Comal County Environmental Health
OSSF Inspection Sheet

Installer Name: Homeowner **OSSF Installer #:** N/A

1st Inspection Date: 10/11/24 **2nd Inspection Date:** 12/16/24 **3rd Inspection Date:** 12/17/24

Inspector Name: Hendry **Inspector Name:** Hendry **Inspector Name:** Hendry

Permit#: 117067 **Address:** 177 High Creek Rd

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	X	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)		X		
2	SITE AND SOIL CONDITIONS & SETBACK DISTANCES Setback Distances Meet Minimum Standards	X	285.91(10) 285.30(b)(4) 285.31(d)		X		
3	SEWER PIPE Proper Type Pipe from Structure to Disposal System (Cast Iron, Ductile Iron, Sch. 40, SDR 26)	X	285.32(a)(1)		X		
4	SEWER PIPE Slope from the Sewer to the Tank at least 1/8 Inch Per Foot	X	285.32(a)(3)		X		
5	SEWER PIPE Two Way Sanitary - Type Cleanout Properly Installed (Add. C/O Every 100' &/or 90 degree bends)	X	285.32(a)(5)		X		
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: **10/11/24 CH: Tight line and tank good, ready for cover, trenches level, ready for pipe and gravel**
12/16/24 CH: Pipe and gravel good, ready for fabric 12/17/24 CH: Cloth good, ready for cover
12/20/24 CH: Covered

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 SingleTank, 2Compartments Provided withBaffle SEPTIC TANK Inlet Flowline Greater than3" and " T " Provided on Inlet and OutletSEPTIC TANK Septic Tank(s) MeetMinimum Requirements	X	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)		X		
9	ALL TANKS Installed on 4" Sand Cushion/ Proper Backfill Used	X	285.32(b)(1)(F) 285.32(b)(1)(G) 285.34(b)		X		
10	SEPTIC TANK Inspection / Clean Out Port & Risers Provided on Tanks Buried Greater than 12" Sealed and Capped	X	285.38(d)		X		
11	SEPTIC TANK Secondary restraint system providedSEPTIC TANK Riser permanently fastened to lid or cast into tank SEPTIC TANK Riser cap protected against unauthorized intrusions	X	285.38(d) 285.38(e)		X		
12	SEPTIC TANK Tank Volume Installed	X		750	X		
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	X	285.33(a)(4) 285.33(a)(1) 285.33(a)(2) 285.33(a)(3)	Pipe and gravel	X		
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	X				X	
26	DRAINFIELD Area Installed	X				X	
27	DRAINFIELD Level to within 1 inch per 25 feet and within 3 inches over entire excavation	X	285.33(b)(1)(A)(v)		X		
28	DRAINFIELD Excavation Width DRAINFIELD Excavation Depth DRAINFIELD Excavation Separation DRAINFIELD Depth of Porous Media DRAINFIELD Type of Porous Media	X X X X X			X X X X X		
29	DRAINFIELD Pipe and Gravel - Geotextile Fabric in Place	X	285.33(b)(1)(E)				X
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

ENGINEER'S OFFICE

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

Permit Number:	117067
Issued This Date:	05/28/2024
This permit is hereby given to:	Mark Friesenhahn

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

177 HIGH CREEK RD
NEW BRAUNFELS, TX 78132

Subdivision:	Francisco Rodriguez Survey 99, A 484
Unit:	0
Lot:	0
Block:	0
Acreage:	13.5500

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System:	Septic Tank
	STD Trenches / Beds

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.

REVISED
8:40 am, Mar 22, 2024

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 1/10/2024 Permit Number 113367

1. APPLICANT / AGENT INFORMATION

Owner Name	Mark Friesenhahn	Agent Name	Mark Friesenhhn, Texas PE # 41912
Mailing Address	231 High Creek Rd	Agent Address	same as applicant
City, State, Zip	New Braunfels, TX 78132	City, State, Zip	
Phone #	281-660-5445	Phone #	
Email	mark@comalpecanfarm.com	Email	

2. LOCATION

Subdivision Name _____ Unit _____ Lot _____ Block _____

Survey Name / Abstract Number Francisco Rodriguez Survey No 99, A-484 Acreage 13.551

Address 177 High Creek Rd 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 1

Indicate Sq Ft of Living Area 560 (504 sq ft excl 4'x14' outside porch)

☐ 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: $ 40,000 (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.

Mark Friesenhahn Mark Friesenhahn original application approved 10/18/21
Signature of Owner Date

This revised application submitted 1/10/24 updated 3/21/24

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 Mark Friesenhahn, Texas PE # 41912

System Description Std disposal system (TAC 30 285.33(b), two compartment septic tank system with gravel filled drain fields

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

Tank Size(s) (Gallons) 750 Absorption/Application Area (Sq Ft) 480

Gallons Per Day (As Per TCEQ Table III) 180

(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.)

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.

Mark Friesenhahn — Signature of Designer

1-10-24 — Date

Attachment 1, Pg 1

REVISED
8:29 am, May 02, 2024

ON-SITE SEWERAGE FACILITY
SOIL EVALUATION REPORT INFORMATION

Date Soil Survey Performed: 4-7-24

Site Location: 171 High Creek Rd New Braunfels, TX 78132

Proposed Excavation Depth: 3 ft (for laterals)

Requirements: (See site Plan for excavation locations)

At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area.
Locations of soil boring or dug pits must be shown on the site drawing.
For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.
Describe each soil horizon and identify any restrictive features on the form. Indicate depths where features appear.

Excavation

SOIL BORING NUMBER 1

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0–5	Soil Class III	Fat Clay w/ Sand dark grey dry stiff; Fat Clay w/ large gravel brown dry, hard	Some small stones, no gravel; Trace gravel; large gravel (< 15% of total)	no water table (Ground water was not encountered)	none	This soil is similar to nearby borings done 12/04/08 (see Attachment 2)

Excavation

SOIL BORING NUMBER 2

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0–5	Soil Class III	(Same as excavation #1 above)		no water table	none	(See above observation for #1)

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

Mark Friesenhahn

Mark Friesenhahn

4-7-24

Date

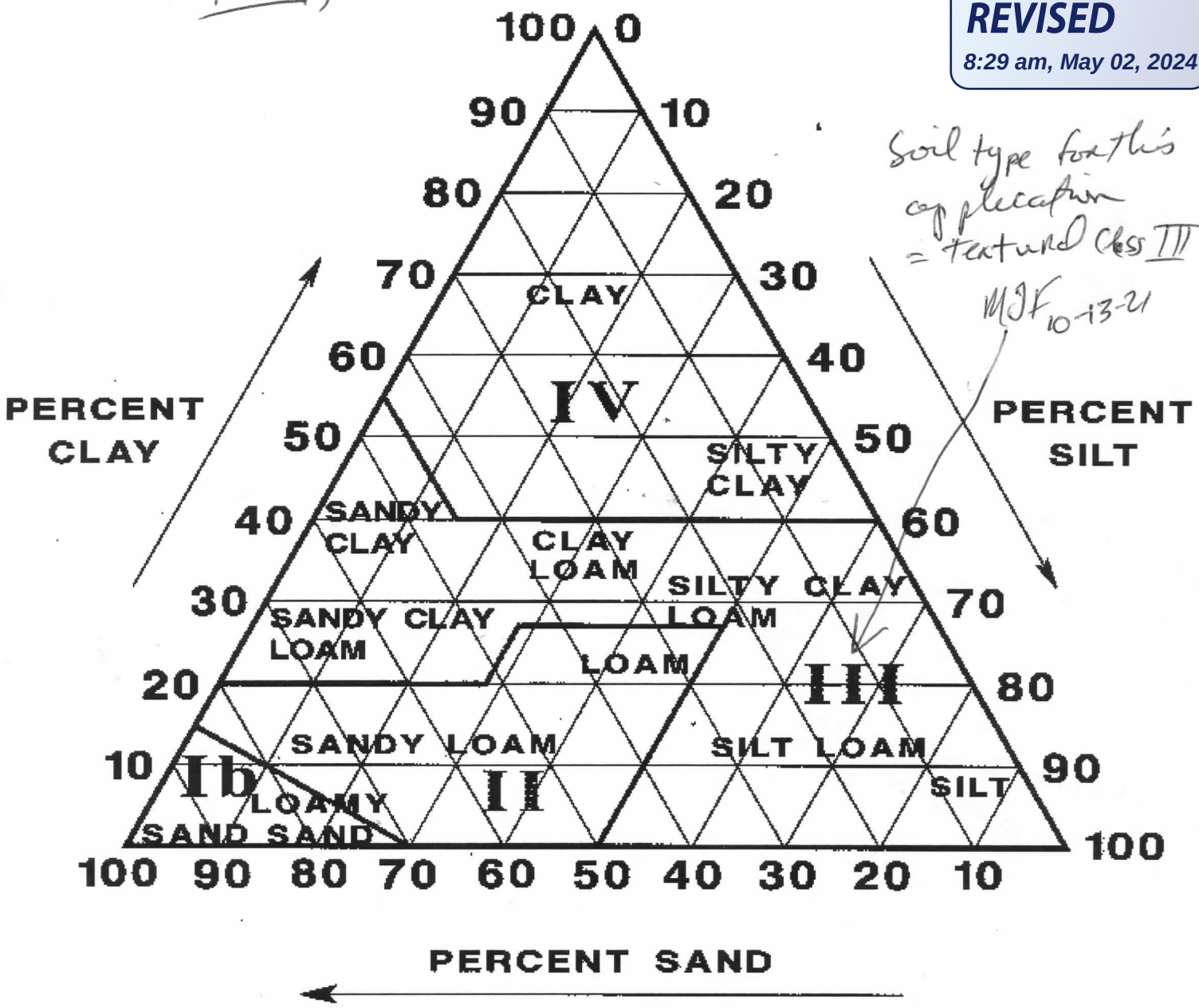
STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER

Mark Friesenhahn 4-7-24

Attachment 1, Pg 2
Table VI, USDA Soil Textural Classifications

REVISED
8:29 am, May 02, 2024

Soil type for this application = textural class III
MJF 10-13-21



SOIL PARTICLE SIZE:

Clay - Smaller than 0.002 mm in diameter
Silt - 0.05 to 0.002 mm in diameter
Sand - 2.0 to 0.05 mm in diameter
Gravel - Greater than 2.0 mm in diameter
mm = millimeter

Note 1: Sand shall be free of organic matter and shall be composed of silica, quartz, mica, or any other stable mineral.
Note 2: Class Ia soils contain more than 30% gravel; therefore, they are not portrayed on the soil triangle.

On-Site Sewage Facility Application
177 High Creek Road, New Braunfels, TX 78132 (located on Comal Pecan Farm)
Owned by Mark Friesenhahn
Original Permit Number 113367 approved 10/18/21
This Revision Submitted 05/01/24
Permit Fee, $160, paid by Ck 5331 on 01/10/24
Revised Permit No, 117067

REVISED
8:24 am, May 02, 2024

System Summary

- On-site sewage system facility for single family 14 ft. x 40 ft., 504 sq. ft. living space, 56 sq. ft. porch, total 560 s. ft., one-bedroom fabricated home
- Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields, two laterals providing the minimum required 960 sq. ft. absorption area
- Refer to attached On-Site Sewage Facility Application for details

Site Description and Site Evaluation

- Single family 560 sq. ft., one-bedroom mobile home
- Refer to Attachment 0.5, Special Warranty Deed for property ownership and description
- Site is just above the FEAM Floodplain Soil Type III, refer to Attachment 1, that includes pgs 1 & 2:
    - On-Site Sewerage Facility, Soil Evaluation Report (pg. 1)
    - Table VI, USDA Soil Textural Classifications (pg. 2)
- Refer to the report in Attachment 2, Subsurface Exploration, Laboratory Testing Program and Foundation Recommendations For The Proposed Friesenhahn Farmhouse Residence, 231 High Creek Road, New Braunfels, TX, RETK Job Number: G208801 dated 12/8/2008

Wastewater Design Flows:

- Per TAC 285.91 Table III, for Single family dwelling (one or two bedrooms) – less than 1500 square feet, Usage Rate, gal/day (with water savings devices) = 180 gal/day

Description of Proposed Treatment System:

- Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Refer to Attachment 3 that includes:
    - Area Plat Map and Area Detailed Plat Map
    - **OSSF Dimensional Site Plan** and Design Layout
    - Google Earth Location Plot Plan showing FEMA 100-year floodplain

Construction/Installation Notes:

- This is a Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields

- Two parallel drain fields, 120 ft long, centerline 5 ft apart are connected to two compartment 750 gal tank with 5 ft of 4 in sch 40 PVC pipe feeding a 4 in sch 40 PVC pipe manifold
- Sch 40 PVC pipe manifold feeds drain fields that are sch 40 perforated PVC pipe capped on the ends with 4 in PVC caps

Maintenance, Operation, Management Requirements:

- This system will be operated in a manner consistent with typical standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Once the tank and drain fields are installed, the tank will be filled with water to initiation operation
- It is expected that this OSSF will quickly reach stable, steady-state operation that will be trouble free for years of service
- Periodic inspections will be conducted, and the tank pumped and cleaned as needed.

