

C1 18676

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY 07 23 13

DATE WELL COMPLETED 7-23-13

Depth of Well 405 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-2565

OWNER Haines, Kenneth WELL SITE ADDRESS Hardy Rd TOWN Mt Airy MD SUBDIVISION SECTION LOT 3

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows include Top Soil, Orange Soil, Tan Silty Soil, Brn Recy layer, Tan weathered Rock, Brn weathered Rock, Red Brn weathered Rock, Brn Rock, Dark Brn Rock, Red Brn Rock, Gray Rock, Red Brn Rock, and Red Hard Gray Rock.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) NO (N) TYPE OF GROUTING MATERIAL (C) BENTONITE CLAY NO. OF BAGS 18 NO. OF POUNDS 1620 GALLONS OF WATER 40 gal DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 66 ft.

CASING RECORD

MAIN CASING TYPE R Nominal diameter top (main) casing (nearest inch) 60 61 63 64 66 70 Total depth of main casing (nearest foot) 66 OTHER CASING (if used) diameter depth (feet) 4 1/2 66 to 256

SCREEN RECORD

screen type or open hole (S) (T) (B) (H) (O) (P) (L) (O) (T) DEPTH (nearest ft.) 1 2 3 4 5 6 7 8 9 11 15 17 21 23 24 26 30 32 36 38 39 41 45 47 51 SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

C 3

PUMPING TEST

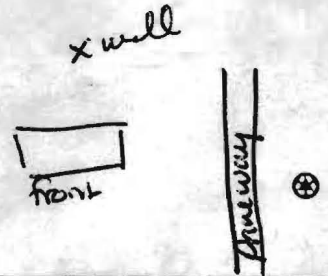
HOURS PUMPED (nearest hour) 7 PUMPING RATE (gal. per min.) 2 METHOD USED TO MEASURE PUMPING RATE Turn/Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 46 ft. WHEN PUMPING 300 ft. TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (YES) NO YES IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 CASING HEIGHT (circle appropriate box and enter casing height) (+) above () below LAND SURFACE (nearest foot) 1

LATITUDE 39.349536 LONGITUDE 77.130823 (DEFAULT COORD. WGS 84)

NOTES:



NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES (Y) NO (N)

- CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. MWD 553 DRILLERS SIGNATURE

LTD. NO. WRD 097

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C 2 DEPTH (nearest ft.)

Table with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 15, 17, 21, 23, 24, 26, 30, 32, 36, 38, 39, 41, 45, 47, 51. Rows include PL 35 250 and H 250 400.

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

C1 18676 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
 FILL IN THIS FORM COMPLETELY
 PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN
 45 DAYS AFTER WELL IS COMPLETED.
 COUNTY NUMBER

1 2 3 4 5 6
 (THIS NUMBER IS TO BE PUNCHED IN COLUMNS 3-6 ON ALL CARDS)

ST/CO USE ONLY DATE Received MM DD YY 07 23 13
 DATE WELL COMPLETED MM DD YY 7-23-13
 Depth of Well 22 465 26 (TO NEAREST FOOT)
 PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-2565

OWNER Haines, Kenneth
 WELL SITE ADDRESS 200 Hurdy Rd TOWN Mt Airy MD
 SUBDIVISION _____ SECTION _____ LOT 3

WELL LOG
 Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Top Soil	0	1	
Orange Soil	1	20	
Tan Silty Soil	20	40	
Brn. Rock Layer	40	43	
Tan weathered Rock	43	50	
Brn weathered Rock	50	57	
Red Brn weathered Rock	57	65	
Brn Rock	65	74	
Dark Brn Rock	74	80	
Red Brn Rock	80	110	
Grey Rock	110	115	
Red Brn Rock	115	125	
Red Hard Grey Rock	125	405	

GROUTING RECORD yes no
 WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N
 TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT CM BENTONITE CLAY BC
 NO. OF BAGS 18 NO. OF POUNDS 1620
 GALLONS OF WATER 40 gal
 DEPTH OF GROUT SEAL (to nearest foot)
 from 0 TOP 66 ft. to 66 BOTTOM 58 ft.
 (enter 0 if from surface)

CASING RECORD
 casing types insert appropriate code below
 ST STEEL CO CONCRETE
 PL PLASTIC OT OTHER
 MAIN CASING TYPE A Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 66
 60 61 63 64 66 70

OTHER CASING (if used)
 diameter inch from to depth (feet) from to
 A C H I N G

SCREEN RECORD
 screen type or open hole insert appropriate code below
 ST STEEL BR BRASS HO OPEN HOLE
 PL PLASTIC OT OTHER

NUMBER OF UNSUCCESSFUL WELLS: 0
 WELL HYDROFRACTURED yes no Y N
 CIRCLE APPROPRIATE LETTER
 A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
 E ELECTRIC LOG OBTAINED
 P TEST WELL CONVERTED TO PRODUCTION WELL

C 2 DEPTH (nearest ft.)
 1 2
 E 1 8 9 11 15 17 21
 A 2 23 24 26 30 32 36
 C 3 38 39 41 45 47 51
 S
 R
 E
 N
 SLOT SIZE 1 _____ 2 _____ 3 _____
 DIAMETER OF SCREEN (NEAREST INCH) _____
 from _____ to _____

