

ON-SITE SEWAGE FACILITY DESIGN

PREPARED FOR:

Michael & Karin Lord
12 Amy Lane
Boling TX 77420
Tract 21-16
ABST 33
Colt R & L Survey
10.382 Acres

DESIGNED BY:

Clayton Mayfield
Professional Sanitarian
6567 W, F.M. 884
Goliad TX 77963

February 24, 2020



Clayton Mayfield KS

Client: Lord

A. Wastewater Load:

The OSSF will serve a 3 bedroom home less than 2,500 square feet of living area equipped with water saving devices. Wastewater load will be calculated at 240 gallons per day.

B. Topography & Flood Zone:

Slope = Less than 2%

Flood Zone X

C. Treatment System:

Nu Water ATU 600 or equivalent

400 Gallon Trash Tank

600 Gallon Aerobic Unit

750 Gallon Pump Tank

D. Chlorinator:

This system will be equipped with a liquid or tablet chlorinator.

E. Irrigation Area:

$Q / Ri = \text{Total Square Feet Of Irrigation Area}$

$240 \text{ GPD} / .045 = 5,333 \text{ Square Feet of Required Irrigation Area}$

F. Nozzle:

Spray Head # 1

Type: K-Rain or equivalent

Number: 3

GPM: 3.1

Psi: 40

Radius: 30'

Spray Area: $30 \times 30 \times 3.14 \times 2 = 5,652$

Spray Head # 2

Type: K-Rain or equivalent

Number: 3

GPM: 3.1

Psi: 40

Radius: 30'

Total Square Feet of Application Area = 5,652

G. Pump Requirements:

Use 1" schedule 40 purple pipe for sprinkler system.

Total gallons per minute equal 6.2

Use a ½ horsepower pump capable of pumping 6.2 gallons per minute.

H. Time of Discharge:

Pump to discharge between midnight and four a.m.

I. Vegetation:

As soon as construction will allow, the surface application area shall be covered with grasses, evergreen shrubs, bushes, or trees. Plants intended for human consumption shall not be grown within the disposal area. All vegetation grown inside the disposal area shall be properly maintained to prevent sprinkler head interference. The homeowner is responsible for providing and maintaining the vegetation in the disposal area.

Client: Lord

J. Notes and Additional Specification Requirements:

If discrepancies exist between the design and actual site conditions the installer shall notify the designer and the local permitting authority prior to construction. Construction materials and methods shall be pursuant to county and state rules/policies, unless specifically noted on this design and approved by the local permitting authority.

Additional Notes:

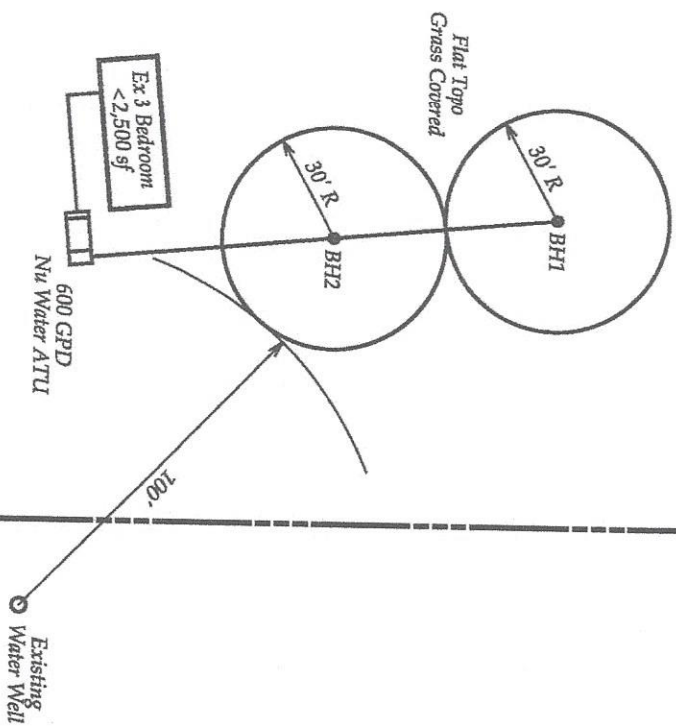
- 1) Water Softener must not drain into aerobic treatment chamber.
- 2) No surface improvements such as buildings, sidewalks, driveways, patios, etc. shall be constructed on the disposal area.
- 3) Grease, cigarette butts, personal hygiene products, and other trash shall be disposed of in the garbage.
- 4) It is the installer's responsibility to review the design criteria prior to construction.
- 5) The site shall be finish graded for positive drainage, and or adequate drainage structures shall be constructed if needed prior to system installation.
- 6) Any warranties of the products installed are those made by the manufacturer. The permit holder assumes full responsibility of the system following final inspection approval by the licensing authority.

