



Howard County
Health Department

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: 8-2-18

ONSITE SEWAGE DISPOSAL SYSTEM

P 563970

APPROVAL DATE: 8/27/18

PERMIT: CONSTRUCTION

A

PROPERTY ADDRESS: 1012 Thunderbird Drive

SUBDIVISION: Fairlane Farms

LOT: 42

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>147.92</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</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: 8-2-18

EXPIRATION DATE: 8-2-19

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 DOWNGRADE 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

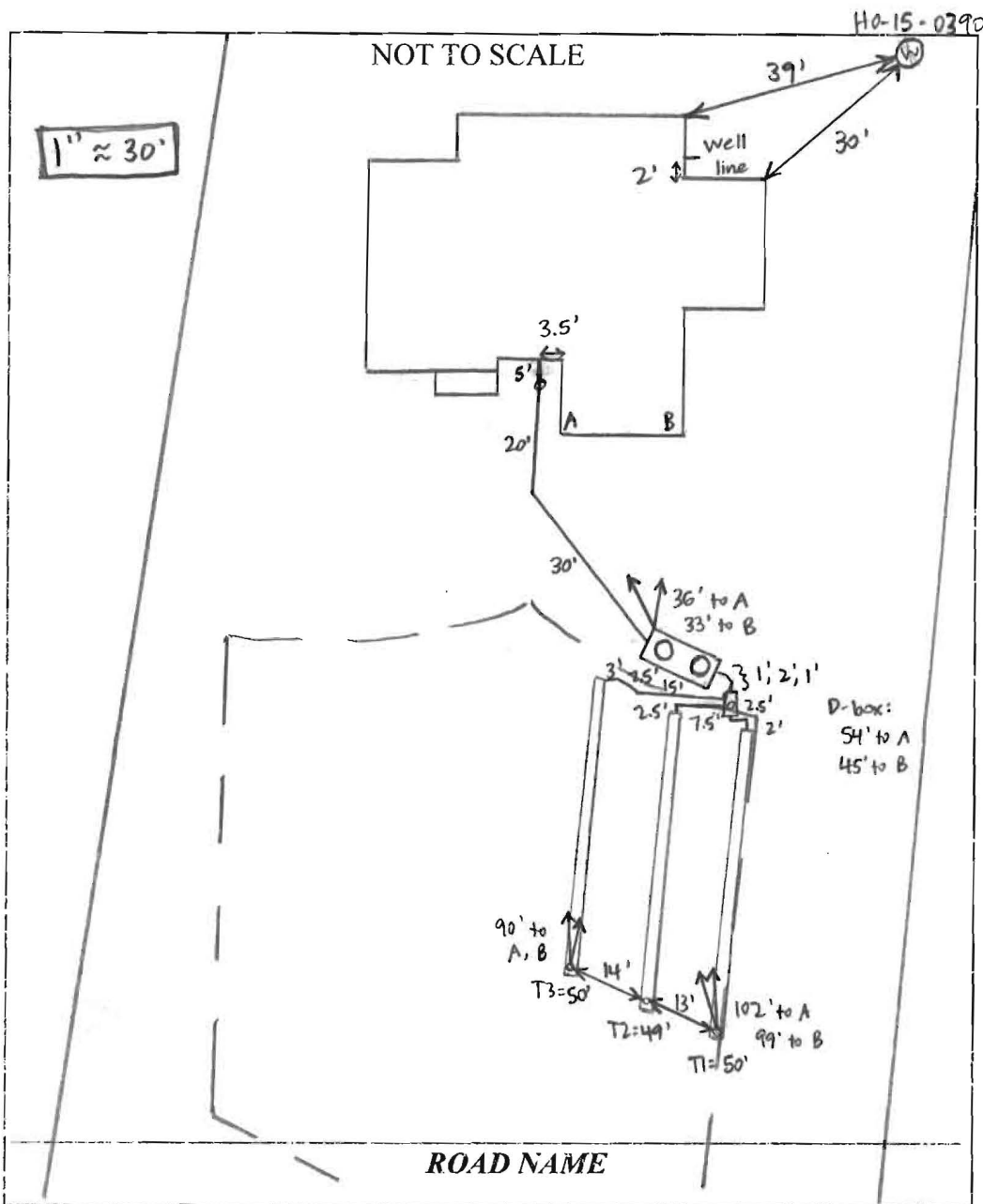
☒ ELECTRICAL PERMIT ISSUED E N/A

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'	6'
NUMBER OF TRENCHES		3
TOTAL LENGTH		149'
