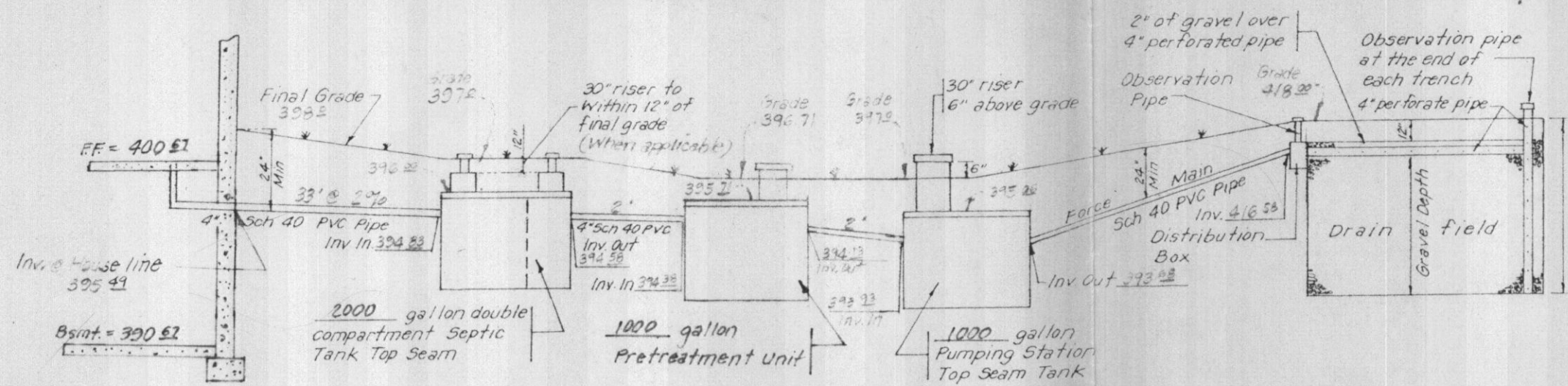
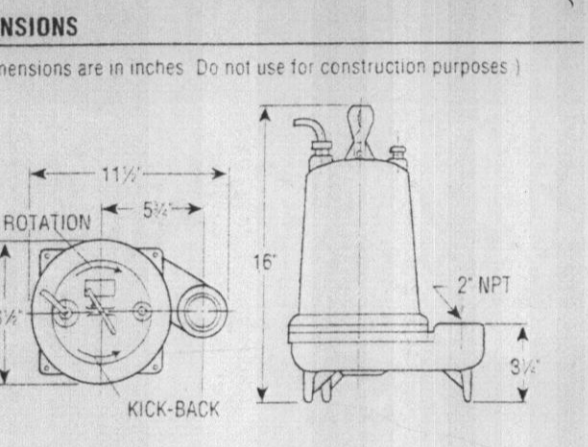


SEPTIC SYSTEM PROFILE
No Scale



PERFORMANCE RATINGS (gallons per minute)

WEEK	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK
1750	1750	3500	3500	3500	3500	3500	3500
70	65	78	64	-	56	86	140
58	58	70	90	100	126	53	138
50	35	60	65	66	122	50	136
5	15	48	78	84	117	42	87
-	-	-	55	67	86	111	40
-	-	-	25	51	62	103	35
-	-	-	12	25	34	50	37
-	-	-	52	64	80	25	116
-	-	-	23	53	77	18	70
-	-	-	17	42	67	12	66
-	-	-	9	30	54	3	68
-	-	-	20	46	60	58	90
-	-	-	11	39	55	85	83
-	-	-	4	26	42	51	75
-	-	-	16	35	52	67	86
-	-	-	15	34	51	67	85
-	-	-	26	50	66	82	93
-	-	-	8	27	38	53	72



