

RECEIVED

MAR 08 2012

HARRIS COUNTY

REVISED RULES OF HARRIS COUNTY, TEXAS FOR ON-SITE SEWERAGE FACILITIES

APPLICATION FOR PERMIT (Complete All Sections)

TO THE HARRIS COUNTY ENGINEER:

The undersigned applicant (property owner) hereby makes application for a permit to construct an on-site sewerage facility in the unincorporated area of Harris County, Texas as required by REVISED RULES OF HARRIS COUNTY, TEXAS FOR ON-SITE SEWERAGE FACILITIES.

DAY PHONE: 713-884-5465

PROPERTY OWNERS NAME: Danh Vo ALT PHONE: _____

CURRENT MAILING ADDRESS: 8819 Rolling Rapids Rd. CITY: Humble STATE: TX ZIP: 77346

CONSTRUCTION SITE ADDRESS: 17616 Moss Forest dr CITY: Houston STATE: TX ZIP: 77090

SUBDIVISION: Pine Oak Forest SECTION: 1 BLOCK: E LOT: 4 RESERVE: _____

IF NOT A SUBDIVISION:
SURVEY NAME: _____ ABSTRACT NO: _____ TRACT NO: _____

APPLICANT IS: OWNER LEASEE OTHER (If other, please specify Name, Address and Phone.)

NAME: _____ ADDRESS: _____ PHONE: _____

WATER SUPPLY:
 PUBLIC (Name of System) _____ COMMUNITY INDIVIDUAL (Existing) INDIVIDUAL (Proposed)

ENGINEER OR SANITARIAN:
Engineering Plans and specifications in support of this application submitted by:

NAME: _____ ADDRESS: _____ PHONE: _____

APPLICANT MUST SUBMIT THE FOLLOWING:

1. Meters & Bounds description (survey), if not in a recorded subdivision. (1 Copy)
2. Site Evaluation (1 Original)
3. Plan of Site & Disposal System (3 Sets - 1 Original & 2 Copies)
4. Affidavit - Notarized (1 Original)
5. Acknowledgement of Testing Requirements
6. Flood Insurance Rate Map with site accurately located.

AUTHORIZATION is hereby given to Harris County, Texas, the Texas Commission on Environmental Quality, the Texas State Department of Health and to their agents, or designees, singularly or jointly, to enter upon the above described property during daylight hours for the purpose of inspecting the on-site sewerage facilities, or for any reason consistent with the water quality program of the Texas Commission on Environmental Quality and the Texas Department of Health. I also acknowledge that INSPECTION OF THE SEWERAGE SYSTEM IS REQUIRED PRIOR TO ALL COMPONENTS BEING COVERED. TO REQUEST INSPECTION, A TWENTY-FOUR (24) HOUR ADVANCE NOTICE MUST BE GIVEN TO THE ENGINEERING DEPARTMENT AT (713) 956-3035.

OWNER'S SIGNATURE: [Signature] PRINTED OWNER'S NAME: CANH VO DATE: 3/7/2012

FOR COUNTY USE ONLY

MINIMUM TANK SIZE: 1000 GALLONS MINIMUM ABSORPTION AREA: 2204 SQ FT MAXIMUM GPD: 420 GPD

TYPE OF SYSTEM PROPOSED: DRP SQUARE FOOTAGE OF BUILDING: 2000 SQ FT CT: 536.21

SEWERAGE APPLICATION RATE: 0.2 SOIL CLASSIFICATION: III

INSPECTIONS: S S2 ULF WW SPECIAL REQUIREMENTS: ULF SSC INS PLANS FLTANK WLOG WWPLUG

FLOOD PLAIN STATUS: A B F DEV. PERMIT# _____ OSSF PERMIT# _____

APPLICANT NO. 109607 REQUEST NO. 315606 PROPERTY NO. 35207842

PLANCHECKER: [Signature] APPROVED BY: [Signature] DATE: 3-8-2012

HFF PRODUCTIONS

27441 Wigwam Trail
Hockley, TX. 77447
936-931-9556

ON-SITE WASTEWATER SYSTEM CHECK LIST

The following information must be included with all design packages for review by the Texas Commission on Environmental Quality and/or the permitting Authority. Failure to include or address all of the following items may result in approval delays.

- Plans and reports must bear a signature address, telephone number and a dated seal on each page.
- A report must be included in the submittal containing the following information:
 - Basis of design*
 - Soil analysis and site evaluation*
 - System flow diagram and sizing calculations*
 - Material specifications and illustrations*
 - Size and model number of approved aerobic system (if used)*
- Construction drawings must include the following information:
 - A scaled, legible site plan with boundary description*
 - The location of all buildings & structures (existing or proposed)*
 - The location of the wastewater treatment units and disposal area*
 - Buffer zones and water wells must be identified and located on the site plan.*
 - The site plan must also include topographical contours for slopes greater than 30 percent.*
 - Easements and bodies of water (lakes, streams, ponds) must also be identified.*
 - Installation details such as septic tank configuration, layouts, and cross-sections of drain fields and disposal beds, irrigation systems, pump station including piping and controls.*
 - Affidavit to the Public for surface application systems recorded by the county.*
 - Records of testing and frequency for surface applications.*

HOME/BUSINESS OWNER	VO RESIDENCE	COUNTY	HARRIS
STREET ADDRESS	17616MOSS FOREST DR	ACREAGE/LOT SIZE	.322
SURVEY		ABSTRACT	
SUBDIVISION	PINE OAK FOREST	SECTION	1
BLOCK	E	LOT	4

DATE ON SITE	1-4-11	WATER SUPPLY	PROPOSED WELL
RESIDENTIAL	X	COMMERCIAL	
BEDROOM HOME	3/2	TYPE OF FACILITY	
LIVING AREA	2000/1064	SQUARE FEET	
PERMANENT RESIDENTS	3/3	EMPLOYEES	

SYSTEM TYPE	STANDARD PVC	GRAVEL-LESS PIPE	LPD
	SURFACE APPLICATION	DRIP EMITTER	X OTHER

SYSTEM PERMITTED FOR: 420 GPD

*This septic system was designed based on the above data and any discrepancies should be discussed with Michelle Hansen prior to installation of the system. **Any change to the design may require a redraw fee.** HFF Productions, nor its employees, will be held liable for any system malfunctions.*