Drawings:

- Refer to Attachment 3 that includes:
  - Area Plat Map and Area Detailed Plat Map
  - **OSSF Dimensional Site Plan** and Design Layout
  - Google Earth Location Plot Plan showing FEMA 100-year floodplain
- Refer to Attachment 4:
  - Figure 4. Typical Drainfields- Sectional View
- Attachment 5:
  - Figure 5. Typical Drainfields – Plan View

- Attachment 6 – Details of 14’ x 40’ building

REVISED
8:33 am, May 02, 2024

Attachment 3

Fabricated Home Installed

On Comal Pecan Farm Property

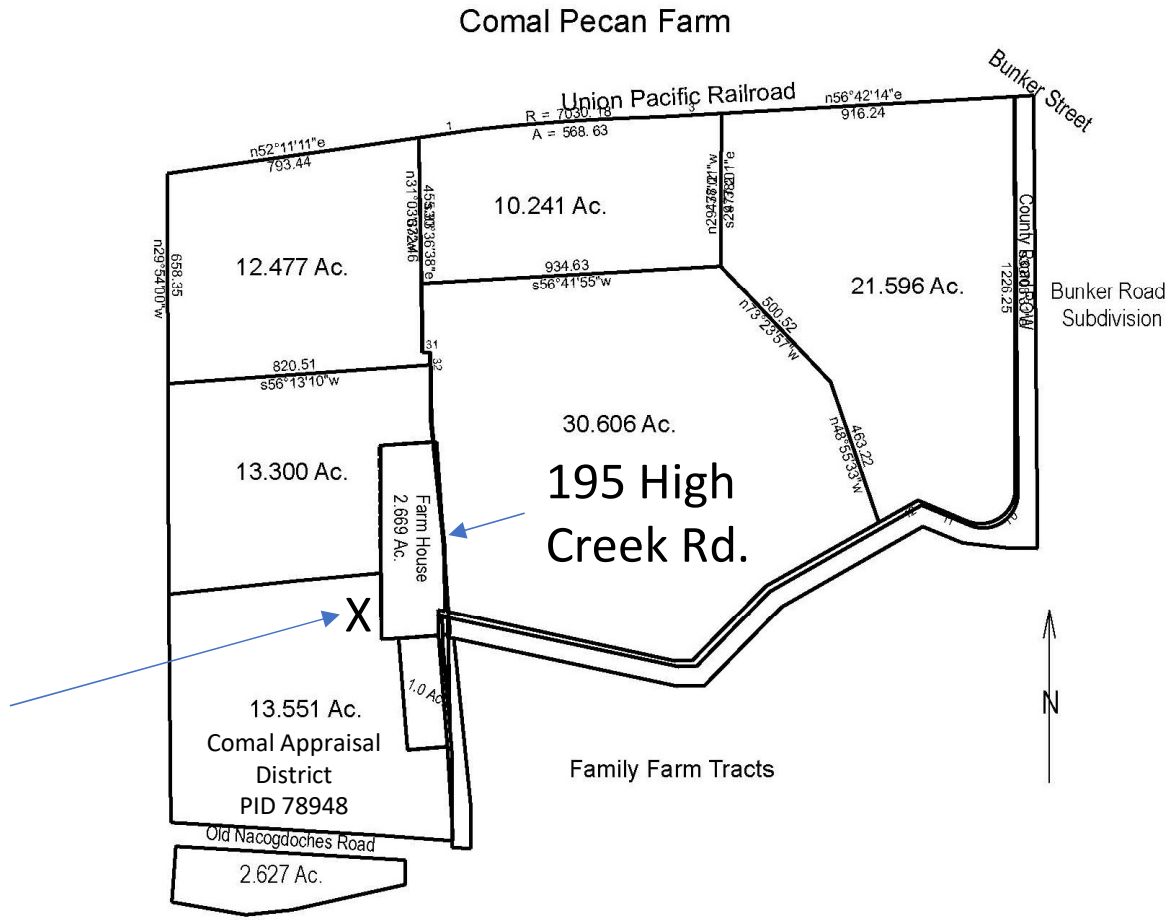
With New OSSF

Nov 2021, updated April, 2024

Area Plat Map

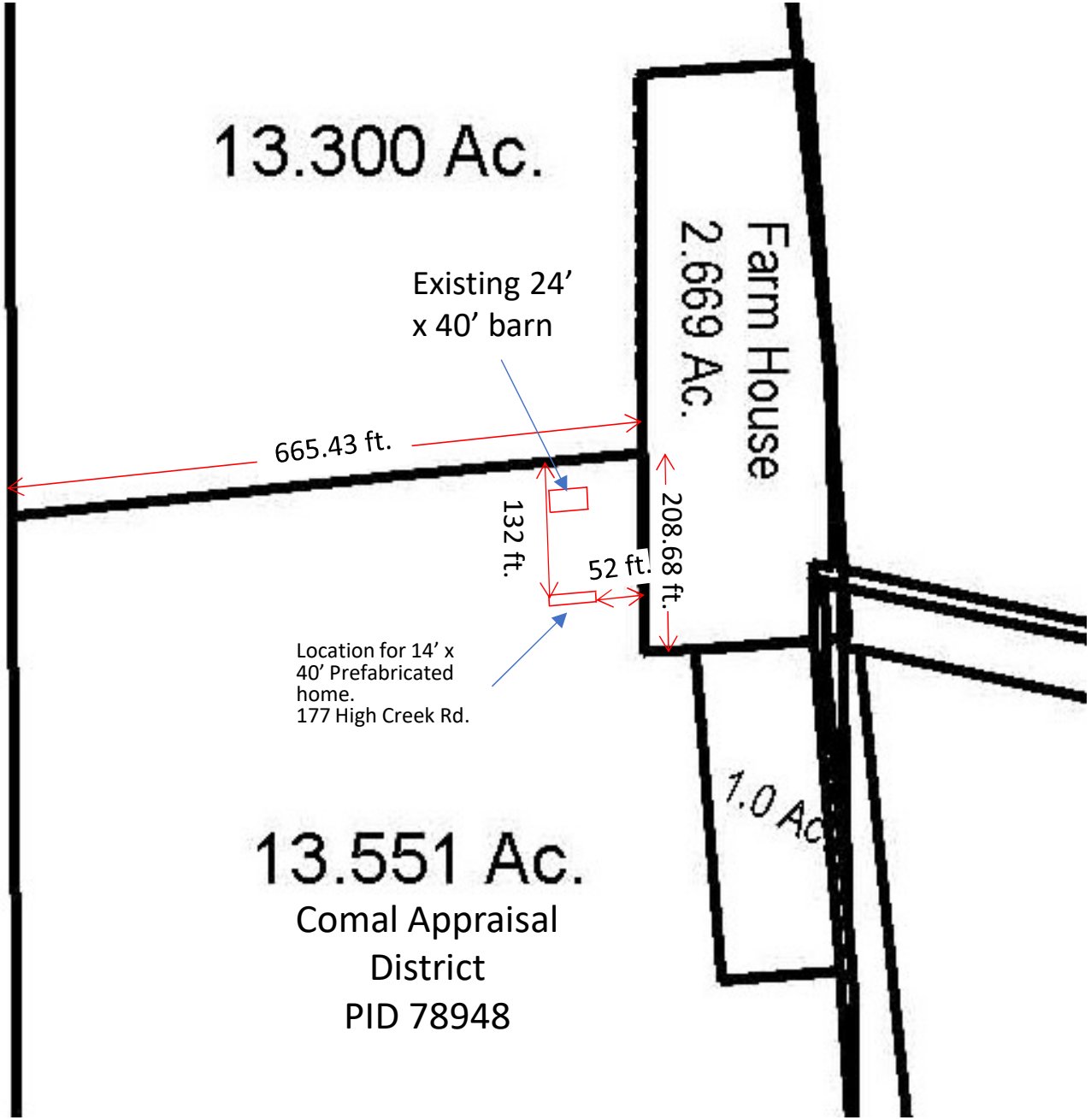
REVISED
8:33 am, May 02, 2024

Prefabricated Home Location
177 High Creek Rd.



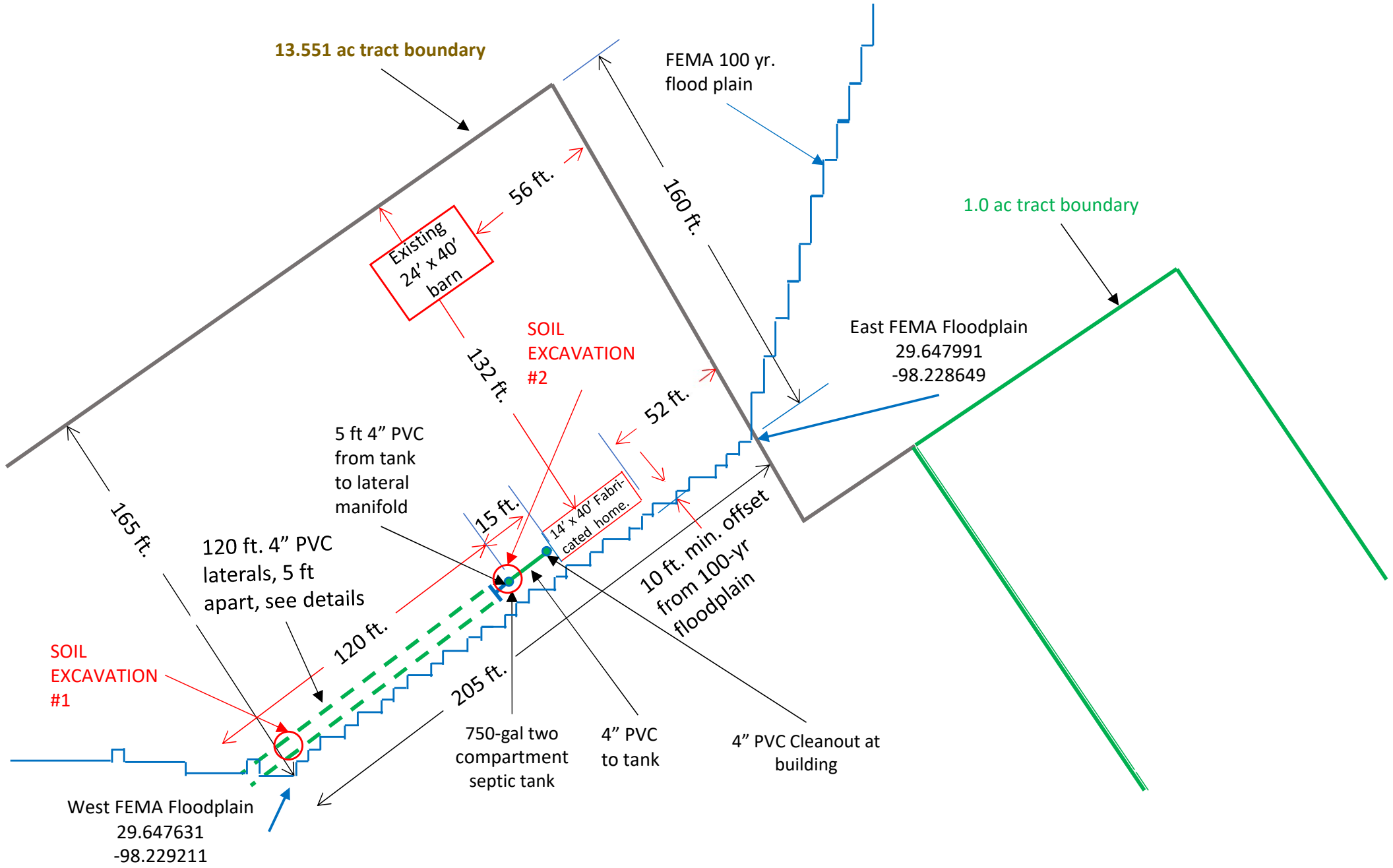
REVISED
8:33 am, May 02, 2024

Detailed Area Plat Map



OSSF Dimensional Site Plan

REVISED
8:34 am, May 02, 2024



Google Earth Location Plot Plan

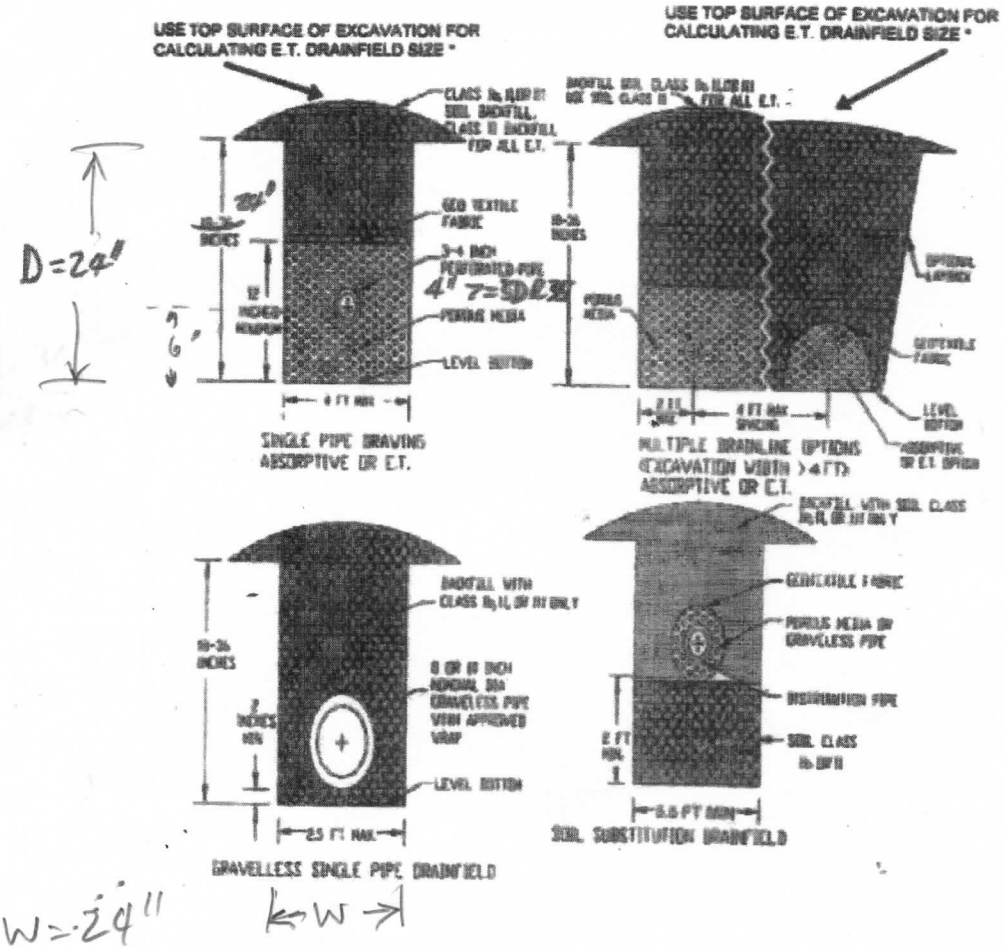
REVISED
8:34 am, May 02, 2024

Figure: 30 TAC §285.90(4)

Attachment 4

REVISED
8:35 am, May 02, 2024

Figure 4. Typical Drainfields - Sectional View.