PUMP SPECIFICATIONS

GALLONS TO BE PUMPED EACH CYCLE: 69.1

DISCHARGE RATE IN GPM: 4.9

DISCHARGE VELOCITY IN FPS: 25.07

STATIC HEAD IN FEET: 1.80

FORCES MAIN LENGTH IN FEET: 130

EQUIVALENT LENGTHS

NUMBER	MULTIPLIER	EQUIV. FT.
GATE VALVES	x	13
CHECK VALVES	x	13
90° BENDS	x	9.8
45° BENDS	x	9.8
OTHER (SPECIFY)	x	

TOTAL EQUIVALENT LENGTH (5+7) = 130

TOTAL LENGTH = 130

ACTION HEAD = 5.5 x MULTIPLIER = 8.81

TOTAL DYNAMIC HEAD (4+9) = 29.88

PUMP SELECTED: Goulds Pumps

MAKE: Goulds Pumps

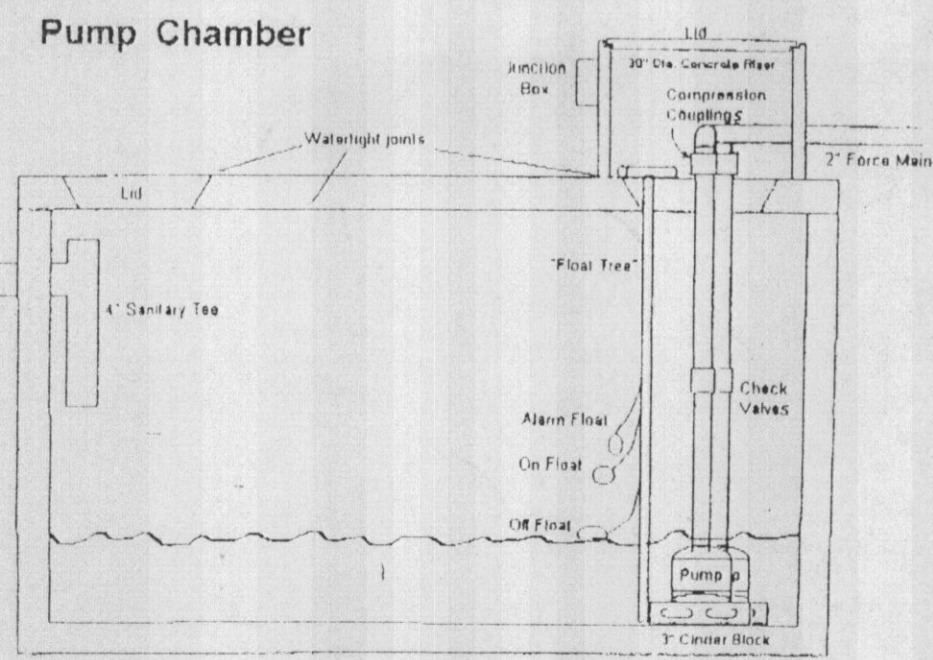
MODEL: WE27H 314

SUPPLIER:

ATTACH COPY OF PUMP CURVE

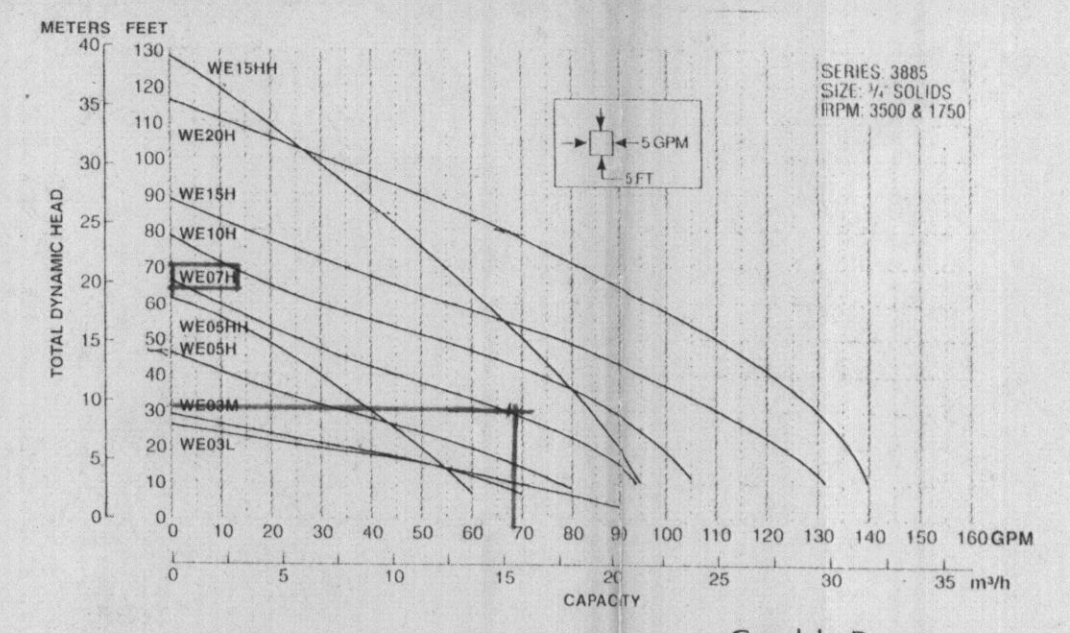
1000 Gallon Pump Chamber - Top Seam Tank