Michelle L. Hansen
Michelle L. Hansen
DATE: 2-23-12



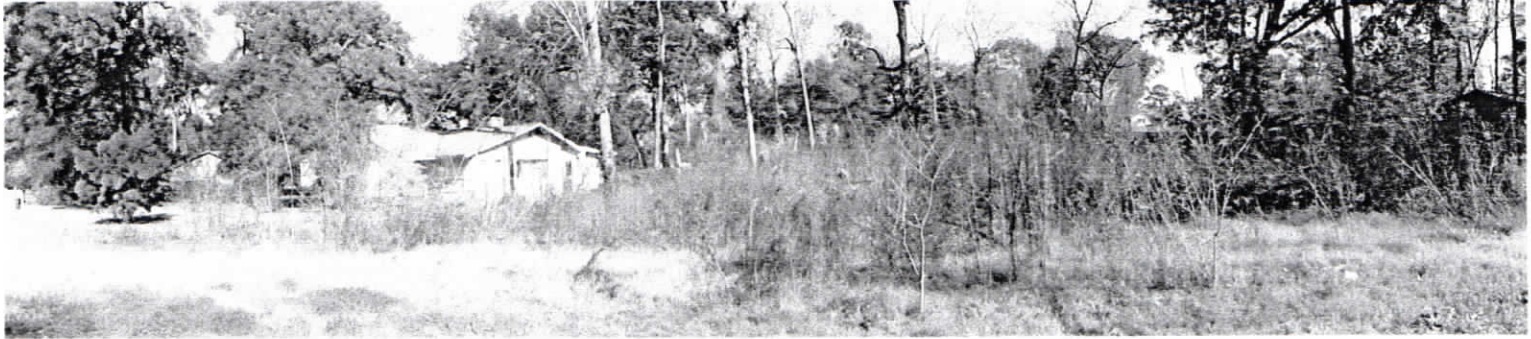
Registered Sanitarian #3769

Site Evaluator #OS8894

HFF PRODUCTIONS

27441 Wigwam Trail
Hockley, TX. 77447
936-931-9556

SITE EVALUATION



FLOOD HAZARD

OUTSIDE 100 YEAR FLOOD PLAIN	X
PARTIALLY IN THE 100 YEAR FLOOD PLAIN	
IN 100 YEAR FLOOD PLAIN	
IN 100-YEAR FLOOD PLAIN AND FLOOD WAY	
FIRM PANEL #	48201C0265L

WATER SUPPLY

COMMUNITY		COMPANY	
WATER WELL	X	DRILLER	PROPOSED WELL
YEAR DRILLED	2012		
DEPTH	UNKN	DIST FROM DISPOSAL AREA	50'+
SIZE	UNKN	PRESSURE CEMENTED	YES

*ALL WELL REQUIRED DISTANCES MUST BE MAINTAINED
IF NEIGHBORING WELLS EXIST THEY MUST BE SHOWN*

TOPOGRAPHY

SLOPE	
FLAT >2%	X
SLIGHT <6%	
SEVERE >30%	
VEGETATION	
GRASS/BRUSH	
LIGHTLY WOODED	X
HEAVILY WOODED	
DRAINAGE	
POOR	
ADEQUATE	X
GOOD	

LANDSCAPE PLAN

For VO RESIDENCE at 17616 MOSS FOREST DR

Homeowner will maintain existing vegetation and/or seed or sod any bare areas irrigated by the aerobic system at all times. Do not plant any shade trees in this area. Settling of the backfill will occur over time. Owner should continually check for this & fill in any low places to prevent rainfall from pooling on the surface of the drain field. Plant a dense grass or groundcover in the drain field area. Over-seed with winter grasses for absorption during dormant growing seasons. The grass should be kept mowed to allow as much sunlight as possible to reach the ground surface. This aids in the evapo-transpiration of water/wastewater & prevent soil erosion.



Registered Sanitarian #3769

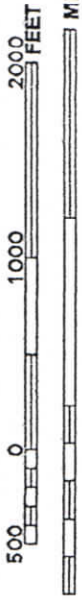
Michelle L. Hansen
Michelle L. Hansen
DATE: 2-23-12



Site Evaluator #OS8894



MAP SCALE 1" = 1000'



ME

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0265L

FIRM FLOOD INSURANCE RATE MAP

HARRIS COUNTY, TEXAS AND INCORPORATED AREAS

PANEL 265 OF 1150

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

DATE: 06/18/2007
DRAWN BY: J. MARRER
CHECKED BY: J. MARRER
APPROVED BY: J. MARRER
HARRIS COUNTY, TEXAS
UNINCORPORATED AREAS

Notice to User: The Map Number shown below should be used to identify the map when requesting information. The information shown above should be used in insurance applications for the subject community.

