



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

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

RECEIPT DATE: 11/2/18 **ONSITE SEWAGE DISPOSAL SYSTEM** P 564038
 APPROVAL DATE: 12/11/18 sec **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 1039 Thunderbird Drive

SUBDIVISION: Fairlane Farms LOT: 33 TAX ID: _____

CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@comcast.com

CONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157 PHONE: 410-596-3618

PROPERTY OWNER: NV Homes EMAIL: _____

OWNER ADDRESS: 9720 Patuxent Woods Drive, Columbia, MD 21046 PHONE: 410-379-5956

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Babylon Vault or equivalent

PUMP MODEL: N/A PUMP SIZE N/A PUMP TANK CAPACITY: N/A

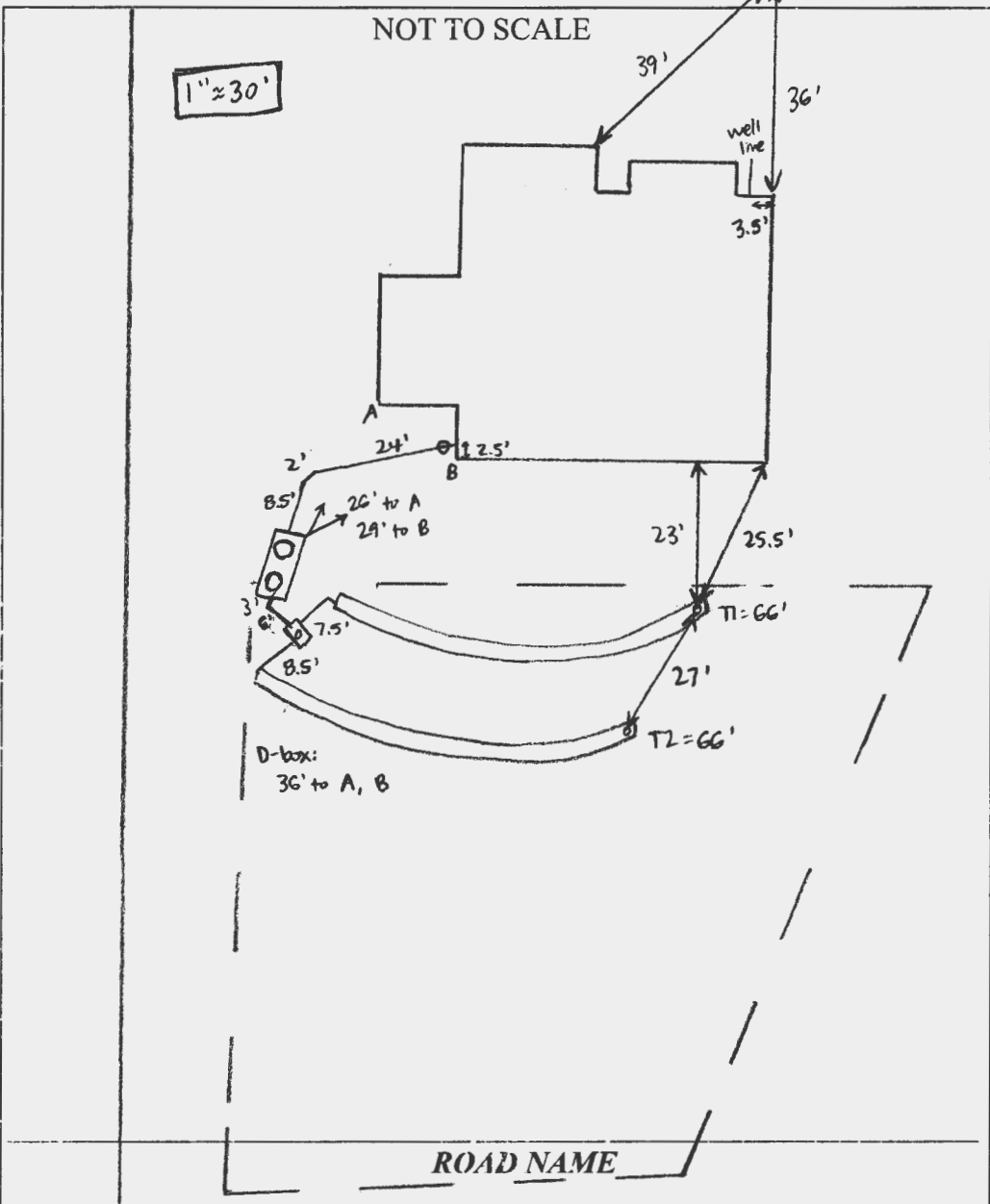
DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>130.21</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Hank Oswald ISSUE DATE: 11/2/18 EXPIRATION DATE: 11/2/19

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 - ELECTRICAL PERMIT ISSUED E N/A
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM. PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT. CALL 410-313-1771 TO SCHEDULE INSPECTIONS.