DRILLERS LIC. NO. M WD 553
 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)
 LIC. NO. W D 0997
 SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68
 MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
 T (E.R.O.S.) W Q
 70 _____ 72 _____ 74 75 76
 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3 1 2
PUMPING TEST
 HOURS PUMPED (nearest hour) 7
 PUMPING RATE (gal. per min.) 2
 METHOD USED TO MEASURE PUMPING RATE Pressure
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING 46 ft.
 WHEN PUMPING 300 ft.
 TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet S submersible

PUMP INSTALLED
 DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO
 IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
 TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 29
 CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35
 PUMP HORSE POWER 37 41
 PUMP COLUMN LENGTH (nearest ft.) 43 47
 CASING HEIGHT (circle appropriate box and enter casing height)
 + above } LAND SURFACE
 - below } (nearest foot)
 49 51

LATITUDE 39.349536
 LONGITUDE 77.130823
 (DEFAULT COORD. WGS 84)
 NOTES:
 x well
 front
 driveway

04-344308

EMERGENCY/TEMP NO. IF ANY

B 1	21343	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER
1 2 3 6				HO-95-2565
				70 fill in this form completely 79

Date Received (APA) 06/26/13

OWNER INFORMATION

8 MM DD YY 13
Haines Kenneth
15 Last Name Owner First Name 34
759 Long Corner Rd
36 Street or RFD 55
Mount Airy MD 21771
57 Town 70 State 72 Zip 76

LOCATION OF WELL

B 3

8 COUNTY Howard 21
Haines Property
23 SUBDIVISION 42
SECTION 3 LOT 3
44 46 48 50
Mt Airy
52 NEAREST TOWN 71

DRILLER INFORMATION

C John Hess MWD 553
Driller's Name 76 License No. 81
Allied Environmental Svcs
Firm Name
PO Box 129, Annap Junction MD 20701
Address
C John Hess 6-13-13
Signature Date

SOURCES OF DRILLING WATER

B 4

1. Public
2.
3.

Hardy Road
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP 0001 BLK 0024 PARCEL 0021

WELL INFORMATION

B 2

1 2

APPROX. PUMPING RATE (GAL. PER MIN.) 10
8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 1000
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
22 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S → 41
DATE ISSUED 07/05/13 [Signature] 7/5/14
43 MM DD YY 48 EXP. DATE

APPROXIMATE DEPTH OF WELL 400 FEET
24 28
APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

PROPOSED LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL.

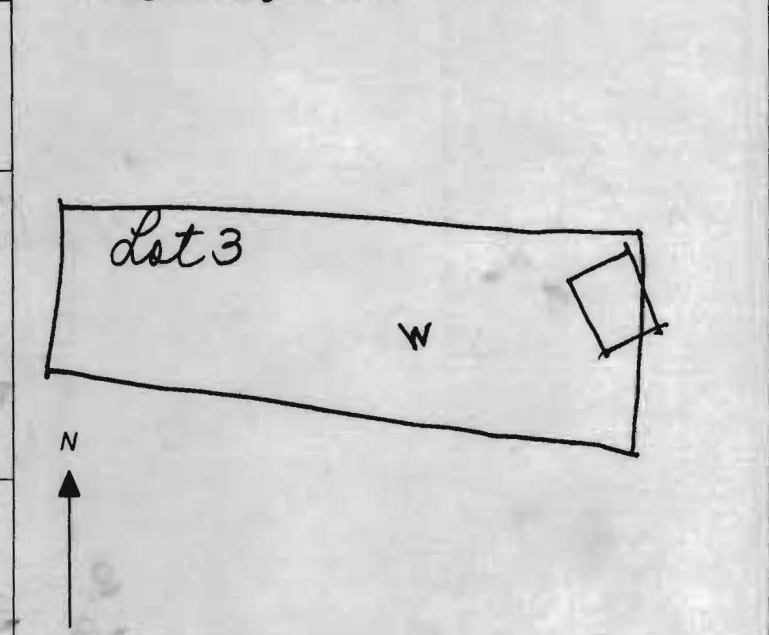
new construction

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)
37 CABLE REVERSE-ROTARY DRIVE-POINT
other

REPLACEMENT OR DEEPEMED WELLS
(CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
39 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 THIS WELL WILL DEEPEM AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52



Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER _____ G

PERMIT No. HO-95-2565
70 71 72 73 74 75 76 77 78 79

Allied Well Drilling Yield Test report

Date Test Performed: 7-23-13
 Address: 17762 Hardy Rd.
 Owner: Amoss
 Well Depth: 400

Permit Number: HO-95-2565
 Subdivision: _____
 Election District: _____
 Static Water Lvl: 46