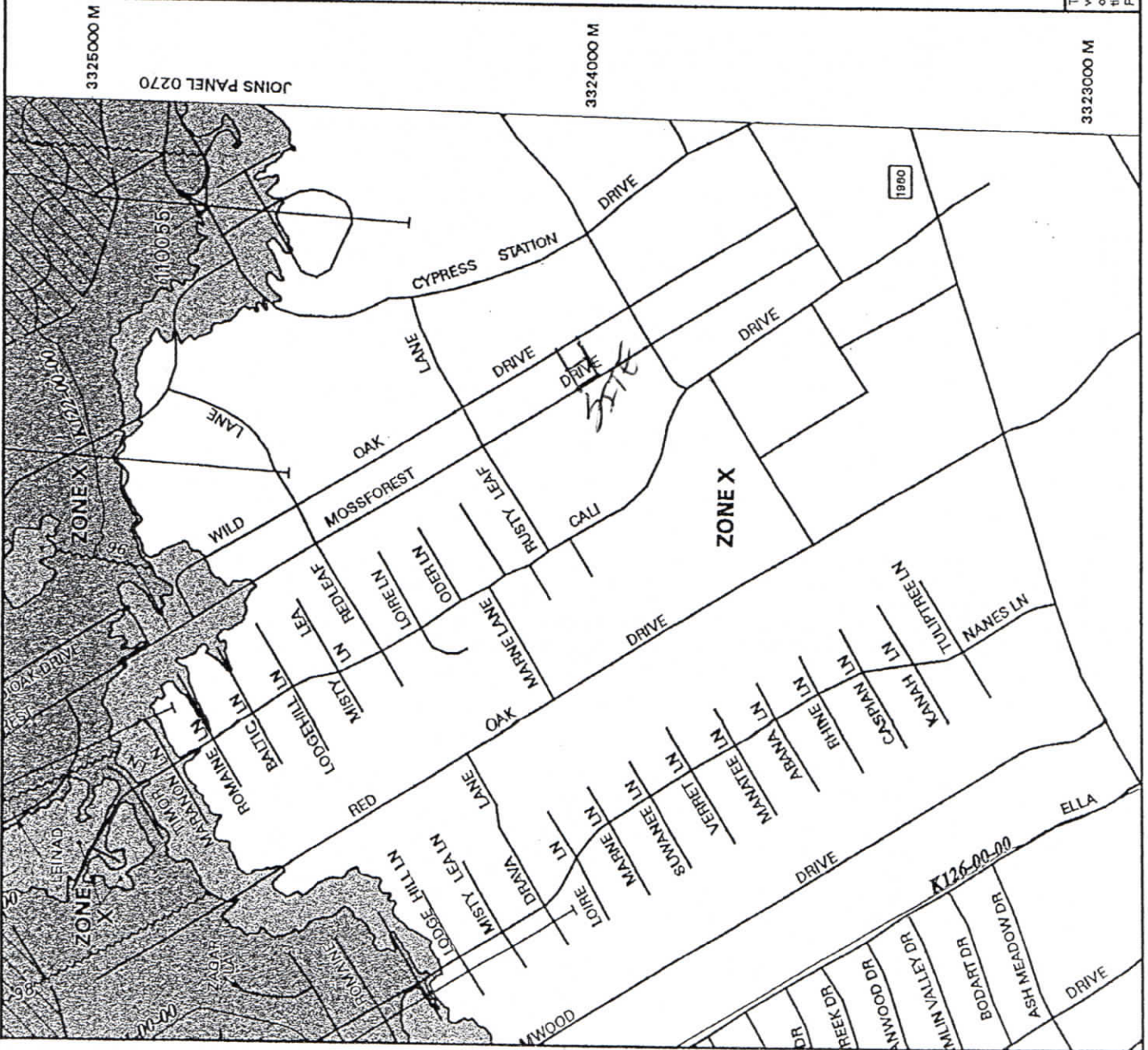


MAP NUMBER 482010265L

MAP REVISED: JUNE 18, 2007

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.ms.c.fema.gov



ASSESSOR'S BLOCK BOOK FOR HARRIS COUNTY, TEXAS

114-128

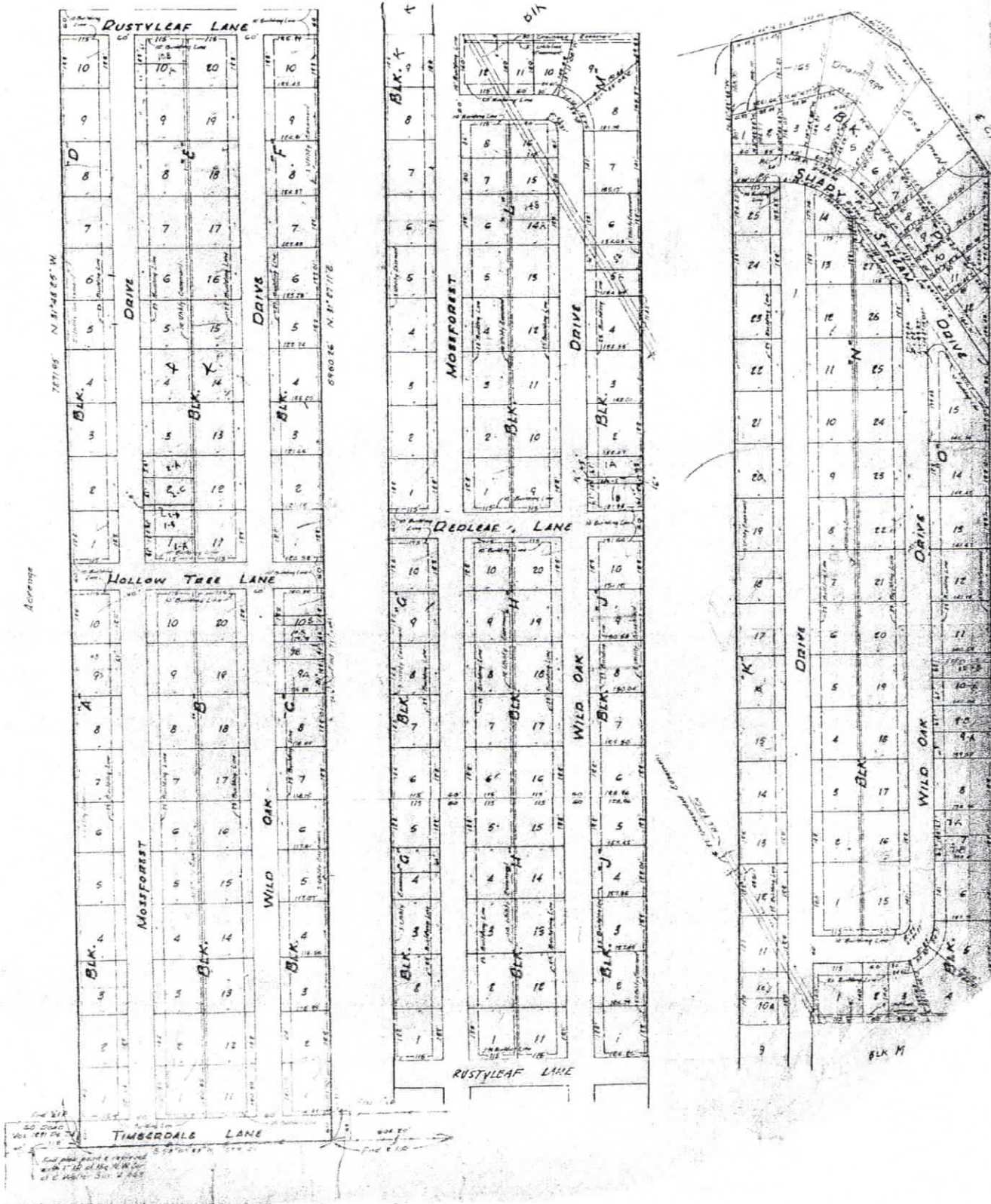
Block or Abstract No. 90 Survey or Addition. PINE OAK FOREST Plat No. S D. SPRING

98.942 Ac. D. HARMON SUR. VAL. 92 PG. 165

No.	Vol.	TO WHOM ISSUED	DATE			ACREAGE	No.	CLASS	CHARACTER	TO WHOM ISSUED
			M	D	Y					

Scale one inch.

H.C. ZWINK S¹/2 AC
W.C. BALTZELL.



