVEYED, and by these presents does hereby GRANT, SELL and CONVEY unto **JOSE BERNAL AND KRISTIE BERNAL**, herein referred to as "Grantee," whether one or more, the real property described as follows:

LOT 21, BLOCK 4, BELLE OAKS RANCH, PHASE II, A SUBDIVISION IN COMAL COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN DOCUMENT NO. 201906029154, MAP AND PLAT RECORDS OF COMAL COUNTY, TEXAS.

This conveyance, however, is made and accepted subject to any and all validly existing encumbrances, conditions and restrictions, relating to the hereinabove described property as now reflected by the records of the County Clerk of COMAL County, Texas.

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

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

**
POOR QUALITY

EXECUTED this 28 day of August, 2024.

CHAD AYRES WARREN

OFELIA WARREN

Grantee's Address:

131 DOVE CREEK DRIVE
COLDSPRING, TEXAS 7733

THE STATE OF TEXAS §
§
COUNTY OF Bexar §

The foregoing instrument was acknowledged before me on the 28 day of August, 2024, by **CHAD AYRES WARREN AND OFELIA WARREN, HUSBAND AND WIFE.**

RICKY GUERRA
Notary Public, State of Texas
Comm. Expires 03-26-2025
Notary ID 129361180

NOTARY PUBLIC, STATE OF TEXAS

PRINTED NAME OF NOTARY

MY COMMISSION EXPIRES:
3-26-25

AFTER RECORDING, RETURN TO:

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
08/28/2024 02:15:34 PM
TERRI 2 Pages(s)
202406026151

County Clerk of Comal County, Texas
Bobbie Koepp