* Credit for top surface area shall be limited to 2 feet past outside drainline.

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER

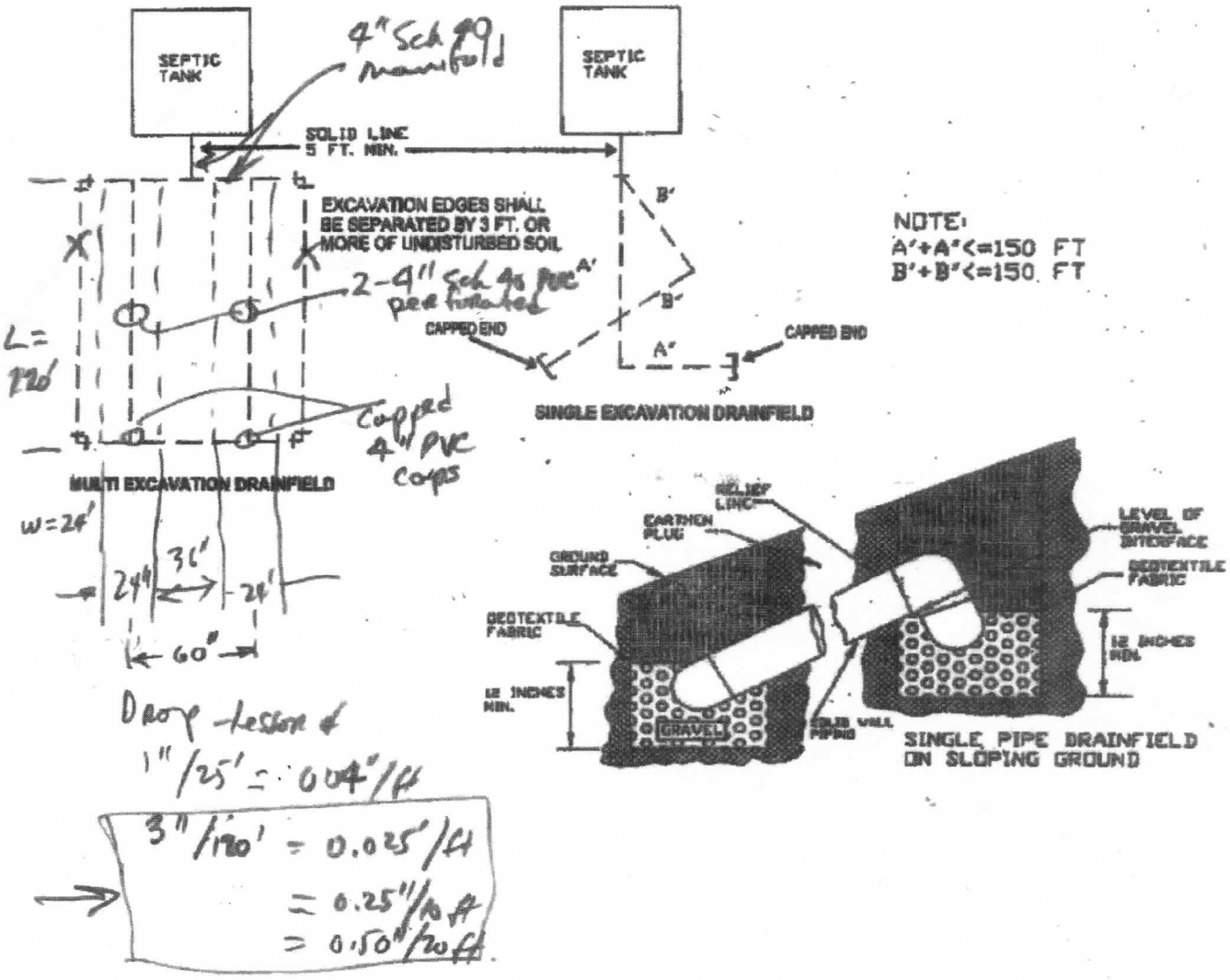
10-13-2021
4-22-24

Attachments

REVISED
8:36 am, May 02, 2024

30 TAC §285.90(5)

Figure 5. Typical Drainfields – Plan View



Drop Lesion of
1"/25' = .004"/ft
3"/120' = 0.025'/ft
= 0.25"/10 ft
= 0.50"/20 ft

Absorption Area

	D(in)	W(in)	L(ft)	Absorption Area ft2
Lateral #1	24"	24"	120'	480
#2	24"	24"	120'	480
Total				960 ft2

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER

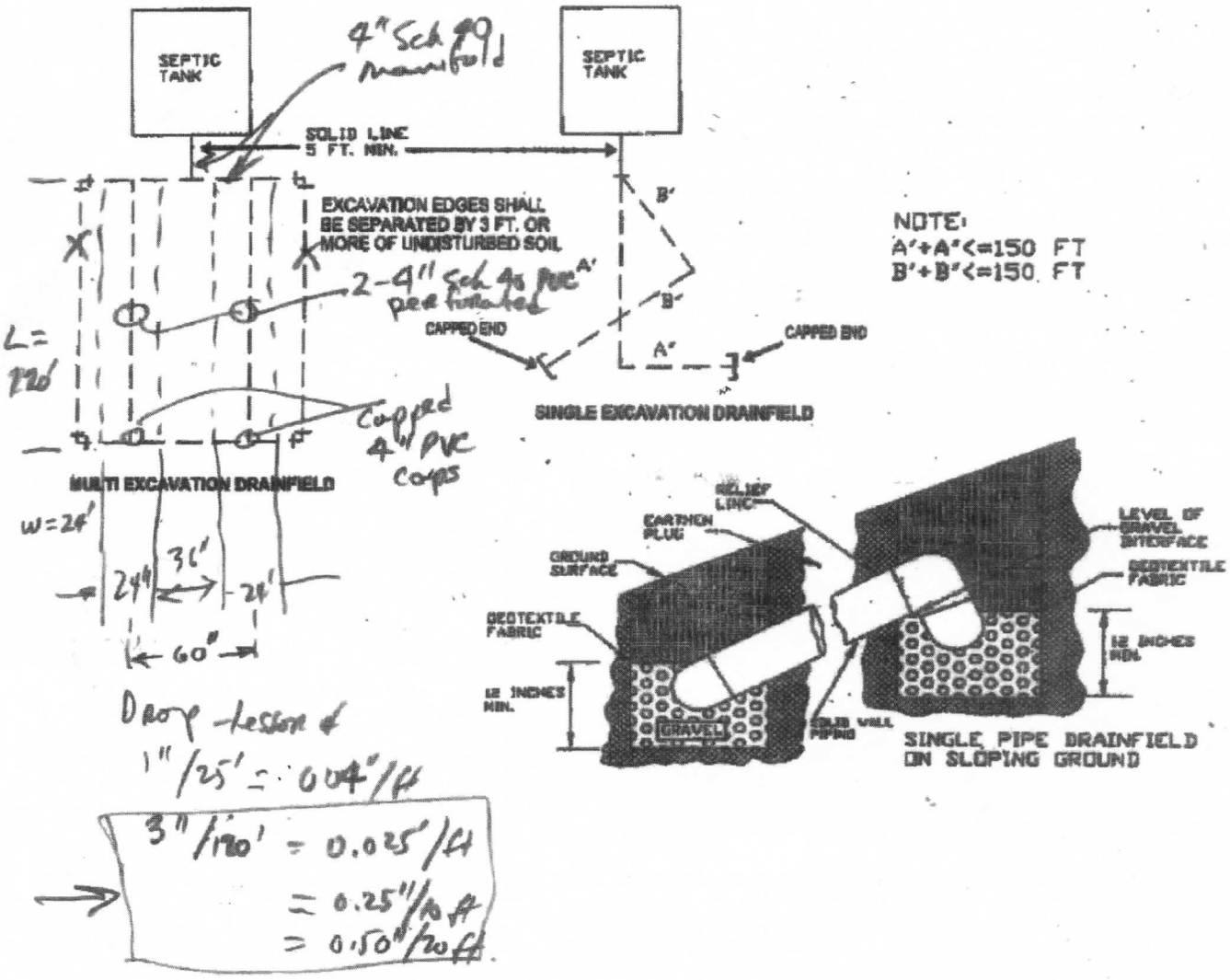
10-13-21
4-22-24

Attachments

REVISED
8:36 am, May 02, 2024

30 TAC §285.90(5)

Figure 5. Typical Drainfields – Plan View



Drop Lesion of
1"/25' = .004"/ft
3"/120' = 0.025'/ft
= 0.25"/10 ft
= 0.50"/20 ft

Absorption Area

	D(in)	W(in)	L(ft)	Absorption Area ft2
Lateral #1	24"	24"	120'	480
#2	24"	24"	120'	480
Total				960 ft2

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER

10-13-21
4-22-24

Derksen Cabin

REVISED
8:39 am, May 02, 2024

DERKSEN
PORTABLE BUILDINGS

CHESTNUT URETHANE WITH WHITE TRIM AND ALAMO WHITE ROOF

METAL (HORIZONTAL) NOT AVAILABLE ON ANY CABIN

CHARCOAL METAL SIDING WITH ALAMO WHITE TRIM AND ROOF

CEDAR URETHANE SIDING WITH TAN TRIM AND TAN METAL ROOF

HONEY GOLD TREATED SIDING WITH CHARCOAL METAL ROOF

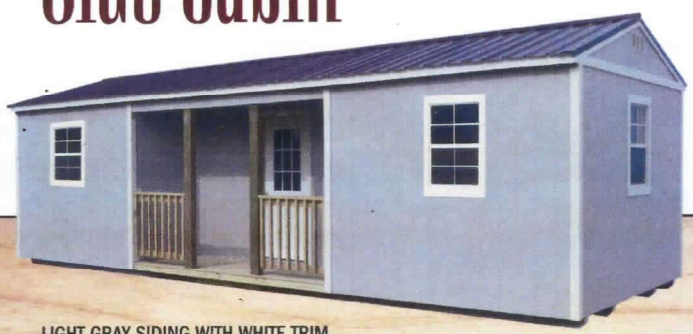
- The Cabin comes standard with a 4' deep front porch with rails. Porch depth is included in length measurement. Side Cabins come standard with a 4' porch on the side, with variable placement options.
- Three 2x3 windows standard.
- One 9-light, 36" pre-hung door.
- The Cabin comes with plenty of head room with standard 8' walls (exterior measurement).

– 14' X 40'
– Galvalum Roof
– Concrete Piers (8")

QUALITY
MATERIALS & WORKMANSHIP

Side Cabin

metal Roof



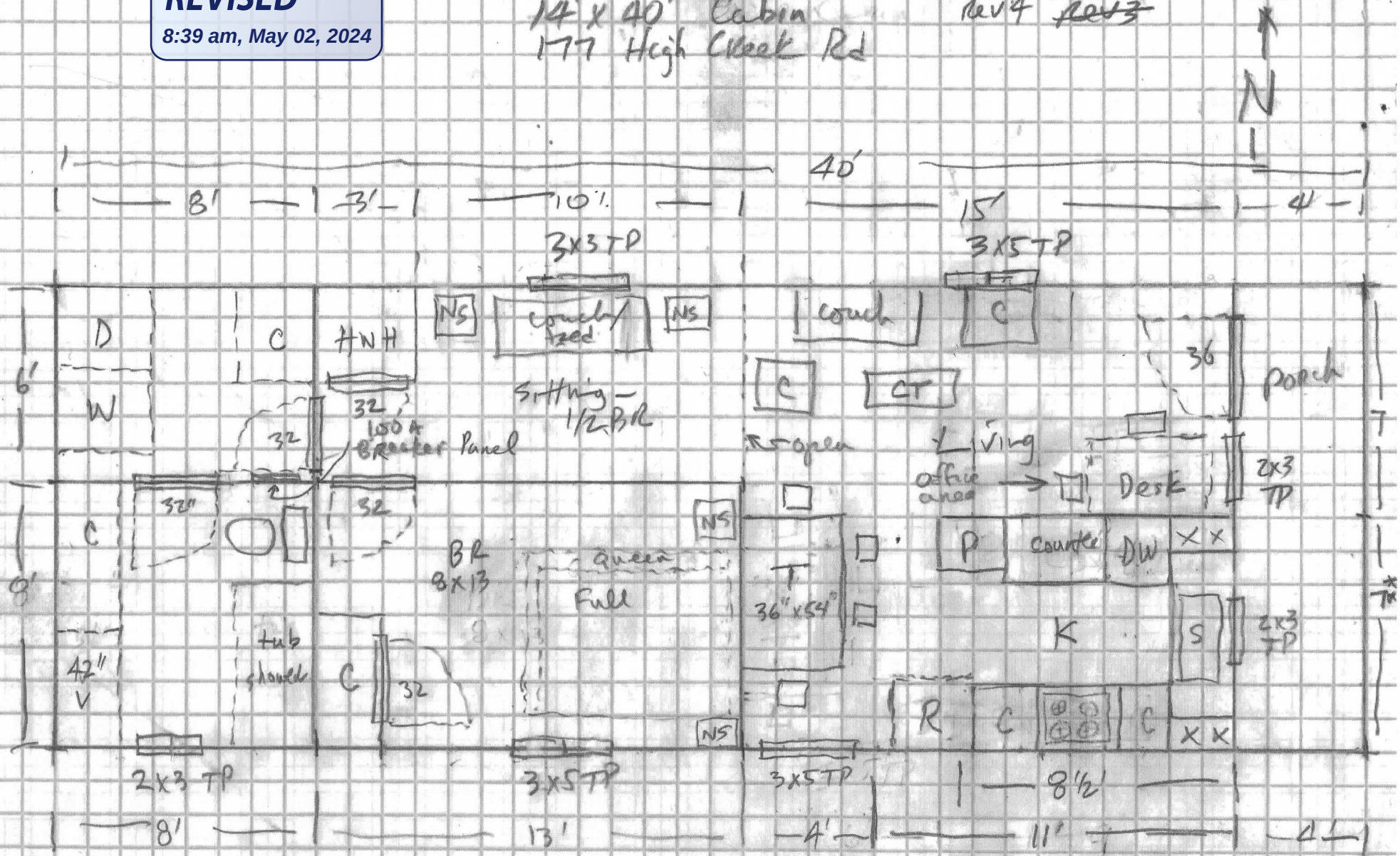
LIGHT GRAY SIDING WITH WHITE TRIM AND BURGUNDY METAL ROOF

CHARCOAL METAL SIDING WITH ALAMO WHITE TRIM AND METAL ROOF

REVISED
8:39 am, May 02, 2024

14' x 40' Cabin
177 High Creek Rd

1-10-24 ~~1-9-24~~
Rev 4 ~~Rev 3~~



DW = 24" wide
W & D = 28" "
Double sink = 30" long

Closet => 24"
Kitchen counter 36" high
Refrig 30" or 36" 24" wide

** possibly change to 7½'

REVISED
8:40 am, May 02, 2024

Attachment 2

SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED FRIESENHAHN FARMHOUSE RESIDENCE 231 HIGH CREEK ROAD NEW BRAUNFELS, TEXAS