0 VO Res

HARRIS COUNTY APPRAISAL DISTRICT
 REAL PROPERTY ACCOUNT INFORMATION
090118000004

Tax Year: 2011

Owner and Property Information						
Owner Name & Mailing Address: VO OANH KIM 8819 ROLLING RAPIDS RD HUMBLE TX 77346-8063			Legal Description: LT 4 BLK E PINE OAK FOREST SEC 1			
			Property Address: 0 MOSS FOREST DR HOUSTON TX 77090			
State Class Code	Land Use Code	Land Area	Total Living Area	Neighborhood	Map Facet	Key Map®
C1 -- Real, Vacant Lots/Tracts (In City)	1000 -- Residential Vacant	14,030 SF	0 SF	2216	5168B	332J

Value Status Information			
Capped Account	Value Status	Notice Date	Shared CAD
No	Noticed	04/15/2011	No

Exemptions and Jurisdictions					
Exemption Type	Districts	Jurisdictions	ARB Status	2010 Rate	2011 Rate
None	024	SPRING ISD	Certified: 08/12/2011	1.460000	1.570000
	040	HARRIS COUNTY	Certified: 08/12/2011	0.388050	0.391170
	041	HARRIS CO FLOOD CNTRL	Certified: 08/12/2011	0.029230	0.028090
	042	PORT OF HOUSTON AUTHY	Certified: 08/12/2011	0.020540	0.018560
	043	HARRIS CO HOSP DIST	Certified: 08/12/2011	0.192160	0.192160
	044	HARRIS CO EDUC DEPT	Certified: 08/12/2011	0.006581	0.006581
	045	LONE STAR COLLEGE SYS	Certified: 08/12/2011	0.117600	0.121000
	637	HC EMERG SRV DIST 28	Certified: 08/12/2011	0.100000	0.100000
	666	HC EMERG SERV DIST 11	Certified: 08/12/2011	0.030000	0.030000

Valuations					
Value as of January 1, 2010			Value as of January 1, 2011		
	Market	Appraised		Market	Appraised
Land	29,000		Land	29,000	
Improvement	0		Improvement	0	
Total	29,000	29,000	Total	29,000	29,000

Land												
Market Value Land												
Line	Description	Site Code	Unit Type	Units	Size Factor	Site Factor	Appr O/R Factor	Appr O/R Reason	Total Adj	Unit Price	Adj Unit Price	Value
1	1000 -- Res Vacant Table Value	SF5	SF	7,015	1.00	1.00	1.00	--	1.00	2.85	2.85	19,993
2	1000 -- Res Vacant Table Value	SF5	SF	7,015	1.00	1.00	1.00	--	1.00	2.85	2.85	19,993

Building												
Vacant (No Building Data)												

Harris County Appraisal District



PUBLICATION DATE:
8/15/2011

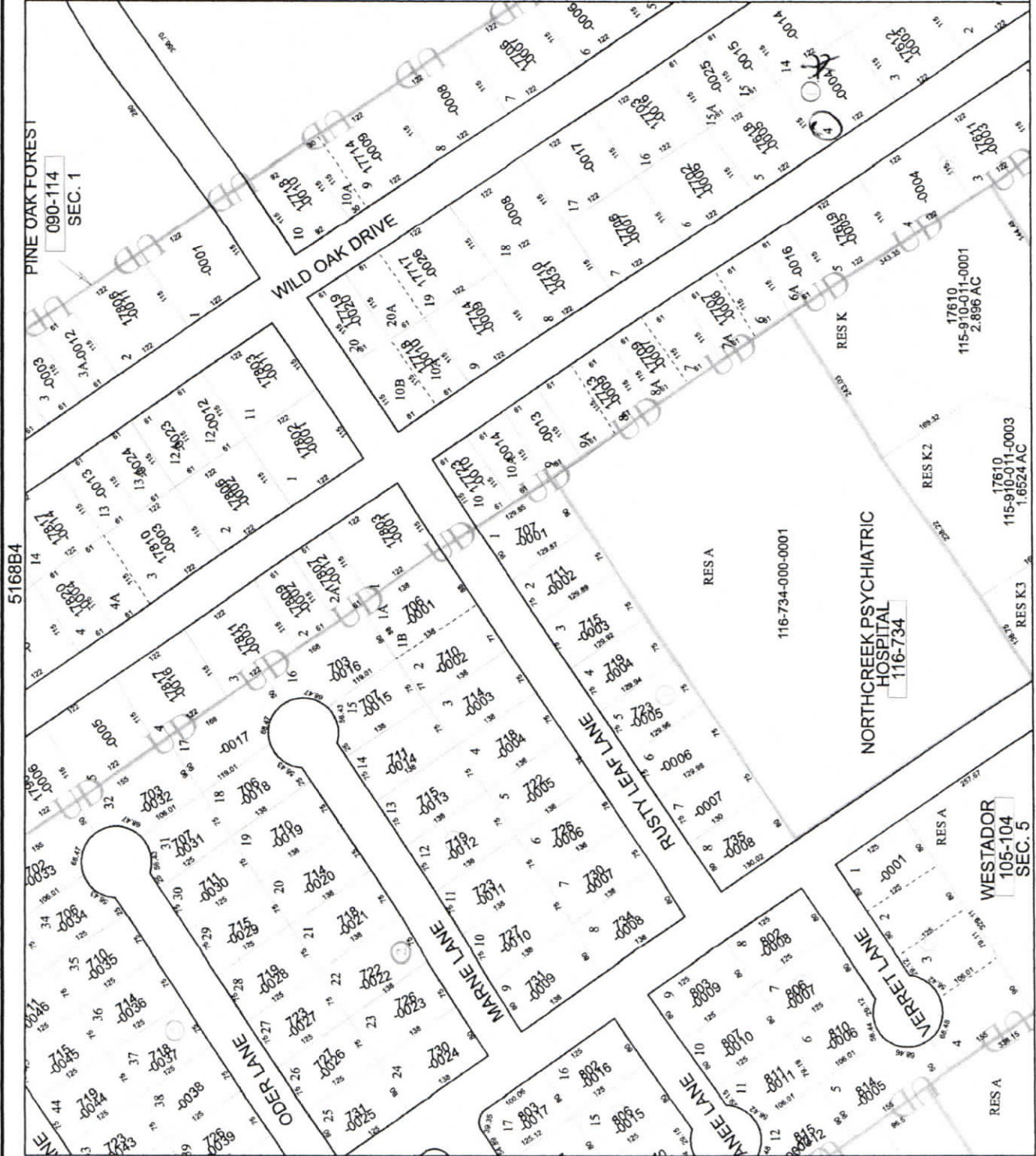
Geospatial or map data maintained by the Harris County Appraisal District is for informational purposes only and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent a field on-the-ground survey and only represents the approximate location of property boundaries.