Outside Dimensions: Length 13'-3" Width 6'-3" Depth 5'-11"



PERFORMANCE RATINGS (gallons per minute)

WEEK	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK
1750	1750	3500	3500	3500	3500	3500	3500
70	65	78	64	-	56	86	140
58	58	70	90	100	126	53	138
50	35	60	65	66	122	50	136
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-	-	-	15	34	51	67	85
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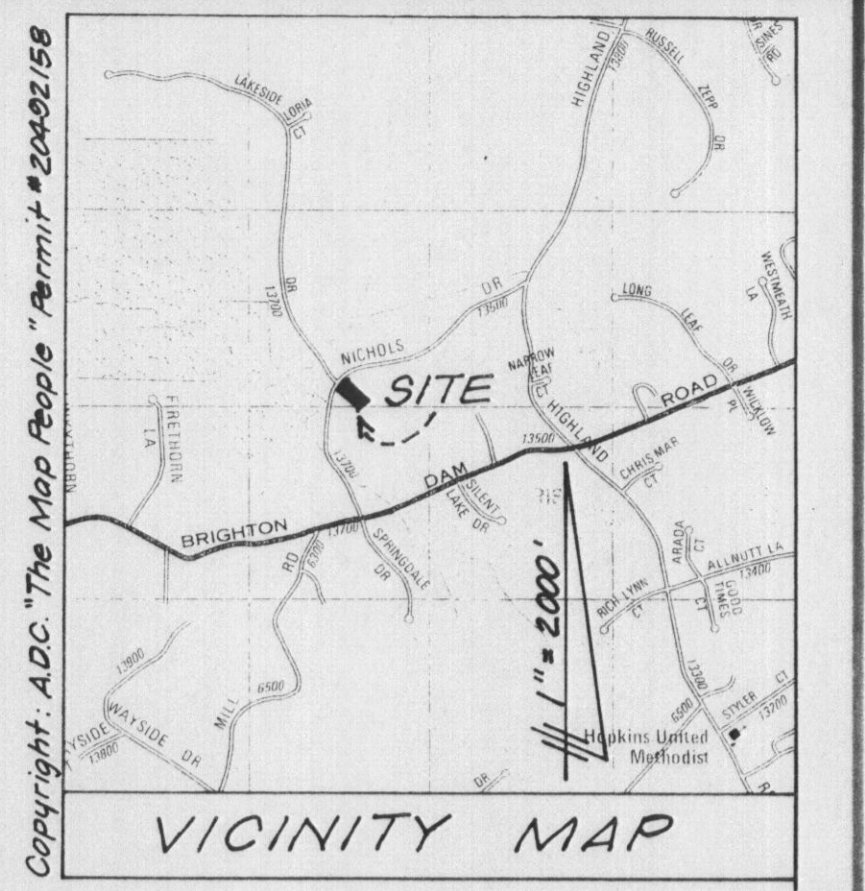
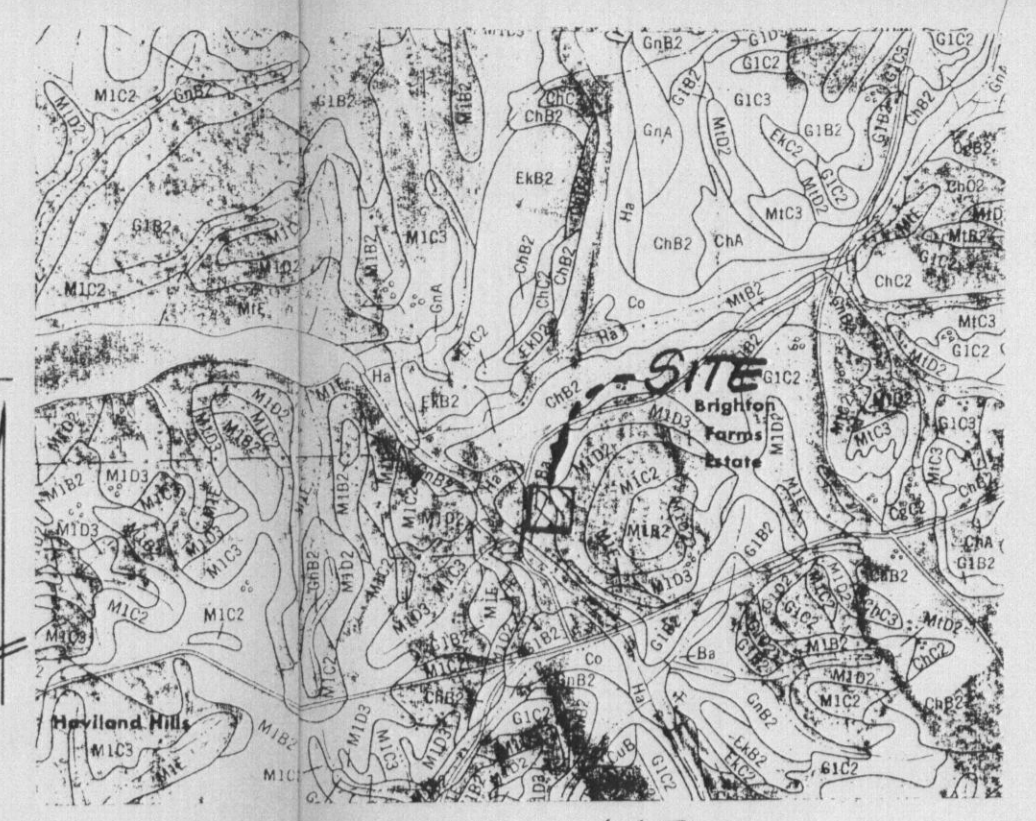