RETL JOB NUMBER: G208801

PREPARED FOR:

MARK FRIESENHAHN

2941 SAND CASTLE LANE

HOUSTON, TEXAS 77057

DECEMBER 17, 2008

ROCK LABORATORY

REVISED
8:40 am, May 02, 2024

- Geotechnical Engineering
- Construction Materials Engineering & Testing
- Soils • Asphalt • Concrete

December 17, 2008

Mark Friesenhahn
2941 Sand Castle Lane
Houston, Texas 77057

SUBJECT: **SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED FRIESENHAHN FARMHOUSE RESIDENCE 231 High Creek Road New Braunfels, Texas RETL Project Number: G208801**

Dear Mr. Friesenhahn,

In accordance with our agreement, we have conducted a subsurface exploration and foundation evaluation for the above referenced project. The results of this exploration, together with our recommendations, are to be found in the accompanying report, 3-copies of which are being transmitted herewith.

Often, because of design and construction details that occur on a project, questions arise concerning soil conditions, and RETL would be pleased to continue its role as the Geotechnical Engineer during project implementation.

RETL also has great interest in providing materials testing and observation services during the construction of the project. If you will advise us of the appropriate time to discuss these engineering services, we will be pleased to meet with you at your convenience.

Sincerely,

Kyle D. Hammock, P.E.
Vice President San Antonio

Rock Engineering & Testing Laboratory, Inc.
www.rocktesting.com
6817 Leopard Street • Corpus Christi, Texas, 78409-1703
Office: (361) 883-4555 • Fax: (361) 883-4711
18847 Redland Road #202 • San Antonio, Texas, 78259
Office: (210) 495-8000 • Fax: (210) 495-8015

REVISED
8:40 am, May 02, 2024

SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED FRIESENHAHN FARMHOUSE RESIDENCE 231 HIGH CREEK ROAD NEW BRAUNFELS, TEXAS

RETL JOB NUMBER: G208801

PREPARED FOR:

MARK FRIESENHAHN
2941 SAND CASTLE LANE
HOUSTON, TEXAS 77057

DECEMBER 17, 2008

PREPARED BY:
ROCK ENGINEERING AND TESTING LABORATORY, INC.
18847 REDLAND ROAD; SUITE 202
SAN ANTONIO, TEXAS 78259
PHONE: (210) 495-8000; FAX (210) 495-8015

12/17/08

Kyle D. Hammock, P.E.
Vice President San Antonio

REVISED
8:40 am, May 02, 2024

TABLE OF CONTENTS

REVISED
8:40 am, May 02, 2024

LOG OF BORING B-1

SHEET 1 of 1

Rock Engineering & Testing Laboratory Inc.
4910 Neptune
Corpus Christi, TX 78405
Telephone: 361-883-4555
Fax: 361-883-4711

CLIENT: Mark Friesenhahn
PROJECT: Friesenhahn Farmhouse Residence
LOCATION: 231 High Creek Rd.- New Braunfels, TX
NUMBER: G208801
DATE(S) DRILLED: 12/04/08 - 12/04/08

DRILLING METHOD(S):
Solid Stem Auger

GROUNDWATER INFORMATION:
Groundwater was not encountered during drilling.

SURFACE ELEVATION: N/A

FIELD DATA					LABORATORY DATA							
SOIL SYMBOL	DEPTH (FT)	SAMPLE NUMBER	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
		SS S-1		N= 22	16	54	24	30			77	**FAT CLAY**, with sand, dark gray, slightly moist, very stiff. (CH)
		SS S-2		N= 32	8							Same as above, trace gravel, dry, hard.
	5	SS S-3		N= 41 50/5"	12						55	**FAT CLAY**, with large gravel, light brown, dry, very hard.
		SS S-4		N= 50/5"	8	37	18	19			59	**SANDY LEAN CLAY**, with gravel, light brown, dry, very hard. (CL) (WEATHERED LIMESTONE)
	10	SS S-5		N= 50/5"	5							Same as above.
		SS S-6		N= 50/4"	4						46	**CLAYEY SAND**, light brown, dry, very dense. (WEATHERED LIMESTONE)
	15											
		SS S-7		N= 50/4"	9							Same as above.
	20											Boring terminated at a depth of 20-feet.

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring location determined by Mark Friesenhahn on the south side of the house. Boring operations performed by a drilling subcontractor to RETL.

LOG_OF_BORING G208801 FRIESENHAHN FARMHOUSE.GPJ ROCK_ETL.GDT 12/17/08

REVISED
8:40 am, May 02, 2024

LOG OF BORING B-2

Rock Engineering & Testing Laboratory Inc.
4910 Neptune
Corpus Christi, TX 78405
Telephone: 361-883-4555
Fax: 361-883-4711

CLIENT: Mark Friesenhahn
PROJECT: Friesenhahn Farmhouse Residence
LOCATION: 231 High Creek Rd.- New Braunfels, TX
NUMBER: G208801
DATE(S) DRILLED: 12/04/08 - 12/04/08

DRILLING METHOD(S):
Solid Stem Auger

GROUNDWATER INFORMATION:
Groundwater was not encountered during drilling.

SURFACE ELEVATION: N/A

FIELD DATA					LABORATORY DATA							
SOIL SYMBOL	DEPTH (FT)	SAMPLE NUMBER	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
		SS S-1		N= 24	17							**FAT CLAY**, with sand, dark gray, dry, very stiff.
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	5	SS S-3		N= 18 50/5"	20							**FAT CLAY**, with large gravel, brown, dry, very hard.
		SS S-4		N= 45 50/4"	10						51	**GRAVELLY LEAN CLAY**, light brown, dry, very dense. (WEATHERED LIMESTONE)
		SS S-5		N= 50/5"	5							Same as above.
	10											
		SS S-6		N= 45	9	38	17	21			56	**SANDY LEAN CLAY**, with gravel, brown, dry, hard. (CL)
	15											
		SS S-7		N= 32	17						40	Same as above, with sand layers, moist.
	20											Boring terminated at a depth of 20-feet.

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
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LOG_OF_BORING G208801 FRIESENHAHN FARMHOUSE.GPJ ROCK_ETL.GDT 12/17/06

Engineering & Testing
Laboratory, Inc.

REVISED
8:40 am, May 02, 2024

4910 Neptune Street
Corpus Christi, Texas 78405
Office: (361) 883-4555 Fax: (361) 883-4711

KEY TO SOIL CLASSIFICATIONS AND SYMBOLS

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Letter	Symbol: Hatching	Symbol: Color	NAME
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW		RED	Well – graded gravels or gravel – sand mixtures, little or no fines
		GP		RED	Poorly-graded gravels or gravel – sand mixtures, little or no fines
		GM		YELLOW	Silty gravels, gravel – sand – silt mixtures
		GC		YELLOW	Clayey gravels, gravel - sand – clay mixtures
	SAND AND SANDY SOILS	SW		RED	Well - graded sands or gravelly sands, little or no fines
		SP		RED	Poorly – graded sands or gravelly sands, little or no fines
		SM		YELLOW	Silty sands, sand – silt mixtures
		SC		YELLOW	Clayey sands, sand – clay mixtures
FINE GRAINED SOILS	SILTS AND CLAYS LL < 50	ML		GREEN	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with
		CL		GREEN	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL		GREEN	Organic silts and organic silt-clays of low plasticity
	SILTS AND CLAYS LL > 50	MH		BLUE	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH		BLUE	Inorganic clays of high plasticity, fat clays
		OH		BLUE	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		Pt		ORANGE	Peat and other highly organic soils

TERMS CHARACTERIZING SOIL STRUCTURE

SLICKENSIDED – having inclined planes of weakness that are slick and glossy in appearance

FISSURED – containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical

LAMINATED (VARVED) – composed of thin layers of varying color and texture, usually grading from sand or silt at the bottom to clay at the top.

CRUMBLY – cohesive soils which break into small blocks or crumbs on drying

CALCAREOUS – containing appreciable quantities of calcium carbonate, generally nodular.

WELL GRADED – having wide range in grain sizes and substantial amounts of all intermediate particle sizes.

POORLY GRADED - predominantly of one grain size (uniformly graded) or having a range of sizes with some intermediate size missing (gap or skip graded)

SYMBOLS FOR TEST DATA

M/C = 15 – Natural moisture content in percent.

γ = 95 – Dry unit weight in lbs/cu ft.

Qu = 1.23 – Unconfined compression strength in tons/ sq ft.

21 – 21 – 30 – Liquid limit, Plastic limit, and Plasticity Index

30% P.NER – Percent finer than No. 200 mesh sieve

30 B/F – Blows per foot, standard penetration test

▼ – Ground water table

TERMS DESCRIBING CONSISTENCY OF SOIL (2)

COARSE GRAINED SOILS		FINE GRAINED SOILS		
DESCRIPTIVE TERM	NO. BLOWS / FT. STANDARD PEN. TEST	DESCRIPTIVE TERM	NO. BLOWS / FT. STANDARD PEN. TEST	UNCONFINED COMPRESSION TONS PER SQ. FT.
Very Loose	0 – 4	Very Soft	< 2	< 0.25
Loose	4 – 10	Soft	2 – 4	0.25 – 0.50
Firm (medium)	10 – 30	Plastic (med. Stiff)	4 – 8	0.50- 1.00
Dense	30 – 50	Stiff	8 – 15	1.0 – 2.00
Very Dense	over 50	Very Stiff	15 – 30	2.00 – 4.00
		Hard	over 30	over 4.00

Field classification for "Consistency" is determined with a 0.25" diameter penetrometer.

From: Ritzen, Brenda
To: "Mark"
Subject: RE: Permit 117067
Date: Friday, March 22, 2024 4:32:00 PM
Attachments: image001.png
Examples.pdf

Mr. Friesenhahn,

I have reviewed your revised planning materials and found the following information is still needed:

1. **Submit a site and soil evaluation in accordance with TAC Chapter 285.30:**
    a. **Soil report as per 285.30(a)(b) (sample form attached)**
    b. **Soil texture analysis as per 285.30(b)(1)(i)-(v)**
    c. **Gravel Analysis, restrictive horizon analysis, groundwater evaluation, surface drainage analysis, topography, and flood hazard.**
2. **Include the minimum absorption area required for the disposal field.**
3. **Identify the width of the disposal field excavations.**
4. **Submit a clear legible site plan which identifies the location of all OSSF components, the separation distances between system components, and to all property boundaries.**
5. **Revise as requested and resubmit.**

Thank you,

COMAL COUNTY TEXAS

Brenda Ritzen
Environmental Health Coordinator
195 David Jonas Dr.
New Braunfels, TX 78132
DR:OS00007722
830-608-2090
www.cceo.org