MAP LOCATION



FACET 5168B

1	2	3	4
5	6	7	8
9	10	11	12



5268A5

5168B7

5168B4

5168B12

HFF PRODUCTIONS

27441 Wigwam Trail
Hockley, TX. 77447
936-931-9556

SOIL EVALUATION

PROFILE DEPTH	TEXTURE (USDA)	GRAVEL ANALYSIS (CLASS II & III)	RESTRICTIVE HORIZON	GROUND WATER	COLOR	COMMENTS
0-32"	SANDY LOAM	0	NO	28"	BROWN	
32-34"	SANDY CLAY LOAM	0	NO		BROWN	
34-48"	CLAY LOAM	0	NO		BROWN	

PROFILE DEPTH	TEXTURE (USDA)	GRAVEL ANALYSIS (CLASS II & III)	RESTRICTIVE HORIZON	GROUND WATER	COLOR	COMMENTS
0-33"	SANDY LOAM	0	NO	30"	BROWN	
33-36"	SANDY CLAY LOAM	0	NO		BROWN	
36-48"	CLAY LOAM	0	NO		BROWN	

- Normal textures (USDA): Coarse sand/gravel/sand/loamy sand/sandy loam/loam/ sandy clay loam/sandy clay/clay loam/silty clay loam/silty loam/silt or clay/silty clay
- Normal structures: Massive, Block, Platy

Subsurface horizons with colors of red, yellow, and brown generally indicate good soil aeration and drainage throughout the year. Subsurface horizons that are in colors of gray, olive or blackish colors indicate poor aeration and poor soil drainage. Any soil profile that has the grayish colors indicative of high-water (or mottling) within thirty-six (36) inches of the surface or has ground water visible in the test bore less than forty-eight (48) inches below the ground surface shall be deemed unsuitable for a conventional subsurface disposal due to internal drainage.

X	SOIL TEXTURE	SOIL CLASS	LONG TERM LOADING RATE
	COARSE SAND/GRAVEL	Ia	>.50
	SAND/LOAM SAND	Ib	0.38
	SANDY LOAM/LOAM	II	0.25
X	SANDY CLAY/ SANDY CLAY LOAM/CLAY LOAM/SILTY CLAY LOAM/SILT	III	0.20
	CLAY/SILTY CLAY	IV	0.10

SOIL ANALYSIS	YES	NO
IS THE SOIL SUITABLE FOR A STANDARD SYSTEM		X
INDICATION OF SEASONABLE WATER TABLE DEPTH	X	
	28"	

I, MICHELLE L. HANSEN, a Registered Sanitarian did personally conduct this site evaluation on

17616 MOSS FOREST DR

I certify these results are true and correct for the property evaluated.



Registered Sanitarian #3769


 Michelle L. Hansen
 DATE: 2-23-12



Site Evaluator #OS8894

HFF PRODUCTIONS

27441 Wigwam Trail
Hockley, TX. 77447
936-931-9556

ENGINEERING REPORT FOR ON-SITE WASTEWATER DISPOSAL SYSTEM CONDITIONS FOR A CLASS I SEWER PLANT WITH SPRINKLER SYSTEM

- Class I sewer plant will have a chlorinator pump tank to distribute water to sprinkler field.
- Aerobic tank will treat 1000 gal/day of septic.
- Sprinklers installed will be the pop-up type.
- Sprinklers will be on a timer.
- Water will be sprinkled in the early morning hours during the time of least traffic (between midnight and 5am.)
- Maximum inlet pressure for sprinklers shall be 40 psi.
- Low angle nozzles of 15 degrees or less shall be used.

DESIGN SPECIFICATION SUMMARY

HOME/BUSINESS OWNER	VO RESIDENCE	STREET ADDRESS	17616 MOSS FOREST DR
STRUCTURE	NEW HOME W/ GARAGE APT	FACILITY TYPE	RESIDENTIAL
SOIL TYPE -CLASS	III CLAY LOAM	LOW FLOW FIXTURES	YES
LIVING AREA	2000/1064	TOTAL SQ FT	2400/2048
BEDROOMS (ACTUAL)	3/2	BEDROOMS (DESIGN)	3/2

ABSORPTION AREA

GPD	420	LOADING FACTOR, GPD/SQ FT	.20
ABSORPTION AREA REQUIRED, SQ FT	2100	ABSORPTION AREA SHOWN, SQ FT	2204
LINEAR FEET OF LINE	1050	ABSORPTION AREA SHOWN, L FT	1102
EMITTERS, EVERY 2 FT(4SQ FT)	525	EMITTERS SHOWN	551

TANK SIZING

TANK	SIZE (GAL) REQ	SIZE (GAL) TO BE INSTALLED	MODEL NAME & NUMBER
SEPTIC TRAP TANK	750	750	
CLASS I AEROBIC PLANT	1000	1000	1000N OR EQUAL
PUMP TANK	1000	1000	

PUMP TANK REEQUIREMENTS

Pressure Drops in System
Elevation Head loss in system feet 4
Friction Head loss in system feet 1.2
Spray head Pressure, psi 25
Spray head pressure, feet 58
Total system head loss, feet 66

PUMP SELECTION

Volume, GPM 20 gal
NPDH, Feet 66
Pressure, psi 29

Supply+Manifold 1.00 " Sch 40 240



Registered Sanitarian #3769

Michelle L. Hansen
Michelle L. Hansen
DATE: 2-23-12



Site Evaluator #OS8894

Geoflow Subsurface Dripline Dispersal: Field Calculation

Job Description:	17616 MOSS FOREST DR
Contact:	ABREGO
Prepared by:	MICHELLE HANSEN
Date:	1/20/2012

Please fill in the shaded areas and drop down menus below:

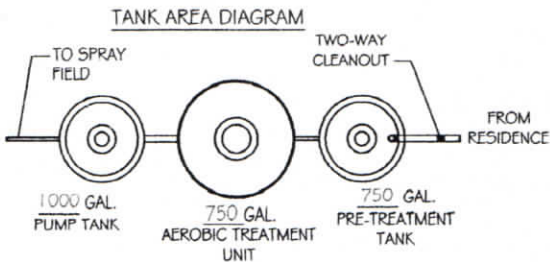
Note. This worksheet can be found in Geoflow's Design and Installation Manual