ABSORPTION AREA		447' + 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	0.5 - 2'	
BAFFLES	YES	
BAFFLE FILTER	NO	
MANHOLE LOC	FRONT + REAR	
6" PORT LOC	NONE	
WATERTIGHT TEST	NO	
SLOTTED	YES	
DATE ON LID	6-26-18	

PUMP/SEPTIC TANK 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:

8/7/17 Met S. Carroll on site for layout. Tank + SDA corners staked. Moved tank location closer to SDA to keep off swale through front yard. Shot contour + laid out 3x50' trenches. (SC)

INSTALLATION: 8/14/18 Tank set, pipe laid from house to tank. Need house connection. (SC) 8/14/18 T2 + T3 complete, T2 left open for inspection and T3 left open at ends. 3' wide, 3.5' to stone. (SC) 8/15/18 T3 dug, S. Carroll adding stone 3' wide, 3.5' to stone. Levelled speed levelers in D-box. (SC) 8/24/18 Builder notified HCHD that house connection was made. Not yet connected. (SC) 8/27/18 House connection made. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 8/27/18

**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 42**

W.O.# **05106-3003**

Date: **April 27, 2018**

Pages: **0** **Page(s) Including this cover**

We are forwarding: ☒ Prints ☐ Copy of Letter ☐ Specifications ☐ Shop drawings ☐ Other
☐ Urgent ☐ For your use ☐ As requested ☒ For Review & Comment

Remarks:

Re: Fairlane Farm, Lot 42, 1012 Thunderbird Drive.

Here are 3 new copies of the OSDS for Lot 42 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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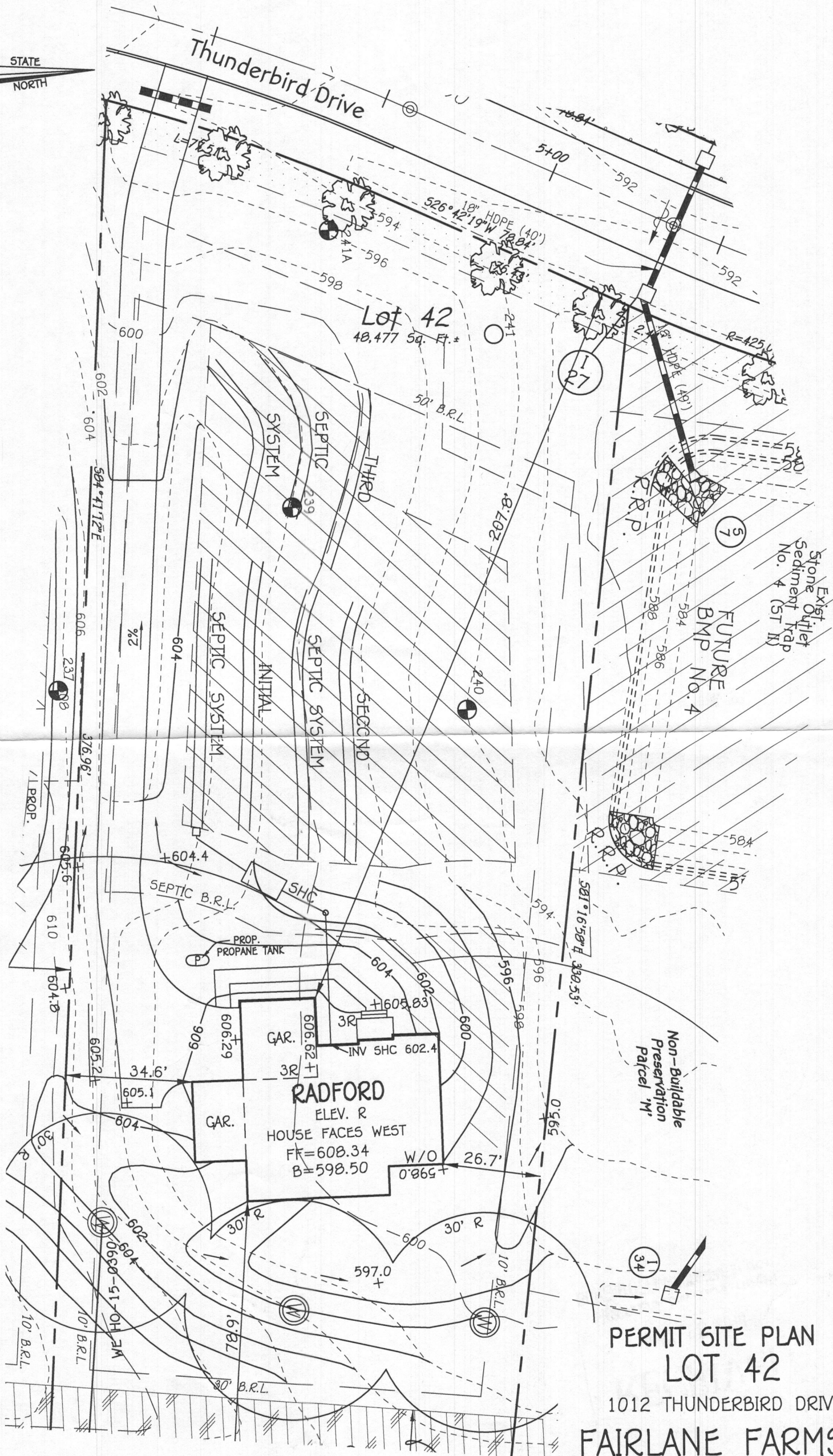
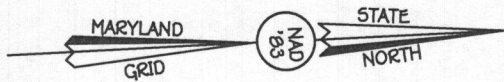
OWNER/DEVELOPER

