



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 536034

AGENCY REVIEW: _____

DATE 11-15-11

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH 4-5 PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE *UNKNOWN* IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) GILBERT + ELIZABETH BLEVINS

DAYTIME PHONE 301-854-0587 CELL 443-980-0306 FAX N/A

MAILING ADDRESS 11986 Hall Shop Rd CLARKSVILLE MD 21029
STREET CITY/TOWN STATE ZIP

APPLICANT WILLIAMSBURG GROUP LLC - BOB CORBETT

DAYTIME PHONE 410-977-3343 CELL 410-977-3343 FAX 410-997-4358

MAILING ADDRESS 5485 HARPERS FARM Rd #200 COLUMBIA MD 21044
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION

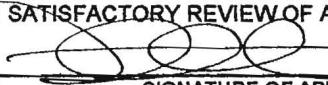
SUBDIVISION/PROPERTY NAME _____ LOT NO. 32

PROPERTY ADDRESS 11986 HALL SHOP Rd CLARKSVILLE, MD 21029
STREET TOWN/POST OFFICE

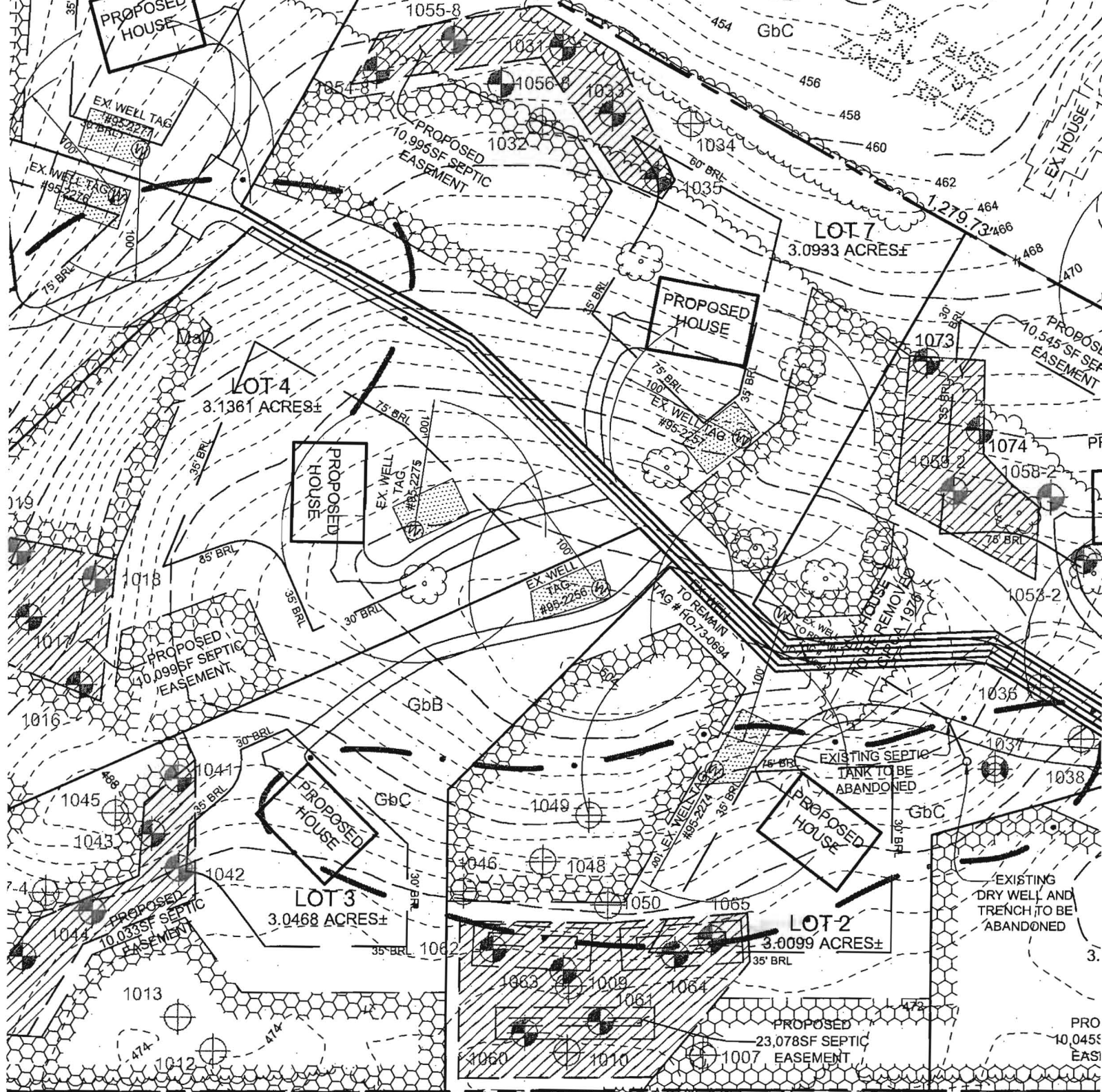
TAX MAP PAGE(S) 35 GRID 19 PARCEL(S) 0310 PROPOSED LOT SIZE 3 ACRE

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT.


SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH



S 87°07'12"W
 PARCEL 208
 N/F ELIZABETH J. &
 CARY D. MILLSTEIN
 L. 3375 F. 614
 ZONED: RR-DEC
 BaA
 copy
 Parcel 208
 6/2/2011

N/F MILTON W. IOLEHARI,
 MILTON HAROLD IOLEHARI
 & JAMES ROBERT IOLEHARI
 L. 5776 F. 540
 PARCEL 158
 ZONED RR-DEC

PARCEL 278
 N/F MILTON HAROLD
 BARTON KELLER, INC.
 L. 5776 F. 535
 ZONED: RR-DEC

Mound 64-65

MOUND TEST DATA SHEETS

Property I.D. Blevins Property Lot # 3 Date 1/17/12

Sanitarian RB Landscape Position _____

% Slope 8% Soil Type Gb Contractor Mike Johnson

HOLE # 1064 DEPTH OF TEST 18" START TIME 3:30

7.5 YR 3/2
1 fg, loam 4"
7.5 YR 4/4
1 v fsbk & fsbk 12"
5 YR 5/6
2 fsbk, loam 18"
2.5 YR 5/6
1 msbk grcl
few mica 32"
10R 6/8 & 7.5 YR 6/6
2 1/2 2.5Y (30% clay or v fsc) 56"

Hook Gauge Reading	Elapsed Time (min)	Measured Drop	Estimated Rate	% Change
9 16/16	0	Begin		
9 13/16	10	3/16	53.3	
9 9/16	10	4/16	40	
9 6/16	10	3/16	53.3	
9 3/16	10	3/16	53.3	PASS

M.I./in

Restrictive layer at 32"

Begin equilibration, 2:50

HOLE # 1065 DEPTH OF TEST 23" START TIME 3:45 → 4:13

7.5 YR 3/2
1 fg, loam 4"
7.5 YR 4/4
1 fsbk, loam
10% gravel 12"
5 YR 4/6
2 msbk v grcl 19"
2.5 YR 4/6
1 msbk grcl
few mica 31"
2.5 YR 4/6
1 msbk, few mica 52"

Hook Gauge Reading	Elapsed Time (min)	Measured Drop	Estimated Rate	% Change
9 16/16	0	Begin		
9 6/16	10	19/16	16	
8 14/16	10	3/16	20	
8 9/16	5	5/16	16	
8 4/16	5	5/16	16	PASS

52"
7.5 YR 5/8
8m, clay
62" ↓

Restrictive layer at 52"

Begin equilibration, 3:28

Mound 60-61

Rain previous 12 hr.

