7/12/04 11:13 AM

Williamson County and Cities Health District
NOTICE OF APPROVAL TO OPERATE AN OSSF

THIS IS TO CERTIFY that the on site sewage facility located at: OSSF #: **2002 - 3542**

329 PARK PLACE DR., Georgetown TX 78628 Grid:

GABRIELS OVERLOOK SECTION I

Block: **Lot:** 60 ☑ RoutineMaint

meets or exceeds the basic requirements established by the District.

LICENSE TO OPERATE this facility is hereby granted to the owner. This license simply grants permission to operate this facility; it does not guarantee its successful operation. Routine maintenance and proper functioning are the sole responsibility of the owner. KEEP THIS LICENSE with important papers. You may need it when selling your house or if a malfunction occurs.

THIS LICENSE REMAINS in effect until such time as there is evidence that this facility is not operating properly and may constitute a threat to the health of the people of Williamson County.
The license to operate this system is valid for only 2 years. To renew this license, maintenance contracts, inspection reports, and verification of a properly operating system are required.

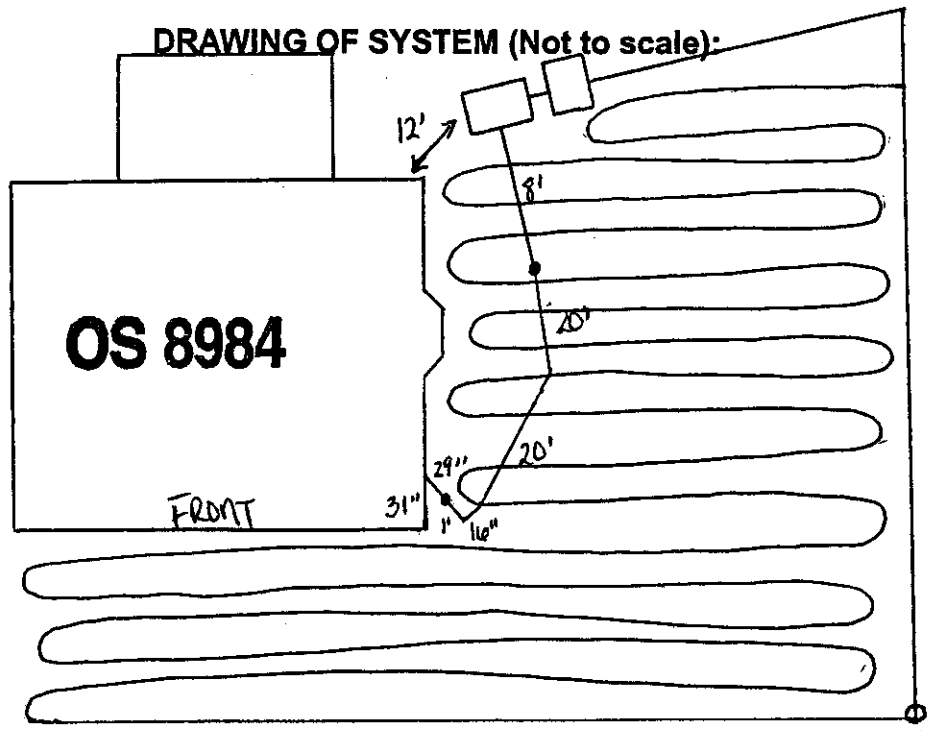
Tank Type: Concrete Box Valve: Max Flow: 360 gal/day

Tank Size: 500 gallons Drainfield Size: 3600 sq. ft.

Installed By: Floyd Harris

Engineered By: BRANDON COUCH, RS

DRAWING OF SYSTEM (Not to scale):



m- 8/3/04

DATE OF FINAL INSPECTION: 7/9/04 ISSUED THIS DATE: 7/28/04

INSPECTOR

OS 7173
DIRECTOR, ENVIRONMENTAL SERVICE

R-10

WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT
WCCHD
Public Health Since 1943

Karen Wilson, Director

M – 6/3/04

June 3, 2004

Horizon Builders
PO Box 341505
Austin, TX. 78734

Re: OSSF # 2002-~~3541~~ 3542 329 Park Place

Dear Sirs:

The On-Site Sewage Facility (OSSF) serving the mentioned property received a first inspection but did not receive needed final inspection. The use of this system without being properly licensed is a violation of State and local OSSF regulations and carries a fine of up to $500.00 per day The needed inspection must therefore, be conducted without any further delays. Please contact our office and or your builder or installer to make arrangements for this inspection. Failure to make the necessary arrangements within 21 days will initiate legal proceedings for the above-mentioned violation.

Thank you for your attention on this matter. If I can be of any assistance please feel free to contact me.

Sincerely,

Paulo Pinto
Director of Environmental Services

ta-11 1-3 Am CANCelled 7-28-03 INstaller Final

1st Inspection ______ 2nd Inspection 2-4-03 AM GRID # ______ OSSF # 02-3542 1659 Final (phone) 4/15/04

Williamson County & Cities Health District Aerobic treatment unit–Field Notes

LOCATION: 329 Park Place Dr INSTALLER: Floyd Harris ENGINEER: ______

SQUARE FEET: ______ RES. - # OF BEDROOMS: ______ COM. - # OF EMPLOYEES: ______

773-7978

TRASH TANK: Concrete ☑ Fiberglass ☐ Box ☑ Oval ☐ Cylinder ☐ Gallon Capacity ______

AEROBIC TREATMENT UNIT: Make MODAT Model ______

Concrete Tank ☑ Fiberglass Tank ☐ Barnard

PUMP TANK: Concrete ☑ Fiberglass ☐ Box ☑ Oval ☐ Cylinder ☐ Gallon Capacity 750

PUMP MODEL: ______ **PUMP SIZE:** ______ CONTROL PANEL 1 ______ 2 ______

DISPOSAL METHOD: Drip Emitter ☐ Spray ☐ LPD Trenches ☐ Other ______

SETBACKS: Tank to well Nc Disposal area to well ______ Water lines ______ 50' House & Property Line ______ Bodies of water ______ Breaks in grade ______ Easements ______ Other ______

CONSTRUCTION/GENERAL CONDITIONS Date: 1-30-03 Inspector: SLS

Sch. 40 equivalent line glued in place from structure to tank:	Yes ☑ No ☐
All needed cleanouts in place:	Yes ☑ No ☐
Inlets/Outlets sealed or grouted:	Yes ☑ No ☐
Tank filled to flowline and watertight:	Yes ☑ No ☐
Tanks set correctly/ level:	Yes ☑ No ☐

not approved 2-4-03

OS 8984

Spray Additional Requirements: (crossed out)

Low angle nozzles,< 13° & non aerosol: ☐

Sample port in pump tank: ☐

Other components:

Pressure gauge or regulator: ☐ ______

Disposal area:

Number of heads = ______

Spray Radius #1 = ______' Spray Radius#2 = ______'

Spray Radius #3= ______' Spray Radius #4= ______'

Disposal Area (πr^2 x heads)= ______ Ft^2

Rotor brand & model#: ______ ,nozzles ______

Drip Minimum Requirements:

☑ Mechanism to Backflush line to trash/ATU:

Ball valve ☑ Gate valve ☐ Other ☐

Other components:

Air Vacuum breaker, at highest elevation: ☑

Pressure reducer: ☐ set @ 27 PSI

Disposal area:

Field 1: ______ Field 2: ______

Total: linear feet 1812 Field depth scarify

Total Area ______ (Total # Emitters x 4)

LANDSCAPE/HEAD PRESSURE Date: 7-28-03 Inspector: SLS

Supply lines Sch. 40, with 100 mesh filter on the effluent supply line:	Yes ☑ No ☐
Pump and HWA Alarm operational & on separate circuits:	Yes ☑ No ☐
Pressure set <40 PSI or Drip as appropriate	Yes ☑ No ☐ N/A ☐
Aerator operational (Compressor running):	Yes ☑ No ☐ N/A ☐
Clorinator in place & stocked:	Yes ☑ No ☐ N/A ☐
Disposal area clear & vegetated <15% slope:	Yes ☑ No ☐ N/A ☐
Spray radius set as designed :	Yes ☐ No ☐ N/A ☑
Auto Dialer Functional:	Yes ☐ No ☑ N/A ☐
Phone Line in & operational	Yes ☐ No ☐ N/A ☑
Pump shutdown operational (for disinfection failure)	Yes ☑ No ☐ N/A
Aeration failure shutdown operational	Yes ☑ No ☐

not approved 2-4-03

OS 8984

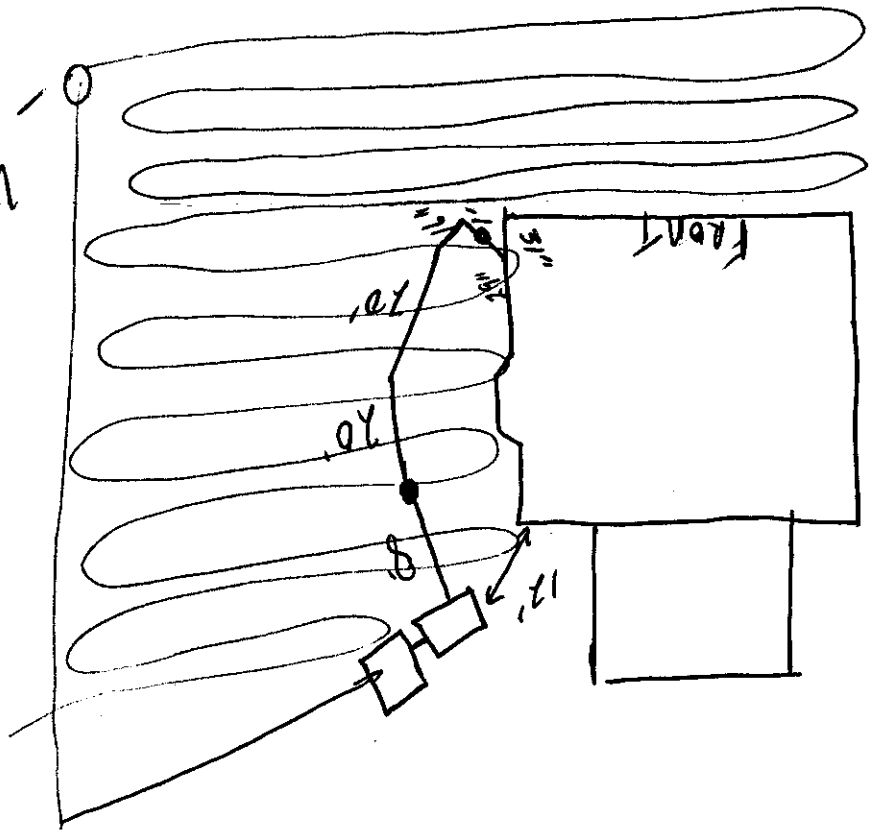
SLS 7-28-03 Installer work has been completed

phone is installed 4/14/04

☐ **FINAL SYSTEM APPROVAL** ~~MODAT installed / 1st Designed~~ OK - ASBUILT OK 2/5/03 058054

