

APPLICATION FOR PRIVATE SEWAGE SYSTEM
CONSTRUCTION PERMIT AND LICENSE

DATE April 17, 1996 PERMIT NO. 2750 FEE 130.00

I, hereby make an application for a license to construct and operate a private sewage disposal system in Gillespie County, Texas.

OWNER CAMP, BEN PHONE NO. 990-8040

MAILING ADDRESS P.O. Box 1458 FBG Tx 78624

HOUSE NO. AND STREET ADDRESS Hwy 290 WEST FM 2093

SUBDIVISION, DESCRIBED LOCATION OR ATTACH A MAP/SKETCH
NAME ABSTRACT 516 M. NARROD # 219 179 Rockbottom

SIZE ACREAGE OR TRACT 50 SECTION _____ BLOCK _____ LOT Ranch Rd

DESCRIPTION OF STRUCTURE TO BE SERVED

House () Mobile Home () Other _____

Commercial _____

(Type of Business)

Living Area (3200) Bedrooms (3) Bathrooms (3.5) Disposal (1)

Washing Machine () Dishwasher () Water Softner () Other

Water Supply By: Public System () Community () Individual ()

DATE April 17, 1996 INSPECTOR-SANITARIAN Dwayne C Boos

Authorization is hereby given to the Private Sewage Facility, Gillespie County, Texas, Texas Department of Water Resources, the Texas State Department of Health Resources, or their agents or designees, singly or jointly, to enter upon the above described property for the purpose of making soil percolation tests, inspecting sewage systems, or for any reason consistent with the water quality program of the Texas Department of Water Resources, the Texas State Department of Health Resources and the Private Sewage Facility, Gillespie County, Texas.

(If signed by Owner, Authorized Agent, Contractor, provide name, address and phone #)

DATE 4-17-96 Ben M. Camp
Signature of Owner or Authorized Agent

Authorization to proceed with construction will be provided after a joint (Owner or Installer and Inspector for the Private Sewage Facility, Gillespie County, Texas survey of the proposed site for the facility and analysis of percolation test data) (If Required)

THIS PERMIT TO CONSTRUCT IS VALID FOR 180 DAYS.
OFFICIAL USE ONLY

SITE INSPECTION OR PERCOLATION TEST

DATE _____ PERMIT NO. _____ FEE _____

TYPE SOIL - Rocky () Gravel () Sand () Other _____

SLOPE - Flat () Sloping () Other _____

PERCOLATION TEST RESULTS INCHES FALL/20 MINUTES

HOLES (1) _____ (2) _____ (3) _____ (4) _____ (5) _____ (6) _____

(7) _____ (8) _____ PERC. TEST AVERAGE _____

DATE _____ INSPECTOR-SANITARIAN _____

COMMENTS:

A LOT OF ROCK, REQUIRED A DESIGN SYSTEM
SOIL NOT SUITABLE FOR CONVENTION SYSTEM.

CERTIFICATION OF APPROVAL

FINAL INSPECTION

DATE 10-2-96 PERMIT NO. _____ FEE _____

MANUFACTURER JET AEROBIC UNIT & A&A PUMP TANK

TANK #1 SN# _____ TANK #2 SN# _____

SIZE TANK #1 1200 GALS. TANK #2 500 GALS. TYPE CONCRETE

ABSORPTION TRENCH () LENGTH _____ WIDTH _____

SPRAY IRRIGATION
ABSORPTION BED AREA () SQUARE FEET SPRAYED = 5,655 SQ. FT.

COMMERCIAL () PRIVATE RESIDENCE ()