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	4'	7'
NUMBER OF TRENCHES		2
TOTAL LENGTH		132'
ABSORPTION AREA		396' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	2-2.5'
BAFFLES	YES
BAFFLE FILTER	NONE
MANHOLE LOC	FRONT + REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	YES
DATE ON LID	10-30-18

SEPTIC TANK II LEVEL	
MANUFACTURER	_____
CAPACITY	_____ GAL
SEAM LOC	_____
TANK LID DEPTH	_____
BAFFLES	_____
BAFFLE FILTER	_____
MANHOLE LOC	_____
6" PORT LOC	_____
WATERTIGHT TEST	_____
SLOTTED	_____
DATE ON LID	_____

PRE-CONSTRUCTION:

11/27/18 Met S. Carroll on site for layout. SDA corners, tank, + D-box staked. Shot contour and laid out 2x65' trenches. Lines painted/staked for trenches are top edge to keep 20' off house. (SC)

INSTALLATION: 12/10/18 Tank set, house connection made. S. Carroll digging T1. using laser to check depths. 3' wide, 7' bottom. (SC) 12/11/18 T2 complete - left open for inspection. 3' wide, 3.5' to stone. Levelled speed levelers in D-box. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 12/11/18

26358
308
171

Oswald, Hank

From: Oswald, Hank
Sent: Friday, August 31, 2018 9:30 AM
To: 'Tony Fertitta'
Subject: Fairlane Farms Lot 33_1039 Thunderbird Drive

Hi Tony:

In looking over the OSDS plan for Fairlane Farms, Lot 33, there is a steep slope within 25 feet of the septic tank/SDA. In addition, there are hash marks outside the SDA. Please revise.

If you wish to discuss, please call.

Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

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This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

Oswald, Hank

From: Oswald, Hank
Sent: Tuesday, September 11, 2018 1:36 PM
To: 'Tony Fertitta'
Subject: RE: Fairlane Farms Lot 33_1039 Thunderbird Drive

Hi Tony:

The revised plan for Fairlane Farm, Lot 33 still shows angled lines outside the SDA. What is the purpose of these lines?

Thanks,

Hank

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**FISHER, COLLINS
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS**

Transmittal

Terrell A. Fisher, P.E., L.S.
Earl D. Collins, P.E.
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.
Mark L. Robel, P.L.S.
Aldo M. Vitucci, P.E.
Frank Manalansan II, L.S.
Stephanie Tuite, RLA, P.E., LEED AP BD&C

Via: Fax Mail Messenger E-Mail To Be Picked Up
 Fax (original to follow via U.S. Mail)

To: Bureau of Environmental Health 8930 Stanford Blvd. Columbia, Maryland 21046-4544	Attn: Hank Fax: Phone: 410-313-2640
---	---

From: Tony Fertitta	CC:
----------------------------	-----

Re: Fairlane Farms, Lot 33	W.O.# 05106-3003
Date: July 26, 2018	Pages: 0 Page(s) Including this cover

We are forwarding:	<input checked="" type="checkbox"/> Prints	<input type="checkbox"/> Copy of Letter	<input type="checkbox"/> Specifications	<input type="checkbox"/> Shop drawings	<input type="checkbox"/> Other
	<input type="checkbox"/> Urgent	<input type="checkbox"/> For your use	<input type="checkbox"/> As requested	<input checked="" type="checkbox"/> For Review & Comment	

Remarks:

Re: Fairlane Farm, Lot 33, 1039 Thunderbird Drive.

Here are 3 new copies of the OSDS for Lot 33 for your review. Please let me know if you have any questions.

Thank You,

Tony.

Fisher, Collins, & Carter, Inc. Ph. 410-461-2855

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From: Tony Fertitta	CC:
----------------------------	-----

Re: Fairlane Farms, Lot 32	W.O.# 05106-3003
Date: Aug. 27, 2018	Pages: 0 Page(s) Including this cover

We are forwarding:	<input checked="" type="checkbox"/> Prints	<input type="checkbox"/> Copy of Letter	<input type="checkbox"/> Specifications	<input type="checkbox"/> Shop drawings	<input type="checkbox"/> Other
	<input type="checkbox"/> Urgent	<input type="checkbox"/> For your use	<input type="checkbox"/> As requested	<input checked="" type="checkbox"/> For Review & Comment	

Remarks:

Re: Fairlane Farm, Lot 33, 1029 Thunderbird Drive.

We revised the grading to be less than 25% and moved the septic tank Here are 3 new copies of the OSDS for Lot 32 for your review. Please let me know if you have any questions.

Thank You,

Tony.

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1039 Thunder
bird

Lot 37

RECEIVED
28 2018
HOWARD COUNTY HEALTH DEPT.
FOOD PROTECTION PROGRAM

Oswald, Hank

From: Tony Fertitta <tonyf@fcc-eng.com>
Sent: Tuesday, September 11, 2018 1:54 PM
To: Oswald, Hank
Subject: RE: Fairlane Farms Lot 33_1039 Thunderbird Drive

area of fill for the pad of the house.