MOUND TEST DATA SHEETS

Property I.D. Blevins Property Lot # 3

Date 1/17/12

Sanitarian RB

Landscape Position _____

% Slope 2%

Soil Type G6

Contractor Mike Johnson

HOLE # 1061

DEPTH OF TEST 19"

START TIME 11:28

7.5 YR 3/2
2m & g loam
35
7.5 YR 4/4
2 v & sbk & sbk
gr loam
11
7.5 YR 5/8
loam few mica
2 msbk
10
7.5 YR 5/8
2m sbk cl
19
28
7.5 YR 5/6 cl
m 1 & 10 YR 7/4
41"

Hook Gauge Reading	Elapsed Time (min)	Measured Drop	Estimated Rate	% Change
9 16/16	—	Begin		
10 10/16	22	3 9/16	6.5	
reset 9 16/16	—			
8 19/16	9	4 6/16	6.5	
5 1/16	21	3 9/16	5.9	
9 16/16	12:33			
6 2/16	22	3 9/16	5.9	
				PASS

25 YR 5/6
& 7.5 YR 6/6
1m sbk
clay loam
53"
water seep
25 YR 5/6
Ø m
clay loam
few mica
60" ↓

Restriction at 53"
Begin equilibration: 11:00

HOLE # 1060

DEPTH OF TEST 20"

START TIME 11:54

7.5 YR 3/2
2m & g loam
44
7.5 YR 4/4
2 v & sbk & sbk
loam
91
7.5 YR 5/8
1msbk
clay loam
27
7.5 YR 5/6
20% 2.5 YR 5/6 clay loam
23
cl & 2.5 Y 7/2
2.5 YR 4/8
& 10 YR 6/6 & 7.5 YR 5/8
& 1d 2.5 Y 7/2

Hook Gauge Reading	Elapsed Time (min)	Measured Drop	Estimated Rate	% Change
9 16/16	—	Begin		
9 15/16	45	No movement	— reset	
Begin	equilibration		12:48	
9 16/16	1:07	Begin		
9 8/16	1:32	9/16	50	
9 4/16	1:47	4/16	60	
9 0/16	2:02	4/16	60	
8 12/16	2:17	4/16	60	PASS

42"
10R 5/4
& 10 YR 6/6
many mica
Ø m, sl
54"
water seep
bottom of pit

Restriction at 53"

Begin equilibration, 11:25

MOUND TEST DATA SHEETS

Mound 62-63

Property I.D. Blevins Property Lot # 3 Date 1/17/12

Sanitarian RB Landscape Position _____

% Slope 10% Soil Type Gb Contractor Mike Johnson

HOLE # 1062 DEPTH OF TEST 22" START TIME 12:35

	Hook Gauge Reading	Elapsed Time (min)	Measured Drop	Estimated Rate	% Change
7.5 VR 3/2 2fg loam 11"	9 16/16	0	Begin		
	9 13/16	1:35	3/16		reset
7.5 VR 4/4 2usbk loam 11"	9 10/16	2:08	Begin	1:45	
	9 10/16	2:18	4/16	40	
	9 8/16	2:28	4/16	40	
	9 4/16	2:38	4/16	40	
5 VR 5/6 2fsbk clay loam 12"					PASS
5 VR 5/6 1msbk clay loam 21"					

2.5 VR 4/6 & 10 VR 6/4
1fsbk loam 32"

5 VR 5/6
0m loam 84"

Begin equilibration 11:57

HOLE # 1063 DEPTH OF TEST 20" START TIME 1:50

	Hook Gauge Reading	Elapsed Time (min)	Measured Drop	Estimated Rate	% Change
7.5 VR 3/2 2fg loam 5"	9 16/16	0	Begin		
	9 15/16	6	1/16		
	9 14/16	14	1/16		reset
	Begin equilibration 2:25				
	9 16/16	2:30	Begin		
	9 10/16	2:55	2 7/16	10.5	
	9 16/16	3:07	14/16	10.5	
	8 4/16	3:19	14/16	10.5	
5 VR 5/6 1msbk clay loam 17"					PASS
5 VR 5/6 1msbk scl, 10% gravel 23"					

5 VR 5/6
1msbk scl, 10% gravel 23"

5 VR 5/6
0m scl mica 36"

Begin equilibration 1:25

Lot 3

AP

1007
dk brn loam 3'g 0.3
brn loam 2' v f sbk 0.7
yel brn cl 2' f sbk
few med roots 2'
brn cl (m 2-f) pale brn 2.7
pale yel & grey st sicl 4'
Red sicl, 2 m pl
m 2 d (grey) c 2 d (red-yel)
↓ 4.8

1009
dk brn loam 2'g
brn loam 1' v f sbk
brn cl 1' m sbk
1' few gravel
3.3
red sicl
2' m d grey
4.2
1' few gravel pale yellow
Red c
4.8
m 1 d p grey

1009 Broad Headland

1010

1007

← Driveway To Neighboring Houses

1010
Similar to #1007 but without stony layer
4.8
Red sicl m 2 d pale yellow
m 2 d grey
Common Mn coats on ped faces
2 m pl
↓ 5.3

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
12/5/11	1007	2.7	Visual		perch water indicator		F
12/5/11	1010	4.8	Visual		texture w/ indicator		F
12/5/11	1009	3.3	Visual		texture w/ indicator		F

REMARKS _____
 SANITARIAN RB BACKHOE Mike Johnson OTHERS Bob Corbett
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