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

NOTE: THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0390, HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

STORMWATER MANAGEMENT NOTES:

STORMWATER MANAGEMENT TREATMENT OF ALL IMPERVIOUS AREA FOR LOT 42 IS BEING PROVIDED BY BMP NO. 4.



PERMIT SITE PLAN LOT 42

1012 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: APRIL 26, 2018
SHEET 1 OF 1

PLAN

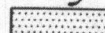


SCALE: 1" = 30'

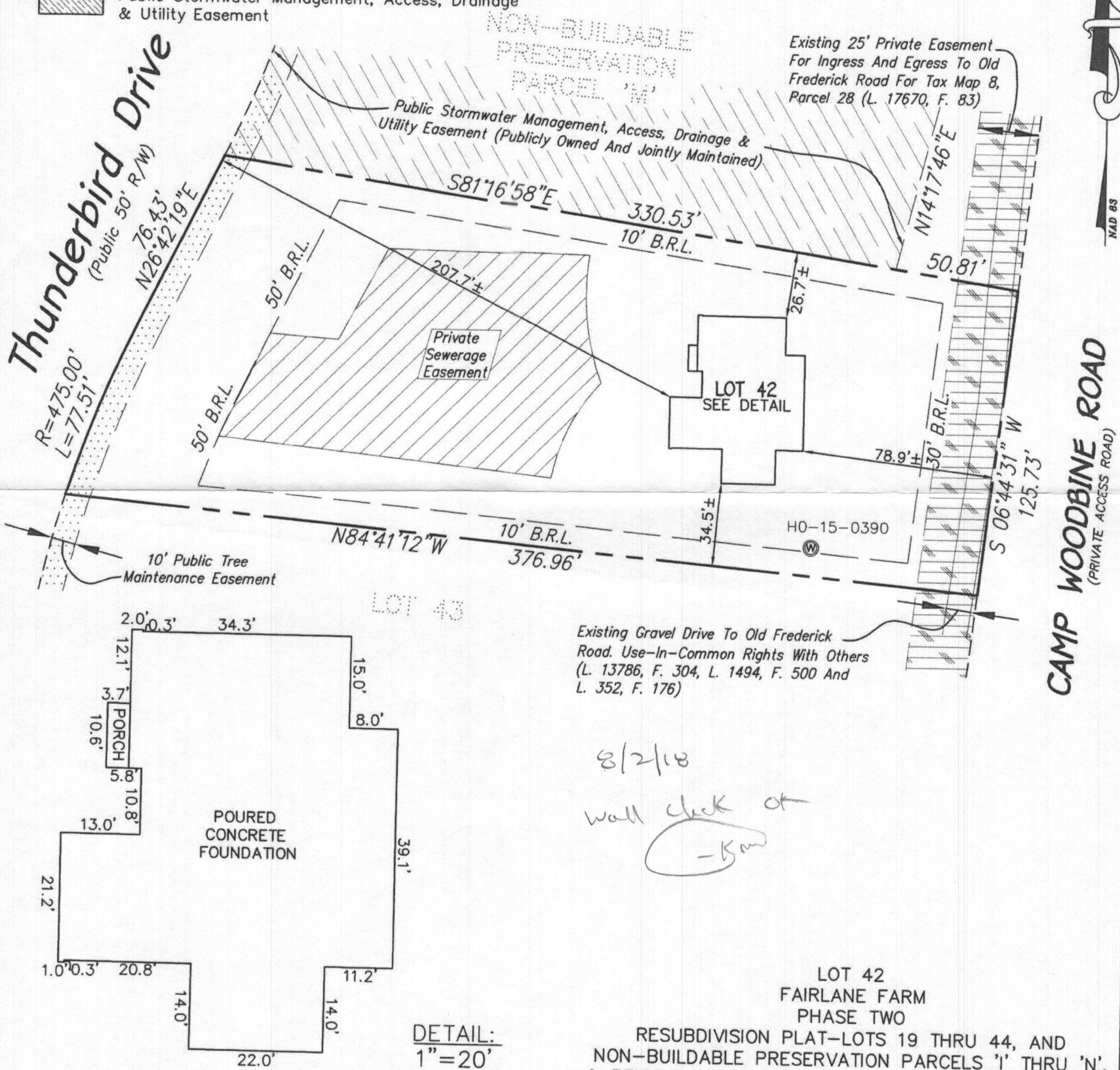
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 461-2855

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 -0390 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 10/04/2018.
- 7) BUILDING PERMIT #B-18001672

Legend

-  10' Public Tree Maintenance Easement
-  Existing 25' Private Easement For Ingress And Egress To Old Frederick Road For Tax Map 8, Parcel 83
-  Public Stormwater Management, Access, Drainage & Utility Easement



#1012 THUNDERBIRD DRIVE
B.R.L. = BUILDING RESTRICTION LINE
TOP OF FOUNDATION ELEVATION = 607.1'±

LOT 42
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
ELLICOTT CITY, MARYLAND 21042
(410) 461-2855

Drawing Name:



Mark L. Robel
PROPERTY LINE SURVEYOR
REG. #339

6/29/18
DATE

HOUSE LOCATION DRAWING

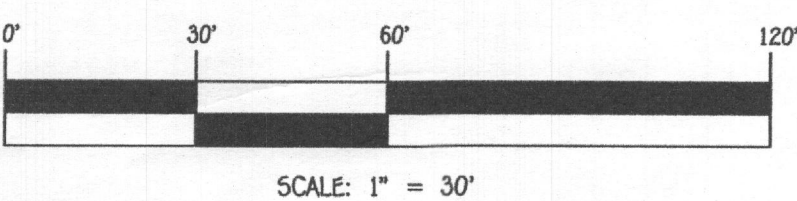
FOUNDATION LOCATION: 6/27/18
FINAL LOCATION:
BOUNDARY SURVEY:

SCALE: 1"=50'
DATE: 6/29/18
DRAWN BY: MD
CHECKED BY: MLR
PROJECT No.: 05106-3003

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-15-0390 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'