C. J. Allen MWD 553

Time	Water Level	PSI Existing Pump	Pumping Rate Seconds to Fill 1 Gallon bucket	Calculated Flow-Gallons Per Minute
7 ⁴⁵	46		30	10
8 ⁰⁰	81		30	10
15	145		48	7.5
30	186		48	7.5
45	243		48	7.5
9 ⁰⁰	300		107	2.8
15	300		107	2.8
30	298		150	2
45	297		150	2
10 ⁰⁰	297		150	2
15	297		150	2
30	297		150	2
45	296		150	2
11 ⁰⁰	296		150	2
15	296		150	2
30	296		150	2
45	296		150	2
12 ⁰⁰	295		150	2
15	295		150	2
30	295		150	2
45	295		150	2
1 ⁰⁰	294		150	2
15	294		150	2
30	294		150	2
45	294		150	2
2 ⁰⁰	294		150	2
15	294		150	2
30	293		150	2
45	293		150	2
3 ⁰⁰	293		150	2

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: JC Harris Plumbing Htg Telephone #: 301-371-7574
Address: 3120 A Old National Pike
Middletown, MD 21769

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:

Name (Print): _____ License# _____

***A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.**

Name of Property Owner: Lee Amoss Telephone #: _____
Subdivision: _____ Lot #: 3 Well Tag #: HO-95-2565
Site Address: 17762 Hardy Road
Mt. Airy, MD 21771

Submersible Pump Data

Make: Grundfos
Model #: 10SQE15330
Pump Capacity 10 GPM
Well Yield: 2 GPM

Pitless Adapter

Make: Campbell
Model#: PA800SS
Depth: 36" (36" min)
NSF/WSC approved: _____

Well Cap and Electric Conduit

Two piece watertight cap:
Screened, vented well cap:
Cap secured to casing:
Conduit min 18" B.G.:
Conduit secured to well cap:

Depth of well encountered at time of pump installation: _____ (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors, Cable guards, or other acceptable method used- Must circle one

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing

Piping to house

Type: Black Poly
PSI: 160 (160 psi min)
Depth of supply line: 36" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: YES
Length of sleeve (5' minimum from foundation): 10'
Sleeve sealed properly: YES

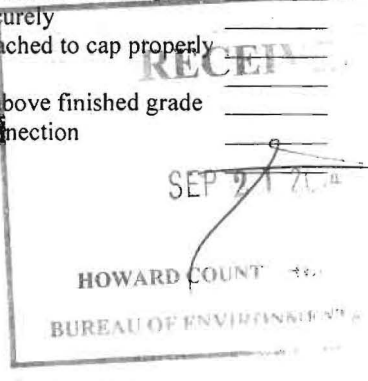
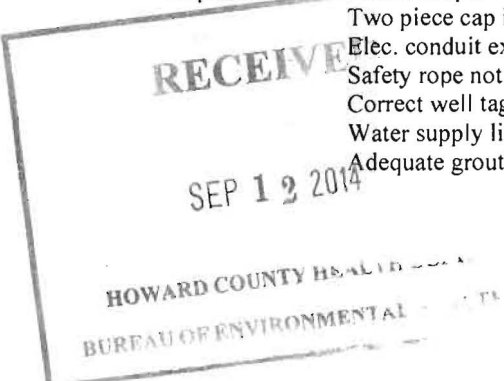
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

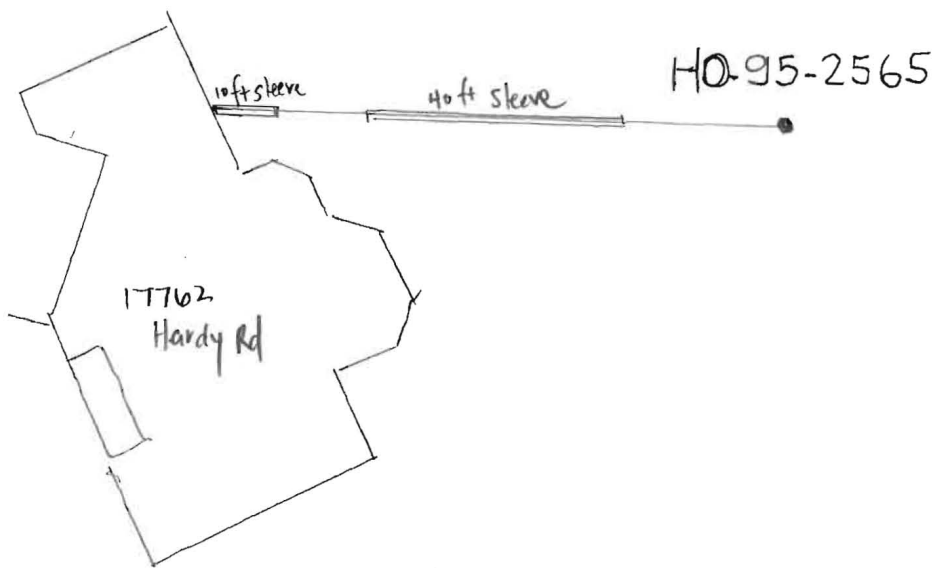
Signature of company representative responsible for installation _____ date _____

For Health Department Use Only – Not to be completed by Installer

Date Insp. Requested: _____ Date Insp. Approved: _____ Inspector: _____

- Inspection Data: Pitless-adapter watertight & water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope not outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter





SCALE 1" = 30'

EMULSED ASPHALT FOR TIZING UNIT

STATE OF MARYLAND
WELL COMPLETION REPORT
 FILL IN THIS FORM COMPLETELY
 PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN
 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER:

DATE WELL COMPLETED: 7-23-13 Depth of Well: 405 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": HO-95-2565

OWNER: Haines, Kenneth TOWN: Mt Airy MD

WELL SITE ADDRESS: 220 Hardy Rd SECTION: LOT: 3

WELL LOG (Not required for drilled wells)

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Top Soil	0	1	
Orange Soil	1	20	
Tan silty soil	20	40	
Brown loam layer	40	43	
Tan weathered rock	43	50	
Brown weathered rock	50	57	
Reddish brown rock	57	65	
Brown rock	65	74	
Dark brown rock	74	80	
Red brown rock	80	110	
Grey rock	110	115	
Red brown rock	115	125	
hard hard grey rock	125	405	

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box): YES NO

TYPE OF GROUTING MATERIAL (Circle one): CEMENT BENTONITE CLAY

NO. OF BAGS: 18 NO. OF POUNDS: 1620

GALLONS OF WATER: 40 gal

DEPTH OF GROUT SEAL (to nearest foot): 60

CASING RECORD

MAIN CASING TYPE: A Nominal diameter top (main) casing (nearest inch): 6 Total depth of main casing (nearest foot): 60

OTHER CASING (if used):

SCREEN RECORD

screen type or open hole: ST BR HO

DEPTH (nearest ft.):

WELL HYDROFRACTURED: YES NO

NUMBER OF UNSUCCESSFUL WELLS: 0

CIRCLE APPROPRIATE LETTER

A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

ELECTRIC LOG OBTAINED

TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 21.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLER'S LIC. NO.: MWD 553

DRILLER'S SIGNATURE: [Signature]

LIC. NO.: W20097

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee):

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 88:

MODE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

TELESCOPE CASING: LOG INDICATOR: OTHER DATA:

PUMPING TEST

HOURS PUMPED (nearest hour): 7

PUMPING RATE (gal. per min.): 2

METHOD USED TO MEASURE PUMPING RATE: Turns/Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 46 ft.

WHEN PUMPING: 300 ft.

TYPE OF PUMP USED (for test): S submersible

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A-C, R, S, T, J) IN BOX 27: S

CAPACITY: GALLONS PER MINUTE (to nearest gallon):

PUMP HORSE POWER:

PUMP COLUMN LENGTH (nearest ft.):

CASING HEIGHT (circle appropriate box and enter casing height): + above LAND SURFACE

LATITUDE: 39.349536

LONGITUDE: 77.130823

(DEFAULT COORD. WGS 84)

NOTES: x well

ORIGINAL

HOWARD COUNTY HEALTH DEPARTMENT
 BUREAU OF ENVIRONMENTAL HEALTH
 WELL & SEPTIC PROGRAM
 TEL: (410)313-1771 FAX: (410)313-2648

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: JC Harris Telephone #: 301-748-0923
 Address: _____

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
 License # and name of individual responsible for the field installation:
 Name (Print): _____ License# _____

*A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: Lee & Nancy Amoss Telephone #: 301-371-9101
 Subdivision: Haines Property Lot #: 3 Well Tag #: HO-95-2565
 Site Address: 17762 Hardy Rd.
Mr. Airy, md 2111

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: _____	Make: _____	Two piece watertight cap: _____
Model #: _____	Model#: _____	Screened, vented well cap: _____
Pump Capacity _____ GPM	Depth: _____ (36" min)	Cap secured to casing: _____
Well Yield: _____ GPM	NSF/WSC approved: _____	Conduit min 18" B.G.: _____
Depth of well encountered at time of pump installation: _____ (feet)		Conduit secured to well cap: _____
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors, Cable guards, or other acceptable method used- Must circle one		
Safety rope, if used, attached to brass rope adapter or other acceptable method <u>inside of well casing</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: _____	PVC sleeve to undisturbed soil at wall penetration: _____
PSI: _____ (160 psi min)	Length of sleeve (5' minimum from foundation): _____
Depth of supply line: _____ (36" min)	Sleeve sealed properly: _____

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

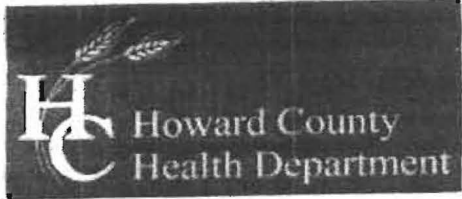
Signature of company representative responsible for installation _____ date _____

For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: 8/21/14 Date Insp. Approved: 8/21/14 Inspector: RR

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade	<input checked="" type="checkbox"/>
Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>
Elec. conduit extends at least 18" below grade/attached to cap properly	<input checked="" type="checkbox"/>
Safety rope not outside of well cap/casing	<input checked="" type="checkbox"/>
Correct well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>
Water supply line sleeved adequately at house connection	<input checked="" type="checkbox"/>
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>