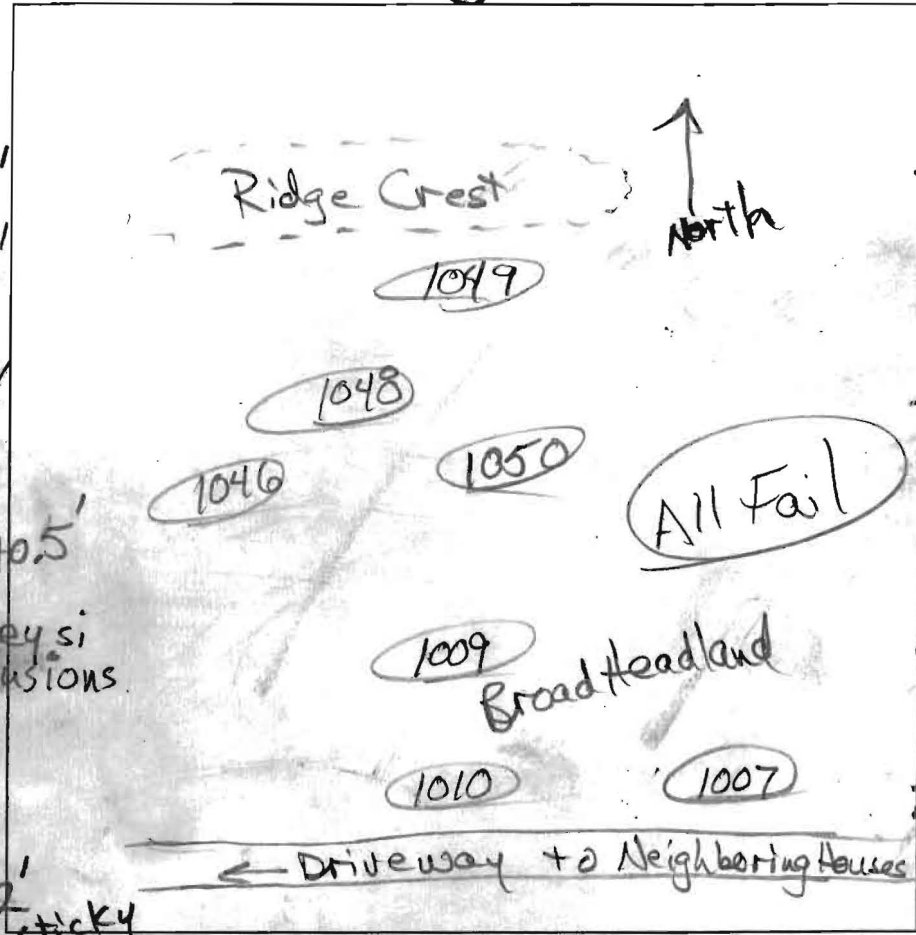
Lot 3

AP

1048
 dk brn loam
 yel-brn loam 1'
 yel-brncl 2'
 yel-redcl
 dense slightly sticky 7.5'
 white & paler red sil; dense 10.5'
 yellow sl
 m 3 p lg grey si
 13' inclusions

dk brn loam
 brn loam 1'
 yel-red sil slight sticky 1.2'
 yel-red drcl 3.8'
 slightly sticky
 lt red & white sil dense 5.3'
 lt red & white fsl 8.2'

red loam
 dense m 2 p paler red m 3 p white 12'



1049
 dk brn loam
 yel-brn loam
 cow stones
 13'
 yel-red cl
 slightly sticky
 5.7'
 yel-red loam
 dense; slight sticky
 inter-layered
 yel-brn loam
 & brncl
 w/ red & white sil
 slightly sticky
 12.5'

1046
 dk brn loam
 0.4'
 brn loam
 1.1'
 yel brncl
 slight sticky
 1.1'
 slight sticky
 2.4'
 yel-red sil
 st loam
 slight sticky
 4.3'

brn & red loam
 many fine mica
 dense
 7.2'
 yel-red fsl
 many fine mica
 dense
 11.2'
 brn yellow fsl
 many fine mica
 12'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
12/13/11	1050	8' / 13'	2:45	3:15 ⁺	—	—	F
12/13/11	1046	8' / 12'	2:49	3:19 ^t	—	—	F
12/13/11	1049	13'	Visual	texture & mineralogy	—	—	F
12/13/11	1048	12.5'	Visual	texture & mineralogy	—	—	F

REMARKS Did not dig #1047

SANITARIAN RB BACKHOE Mike Johnson OTHERS Rob Corbett
Mike Johnson

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE S/W _____

LOT 488

4

LEC

EXISTI

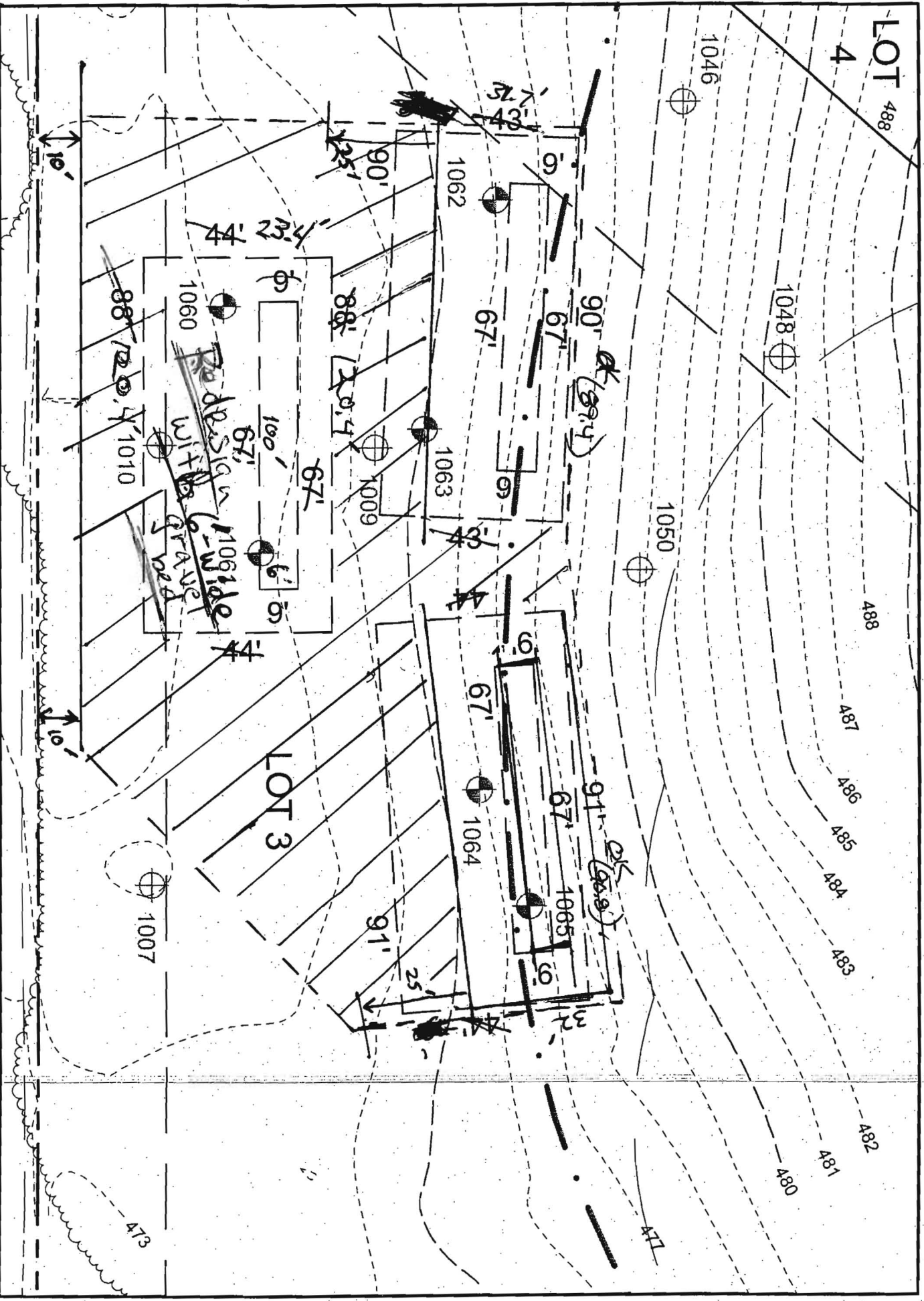
EXISTI

PERCC

PERCC

PASSE
EXISI

SOIL B



LOT 3 SAND MOUND ENLARGEMENT

SCALE: 1"=30'

