

COUNTY #

SOIL PROFILE

0' (42)

top fl

orig grade

LMS

mn nodules

begin

Back

superside

from 5-6'

235-40%

Colors

throughout

black str brn

30% yellow org

Lm 5 brn

Bot tom

(43) 44

Top of hill 10'
 Strongly fibrous
 fine
 V. Low
 V. weak
 Structure
 { V. weak
 Saprophytic
 15% ±
 Sm. frag.
 ↓
 Bottom 10'

45/44 12 1/2'

Wkōngbrō
brō
mōy Slin
—
ōngbrō
brō
Sngōlō
215%
V. micar.
Lōmō

Water table
Bottom

SOIL PROFILE

0'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5-6-03	(42)	4' M / 1/4"	11:42 ³⁰	11:44 ¹⁹	11:44 ¹⁹	11:48 ⁵⁰	4' 0 1/2"
	(43) 15'	3 1/2' Below original grade	11:53 ¹⁹	11:55 ⁰⁰	11:55 ⁰⁰	11:57	2 1/2'
	(44) 12 1/2'	4 1/2' M below surface	12:05 ¹⁰	12:07 ¹⁵	12:07 ¹⁵	12:13	10 min
		(3 1/2' below original grade)					
hole open since 9 AM	(45)	4 1/2'	12:19 ¹⁰	12:20 ⁴⁰	12:20 ⁴⁰	12:23 ⁵⁰	2' 0 1/2"

REMARKS Holes staked and dug for dam

TYPE OF SOIL Brackish Glott

TESTED BY Karen Homan ALSO PRESENT Justin Bunde

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM _____

517922

COUNTY #

SOIL PROFILE

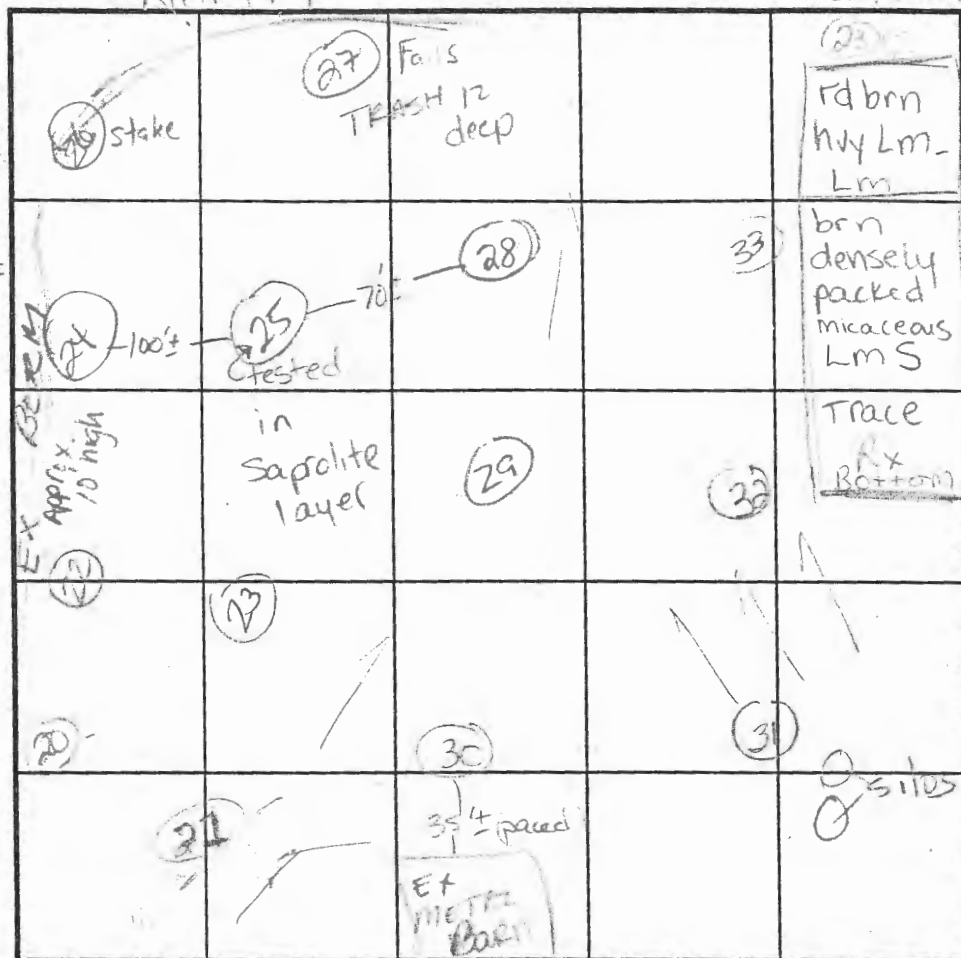
0' (29)
Strong brn
hvy Lm
Odob.
15-20
5 1/2'
tightly
packed,
V. micaceous
lmy Sand
(Fine)
Cherty
frags
5-10%
Bottom 15'

(28)
tightly
packed
massive
slt
Qtz + Grains
25-35%
9'
stony
a few
mini boulders
≤ 10%
V. micaceous
Lm S
Bottom 13'

(32)
org brn
tightly
packed
loam
micaceous
lt brn org
Shm
Lm S
Etc. b.
md g
SAND
mass
Bottom 4'

← North

Soil Profile



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

SOIL PROFILE

0' (33)
Strong
brn, org
brn
densely
packed
Si Lm
cobble 10%
4'
fine
Lm S
Trace
Rx
14'
15'
Bottom 5' 1/2'

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		MIN TIME	
			START	STOP	START	STOP		
1-14-03	(29)	5 1/2' S / 15' V	9:29:30	9:34:50		9:42:50	8 min	OK
1	(28)	5 1/2' S / 13' V	9:38:44	9:41:21		9:49	8 min	OK
post-hole digget size	DUG INTO Rx layer	7' perc	10:16:03	10:20:34		10:22:53	~2 1/2	OK
	(32)	4 1/2' S / 14' V	9:47	9:55		10:11	16 min	OK
	(33)	4 1/2' S / 15' V	10:01:28	10:06:10		10:12	6 min	OK
	(23)	4' S / 14' V	10:08:35	10:51:20		10:34	~3 1/2	OK
	(22)	Visual	See Soil Profile					OK
		Overall micaceous, hr frags < 10%						
		with v fr. saprolite						
		*Natural Gr. not preserved.						

REMARKS Some Holes not dug as shaked due to road or berm

TYPE OF SOIL ISSUES. SEE PAGE 2 of Shared Sys. Notes for additional

TESTED BY KN percolation data. ALSO PRESENT Mr. Nelson + J.

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME TRENCH WIDTH

INLET DEPTH MAXIMUM BOTTOM DEPTH SQ. FT./BEDROOM

-2000 01

517922

COUNTY #

SOIL PROFILE

0' 1" 2" 4" 6" 14"

via grade
Lms
min nodules
bec n
BWK
saprolite
from 5-6
~35-40%
Colors
+ rougher
black str
str yellow org
Lm 5 brn
Rotten

(43)

Top 6"
org org
Strong fib
fine S.
0"

V. wk play
S. to

V. wk
Saprolite
15%+
Sm frag

Rotten

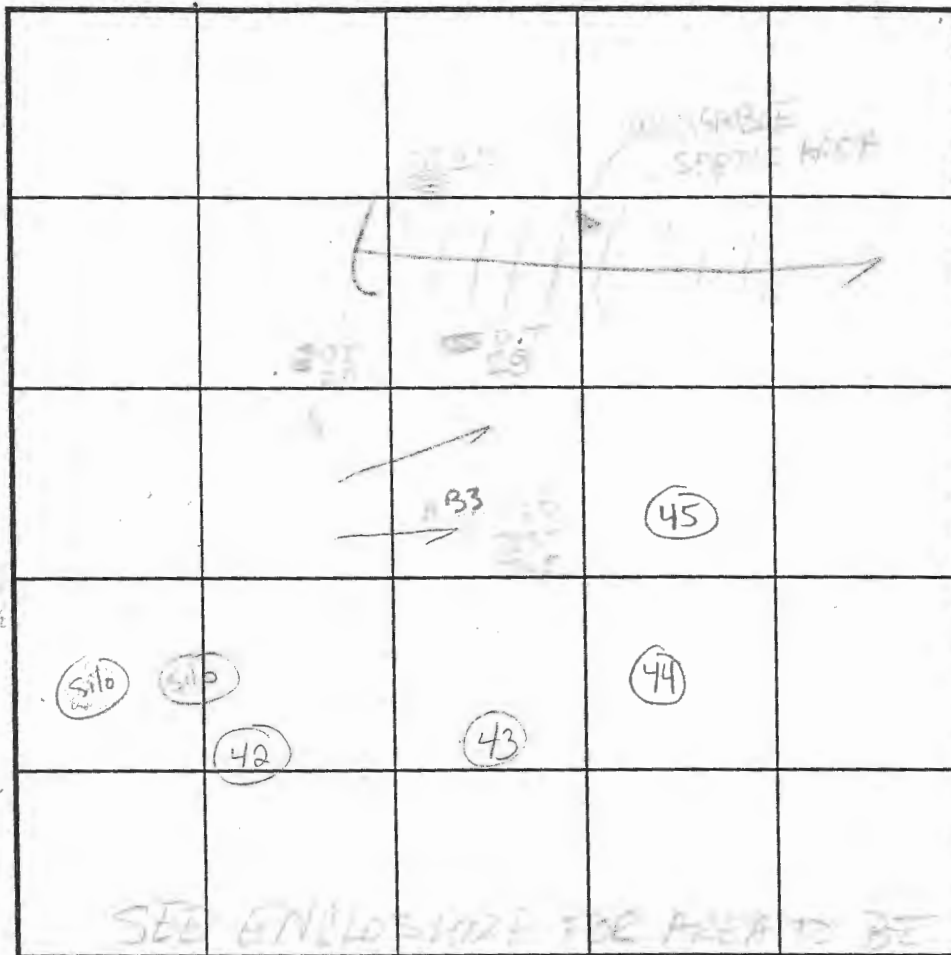
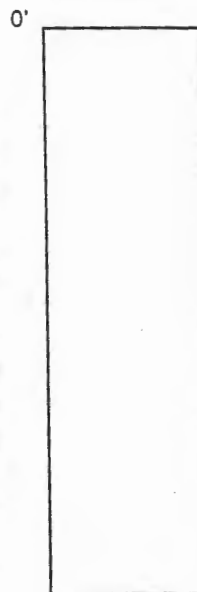
(45) (44) 12 1/2'