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895

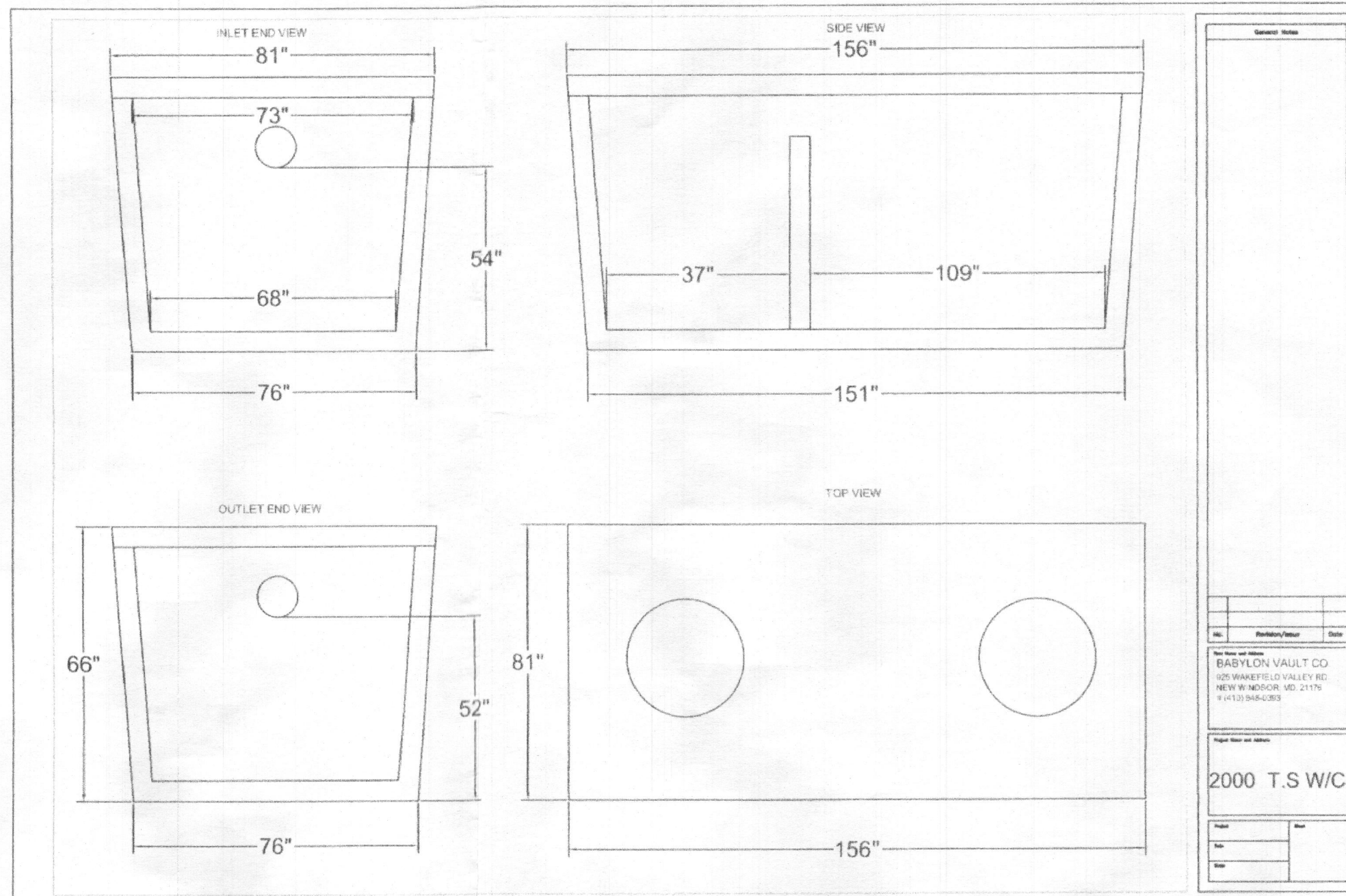