Mound 60-61 Revised
4/12/12

SAND MOUND CALCULATIONS

Total mound width:	23.4	feet
Total mound length:	120.4	feet

SITE SPECIFIC INFORMATION

Slope Percent:	2	%
Z- Restictive Depth to rock or water:	53	inches
Percolation Rate:	60	minutes/inch
Design Flow:	600	gallons per day

BED/MOUND CALCULATIONS

Design infiltration rate for sand (1.2 for comar sand spec or 1.0 for alt sand spec):	1	gal. per sq. ft. per day
Absorption bed: Design flow / Design infiltration rate =	600	square feet
A- Bed width (12 for comar sand/less than 9 for alt sand):	6.00	feet
B- Bed length: Absorption bed (sq.ft)/Bed width (ft) = (21 to 101 feet)	100.00	feet
D- Upslope sand fill depth: 48 in - Z =	12	inches
E- Downslope sand fill depth: 12 A x % slope + D in. =	13	inches
H- Cap + topsoil at bed center =	18	inches
G- Cap + topsoil at bed edge =	12	inches
F- Total Bed Depth:	10	inches
K- Sideslope setback: { ((D + E) / 2] + 28 in.) / 12 } x 3 =	10.18	feet
Upslope correction factor (from chart):	0.94	
J- Upslope setback: ((22 in + D) / 12) x 3 x Upslope corr. Factor =	7.99	feet
Downslope correction factor (from chart):	1.06	
I- Downslope setback: ((22 in + E) / 12) x 3 x Downslope corr. Factor =	9.39	feet
W- Preliminary Width of Mound: A + J + I =	23.4	feet
L- Total Length of Mound: B + 2K =	120.4	feet

← Gravel Bed
6' x 100'

LOADING RATE AND BASAL AREA CALCULATIONS

Linear loading rate: Design flow / Bed Length =	6.0	gallons per linear ft.
Soil infiltration rate based on percolation rate:	0.5	gal. per sq. ft. per day
Basal area required: Design flow / infiltration =	1200	square feet
Basal area provided with preliminary width: Level Site = L x W; Slope Site (A+I)xB	1539	square feet

Mound 62-63 Revised

SAND MOUND CALCULATIONS

Total mound width:	31.7	feet
Total mound length:	89.4	feet

SITE SPECIFIC INFORMATION

Slope Percent:	10	%
Z- Restrictive Depth to rock or water:	60	inches
Percolation Rate:	40	minutes/inch
Design Flow:	600	gallons per day

BED/MOUND CALCULATIONS

Design infiltration rate for sand (1.2 for comar sand spec or 1.0 for alt sand spec):	1	gal. per sq. ft. per day
Absorption bed: Design flow / Design infiltration rate =	600	square feet
A- Bed width (12 for comar sand/less than 9 for alt sand):	9.00	feet
B- Bed length: Absorption bed (sq.ft)/Bed width (ft) = (21 to 101 feet)	66.67	feet
D- Upslope sand fill depth: 48 in - Z =	12	inches
E- Downslope sand fill depth: 12 A x % slope + D in. =	23	inches
H- Cap + topsoil at bed center =	18	inches
G- Cap + topsoil at bed edge =	12	inches
F- Total Bed Depth:	10	inches
K- Sideslope setback: { ([(D + E) / 2] + 28 in.) / 12 } x 3 =	11.35	feet
Upslope correction factor (from chart):	0.77	
J- Upslope setback: ((22 in + D) / 12) x 3 x Upslope corr. Factor =	6.55	feet
Downslope correction factor (from chart):	1.44	
I- Downslope setback: ((22 in + E) / 12) x 3 x Downslope corr. Factor =	16.13	feet
W- Preliminary Width of Mound: A + J + I =	31.7	feet
L- Total Length of Mound: B + 2K =	89.4	feet

LOADING RATE AND BASAL AREA CALCULATIONS

Linear loading rate: Design flow / Bed Length =	9.0	gallons per linear ft.
Soil infiltration rate based on percolation rate:	0.5	gal. per sq. ft. per day
Basal area required: Design flow / infiltration =	1200	square feet
Basal area provided with preliminary width: Level Site = L x W; Slope Site (A+I)xB	1675	square feet

Mound 64-65 Revised

4/12/12

SAND MOUND CALCULATIONS

Total mound width:	32.0	feet
Total mound length:	90.8	feet

SITE SPECIFIC INFORMATION

Slope Percent:	8	%
Z- Restictive Depth to rock or water:	32	inches
Percolation Rate:	53.3	minutes/inch
Design Flow:	600	gallons per day

BED/MOUND CALCULATIONS

Design infiltration rate for sand (1.2 for comar sand spec or 1.0 for alt sand spec):	1	gal. per sq. ft. per day
Absorption bed: Design flow / Design infiltration rate =	600	square feet
A- Bed width (12 for comar sand/less than 9 for alt sand):	9.00	feet
B- Bed length: Absorption bed (sq.ft)/Bed width (ft) = (21 to 101 feet)	66.67	feet
D- Upslope sand fill depth: 48 in - Z =	16	inches
E- Downslope sand fill depth: 12 A x % slope + D in. =	25	inches
H- Cap + topsoil at bed center =	18	inches
G- Cap + topsoil at bed edge =	12	inches
F- Total Bed Depth:	10	inches
K- Sideslope setback: { ([(D + E) / 2] + 28 in.) / 12 } x 3 =	12.08	feet
Upslope correction factor (from chart):	0.80	
J- Upslope setback: ((22 in + D) / 12) x 3 x Upslope corr. Factor =	7.60	feet
Downslope correction factor (from chart):	1.32	
I- Downslope setback: ((22 in + E) / 12) x 3 x Downslope corr. Factor =	15.39	feet
W- Preliminary Width of Mound: A + J + I =	32.0	feet
L- Total Length of Mound: B + 2K =	90.8	feet

