



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: 11/16/18 **ONSITE SEWAGE DISPOSAL SYSTEM**

P 564071

APPROVAL DATE: 11/29/18 SEC **PERMIT: CONSTRUCTION**

A

PROPERTY ADDRESS: 15212 Torino Way

SUBDIVISION: Fairlane Farm

LOT: 28

TAX ID:

04-600177

CONTRACTOR: South Carroll Backhoe

EMAIL: scbackhoe@comcast.net

CONTRACTOR ADDRESS: 4410 Salem Bottom Road

PHONE: 410-596-3618

PROPERTY OWNER: NV Homes

EMAIL:

OWNER ADDRESS: 9720 Patuxent Woods Drive

PHONE: 410-379-5956

SEPTIC TANK SIZE (GALLONS): 2000

TANK MANUFACTURER:

Babylon

PUMP MODEL:

PUMP SIZE

PUMP TANK CAPACITY:

DISTRIBUTION SYSTEM:



GRAVITY



PRESSURE DOSED

BEDROOMS: 6

APPLICATION RATE:

1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>104</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install two 52' trenches.	

ISSUED BY: Sarah Collins

ISSUE DATE: 11/16/18

EXPIRATION DATE: 11/16/19

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.

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 11/29/13

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. 24027C00350 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 1.0'.
- 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-15-0376 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-18003159

Legend

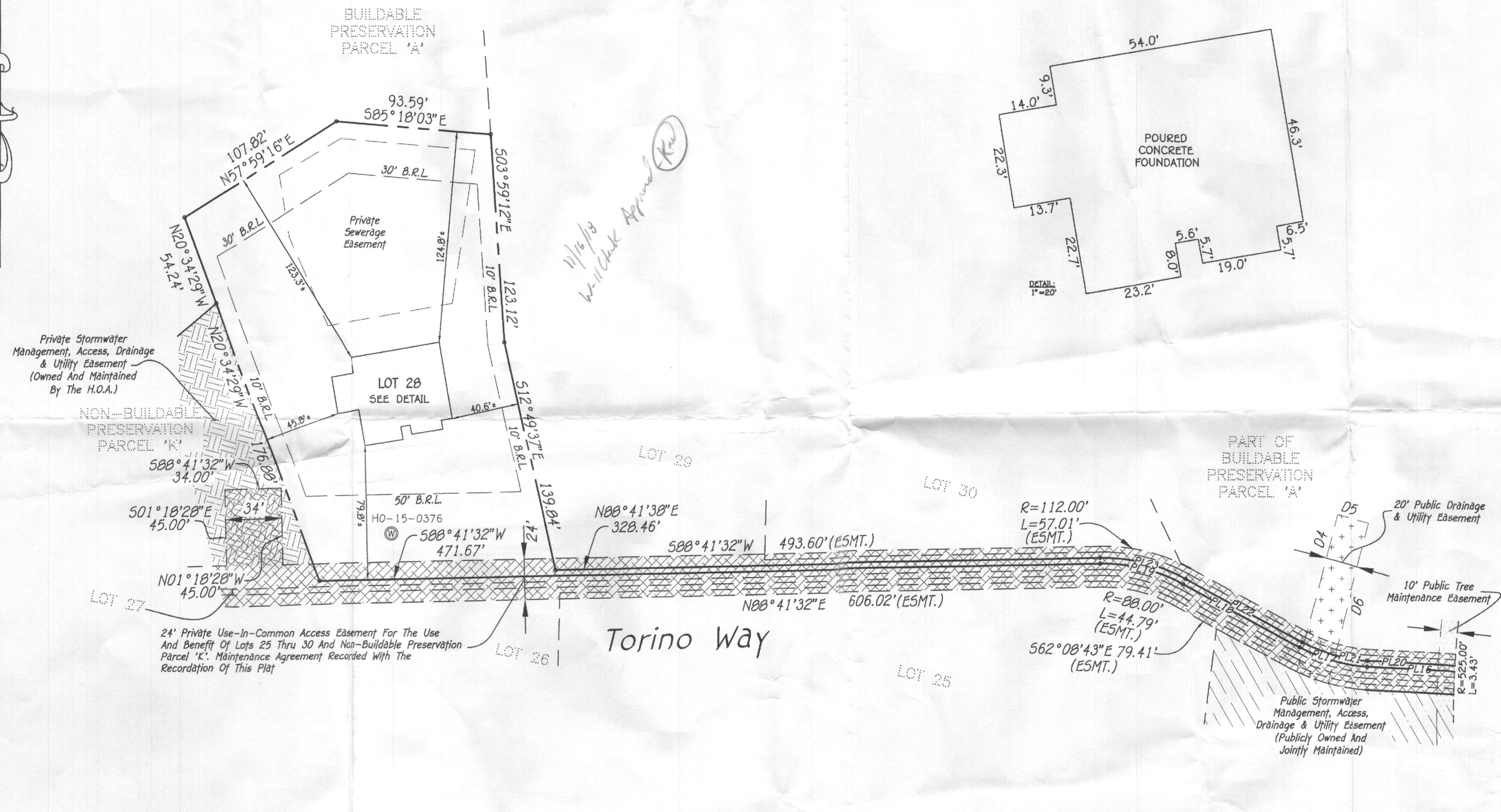
- Existing Private Stormwater Management, Access, Drainage & Utility Easement
- Public Stormwater Management, Access, Drainage & Utility Easement
- 10' Public Tree Maintenance Easement
- Public Drainage & Utility Easement