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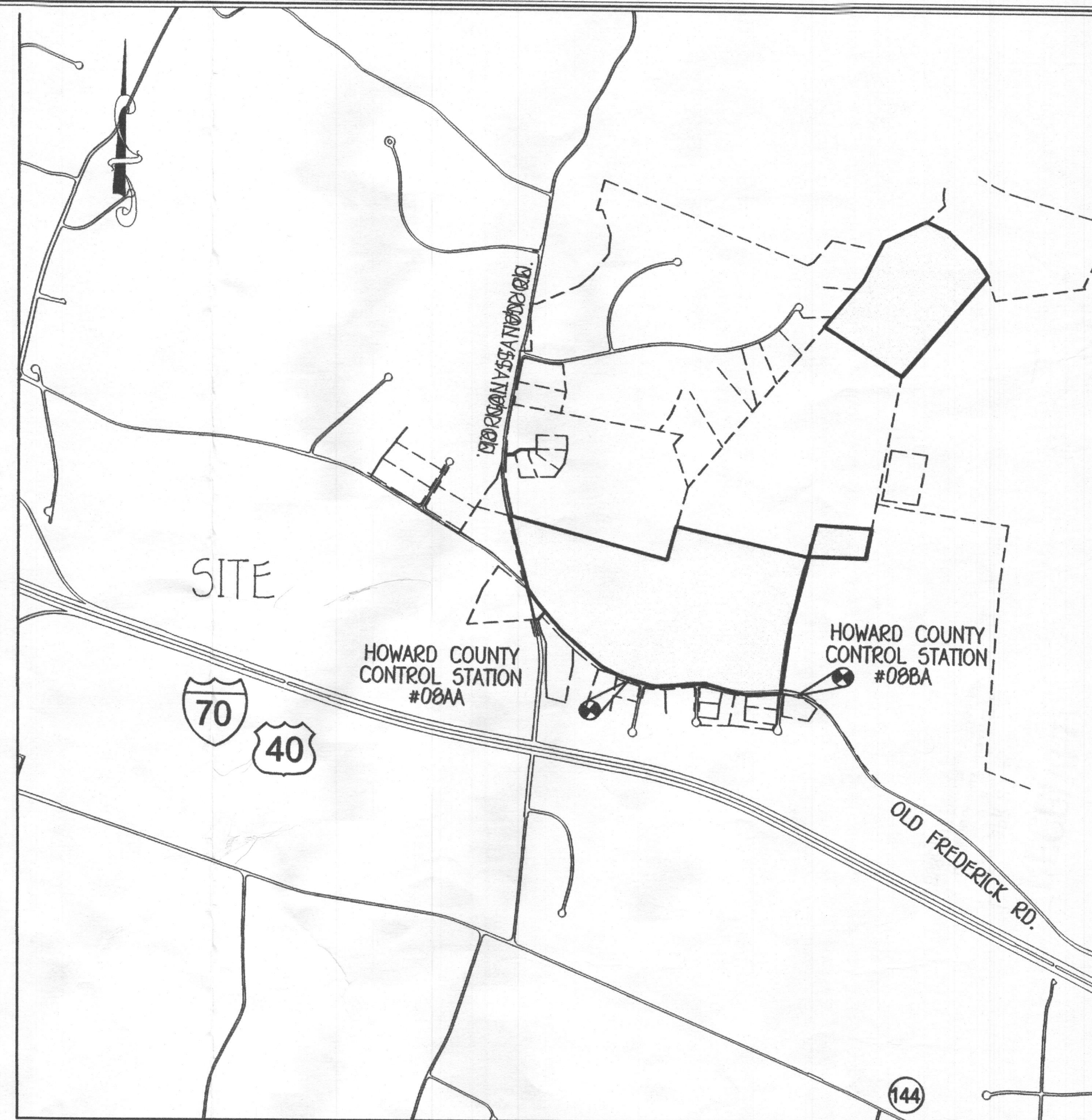