LOADING RATE AND BASAL AREA CALCULATIONS

Linear loading rate: Design flow / Bed Length =	9.0	gallons per linear ft.
Soil infiltration rate based on percolation rate:	0.5	gal. per sq. ft. per day
Basal area required: Design flow / infiltration =	1200	square feet
Basal area provided with preliminary width: Level Site = L x W; Slope Site (A+I)xB	1626	square feet

Mound 64-65

SAND MOUND CALCULATIONS

Total mound width:	<u>43.6</u>	feet
Total mound length:	<u>90.8</u>	feet

SITE SPECIFIC INFORMATION

Slope Percent:	<u>8</u>	%
Z- Restictive Depth to rock or water:	<u>32</u>	inches
Percolation Rate:	<u>53.3</u>	minutes/inch
Design Flow:	<u>600</u>	gallons per day

BED/MOUND CALCULATIONS

Design infiltration rate for sand (1.2 for comar sand spec or 1.0 for alt sand spec):	<u>1</u>	gal. per sq. ft. per day
Absorption bed: Design flow / Design infiltration rate =	<u>600</u>	square feet
A- Bed width (12 for comar sand/less than 9 for alt sand):	<u>9.00</u>	feet
B- Bed length: Absorption bed (sq.ft)/Bed width (ft) = (21 to 101 feet)	<u>66.67</u>	feet
D- Upslope sand fill depth: 48 in - Z =	<u>16</u>	inches
E- Downslope sand fill depth: 12 A x % slope + D in. =	<u>25</u>	inches
H- Cap + topsoil at bed center =	<u>18</u>	inches
G- Cap + topsoil at bed edge =	<u>12</u>	inches
F- Total Bed Depth:	<u>10</u>	inches
K- Sideslope setback: { ([(D + E) / 2] + 28 in.) / 12 } x 3 =	<u>12.08</u>	feet
Upslope correction factor (from chart):	<u>0.80</u>	
J- Upslope setback: ((22 in + D) / 12) x 3 x Upslope corr. Factor =	<u>7.60</u>	feet
Downslope correction factor (from chart):	<u>1.32</u>	
I- Downslope setback: ((22 in + E) / 12) x 3 x Downslope corr. Factor =	<u>15.39</u>	feet
W- Preliminary Width of Mound: A + J + I =	<u>32.0</u>	feet
L- Total Length of Mound: B + 2K =	<u>90.8</u>	feet

LOADING RATE AND BASAL AREA CALCULATIONS

Linear loading rate: Design flow / Bed Length =	<u>9.0</u>	gallons per linear ft.
Soil infiltration rate based on percolation rate:	<u>0.25</u>	gal. per sq. ft. per day
Basal area required: Design flow / infiltration =	<u>2400</u>	square feet
Basal area provided with preliminary width: Level Site = L x W; Slope Site (A+I)xB	<u>1626</u>	square feet

Revise

Mound 62-63

SAND MOUND CALCULATIONS

Total mound width:	42.5 feet
Total mound length:	89.4 feet

SITE SPECIFIC INFORMATION

Slope Percent:	10 %
Z- Restictive Depth to rock or water:	60 inches
Percolation Rate:	40 minutes/inch
Design Flow:	600 gallons per day

BED/MOUND CALCULATIONS

Design infiltration rate for sand (1.2 for comar sand spec or 1.0 for alt sand spec):	1 gal. per sq. ft. per day
Absorption bed: Design flow / Design infiltration rate =	600 square feet
A- Bed width (12 for comar sand/less than 9 for alt sand):	9.00 feet
B- Bed length: Absorption bed (sq.ft)/Bed width (ft) = (21 to 101 feet)	66.67 feet
D- Upslope sand fill depth: 48 in - Z =	12 inches
E- Downslope sand fill depth: 12 A x % slope + D in. =	23 inches
H- Cap + topsoil at bed center =	18 inches
G- Cap + topsoil at bed edge =	12 inches
F- Total Bed Depth:	10 inches
K- Sideslope setback: { ([(D + E) / 2] + 28 in.) / 12 } x 3 =	11.35 feet
Upslope correction factor (from chart):	0.77
J- Upslope setback: ((22 in + D) / 12) x 3 x Upslope corr. Factor =	6.55 feet
Downslope correction factor (from chart):	1.44
I- Downslope setback: ((22 in + E) / 12) x 3 x Downslope corr. Factor =	16.13 feet
W- Preliminary Width of Mound: A + J + I =	31.7 feet
L- Total Length of Mound: B + 2K =	89.4 feet

LOADING RATE AND BASAL AREA CALCULATIONS

Linear loading rate: Design flow / Bed Length =	9.0 gallons per linear ft.
Soil infiltration rate based on percolation rate:	0.25 gal. per sq. ft. per day
Basal area required: Design flow / infiltration =	2400 square feet
Basal area provided with preliminary width: Level Site = L x W; Slope Site (A+I)xB	1675 square feet

Revise

SAND MOUND CALCULATIONS

Mound 60-61

Total mound width: 44.0 feet
 Total mound length: 87.2 feet

SITE SPECIFIC INFORMATION

Slope Percent: 2 %
 Z- Restrictive Depth to rock or water: 53 inches
 Percolation Rate: 60 minutes/inch
 Design Flow: 600 gallons per day

BED/MOUND CALCULATIONS

Design infiltration rate for sand (1.2 for comar sand spec or 1.0 for alt sand spec): 1 gal. per sq. ft. per day
 Absorption bed: Design flow / Design infiltration rate = 600 square feet
 A- Bed width (12 for comar sand/less than 9 for alt sand): 9.00 feet ✓
 B- Bed length: Absorption bed (sq.ft)/Bed width (ft) = (21 to 101 feet) 66.67 feet ✓
 D- Upslope sand fill depth: 48 in - Z = 12 inches
 E- Downslope sand fill depth: 12 A x % slope + D in. = 14 inches
 H- Cap + topsoil at bed center = 18 inches
 G- Cap + topsoil at bed edge = 12 inches
 F- Total Bed Depth: 10 inches
 K- Sideslope setback: { ([(D + E) / 2] + 28 in.) / 12 } x 3 = 10.27 feet ✓
 Upslope correction factor (from chart): 0.94
 J- Upslope setback: ((22 in + D) / 12) x 3 x Upslope corr. Factor = 7.99 feet ✓
 Downslope correction factor (from chart): 1.06
 I- Downslope setback: ((22 in + E) / 12) x 3 x Downslope corr. Factor = 9.58 feet
 W- Preliminary Width of Mound: A + J + I = 26.6 feet 27'
 L- Total Length of Mound: B + 2K = 87.2 feet ✓

LOADING RATE AND BASAL AREA CALCULATIONS

Linear loading rate: Design flow / Bed Length = 9.0 gallons per linear ft.
 Soil infiltration rate based on percolation rate: 0.25 gal. per sq. ft. per day
 Basal area required: Design flow / infiltration = 2400 square feet
 Basal area provided with preliminary width: Level Site = L x W; Slope Site (A+I)xB 1239 square feet