Wk org br

org
brn

V. mica

SOIL PROFILE



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5-6-03	(42)	4' M / 10	11:42	11:44 ¹⁹	11:4 ⁹	11:48 ⁵⁰	4 ⁰ L
	(43) 15'	3 1/2' 30' 00"	11:53 ¹⁹	11:55 ⁰⁰	11:55 ⁰⁰	11:57	4 ⁰ L
	(44) 15'	4 1/2' M	12:05 ¹⁰	12:07 ⁵	12:07 ⁵	12:12	4 ⁰ L
	hole open	4 1/2'	12:0 ¹⁰	12:20 ⁴⁰	12:20 ⁴⁰	12:22 ⁵⁰	4 ⁰ L

REMARKS

TYPE OF SOIL

TESTED BY

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME

INLET DEPTH

MAXIMUM BOTTOM DEPTH

ALSO PRESENT

TRENCH WIDTH

SQ. FT/BEDROOM

Bobby Gaffney

Justin Ponder

A/P _____

~~1375~~ 402Red/Brown
SCL

5.5

Red Brown
yellow
many
mica
manganese
Deposits

↓ SCL

14'

401

Red (Large
Brown) Red
yellow
SCL { Buried
roadRed Brown
yellow
white
many
mica
pockets
FSH

↓

14'

402

Red Brown
yellow
SCL

6.2

Red Brown
yellow
5-10%

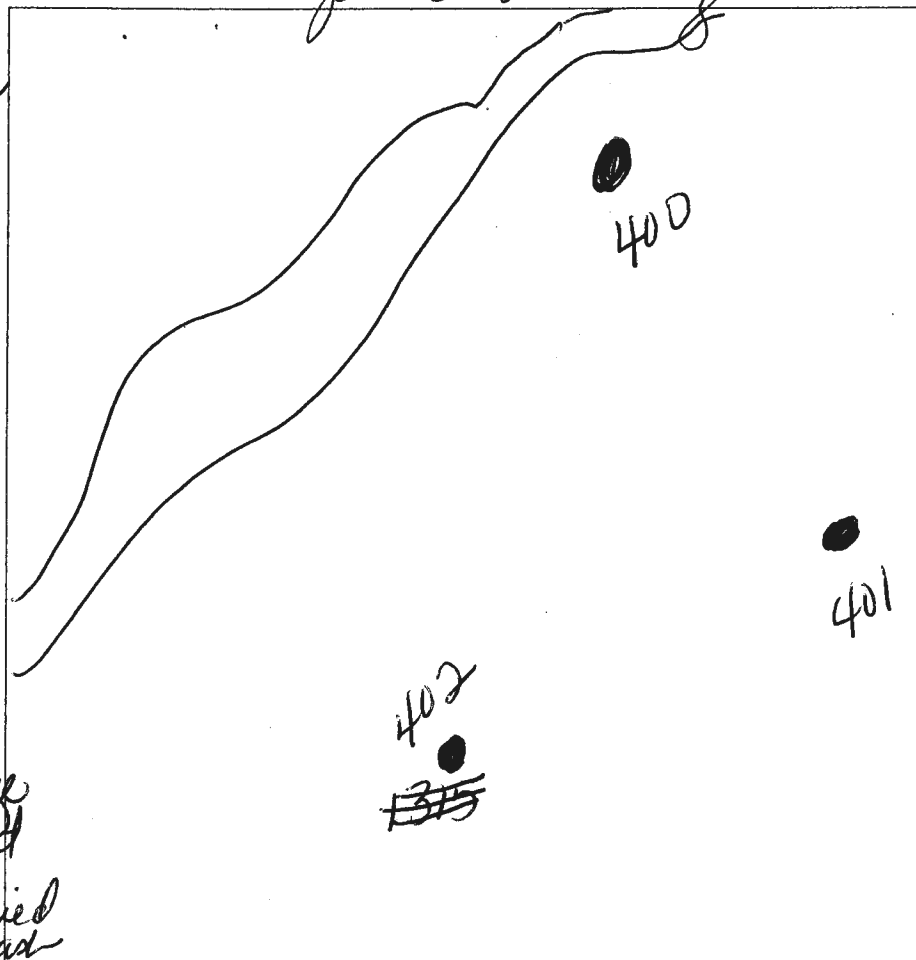
R4

FSH

↓

4'

Jack's Landing



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
11-2-17	1375 402	6.5/13	10:30	10:33	10:37	4min	P
11-2-17	401	6.7/14	10:43	10:46	10:50	4min	P
11-2-17	400	6.5/14.5	10:53	10:55	11:00	5min	P

REMARKS _____

SANITARIAN DBernard

BACKHOE _____

OTHERS _____

TEST HOLES USED IN SDA _____

AVG. PERC TIME _____

SQ. FT/BR _____

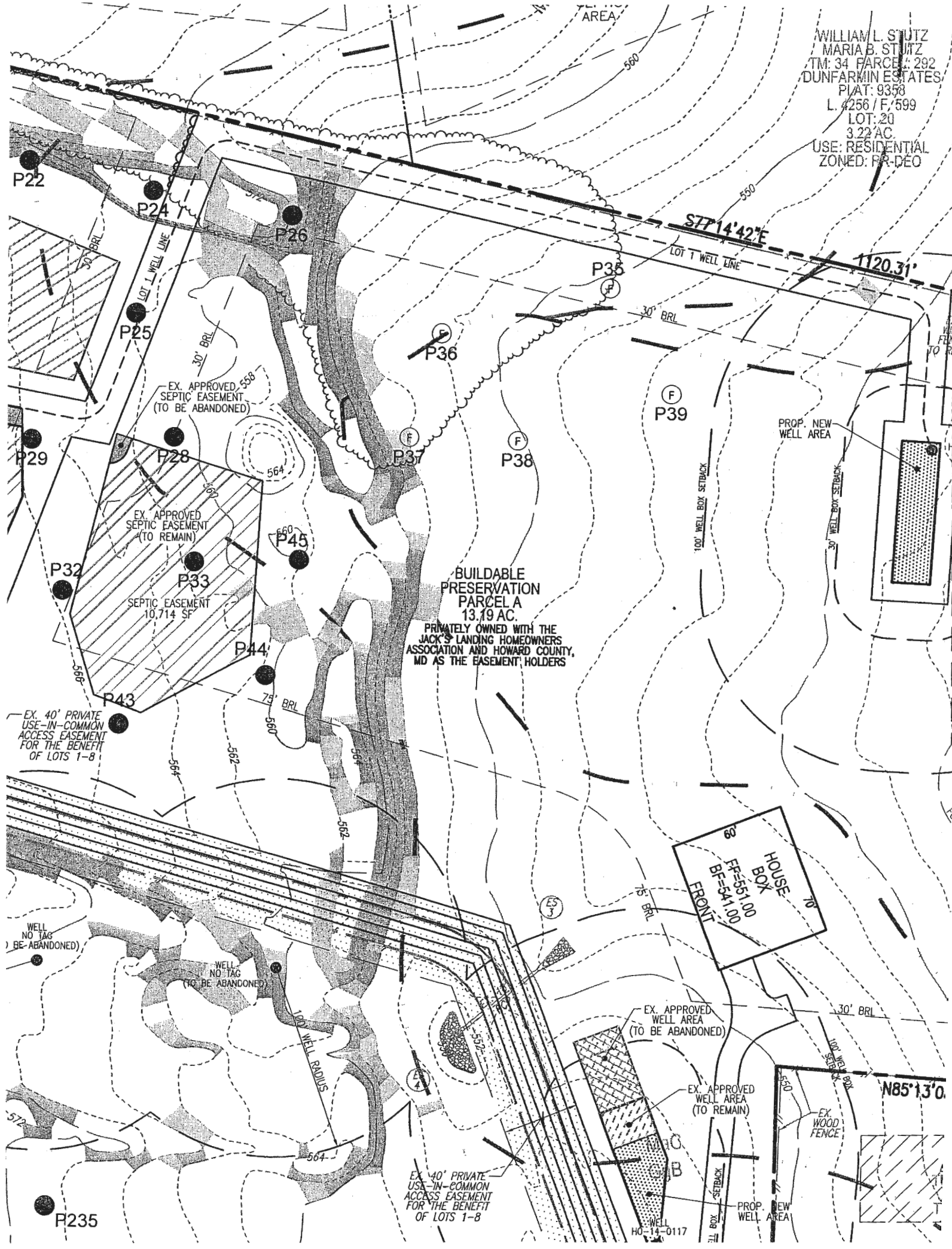
TRENCH WIDTH _____

INLET DEPTH _____

MAX. BOT DEPTH _____

EFFECTIVE SW _____

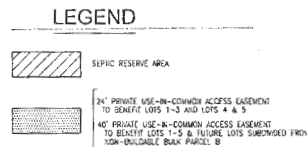
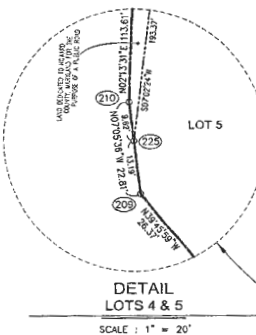
WILLIAM L. STUTZ
MARIA B. STUTZ
TM: 34 PARCELS: 292
DUNFARMIN ESTATES
PLAT: 9358
L. 4256 / F. 599
LOT: 20
3.22 AC.
USE: RESIDENTIAL
ZONED: RR-DEO



CURVE TABLE					
CURVE NO.	RADIUS	LENGTH	DELTA	TAN	CHORD
C-1	530.00'	114.63'	122°31'	57.54'	513.14' @ 9°11'14.4"