Public And Private Drainage & Utility Easement Line Table

LINE	BEARING	LENGTH
D4	N14°40'57"E	96.43'
D5	S75°19'03"E	20.00'
D6	S14°40'57"W	98.31'

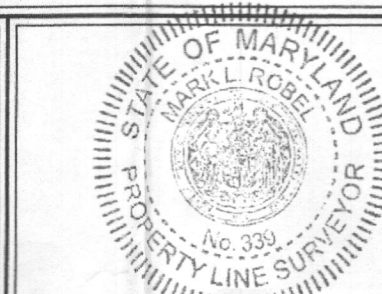
Property Line Metes And Bounds Line Table

LINE	BEARING	LENGTH
PL16	N07°24'40"W	52.59'
PL17	R=98.29'	L=43.34'
PL18	N62°08'43"W	79.41'
PL19	R=101.71'	L=51.77'
PL20	N07°24'40"W	52.61'
PL21	R=94.86'	L=41.83'
PL22	N62°08'43"W	79.41'
PL23	R=105.14'	L=53.51'



#15212 TORINO WAY
B.R.L. = BUILDING RESTRICTION LINE
TOP OF FOUNDATION ELEVATION = 602.6'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE



Mark L. Robel
PROPERTY LINE SURVEYOR
REG. #339

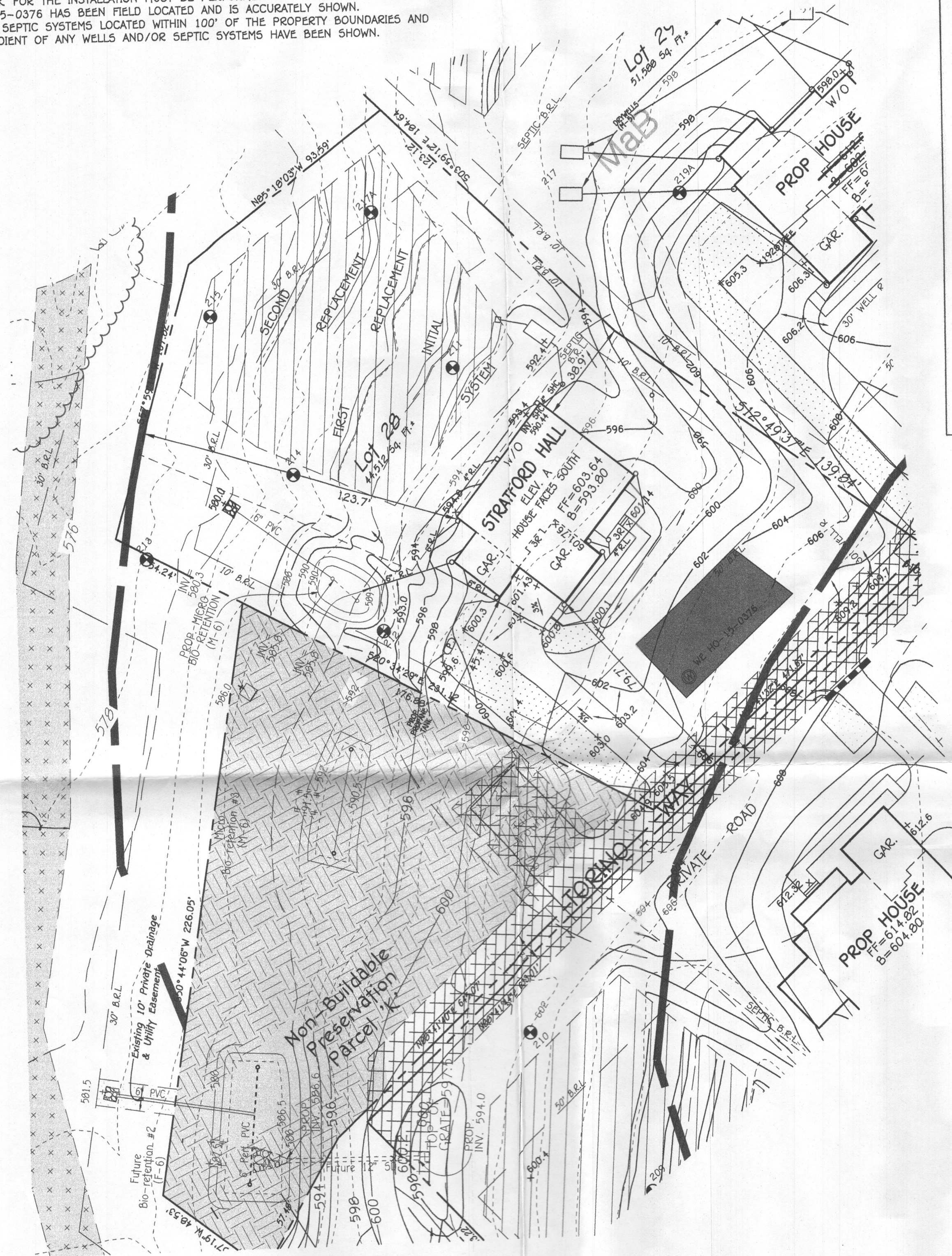
HOUSE LOCATION DRAWING

FOUNDATION LOCATION: 10/28/18
FINAL LOCATION:
BOUNDARY SURVEY:

SCALE: 1"=50'
DATE: 10/11/18
DRAWN BY: MD
CHECKED BY: MLR
PROJECT No.: 05106-3003

LOT 28
FAIRLANE FARM
PHASE TWO
RESUBDIVISION PLAT-LOTS 19 THRU 44,
& REVISION PLAT-BUILDABLE PRESERVATION PARCEL 'A'
PLAT NOS. 24367 THRU 24372
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

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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-15-0376 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.

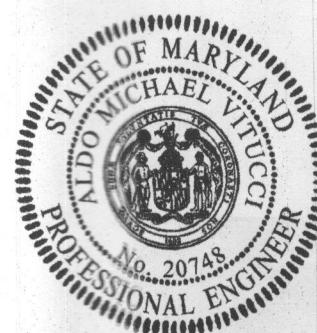


PLAN

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. 20746, EXPIRATION DATE: 02/22/2019.