Revise

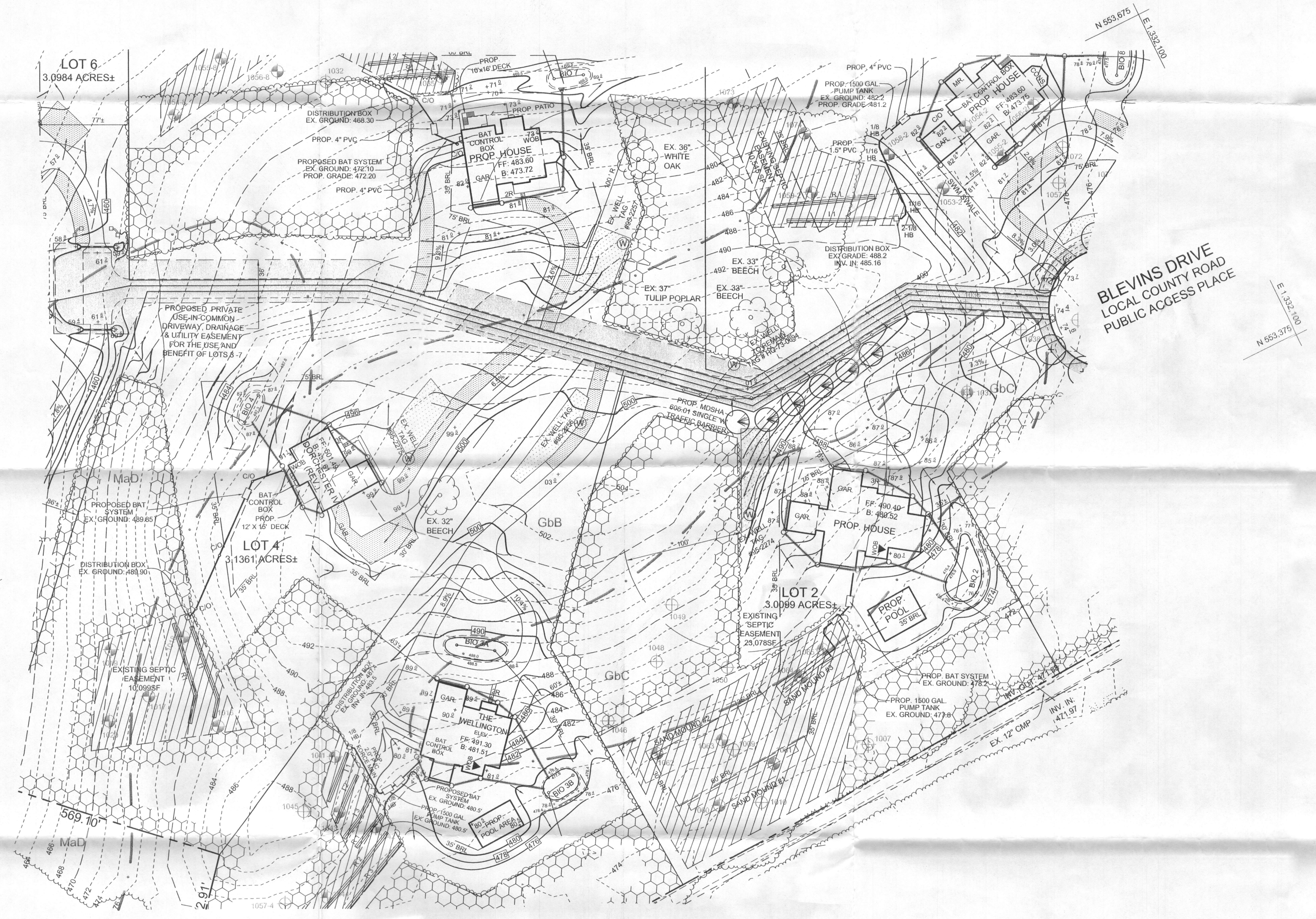
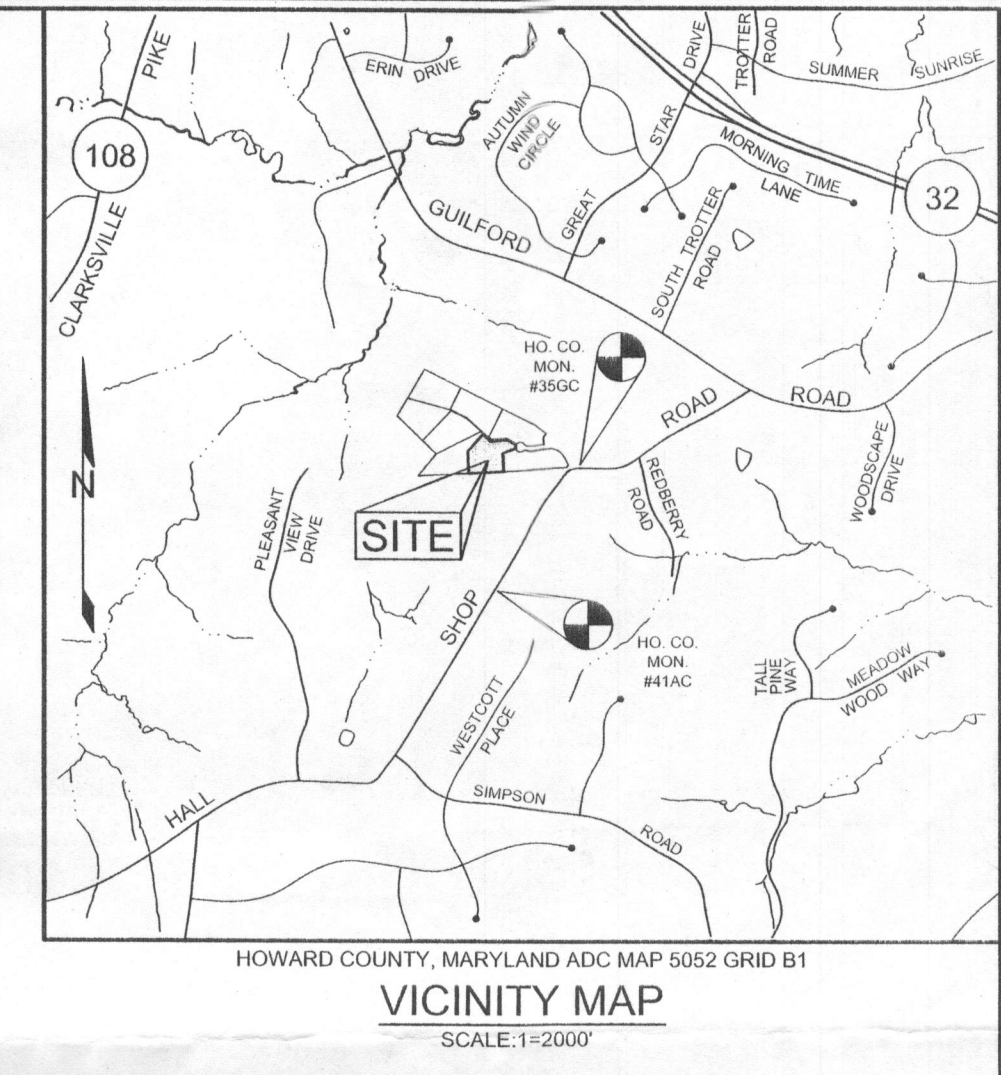
SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GbA	GLADSTONE LOAM, 0 TO 3 PERCENT SLOPES	B	0.20
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
GbC	GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES	B	0.20
MmD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE; NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