Water line sleeved from house for 10 feet
@ 25ft from house water line is sleeve again for 40 feet for future build
(see detail on back) →



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2646
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

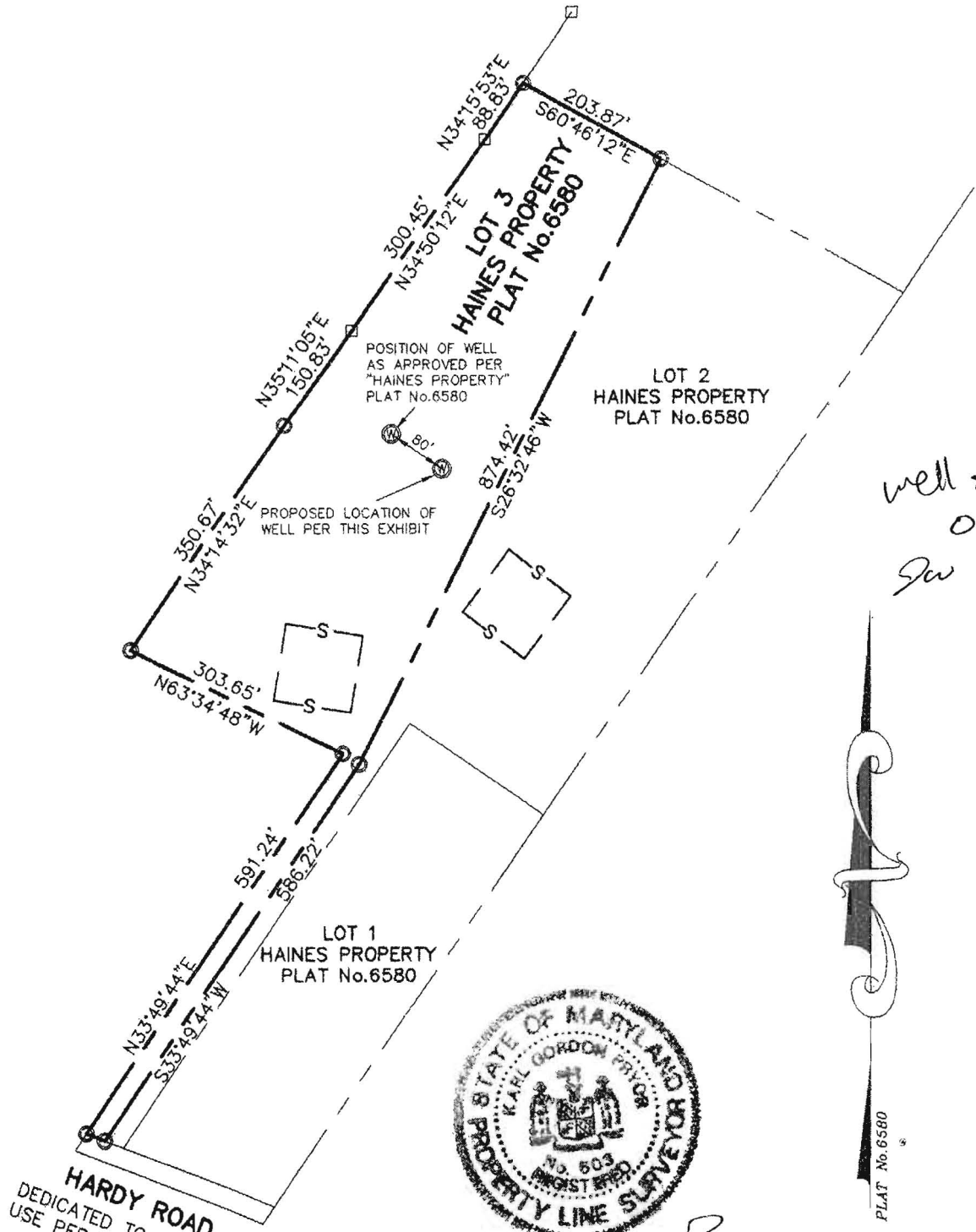
Heenes Property *3* *Hardy*
Subdivision/Property Name Lot# Road Name

The well site has been staked by *Sheladia Assoc*
(professional land surveyor or company employing professional land surveyors)
on *1/23/86* (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 3/11/05



well site
OK
Jaw 7/5/13



7/3/13 *Karl Gordon Pugh* WELL EXHIBIT

FOR
**LOT 3, SECTION ONE
HAINES PROPERTY
PLAT No. 6580**

SITUATED ALONG HARDY ROAD
4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE 1"=200' JULY, 2013

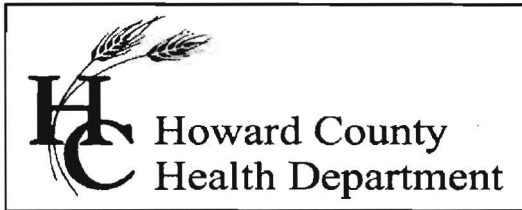
CATOCTIN MOUNTAIN SURVEYS, INC.
8423 HORNETS NEST ROAD
EMMITSBURG, MD 21727
(301) 447-3344 FAX: (301) 447-2444