Need new maint contract OK to cover tanks

STILL NEED NEW MTC CONTRACT



15'

Breeze in shade

WCCHD CHECK LIST FOR PROFESSIONAL DESIGNS - ON SITE SEWAGE FACILITIES

DATE: 01/14/03 OWNER: HORIZON HOMEBUILDERS LP OSSF #: 02-3542

LOCATION: 329 PARK PLACE DR GABLERS OVERLOOK SEC I

DESIGNER: COUCH SITE EVALUATOR: ~~GREEN~~ MOORE

Commercial?:

Type of System: DRIP Bedrooms on Permit: 5 Sq Ft: 3992

Wastewater Design Flow (Gal/Day): 360 Bedrooms on Design: 3 Sq Ft: 3992

Soil/Surface Application Rate: 0.1 Equivalent Bedrooms:

SITE EVALUATION (Most restrictive conditions)

Class of Native Soil: ~~IV~~ TO 15", THEN >30% GRAVEL/ROCK SLR required: SUBDIV

Restrictive layers (Rock, Clay, etc...) 15" → Depth: Flood Plain addressed: YES

Evidence of Groundwater: NO EVD → Depth: EARZ Addressed: YES

NOT APPROVED by Field Inspector: PW 9-25-02 **APPROVED by Field Inspector:**

TREATMENT PROCESS

Septic / Trash Tank (gallons): Pump Tank (gallons): BUCHANAN 750G ~~CONC PUMP TANK~~

Secondary Treatment (gal/day) 500 ATU Model/Tank specifications: ~~JET 500~~ MODAD

DISPOSAL PROCESS

Drain Field (Linear Feet): ~~1800~~ 1860' Drain/Spray Field (Square Feet): 3600 ft

Depth Min/Max (inches): AT GRADE Pressure Valve: GATE

Diversion Valve: NA Pressure Reducer: NA

Pressure Gauge: YES Backfill Class/Height above grade: 6"

DOSING & DISTRIBUTION

Dosing Rate (gal/minute): 9 Dosing Volume (gallons): ~~135~~ 86

Reserve capacity in pump tank (gal): ~~374~~ 382 Head Pressure: 15 PSI

Check Valve: Syphon Hole:

EQUIPMENT SPECIFICATIONS

CONTINUOUS FLUSH RETURN TO PUMP TANK

High Water Alarm: YES Audible: YES Visual: YES

Pump Size (hp) / Model: ½ HP ABERMOTOR 2050 Pump on separate circuit from alarm?

Disinfection / Model: CL ADVANTAGE Filtration / Model: AP4I 100

Vacuum Breaker specs: ADVBK-1 Flush Valve specs: BALL

Control Panel specs: CA 300LSONTOBS Auto Dialer specs: JS CONTROLS

Auto Shutoff? YES Auto Notification? YES

Emitter line specified: 0.6 NETAFIM ~~Night Spray only?~~

Dial In Number:

~~Spray or~~ Drip Field Notes: SCARIFY FIELD, LAY LINES, COVER WITH 6" SOIL

CONSTRUCTION PLAN (SITE PLAN/CROSS SECTIONS)

Contour lines/slope - esp. in disposal area: 4-5% SLOPE Well locations shown: N/A Water line shown:

Profile Holes shown and near drain field: YES Property lines shown: YES Setbacks shown/stated: YES

Float settings (inches & gal) in pump tank: YES Cross section of tanks: YES Cross Sections Labeled: YES

Landscape/Vegetation Notes:

CONTRACTURAL / ADMINISTRATIVE

Signed/Sealed/Dated by designer: YES 1/10 RCD 1/14 REV 1/22 Fees Due: $100 1/22/03

Affidavits: YES Maintenance Sheet: YES

Maintenance Contract: YES Monitoring Agreement: YES

DESIGN APPROVED: YES (KPT 1/22/03) NO

ADDITIONAL NOTES:

$100 DUE 1/22/03

~~CASE 6.6.6~~

~~MAY NOT INCLUDE~~

~~LINE UNDER~~ UNDER

S/W — MAY DRIP

~~UP TO BUT NOT UNDER~~

~~IMPERVIOUS LAYER~~

~~WELL H2O LINE CLOSE CHECK?~~ SHOW

PUMP TANK - FLOAT SETTINGS / CAPACITIES ?

10' FROM BREAK IN GRADE WATER H2O LINE

Kurt Taylor 1/23/03

Inspector / Date

OSB034

Williamson County & Cities Health District

Board of Health: Mary Faith Sterk, Chair • Margaret R. Fink • Katherine M. Galloway • Angela Tietz • Lettie A. Lee • Scott D. Evans

Karen Wilson, Director

your public health department

m - 1/23/03

January 22, 2003

Horizon Homebuilders, LP
PO Box 341505
Austin, TX 78734

RE: ON-SITE SEWAGE FACILITY (OSSF) PERMIT #: 2002-3542
LOCATION: 329 PARK PLACE, GABRIELS OVERLOOK, SECTION I, LOT 60, 1.162 ACRES

Designer: Brandon Couch, R.S.
Design received: 01/14/03 Revised: 01/22/03
System type: Drip Irrigation
Maximum gallons per day: 360 gallons/day

To Whom It May Concern:

The design for the above referenced system appears to meet the minimum requirements of the WCCHD. ***Authorization to construct has hereby been granted.***

An individual holding a valid Installer II license from TNRCC must perform the installation. The WCCHD must also inspect the system at critical stages of installation. If well easements are found to encroach any portion of the OSSF, stop construction. If groundwater or evidence of groundwater is encountered, this design is void and you must stop construction. If you encounter soils different from those approved on the site evaluation, stop construction. If you must stop construction, contact our office to receive instructions on how to proceed.

If you have any questions concerning this matter, please contact this office.

Sincerely,

Karen P Tarlow

Karen P. Tarlow, OS8034

Copy: Brandon Couch, R.S.

Williamson County and Cities Health District

303 Main St.
Georgetown TX 78626-
(512) 930-4390

OSSF #: 2002 - 3542
Grid:

NEW

APPLICATION FOR A LICENSE TO OPERATE AN ON-SITE SEWAGE FACILITY

***** VALID FOR ONE YEAR FROM DATE OF PURCHASE *****

Date: 9/26/02 Residential 5 Bedrooms: 3992 Sq Ft ☐Well on site ☑Public Water
Legal: GABRIELS OVERLOOK SECTION I ☑Engineered
Block: Lot: 60 Lot Size: 1.162 AC ☐Routine Maint
Location: 329 PARK PLACE DR., Georgetown TX 78628
Owner: HORIZON HOMEBUILDERS, LP Phone: (512) 784-8269
Mailing address: PO BOX 341505, AUSTIN TX 78734
Fee: $285.00 Payment: CASH/KEVIN MOORE
Certificate of Compliance:
Fee: $25.00 CASH/KEVIN MOORE

pd. #100 (1/22/03)
+
Total payment: **$310.00**

Warning:
The flood hazard boundary maps and other flood data used by the County in evaluating flood hazards to proposed developments are considered reasonable and accurate for regulatory purposes. Flood Plain determinations are based solely on the property owner's indication of the proposed home-site. On occasion greater floods can and will occur and flood heights may be increased by man-made and natural causes. The County cannot guarantee the property will not flood. Exempting the property owner from the Flood Plain management Regulations does not create any liability on the part of the county or any officer or employee of the County in the event that flooding and/or flood damage does occur. Ultimate responsibility of locating the home/structure outside of the flood plain rests with the property owner. The County recommends the property owner contact a surveyor prior to construction for precise determination.

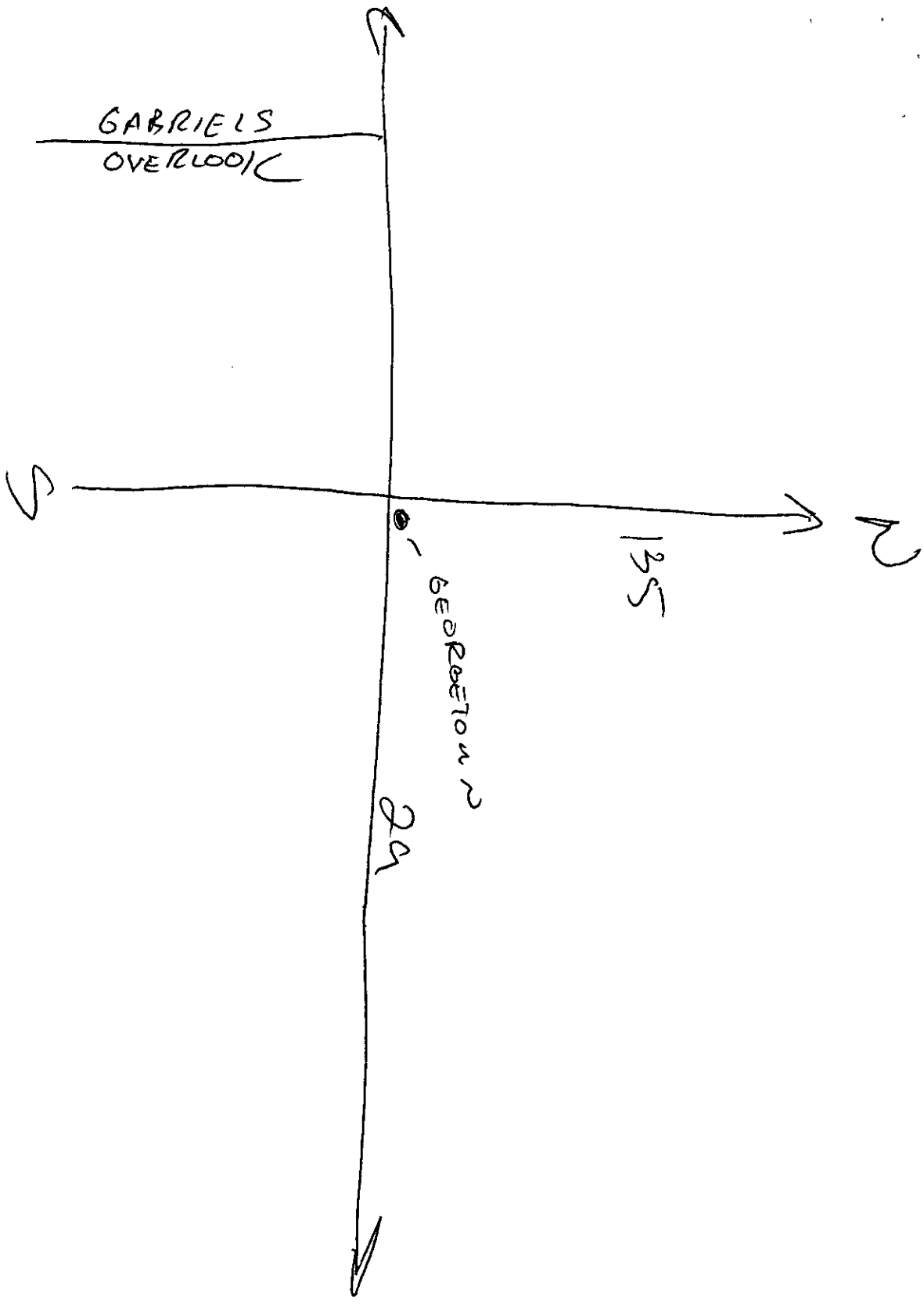
I acknowledge the above warning. I certify I am the property owner / designated agent, and the above statements are true and correct.