Goulds Pumps
ITT Industries

DESIGN DATA

- 85 Linear feet of drainfield
- 58.25 Volume of 4" drainfield pipe in gallons (0.45 x linear feet)
- 2 Diameter of force main pipe (inches)
- 136 Linear length of force main pipe
- 22.7 Gallons per inch drawdown (Tank size = outlet elev. - inside tank bottom elev. x 1/12)
- 68.1 Gallons pumped each cycle (Volume of drainfield pipe or the equivalent to a three inch drawdown, whichever is greater)
- 3" Inlet drawdown per cycle
- 48.4 Gallons of reserve capacity (Inlet elev. x 12 x gal./inch drawdown)
- 18.5 Equivalent length of force main pipe (Fees, Ellis, valves, etc.)
- 164.5 Total pipe length (Linear + equivalent)
- 3.11 Frictional loss per 100' (min. velocity of 2.0 ft/sec)
- 30.78 Frictional loss for system (total pipe length x frictional loss/100')
- 25.27 Static head loss (highest force main elev. - pump-off elev.)
- 29.88 Total head loss (frictional loss + static loss)
- 31.4 Size horsepower pump needed (refer to pump curve)
- 1.14 drawdown time (1 minute at 42 sec at 40 gpm (Pump should deliver 45-50 gallons per min. per lateral))

Recommended pump: Make Goulds Model # WE27H
Control panel: Make _____ Model # _____