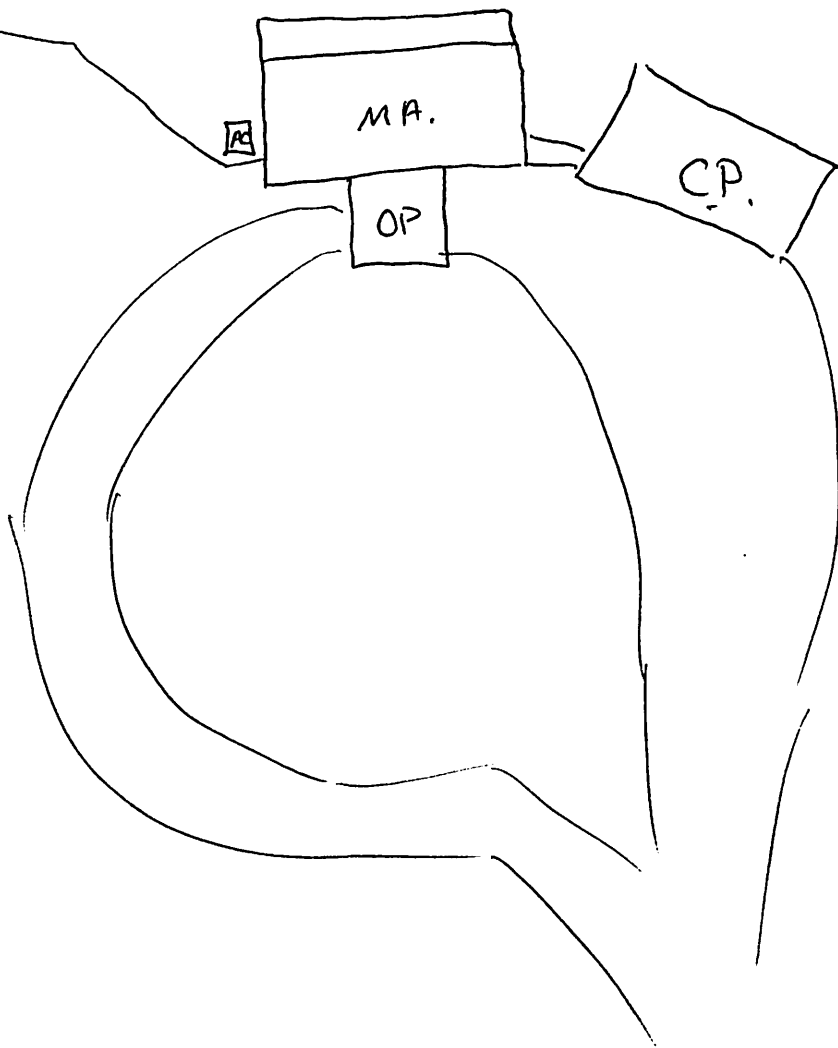
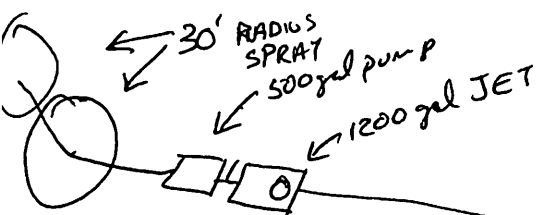
INSTALLER OR CONTRACTOR DAVE GRAHAM, SOUTH TEXAS WASTEWATER

ADDRESS P.O. Box 1284 Boerne TX 78006 PHONE # 210-249-8098

DATE 10/2/96 FINAL INSPECTION MADE BY Dwayne C. Bots

(INSPECTION IS REQUIRED AFTER TANK AND PIPES ARE INSTALLED, BUT NOT COVERED)
MAKE A SKETCH OF SYSTEM
(NOT TO SCALE)

* SEE DESIGN



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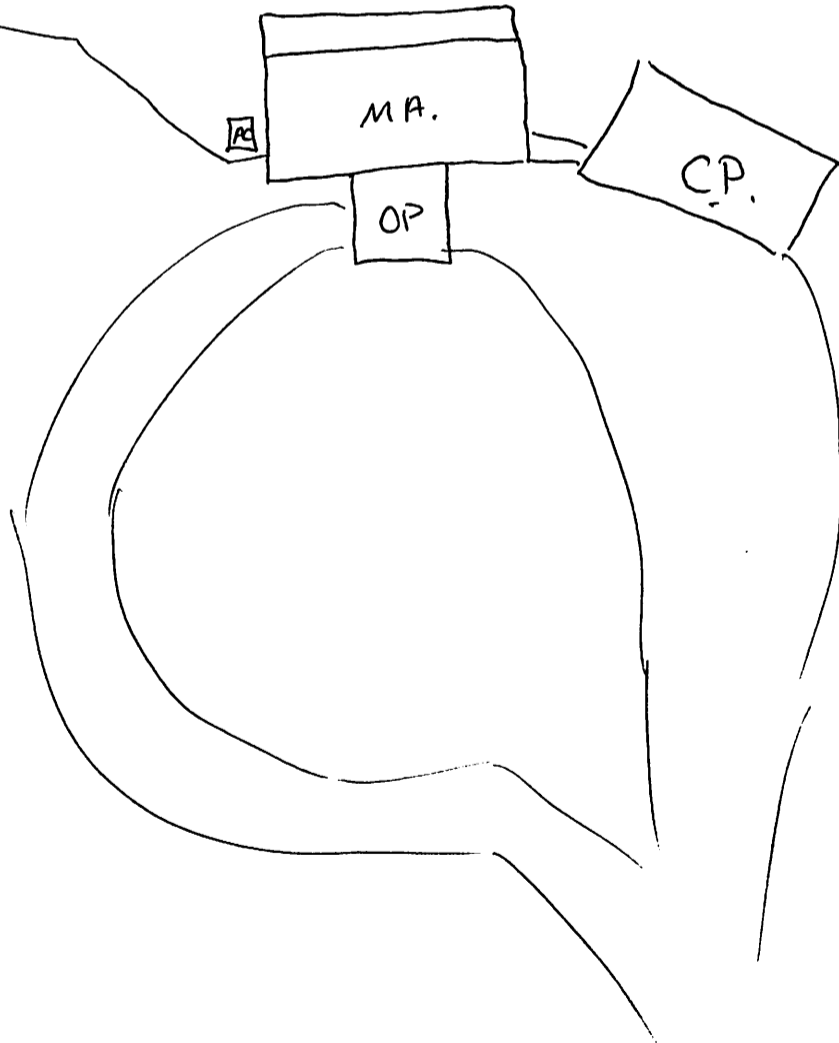
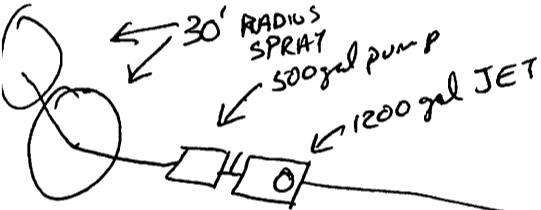
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SOUTH TEXAS WASTEWATER TREATMENT