Signature — Date: 9-26-02

FLOOD PLAIN STATUS = Exempt

Environmental Services Official: Tiffany Ridgeway — Date: 9/26/02

TAR
9/26/02 01:14 PM R-7


GABRIELS
OVERLOOK
S
N
135
29
GEORGETOWN

BRANDON COUCH, R.S.
septic design-site evaluation-consulting

February 3, 2003

Ms. Karen P. Tarlow

Environmental Services
303 Main Street
Georgetown, Texas 78626

As-Built OSSF#2002-3542, 239 Park Place Drive

The following changes were made during the installation of the designed system for OSSF #2002-3542:

1) The site was conservatively given space. The area beyond the sidewalk in front of the home was not necessary to have 3600 sq. ft. of drip field. The line lengths are as follows: 408', 400', 400', 326', and 326'

2) The field layout is attached.

3) The aerobic unit installed was the MO-DAD unit (cross-section attached).

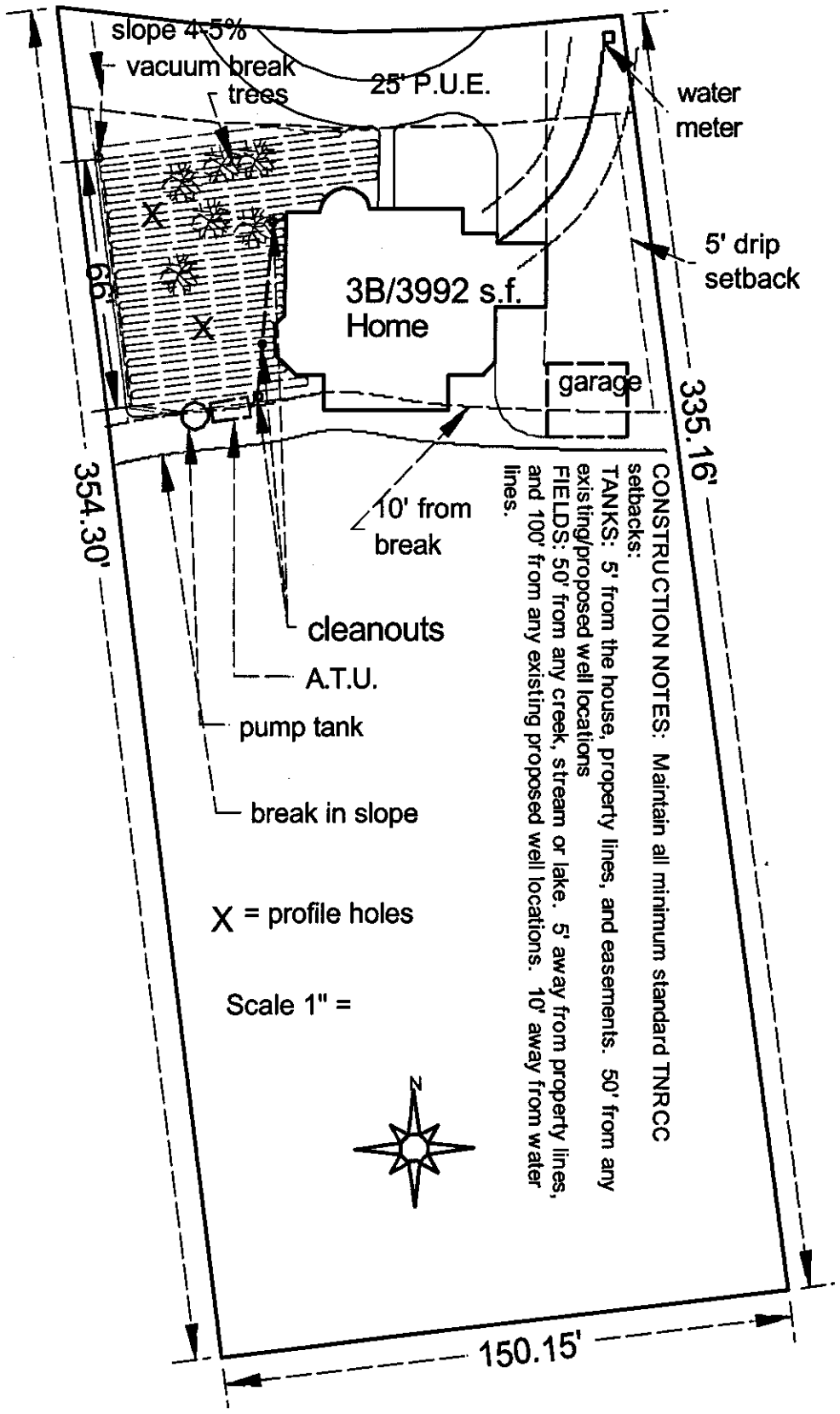
I hope this helps to clarify my design. If you have anymore questions, please call or email.

Respectfully,

Brandon Couch, R.S.

209-a tamara drive, georgetown, texas 78628 • (512) 630-8600

Park Place Drive



5 lines:
326'
326'
400'
400'
408'

RECEIVED
FEB 0 5 2003
WCCHD-ENV

BRANDON COUCH, R.S.
septic design-site evaluation-consulting

February 5, 2003

Ms. Karen P. Tarlow

Environmental Services
303 Main Street
Georgetown, Texas 78626

As-Built OSSF#2002-3542, 239 Park Place Drive

The additional changes were made during the installation of the designed system for OSSF #2002-3542:

1) The pump tank used was the Benard's 750 single compartment pump tank.

   Tank volume at water level (according to attached letter) 1000 gallons
   Outlet at 34"
   Volume per inch = 29.41 gal/in
   Alarm volume = 360/29.41 = 12.24 ≈ 13"
   Alarm on at 21" (leaving 382.33 gallons for alarm volume)
   Pump on at 14"
   Pump off at 12" (dosing volume 85.68 gallons)
   Pump must be set for demand dosing.

I hope this helps to clarify my design. If you have anymore questions, please call or email.

Respectfully,

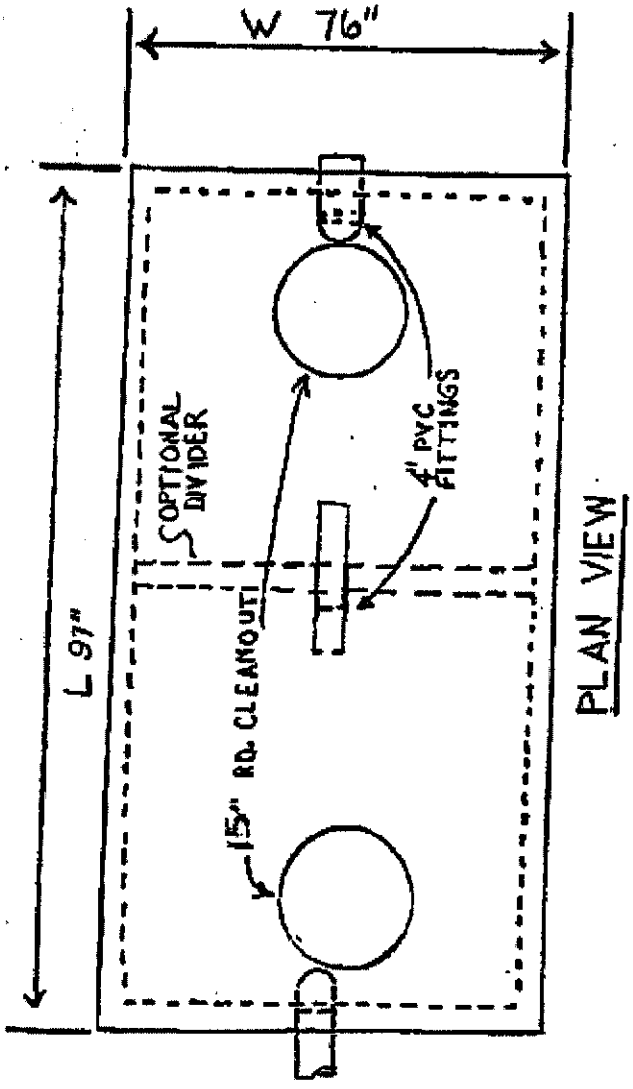
Brandon Couch, R.S.