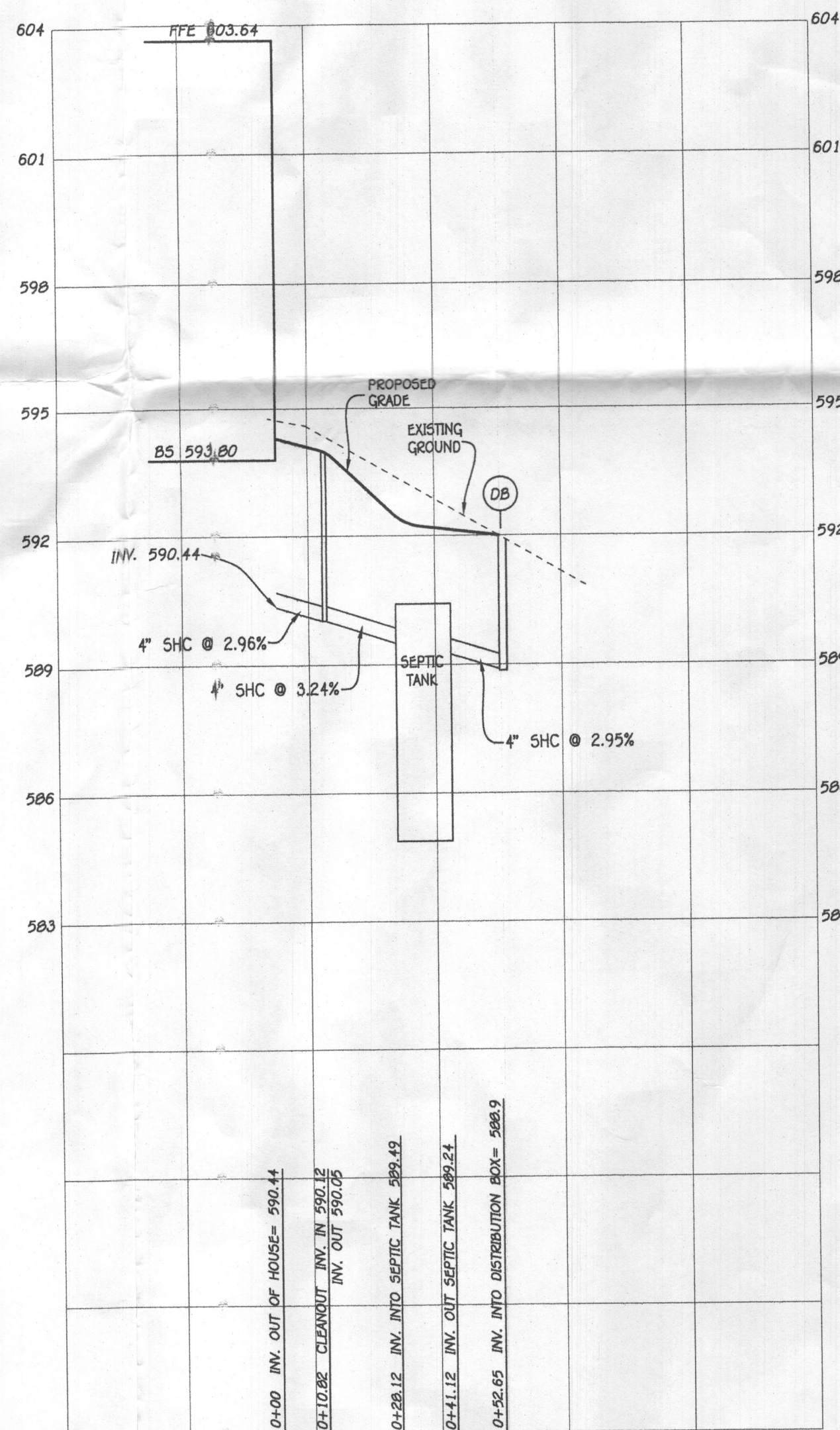