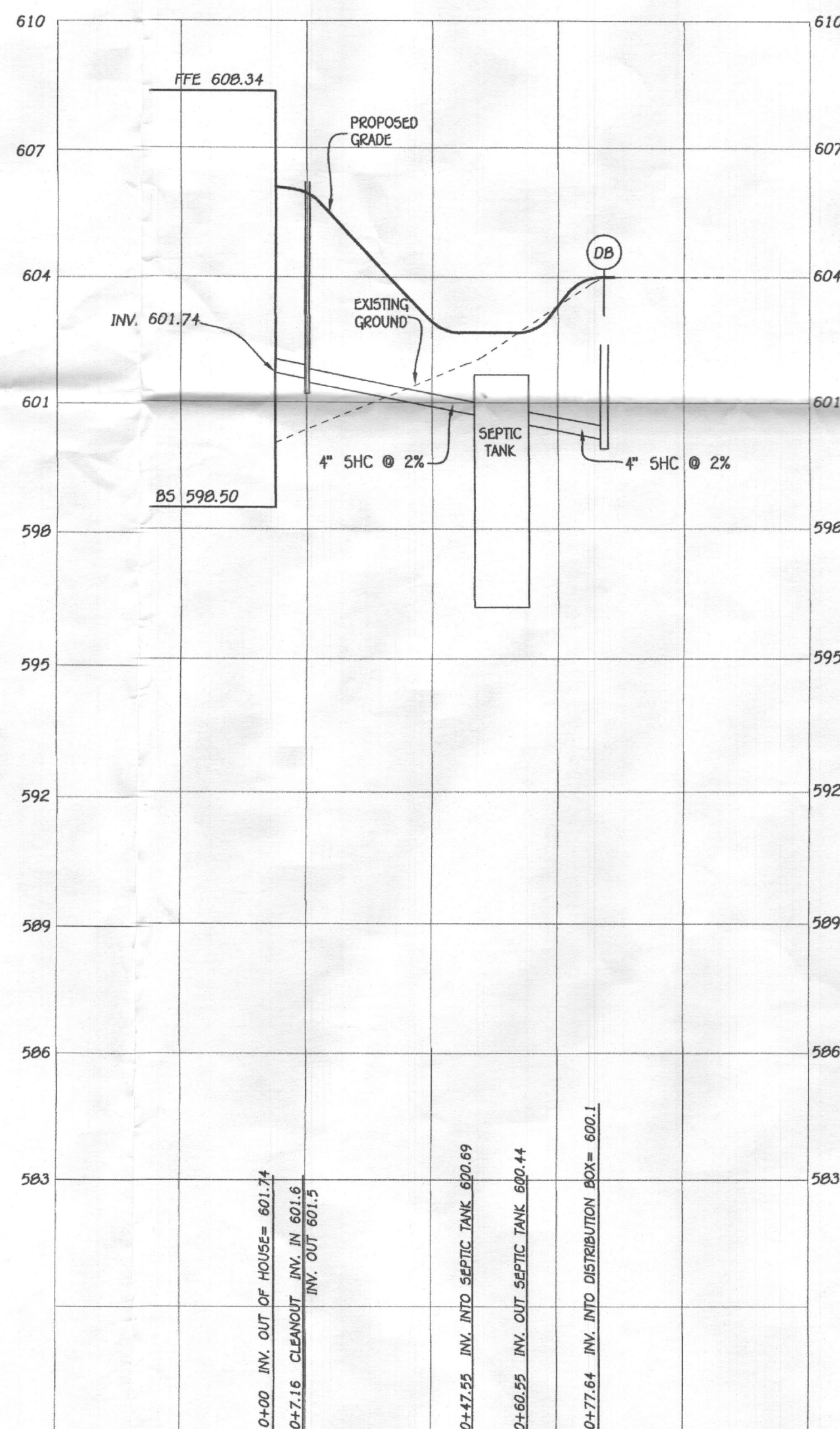
PROFESSIONAL CERTIFICATION