From: Mark <mark@comalpecanfarm.com>

Attachment 1 Table VI

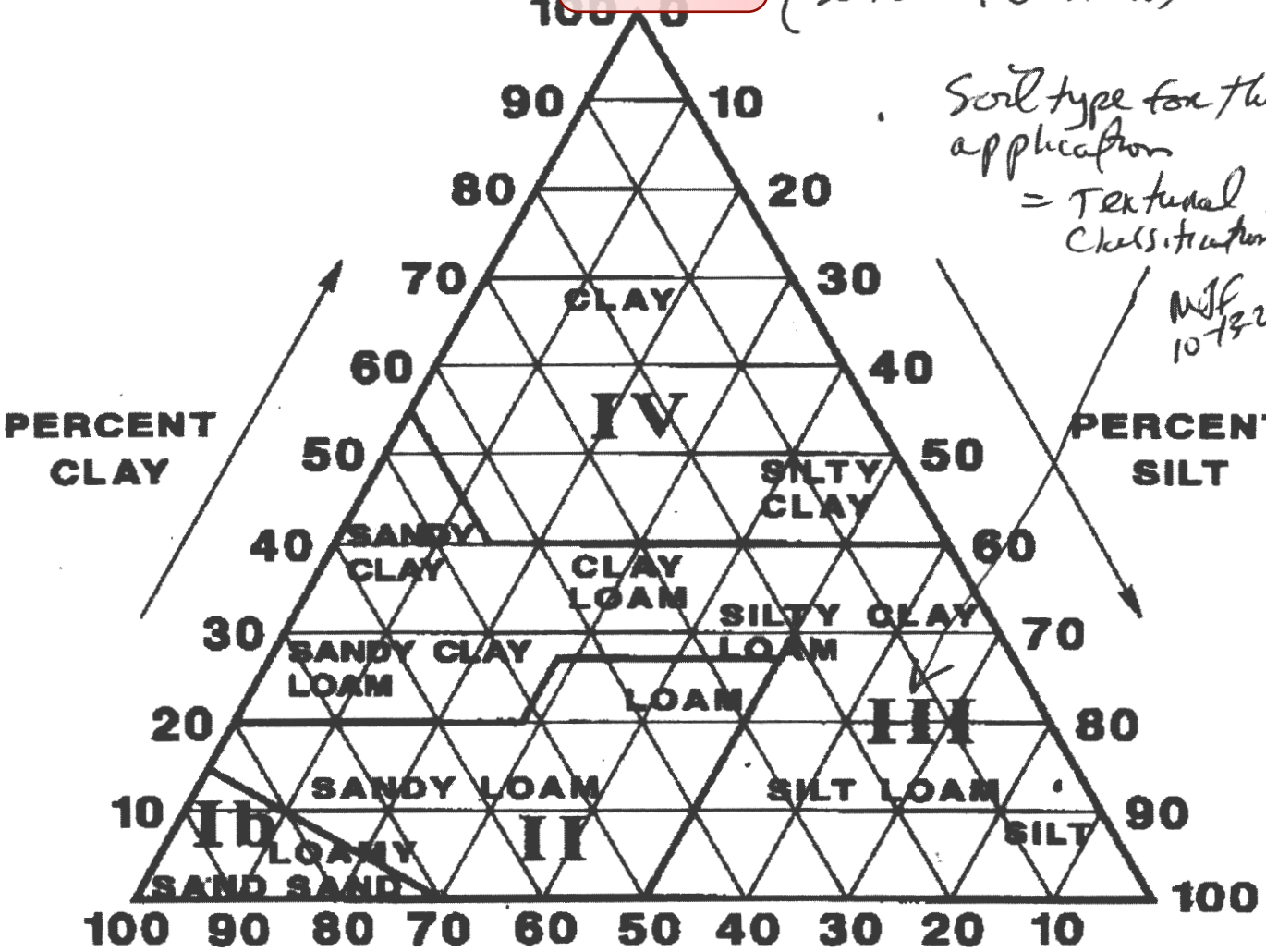
USDA Soil Textural Classifications

(30.0285, 0091-16)

VOID

Soil type for this application = Textural Classification II

MJF 10-13-21



VOID

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER

10-13-2021

Resubmitted 1-10-2024

SOIL PARTICLE SIZE:

Clay - Smaller than 0.002 mm in diameter
Silt - 0.05 to 0.002 mm in diameter
Sand - 2.0 to 0.05 mm in diameter
Gravel - Greater than 2.0 mm in diameter

mm = millimeter

Note 1: Sand shall be free of organic matter and shall be composed of silica, quartz, mica, or any other stable mineral.

Note 2: Class Ia soils contain more than 30% gravel; therefore, they are not portrayed on the soil triangle.

REVISED
8:33 am, Mar 22, 2024

ON-SITE SEWERAGE FACILITY
SOIL EVALUATION REPORT INFORMATION

VOID

Date Soil Survey Performed: 12/4/2008

Site Location: Lord Pecan Farm Near 195 High Creek Rd

Proposed Excavation Depth: See attached log of Boring B-1 & B-2

Requirements:

At least two soil excavations must be performed on the site, at opposite ends of the proposed disposal area.
Locations of soil boring or dug pits must be shown on the site drawing.
For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed excavation depth. For surface disposal, the surface horizon must be evaluated.
Describe each soil horizon and identify any restrictive features on the form. Indicate depths where features appear.

SOIL BORING NUMBER _____

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 1 2 3 4 5						

SOIL BORING NUMBER _____

Depth (Feet)	Texture Class	Soil Texture	Gravel Analysis	Drainage (Mottles/ Water Table)	Restrictive Horizon	Observations
0 1 2 3 4 5						

VOID

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

_____ 3-21-24

Date

REVISED
8:33 am, Mar 22, 2024

VOID

Attachment 2

SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED FRIESENHAHN FARMHOUSE RESIDENCE 231 HIGH CREEK ROAD NEW BRAUNFELS, TEXAS

RETL JOB NUMBER: G208801

PREPARED FOR:

MARK FRIESENHAHN

2941 SAND CASTLE LANE

HOUSTON, TEXAS 77057

DECEMBER 17, 2008

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ROCK LABORATORY INCORPORATED

REVISED
8:33 am, Mar 22, 2024

- Geotechnical Engineering
- Construction Materials Engineering & Testing
- Soils • Asphalt • Concrete

VOID

December 17, 2008

Mark Friesenhahn
2941 Sand Castle Lane
Houston, Texas 77057

SUBJECT: **SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED FRIESENHAHN FARMHOUSE RESIDENCE 231 High Creek Road New Braunfels, Texas RETL Project Number: G208801**

Dear Mr. Friesenhahn,

In accordance with our agreement, we have conducted a subsurface exploration and foundation evaluation for the above referenced project. The results of this exploration, together with our recommendations, are to be found in the accompanying report, 3-copies of which are being transmitted herewith.

Often, because of design and construction details that occur on a project, questions arise concerning soil conditions, and RETL would be pleased to continue its role as the Geotechnical Engineer during project implementation.

RETL also has great interest in providing materials testing and observation services during the construction of the project. If you will advise us of the appropriate time to discuss these engineering services, we will be pleased to meet with you at your convenience.

Sincerely,

Kyle D. Hammock, P.E.
Vice President San Antonio

VOID

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REVISED
8:34 am, Mar 22, 2024

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SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED FRIESENHAHN FARMHOUSE RESIDENCE 231 HIGH CREEK ROAD NEW BRAUNFELS, TEXAS

RETL JOB NUMBER: G208801

PREPARED FOR:

MARK FRIESENHAHN
2941 SAND CASTLE LANE
HOUSTON, TEXAS 77057

DECEMBER 17, 2008

PREPARED BY:
ROCK ENGINEERING AND TESTING LABORATORY, INC.
18847 REDLAND ROAD; SUITE 202
SAN ANTONIO, TEXAS 78259
PHONE: (210) 495-8000; FAX (210) 495-8015

VOID

12/17/08

Kyle D. Hammock, P.E.
Vice President San Antonio

ROCK ENGINEERING & TESTING LABORATORY INCORPORATED

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REVISED
8:34 am, Mar 22, 2024

LOG OF BORING B-1

VOID

Rock Engineering & Testing Laboratory
4910 Neptune
Corpus Christi, TX 78405
Telephone: 361-883-4555
Fax: 361-883-4711

CLIENT: Mark Friesenhahn
PROJECT: Friesenhahn Farmhouse Residence
LOCATION: 231 High Creek Rd.- New Braunfels, TX
NUMBER: G208801
DATE(S) DRILLED: 12/04/08 - 12/04/08

DRILLING METHOD(S):
Solid Stem Auger

GROUNDWATER INFORMATION:
Groundwater was not encountered during drilling.

SURFACE ELEVATION: N/A

SOIL SYMBOL	DEPTH (FT)	SAMPLE NUMBER	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ.FT)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
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		SS S-2		N= 32	8							Same as above, trace gravel, dry, hard.
	5	SS S-3		N= 41 50/5"	12						55	**FAT CLAY**, with large gravel, light brown, dry, very hard.
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	10	SS S-5		N= 50/5"	5							Same as above.
		SS S-6		N= 50/4"	4						46	**CLAYEY SAND**, light brown, dry, very dense. (WEATHERED LIMESTONE)
	15	SS S-7		N= 50/4"	9							Same as above.
	20											Boring terminated at a depth of 20-feet.

VOID

N - STANDARD PENETRATION TEST RESISTANCE
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T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring location determined by Mark Friesenhahn on the south side of the house. Boring operations performed by a drilling subcontractor to RETL.

LOG_OF_BORING G208801 FRIESENHAHN FARMHOUSE.GPJ ROCK_ETL.GDT 12/17/08

REVISED
8:34 am, Mar 22, 2024

LOG OF BORING B-2

Rock Engineering & Testing Laboratory
4910 Neptune
Corpus Christi, TX 78405
Telephone: 361-883-4555
Fax: 361-883-4711

VOID

CLIENT: Mark Friesenhahn
PROJECT: Friesenhahn Farmhouse Residence
LOCATION: 231 High Creek Rd.- New Braunfels, TX
NUMBER: G208801

DATE(S) DRILLED: 12/04/08 - 12/04/08

DRILLING METHOD(S):
Solid Stem Auger

GROUNDWATER INFORMATION:
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FIELD DATA					LABORATORY DATA							
SOIL SYMBOL	DEPTH (FT)	SAMPLE NUMBER	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	ATTERBERG LIMITS LIQUID LIMIT LL	ATTERBERG LIMITS PLASTIC LIMIT PL	ATTERBERG LIMITS PLASTICITY INDEX PI	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	MINUS NO. 200 SIEVE (%)	DESCRIPTION OF STRATUM
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		SS S-5		N= 50/5"	5							Same as above.
	10											
		SS S-6		N= 45	9	38	17	21			56	**SANDY LEAN CLAY**, with gravel, brown, dry, hard. (CL)
	15											
		SS S-7		N= 32	17						40	Same as above, with sand layers, moist.
	20											Boring terminated at a depth of 20-feet.

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LOG_OF_BORING G208801 FRIESENHAHN FARMHOUSE.GPJ ROCK_ETL.GDT 12/17/08

Engineering & Testing Laboratory, Inc.

4910 Neptune Street
Corpus Christi, Texas 78405
Office: (361) 883-4555 Fax: (361) 883-4711

REVISED
8:34 am, Mar 22, 2024

KEY TO SOIL CLASSIFICATIONS AND SYMBOLS

UNIFIED SOIL CLASSIFICATION SYSTEM

VOID

Major Divisions		Symbol: Letter	Symbol: Hatching	Symbol: Color	NAME
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FINE GRAINED SOILS	SILTS AND CLAYS LL < 50	ML		GREEN	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with
		CL		GREEN	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL		GREEN	Organic silts and organic silt-clays of low plasticity
	SILTS AND CLAYS LL > 50	MH		BLUE	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH		BLUE	Inorganic clays of high plasticity, fat clays
		OH		BLUE	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		Pt		ORANGE	Peat and other highly organic soils

TERMS CHARACTERIZING SOIL STRUCTURE

SLICKENSIDED – having inclined planes of weakness that are slick and glossy in appearance

FISSURED – containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical

LAMINATED (VARVED) – composed of thin layers of varying color and texture, usually grading from sand or silt at the bottom to clay at the top.

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M/C = 15 – Natural moisture content in percent.

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Qu = 1.23 – Unconfined compression strength in tons/ sq ft.

21 – 21 – 30 – Liquid limit, Plastic limit, and Plasticity Index

30% P.NER – Percent finer than No. 200 mesh sieve

30 B/F – Blows per foot, standard penetration test

▼ – Ground water table

VOID

TERMS DESCRIBING CONSISTENCY OF SOIL (2)

COARSE GRAINED SOILS		FINE GRAINED SOILS		
DESCRIPTIVE TERM	NO. BLOWS / FT. STANDARD PEN. TEST	DESCRIPTIVE TERM	NO. BLOWS / FT. STANDARD PEN. TEST	UNCONFINED COMPRESSION TONS PER SQ. FT.
Very Loose	0 – 4	Very Soft	< 2	< 0.25
Loose	4 – 10	Soft	2 – 4	0.25 – 0.50
Firm (medium)	10 – 30	Plastic (med. Stiff)	4 – 8	0.50 – 1.00
Dense	30 – 50	Stiff	8 – 15	1.0 – 2.00
Very Dense	over 50	Very Stiff	15 – 30	2.00 – 4.00
		Hard	over 30	over 4.00

Field classification for "Consistency" is determined with a 0.25" diameter penetrometer.

On-Site Sewage Facility Application
177 High Creek Road, New Braunfels, TX 78132 (located on Comal Pecan Farm)
Owned by Mark Friesenhahn
Original Permit Number 113367 approved 10/18/21
This Revision Approved 01/10/24
Permit Fee, $160, paid by Ck 5331 on 01/10/24
Revised Permit No, 117067

VOID

REVISED
8:30 am, Mar 22, 2024

System Summary

- On-site sewage system facility for single family 14 ft. x 40 ft., 560840 sq. ft., one-bedroom fabricated home
- Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields

Site Description and Site Evaluation

- Single family 560 sq. ft., one-bedroom mobile home
- Refer to Attachment 0.5, Special Warranty Deed for property ownership and description
- Site is just above the FEAM Floodplain Soil Type III, refer to Attachment 1, Table VI, USDA Soil Textural Classifications
- Refer to the report in Attachment 2, Subsurface Exploration, Laboratory Testing Program and Foundation Recommendations For The Proposed Friesenhahn Farmhouse Residence, 231 High Creek Road, New Braunfels, TX, RETK Job Number: G208801 dated 12/8/2008

Wastewater Design Flows:

- Per TAC 285.91 Table III, for Single family dwelling (one or two bedrooms) – less than 1500 square feet, Usage Rate, gal/day (with water savings devices) = 180 gal/day

Description of Proposed Treatment System:

- Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Refer to Attachment 3 that includes:
  - Area Plat Map
  - Aerial View showing FEMA 100-year floodplain
  - Location Plot Plan and Design Layout

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Construction/Installation Notes:

- This is a Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Two parallel drain fields, 120 ft long, centerline 5 ft apart are connected to two compartment 750 gal tank with 5 ft of 4 in sch 40 PVC pipe feeding a 4 in sch 40 PVC pipe manifold

VOID

REVISED
8:30 am, Mar 22, 2024

- Sch 40 PVC pipe manifold feeds drain fields that are sch 40 perforated PVC pipe capped on the ends with 4 in PVC caps

Maintenance, Operation, Management Requirements:

- This system will be operated in a manner consistent with typical standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Once the tank and drain fields are installed, the tank will be filled with water to initiation operation
- It is expected that this OSSF will quickly reach stable, steady-state operation that will be trouble free for years of service
- Periodic inspections will be conducted and the tank pumped and cleaned as needed.