209-a tamara drive, georgetown, texas 78628 • (512) 630-8600

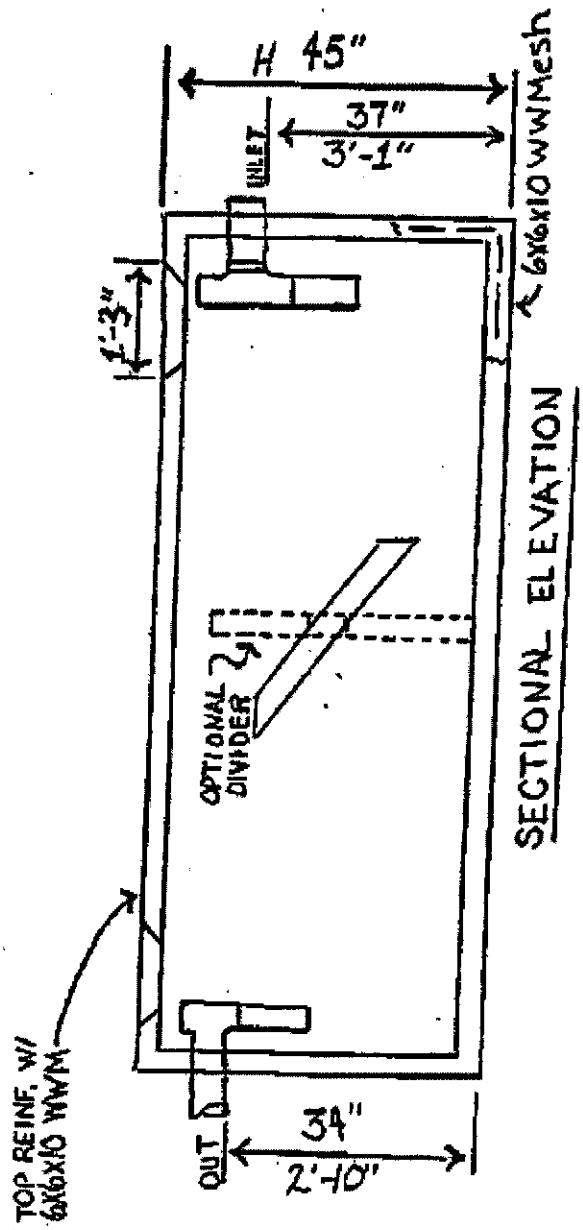
BARNARDS SEPTIC TANK MFG. INC.

NOTES:

1. CONCRETE MIX; 6 1/2 SACK CEMENT / CUBIC YARD, 3/8" MAX. AGGREGATE.
2. TWO-COMPARTMENT TANKS ARE DIVIDED 60%-40%.
3. TANK VOLUME IS 1,000 GAL. MIN. AT WATER SURFACE.



PLAN VIEW



SECTIONAL ELEVATION

750GALLON

BRANDON COUCH, R.S.
septic design-site evaluation-consulting

January 22, 2003

Mrs. Karen Tarlow

Environmental Services
303 Main Street
Georgetown, Texas 78626

Re: OSSF#2002-3542, 329 Park Place Drive

Karen Tarlow requested the following for approval of designed system OSSF #2002-3542:

1. The $100 will be paid.
2. The lines will not run under the surface improvement (sidewalk); there will be a pvc line (same diameter) splicing the lines through the sidewalk.
3. The water line is indicated on the attached site plan.

I hope this helps to clarify my design. If you have anymore questions, please call or email.

Respectfully,

Brandon Couch, R.S.

209-a tamara drive, georgetown, texas 78628 • (512) 630-8600

On-Site Wastewater Disposal System

For
Horizon Builders

Site
329 Park Place Drive
Lot 60
Gabriels Overlook
Section 1
Georgetown, Texas
Williamson County

RECEIVED
JAN 14 2003
WCCHD-ENV

Permit # 2002-3542

An Aerobic OSSF with Drip Irrigation Disposal Field
for a
3 Bedroom Residence
of
3992 sq. ft.

Design By:
Brandon L. Couch R.S.
209 A Tamara Drive
Georgetown, Texas 78628
(512) 630-8600

January 10, 2003

Permit #2002-

Design Calculation & Notes
For 329 Park Place Drive

System Destination:
Owner: Horizon Builders
Location: 329 Park Place Drive, Lot 60, Gabriels Overlook, Georgetown
Permit # 2002-3542
Design capacity for a 3 bedroom home with water-saving devices
Estimated daily flow 360 GPD

Inspection Schedule:
Inspection schedule must be adhered to in order to demonstrate compliance. This schedule is independent of the local health authority's inspection & requirements.
Pre-construction Meeting: Meet with designer prior to construction with any questions.
Plumbing Inspection: Plumbing, pump, controls, and alarm are in place, operational and exposed.
Final: When system is complete and landscaping is finished.

Proposed System:
Install an aerobic pre-treatment/chlorination system with a drip irrigation type drainfield on this site. The aerobic unit must be NSF approved and meet all state and local requirements for effluent quality.

Selection Criteria:
This type of system was chosen due to its superior effluent treatment characteristics.

Design Ideology:
Primary treatment of effluent will be accomplished using a NSF approved aerobic treatment unit. Treated effluent will then be distributed evenly over the disposal field area at night. Drip irrigation will be the method of effluent dispersal and disposal. Design has been equipped with chlorination so at to prevent biotic build up within drip lines and provide continuous disinfection so as to minimize the possible health risk associated with a field failure. **Class III soils will be imported to ensure a suitable area for surface vegetation. (6" of soil to cover drainfield area)**

Drain Field Calculations:
The designed load for this system is 360 GPD
Drip irrigation requires 360/0.10 (R_a for Class IV soil) = 3600 sq. ft. field area

a) Field Area = 3600.0 sq. ft.
b) Total Amount of Emitter Line = 1800.0 ft.
c) Number of Emitters = 900
d) Flow Rate = 0.6 GPH @ 15 psi
e) Total Flow = 900 x 0.6 GPH = 540 GPH
= 540 GPH / 60 = 9.0 GPM
f) Minimum Spacing of Emitter lines = 24"
g) Total Daily Irrigation Time = 360 gpd/9.0 gpm = 40 ≅ 40 minutes/day
h) Aerobic treatment system = Jet aerobic treatment system or equivalent including: Aerobic unit, Aerator mechanism, Electronic controls in a weather-proof box.
i) Chlorinator = Aqua Safe In-Line Chlorinator with sensor
j) Pressure Gauge = A pressure gauge/gate valve will be installed to regulate flow to emitter field for a pressure setting of not greater than 51 psi.
k) Collection port = A unthreaded hose bib or equivalent shall be installed in the pump chamber to facilitate sampling of effluent on a periodic basis.
l) Emitter Lines = Pressure compensating 0.6 gph Netafim Bio-line drip lines

***Important Installer Note: Chlorine gas is corrosive. Do not use components in the pump tank which are subject to oxidation such as metal clamps, brass fittings, or hose bibs, etc. as they will deteriorate. Use plastic binders, pvc. Fittings, etc. Use air tight seals on electric splices in the pump tank if any. Be sure to silicone seal any route by which chorine gas might reach control panels such as electrical conduits from the pump tank. IN CASES OF SHALLOW GROWNDWATER BE SURE TO SET TANKS AS SHALLOW AS POSSIBLE AND SILICONE SEAL ALL JOINTS AND AROUND THE TANNK LID TO PREVENT SEEPAGE.**

Pump Timer

A 12 hour timer with application every 5hr 45min. (9 GPM x 15min = 135 gallons/dose)

Tank Data:

Trash tank:	Included with aerobic unit
Pre-treatment tank:	J500 Jet aerobic unit (capacity 500gpd)
Pump tank:	750 gallon Buchannan Top Entry Tank/single compartment (concrete)

Installation Note: Tanks are to be installed with a minimum separation of five feet from the foundation. The tank is to be level (+/- 1") and is to be set on a minimum of four inches of washed sand. A clean-out shall be installed between each foundation and septic tank or every 50'.

Pump Tank Data

A single compartment 750 gallon concrete tank shall be used as the pump chamber.

Inlet @ 45" above the floor (Tank cast with no side ports, Pump effluent through top port, total volume of tank: 937 gallons)
Volume per inch = 20.83 gallons/inch
Minimum 360 gallons of pump flow above alarm = 360/20.83 = ≈ 18" volume
Alarm on at 27 inches above the floor (leaving 374.59 gallons for alarm volume)
Start Pump @ 14 inches above the floor.
Stop Pump @ 12 inches above the floor.

Alarm System:

An audio/visual high water alarm (red light) will be installed on this system. ChlorAlarm 303LSORTBB5-3B-BBXLS-BB5LS-115. The alarm/light will be installed in a highly visible location as near the pump tank as possible. The alarm shall also be connected to the chlorinator sensor and aerator alarm. The alarm will shut down the pump in case of aerator or disinfection failure. The alarm box shall also contain the U.S. Controls Inc. Tonedialer CPD-1 to notify the maintenance company of alarm codes at 1(877)912-2711.

NOTE TO BUILDER: Please be sure to run a phone line to the control panel area.

Drain Field Data:

The disposal area will be comprised of 1 field. Field area shall contain 5 emitter lines of **386', 386' 406', 338', & 284'** in length placed parallel to the contour of the site. Each emitter line shall be spaced a **minimum of 24"** apart, giving a minimum width of **66'**. The supply and return lines will be connected to the system with 1.25" sch. 40 pvc supply line. Continuous flushing of both filter and flush valve in maintained by a 1/8" port in each device. The return lines shall empty into the pump tank.

a) **Filter:** (at least 100 microns) shall be installed on the supply line. Suggested model **Geoflow AP4I-100** - with a filtrate return to the pump tank.
b) **Vacuum Break: Geoflow APVBK-1-** Vacuum breakers installed at the high points protect the system from sucking dirt back into the drip line due to back siphoning or back pressure with position elevation so as not to drain when not pressurized
c) **Flush Valve: generic 1" PVC ball valve** with continuous flushing port.
d) **Field Dimensions:** see site plan

Disposal Field Finish:

1. No evidence of groundwater.
2. No Recharge Features within 150' of system

3. The drip irrigation system area shall be located in a relatively open area at *least 100' away from any well and 5' from any property line.*
4. The field will be installed into a scarified area 6" imported soil above the lines. Area should be cleared of any exposed rocks that may be exposed during the scarification process.
5. The field area must be seeded, mulched, or sodded immediately after installation.
6. The field shall be maintained at all times (mowed).
7. The field edges will maintain a 3:1 run to rise ratio.

Pump Data:

Design Goals: Provide 9 gpm to 5 emitter lines at 20 psi.