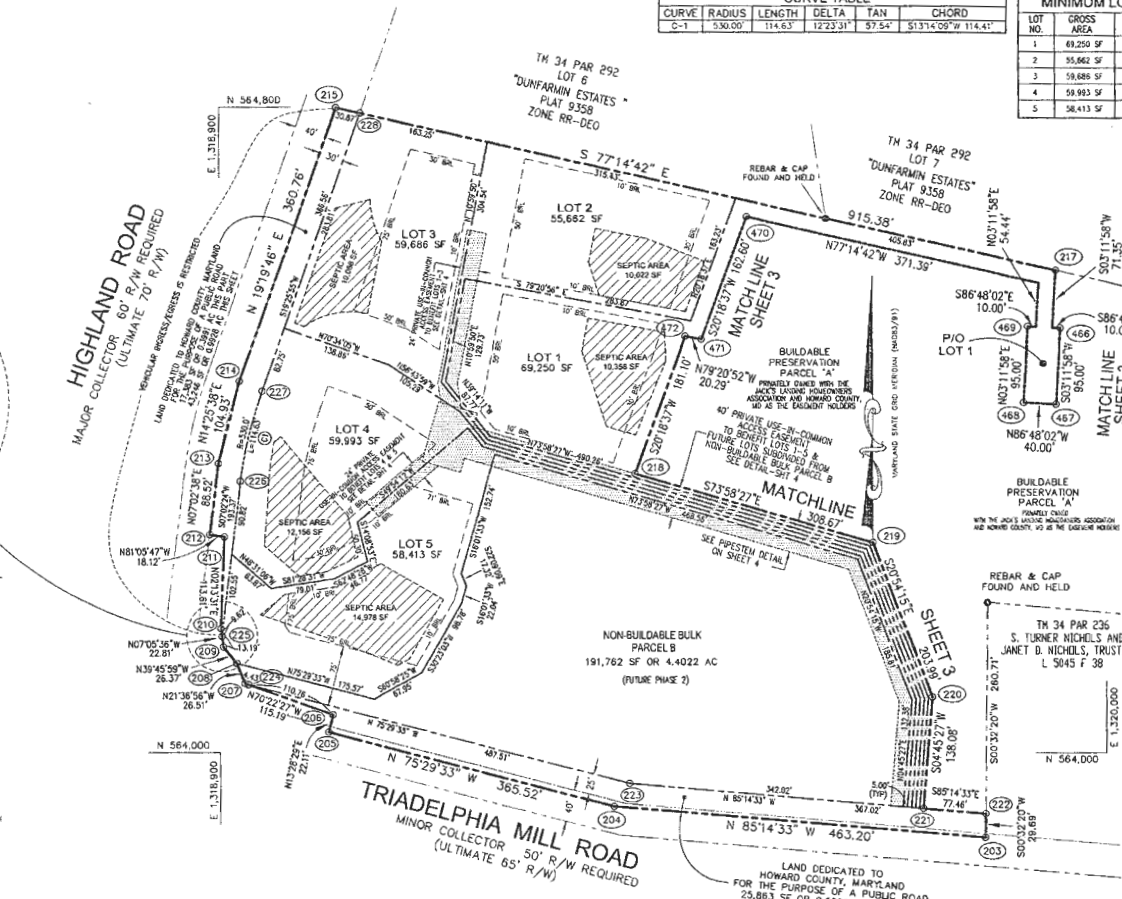
MINIMUM LOT SIZE CHART			
LOT NO.	GROSS AREA	PIPE STEM AREA	MINIMUM LOT SIZE
1	89,250 SF	19,327 SF	49,723 SF
2	95,862 SF	3,227 SF	50,435 SF
3	19,886 SF	4,341 SF	55,345 SF
4	59,993 SF	4,214 SF	56,779 SF
5	56,413 SF	1,951 SF	54,462 SF

COORDINATE TABLE		
NO.	NORTH	EAST
201	563895.2444	1319849.0981
204	563531.6602	1319387.4580
205	564095.2235	1319033.6361
208	564048.1776	1319038.7896
207	564000.4100	1318930.2913
208	564110.0576	1318820.5246
209	564150.3172	1318803.6578
210	564151.8606	1318800.8411
211	564268.4870	1318905.2527
212	564768.2967	1318887.3558
213	564335.1460	1318898.2119
214	564458.7671	1318924.3247
215	564796.1816	1319043.7624
217	564597.0939	1318925.2250
218	564344.7352	1319414.7880
219	564558.5199	1319170.8574
220	564068.9601	1319783.6346
221	563031.3582	1319772.1827
222	563874.9317	1319649.3774
223	563981.7997	1319406.4297
224	564083.9229	1318934.4610
225	564114.4182	1318802.2940
226	564335.3295	1318925.2250
227	564444.6952	1318951.2534
228	564792.3781	1319073.6746
466	565225.2921	1319942.6570
467	564444.4430	1319332.7247
468	564527.5276	1318802.6183
469	564444.4430	1319332.7247
471	564551.8293	1319486.7861
472	564514.5794	1318477.0402



AREA TABULATION CHART (THIS SHEET)

NUMBER OF BUILDABLE LOTS	5
NUMBER OF BUILDABLE PRESERVATION PARCELS	0
NUMBER OF NON-BUILDABLE BULK PARCELS	1
NUMBER OF OPEN SPACE LOTS	0
TOTAL LOTS AND/OR PARCELS TO BE RECORDED	6
AREA OF BUILDABLE LOTS	6,956.0 AC
AREA OF BUILDABLE PRESERVATION PARCELS	0.0000 AC
AREA OF NON-BUILDABLE BULK PARCELS	4.4022 AC
AREA OF OPEN SPACE LOTS	0.0000 AC
TOTAL AREA OF LOTS AND/OR PARCELS	11.3582 AC
AREA OF ROADWAY WIDENING TO BE RECORDED	0.9928 AC
TOTAL AREA OF SUBDIVISION TO BE RECORDED	12.3510 AC



WAR PLAT NO. 23953
RECORDED 250
10-28-16

LR - Plat Fee - Subdivision
Subdivision Name: Jack's Landing
Reference/Control: 23953
10/28/2016 11:07
#7193073 CC#583
Howard Co
Columbia/CC#5.03.07
Register 87

THE REQUIREMENTS 3-108, THE REAL PROPERTY ARTICLE, ANNOTATED CODE OF MARYLAND, 1989 REPLACEMENT VOLUME, (AS SUPPLEMENTED) AS FAR AS THEY RELATE TO THE MAKING OF THIS PLAT AND THE SETTING OF MARKERS HAVE BEEN COUPLED WITH
Thomas M. Hoff 7-20-16
THOMAS M. HOFF, JR.
PROPERTY LINE SURVEYOR, MD REG. NO. 267
Marty A. Howard 7/27/16
MARTY ANTHONY HOWARD
DATE

OWNER
MARTY A. HOWARD
P.O. BOX 740
CLARKSVILLE, MD 21029

DEVELOPER
LAND DESIGN & DEVELOPMENT, INC.
6318 FOREST STREET, SUITE 200
ELICOTT CITY, MD 21043
ATTN: MR. DONALD R. REIJER
(443) 367-0422

OWNER'S CERTIFICATE

I, MARTY ANTHONY HOWARD, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, ADOPT THIS FINAL PLAT OF SUBDIVISION, AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE DEPARTMENT OF PLANNING AND ZONING, ESTABLISH THE MAIN BUILDING RESTRICTION LINES AND GRANT UNTO HOWARD COUNTY, MARYLAND, ITS SUCCESSORS AND ASSIGNS: 1) THE RIGHT TO LAY, CONSTRUCT AND MAINTAIN SEWERS, DROPS, WATER PIPES AND OTHER MUNICIPAL UTILITIES AND SERVICES IN AND UNDER ALL ROADS OR STREET RIGHTS-OF-WAY AND THE SPECIFIC EASEMENT AREAS SHOWN HEREON; 2) THE RIGHT TO REQUIRE DEDICATION FOR PUBLIC USE OF THE BELTS OF THE STREETS AND/OR ROADS, THE FLOOD PLAINS AND OPEN SPACE WHERE APPLICABLE AND FOR GOOD AND VALUABLE CONSIDERATION, HEREBY GRANT THE RIGHT AND OPTION TO HOWARD COUNTY TO ACQUIRE THE FEE SIMPLE TITLE TO THE BELTS OF THE STREETS AND/OR ROADS AND FLOOD PLAINS, STORM DRAINAGE FACILITIES AND OPEN SPACE WHERE APPLICABLE; 3) THE RIGHT TO REQUIRE DEDICATION OF WATERWAYS AND DRAINAGE EASEMENTS FOR THE SPECIFIC PURPOSE OF THEIR CONSTRUCTION, REPAIR AND MAINTENANCE; 4) THAT NO BUILDING OR SIMILAR STRUCTURE OF ANY KIND SHALL BE ERRECTED ON OR OVER THE EASEMENTS AND RIGHTS-OF-WAY.

WITNESS OUR HAND AND SEAL THIS 27 DAY OF JULY 2016

Marty A. Howard
MARTY ANTHONY HOWARD

Megan Riggins
WITNESS

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREON IS CORRECT, THAT IT IS A SUBDIVISION OF PART OF THE LAND CONVEYED BY SAMUEL T. NICHOLS, JR. & JANET D. NICHOLS AND JAMES S. NICHOLS & G. DALE NICHOLS TO MARTY ANTHONY HOWARD BY DEED DATED FEBRUARY 16, 1994 AND RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN LIBER 3172 FOLIO 336.

I ALSO CERTIFY ALL HOMEOWNERS ARE IN OR WILL BE IN PLACE PRIOR TO THE ACCEPTANCE OF THE STREETS IN THE SUBDIVISION BY HOWARD COUNTY AS SHOWN, IN ACCORDANCE WITH THE ANNOTATED CODE OF MARYLAND, AS AMENDED AND BOUNDARY SURVEYOR IN ACCORDANCE WITH THE HOWARD COUNTY SUBDIVISION REGULATIONS.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 267, EXPIRATION DATE JULY 28, 2018.

Thomas M. Hoff 7-20-16
THOMAS M. HOFF, JR.
PROPERTY LINE SURVEYOR, MD REG. NO. 267

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS - SURVEYORS - PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043 726.218.481/2669

RECORDED AS PLAT NO. _____ ON _____
AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.