Map Layers Map Legend Search

- All Layers
 - Base Maps & Aerial Photos
 - Annotation Layers
 - HoCo Base Map Layers
 - Contours 2004
 - County Boundary
 - Stream Centerline Buffer 75ft
 - Building Permits (New)
 - Scanned PDF Drawings
 - Address Points
 - Street Centerline
 - Metro Property
 - Property Boundaries
 - Additional Layers
 - Layer Overlays
 - Floodplain
 - Historic Districts
 - Zoning
 - Land Use
 - Water/Sewer Labels
 - Sewer Infrastructure
 - Water Infrastructure
 - Storm Drain Features
 - Hydric Soils
 - Soils
 - Wetlands
 - Rare Threatened and Endangered
 - Town Center Neighborhoods
 - Town Center Boundary
 - Parks and Open Space
 - Parks - Howard County
 - Open Space - Other
 - Open Space - Howard County
 - Forest Conservation Easements
 - Preservation Easements

20 m / 60 ft





Bureau of Environmental Health

8930 Stanford Blvd., 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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – August 11, 2015

February 11, 2015

Homeowner
17762 Hardy Road
Mt. Airy, MD 21771

**RE: Haines Property, Lot 3
17762 Hardy Road
Building Permit: B14000500
Well Permit: HO-95-2565**

Dear Homeowner:

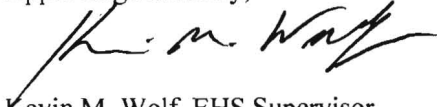
This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **2/11/2015**. Final approval of the well line connection to the dwelling was granted on **8/21/2014**. The well construction was completed on **7/23/2013**. Water samples were collected on **1/22/2015 and 2/2/2015**.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-2565. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the Annotated Code of Maryland, Environment Article, 9-1311, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,

A handwritten signature in black ink, appearing to read "Kevin M. Wolf". The signature is fluid and cursive, with the first name "Kevin" and last name "Wolf" being the most prominent parts.

Kevin M. Wolf, EHS Supervisor
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File



Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

3020 Ventrie Court • P.O. BOX 245 • Myeraville, MD 21773 • 800-332-3340 • FAX 301-283-2368
www.fredericktownelabs.com • info@fredericktownelabs.com

Certificate of Analysis

Acct. No. 320 - 31-1

Field Record

Site visit performed on: Thursday, January 22, 2015 10:25 AM
by: Richard Snyder State ID No. 0043RS
Affiliation: Fredericktowne Labs, Inc.
Property Owner: Lancaster Craftsmen Builders, Inc.
Property Address: 17762 Hardy Road
Mt Airy, MD 21771
Sample Source: 1. Laundry Room Sink
Treatment Devices Noted: No Treatment Devices
Sample taken after treatment: No
Well No.: HO-96-2565
Field pH: 6.1
Total Free Res. Cl.: <0.1 mg/l
Temp: 12.1° C

Laboratory Report

Sample Received at laboratory: 1/22/2015 1:44 PM

Bacteriological results:

Total Colif. (/100ml)	E.coli. (/100ml)	Start		End		Method	Analyst
		Date	Time	Date	Time		
16	<1	01/22/15	14:31	01/23/15	15:05	9223B	JD

Bacteriological analysis of this sample indicates the water is unsafe for human consumption.
Analysis was performed according to the 20th edition of Standard Methods

Inorganic Chemical results:

Parameter	Result	Units	MCL	Date of Analysis	Method	Analyst
Nitrate-Nitrogen	3.7	mg/l	10	1/22/2015	300.0	PH
Sand	<2	mg/l	5	1/22/2015	0.065mm Filter	JD
Turbidity	4.2	NTU	10	1/22/2015	180.1	KB

Reported by: Gellan Mellott 1/26/15
Name Date

Fredericktowne Labs, Inc. is a State Certified Water Quality Laboratory
Maryland Cert. No. 116 Virginia Cert. No. 00444
MDOT WBE Cert. No.: 91-158



Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

3020 Ventrie Court • P.O. BOX 248 • Myersville, MD 21773 • 800-332-3340 • FAX 301-293-2286
 www.fredericktownelabs.com • info@fredericktownelabs.com

Certificate of Analysis

Acct. No. 9470 - 1-1

Field Record

Site visit performed on: Monday, February 02, 2015 10:40 AM
 by: Ronald Demory State ID No. 8072RD
 Affiliation: Fredericktowne Labs, Inc.