Elevation	5.33'
Pressure (20 psi)	34.61'
Loss in pipe (60') x 1.2 (supply)	3.06'
Loss in pipe (90') x 1.2 (return)	1.08'
Loss at Filter	4.23'
Loss from Valves	7.36'
Loss from emitter lines	55.37'
Misc.	5.00'
Total Head	116.04' (50.3 psi)
Flushing velocity 9 + 1.6(5) =	17 gpm

Pump Selection: Aermotor t-2050 1¼" discharge submersible pump, ½ hp, 115 volt, 60 Hz, or pump capable of attaining 40+ psi

Construction Notes:

A. Installer shall be responsible to comply with TNRCC and local codes for proper OSSF installation.
B. The owner or contractor is to be responsible for identifying all property lines, easements, wells and other related improvements either actual or proposed and verify that the septic system installation does not violate any regulation or law. Water lines shall be a minimum of 10' from any OSSF drainfield.
C. All roof and surface drainage shall be diverted from fields by guttering, berms, swales, etc.
D. It is required that water conserving methods be used with this system, including low flush toilets (1.6 gallons), pressure reducing faucet aerators and shower heads to reduce overloading the field areas.
E. Should seepage or other underground water be found that was not found in the examination of the profile hole, stop all construction and notify the design engineer and/or the environmental permitting agency.
F. Homeowner/contractor is hereby aware that water softeners will cause corrosion of the electrical components and will shorten the life of the pumps and floats and may void equipment warranties.
G. Liquid input into this septic system shall not exceed **360** gallons per day.

Design Maintenance and Limitations:

This OSSF design is intended to meet minimum state requirements for OSSF as of June 2001. The owner should be aware that a septic system is a system of "limited" capacity and will not stand up to prolonged abuse. Any of the guidelines below which are not followed amount to abuse of the septic system constitutes agreement by the homeowner to regulate use of this system so as to maintain its integrity.

A. The owner is to be responsible for properly maintaining this aerobic system.
   To keep your aerobic sewage system in peak condition the following steps should be taken:
   1. Keep the field areas mowed and in good condition in order to encourage peak transpiration.
   2. Do not allow excess water to enter your drainfield (sprinkler systems, run-off, etc) Leaky faucets and toilets must be repaired immediately.
   3. Avoid the use of garbage disposals to dispose of kitchen waste.
   4. The property owner must not use any additives to septic tanks, i.e., commercial enzymes, yeast, etc. Do not let harsh chemicals, grease, high sudsing detergents, discharge from water softeners, disinfectants or any other bactericides enter the system. **This is an aerobic "living" system, and additives can upset the natural bacterial balance.**
   5. Avoid flushing paper products or items not intended for septic use (i.e. toilet paper only).

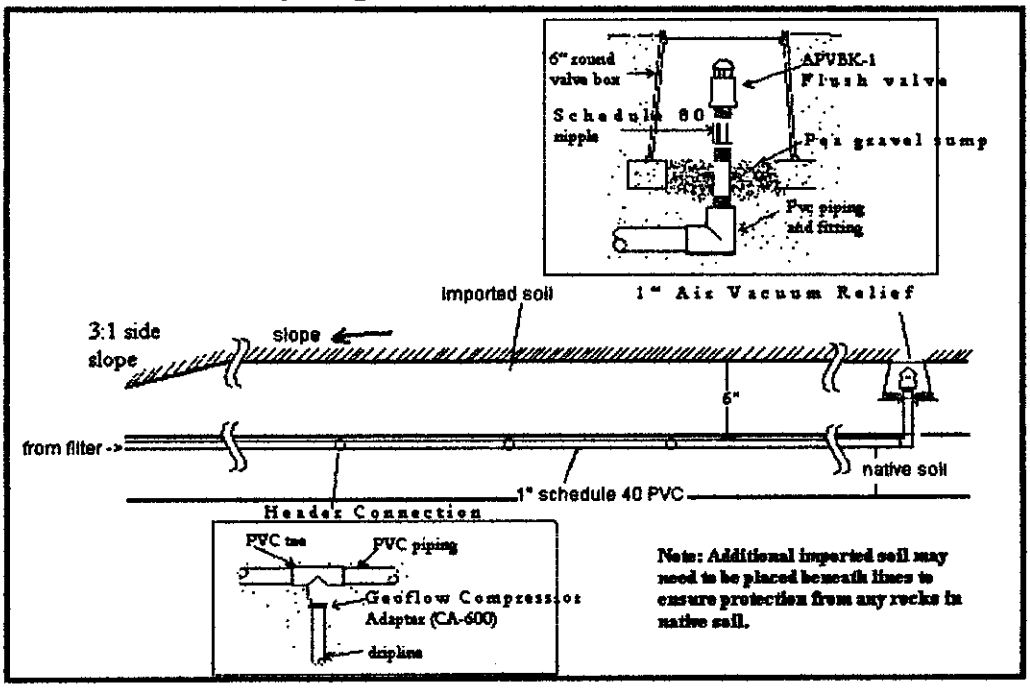
6. Be sure to pump out your trash tank (see schematic drawing) every 2 to 3 years to avoid excessive sludge build-up. Excessive build up reduces storage volume in your tank and can damage your drainfield.
7. Do not allow vehicles or heavy equipment to drive over the irrigation fields or tanks.
8. If any problem persists, such as frequent high water alarms or surfacing of septic water in your yard, call you OSFF service maintenance company for consultation or repair service.
9. **Important!! The homeowner must leave the aerator for the aerobic unit running at all times.**

Information about Your Professional Maintenance Contract:

Homeowners with aerobic sewage systems are required by rule to maintain a "service" agreement. Your installer is to include an initial 2 year service agreement in the construction bid. The service agreement shall indicate at least two annual inspections and inspections shall provide service as recommended by the aerobic unit manufacturer and/or as required by the licensing authority. A written inspection report is to be issued to the owner and the licensing authority for each inspection performed.

If there is any question as to the implementation of these plans or any contemplation toward making significant changes to implement installation, contact the designer-
Brandon L. Couch R.S. (512) 630-8600

Drip Irrigation Field Cross Section



Permit #2002-

ALVIN FAIRBURN & ASSOC., INC.
CONSULTING ENGINEERS
LAND SURVEYORS DESIGNERS

1

STATE OF LOUISIANA
LUKE J. FAIRBURN, JR.
REG. NO. 19961
PROFESSIONAL ENGINEER
CIVIL

9-9-98

TOP VIEW
SCALE: N.T.S.

RIGHT VIEW

FRONT VIEW

LEFT VIEW

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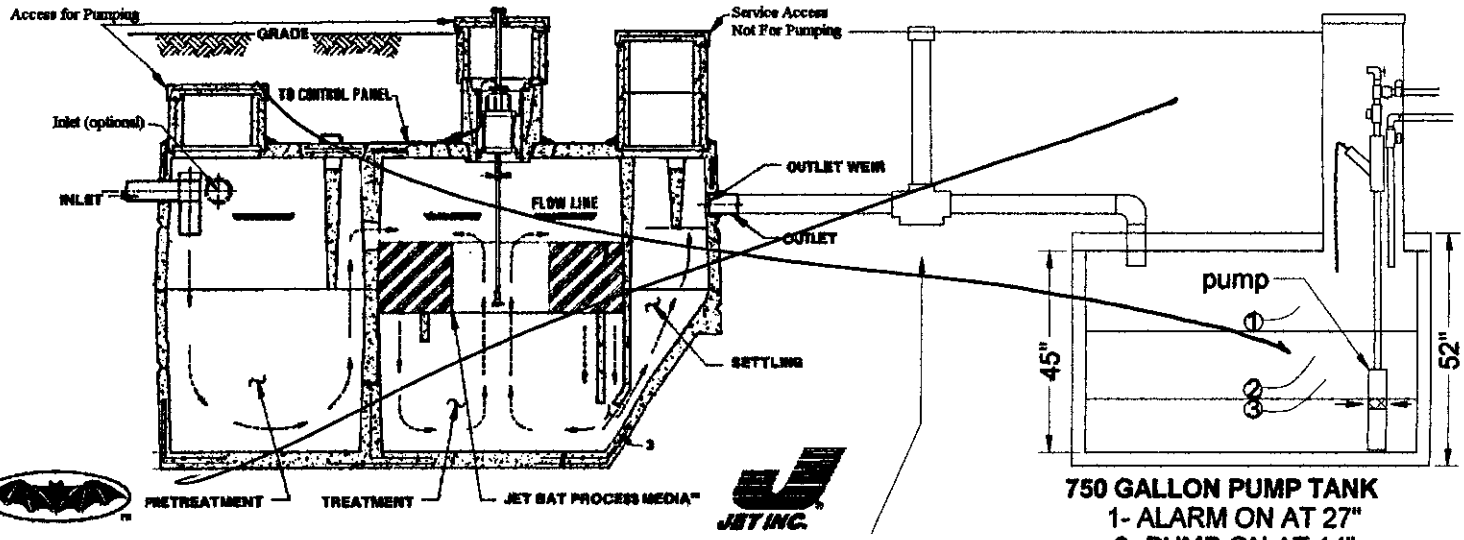
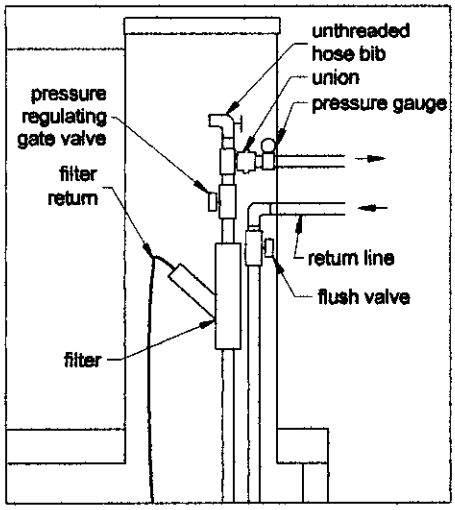
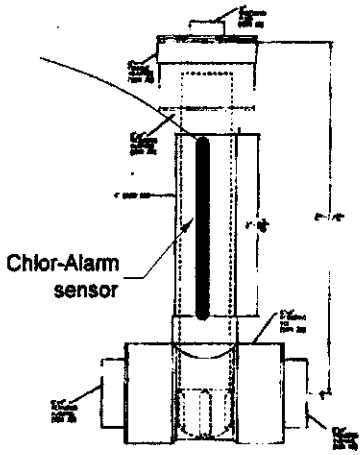
FEB 05 2003
WCCHD-ENV