PLAT OF SUBDIVISION
JACK'S LANDING, PHASE 1
LOTS 1-5, BUILDABLE PRESERVATION PARCEL A, AND NON-BUILDABLE BULK PARCEL B
A SUBDIVISION OF TAX MAP 34 PARCEL 414 (3172 F 336)

ZONED: RR-DEO

DP2 REF'S: F-08-101, SP-06-14, BA-89-456, WP-13-184, WP-10-25, WP-11-093, WP-12-096, WP-13-112

TAX MAP 34 GRID 3 PARCEL 414
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 100'

JULY 20, 2016

SHEET 2 OF 4

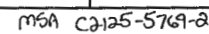
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2
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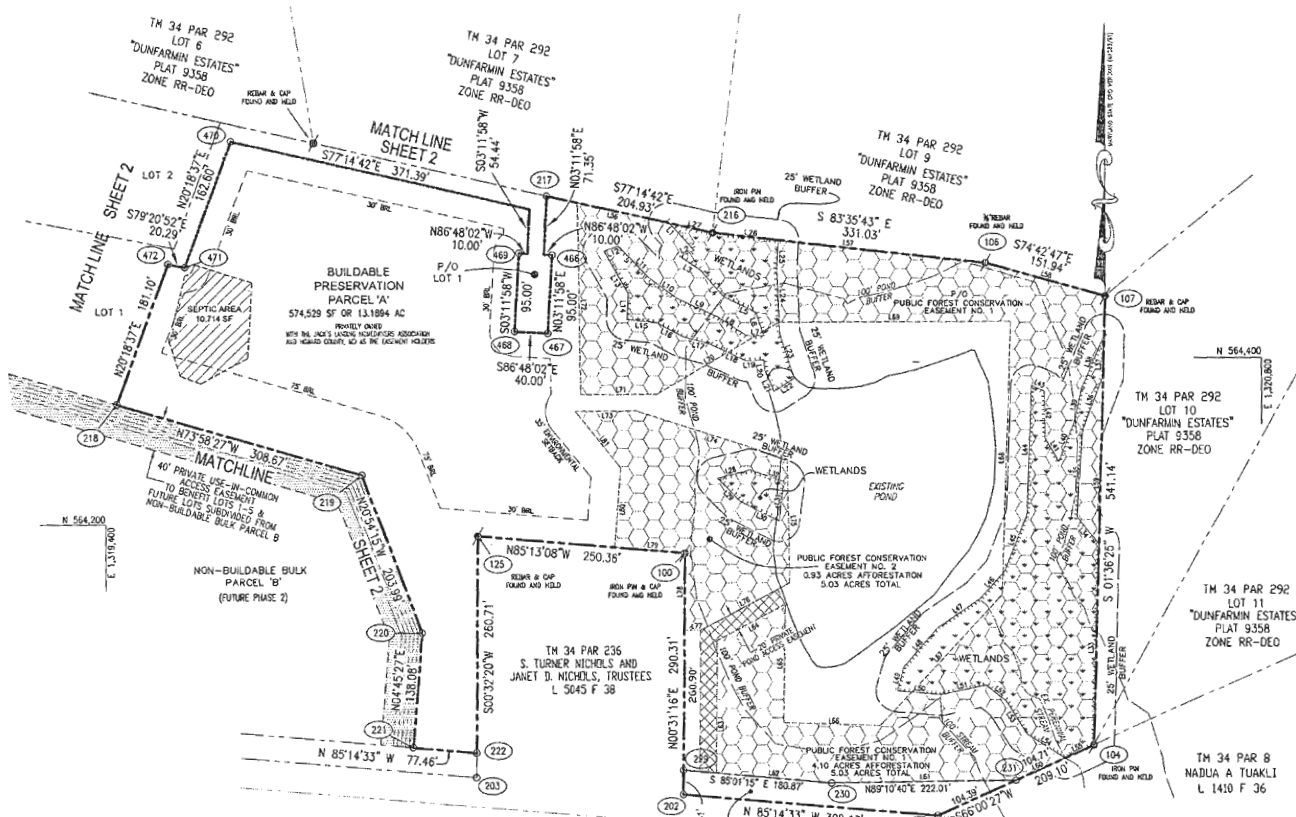
705A C3125-5769-2

F-08-101



WETLANDS AREA LINE TABLE

LINE	BEARING	DISTANCE
L1	S47°09'33"E	45.08
L2	S88°17'23"E	19.11
L3	S22°18'15"E	32.15
L4	S41°04'01"E	41.19
L5	S64°20'51"E	43.82
L6	S78°33'54"E	29.82
L7	S87°18'03"E	21.37
L8	S25°32'58"E	42.07
L9	N02°44'05"E	53.25
L10	S52°39'55"E	46.50
L11	N45°03'40"E	56.19
L12	S11°04'31"E	18.10
L13	S29°29'38"E	56.02
L14	S21°33'58"E	31.88
L15	S84°12'10"E	35.48
L16	S61°40'49"E	36.28
L17	S74°36'25"E	31.89
L18	S64°48'49"E	42.38
L19	N88°17'24"E	21.92
L20	S04°40'02"E	14.82
L21	S22°22'51"E	26.77
L22	N03°30'58"E	29.37
L23	N18°06'44"E	56.97
L24	N02°28'27"E	31.94
L25	N03°14'04"E	31.87
L26	N03°34'58"E	80.56
L27	N77°14'44"E	54.13
L28	S48°08'27"E	40.77
L29	S44°12'38"E	38.78
L30	S83°07'51"E	53.45
L31	N07°37'59"E	46.49
L32	N01°48'24"E	43.75
L33	N03°53'57"E	241.34
L34	N38°54'14"E	42.85
L35	N04°01'44"E	105.72
L36	N01°21'33"E	69.42
L37	N01°36'28"E	48.14
L38	S13°18'09"E	70.43
L39	S17°06'55"E	42.82
L40	S14°23'37"E	49.88
L41	N30°04'28"E	37.45
L42	N01°14'34"E	25.53
L43	N45°08'27"E	17.48
L44	S07°58'45"E	154.08
L45	S11°38'33"E	76.51
L46	S42°45'25"E	43.39
L47	S05°49'28"E	67.86
L48	S60°25'39"E	62.34
L49	S15°03'45"E	29.44
L50	S85°15'04"E	53.12
L51	N02°21'11"E	55.44
L52	S01°38'02"E	31.80
L53	S10°46'45"E	46.01
L54	S2°49'37"E	54.61
L55	N85°20'29"E	39.25



COORDINATE TABLE

NO.	NORTH	EAST
100	564184.7604	1220101.3205
101	564334.1316	1195529.2620
102	564514.8228	1192045.3806
103	564474.8651	1192061.9878
104	564661.3160	1191952.6131
105	564185.6273	1191851.8300
106	564846.9106	1192045.7487
107	564374.4458	1192039.5853
108	564895.2444	1191949.0981
109	564551.8480	1192013.4300
110	564587.0830	1191958.2580
111	564344.7352	1191844.1720
112	564259.5199	1191710.8014
113	564268.9501	1191783.6146
114	563931.3582	1191775.1827
115	563924.9347	1191848.3774
116	563973.8658	1192008.4777
117	563588.1717	1192078.1317
118	563891.3576	1192061.1194
119	564259.5199	1191942.5570
120	564130.4432	1191957.2547
121	564439.6757	1191887.3170
122	564557.5276	1191902.6183
123	564581.3176	1191925.4168
124	564510.8293	1191996.9781
125	564514.5724	1191977.0452

PUBLIC FOREST CONSERVATION EASEMENT LINE TABLE

LINE	BEARING	DISTANCE
L56	S77°17'55"E	357.74
L57	S03°14'37"E	331.69
L58	S01°44'44"E	153.00
L59	S01°36'37"W	540.91
L60	S60°27'03"W	104.74
L61	S02°19'40"E	222.01
L62	N85°51'15"W	142.86
L63	N02°21'37"E	158.98
L64	N48°29'37"E	84.74
L65	S00°06'17"W	142.07
L66	N85°51'14"E	115.68
L67	N03°14'12"E	715.77
L68	N02°30'27"E	330.29
L69	N04°47'24"W	279.47
L70	S09°44'37"E	172.56
L71	N05°52'17"W	91.93
L72	N09°42'56"W	232.86
L73	N85°52'14"E	74.08
L74	S72°28'53"E	195.77
L75	N05°52'17"E	170.37
L76	S02°25'53"W	123.11
L77	N85°58'30"W	19.80
L78	N02°32'14"E	82.82
L79	N05°11'41"W	85.80
L80	N04°48'54"E	98.29
L81	N05°51'17"W	87.40

LEGEND

- PUBLIC FOREST CONSERVATION EASEMENT (AFFORESTATION 143 ACRES)
- WETLANDS
- 20' PRIVATE FOREST ACCESS EASEMENT
- 40' PRIVATE USE-IN-COMMON ACCESS EASEMENT TO BENEFIT LOTS 1-4 & FUTURE LOTS SUBSEQUENT FROM NON-BUILDABLE BULK PARCEL B
- SEPTIC RESERVE AREA

AREA TABULATION CHART (THIS SHEET)

NUMBER OF BUILDABLE LOTS	0
NUMBER OF BUILDABLE PRESERVATION PARCELS	1
NUMBER OF NON-BUILDABLE BULK PARCELS	0
NUMBER OF OPEN SPACE LOTS	0
TOTAL LOTS AND/OR PARCELS TO BE RECORDED	0.0000 AC
AREA OF BUILDABLE LOTS	0.0000 AC
AREA OF BUILDABLE PRESERVATION PARCELS	13.1894 AC
AREA OF NON-BUILDABLE BULK PARCELS	0.0000 AC
AREA OF OPEN SPACE LOTS	0.0000 AC
TOTAL AREA OF LOTS AND/OR PARCELS	13.1894 AC
AREA OF ROADWAY WIDENING TO BE RECORDED	0.2668 AC
TOTAL AREA OF SUBDIVISION TO BE RECORDED	13.4562 AC

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.