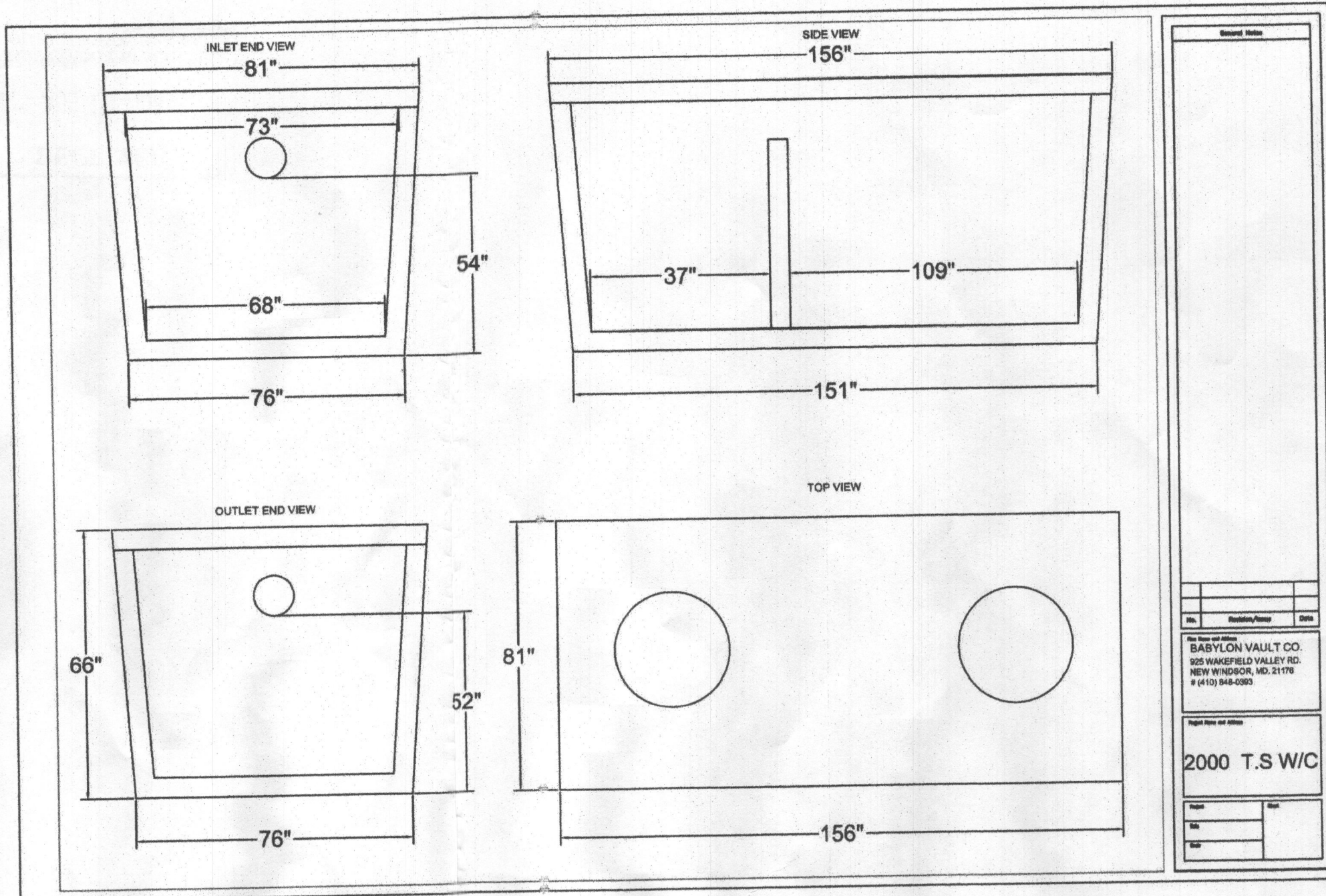