750 GALLON PUMP TANK
1- ALARM ON AT 27"
2- PUMP ON AT 14"
3- PUMP OFF AT 12"



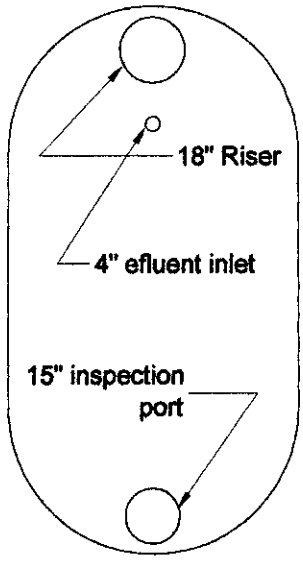
Riser Detail



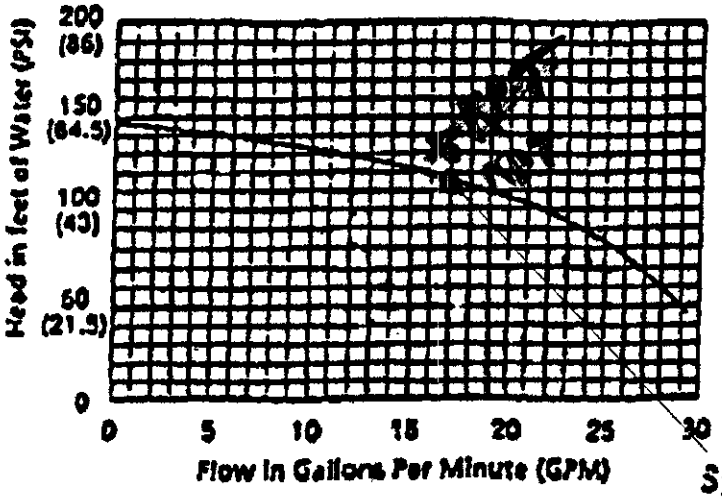
Performance in Feet of Head at Gallons per Minute

GPM	0	5	10	15	20	25
FT-H	147	140	132	122	112	81

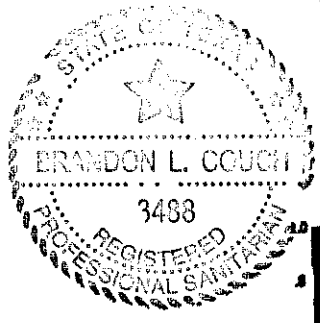
PUMP TANK LID



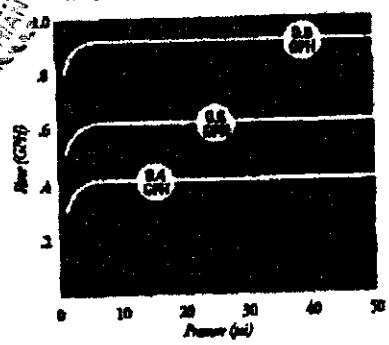
Aermotor T-2050



System Requirement



BIOLINE Flow Rate vs. Pressure



RECEIVED

JAN 14 2003

WCCHD-ENV

WCCHD 329 Park Place Dr. S/E DATE: 9/30/02 GRID #_____ OSSF # 02-3542

SITE EVALUATION VERIFICATION SHEET

THE PROPERTY OWNER IS RESPONSIBLE FOR THE FINAL OSSF DESIGN. DESIGNS MUST MEET MINIMUM REQUIREMENTS. THE PROPER PERFORMANCE OF AN ON-SITE SEWAGE FACILITY CANNOT BE GUARANTEED. PROPERTY OWNERS ARE ENCOURAGED TO OBTAIN A DESIGN FROM A PROFESSIONAL DESIGNER. *PROPER LANDSCAPE AND DRAINAGE DIVERSION IS THE RESPONSIBILITY OF THE OWNER.*

TYPE OF OSSF ALLOWED (Based on Approved Site Evaluation):

_____Absorption beds/trenches *

or _____ Evapotranspiration beds *

or _____ Alternative System needed. Contact a Professional Engineer or Registered Sanitarian.

*(Standard absorption beds or ET beds may be designed by an Engineer, Sanitarian, Installer II or the homeowner.)

MINIMUM SETBACK DISTANCES: TANK – 5 ft. from house, 5 ft. from property line, 50 ft. from water well. **FIELD** – 5 ft. from house, 5 ft. from property line, 100 ft. from water well, 10 ft. from water line, 75 ft. from body of water.

OTHER: _____

ALL VARIANCE REQUESTS MUST BE APPROVED PRIOR TO INSPECTION.

PIPE & GRAVEL: Tank connected to house and valve; cleanout between structure and tank; fittings in place; full of clean water to flow line. Schedule 40 equivalent, 1/8" per foot fall from house to tank; 1" per 100' from tank to valve. Filter required at outlet; cleanout between tank & valve within 1' of tank outlet. Fields/trenches excavated, level, 12" lower than tank flow line; 18"-36" deep. Gravel & pipe in place; voids left for inspection. Distribution pipes must be level with 6" of gravel below pipes. Total gravel required is 12". Monitor wells at far ends of fields. Filter fabric, all sand & sandy loam **MUST** be on site.
LANDSCAPE INSPECTION: Properly backfilled with sand & sandy loam. Area over fields/trenches **MUST** be mounded 4" or more. Grass must be planted over this area.

EVALUATION OF PROFILE HOLE #1

DEPTH	SOIL DESCRIPTION
10"	Dark brown gravelly clay (IV) (<30% gravel)
17" 20"	Limestone fragments and blocks (<30% gravel) intermixed with clay seams (IV)
25" 30"	Reddish brown sandy clay loam mixed with
36" 40"	weathered limestone frags (>30% gravel)
50"	
60"	
70"	

EVALUATION OF PROFILE HOLE #2

DEPTH	SOIL DESCRIPTION
10"	Dark brown gravelly clay III (<30% gravel)
15' 20"	Limestone fragments and blocks intermixed with clay seams (IV) (>30% gravel/rock)
30" 34" 40"	
50"	
60"	
70"	

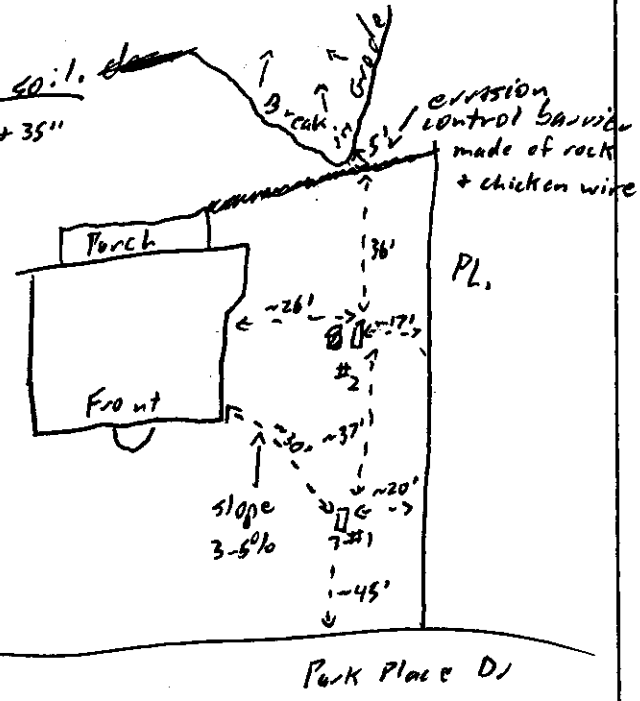
WCCHD USE

APPROVAL OF SITE EVALUATION: YES / (NO)

(IF YES, PLEASE SUBMIT DESIGN ACCORDING TO TYPE OF OSSF ALLOWED)

Explanation:

Class IV 60:1. down to 25" & 35"



NO CONSTRUCTION MAY BEGIN UNTIL A DESIGN IS APPROVED BY THE WCCHD. IF GROUNDWATER IS ENCOUNTERED, STOP CONSTRUCTION AND CONTACT OUR OFFICE.

INSPECTOR Paul E. Walter DATE 9-30-02

05 8032

Date: 10-22-02
To: Paulo Pinto
From: Kevin Moore

RE: OSSF 2002-3542, 329 PARK PLACE, GEORGETOWN, TX

On 09-25-02, a site evaluation was submitted to the WCCHD for the above-mention location. On 09-30-02, the site was inspected by Paul Walter and determined to be class IV soil. On 10-07-02, the homeowner and myself were notified of Mr. Walter's findings. The homeowner then agreed to have a soil test conducted. The soil was tested using the *LaMotte* Soil Texture Kit and the results were as follows:

Profile Hole #1

0 - 6 inches (class IV silty clay)
Clay: 58.9 %
Silt: 38.7 %
Sand: 02.4 %

7 - 11 inches (class III silty clay loam)
Clay: 37.6 %
Silt: 56.9 %
Sand: 05.5 %

11 - 36 inches (class III silty clay loam)
Clay: 28.8 %
Silt: 57.4 %
Sand: 13.8 %

Profile Hole #2

0 - 6 inches (class IV silty clay)
Clay: 54.6 %
Silt: 42.9 %
Sand: 02.5 %

7 - 10 inches (class III silty clay loam)
Clay: 38.7 %
Silt: 57.0 %
Sand 04.3 %

10 - 34 inches (class III silty clay loam)
Clay: 30.7 %
Silt: 54.9 %
Sand: 14.4 %

In addition to the above-mentioned findings, the *Soil Survey of Williamson County Texas*

maps this property in the **EeB-Eckrant extremely stony clay, 0 to 3 percent slopes** (North 30 degrees, 37' 43.8" & West 097 degrees, 48' 23.5").

Typically, this soil has an extremely stony, very dark gray clay surface layer about 11 inches thick. The underlying material is indurated limestone. About 25 percent of the surface is covered with fragments of limestone; most are 6 inches across and are as much as 10 inches thick. The soil is calcareous and moderately alkaline.

I will agree with the soil survey book in classifying the top soil (10 -11 inches) clay as the soil test indicates that it is very close to being classified as a silty clay. However, it crucial that the WCCHD agree with the soil test as well as the soil survey and classify the underlying material (10 - 11 inches to bottom of excavation) as a class III soil with greater than 30% gravel.

With the underlying material classified as a silty clay loam, it is my intention to design a Low-Pressure Dose soil substitution / mound OSSF. Even during the recent heavy rainfall, the profile holes continue to drain well and do not retain any rainwater. It is my opinion that an L.P.D. soil-sub / mound will provide adequate treatment of wastewater effluent with concerns to groundwater and best serve the homeowner.

I hope that a decision can be made as soon as possible as for the house is nearly completed. Please notify myself and / or the homeowner of you decision.