Worksheet - Field Design

		Dispersal Field as Single Zone	Dispersal Field as Multiple Zones	
Number of Zones		1	2	zone(s)
A)	Quantity of effluent to be disposed per day	420	210	gallons / day
B)	Hydraulic loading rate	0.2	0.2	gallons / sq.ft. / day
C)	Determine total area required	2,100	1,050	square ft.
D)	Choose spacing between WASTEFLOW lines	2	2	ft.
D)	Choose spacing between WASTEFLOW emitters	2 ft. ▼	2	ft.
E)	Total linear ft.	1,050	525	each
F)	Total number of emitters	525	263	each
G)	Select Wasteflow dripline	Wasteflow PC - 1/2gph ▼	Wasteflow PC 1/2 gph	dripline
H)	Pressure at the beginning of the dripfield	20 psi ▼	20	psi
I)	Feet of Head at the beginning of the dripfield	46.2	46.2	ft.
J)	What is the flow rate per emitter in gph?	0.53	0.53	gallons per hour
K)	Total flow for the area (gph)	278	139	gallons per hour
	Total flow for the area (gpm)	4.64	2.32	gallons per minute
L)	Select pipe diameters for manifolds and submains	0.75	.5	inch
M)	Select Vortex Filter (item no.)	AP4E-.75F (0.75in.)	Consult factory	
N)	Maximum length of each WASTEFLOW line. For additional technical flow, pressure and flushing data please refer to Geoflow's Design Manual and WASTEFLOW hydraulics worksheet.	424	424	ft.

Check below to choose quantity and length of daily doses

Dosing			
Number of doses per day/zone:	12	12	
Pump run time per dose/zone (minutes):	7.55	7.55	minutes
Pump run time per day/zone (hours):	1.51	1.51	hours / day
Pump run time per day/all zones (hours):	1.51	3.02	hours



HFF PRODUCTIONS
 27441 WIGWAM TRAIL
 HOCKLEY, TX. 77447
 281-384-3976

VO RESIDENCE
 17616 MOSSFORD DR

COUNTY:	HARRIS
ACREAGE:	.322
SURVEY:	PINE OAK FOREST
ABSTRACT:	1
TRACT:	4
BLOCK:	E
BEDROOMS:	3/2
LIVING AREA:	2000/1024

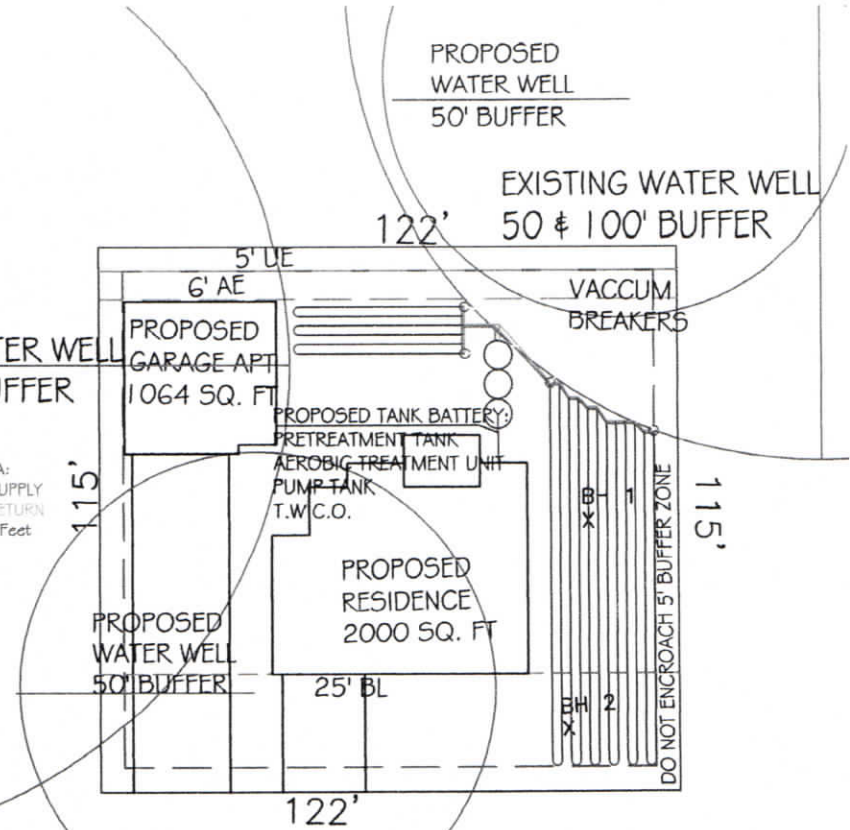
SLOPE:	FLAT
VEGETATION:	LIGHTLY WOODED
DRAINAGE:	ADEQUATE
FLOOD HAZARD:	OUT
FIRM PANEL #:	48201C0285L
WATER SUPPLY:	PROPOSED WELL

DATE:	1-6-11
DRAWN BY:	MLH
DESIGNED BY:	MLH
SCALE:	AS NOTED
TOTAL GPD:	420
LOADING RATE:	.20
REQUIRED DRIP LINE(LF):	1080
PROVIDED DRIP LINE(LF):	1102

EXISTING WATER WELL
 50' & 100' BUFFER

PROPOSED DRIP AREA:
 1-1/2" SCH 40 PVC SUPPLY
 1-1/2" SCH 40 PVC RETURN
 TOTAL ~ 1102 Linear Feet

Flex Connector



MOSS FOREST DR

THE DRIP LINE IS TO BE INSTALLED AT 6-12" BELOW NATURAL GROUND TO MAINTAIN 1' SEPARATION FROM SEASONAL SATURATION. DISPOSAL AREA SHOULD BE SLIGHTLY MOUND TO SHED WATER & COVERED WITH SOD TO PREVENT WASH OUT.

DRIP AREA IS 1102 LF OF ALTERNATING LOOPS:

- 2 LINES @ 70' = 140 LF
- 2 LINES @ 75' = 150 LF
- 2 LINES @ 80' = 160 LF
- 4 LINES @ 72' = 288 LF
- 2 LINES @ 77' = 154 LF
- 6 LINES @ 35' = 210 LF

TOTAL- 1102LF

IT IS THE INSTALLER'S RESPONSIBILITY TO INSURE THAT THIS AEROBIC TREATMENT UNIT MEETS A 30-DAY AVERAGE CBOD OF 10mg/L & TSS OF 10mg/L.