BENCHMARKS				DESCRIPTION
NUMBER	NORTHING	EASTING	ELEVATION	
35GC	553,244.4	1,332,505.9	482.40	N SIDE OF HALL SHOP ROAD, 1/3 MILE SW OF GUILFORD ROAD, 30' NE OF POLE #112401
41AC	551,969.6	1,331,695.3	488.34	E SIDE OF HALL SHOP ROAD, 135' N OF POLE #112411, 111' S OF POLE #112410

LEGEND

- EXISTING CONTOUR: --- 382
- PROPOSED CONTOUR: --- 382
- EXISTING TREELINE: [Symbol]
- EXISTING TREE: [Symbol]
- SOIL BOUNDARY: ---
- PROPOSED BIORETENTION FACILITY: [Symbol]
- EXISTING FOREST CONSERVATION EASEMENT PER F-12-041: [Symbol]
- FAILED PERCOLATION TEST LOCATION: [Symbol]
- PASSED PERCOLATION TEST LOCATION: [Symbol]
- WELL BOX: [Symbol]



PLAN VIEW
SCALE: 1"=50'

- PERCOLATION CERTIFICATION NOTES**
- SUBJECT PROPERTY IS ZONED RR-DEO PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
 - TOTAL AREA OF PROPERTY: 3.0099 ACRES.
 - PRIVATE WATER AND SEWER WILL BE USED WITHIN THIS SITE.
 - THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
 - THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY SILL, ADCOCK & ASSOCIATES, LLC, ON FEBRUARY 27, 2012.
 - THE TOPOGRAPHY SHOWN HEREON HAS BEEN FIELD RUN WITH 2' CONTOUR INTERVALS BY SILL, ADCOCK & ASSOCIATES, LLC, ON APRIL 13, 2012. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004.
 - PROPERTY ADDRESS: 1101 BLEVINS DRIVE.
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 - ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN LOCATED USING AVAILABLE RECORD DRAWINGS OR HAVE BEEN FIELD LOCATED.
 - THE PURPOSE OF THIS REVISED PERCOLATION CERTIFICATION PLAN IS TO REVISE THE LOCATION OF THE PROPOSED WELL BOX ON LOT 2.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PAUL M. SILL, PE, LEED AP
LICENSED PROFESSIONAL ENGINEER #32025

DATE: 11/11/15

OWNER/DEVELOPER
 WILLIAMSBURG GROUP
 5485 HARPERS FARM ROAD, SUITE 200
 COLUMBIA, MARYLAND 21044
 410997.8800

REVISED PERCOLATION CERTIFICATION PLAN
BLEVINS PROPERTY
 LOT 2

TAX MAP 35 GRID 19
5TH ELECTION DISTRICT

PARCEL 310
HOWARD COUNTY, MARYLAND

DESIGN BY: PS
 DRAWN BY: AEA
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: NOVEMBER 11, 2015
 PROJECT #: 14-040
 SHEET #: 1 of 1

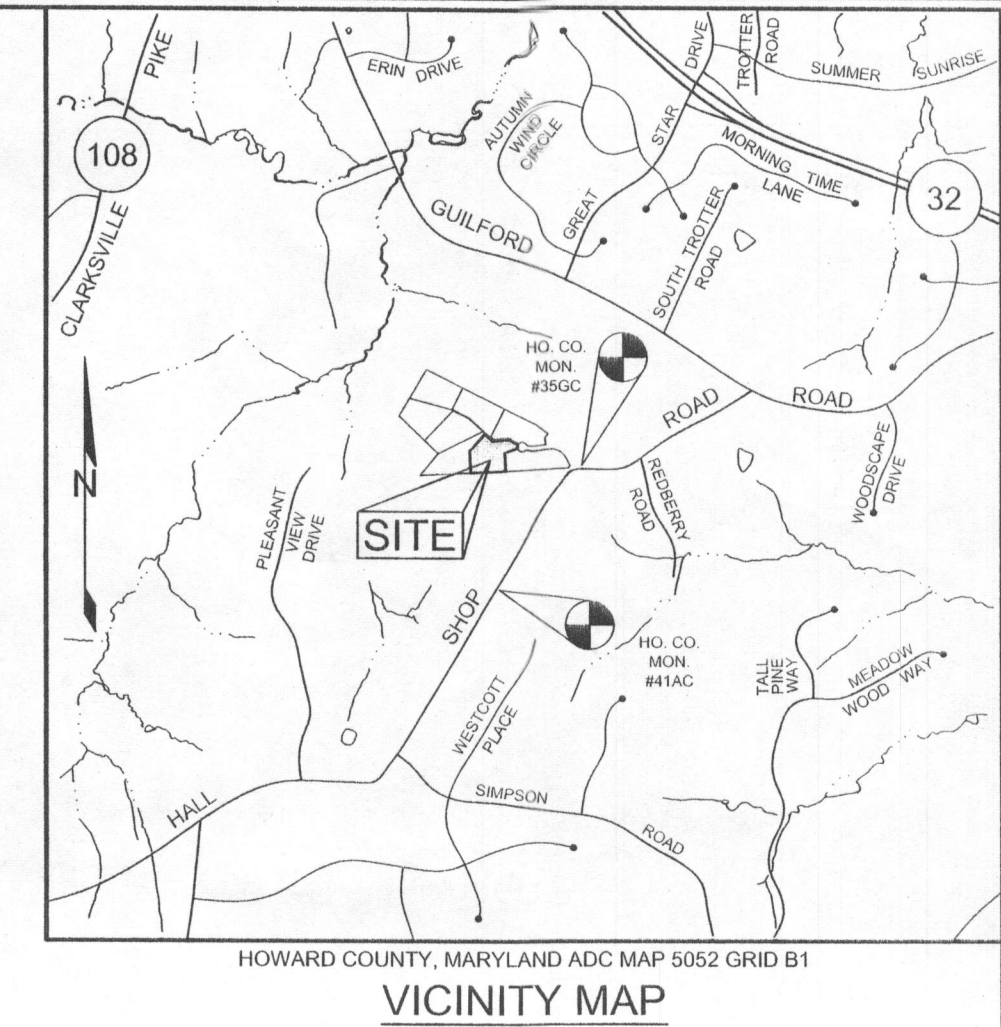
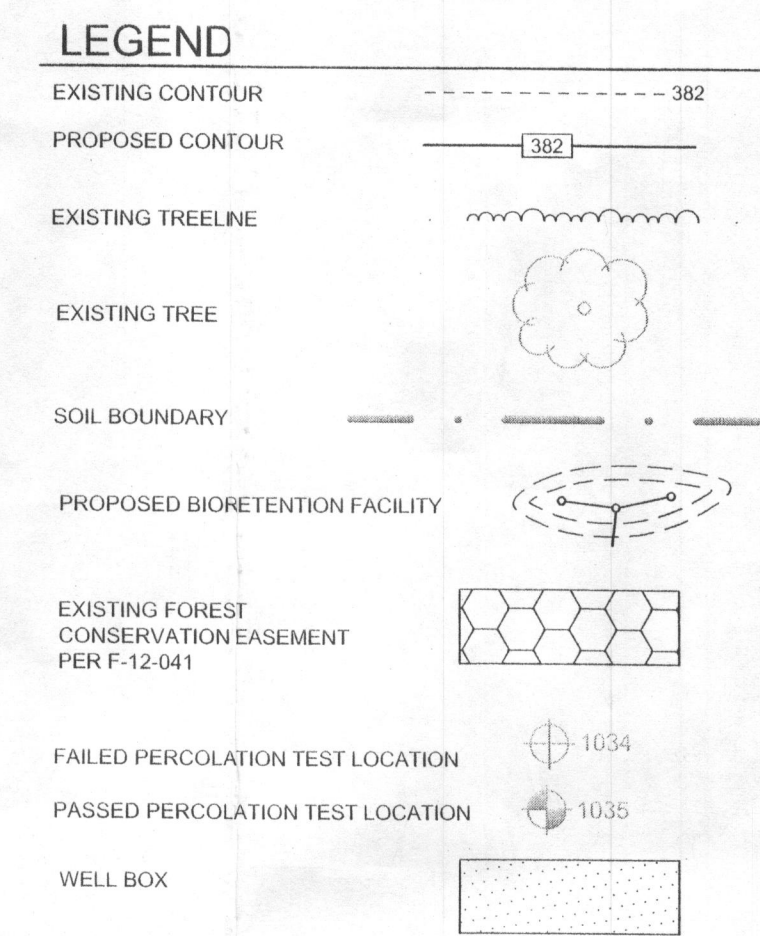
SILL ENGINEERING GROUP, LLC
 11130 Dovedale Court, Suite 200
 Marriottsville, Maryland 21104
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 30, 2017.