Drawings:

- Refer to Attachment 3 that includes:
  - Areas Plat Map
  - Aerial View showing FEMA 100-year floodplain
  - Location Plot Plan and Design Layout
- Refer to Attachment 4:
  - Figure 4. Typical Drainfields- Sectional View
- Attachment 5:
  - Figure 5. Typical Drainfields – Plan View

VOID

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER
3-21-24

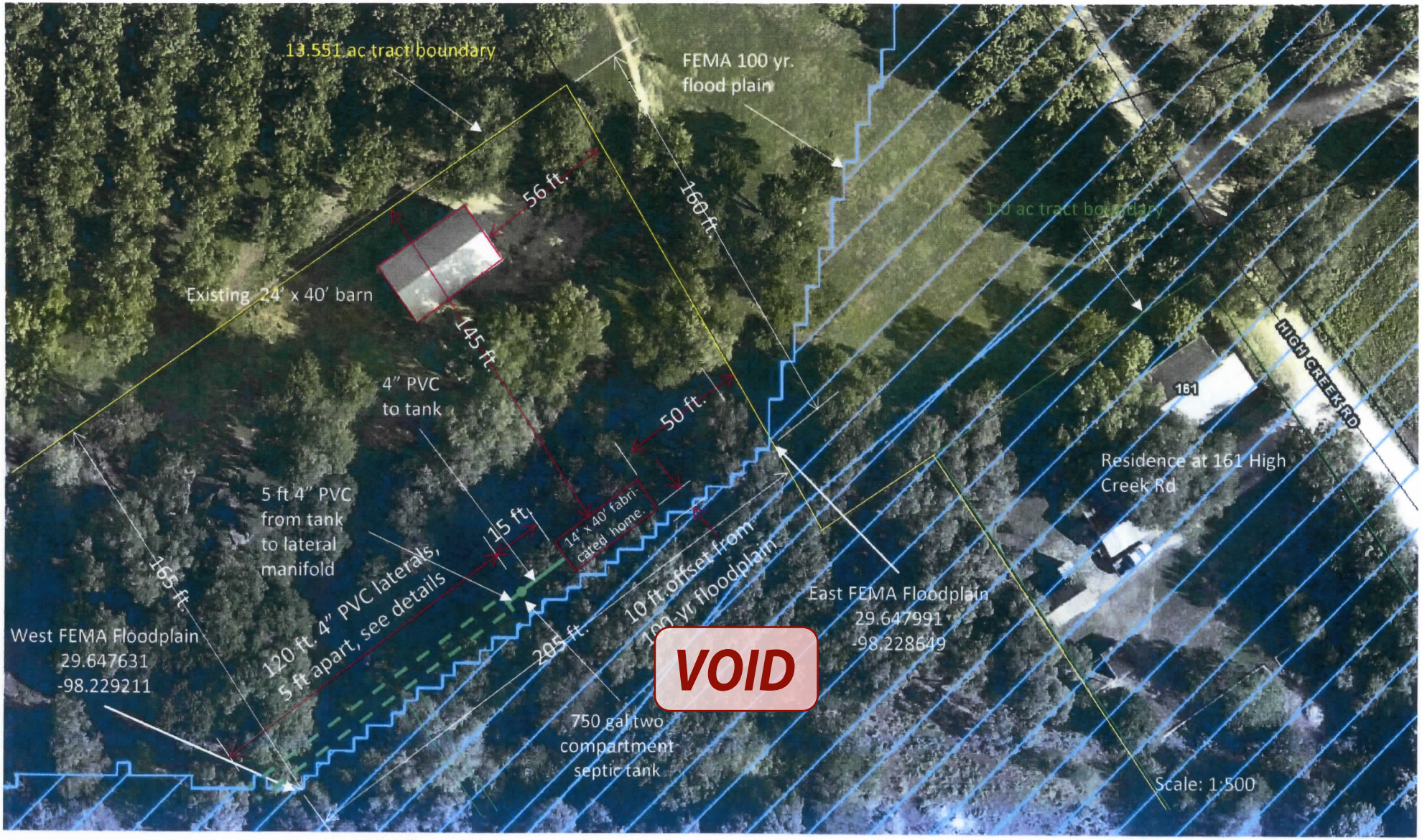
REVISED
8:51 am, Mar 22, 2024

VOID

Attachment 3, Pg 2

Location Plot Plan and OSSF Design Layout

177 High Creek Rd New Braunfels, TX



VOID

VOID

REVISED
8:34 am, Mar 22, 2024

Attachment 3

Fabricated Home Installed

177 High Creek Rd

On Comal Pecan Farm Property

With New OSSF

Nov 2021, updated Jan, 2024

Received 3-21-24

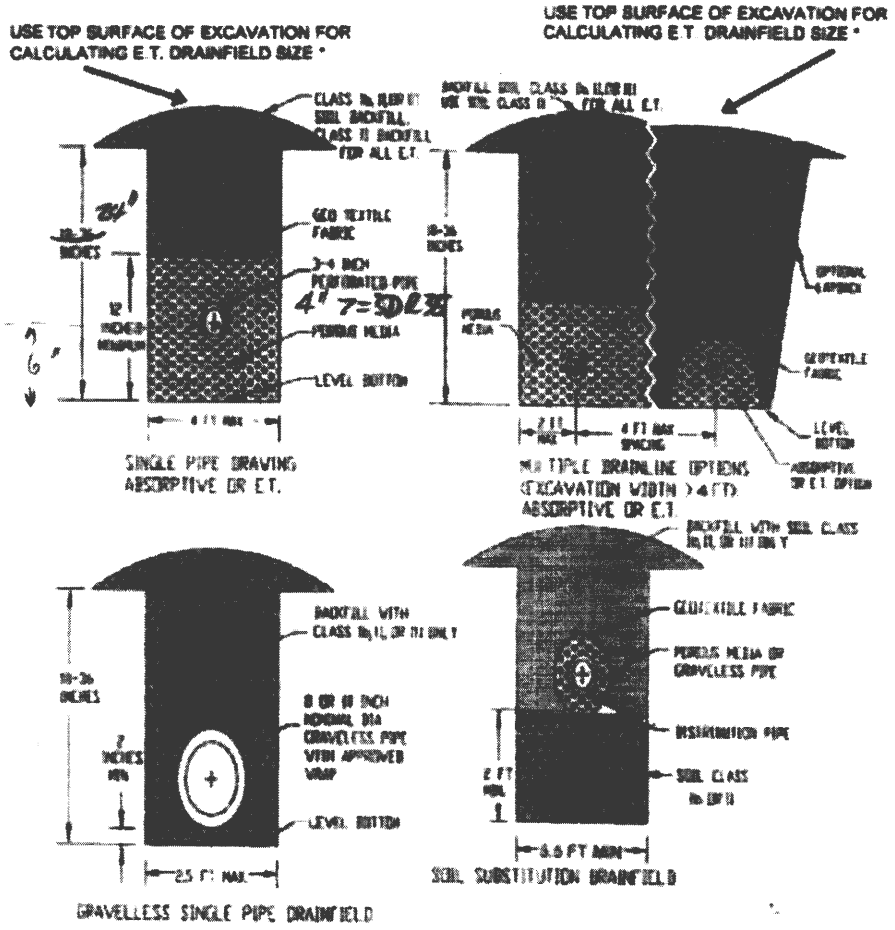
VOID

Figure: 30 TAC §285.90(4)

VOID

Attachment 4

Figure 4. Typical Drainfields - Sectional View.



* Credit for top surface area shall be limited to 2 feet past outside drainline.

VOID

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER

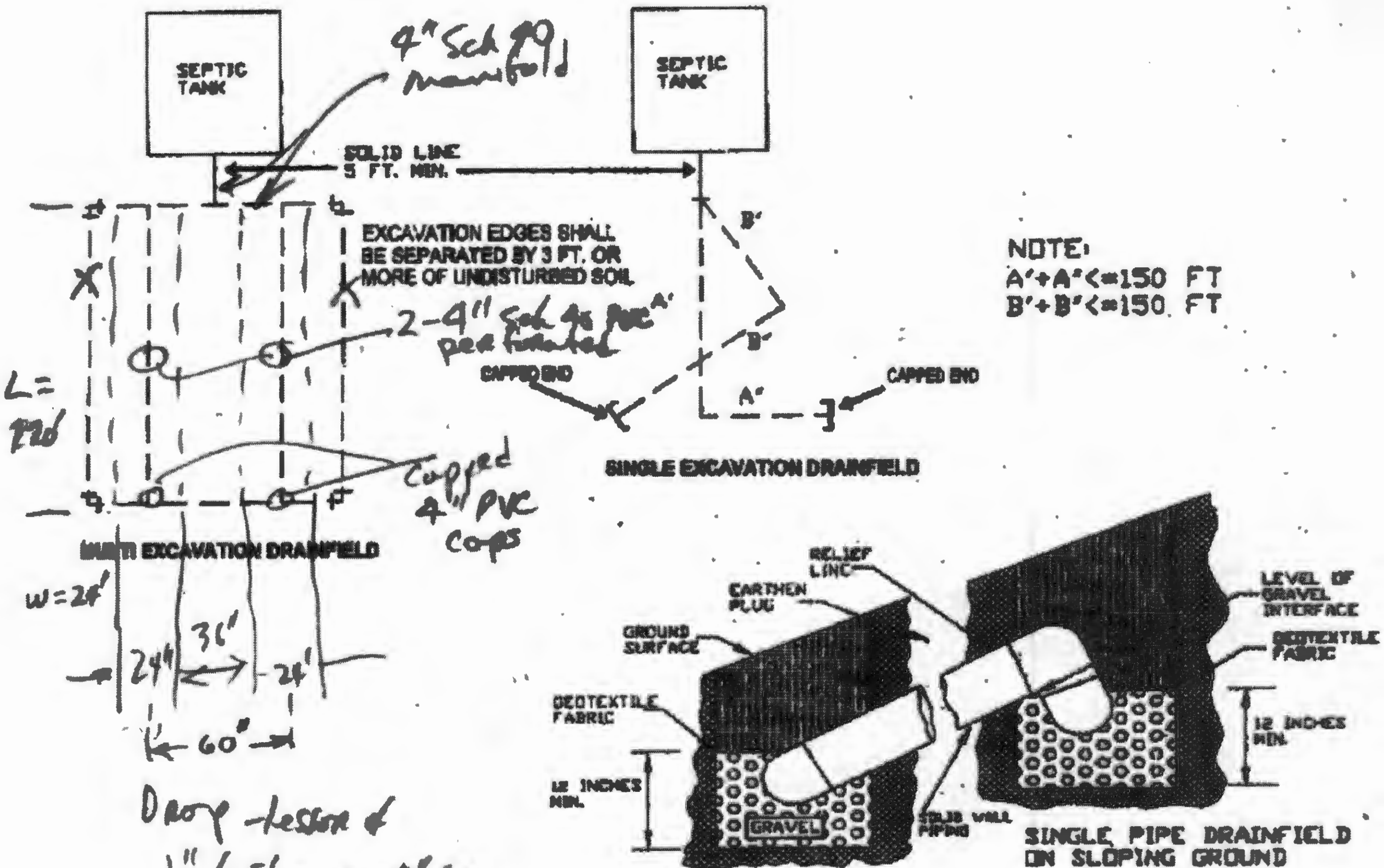
10-13-2021

VOID

Attachment 5

30 TAC §285.90(5)

Figure 5. Typical Drainfields – Plan View



Drop - lesson of
1"/25' = 0.04'/ft

3"/120' = 0.025'/ft
= 0.25"/10 ft
= 0.50"/20 ft

VOID

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED PROFESSIONAL ENGINEER

Mark Friesenhahn
10-13-2021

Derksen Cabin

VOID

DERKSEN
PORTABLE BUILDINGS

CHESTNUT URETHANE WITH WHITE TRIM AND ALAMO WHITE ROOF

METAL (HORIZONTAL) NOT AVAILABLE ON ANY CABIN

CHARCOAL METAL SIDING WITH ALAMO WHITE TRIM AND ROOF

CEDAR URETHANE SIDING WITH TAN TRIM AND TAN METAL ROOF

HONEY GOLD TREATED SIDING WITH CHARCOAL METAL ROOF

- The Cabin comes standard with a 4' deep front porch with rails. Porch depth is included in length measurement. Side Cabins come standard with a 4' porch on the side, with variable placement options.
- Three 2x3 windows standard.
- One 9-light, 36" pre-hung door.
- The Cabin comes with plenty of head room in standard 8' walls (exterior measurement).