From: Oswald, Hank [<mailto:hoswald@howardcountymd.gov>]
Sent: Tuesday, September 11, 2018 1:36 PM
To: Tony Fertitta
Subject: RE: Fairlane Farms Lot 33_1039 Thunderbird Drive

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Columbia, MD 21045
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

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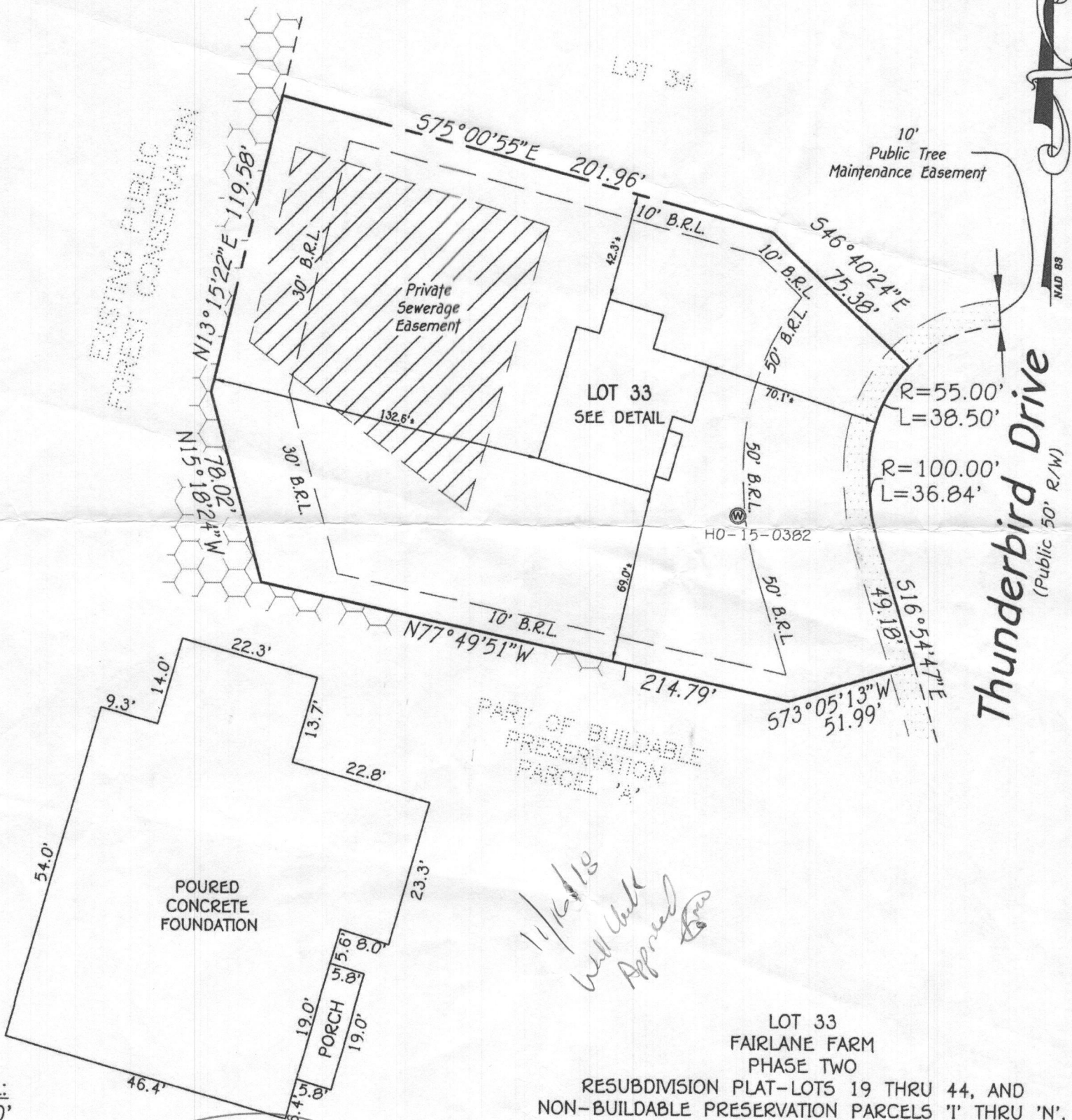
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GENERAL NOTES:

- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE X ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C0035D EFFECTIVE 11-06-2013.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 1'.
- 4) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- 5) THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-15-0302 HAS BEEN FIELD LOCATED BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 6) PROFESSIONAL CERTIFICATION: 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. 339, EXPIRATION DATE 10/04/2020.
- 7) BUILDING PERMIT #B-10003160

Legend

-  10' Public Tree Maintenance Easement
-  Existing Public Forest Conservation Easement



DETAIL:
1" = 20'

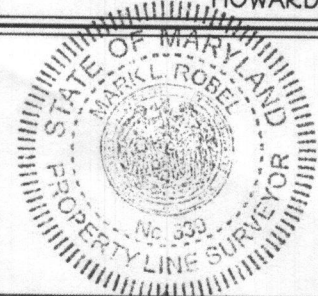
#1039 THUNDERBIRD DRIVE
B.R.L. = BUILDING RESTRICTION LINE
TOP OF FOUNDATION ELEVATION = 597.3'±

*11/10/18
Well Located
Approved*

LOT 33
FAIRLANE FARM
PHASE TWO
RESUBDIVISION PLAT-LOTS 19 THRU 44, AND
NON-BUILDABLE PRESERVATION PARCELS 'I' THRU 'N',
& REVISION PLAT-BUILDABLE PRESERVATION PARCEL 'A'
PLAT NOS. 24367 THRU 24372
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 461 - 2855

Drawing Name:

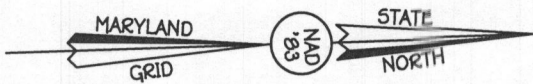


Mark J. Kibel 10/10/18
PROPERTY LINE SURVEYOR DATE
REG. #339

HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 10/8/18
FINAL LOCATION:
BOUNDARY SURVEY:

SCALE: 1" = 50'
DATE: 10/10/18
DRAWN BY: MD
CHECKED BY: MLR
PROJECT No.: 05106-3003



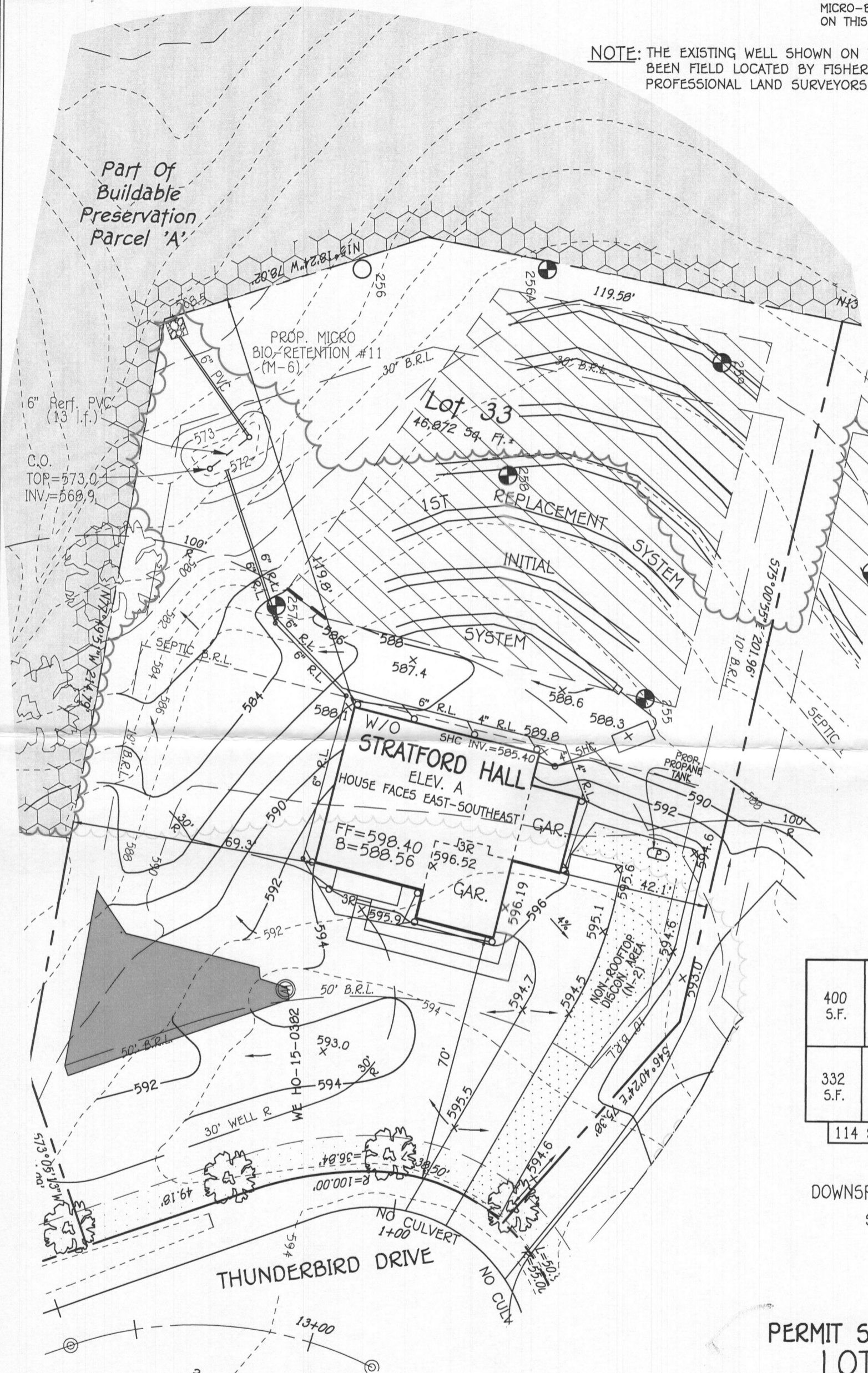
STORMWATER MANAGEMENT NOTES:

STORMWATER MANAGEMENT FOR LOT 33 IS BEING PROVIDED BY A COMBINATION OF NON-ROOFTOP DISCONNECTION (N-2) FOR THE DRIVEWAY AREA AND A MICRO-BIORETENTION FACILITY, AS SHOWN ON THIS PLAN.

NOTE: THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0382, HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