Michael J. Vetter
Signature of Professional Engineer

9/13/19
DATE

OWNER/DEVELOPER

NY HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MD 21046
410-375-5956



SEPTIC PROFILE

SCALE: 1" = 30'



VICINITY MAP

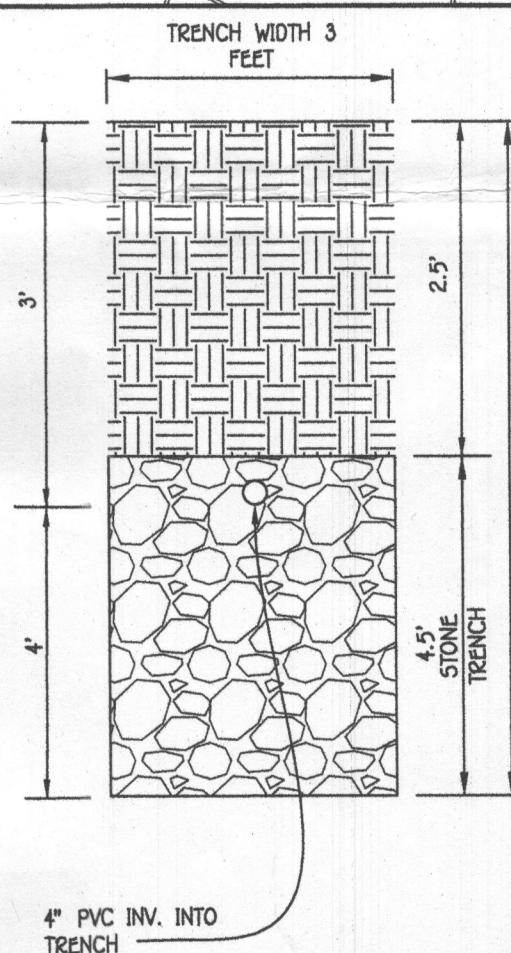
SCALE: 1" = 1200'