Authorized JET Distributor - Home and Commercial - Engineering Services
P O Box 1284 Boerne, Texas 78006 * 210-249-8098 or 1-800-86 WASTE

*Gillespie Co.
Copy*

PAGE 1 of 3
26 April 1996

JET HOME WASTEWATER TREATMENT SYSTEM DESIGN SPRINKLER SYSTEM

Ben Camp
P.O. Box 1458
Fredericksburg, TX 78624
990-8040

Site: Survey (50.00 acres more or less) out of
M. Narrod Survey 219, Abstract No. 516
Gillespie County, Texas

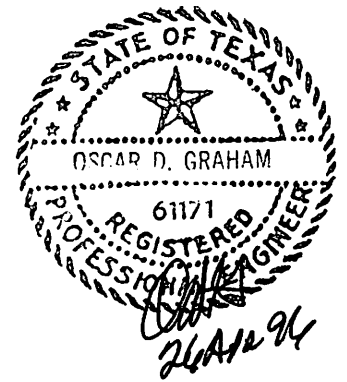
This design includes an attached drawing No. 960405R0 dated 5 April 1996.

Design Specifications:

Estimated average daily wastewater flow: 3 Bedroom Home
Pump tank/chlorine contact chamber capacity: 500 gallons
Design application rate: 0.064 gal./sq.ft./day
Average annual rainfall: 30 inches/year
Average annual Evaporation Rate: 70 inches/year
Soil Profile determined: Thin topsoil over caliche/limestone formation
Dosing cycle quantity: 100 gallons
Number of dosing cycles per day: three (3)
Type of float switch: mercury float switch
Design pressure head: 25 psi at sprinkler head
Total length of supply pipe: 120 feet
Dosing pump capacity: Myers Mod. Rustler pump--12.0 GPM @ approx. 25 psi at
sprinkler
Chlorinator: installed at inlet to pump tank
Maximum slope of the field: 2-3 percent
Means of preventing syphoning: none
Type of forced main required: 1" SCH 40 with two sprinkler heads
Diameter of supply pipe: 1 inch
Pressure adjusting valves to be installed: one required
Offsets: property lines, wells, easements, water lines, structures, swimming pools,
ponds, etc shall be strictly adhered to as required by latest Texas Natural
Resources Conservation Commission construction standards.

Pump controls must have NEMA (National Manufacturing Association) approval.
A PVC union shall be placed above the pump to allow for easy pump removal.





Calculation of field Size

Three Bedroom house --300 GPD effluent flow
Assume an application rate of 15.6 square feet per gallon per day.

$$300 / 0.064 = 4,688 \text{ sq ft}$$

If two sprinkler heads were installed that were capable of 2.0 gallons per minute each with a radius of 30 feet. Then the area covered may be calculated:

$$30 * 30 * \pi * 2 = 5,655 \text{ sq ft}$$

Pipe and fittings

All pipes and fittings in this system shall be schedule 40 PVC. All joints shall be sealed with an approved solvent-type PVC cement. The forced main shall be 1 inch in diameter. A Myers Model Rustler (12 gpm) or equivalent high head submersible pump capable of providing at least 6 GPM and providing a 25+ psi head shall be utilized for pumping effluent.

Site Preparation

The area selected for irrigation is already cleared. Very little preparation is required. The area is presently a field covered with native grasses; however, additional seeding with selected grass seed shall be used only if necessary.