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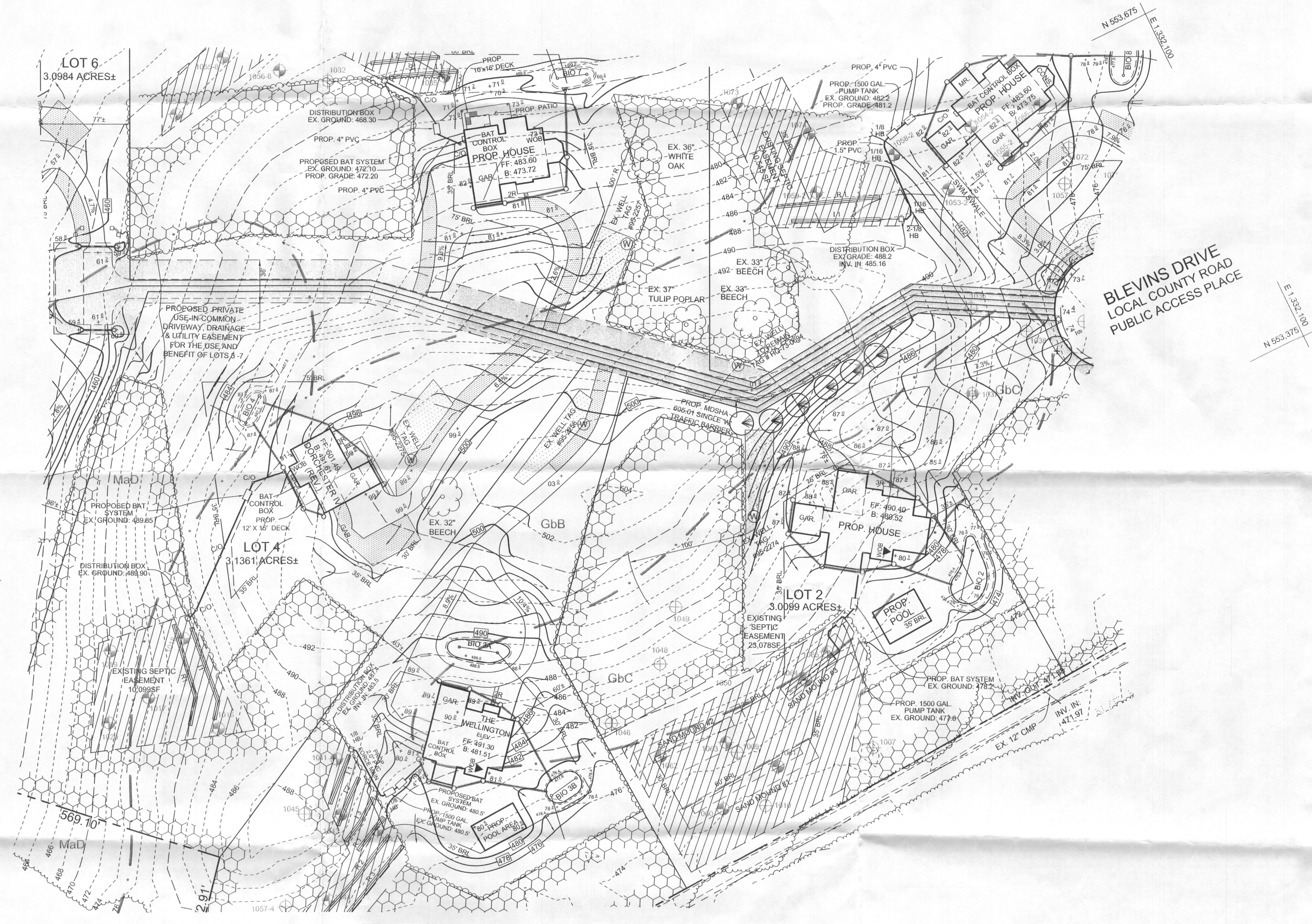
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[Signature] DATE 11/23/2015
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

[Signature] DATE 11/16/15
 PAUL M. SILL, PE, LEED AP
 LICENSED PROFESSIONAL ENGINEER #32025

OWNER/DEVELOPER

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REVISED PERCOLATION CERTIFICATION PLAN
BLEVINS PROPERTY
 LOT 2

TAX MAP 35 GRID 19
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