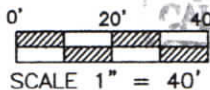
ELECTRONIC MONITORING REQUIRED
 Auto-dialer must be in place by the final inspection

This License to construct and operate an on-site sewerage facility requires that this Department INSPECT AND APPROVE the construction of the said facility PRIOR TO COVER UP and PRIOR TO PLACING IT INTO OPERATION. Failure to comply with these requirements constitutes a Class "C" Misdemeanor. CALL 955-3035 TO SCHEDULE INSPECTION

HARRIS COUNTY ENGINEERING DEPARTMENT INTERPOSES NO OBJECTIONS PROVIDED THE SYSTEM IS INSTALLED IN ACCORDANCE WITH THESE PLANS. SYSTEM DESIGNER, INSTALLER AND PROPERTY OWNER ARE RESPONSIBLE FOR PROPER SYSTEM OPERATION.

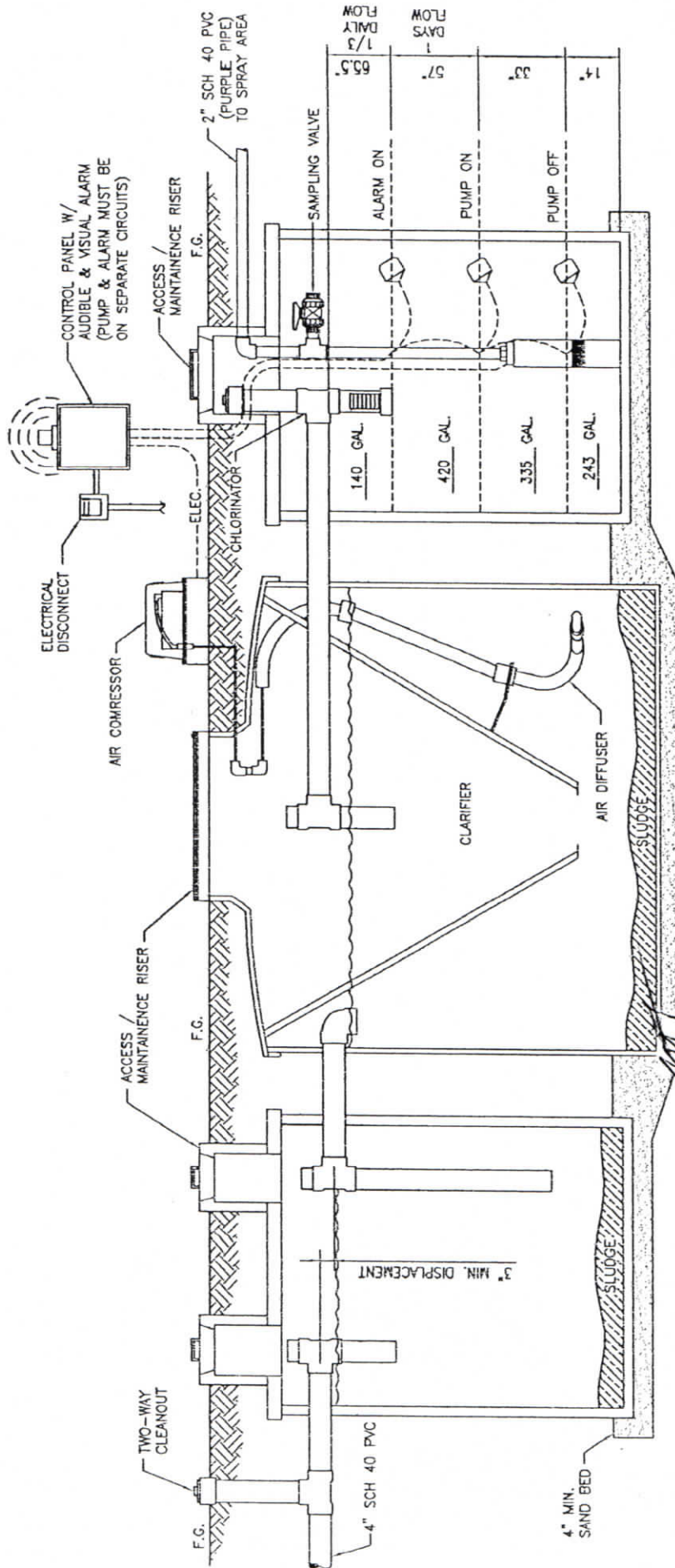
Signature: _____ Date: _____

3-8-2012



PROPOSED ON-SITE SEWAGE FACILITY	
EQUIPMENT SPECIFICATIONS	
PRETREATMENT TANK:	750 GALLON - PRE-CAST CONCRETE
AEROBIC TREATMENT UNIT:	1000 GALLON - 1000G OR EQUAL
PUMP TANK:	1000 GALLON - PRE-CAST CONCRETE
SPRAYHEADS:	N/A
TANK NOTES	
1. ALL EXISTING SEPTIC TANKS TO BE ABANDONNED	
2. TANKS NOT BUILT FOR TRAFFIC BEARING LOADS	
3. TANKS INSTALLED IN LINE ON 90° OFFSETS	
MISCELLANEOUS NOTES	
1. MAINTAIN ALL BUFFER ZONES SHOWN ON DRAWING	
2. PRIVATE WATER WELL MUST BE A MINIMUM OF 50 FT. FROM SEPTIC TANKS AND 100FT. FROM SPRAY FIELD UNLESS IT IS PRESSURE CEMENTED. THEN IT MUST BE 50 FT. FROM SEPTIC TANKS AND SPRAY FIELD.	
BUFFER ZONE NOTES	
- SEPTIC TANKS MUST BE AT LEAST 10 FT. FROM:	
- ANY EASEMENT NOT SHOWN ON DRAWING.	
- 5' FROM ANY SLAB.	