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. 20740, EXPIRATION DATE: 02/22/2019.

Signature of Professional Engineer
DATE



SEPTIC PROFILE
SCALE: 1" = 30'

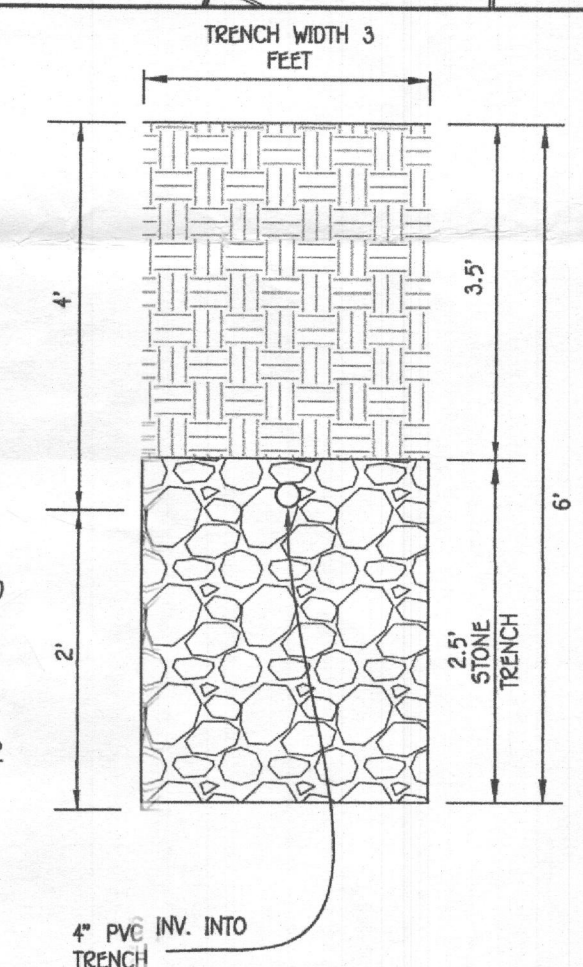


VICINITY MAP
SCALE: 1" = 1200'

FFE 608.34
BSE 598.50
INV. OUT OF HOUSE = 601.74
PROP. GROUND AT CLEANOUT #1 = 606.0
INV. INTO CLEANOUT = 601.6
INV. OUT OF CLEANOUT = 601.5
EX. GROUND AT SEPTIC TANK = 602.0
PROP. GRADE ABOVE SEPTIC TANK = 602.69
TOP OF SEPTIC TANK = 601.69
INV. INTO SEPTIC TANK = 600.69
INV. OUT OF SEPTIC TANK = 600.44
EX. GROUND AT DISTRIBUTION BOX = 604.0
INV. INTO DISTRIBUTION BOX = 600.1
INV. OUT OF DISTRIBUTION BOX = 600.0

Approved Septic System Plan
Howard County Health Department
Mark Oswald 4/30/18
Signature Date

TRENCH DATA:
TRENCH 1:
EX. GROUND ABOVE = 604.0
INV. IN = 600.0
BOTTOM TRENCH = 598.0
TRENCH 2:
EX. GROUND ABOVE = 602.2
INV. IN = 598.2
BOTTOM TRENCH = 596.2



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

INITIAL SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 2 BEDROOMS
LOADING RATE = 5 BEDROOMS X 150 GPD/BEDROOM = 750 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 4.5 FEET
TRENCH DEPTH = 6 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 750 GPD / 1.2 = 625 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = .71
TRENCH LENGTH = 208.33 SF x .71 = 147.92 FEET
(USE 2 TRENCHES AT 73.96 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 = 1.2
EFFECTIVE SIDEWALL BEGINS AT 4.5 FEET
TRENCH DEPTH = 6 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 750 GPD / 1.2 = 625 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = .71
TRENCH LENGTH = 208.33 SF x .71 = 147.92 FEET
(USE 2 TRENCHES AT 73.96 L.F.)
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' 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 = 1.2
EFFECTIVE SIDEWALL BEGINS AT 4.5 FEET
TRENCH DEPTH = 6 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 1.5 FEET
SF OF DRAINFIELD = 750 GPD / 1.2 = 625 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x1.5)) = .71
TRENCH LENGTH = 208.33 SF x .71 = 147.92 FEET
(USE 3 TRENCHES AT 49.31 L.F.)
TRENCH SPACING = 2D+W = ((2x2) + 3) = 7' USE 10'

SEPTIC SYSTEM
INSTALLATION SITE PLAN
LOT 42

1012 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: APRIL 27, 2018
SHEET 1 OF 1

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
42	1012 THUNDERBIRD DRIVE