– 14' X 40'
– Galvalum Roof
– Concrete Piers (6")

VOID

metal Roof

QUALITY
MATERIALS & WORKMANSHIP

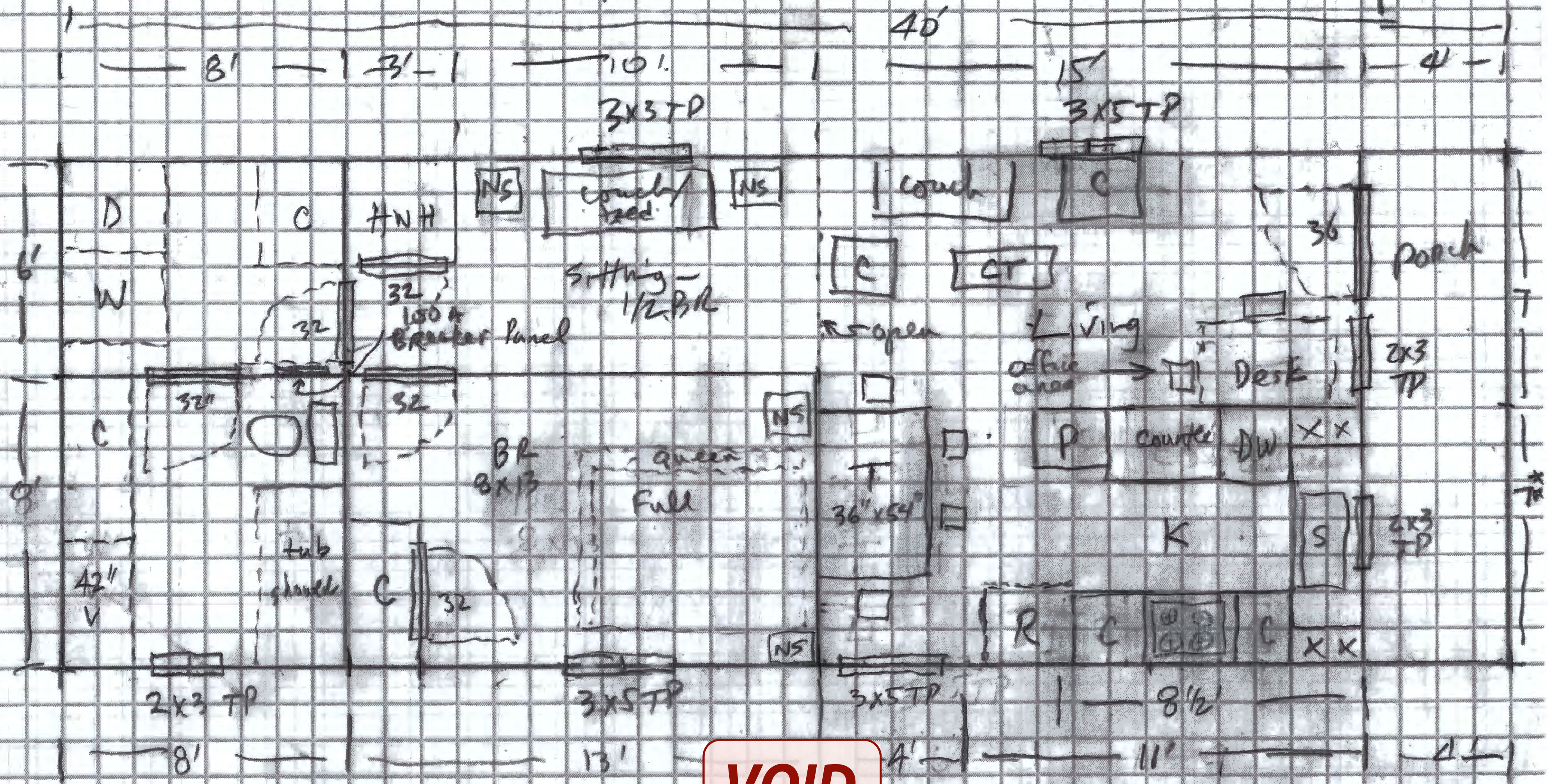
Side Cabin

LIGHT GRAY SIDING WITH WHITE TRIM AND BURGUNDY METAL ROOF

CHARCOAL METAL SIDING WITH ALAMO WHITE TRIM AND METAL ROOF

14' x VOID Cabin
177 VOID k Rd

1-10-24 ~~1-9-24~~
Rev 4 ~~Rev 3~~



DW = 24" wide
W & D = 28" "
Double sink = 30" long

Closet = 24"
Kitchen counter 36" high 24" wide
Refrig 30" or 36"

** possibly change to 7½'

From: Ritzen, Brenda
To: mark@comalpecanfarm.com
Subject: Permit 117067
Date: Wednesday, January 31, 2024 4:30:00 PM
Attachments: image001.png
Examples.pdf

Re: Mark Friesenhahn
13.551 acres, 177 High Creek Road
Application for Permit for Authorization to Construct an On-Site Sewage Facility (OSSF)

Mr. Friesenhahn :

The following information is needed before I can continue processing the referenced permit submittal:

1. **Submit a site and soil evaluation in accordance with TAC Chapter 285.30. A sample form is attached.**
2. **Provide a dimensioned site plan showing all improvements and system components in relation to property lines. An example sketch is attached. Include all separation distances to property lines and improvements, and between system components,**
3. **Revise as needed and resubmit.**

Thank you,

COMAL COUNTY TEXAS

Brenda Ritzen
Environmental Health Coordinator
195 David Jonas Dr.
New Braunfels, TX 78132
DR:OS00007722
830-608-2090
www.cceo.org

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:	113367
Issued This Date:	10/18/2021
This permit is hereby given to:	Mark Friesenhahn

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

177 HIGH CREEK RD
NEW BRAUNFELS, TX 78132

Subdivision:	F Rodriguez Survey 99 A484
Unit:	--
Lot:	--
Block:	--
Acreage:	13.5500

APPROVED MINIMUM SIZES AS PER ATTACHED DESIGN

Type of System:	Septic Tank
	STD Trenches / Beds

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 12:57 pm, Jan 10, 2024

COMAL COUNTY
ENGINEER'S OFFICE

ON-SITE SEWAGE FACILITY APPLICATION

VOID

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

Date 1/10/2024

Permit Number 113367 ~~117067~~

1. APPLICANT / AGENT INFORMATION

Owner Name	Mark Friesenhahn	Agent Name	Mark Friesenhhn, Texas PE # 41912
Mailing Address	231 High Creek Rd	Agent Address	same as applicant
City, State, Zip	New Braunfels, TX 78132	City, State, Zip	
Phone #	281-660-5445	Phone #	
Email	mark@comalpecanfarm.com	Email	

2. LOCATION

Subdivision Name _____ Unit _____ Lot _____ Block _____

Survey Name / Abstract Number Francisco Rodriguez Survey No 99, A-484 Acreage 13.551

Address 177 High Creek Rd 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 1

Indicate Sq Ft of Living Area 560

☐ 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 _____

VOID

Estimated Cost of Construction: $ 40,000 (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.

Mark Friesenhahn Mark Friesenhahn
Signature of Owner

original application approved 10/18/21
Date
This revised application submitted 1/10/24

VOID

Attachment 3

Fabricated Home Installed

On Comal Pecan Farm Property

With New OSSF

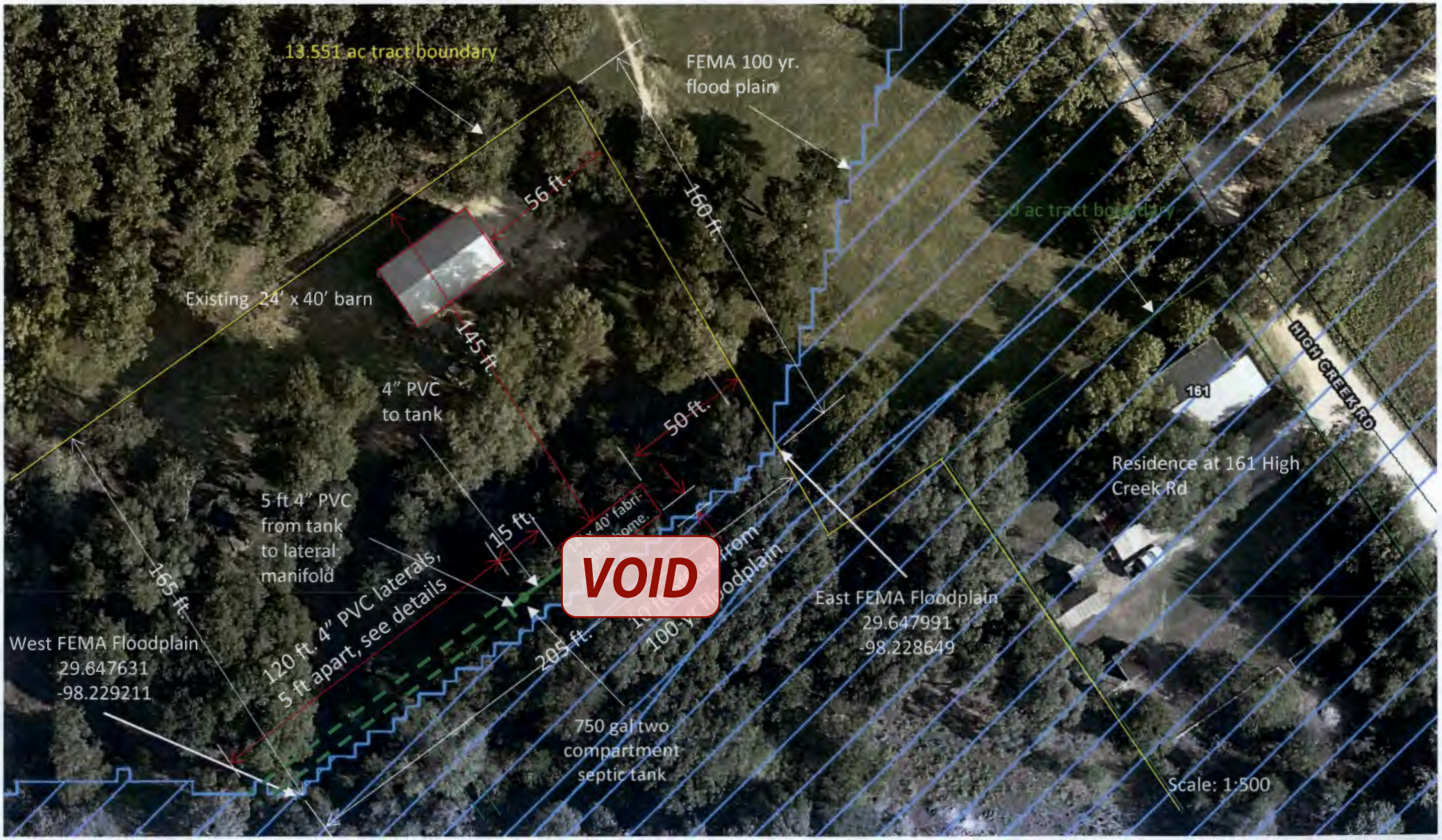
Nov 2021, updated Jan, 2024

VOID

Attachment 3, Pg 2

Location Plot Plan and OSSF Design Layout

VOID



VOID

Attachment 2

SUBSURFACE EXPLORATION, LABORATORY TESTING PROGRAM

AND FOUNDATION RECOMMENDATIONS

FOR THE PROPOSED

FRIESENHAHN FARMHOUSE RESIDENCE

231 HIGH CREEK ROAD

NEW BRAUNFELS, TEXAS

RETL JOB NUMBER: G208801

PREPARED FOR:

MARK FRIESENHAHN

2941 SAND CASTLE LANE

HOUSTON, TEXAS 77057

VOID

DI[illegible]8

ROCK ENGINEERING & TESTING LABORATORY ASSOCIATES

On-Site Sewage Facility Application
New address: [illegible] Pecan Farm
Owned by [illegible] hahn
Original Permit Number 113367 approved 10/18/21
This Revision Submitted 01/10/24

VOID

System Summary

- On-site sewage system facility for single family 14 ft. x 40 ft., 560 sq. ft., one-bedroom fabricated home
- Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields

Site Description and Site Evaluation

- Single family 560 sq. ft., one-bedroom mobile home
- Refer to Attachment 0.5, Special Warranty Deed for property ownership and description
- Site is just above the FEAM Floodplain Soil Type III, refer to Attachment 1, Table VI, USDA Soil Textural Classifications
- Refer to the report in Attachment 2, Subsurface Exploration, Laboratory Testing Program and Foundation Recommendations For The Proposed Friesenhahn Farmhouse Residence, 231 High Creek Road, New Braunfels, TX, RETK Job Number: G208801 dated 12/8/2008

Wastewater Design Flow

VOID

- Per TAC 285.91 Table III, for Single family dwelling (one or two bedrooms) – less than 1500 square feet, Usage Rate, gal/day (with water savings devices) = 180 gal/day

Description of Proposed Treatment System:

- Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Refer to Attachment 3 that includes:
  - Area Plat Map
  - Aerial View showing FEMA 100-year floodplain
  - Location Plot Plan and Design Layout

Construction/Installation Notes:

- This is a Standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Two parallel drain fields, 120 ft long, centerline 5 ft apart are connected to two compartment 750 gal tank with 5 ft of 4 in sch 40 PVC pipe feeding a 4 in sch 40 PVC pipe manifold
- Sch 40 PVC pipe manifold feeds drain fields that are sch 40 perforated PVC pipe capped on the ends with 4 in PVC caps

On-Site Sewage Facility Application
New address for Pecan Farm
Owned by Mark Friesenhahn
Original Permit Number 113367 approved 10/18/21
This Revision Submitted 01/10/24

VOID

Maintenance, Operation, Management Requirements:

- This system will be operated in a manner consistent with typical standard disposal system (TAC 30 285.33(b)), two compartment septic tank (750 gal) with gravel-filled drain fields
- Once the tank and drain fields are installed, the tank will be filled with water to initiation operation
- It is expected that this OSSF will quickly reach stable, steady-state operation that will be trouble free for years of service
- Periodic inspections will be conducted and the tank pumped and cleaned as needed.