Sincerely,

Kevin Moore

WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT
ENVIRONMENTAL SERVICES
Paulo Pinto, B.S., R.S. Director

"Promoting and Protecting the Health of the People of Williamson County"
303 Main Street • Georgetown, TX 78626 • (512) 930-4390 Fax: (512) 930-3110

October 4, 2002

M-10/7/02

Horizon Homebuilders, LP
P.O. Box 341505
Austin, TX 78734

RE: SITE EVALUATION SUBMITTAL FOR 329 PARK PLACE DRIVE, GABRIELS OVERLOOK SEC. 1, LOT 60, 1.16 ACRES, GEORGETOWN, TX, OSSF #2002-3542.

To Whom It May Concern:

On September 25, 2002 the Williamson County and Cities Health District (WCCHD) received a Site Evaluation submitted by Kevin Moore, R.S. for the above-mentioned location. This site evaluation does not meet the minimum requirements of the WCCHD.

This Site Evaluation has been not approved for the following reasons:

1. The WCCHD inspector found class IV soil down to 25 inches in the north hole, and down to 34 inches in the south hole.

The above-mentioned areas are required to be addressed on all Site Evaluations. Please have your Site Evaluator address these areas. If there are any questions regarding this matter, please feel free to contact this office. Please keep in mind that an additional field inspection will require a $60.00 fee.

Sincerely,

Paul T. Walter

Paul T. Walter, R.S.
Environmental Services

C: Kevin Moore, R.S.

AFFORDABLE SEPTIC

Kevin J. Moore
Site Evaluator
OS7611

P.O. BOX 1122
GEORGETOWN, TX 78627-1122
(512) 779-3527
(775) 269-3653 fax

SITE EVALUATION

2002-3502

LOCATION OF PROPERTY:

329 Park Place Drive
Georgetown, TX

DATE:

09-25-02

09-25-02 329 Park Place

SITE EVALUATION

profile #1

0 - 3"	Class IV dark brown silty clay. No evidence of ground water. No restrictions. Less than 30% gravel and greater than 2.0 mm.
3 - 11"	Class III dark brown silty clay loam. No evidence of ground water. No restrictions. Less than 30 % gravel and greater than 2.0 mm.
11 - 36"	Class III orange / brown silty clay loam with large boulder size chunk rock. No evidence of ground water. No restrictions. Unsuitable for standard disposal.

profile #2

0 - 3"	Class IV dark brown silty clay. No evidence of ground water. No restrictions. Less than 30% gravel and greater than 2.0 mm.
3 - 10"	Class III dark brown silty clay loam. No evidence of ground water. No restrictions. Less than 30 % gravel and greater than 2.0 mm.
10 - 34"	Class III orange / brown silty clay loam with large boulder size chunk rock. No evidence of ground water. No restrictions. Unsuitable for standard disposal.

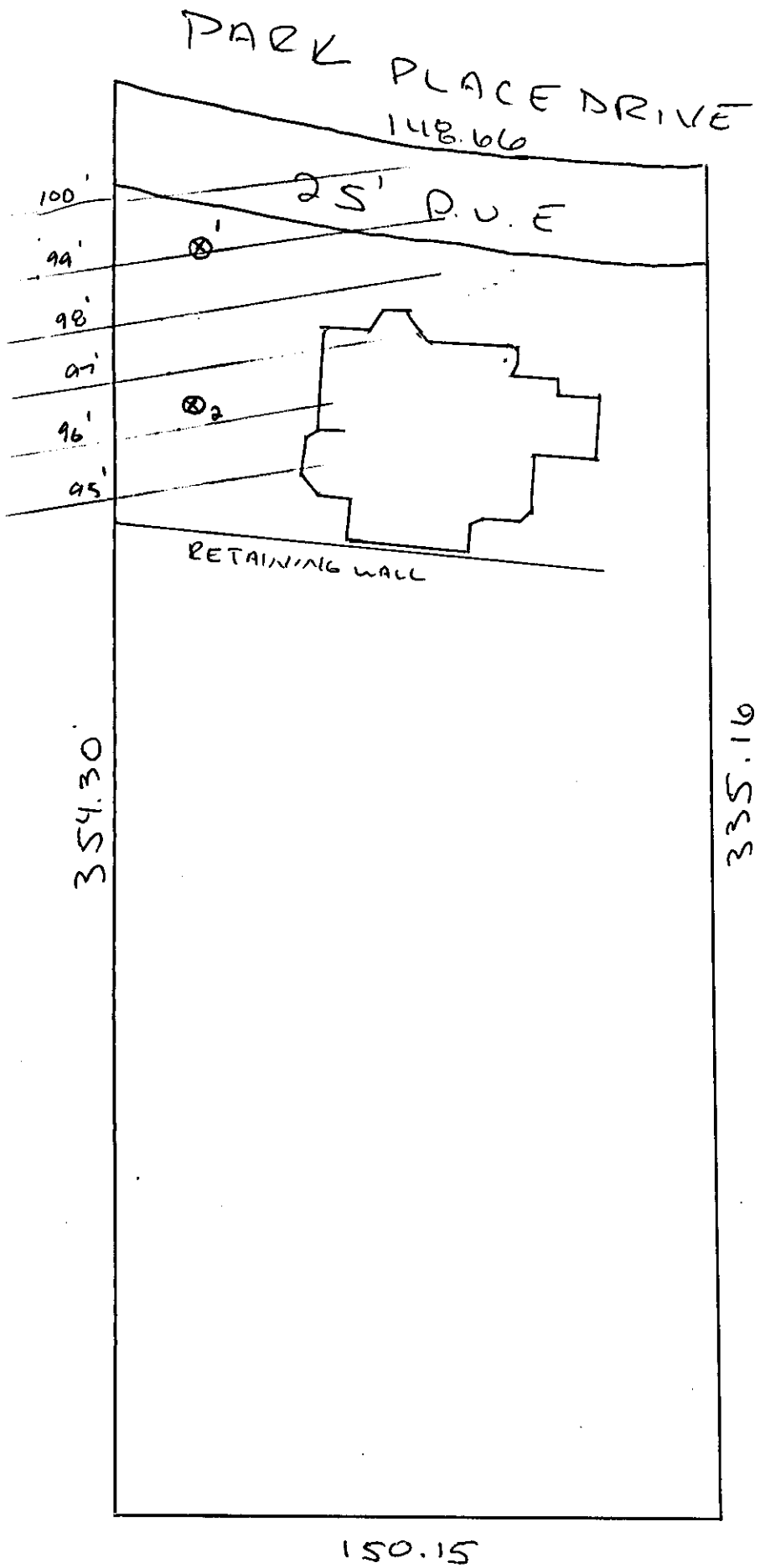
- This property is well vegetated with natural grasses.
- This property is not located within the 100-year floodplain.
- This property is located over the E.A.R.Z.
- Positive drainage exists at this property.

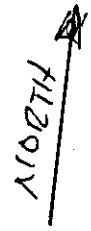
Based on the above-mentioned site evaluation, the following OSSF's may be utilized:

- Low Pressure Dose - soil sub / mound
- A.T.U. drip irrigation

SCALE: 1" = 40'

⊗ INDICATES PROFILE HOLE





January 13, 2003

Williamson County & Cities Health District
Environmental Services
303 Main Street
Georgetown, TX 78626

Re: 329 Park Place Drive, Lot 60, Gabriels Overlook Sec. 1

To whom it may concern:

Please accept this letter as my authorization for Brandon Couch to act as my agent for the purpose of septic permitting on the above referenced property.

If you have any questions, please do not hesitate to contact me at (512) 784-8269.

Sincerely,

Rick Cones, Builder
Horizon Homebuilders, L.P.

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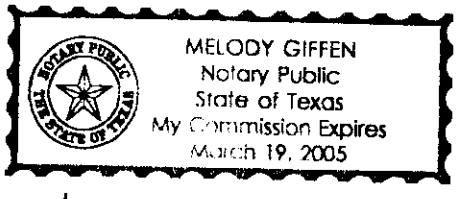
JAN 14 2003
WCCHD-ENV



Melody Giffen
1.13.03

Horizon Homebuilders, LP

PO Box 341505
Austin, TX 78734
512-784-8269 (Mob)
512-263-2572 (Fax)
rick@horizonhomebuilderslp.com

September 10, 2002

To whom it may concern:
Kevin Moore has my permission to act as my agent in obtaining all permits associated with 329 Park Place Dr. in Gabriels Overlook

Any questions, call me at 784-8269.

Sincerely,
Rick Cones
Owner

RECEIVED
SEP 26 2002
WCCHD-ENV

STATE OF TEXAS
COUNTY OF TRAVIS

BEFORE ME, A NOTARY PUBLIC, ON THIS 10TH DAY OF SEPTEMBER, 2002 PERSONALLY APPEARED RICK CONES.
GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 10TH DAY OF SEPTEMBER, 2002.

PAULA R. WILLIS
NOTARY PUBLIC STATE OF TEXAS
COMMISSION EXPIRES:
JULY 16,2006

NOTARY PUBLIC, STATE OF TEXAS

MY COMMISSION EXPIRES THE 16TH DAY OF JULY, 2006.

RETURN TO:
ALAMO TITLE COMPANY
3921 STECK AVE. A120
AUSTIN, TX 78759
GF# 02-750 2740-19

(30)

SPECIAL WARRANTY DEED WITH VENDOR'S LIEN

2002025514 2 pgs

DATE: MARCH 27, 2002

GRANTOR: 452, LTD., a Texas limited partnership

GRANTOR'S MAILING ADDRESS: P.O. BOX 276; AUSTIN, TEXAS 78767

GRANTEE: HORIZON HOMEBUILDERS, LP, a Texas limited partnership

GRANTEE'S MAILING ADDRESS: P.O. BOX 341505
AUSTIN, TX 78734

CONSIDERATION: Ten and No/100 Dollars ($10.00) and Grantee's execution of first-lien note of even date herewith in the principal sum of ****** SEVEN HUNDRED TWENTY-FIVE THOUSAND AND NO/100 ******* DOLLARS $725,000.00) executed by Grantee and payable to the order of COMPASS BANK. The note is secured by a vendor's lien in this deed and by a Deed of Trust of even date from Grantee to JAMES D. ALFRED, Trustee.