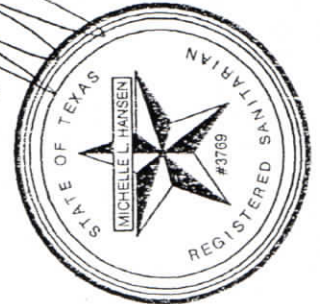
GENERAL NOTES:	
1. AN ON-SITE SEWAGE LICENSE MUST BE OBTAINED PRIOR TO INSTALLING THIS WASTEWATER DISPOSAL SYSTEM.	
2. SYSTEM INSTALLATION MUST BE BY A REGISTERED INSTALLER OF ON-SITE SEWAGE FACILITIES AS REQUIRED BY ARTICLE 4477-7E OF VERNONS CIVIL STATUTES OR BY THE OWNER OF THE PROPERTY UNDER LICENSE. NO COMPONENT OF THIS SYSTEM SHALL BE COVERED UP WITHOUT COUNTY'S APPROVAL.	
3. IF ANY DISCREPANCIES EXIST BETWEEN THIS DESIGN AND ACTUAL FIELD CONDITIONS IT IS THE INSTALLER'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE ENGINEER AND THE JURISDICTION PRIOR TO BEGINNING OF CONSTRUCTION.	
4. ALL CONSTRUCTION METHODS AND MATERIALS MUST BE IN ACCORDANCE WITH COUNTY AND STATE RULES AND POLICIES, UNLESS SPECIFICALLY NOTED ON THESE DRAWINGS AND ARE APPROVED BY THE JURISDICTION.	
5. SITE SHALL BE CAREFULLY FINISH GRADED AFTER CONSTRUCTION OF SYSTEM IS COMPLETED, TO PROVIDE ADEQUATE STORM WATER DRAINAGE. ABSORPTION AREA SHALL BE CROWNED. DRAINAGE SWALES SHALL BE CONSTRUCTED TO ADEQUATELY CONVEY STORM WATER DRAINAGE AWAY FROM ABSORPTION AREA.	
6. HIS SYSTEM INSTALLED AND OPERATED IN ACCORDANCE WITH THIS PLAN SHALL NOT PRESENT A HAZARD TO PUBLIC HEALTH, OR THREATEN PROPOSED OR ADJACENT WATER WELLS.	
7. THERE SHALL BE AT LEAST ONE DAY OF DRY STORAGE VOLUME OF ONE-THIRD THE DAILY FLOW BETWEEN THE ALARM-ON LEVEL AND THE INLET TO THE PUMP TANK.	
8. ALL COMPONENTS OF THE SYSTEM MUST BE INSTALLED 10 FT FROM WATERLINES, ACCEPT AT BUILDING CONNECTION. WATERLINE CROSSING MUST BE CONSTRUCTED IN ACCORDANCE WITH 30 TAC 290, 44(e)	
9. PUMP TANK FLOAT ELEVATIONS MUST BE SET IN COMPLIANCE WITH 30 TAC 285.33(d)(2)(G)(iii)(1)	
10. SPRAY HEADS TO BE NO CLOSER THAN 10' FROM TREES OR OTHER OBSTRUCTIONS THAT INTERFERE WITH SPRAY PATTERN.	
11. TIMER MUST BE SET TO DISCHARGE BETWEEN THE HOURS OF MIDNIGHT AND 5 am.	

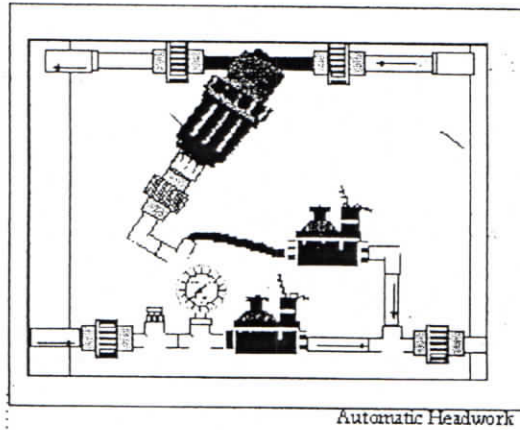


750 GAL PRETREATMENT TANK	1000 GAL AEROBIC TREATMENT UNIT	1000 GAL PUMP TANK
CAPACITY (GALLONS) 750	GALLON/DAY 1000 GAL/DAY	GALLONS 1000 GAL
	MAKE CLEARSTREAM	MINIMUM STORAGE CAPACITY 912 GAL
	MODEL 1000 GA	MAXIMUM STORAGE CAPACITY 1138 GAL
		TANK DIMENSIONS 65.5" X 71.5"
		GPI 17.37

420 GPD

HFF PRODUCTIONS
 27441 WIGWAM TRAIL
 HOCKLEY, TX. 77447
 281-384-3976





HEADWORKS

FOR DETAIL ONLY

* MAY USE HEADWORKS OR INTERNALIZE IN PUMP TANK IN PUMP CONFIGURATION

Description
 Geoflow accessory parts are now available pre-assembled with either manual or automatic flush configurations. Each headwork box includes the following:

- Vortex filter
- Filter flush valve
- Zone flush valve
- Pressure gauge
- Headwork air vent
- Headwork box

Note. Air vents, dipline, and fittings are required to complete the Geoflow disposal system. Pressure regulators are required with Wasteflow Classic systems.

Operation

Field and filter flushing can be done manual or automatically.

Manual Headworks

Both valves should be cracked open slightly times to allow a constant flush. Make sure p at the Headwork gauge is at least 3 psi, and i close the valves slightly to increase pressure. annually the valves need to be open fully for complete system flush.

Automatic Headworks

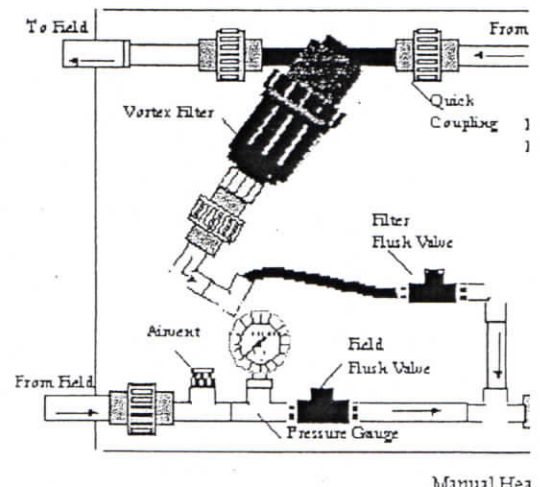
Both valves are activated electrically. Geoflow recommends using the GEO1 or GEO2 cor to activate your pumps and Automatic Head

Flow Rates

Model No.	Min. Flow	Max. Flow
WHW-075-Aut	4 gpm	11 gpm
WHW-100-Aut	10 gpm	28 gpm
WHW-075-Man	4 gpm	11 gpm
WHW-100-Man	10 gpm	28 gpm

Pressure loss vs. Flow
 (Between inlet from pump & outlet to field)

Flow (gpm)	WHW 075-Aut	WHW 100-Aut	WHW 075-man	WHW 100-man
4	3.0 psi		3.0 psi	
6	5.5 psi		5.5 psi	
8	8.5 psi		8.5 psi	
10	13.0 psi	3.5 psi	13.0 psi	3.5 psi
15		7.2 psi		7.2 psi
20		12.0 psi		12.0 psi



Specification

Please refer to individual specification sheet

DIAGRAM 1: TYPICAL DRIPFIELD LAYOUT

FOR DETAIL ONLY