OWNER/DEVELOPER

NV HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MD 21046
410-379-5956



400 S.F.	400 S.F.	255 S.F.	255 S.F.	153 S.F.
332 S.F.	332 S.F.	327 S.F.	327 S.F.	153 S.F.
114 S.F.				

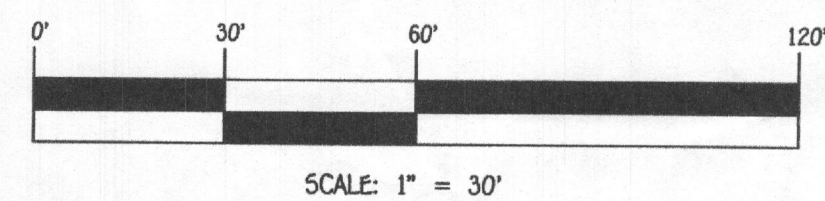
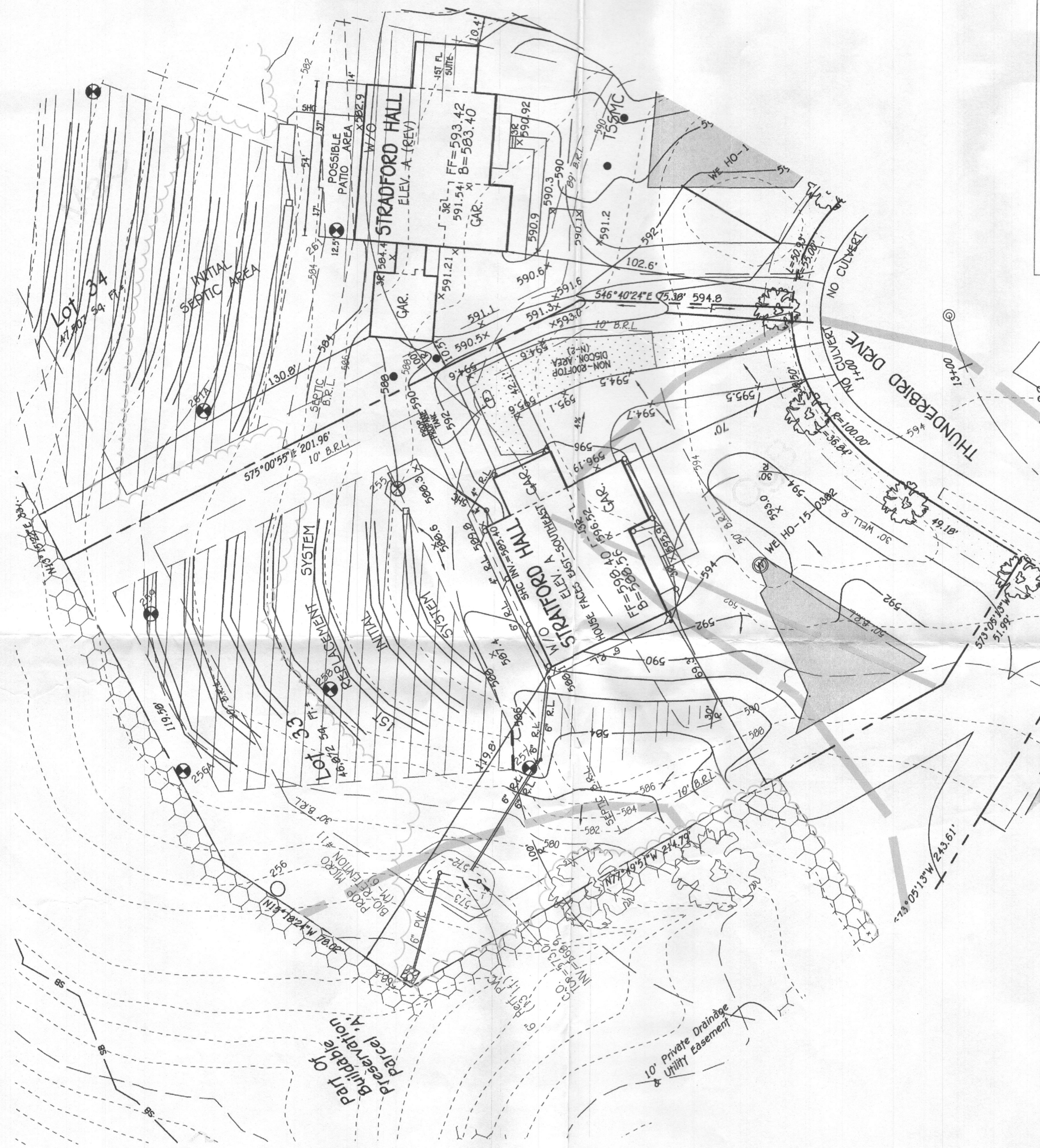
DOWNSPOUT DRAINAGE AREAS
SCALE: 1" = 30'

PLAN
SCALE: 1" = 30'

**PERMIT SITE PLAN
LOT 33**
1039 THUNDERBIRD DRIVE
FAIRLANE FARMS

PHASE TWO
ZONED: RC-DEO
TAX MAP NO.: 8 GRID NO.: 2 PARCEL NO.: 8
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: AUG. 23, 2018
SHEET 1 OF 1

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELL HO-15-0382 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.



PLAN
SCALE: 1" = 30'