PROPERTY: Lot(s) 60, GABRIELS OVERLOOK SECTION ONE, a subdivision in Williamson County, Texas, according to the map or plat thereof recorded in Cabinet S, Slides 218-229, Plat Records of Williamson County, Texas

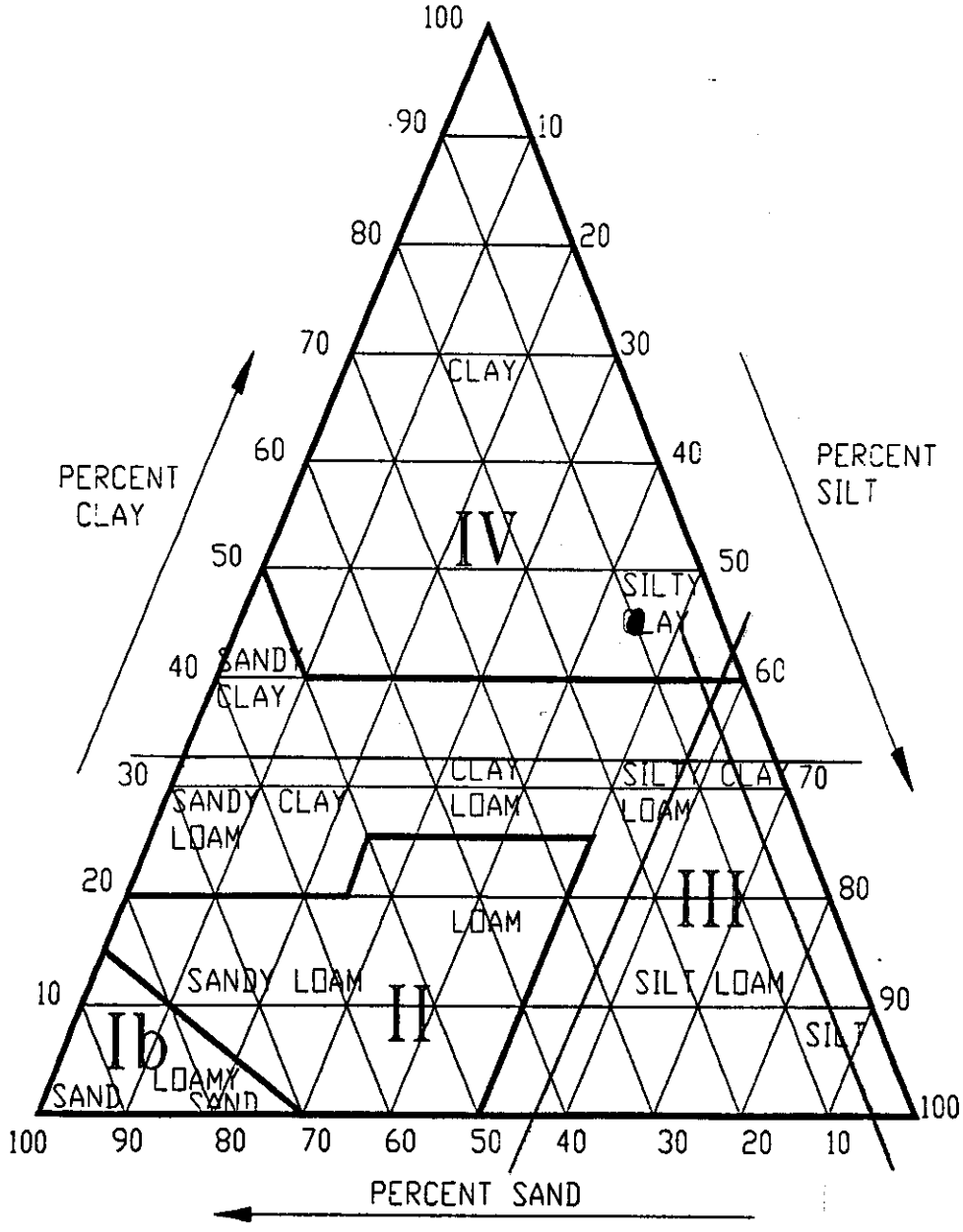
Lot(s) N/A, GABRIELS OVERLOOK SECTION TWO, a subdivision in Williamson County, Texas, according to the map or plat thereof recorded in Cabinet T, Slides 66-75, Plat Records of Williamson County, Texas

RESERVATIONS FROM AND EXCEPTIONS TO CONVEYANCE AND WARRANTY:

(1) This conveyance is made, delivered and accepted subject to the payment of ad valorem taxes assessed against the property conveyed for the current year, all restrictions, covenants, any outstanding royalty and mineral reservations, conditions and easements of record affecting said property and any and all zoning laws, regulations and ordinances of municipal and/or other governmental authorities affecting said property.

(2) GRANTEE CONFIRMS THAT AS PART OF THE CONSIDERATION OF GRANTOR'S CONVEYANCE OF THE PROPERTY TO GRANTEE, GRANTEE ACCEPTS THE PROPERTY "AS IS", "WITH ALL FAULTS", AND SUBJECT TO THE TERMS OF THIS WAIVER. GRANTOR MAKES NO WARRANTY, EXPRESS OR IMPLIED, SAVE AND EXCEPT THE WARRANTY OF TITLE CONTAINED HEREIN, CONCERNING ANY EXISTING OR FUTURE CONDITIONS RELATED TO THE PROPERTY, INCLUDING, BUT NOT LIMITED TO, EXPOSURE TO ELECTRIC OR MAGNETIC FIELDS, PRESENT OR FUTURE POLLUTION OF THE AIR, WATER, OR SOIL IN, ON, OR ADJACENT TO THE PROPERTY, SOIL CONDITIONS, OR THE PRESENCE OF ENDANGERED SPECIES OR HABITAT THEREFOR. GRANTEE IS RELYING WHOLLY UPON GRANTEE'S OWN INSPECTION OF THE PROPERTY IN MAKING THE DECISION TO ACCEPT GRANTOR'S CONVEYANCE OF THE PROPERTY AND NOT UPON ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, OF GRANTOR OR GRANTOR'S BROKER OR AGENT.

TABLE VI
USDA SOIL TEXTURAL CLASSIFICATIONS



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.

Williamson County & Cities Health District

Karen Wilson, Director

your public health department

January 21, 2003

m-1|22|03

Horizon Homebuilders, LP
PO Box 341505
Austin, TX 78734

RE: ON-SITE SEWAGE FACILITY (OSSF) PERMIT #: 2002-3542
LOCATION: 329 PARK PLACE, GABRIELS OVERLOOK, SECTION I, LOT 60, 1.162 ACRES

Designer: Brandon Couch, R.S.
Design received: 01/14/03
System type: Drip Irrigation
Maximum gallons per day: 360 gallons/day

To Whom It May Concern:

The design for the above-referenced system cannot be approved at this time for the following reasons:

1. An additional $100 total is due for the new design. The permit purchase price for an engineer-designed system requiring routine maintenance is $410. $310 has been received to date. 1/22/03 ck# 919
2. The TAC allows drip lines to be placed up to an impervious cover, but not under one. Distribution area credit cannot be given to lines under the sidewalk.
3. Indicate the location of the water line on the site plan.

If you have any questions concerning this matter, please contact this office.

Sincerely,

Karen P Tarlow

Karen P. Tarlow, OS8034

Copy: Brandon Couch, R.S.

WILLIAMSON COUNTY AND CITIES HEALTH DISTRICT
ENVIRONMENTAL SERVICES
Paulo Pinto, B.S., R.S., Director of Environmental Services

"Promoting and Protecting the Health of the People of Williamson County"
303 Main Street • Georgetown, TX 78626 • (512) 930-4390 Fax: (512)-930-3110

AFFIDAVIT TO THE PUBLIC

THE COUNTY OF WILLIAMSON
STATE OF TEXAS

Before me the undersigned authority, on this day personally appeared Richard W. Cones, II / Horizon Homebuilders, LP who, after being by me duly sworn, upon oath states that he/she is the owner of record of that certain tract or parcel of land lying and being situated in Williamson County, Texas and being more particularly described as follows:

Full Legal Description 329 Park Place Drive

Or, Subdivision Gabriels Overlook

Block _____ Lot 60

Future owners are advised that the OSSF utilizes a surface application and/or shallow subsurface application system for wastewater disposal. The undersigned further states that he/she will, upon any sale or transfer of the above-described property, request a transfer of the license to operate a secondary treatment system to the buyer or transferee. The license to operate systems requiring maintenance is valid for only 2 years. **The operator further agrees to provide routine maintenance by adding chlorination tablets, inspecting drip field and inspecting the general operation as needed. The operator realizes that this unit will cease discharging in the event of treatment malfunction or lack of disinfection, which may cause sewage backup if total system capacity is exceeded. The system should not be used when disabled.** The homeowner is also responsible for the following:

- A request for license transfer is required: every 2 years, upon change of ownership or upon lapse of the maintenance contract. A license transfer fee will be required upon request for the transfer, along with a copy of a current inspection report and maintenance contract. The new contract must meet TNRCC minimum standards and be signed and dated by both the service provider and the homeowner.
- Any buyer or transferee is hereby notified that in accordance with 30 Texas Administrative Code (TAC) Chapter 285, an on going maintenance contract with an approved maintenance company will be required for use of the system at all times.
- A new contract must be submitted to the Williamson County & Cities Health District (WCCHD) 30 days prior to expiration of the previous contract.
- Testing and reporting must be done every 6 months with electronic monitoring equipment that automatically notifies service providers upon malfunction. Copies of the report are due to the WCCHD within 10 days of testing.
- If a system does not possess a current maintenance contract or if it is creating a public health nuisance or threatening to create a public health nuisance, the license to operate will be cancelled.
- Any violations of rules adopted under Subchapter C of Chapter 366 of the Texas Health and Safety Code (30 TAC Chapter 285 or Williamson County On-Site Sewage Facility Regulations) is a Class C misdemeanor.

WITNESS MY HAND ON THIS 13 **DAY OF** January, 2003.

Richard W. Cones, II, HHLP
PROPERTY OWNER

RECEIVED
JAN 14 2003
WCCHD-ENV

SWORN TO AND SUBSCRIBED BEFORE ME
ON THIS 13 **DAY OF** January, 2003.

BY: Richard W. Cones, II, HHLP
PRINTED NAME OF PROPERTY OWNER

Melody Giffen
NOTARY PUBLIC, STATE OF TEXAS

Melody Giffen
NOTARY'S PRINTED NAME

My Commission Expires: _____

MELODY GIFFEN
Notary Public
State of Texas
My Commission Expires
March 19, 2005