FFE 603.64
BSE 593.80
INV. OUT OF HOUSE = 590.44
PROP. GROUND AT CLEANOUT #1 = 594.0
INV. INTO CLEANOUT = 590.22
INV. OUT OF CLEANOUT = 590.12
EX. GROUND AT SEPTIC TANK = 592.4
PROP. GRADE ABOVE SEPTIC TANK = 592.4
TOP OF SEPTIC TANK = 590.49
INV. INTO SEPTIC TANK = 589.49
INV. OUT OF SEPTIC TANK = 589.24
EX. GROUND AT DISTRIBUTION BOX = 591.8
INV. INTO DISTRIBUTION BOX = 588.9
INV. OUT OF DISTRIBUTION BOX = 588.8

TRENCH DATA:

TRENCH 1:
EX. GROUND ABOVE = 591.8
INV. IN = 588.8
BOTTOM TRENCH = 584.8

TRENCH 2:
EX. GROUND ABOVE = 589.9
INV. IN = 588.9
BOTTOM TRENCH = 582.9



INITIAL TRENCH DETAIL

SCALE: 1" = 2'

INITIAL SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 3 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4)) = .416$
TRENCH LENGTH = 750 SF / .416 = 104.00 FEET
(USE 2 TRENCHES AT 52.00 L.F.)
TRENCH SPACING = $2D+W = ((2 \times 4) + 3) = 11'$ USE 11'

1ST REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 4.5 FEET
TRENCH DEPTH = 7.5 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4.5 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4.5)) = .384$
TRENCH LENGTH = 750 SF / .384 = 96.00 FEET
(USE 2 TRENCHES AT 48.00 L.F.)
TRENCH SPACING = $2D+W = ((2 \times 4.5) + 3) = 12'$ USE 12'

2ND REPLACEMENT SYSTEM

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 3 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 5 FEET
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 5)) = .357$
TRENCH LENGTH = 1125 SF / .357 = 315.00 FEET
(USE 2 TRENCHES AT 157.50 L.F.)
TRENCH SPACING = $2D+W = ((2 \times 5) + 3) = 13'$ USE 13'

SEPTIC SYSTEM INSTALLATION SITE PLAN

LOT 28

15212 TORINO WAY

FAIRLANE FARMS

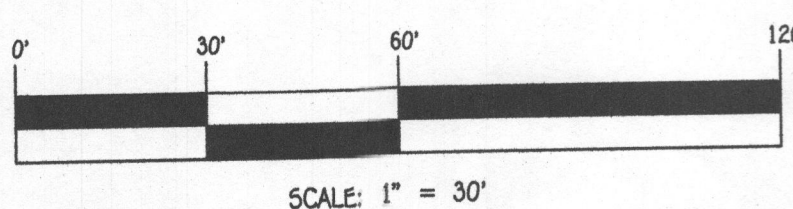
PHASE TWO

ZONED: RC-DEO

TAX MAP NO.: 8 GRID NO.: 2 PARCEL NO.: 8
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: AUGUST 13, 2018
SHEET 1 OF 1