Provisions for Emergencies

A warning system shall be added to the pump tank on a separate circuit from the pump circuit to provide warning of a failure of the system. This aerobic system has a 24 month service agreement which includes emergency service(see attached copy of service contract).

Flood Prone Areas

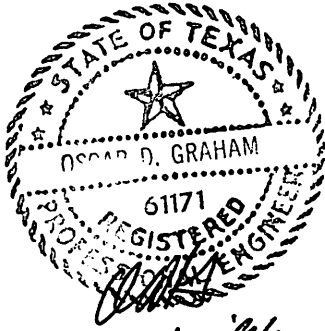
The subject lot is not in a flood prone area according to National Flood Insurance Program FIR Map community-panel Number 480696 _____.

Tank Sizes

The system shall have a 1200 gal JET Model J-353 extended aeration plant(Plant specification sheet attached) The pump tank shall have a capacity of 500 gal. This tank will not need tees on inlet. All tanks will be installed with elevations as noted on attached tank profile drawing.

Inspections

In addition to the inspections required by the Gillespie County EHD the system shall be inspected by the design engineer at least twice during construction and an inspection report submitted to County officials including an as-built drawing.



26 APR 96

This system designed by:

South Texas Wastewater Treatment
Oscar D Graham, professional Engineer
Registration Number 61171, State of Texas
PO Box 1284, Boerne, Texas

Oscar D Graham, PE

26 April 1996
Date

Attachments:

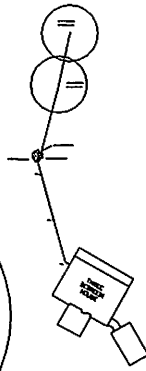
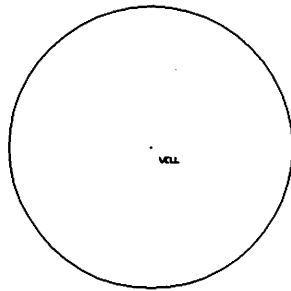
- Drawing No. 960405R0 dated 5 April 1996
- Affidavit to the Public
- Spray Irrigation Pump Tank Attach, "Pressure Dosing Tank"
- Service Policy
- Rain Bird Sprinkler Performance sheet
- Jet Home Plant Specification sheet
- Electrical Wiring Requirements
- Information for the Builder
- Myers Model Rustler Pump data sheet

EAST -- 1224.91 ft

10 ft SETBACK

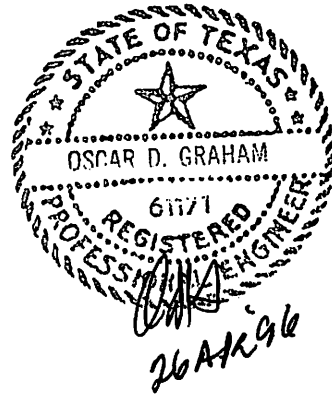
N 00°01'31" W -- 1593.31 ft
10 ft SETBACK

10 ft SETBACK
N 00°04'56" W -- 2024.21 ft



THIS DESIGN MEETS ALL OF THE REQUIREMENTS OF THE TEXAS NATURAL RESOURCES CONSERVATION COMMISSION CONSTRUCTION STANDARDS AND THE REGULATIONS BY COLLEGE COUNTY AND WILL NOT CAUSE A HAZARD OR HEALTH HAZARD.

DESIGN DESIGN
FOR
BEN CAMP
50.00 acre SURVEY OUT OF THE
H. HARRIS SURVEY NO. 219, ABS. NO. 516
COLLEGE COUNTY, TEXAS
BY
OSCAR D. GRAHAM, P.E. 61171
2227H TEXAS WASTEWATER TREATMENT
P.O. BOX 5844 HOUSTON, TX 77266
281-417-0000
DRAWING NO. 20091209 DATED 3 APR 1976



10 ft SETBACK
N 74°23'55" W -- 736.11 ft

FM 2093

R = 1950.00 ft
L = 570.10 ft

THIS DESIGN MEETS ALL OF THE REQUIREMENTS OF THE TEXAS NATURAL RESOURCES CONSERVATION COMMISSION CONSTRUCTION STANDARDS AND THE REGULATIONS OF GILLESPIE COUNTY AND WILL NOT CAUSE A NUISANCE OR HEALTH HAZARD.

SYSTEM DESIGN
FOR

BEN CAMP

50.00 acre SURVEY OUT OF THE
M. NARROD SURVEY NO. 219, ABS. NO. 516
GILLESPIE COUNTY, TEXAS

BY

DSCAR D GRAHAM, PE 61171
SOUTH TEXAS WASTEWATER TREATMENT
P.O. BOX 1284 BOERNE, TX 78006
210-249-8098

DRAWING NO.: 960405R0 DATE: 5 APR 1996