Mary Ann Howard 10/5/2016
HOWARD COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Clenden 10-19-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION JP DATE
Keptelchew 10-21-16
DIRECTOR DATE

OWNER'S CERTIFICATE

I, MARY ANTHONY HOWARD, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, ADOPT THIS FINAL PLAN OF SUBDIVISION, AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAN BY THE DEPARTMENT OF PLANNING AND ZONING, ESTABLISH THE VARIOUS BUILDING RESTRICTION LINES AND GRANT UNTO HOWARD COUNTY, MARYLAND, ITS SUCCESSORS AND ASSIGNS: 1) THE RIGHT TO LAY, CONSTRUCT AND MAINTAIN SEWERS, DRAINS, WATER PIPES AND OTHER MUNICIPAL UTILITIES AND SERVICES AND UNDER ALL RIGHTS-OF-WAY AND THE SPECIFIC EASEMENT AREAS SHOWN HEREON; 2) THE RIGHT TO REQUIRE DEDICATION FOR PUBLIC USE OF THE BEDS OF THE STREETS AND/OR ROADS, THE FLOOD PLAINS AND OPEN SPACE THERE APPLICABLE AND FOR GOOD AND VALUABLE CONSIDERATION, HEREBY GRANT THE RIGHT AND OPTION TO HOWARD COUNTY TO ACQUIRE THE FEE SIMPLE TITLE TO THE BEDS OF THE STREETS AND/OR ROADS AND FLOOD PLAINS, STORM DRAINAGE FACILITIES AND OPEN SPACE WHERE APPLICABLE; 3) THE RIGHT TO REQUIRE DEDICATION OF WATERWAYS AND DRAINAGE EASEMENTS FOR THE SPECIFIC PURPOSE OF THEIR CONSTRUCTION, REPAIR AND MAINTENANCE; 4) THAT NO BUILDING OR SIMILAR STRUCTURE OF ANY KIND SHALL BE ERRECTED ON OR OVER THE SUBDIVISIONS AND RIGHTS-OF-WAY.

WITNESS OUR HANDS THIS 21ST DAY OF JULY 2016

Mary Anthony Howard
MARY ANTHONY HOWARD

Megan Ruggier
WITNESS

DEVELOPER
LAND DESIGN & DEVELOPMENT, INC.
8318 FOREST STREET, SUITE 200
ELLCOTT CITY, MD 21043
ATTN: MR. DONALD R. REJUNER
(443) 367-0422

OWNER
MARTY A. HOWARD
P.O. BOX 740
CLARKSVILLE, MD 21029

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE FINAL PLAN SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF PART OF THE LAND CONVEYED BY SHARPE L. NICHOLS, JR. & JAMES D. NICHOLS & JAMES E. NICHOLS & E. DANCE INDEXES TO MARY SURVEY HOWARD BY DEED DATED JULY 16, 1994 AND RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN LIBER 3172 FOLD 336.

I ALSO CERTIFY ALL MONUMENTS ARE IN OR WILL BE IN PLACE PRIOR TO THE ACCEPTANCE OF THE STREETS IN THE SUBDIVISION BY HOWARD COUNTY AS SHOWN, IN ACCORDANCE WITH THE ANNOTATED CODE OF MARYLAND, AS REVISED AND BOKINGHAY SURVEY IS IN ACCORDANCE WITH THE HOWARD COUNTY SUBDIVISION REGULATIONS.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 267, EXPIRATION DATE JULY 28, 2018.

Robert H. Vogel 7-2016
PROPERTY LINE SURVEYOR, MD REG. NO. 267

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8401 MAIN STREET
ELLCOTT CITY, MD 21043 TEL: 410-441-7661

RECORDED AS PLAT NO. _____ ON _____
AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.

PLAT OF SUBDIVISION

JACK'S LANDING, PHASE 1
LOTS 1-5, BUILDABLE PRESERVATION PARCEL A, AND NON-BUILDABLE BULK PARCEL B
A SUBDIVISION OF TAX MAP 34 PARCEL 414 (L 3172 F 336)

ZONED: RR-DEO

DP2 REF: F-08-101, SP-06-14, BA-09-45E, UP-13-184, WP-10-25, WP-11-030, WP-12-096, WP-13-112

TAX MAP 34 GRID 3 PARCEL 414
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 100'

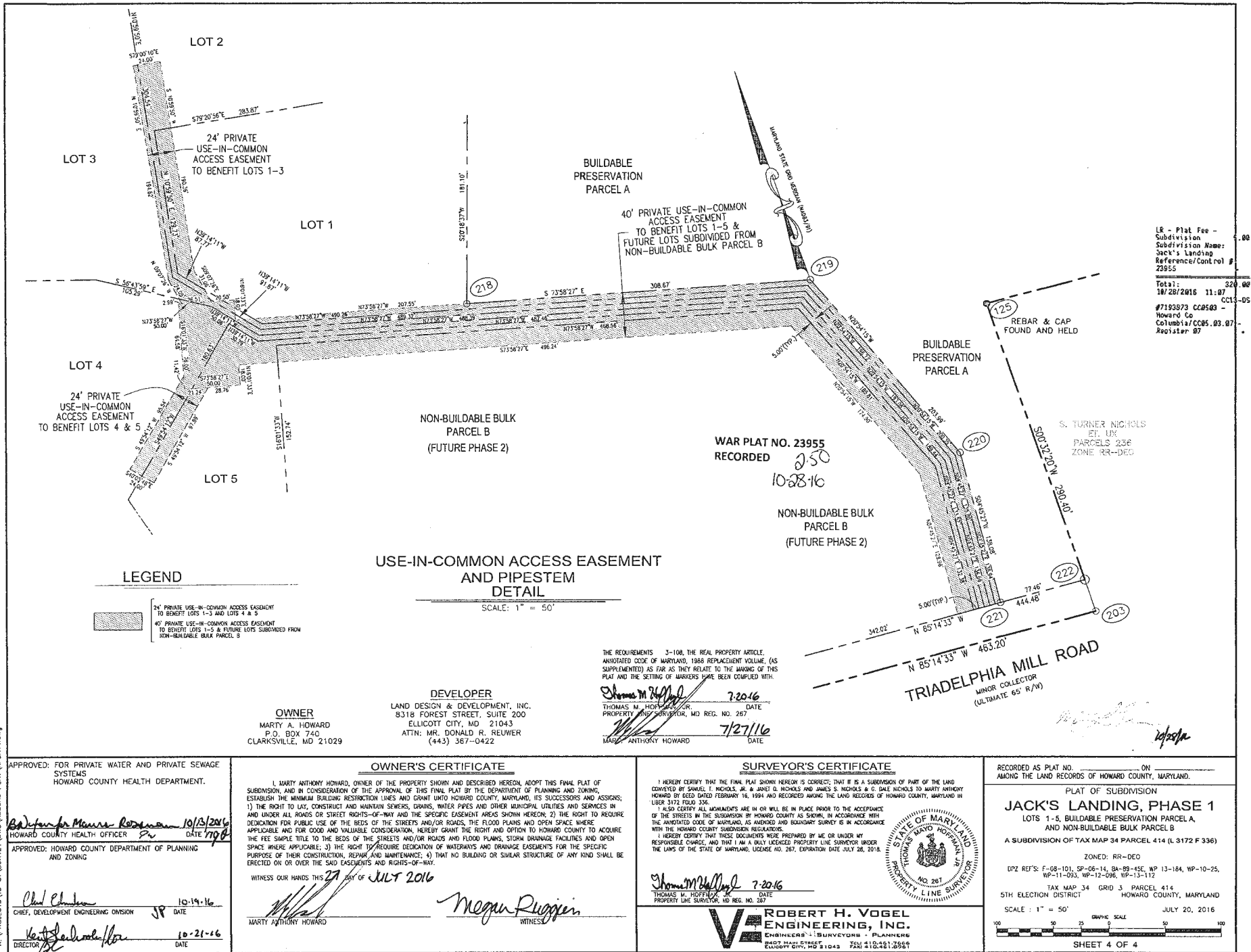
JULY 20, 2016

SHEET 3 OF 4

LR - Plat Fee -
Subdivision
Subdivision Name:
Jack's Landing
Reference/Control #:
28954

THE REQUIREMENTS 3-106, THE REAL PROPERTY ARTICLE, ANNOTATED CODE OF MARYLAND, 1988 REPLACEMENT VOLUME, (AS SUPPLEMENTED) AS FAR AS THEY RELATE TO THE MAKING OF THIS PLAN AND THE SETTING OF MARKERS HAVE BEEN COMPLIED WITH.

Thomas M. Howard 7-2016
THOMAS M. HOWARD, MD REG. NO. 267 DATE
Mary Anthony Howard 7-27-16
MARY ANTHONY HOWARD DATE



WETLANDS AREA LINE TABLE

LINE	BEARING	DISTANCE
L1	S47°09'33"E	45.06
L2	S89°27'15"W	19.11
L3	S55°36'12"E	39.19
L4	S41°04'01"E	41.19
L5	S84°20'51"E	43.87
L6	S18°53'54"E	29.87
L7	N02°09'04"W	21.32
L8	N04°52'46"W	42.47
L9	N05°44'48"W	53.25
L10	N04°25'15"W	46.32
L11	N40°02'40"W	56.18
L12	S27°04'31"W	18.10
L13	S29°29'30"W	36.07
L14	S01°32'54"W	31.86
L15	S04°12'02"E	35.48
L16	S01°40'49"E	36.28
L17	S74°36'25"E	35.86
L18	S04°48'02"E	41.08
L19	N05°12'52"E	21.92
L20	N04°00'02"E	14.02
L21	S24°22'51"E	26.77
L22	N02°36'56"E	29.32
L23	N18°06'44"W	58.92
L24	N02°29'27"W	81.94
L25	N03°43'41"E	31.69
L26	N03°34'36"W	80.56
L27	N77°14'44"W	54.13
L28	S76°06'27"W	40.77
L29	S44°10'30"E	38.76
L30	S04°07'51"E	53.45
L31	N07°37'50"E	48.49
L32	N10°16'24"W	43.75
L33	N07°29'31"E	281.24
L34	N03°54'11"W	42.86
L35	N04°01'44"E	100.72
L36	N02°12'17"E	80.42
L37	N07°26'01"E	48.14
L38	S27°28'02"W	70.43
L39	S17°58'33"W	49.82
L40	S21°23'17"W	48.86
L41	N04°06'30"W	52.45
L42	N01°14'34"W	58.53
L43	N04°06'37"W	17.48
L44	S07°04'47"W	124.58
L45	S17°33'33"W	76.51
L46	S42°45'55"W	43.38
L47	S55°40'32"W	82.86
L48	S47°02'37"W	62.34
L49	S15°03'43"W	29.44
L50	S05°15'04"W	33.12
L51	N07°21'18"E	56.44
L52	S51°30'01"E	31.80
L53	S52°56'45"E	46.01
L54	S57°49'37"E	54.81
L55	N05°09'29"E	38.25

AREA TABULATION CHART (THIS SHEET)

NUMBER OF BUILDABLE LOTS	0
NUMBER OF BUILDABLE PRESERVATION PARCELS	1
NUMBER OF NON-BUILDABLE BULK PARCELS	0
NUMBER OF OPEN SPACE LOTS	0
TOTAL LOTS AND/OR PARCELS TO BE RECORDED	1
AREA OF BUILDABLE LOTS	0.0000 AC
AREA OF BUILDABLE PRESERVATION PARCELS	13.1894 AC
AREA OF NON-BUILDABLE BULK PARCELS	0.0000 AC
AREA OF OPEN SPACE LOTS	0.0000 AC
TOTAL AREA OF LOTS AND/OR PARCELS	13.1894 AC
AREA OF ROADWAY WIDENING TO BE RECORDED	0.2668 AC
TOTAL AREA OF SUBDIVISION TO BE RECORDED	13.4562 AC

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.