Property Owner: Lee Amos
 Property Address: 17762 Hardy Road
 Mt. Airy, MD

Sample Source: Basement Laundry Tub

Treatment Devices Noted: No Treatment Devices

Sample taken after treatment: No

Well No.: HO-95-2565

Total Res. Cl.: <0.1 mg/l

Temp: 11.6° C

Laboratory Report

Sample Received at laboratory: 2/2/2015 11:15 AM

Bacteriological results:

Total Colif. (/100ml)	E.coli.(/100ml)	Start		End		Method	Analyst
		Date	Time	Date	Time		
<1	<1	02/02/15	13:16	02/03/15	13:40	9223B	KMW

Bacteriological analysis of this sample indicates the water is safe for human consumption and meets federal, state and local requirements. Analysis was performed according to the 20th edition of Standard Methods

Inorganic Chemical results:

Parameter	Result	Units	MCL	Date of Analysis	Method	Analyst
Chloride	5.1	mg/l	250	2/2/2015	300.0	PH
Fluoride	<0.2	mg/l	4	2/2/2015	300.0	PH
Hardness	250	mg/l		2/4/2015	130.2	KMW
Iron	<0.05	mg/l	0.3	2/4/2015	3500-Fe-D	KMW
Nitrate-Nitrogen	3.8	mg/l	10	2/2/2015	300.0	PH
Nitrite Nitrogen	<0.2	mg/l	1	2/2/2015	300.0	PH
pH	5.8			2/2/2015	4500-H+B	RD

Reported by: Tollan Millott 2/4/15
 Name Date

Fredericktowne Labs, Inc. is a State Certified Water Quality Laboratory
 Maryland Cert. No. 116 Virginia Cert. No. 00444
 MDOT WBE Cert. No.: 91-158



Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

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Certificate of Analysis

Acct. No. 9470 - 1-1

Phosphorous-Ortho

<0.2 mg/l

2/2/2015

300.0

PH

Sulfates

<5 mg/l

2/2/2015

300.0

PH

Turbidity

0.5 NTU'

10

2/2/2015

180.1

KB

Reported by:

Tollen Mellott 2/4/15

Name

Date

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Maryland Cert. No. 116 Virginia Cert. No. 00444

MDOT WBE Cert. No.: 91-158



Bureau of Environmental Health

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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

copy

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

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 22nd day of October, among LEE M. Amoss & NANCY P. Amoss, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at 17762 HARDY ROAD, MT. AIRY, 21771, in the 5th Election District of Howard County, Maryland, and the deed to same is recorded or shall be recorded among the Land Records of Howard County, Maryland in Liber 15126 Folio 00057

WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective January 1, 2013. The pre-treatment device being installed is NORWELCO TNTLP-5006PD.

NOW, THEREFORE, the parties hereto agree as follows:

A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County to develop accurate and thorough test results.

B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.

E. This agreement shall run with the land and upon Owner's taking title to the Lot shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Lot that the system shall require

copy

maintenance or other attention. Upon taking title to the Lot, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

Bea Nifan 10/22/14
Howard County Health Department

Lee Amoss 9/17/14
Owner #1 Signature Date

Lee Amoss
Owner #1 Print Name

Lee Amoss 9/17/14
Buyer #1 Signature Date

Lee Amoss
Buyer #1 Print Name

Nancy Amoss 9-17-14
Owner #2 Signature Date

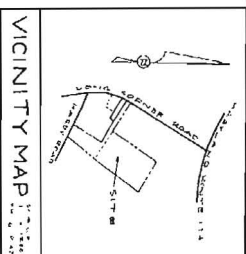
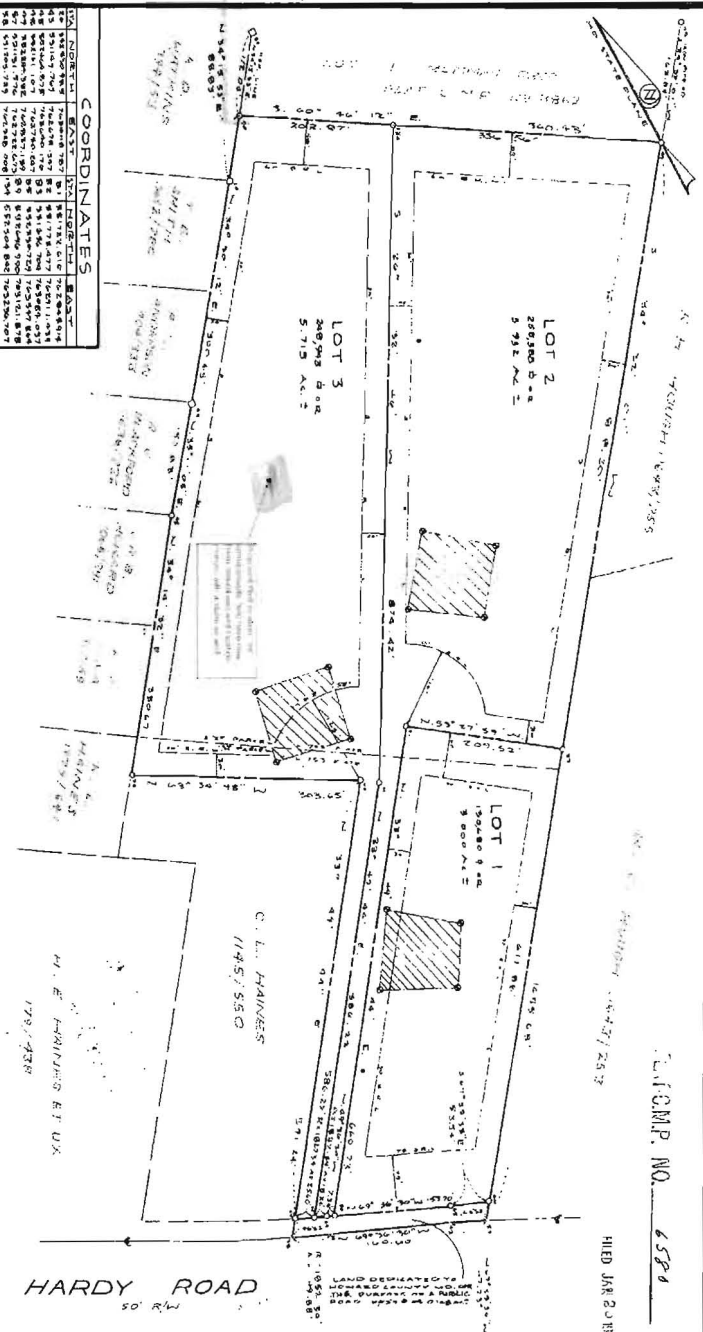
Nancy Amoss
Owner #2 Print Name