SOILS MAP
Scale: 1" = 1,380'
Soil Types: MIDE MID34 Bz
Map Page #22

GENERAL NOTES

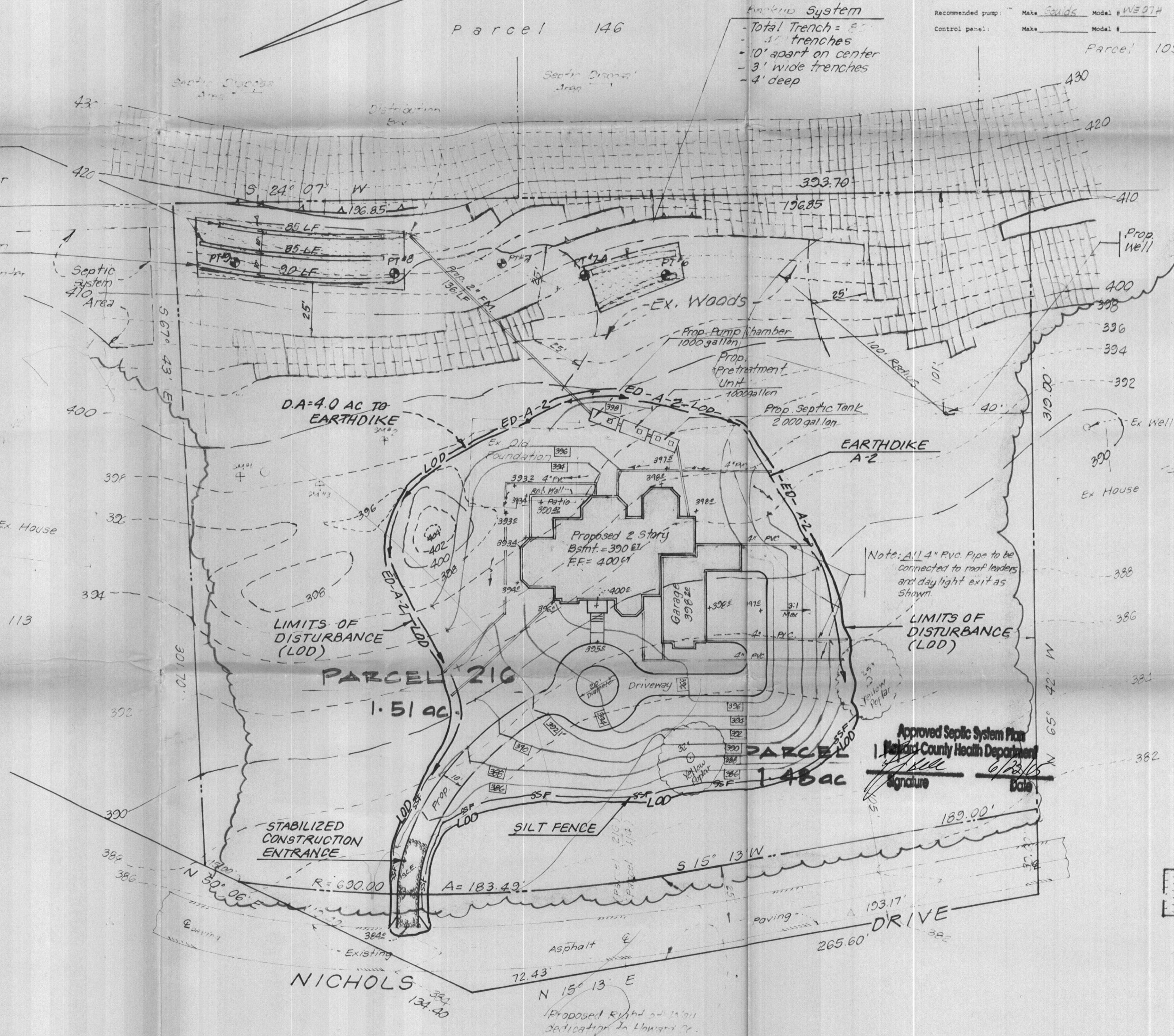
- Property Zoned: RRDEO
- Property Area: 2.09 Acres
- Deed Reference: Liber 5006 Folio 176
- Property Owner(s): Akinyemi Bamisaiye
0302 Cedar Lane
Bethesda, Md 20814
- Applicant:
Bethel Construction
4815 Prince George's Avenue
Beltsville, Md. 20705
- Field shot topography by Surveys, Inc. 5-13-04, 6-23-04.
- Per test holes:
● = Perc test conventional - (pt #1)
● = Stormwater management provided by roof-top/nonroof-top disconnection credit.
● = Well permit No. Ho-94-4098, County No. A-52002-B.