APPROVED: *Maria Rodman* 10/3/2016
HOWARD COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Chubb 10-19-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kyle Schell 10-21-16
DIRECTOR DATE

LEGEND



OWNER'S CERTIFICATE

I, MARTY ANTHONY HOWARD, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREIN, ADOPT THIS FINAL PLAT OF SUBDIVISION AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE DEPARTMENT OF PLANNING AND ZONING, ESTABLISH THE NEIGHBORHOOD BUILDING RESTRICTIONS LINES AND GRANT UNTO HOWARD COUNTY, MARYLAND, ITS SUCCESSORS AND ASSIGNS: 1) THE RIGHT TO LAY, CONSTRUCT AND MAINTAIN SEWERS, DRAINAGE, WATER PIPES AND OTHER MUNICIPAL UTILITIES AND SERVICES IN AND UNDER ALL ROADS OR STREET RIGHTS-OF-WAY AND THE SPECIFIC EASEMENT AREAS SHOWN HEREON; 2) THE RIGHT TO REQUIRE DEDICATION FOR PUBLIC USE OF THE BEDS OF THE STREETS AND/OR ROADS, THE FLOOD PLAINS AND OPEN SPACE WHERE APPLICABLE AND FOR CDDO AND VALUABLE CONSIDERATION, HEREBY GRANT THE RIGHT AND OPTION TO HOWARD COUNTY TO ACQUIRE THE FEE SIMPLE TITLE TO THE BEDS OF THE STREETS AND/OR ROADS AND FLOOD PLAINS, STORM DRAINAGE FACILITIES AND OPEN SPACE WHERE APPLICABLE; 3) THE RIGHT TO REQUIRE DEDICATION OF WATERWAYS AND DRAINAGE EASEMENTS FOR THE SPECIFIC PURPOSE OF THEIR CONSTRUCTION, REPAIR AND MAINTENANCE; 4) THAT NO BUILDING OR SIMILAR STRUCTURE OF ANY KIND SHALL BE ERECTED ON OR OVER THE EASEMENTS AND RIGHTS-OF-WAY.

WITNESS OUR HANDS THIS 27 DAY OF JULY 2016

MARTY ANTHONY HOWARD

Megan Ruggien
WITNESS

OWNER
MARTY A. HOWARD
P.O. BOX 740
CLARKSVILLE, MD 21029

DEVELOPER
LAND DESIGN & DEVELOPMENT, INC.
8318 FOREST STREET, SUITE 200
ELLICOTT CITY, MD 21043
ATTN: MR. DONALD B. REIFNER
(443) 367-6422

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF PART OF THE LAND COMMERCE BY SHARLETT L. NICHOLS, JR. & JAMES D. NICHOLS & JAMES S. NICHOLS & C. G. NICHOLS TO MARTY ANTHONY HOWARD BY DEED DATED FEBRUARY 15, 1994 AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN BOOK 3175 FOLIO 236.

I ALSO CERTIFY ALL MONUMENTS ARE IN OR WILL BE IN PLACE PRIOR TO THE ACCEPTANCE OF THE STREETS IN THE SUBDIVISION BY HOWARD COUNTY AS SHOWN, IN ACCORDANCE WITH THE APPROPRIATE CODE OF MARYLAND, IS AMENDED AND BOUNDARY SURVEY IS IN ACCORDANCE WITH THE HOWARD COUNTY SUBDIVISION REGULATIONS.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 267, EXPIRATION DATE JULY 20, 2018.

Sharon M. Vogel 7-20-16
THOMAS M. HOWARD, JR.
PROPERTY LINE SURVEYOR, MD REG. NO. 267

ROBERT H. VOGEL
ENGINEERS - SURVEYORS - PLANNERS
2407 MAIN STREET
ELLICOTT CITY, MD 21048 TEL 410-481-2888



RECORDED AS PLAT NO. 23954 ON 10/28/16
AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.

PLAT OF SUBDIVISION
JACK'S LANDING, PHASE 1
LOTS 1-5, BUILDABLE PRESERVATION PARCELS A AND NON-BUILDABLE BULK PARCEL B
A SUBDIVISION OF TAX MAP 34 PARCEL 414 (L 3172 F 336)

ZONED: RR-DEO

OFF. REF'S: F-08-101, SP-06-14, RA-08-056, WP-13-104, WP-10-23, WP-11-093, WP-12-096, WP-13-112

TAX MAP 34 GRID 3 PARCEL 414
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 100' JULY 20, 2016

SHEET 3 OF 4

COORDINATE TABLE

NO.	NORTH	EAST
100	564164.7604	1320101.3205
104	564933.9346	1320098.7520
106	564514.9228	1320485.3958
107	564474.8641	1320611.8578
110	564661.3155	1319952.8444
120	564185.6273	1316850.8300
201	563846.9108	1320406.7487
202	563714.4858	1320098.6803
203	563695.2444	1319849.0981
216	564551.8489	1320136.4300
217	564593.0838	1320136.1550
218	564344.7352	1319414.1780
219	564295.5199	1319710.8514
220	564305.6501	1319710.8514
221	564391.3592	1319777.1827
222	563924.9347	1319849.3774
223	563900.8488	1320028.9477
230	563668.1117	1320235.1517
231	563891.5276	1320201.1194
406	564552.7951	1319847.5570
467	564430.4432	1319837.2547
468	564430.6757	1319880.3170
469	564537.9798	1319802.8193
470	564683.3176	1318555.4166
471	564510.8283	1319496.9781
472	564514.5794	1319477.0402

PUBLIC FOREST CONSERVATION EASEMENT LINE TABLE

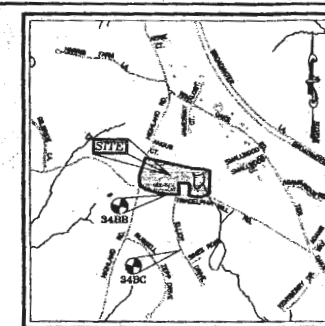
LINE	BEARING	DISTANCE
L56	S77°17'10"E	187.74
L57	S81°34'32"E	131.62
L58	S24°41'44"E	152.00
L59	S01°36'37"W	94.91
L60	S05°57'15"W	104.74
L61	LINE SHOWN	22.61
L62	N05°01'13"W	146.98
L63	N04°11'37"E	158.95
L64	N02°23'17"E	154.46
L65	S00°56'17"W	162.07
L66	S08°05'14"E	115.68
L67	N02°18'12"E	215.72
L68	N00°12'25"E	130.21
L69	N04°47'45"E	278.47
L70	S09°44'37"W	172.58
L71	S05°52'12"W	81.83
L72	N00°42'04"W	173.86
L73	N00°32'34"E	74.08
L74	S72°28'23"E	192.77
L75	S05°51'27"E	140.31
L76	S02°23'37"W	123.11
L77	N00°58'26"W	16.80
L78	N00°37'10"E	82.62
L79	N05°14'14"E	85.80
L80	N04°46'56"E	80.29
L81	N03°51'17"W	87.40

THE REQUIREMENTS 3-108, THE REAL PROPERTY ARTICLE, ANNOTATED CODE OF MARYLAND, 1986 REPLACEMENT VALUE, (AS SUPPLEMENTED) AS FAR AS THEY RELATE TO THE MAKING OF THIS PLAT AND THE SETTING OF MARKERS HAVE BEEN COMPLIED WITH.

Sharon M. Vogel 7-20-16
THOMAS M. HOWARD, JR.
PROPERTY LINE SURVEYOR, MD REG. NO. 267
Marty Anthony Howard 7/27/16
DATE

[illegible]

	SHEET 2	SHEET 3	TOTAL
NUMBER OF BUILDABLE LOTS	5	0	5
NUMBER OF BUILDABLE PRESERVATION PARCELS	0	1	1
NUMBER OF NON-BUILDABLE (BLK) PARCELS	1	0	1
NUMBER OF OPEN SPACE LOTS	0	0	0
TOTAL LOTS AND/OR PARCELS TO BE RECORDED	6	1	10
AREA OF BUILDABLE LOTS	6,596.60 AC	0.0000 AC	6,596.60 AC
AREA OF BUILDABLE PRESERVATION PARCELS	0.0000 AC	13,189.94 AC	13,189.94 AC
AREA OF NON-BUILDABLE (BLK) PARCELS	4.4072 AC	0.0000 AC	4.4072 AC
AREA OF OPEN SPACE LOTS	0.0000 AC	0.0000 AC	0.0000 AC
TOTAL AREA OF LOTS AND/OR PARCELS	11,008.32 AC	13,189.94 AC	24,547.46 AC
AREA OF ROADWAY W/INDEING TO BE RECORDED	0.9976 AC	0.2668 AC	1.2566 AC
TOTAL AREA OF SUBDIVISION TO BE RECORDED	12,351.10 AC	13,546.82 AC	25,807.87 AC

[illegible][illegible]

VICINITY MAP
SCALE 1"=2000'
ADC MAP: 13 K-8

DENSITY EXCHANGE CHART	
TOTAL GROSS AREA OF SUBDIVISION	75.81 ACRES
AREA OF 300 FEET FLOODPLAIN	0.66 ACRES
AREA OF 25% SLOPES (OUTSIDE FLOODPLAIN)	0.00 ACRES
NET TRACT AREA	75.13 ACRES
MAXIMUM NUMBER OF LOTS ALLOWED	$25.13 / 2 = 12$
NUMBER OF RESIDENTIAL UNITS ALLOWED BY ZONING	$25.13 / 4.25 = 6$
NUMBER OF RESIDENTIAL UNITS PROPOSED	$6 \text{ (PHASE 1)} + 3 \text{ (PHASE 2)} = 9 \text{ TOTAL}$
NUMBER OF CDD UNITS REQUIRED	$= 3$
SENDING PARCEL INFORMATION	TRACT 1467, 15, GRID 12, PARCELS 110 3064 SOUTH ROAD, WOODBRIDGE, MI POWERTY ELECTION DISTRICT

