

# 936-646-5115

## **On Site Sewage Facilities**

Planning Documents

Site evaluation and Septic Design

Owner:

Juan Salcedo

Physical Property Address: Peach Point Lane Trinity, Texas

Trinity Paul Hendrix TCEQ Designated Representative

GPS Location:

Latitude 30.881816 Degrees North and Longitude 95.360810 Degrees West Block 2 Lot(s) 27 of Trinity Plantation

Recommended On-Site Sewage Facility Drip Irrigation - Secondary Treatment/Filter
Total system is designed for a capacity of 240 Gallons Per Day.

Site Inspection Date 10/10/2023

Job Number - S101023\_1\_Salcedo\_



#### Owner Interview

# Site status at the time of the evaluation.

- No Will there be more than one piece of property used?
- Yes Was the property plated before 1988?
- No Are there abandoned or active private water wells on your property?
- No Are there public wells on neighboring properties? (150ft)
- No Do you have any cisterns or underground tanks on your property
- Yes Is property serviced by a public water supply?
- Yes If yes can you locate meter?
- No Is there an existing on site sewage system?
- No Is there underground drainage on the property?
- No Is there underground water supply lines?
- No Is there underground gas supply lines?
- No Is there underground electrical lines?
- No Is there a sprinkler system installed on any part of the property?
- No Do overhead easements exist for the property.
- No Do underground easements exist for the property.
- Yes Do you understand that new disposal areas will limit future land use of those areas?
  - Yes Does your home use water saving devices?
  - No Does any part of the properties exhibit poor or slow drainage?



## Blue Water Works 1-936-646-5115 OSSF Soil/Site Evaluation Form

10/10/2023

Bore Number 1

From Surface to 48 inches Dominate Soil Class is IV

Description: Clay

No signs of a water table were noticed in this bore.

Bore Number 2

From Surface to 48 inches Dominate Soil Class is IV

Description: Clay

No signs of a water table were noticed in this bore.

Design

Waste Volume - Facility Type

The type of facility as listed in Chapter 285.91 Table III is Single Family Dwelling (three bedrooms) - less than 2500 ft2. The base usage rate with water saving devices in use is 240 gallons per day.

Single Family Dwelling (three bedrooms) - less than 2500 ft2 = 240 Q - Total Application Design Flow

Application Criteria (Chapter 285.91 Table V)

Slope of the site in the application area is %.

Restrictive horizons were not encountered in the borings made in the

No signs of a seasonal high water table were noted during the soil borings. proposed application area. No free water was noted during the soil borings.

The site is not in the 100 year floodplain and is not in a floodway. Site acreage is in compliance with requirements of Chapter 285.

Site Data

Public water supply is available to the property but is not being supplied to the site.

Public water lines do not cross the site

The property does not have water borders. (Streams, Ponds, Lakes, or Creeks)

The property does not have steep slopes that could be the source of seeps:

Soil Type

Controlling soil type is Soil Class IV

OSSE

Recommended On-Site Sewage Facility Drip Irrigation - Secondary Treatment/Filter

#### Treatment Equipment

The pipe from the sewer stub-out to the treatment system should be watertight Schedule 40 PVC or SDR 26. Slope of the line should be no less than 1/8 inch per foot(1%). A two-way cleanout plug is required between the sewer stub out and the treatment tank. An additional cleanout plug should be provided every 50 feet on long runs of pipe and within five feet of 90 degree bends. The minimum inside diameter is three inches.

Trash/Pre-treatment tank - 500 gallon tank

Aerobic Treatment unit - 500 gallon per day Aerobic Combo tank

(A multi purpose aerobic plant rated in excess of the 'daily flow or minimum required aerobic treatment capacity', which ever is larger, may be used to replace the pretreatment and/or pump tank if approved by the state for this service.)

A state approved system listed at http://www.tnrcc.state.tx.us/cgi-bin/enforcement/ossf\_approved.pl may be used if rated at or above daily loading, except in Walker County
Pump Tank - 500 gallon tank

An audible and visible high water alarm, on an electric circuit separate from the pump, must be provided.

Single supply pump

Pump Specifications - 6.6 gpm at a discharge head of 18.5 ft.

Filter - The system must be equipped with a filtering device capable of filtering particles larger than 100 microns and that meets the manufactures requirements.

System flushing. - Systems must be equipped to flush the contents of the lines back to the pretreatment unit when intermittent flushing is used. If continuous flushing is used during the pumping cycle, the contents of the lines must be returned to the pump tank. All drip irrigation system devices shall either be labeled by the manufacturer as suitable for use with domestic sewage, or be on the list of approved devices maintained by the executive director according to §285.32(c)(4).

Drip tubing runs spaced on 2 ft centers.

Emitter spacing on tubing is on 2 ft centers.

(Ra) per 285.91(1) Application Rate = .10 Gal/Ft2/Day Application area required for 240/.10 = 2400 Ft2.

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Zone   #	l	si can Raw i	
1 2 10	66 33. 46 23.	4.3 1716 0 Overlap	Ft2
Total installed	linear feet of told	920 0 14/.0	1569.0
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Total installed linear feet of tubing required is 1318 feet. Total Application Area =

Line flow losses

Pipe length is Oft +10% for fittings is ft.

Lift required from pump off to distribution manifold is 0 ft.

Emitter Operating Pressure =8.0 psig or 18.5 ft of head Pump -

Total pump head required = line loss of .0 ft + lift of 0 ft + emitter Total pump head required =19 ft

Owner Notes:

Reasonable efforts have been made to assure that this septic design is within your property boundaries. We do not represent ourselves as professional surveyors and can only provide approximate locations of property corners with meets and bounds information. We do not assume any responsibility for misunderstandings or errors. Please review the drawing and notify the designer if you even suspect that any part of this septic design is located on property not owned by you.

It is recommended that you keep this design along with all equipment information with other important papers. Photos of the installation can prove valuable in later years should maintenance be required.

Installer Notes:

Plastic tanks if installed must be protected from flotation. Buoyancy calculations and installation instructions should be obtained from manufacture and supplied to inspector and designer.

This system must be installed and maintained in accordance with all standards set by the Texas Commission on Environmental Quality and Local officials. This consultant / designer does not represent or warrant the material, installation, operation or proper performance of this system for any period of time. Every attempt has been made to accurately depict the location of lines, plants, tanks, sprinklers, etc. Construction realities may necessitate minor design changes. Any major changes will be submitted before construction.

All Construction methods must be in accordance with all State and Local Codes effecting the installation of On-Site Sewage Facilities