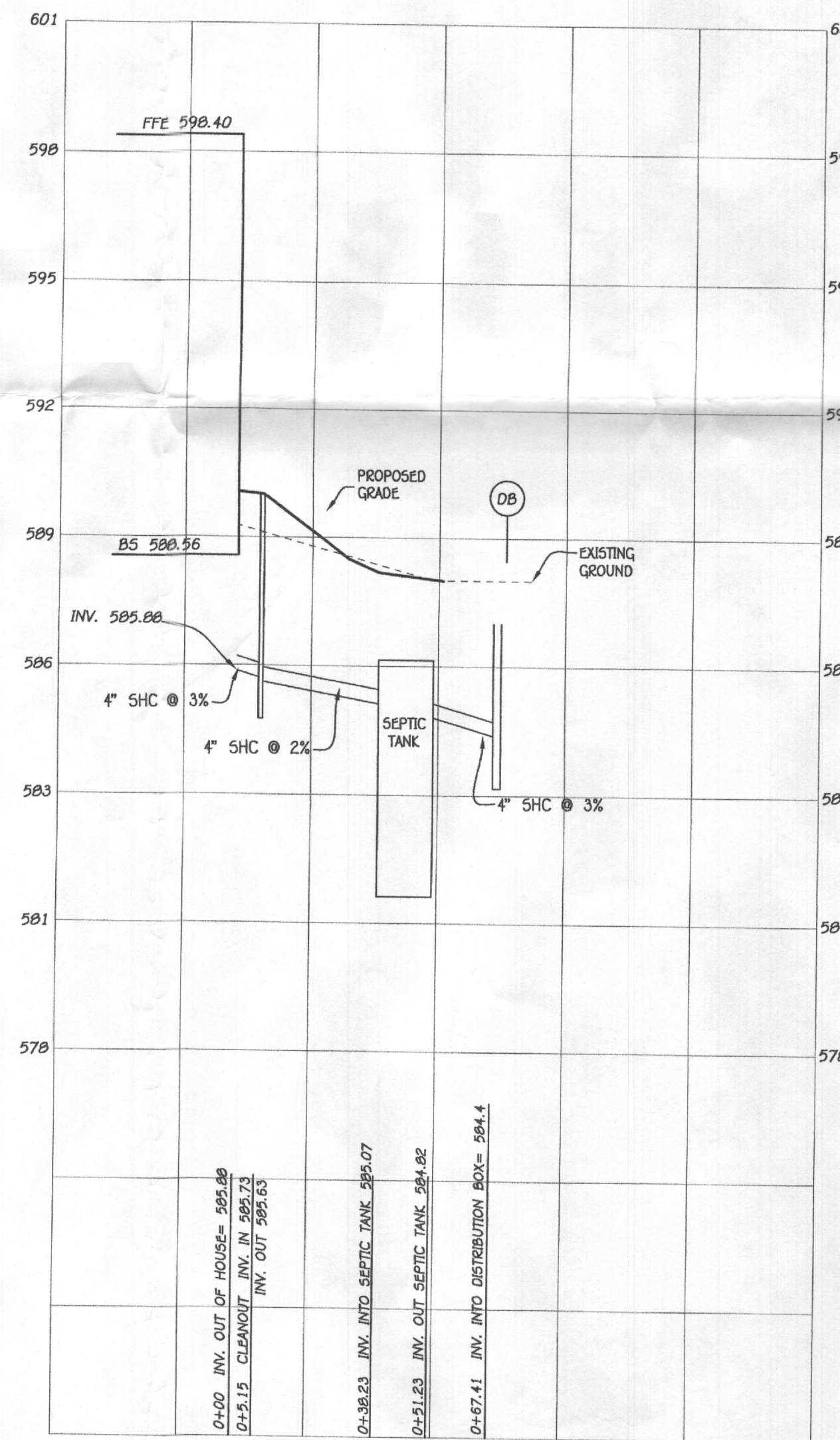
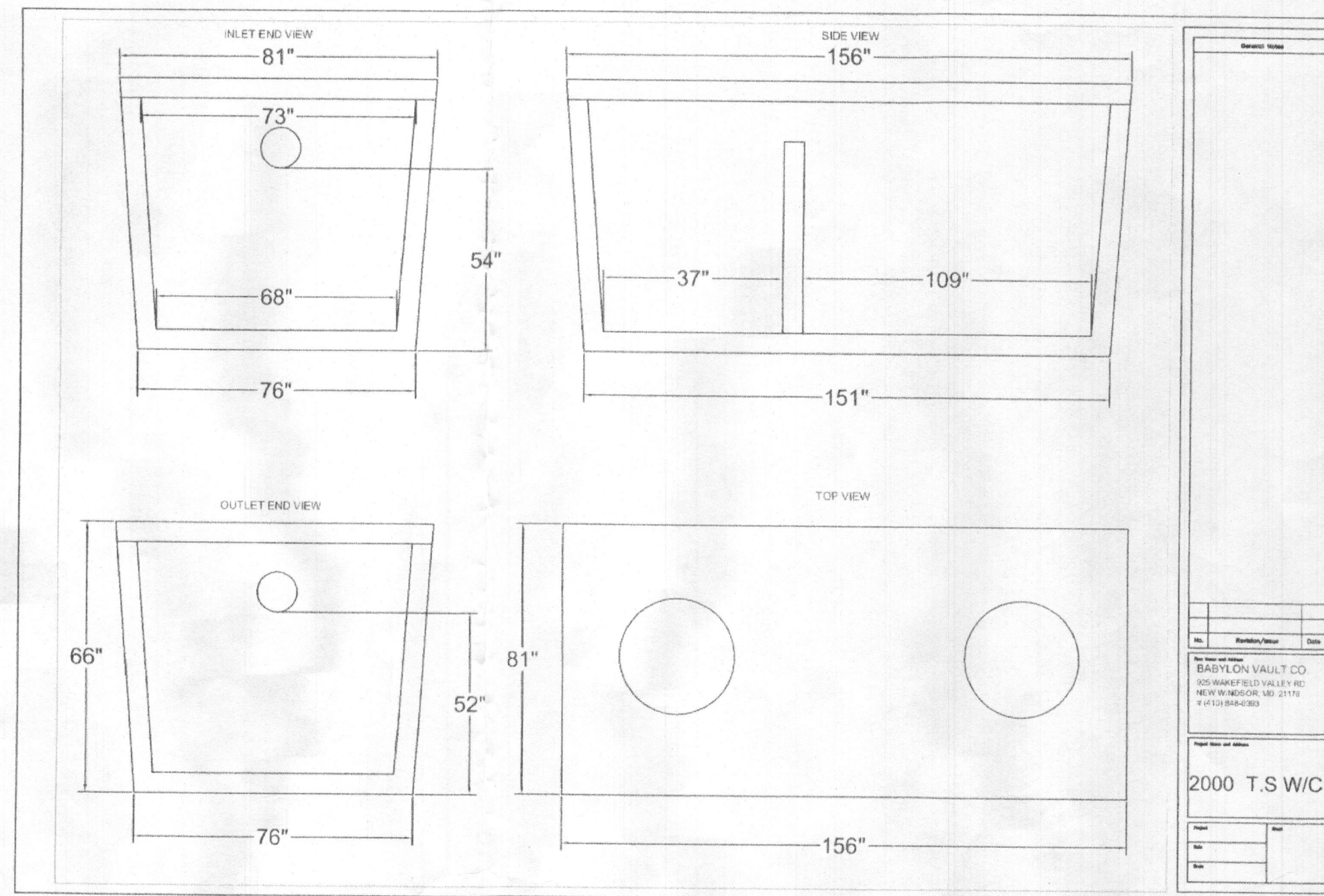


PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2019.

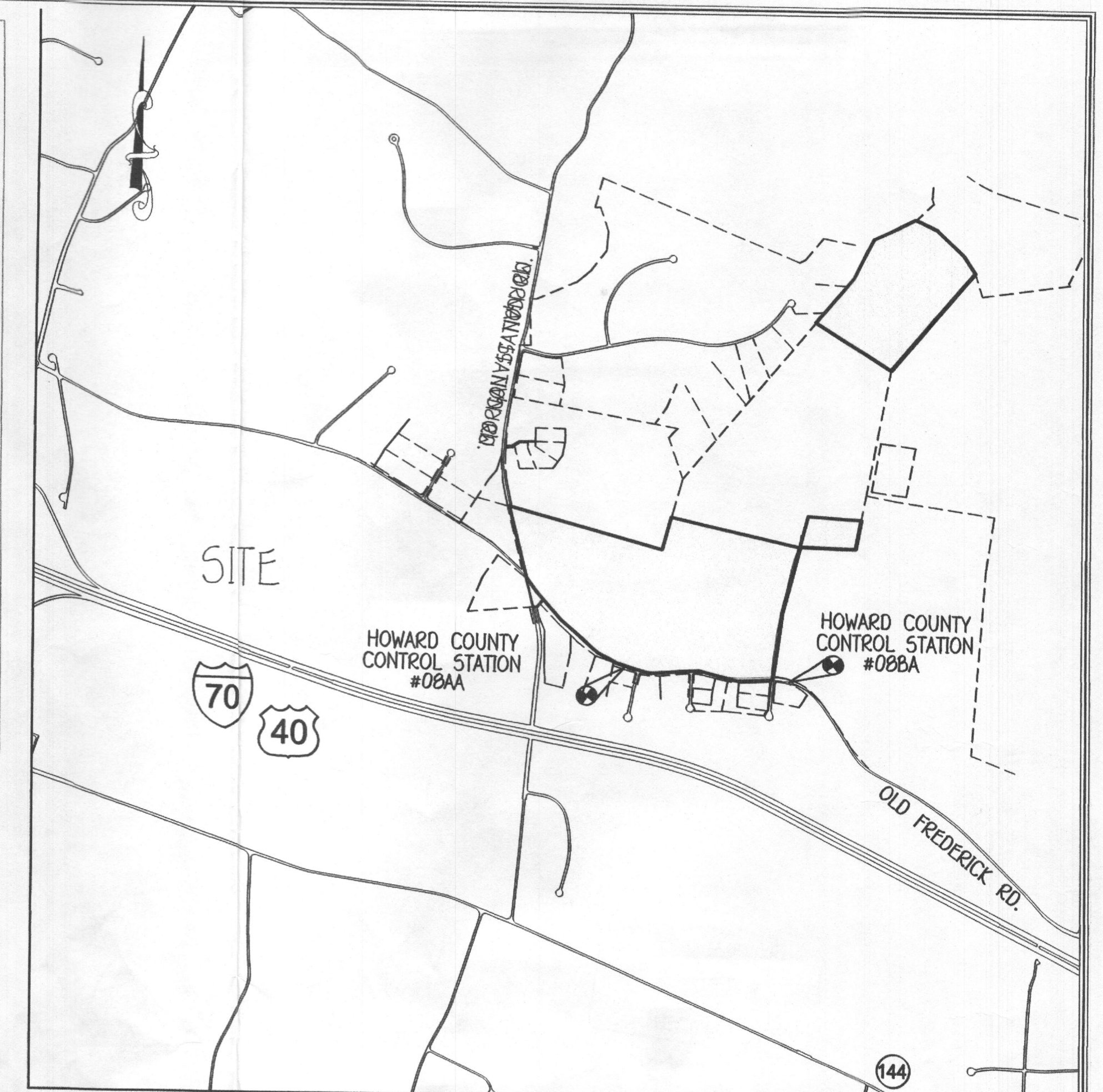
Aldo M. Vitucci
Signature of Professional Engineer
9/5/18
DATE