COORDINATE TABLE		
NO.	NORTH	EAST
100	5644.844.7604	1320201.05
101	5646.33.8746	1320099.7207
109	564514.9224	1320099.7207
120	5644.74.8641	1320121.9527
125	5645.05.6273	1319851.8300
130	5644.84.9106	1320475.7448
131	5644.84.9106	1320475.7448
203	5639.245.4424	1319469.0900
204	5639.33.6602	1319387.6602
205	5640.02.2235	1319333.6386
206	5640.04.7278	1319347.6386
207	5640.05.4700	1319347.6386
208	5641.05.0576	1319220.5225
209	5641.50.3772	1318960.1878
210	5641.52.0646	1318960.1878
211	5641.56.4848	1318960.1878
212	5642.08.2707	1318960.1878
213	5644.52.1460	1319098.2111
214	5644.58.7671	1319274.3544
215	5644.99.0118	1319043.7665

THE REQUIREMENTS 3-108, THE REAL PROPERTY ARTICLE, ANNOTATED CODE OF MARYLAND, 1988 REPLACEMENT VOLUME, (SUPPLEMENTED) AS FAR AS THEY RELATE TO THE MAKING OF A PLAY AND THE SETTING OF MARKERS HAVE BEEN COMPLIED WITH.

THOMAS M. HOFFMAN, JR. DATE 7-20-16
PROPERTY LINE SURVEYOR, MO REG. NO. 267
MARTY ANTHONY HOWARD DATE 7/27/16

BY ANDREW HOWARD, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, AGAINST THE FINAL PLAT OF THE PROJECT, AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE DEPARTMENT OF PLANNING AND ZONING, THE CITY OF LOS ANGELES, AND THE CITY OF HAWAII COUNTY, ITS SUCCESSORS, AND ASSIGNMENT TO LAY, CONSTRUCT AND MAINTAIN SEWERS, DRAINS, WATER PIPES AND OTHER MINOR UTILITIES AND SERVICES IN PUBLIC USE OF THE BEDS OF THE STREETS AND/OR ROADS, THE FLOOD PLAINS AND OPEN SPACE RIGHT TO FLOOD HAZARD AND VALUABLE CONSIDERATION, HEREBY GRANT THE RIGHT AND OPTION TO FORWARD COUNTER TO ACQUIRE THE TITLE TO THE BEDS OF THE STREETS AND/OR ROADS AND FLOOD PLAINS, AND OPEN SPACE AREAS OPEN TO THE PUBLIC, FOR THE PURPOSE OF DEDICATION OF WATERWAYS AND DRAINAGE EASEMENTS FOR THE SPECIFIC REPAIR CONSTRUCTION, REPAIR AND MAINTENANCE, 4) THAT NO BUILDING OR SIMILAR STRUCTURE OF ANY KIND SHALL BE OVER THE SHAD EASEMENTS AND RIGHTS-OF-WAY.

WITNESS OUR HANDS, THIS 27 DAY OF JULY 2016

MARTIN LUTHER KING, JR.

Megan Ruggien
WITNESS

I HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREIN IS CORRECT; THAT IT IS A SUBDIVISION OF PART OF THE LAND CONTAINED BY PARCELS 1, 2, 3, 4 AND 5 IN JAMES T. HICKLEY AND MARY E. HICKLEY'S & JOSEPH W. HICKLEY'S DEEDS DATED JANUARY 1870, RECORDED IN THE PUBLIC RECORDS OF HANCOCK COUNTY, MISSISSIPPI, IN VOLUME 16, PAGE 197, AND DATED FEBRUARY 16, 1894 AND RECORDED AMONG THE LAND RECORDS OF HANCOCK COUNTY, MISSISSIPPI, IN JANUARY 1922 FOLIO 30.

I ALSO HEREBY AFFIRM AND WARRANT AS OF MY WILL AND IN PLACE THEREIN TO THE ACCEPTANCE OF THE STREETS IN THE SUBDIVISION BY HANCOCK COUNTY AS SHOWN, IN ACCORDANCE WITH THE UNFINISHED CODE OF MISSISSIPPI, AS AMENDMENT AND BROWNISH SLAVEY IS IN ACCORDANCE WITH THE UNFINISHED CODE OF MISSISSIPPI, SECTION 15-2-24 AND 15-2-25.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE STATE OF MISSISSIPPI.

STATE OF MISSISSIPPI
COUNTY OF HANCOCK

THOMAS M. HOFFMAN, JR. DATE
PROPERTY LINE SURVEYOR NO REC NO. 267

V **ROBERT H. VOGEL**
ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL 410.461.7888

RECORDED AS PLAT NO. 23952 ON 10/28/16
AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.

PLAT OF SUBDIVISION
JACK'S LANDING, PHASE 1
LOTS 1-5, BUILDABLE PRESERVATION PARCEL A,
AND NON-BUILDABLE BULK PARCEL B
A SUBDIVISION OF TAX MAP 34 PARCEL 414 (L 3172 F 336)

ZONED: RR-DEO
DPZ REF'S: F-08-101, SP-06-14, BA-89-45E, WP-13-184, WP-10-25,
WP-11-093, WP-12-096, WP-13-112, WP-13-184, WP-16-
TAX MAP 34 GRID 3 PARCEL 414
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

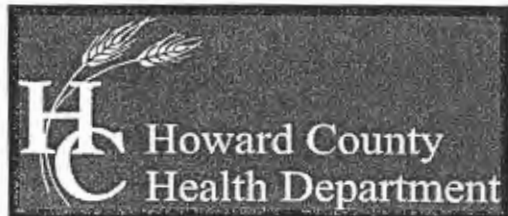
SCALE: 1" = 200' JULY 20, 20

GRAPHIC SCALE



SHEET 1 OF 4

F-08-101



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Subdivision File, Lot files for lots 1-5, Nonbuildable Bulk Parcel B, and Preservation Parcel A, Jacks Landing Subdivision

FROM: Jeff Williams *JW*
Program Supervisor, Well & Septic Program

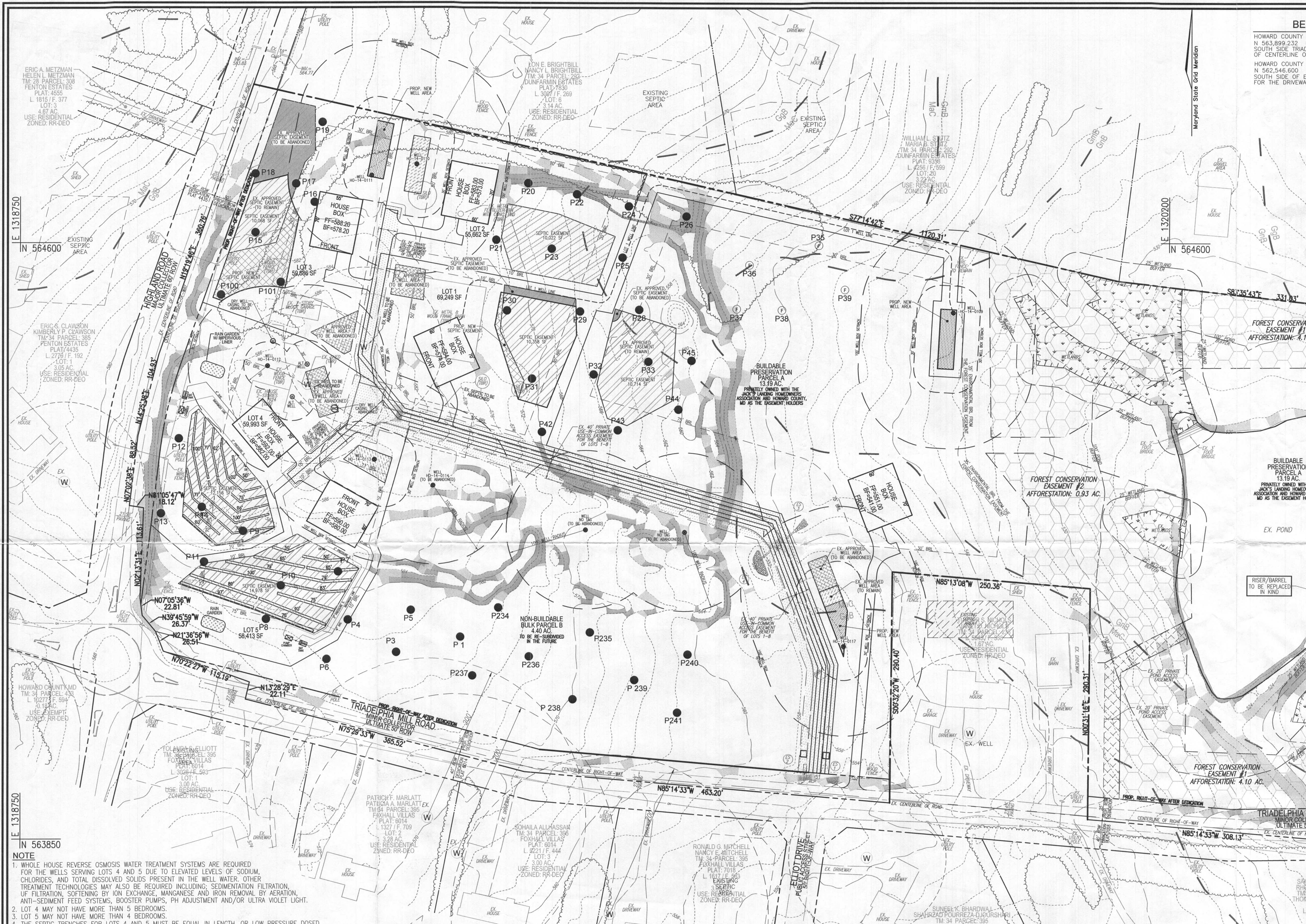
RE: Jack's Landing Subdivision, Tax Map 34, Grid 3, Parcel 414