Drawings:

- Refer to Attachment 3 that includes:
  - Areas Plat Map
  - Aerial View showing FEMA 100-year floodplain
  - Location Plot Plan and Design Layout
- Refer to Attachment 4:
  - Figure 4. Typical Drainfields- Sectional View
- Attachment 5:
  - Figure 5. Typical Drainfields – Sectional

VOID

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER
1-10-2024

Attachment 0.5

ITC GF# 0818115

↑ 7/T

200906006062 02/20/2009 11:17:44 AM DEED 1/7

SPECIAL 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 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.

Date: January 16, 2009, to be effective SEPTEMBER 18, 2001

Grantor: BONITA SCHOLZ FRIESENHAHN, BEING ONE AND THE SAME PERSON AS BONITA A. FRIESENHAHN, PURSUANT TO THE DIVISION OF PROPERTY IN CAUSE NO. 2001-02998, STYLED "IN THE MATTER OF THE MARRIAGE OF BONITA FRIESENHAHN AND MARK JAMES FRIESENHAHN", ENTERED IN THE 310TH COURT OF HARRIS COUNTY, TEXAS

Grantor's Mailing Address: 406 N. River Oaks Dr., Burnet, TX 78611

Grantee: MARK JAMES FRIESENHAHN

Grantee's Mailing Address: 2941 Sandcastle Lane, Houston, TX 77057

Consideration: TEN AND NO/100——($10.00)——DOLLARS and other good and valuable consideration, the receipt of which is hereby acknowledged and confessed;

and THE FURTHER CONSIDERATION by the Grantee herein of the ASSUMPTION OF AND AGREEMENT TO PAY, ACCORDING TO THE TERMS THEREOF, ALL PRINCIPAL AND INTEREST NOW REMAINING DUE AND UNPAID ON THAT ONE CERTAIN PROMISSORY NOTE DATED SEPTEMBER 27, 1999, IN THE ORIGINAL PRINCIPAL SUM OF $187,500.00, EXECUTED BY BONITA A. FRIESENHAHN, INDIVIDUALLY AND AS AGENT AND ATTORNEY-IN-FACT FOR HER HUSBAND, MARK J. FRIESENHAHN, PAYABLE TO THE ORDER OF FARM CREDIT BANK, SECURED BY A DEED OF TRUST OF EVEN DATE THEREWITH TO DONALD R. ROGGE, TRUSTEE(S), RECORDED IN VOLUME 694, PAGE 560, OFFICIAL RECORDS, COMAL COUNTY, TEXAS; ASSIGNMENT TO CAPITAL FARM CREDIT, FLCA, RECORDED UNDER COUNTY CLERK'S FILE NO. 20006007400, OFFICIAL PUBLIC RECORDS, COMAL COUNTY, TEXAS.

As further consideration Grantee promises to keep and perform all of the covenants and obligations of the Grantor named in that Deed of Trust and to indemnify Grantor against any damages caused by Grantee's breach of its obligations under this assumption.

Property (including any improvements):

ALL OF MY UNDIVIDED INTEREST IN AND TO THOSE CERTAIN TRACTS OF LAND SITUATED IN COMAL COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS ON EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR ALL PURPOSES.

Reservations from and Exceptions to Conveyance and Warranty:

THIS CONVEYANCE IS EXECUTED, DELIVERED AND ACCEPTED SUBJECT TO AD VALOREM TAXES FOR THE CURRENT YEAR, ROLLBACK TAXES DUE TO THIS CONVEYANCE OR GRANTEE'S USE OF THE SUBJECT PROPERTY, MAINTENANCE FUND LIENS, ZONING ORDINANCES, UTILITY DISTRICT ASSESSMENTS AND STANDBY FEES, IF ANY, ANY AND ALL VALID UTILITY EASEMENTS CREATED BY THE DEDICATION DEED OR PLAT OF THE SUBDIVISION IN WHICH SAID REAL PROPERTY IS LOCATED, RECORDED EASEMENTS, MINERAL RESERVATIONS AND LEASES, RESTRICTIONS, COVENANTS, CONDITIONS, RIGHTS OF WAY EASEMENTS, IF ANY, AFFECTING THE HEREIN DESCRIBED PROPERTY BUT ONLY TO THE EXTENT THE SAME ARE VALID AND SUBSISTING.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor hereby binds Grantor and Grantor's heirs, executors, administrators, and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, when the claim is by, through, or under Grantor, but not otherwise.

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

Bonita Scholz Friesenhahn
BONITA SCHOLZ FRIESENHAHN

[redacted]:

[redacted]

(Acknowledgment)

THE STATE OF TEXAS :
COUNTY OF BURNET

This instrument was acknowledged before me on the 7th day of FEBRUARY, 2009, by **BONITA SCHOLZ FRIESENHAHN.**

William Bryant Higginbotham
Notary Public, State of Texas
Notary's Name (printed): William Bryant Higginbotham
Notary's commission expires: 8-30-2011

NOTICE: This document affects your legal rights. Read it carefully before signing.

(Seal)

WILLIAM BRYANT HIGGINBOTHAM NOTARY PUBLIC STATE OF TEXAS EXPIRES 08-30-2011

AFTER RECORDING RETURN TO:
MARK JAMES FRIESENHAHN

PREPARED IN THE LAW OFFICE OF:
BEADLES, NEWMAN & LAWLER
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
3500 HULEN STREET
FORT WORTH, TEXAS 76107

CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS SURVEYORS
410 N. Seguin Street
New Braunfels, Texas 78130-5055
FIELD NOTES
FOR
A 10.241 ACRE TRACT

Being 10.241 acres of land out of the Francisco Rodriguez Survey No. 99 and also being out of the Western portion of a tract called 55.000 acres described in Volume 202, Pages 203-204 of the Deed Records of Comal County, Texas, and being more particularly described as follows:

BEGINNING: At the West fenced corner of the above referenced tract, in the Southeast line of the Missouri-Pacific Railroad, for the West corner of this tract;

THENCE: Along the Southeast line of the Missouri-Pacific Railroad, N 51° 44' 05" E 179.90 feet to the beginning of a curve to the right, for a corner of this tract;

THENCE: Continuing along said Southeast line and said curve to the right, having a central angle of 04° 38' 03", a radius of 7,030.18 feet, an arc length of 568.63 feet, and a chord bearing and distance of N 56° 07' 30" E 568.47 feet to an iron pin set at the end of said curve, in same, for a corner of this tract;

THENCE: Continuing along said Southeast line, N 56° 42' 14" E 199.68 feet to a fence corner in same for the North corner of this tract;

THENCE: Along existing cross-fence line, S 29° 38' 01" E 477.20 feet to a fence corner for the East corner of this tract;

THENCE: Along an existing cross-fence line, S 56° 41' 55" W 934.63 feet to a fence corner in the Southwest line of the above referenced tract, for the South corner of this tract;

THENCE: Along the Southwest fenced line of the above referenced tract, N 31° 03' 33" W 455.33 feet to the Point of Beginning and containing 10.241 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, September 18, 1989.

S. Craig Hollmig
Registered Public surveyor

EXHIBIT A-1

BEING a 12.477 acre tract of land situated in the Francisco Rodriguez Survey No. 99, being out of a tract called 39 acres and recorded in Volume 177, Pages 32-34 of the Deed Records of Comal County, Texas, and being described more particularly by metes and bounds as follows:

BEGINNING at the North corner of the aforementioned 39 acre tract for the North corner of this tract, said point being the intersection of the Southeast line of the Missouri-Pacific Railroad R.O.W. and a Northeast line of the aforementioned 39 acre tract;

THENCE S. 30° 36' 38" E. a distance of 672.46 feet to a point;

THENCE N. 59° 16' 29" E. a distance of 23.98 feet to a point;

THENCE S. 30° 30' 50" E. a distance of 40.00 feet to a point for the most Easterly corner of this tract;

THENCE S. 56° 13' 10" W. a distance of 820.51 feet along the Northwestern line of a 13.300 acre tract to a point for the South corner of this tract;

THENCE N. 29° 54' 00" W. a distance of 658.35 feet along a fence to a fence corner;

THENCE N. 52° 11' 11" E. a distance of 793.44 feet along the Southeastern line of the Missouri-Pacific Railroad R.O.W. to the Point of Beginning and containing 12.477 acres of land, more or less.

EXHIBIT A-3

BEING a 13.300 acre tract of land out of the Francisco Rodriguez Survey No. 99 and being approximately 0.087 acres out of a 7.923 acre tract as recorded in Volume 200, Pages 297-299, approximately 0.270 acres out of a 0.287 acre tract as recorded in Volume 177, Pages 32-34, approximately 12.730 acres out of the central portion of a 39.0 acre tract as recorded in Volume 177, Pages 32-34 and approximately 0.213 acres out of a 0.234 acre tract as recorded in Volume 200, Pages 294-295 of the Deed Records of Comal County, Texas, and being more particularly described as follows:

BEGINNING at an iron pin set in the Southwest fence line of above referenced 39.0 acre tract, said point being S. 29° 54' 00" E. 658.35 feet from the West fence corner of above referenced tract, for the West corner of this tract;

THENCE N. 56° 13' 10" E. 820.51 feet to an iron pin set in an existing fence line, for the North corner of this tract;

THENCE S. 30° 30' 50" E. 180.10 feet, S. 35° 35' 47" E. 386.64 feet and S. 31° 02' 43" E. 204.79 feet along said existing fence line to a fence corner, for a corner of this tract;

THENCE S. 72° 47' 55" W. 22.76 feet to an iron pin, for an interior corner of this tract;

THENCE S. 31° 18' 13" E. 68.41 feet and S. 28° 20 21" E. 12.83 feet along an existing fence line, to the North corner of a 1.00 acre tract, for the East corner of this tract;

THENCE S. 56° 02' 48" W. 124.99 feet to the West corner of said 1.00 acre tract, for an angle point of this tract;

THENCE S. 57° 14' 28" W. 53.86 feet to a fence corner, for a corner of this tract;

THENCE N. 30° 16' 34" W. 208.68 feet along an existing fence line to a fence corner, for an interior corner of this tract;

THENCE S. 55° 00' 00" W. 256.26 feet and " S. 54° 17' 09" W. 409.17 feet along an existing fence line to a fence corner in the Southwest fence line, for the South corner of this tract;

THENCE N. 29° 54' 00" W. 657.32 feet along said Southwest fence line to the PLACE OF BEGINNING and containing 13.300 acres of land, more or less.

EXHIBIT A-4

A

BEING a 13.551 acre tract of land situated in the Francisco Rodriguez Survey No. 99, being out of a tract called 39 acres and recorded in Volume 177, Pages 32-34, of the Deed Records of Comal County, Texas, being more particularly described by metes and bounds as follows:

BEGINNING: At the East corner of this tract, said point being the intersection of the Northwest line of County Road known as the New Braunfels - Bracken Road and the Northeast line of the aforementioned parent tract called 39 acres, said Northeast line also being the Southwest line of a private roadway;

THENCE: With the Northwest line of the New Braunfels - Bracken Road, S. 64° 23' 59" W 244.28 feet, and S 63° 47' 49" W 639.10 feet along a fence to the South corner of this tract, a fence corner;

THENCE: N 30° 15' 15" W a distance of 713.19 feet along a fence to a fence corner for the West corner of this tract;

THENCE: With fence, N 54° 17' 09" E 409.17 feet and N 55° 00' 00" E 256.26 feet to a fence corner for the North corner of this tract;

THENCE: S 30° 16' 34" E a distance of 208.68 feet with fence to a fence corner for an interior corner of this tract;

THENCE: N 57° 14' 28" E a distance of 53.86 feet with fence to a fence corner;

THENCE: S 34° 17' 00" E a distance of 348.44 feet with fence to a fence corner;

THENCE: N 55° 47' 27" E' a distance of 125.00 feet with fence to a fence corner;

THENCE: S 33° 13' 33" E a distance of 293.41 feet along the Southwest line of a private roadway to the Point of Beginning and containing 13.551 acres of land, more or less.

Filed and Recorded
Official Public Records
Joy Streater, County Clerk
Comal County, Texas
02/20/2009 11:17:44 AM
CASHTHREE
200906006062

Joy Streater

EXHIBIT A-5

EFFECTIVE JANUARY 1, 2019 COMAL COUNTY

ENVIRONMENTAL HEALTH DEPARTMENT FEES

Sewerage Facility Permit (<500 gallons per day) - $300.00 was $150.00

Sewerage Facility Permit (>500 gallons per day) - $500.00 was $180.00

Permit Renewal within 12 months - $80.00

Permit Renewal after 12 months - $150.00

Remodel Permit - $100.00

Re-inspection Fee - $40.00

Holding Tank Permit - $150.00

Subdivision Review (5 lots/tracts or less) - $20.00/lot

Subdivision Review (6 lots/tracts or more) - $100.00 plus charge per lot/tract - $5.00

State Research Council Fee - $10.00

TCEQ O.S.S.F. Rules & Regulations - $6.50

RECEIVED
By Kathy Griffin at 12:57 pm, Jan 10, 2024

COMAL COUNTY
ENGINEER'S OFFICE

OSSF DEVELOPMENT APPLICATION CHECKLIST

Staff will complete shaded items

Date Received	Initials	Permit Number
		~~113367~~ 117067

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

- [x] Completed Application for Permit for Authorization to Construct an On-Site Sewage Facility and License to Operate
- [x] Site/Soil Evaluation Completed by a Certified Site Evaluator or a Professional Engineer
- [x] 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.
- [x] Required Permit Fee - See Attached Fee Schedule
- [x] 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

STATE OF TEXAS
MARK FRIESENHAHN
41912
LICENSED
PROFESSIONAL ENGINEER
Mark Friesenhahn 1-10-24

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

Mark Friesenhahn
Signature of Applicant

1-10-2024
Date

___ COMPLETE APPLICATION

Check No. _____ Receipt No._____

___ INCOMPLETE APPLICATION
(Missing Items Circled, Application Refeused)

Revised: September 2019