SEQUENCE OF CONSTRUCTION

- PRECONSTRUCTION MEETING.....1 DAY
 - OBTAIN NECESSARY PERMITS.....2 DAYS
 - NOTIFY 'MISS UTILITY' AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION 1-800-257-7777.....1 DAY
 - CONSTRUCT AND/OR INSTALL SEDIMENT CONTROL DEVICES.....1 WEEK
 - SILT FENCE (SUPER)
 - STABILIZE CONSTRUCTION ENTRANCE
 - EARTHDIKE A-2
 - WITH WRITTEN PERMISSION FROM SEDIMENT CONTROL INSPECTOR, CONSTRUCT HOUSE/DWY, UTILITIES, DRYWELL.....12 MONTHS
 - STABILIZE ALL AREAS DISTURBED BY CONSTRUCTION.....2 DAYS
 - REMOVE ALL SEDIMENT CONTROL DEVICES WHEN WRITTEN PERMISSION HAS BEEN GRANTED BY THE SEDIMENT CONTROL INSPECTOR.....2 DAY
- TOTAL ESTIMATED TIME OF CONSTRUCTION.....12 MONTHS

SEPTIC SYSTEM NOTES:

- All wells and septic systems within 100 feet of property boundaries are shown.
- Depicted topography reflects field-verified information.
- Offsite sewage easement on Parcel 216 to serve Parcel 114 to be recorded in Land Records prior to well permit.
- Install a berm and curtain drain located at the top of the steep slopes and at least 10 feet uphill of the highest proposed sewage trench.
- Variance request to MDE to the 25' separation to steep slopes uphill required by regulation (COMAR 26.04.02.04.J) must be issued prior to well permit approval.
- Variance request to MDE to the 2-acre minimum lot size required by regulation (COMAR 26.04.02.04.K) must be issued prior to well permit approval. Pre-treatment system installation designed to remove at least 50% of the nitrates from sewage, must be installed with all septic systems.
- Septic system designed for 4-bedroom. No additional bedrooms will be permitted without additional septic capacity.
- WELL APPLICATION TO P.E. SUBMITTED AFTER ADJUDICATED. CONVEYANCE IS APPROVED THAT COMPRISES PARCEL 216 & 114.
- Ejector pump required for basement sewer.



Reviewed for Howard S.C.D. and meets Technical Requirements
Jim Major
Signature _____ Date _____
U.S. Resource Conservation Service

This Development Plan is approved for soil erosion and sediment control by the Howard Soil Conservation District

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS IN CONFORMANCE WITH THE MASTER PLAN OF HOWARD COUNTY.

Approved _____ Date 4/13/05
John A. Roberts
for Howard County Health Officer

Approved _____ Date 11/6/04
Robert W. _____
for Howard County Health Officer

TOTAL DISTURBED AREA = 0.71 ac ±

SURVEYS, INC.
SURVEYORS • ENGINEERS • LAND PLANNERS
PERMIT SERVICES
950 MAIN STREET
LAUREL, MARYLAND, 20707
PHONE 301-716-0561 FAX 301-716-0642

DATE	REVISION
5-1-04	Add new prop. perc test hole locations.
6-23-04	Tie New perc Test holes & Detail type
7-21-04	New Prop Trench system per new perc.
12-17-04	Add 5' in. distribution & 1/2" in. 1/2" in. 1/2" in.
4-12-05	300 Comments
5-27-05	CROWN DRN4

SITE, GRADING & SEDIMENT CONTROL PLAN
Tax Map 34: Parcels 114 & 216
13605 Nichols Drive
BAMISAIYE PROPERTY
Clarksville (5th) Election District
Howard County, Maryland
PC-520021

SCALE	DESIGNER	CHECKED BY
1" = 30'	g.b./n.s.	g.b.
DATE	DRAWER	FIELD BOOK
5-17-04	L.C.	033-48
JOB NUMBER	SHEET NUMBER	FILE NUMBER
03-147	1 of 2	L-205

Professional Engineer
Signature _____
Date 4/12/05

CK 1254
CK 92127
\$ 50.00

June 20, 2005

Attention: Ms. Avis Corbin
Howard County
Inspections and Permits
3430 Court House Drive,
Ellicott City, MD 21043

**Application to Change number of Bedrooms from 5 to 4 Bedroom for Building
Permit # B00153129 at 13675 Nichols Drive**

Ms. Corbin,

I wish to inform you that I will like to change the Bedroom #5 on the second floor of my proposed single family house into a family Library. This amendment will reduce the number of Bedrooms from 5 bedrooms to 4 bedrooms. My Builder, Bethel Design Construct with MHRB 4235 has been notified of this change.

Please call me if you have any question.

Sincerely,



Akinyemi Bamisaiye

Owner

cc: Plans Review
Health