DATE: May 25, 2016

This memo is intended to serve as a summary of conditions affecting the availability of onsite well and onsite sewage disposal at the property located at Tax Map 34, Grid 3, Parcel 414, subdivided as the Jack's Landing subdivision in 2016

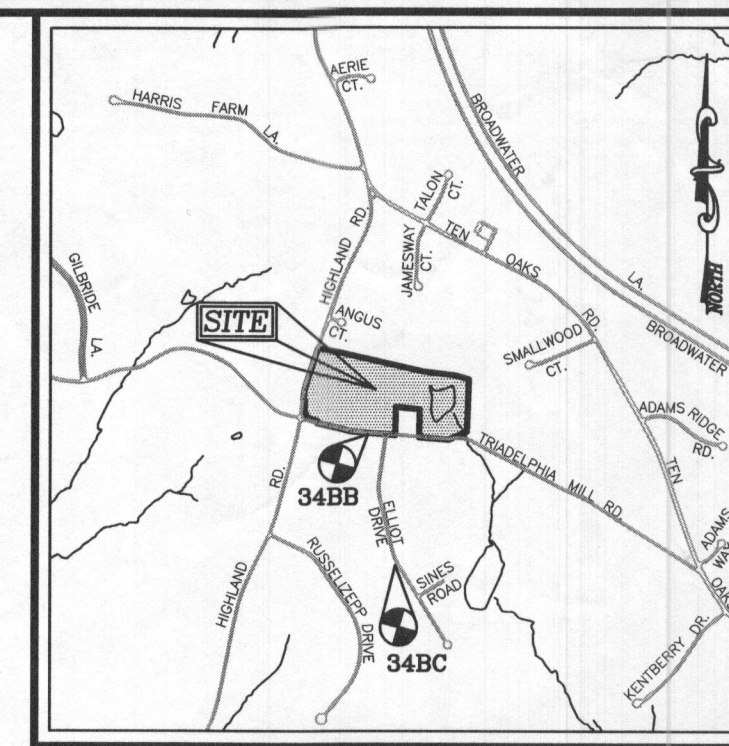
- A perc certification plan was approved on February 6, 2014 for a subdivision for lots 1-8 and Preservation Parcel A. Subsequent well drilling in advance of the final record plat revealed low water yield and elevated levels of Sodium (Na), Chloride (Cl), and Total Dissolved Solids (TDS) for the following lots:
 - Lots 1, 3, 4, 5, 6 had elevated levels of Na, Cl, and TDS
 - Lots 4, 7, 8, and Parcel A had low yield.
 - Wells with yields of 1 gpm or greater were never obtained on lots 7 and 8.
 - Elevated levels of MTBA were recorded on lot 6. Subsequent purging and retested showed levels below EPA recommended limits.
- Previously proposed lots 6, 7, and 8 became nonbuildable bulk parcel B on the final record plat. Any attempt to subdivide that parcel in the future must include well areas with suitable yield and acceptable levels of Na, Cl, TDS.
- The Health Department determined that the elevated levels at lots 1, 3, and 6 were too high to allow for a potable supply, even with potential treatment.
- New well areas were approved for lots 1 and 3 and wells drilled in those areas did not have elevated levels. The original well areas will not be approvable for future replacement wells.
- No new well area for lot 6 was proposed and the lot was not included in the final approved subdivision.
- Well locations with suitable yield were not obtained for lots 7 and 8 and those lots were not included in the final approved subdivision.

- Lots 4 and 5 were approved with the condition that a whole house reverse osmosis system be installed and maintained for the potable water supply. The system approved as part of the perc certification plan was a Liberty Pure model guaranteed by the manufacturer to reduce the levels of Na Cl and TDS to below MDE secondary standards and maintain a ratio of 1:1 treated water to backwash water. The backwash will discharge to the OSDS bypassing the treatment tank and the drainfield will be sized for twice the number of bedrooms in the house. Lot 4 has a 5 bedroom restriction and lot 5 has a 4 bedroom restriction. An Operation and Maintenance agreement for the system must be signed by the homeowner and recorded in Land Records prior to Health approval of the building permit.



BENCHMARKS

HOWARD COUNTY BENCHMARK 34BB (CONC. MON.)
N 563,899.232 E 1319560.973 ELEV. 559.29
SOUTH SIDE TRIADAPHA MILL ROAD, APPROX. 13' EAST
OF CENTERLINE OF DRIVEWAY FOR HOUSE # 13295.
HOWARD COUNTY BENCHMARK 34BC (CONC. MON.)
N 562,546.600 E 1,319,851.319 ELEV. 529.572
SOUTH SIDE OF ELLIOTT DRIVE, EAST OF CENTERLINE
FOR THE DRIVEWAY FOR HOUSE NUMBER 13318.



VICINITY MAP

SCALE: 1"=2,000'
ADC MAP COORDINATE: PAGE 24 GRID E8

LEGEND:

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- PROPOSED RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING CURB AND GUTTER
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- ST-1 EXISTING TREES
- EXISTING SPECIMEN TREE
- EXISTING WOOD FENCE
- EXISTING METAL FENCE
- PROPOSED TREELINE
- EX. USE-IN-COMMON ACCESS EASEMENT
- EXISTING UTILITY POLE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- EXISTING STEEP SLOPES
- EXISTING MODERATE SLOPES
- PROPOSED PERC. TEST
- PASSED PERC. TEST
- FAILED PERC. TEST
- EXISTING WELL FIELD LOCATED
- EXISTING APPROVED WELL BOX AREA (TO REMAIN)
- EXISTING APPROVED WELL BOX AREA (TO BE ABANDONED)
- PROPOSED NEW WELL BOX AREA
- EXISTING APPROVED SEPTIC EASEMENT (TO REMAIN)
- EXISTING APPROVED SEPTIC EASEMENT (TO BE ABANDONED)
- PROPOSED NEW SEPTIC EASEMENT

THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. 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 SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.

E 1318750
IN 563850

NOTE
1. WHOLE HOUSE REVERSE OSMOSIS WATER TREATMENT SYSTEMS ARE REQUIRED FOR THE WELLS SERVING LOTS 4 AND 5 DUE TO ELEVATED LEVELS OF SODIUM, CHLORIDES, AND TOTAL DISSOLVED SOLIDS PRESENT IN THE WELL WATER. OTHER TREATMENT TECHNOLOGIES MAY ALSO BE REQUIRED INCLUDING: SEDIMENTATION FILTRATION, UF FILTRATION, SOFTENING BY ION EXCHANGE, MANGANESE AND IRON REMOVAL BY AERATION, ANTI-SEDIMENT FEED SYSTEMS, BOOSTER PUMPS, PH ADJUSTMENT AND/OR ULTRA VIOLET LIGHT.
2. LOT 4 MAY NOT HAVE MORE THAN 5 BEDROOMS.
3. LOT 5 MAY NOT HAVE MORE THAN 4 BEDROOMS.
4. THE SEPTIC TRENCHES FOR LOTS 4 AND 5 MUST BE EQUAL IN LENGTH, OR LOW PRESSURE DOSED.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS. - See attached Summary Memo.
Boylan for Maureen Roseman 5/31/2016
COUNTY HEALTH OFFICER DATE

PERCOLATION CERTIFICATION:
I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.
Thomas M. Hoffmann, Jr. 5-11-16
THOMAS M. HOFFMANN, JR.
PROFESSIONAL LAND SURVEYOR No. 267

SOILS LEGEND				
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
GgB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	B	.20	NO
GgB	GLENELF LOAM, 3 TO 8 PERCENT SLOPES	B	.20	NO
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	.37	YES
GnB	GLENVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	.37	YES
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	C	.24	NO

SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE

NOTE:
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL EROSION FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

PLAN SCALE
SCALE: 1"=60'

GENERAL NOTES

- THIS SUBJECT PROPERTY IS ZONED RR-DEO.
- PROPERTY OUTLINE SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC., DATED NOVEMBER, 2013.
- DEED REFERENCES: LIBER 3172 FOLIO 336
- THE EXISTING TOPOGRAPHY IS TAKEN FROM CURRENT HOWARD COUNTY GIS DATA AND FIELD VERIFIED TO BE ACCURATE.
- SOIL TYPES SHOWN HEREON ARE FROM THE USDA WEB SOIL SURVEY.
- ALL WELLS AND SEPTIC SYSTEMS WITHIN 100' FROM THE PROPERTY BOUNDARIES HAVE BEEN SHOWN.
- ANY CHANGE TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- ADJUSTMENT TO THE SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- EXISTING WELLS AND/OR SEWERAGE EASEMENTS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
- ALL BUILDING SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
- THE PURPOSE OF THIS PERCOLATION CERTIFICATION PLAN IS TO CREATE AND DEFINE AN PRIVATE SEPTIC EASEMENT FOR THE PROPERTY / PROJECT IN ACCORDANCE WITH THE STATE AND COUNTY CODES.
- THE WELLS ON PARCEL B AND THE DRY CASING ON LOT 4 MUST BE PROPERLY ABANDONED PRIOR TO HEALTH SIGNATURE OF THE RECORD PLAT.
- MOE HAS APPROVED THE WELL ON LOT 1 TO BE DOWNGRADE OF THE SEWAGE DISPOSAL AREAS ON LOTS 1, 2, PARCEL A, AND NEIGHBORING LOT, DUNFARMIN ESTATES LOT 20, SUBJECT TO THE FOLLOWING CONDITIONS:
A. THE SEWAGE DISPOSAL SYSTEMS FOR LOTS 1, 2, AND PARCEL A MUST UTILIZE BEST AVAILABLE TECHNOLOGY FOR NITROGEN REDUCTION.

PERCOLATION CERTIFICATION REVISION PLAN

JACK'S LANDING
LOTS 1-5, BUILDABLE PRESERVATION PARCEL 'A',
& NON-BUILDABLE PRESERVATION PARCEL 'B'
A SUBDIVISION OF TAX MAP 34
PARCEL 414 (L. 3172 / F. 336)

5TH ELECTION DISTRICT
TAX MAP: 34 GRID: 03
PARCEL: 414
ZONED: RR-DEO
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: MAY 2016
SCALE: 1"=60'
W.O. NO.: 13-31

PROFESSIONAL CERTIFICATE
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. 16193 EXPIRATION DATE: 02-27-2016

1 SHEET OF 1