Michael & Karin Lord
12 Amy Lane
Boiling, Texas 77420

Tract 21-16, Abstract 33
Colt R & L Tract 103
Wharton County
10.382 Acres

Floodzone X
Scale: 1" = 50'

Amy Lane
→



Existing
Water Well



Environmental Health Division
On-Site Sewage Facility Soil and Site Evaluation

Date Performed: 2/24/20

New Installation ☒ Replacement ☐ Alteration ☐

Property Owner's Information

Name Michael + Karin Lord
Address 12 Amy Lane
City Boling State TX
Zip Code 77420 Phone _____ Fax _____

Certified Site Evaluator/PE Information

Name Clayton Mayfield
Company Mayfield Designs
Address 6567 W FM 889
City Goliad State TX
Zip Code 77963 Phone 645-4570 Fax _____
TCEQ Registration Number 641

Property Description

Plat Date _____
Sec _____ Lot _____ Block _____ Subdivision _____
Street/Road Address 12 Amy Lane
County Wharton Unincorporated Area? ☒ Y or N
City Boling Zip Code 77420
Property Size _____ Acreage 10.382
Survey Colt R+L Abstract 33
Additional Information Tract 103

Installer Information

Name _____
Company _____
Address _____
City _____ State _____
Zip Code _____ Phone _____ Fax _____
TCEQ Registration Number _____

TOPOGRAPHY

Slope	Vegetation	Site Drainage	Reference Soil Survey Book
☒ Flat (under 2%)	☒ Grass/Brush	☒ Poor	☐ Seasonal water table
☐ Slight (under 4%)	☐ Lightly Wooded	☐ Adequate	☐ Water table (upper water shed) evident Depth: _____
☐ Severe (over 5%)	☐ Heavily Wooded	☐ Good	☐ Presence of adjacent ponds, streams, water impoundments
☐ Gullies/erosion			

Comments/Observations: _____

WATER SUPPLY

Private ☒ Public ☐ Name of public water supplier _____

For on-site water well:

Is water well less than 100 feet from drainfield?

*Yes ☒ No

*If yes, attach documentation, i.e. well log or driller affidavit,
that well is pressure cemented or grouted to required depth.

Neighboring wells within 100 feet of property line?

*Yes ☒ No

*If neighboring wells exist they must be shown on the design.

Water saving devices ☒ Yes ☐ No

☐ Water softener ☐ Reverse osmosis system

☐ Other: _____

SOIL EVALUATION

Requirements:

- At least two soil evaluations 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 drawing.
- For subsurface disposal, soil evaluations must be performed to a depth of at least two feet below the proposed trench depth. For surface disposal, the surface horizon must be evaluated.
- Please describe each soil horizon and identify any restrictive features in the space provided below. Draw lines at the appropriate depth.

Proposed Trench Depth Surface (Will be 18" to 36" unless designed by P.E. or R.S.)

Soil Boring Number <u>1</u>					
Depth (Feet)	Textural Class	Soil Texture And Color	Gravel Analysis For Class II and III	Drainage (Mottles/Water Table) indicate color of mottling	Restrictive Horizon
0	<u>IV</u> ↓	Clay	N/A	None	None
1					
2					
3					
4					
5					
6					

Soil Boring Number <u>2</u>					
Depth (Feet)	Textural Class	Soil Texture And Color	Gravel Analysis For Class II and III	Drainage (Mottles/Water Table) indicate color of mottling	Restrictive Horizon
0	<u>IV</u> ↓	Clay	N/A	None	None
1					
2					
3					
4					
5					
6					

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

Clay M. H. 10200
Signature of Certified Site Evaluator/PE & License #

2/24/20
Date