Nancy Amoss 9-17-14
Buyer #2 Signature Date

Nancy Amoss
Buyer #2 Print Name

COM.P. NO. 6584

FILED JAN 21 1985



NOTES

- (1) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
- (2) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
- (3) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
- (4) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
- (5) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
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- (8) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
- (9) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.
- (10) THE LOTS 3, 2 AND 1 ARE TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.

COORDINATES

NO.	NORTH	EAST	NO.	NORTH	EAST
1	7522444.44	7522444.44	1	7522444.44	7522444.44
2	7522444.44	7522444.44	2	7522444.44	7522444.44
3	7522444.44	7522444.44	3	7522444.44	7522444.44
4	7522444.44	7522444.44	4	7522444.44	7522444.44
5	7522444.44	7522444.44	5	7522444.44	7522444.44
6	7522444.44	7522444.44	6	7522444.44	7522444.44
7	7522444.44	7522444.44	7	7522444.44	7522444.44
8	7522444.44	7522444.44	8	7522444.44	7522444.44
9	7522444.44	7522444.44	9	7522444.44	7522444.44
10	7522444.44	7522444.44	10	7522444.44	7522444.44

TOTAL TABULATION THIS SUBDIVISION
 TOTAL NUMBER OF LOTS TO BE RECORDED 3
 TOTAL AREA OF LOTS (LOT 1, LOT 2) 5,887.00 SQ. FT.
 TOTAL AREA BEING OPEN TO THE PUBLIC 5,887.00 SQ. FT.
 RECEIVED BY THE FOLLOWING PROCEEDINGS: 6/23/84
 TOTAL AREA THIS SUBDIVISION 5,887.00 SQ. FT.

OWNERS' DESIGNATION

WE, THE UNDERSIGNED, HEREBY DESIGNATE THE LOTS 1, 2 AND 3 OF THE ABOVE DESCRIBED SUBDIVISION TO BE SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.

SURVEYOR'S CERTIFICATION

I, JOHN HAINES, SURVEYOR, DO HEREBY CERTIFY THAT THE ABOVE DESCRIBED SUBDIVISION IS ACCORDING TO THE PLAN AND THE LOTS ARE BEING SEPARATELY SUBDIVIDED INTO 10 LOTS EACH BY THE ENGINEERING FIRM OF JOHN HAINES ENGINEERS AND ARCHITECTS, INC. AND SHALL BE OPEN TO THE PUBLIC THROUGH THE STATE HIGHWAY DEPARTMENT.

CURVE DATA

FROM POINT	TO POINT	RADIUS	ARC	ANG.	CHORD	CHORD BEG.	CHORD END.
1	2	100.00	10.00	18.00	19.61	10.00	19.61
2	3	100.00	10.00	18.00	19.61	19.61	29.22
3	4	100.00	10.00	18.00	19.61	29.22	38.83
4	5	100.00	10.00	18.00	19.61	38.83	48.44
5	6	100.00	10.00	18.00	19.61	48.44	58.05
6	7	100.00	10.00	18.00	19.61	58.05	67.66
7	8	100.00	10.00	18.00	19.61	67.66	77.27
8	9	100.00	10.00	18.00	19.61	77.27	86.88
9	10	100.00	10.00	18.00	19.61	86.88	96.49

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEMS
 APPROVED FOR PLANNING AND ZONING
 APPROVED FOR SUBDIVISION
 APPROVED FOR SEWER DRAINAGE SYSTEMS AND PUBLIC ROADS

APPROVED FOR SEWER DRAINAGE SYSTEMS AND PUBLIC ROADS
 APPROVED FOR PLANNING AND ZONING
 APPROVED FOR SUBDIVISION
 APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEMS

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 APPROVED FOR SUBDIVISION
 APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEMS

MAR 24 1985

F-86-40 NSA SSU 1941-3904

HAINES PROPERTY
 SHELLADIA Associates, Inc.
 1000 SHELLADIA DRIVE
 ANNAPOLIS, MD 21403