OWNER/DEVELOPER
NV HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MD 21046
410-379-5956

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10772 BALDWIN NATIONAL PIKE
ELLSWORTH CITY, HOWARD COUNTY, MARYLAND
(410) 461-2295



SEPTIC PROFILE
SCALE: 1" = 30'

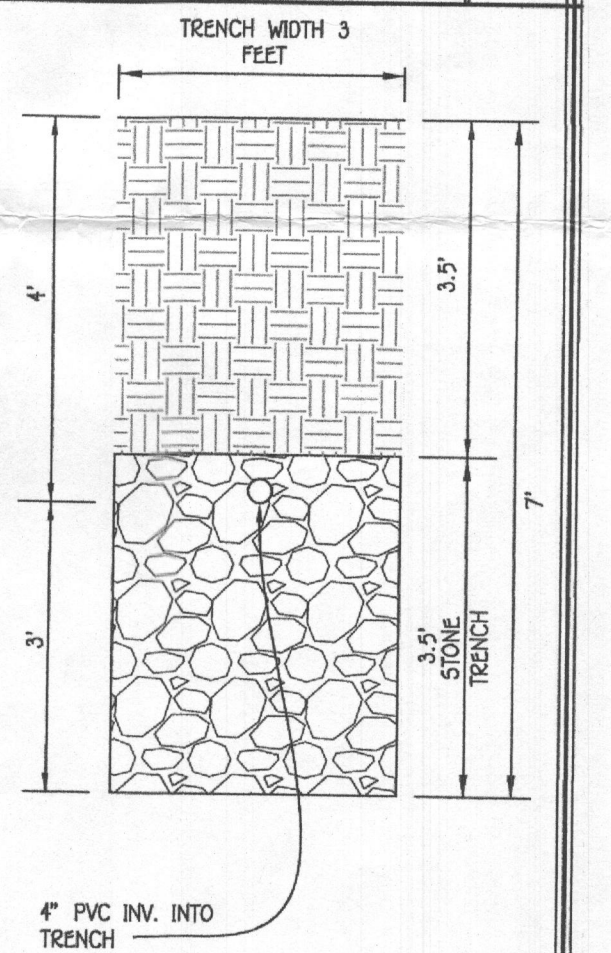


FFE 590.40
BSE 500.56
INV. OUT OF HOUSE = 505.00
PROP. GROUND AT CLEANOUT #1 = 590.0
INV. INTO CLEANOUT = 505.73
INV. OUT OF CLEANOUT = 505.63
EX. GROUND AT SEPTIC TANK = 500.3
PROP. GRADE ABOVE SEPTIC TANK = 500.3
TOP OF SEPTIC TANK = 506.07
INV. INTO SEPTIC TANK = 505.07
INV. OUT OF SEPTIC TANK = 504.82
EX. GROUND AT DISTRIBUTION BOX = 500.3
INV. INTO DISTRIBUTION BOX = 504.4
INV. OUT OF DISTRIBUTION BOX = 504.3

VICINITY MAP
SCALE: 1" = 1200'

TRENCH DATA:

TRENCH 1:
EX. GROUND ABOVE = 500.3
INV. IN = 504.3
BOTTOM TRENCH = 501.3
TRENCH 2:
EX. GROUND ABOVE = 507.2
INV. IN = 503.2
BOTTOM TRENCH = 500.2



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

INITIAL SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 5 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 2 FEET
SF OF DRAINFIELD = 750 GPD / 1.2 = 200.33 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2)) = 0.625
TRENCH LENGTH = 200.33 SF x 1.2 = 130.21 FEET
(USE 2 TRENCHES AT 65.10 L.F.)
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

1ST REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 5.5 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 2.5 FEET
SF OF DRAINFIELD = 750 GPD / 0.8 = 937.5 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2.5)) = 0.55
TRENCH LENGTH = 312.5 SF x 0.55 = 171.88 FEET
(USE 2 TRENCHES AT 85.94 L.F.)
TRENCH SPACING = 2D+W = ((2x2.5) + 3) = 8' USE 10'

2ND REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 5 BEDROOMS
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 4 FEET
TRENCH DEPTH = 6 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 2 FEET
SF OF DRAINFIELD = 750 GPD / 0.8 = 937.5 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x2.5)) = 0.55
TRENCH LENGTH = 312.5 SF x 0.625 = 195.31 FEET
(USE 3 TRENCHES AT 65.10 L.F.)
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

Approved Septic System Plan
Howard County Health Department
Henry Oswald 9/18/18
Signature Date

**SEPTIC SYSTEM
INSTALLATION SITE PLAN**
LOT 33
1039 THUNDERBIRD DRIVE
FAIRLANE FARMS

PHASE TWO
ZONED: RC-DEO
TAX MAP NO.: 0 GRID NO.: 2 PARCEL NO.: 0
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: SEPTEMBER 5, 2018
SHEET 1 OF 1

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
33	1039 THUNDERBIRD DRIVE