ADDRESS CHART

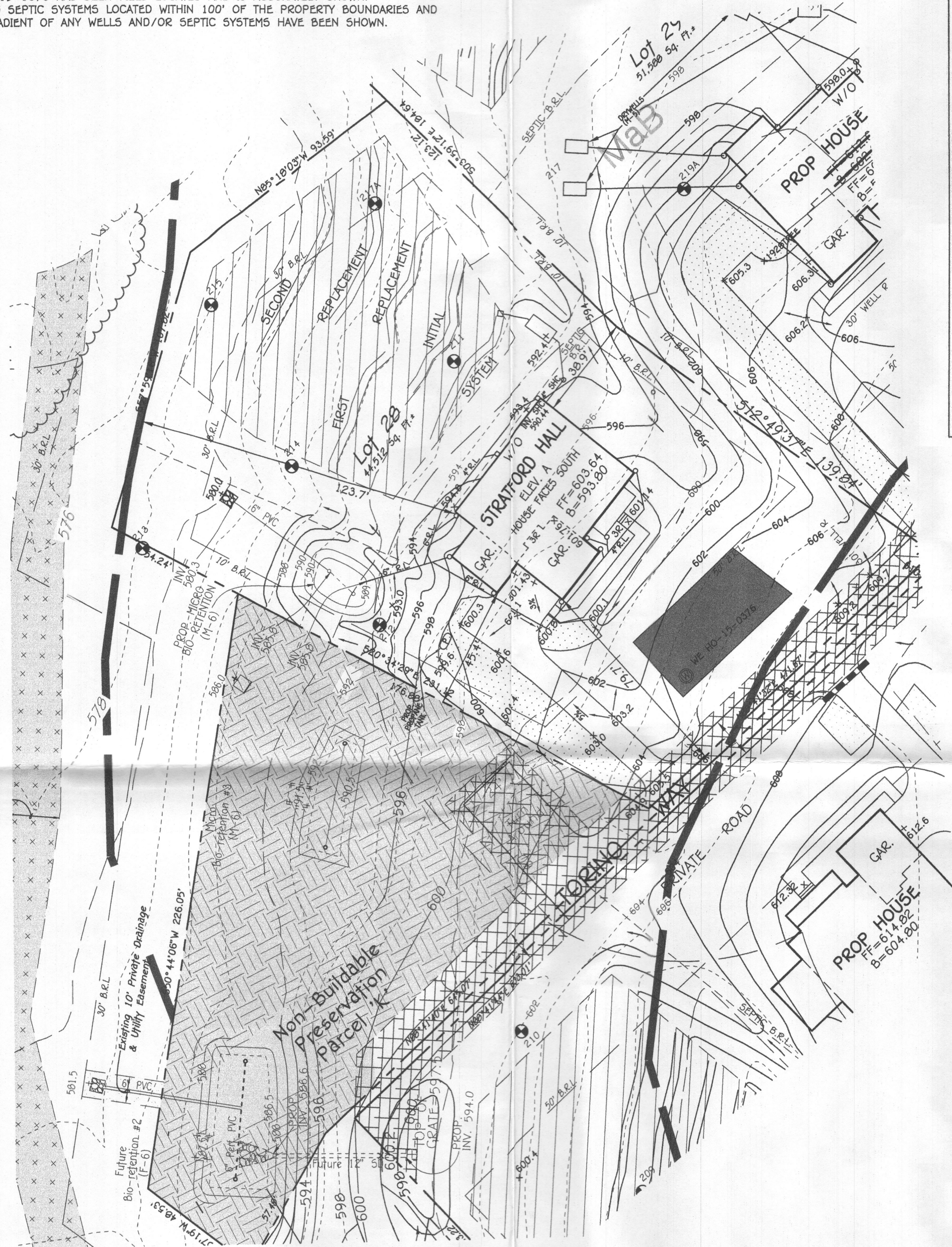
LOT NUMBER	STREET ADDRESS
28	15212 TORINO WAY



SCALE: 1" = 30'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10572 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895

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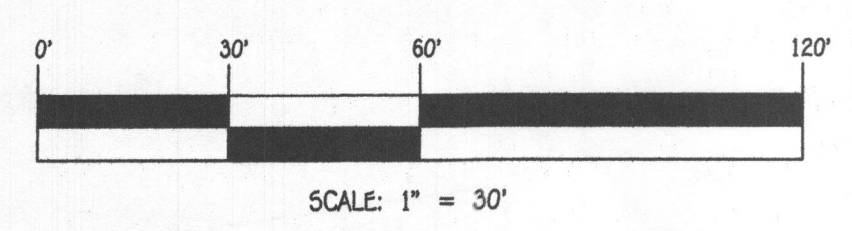


PLAN
SCALE: 1" = 30'

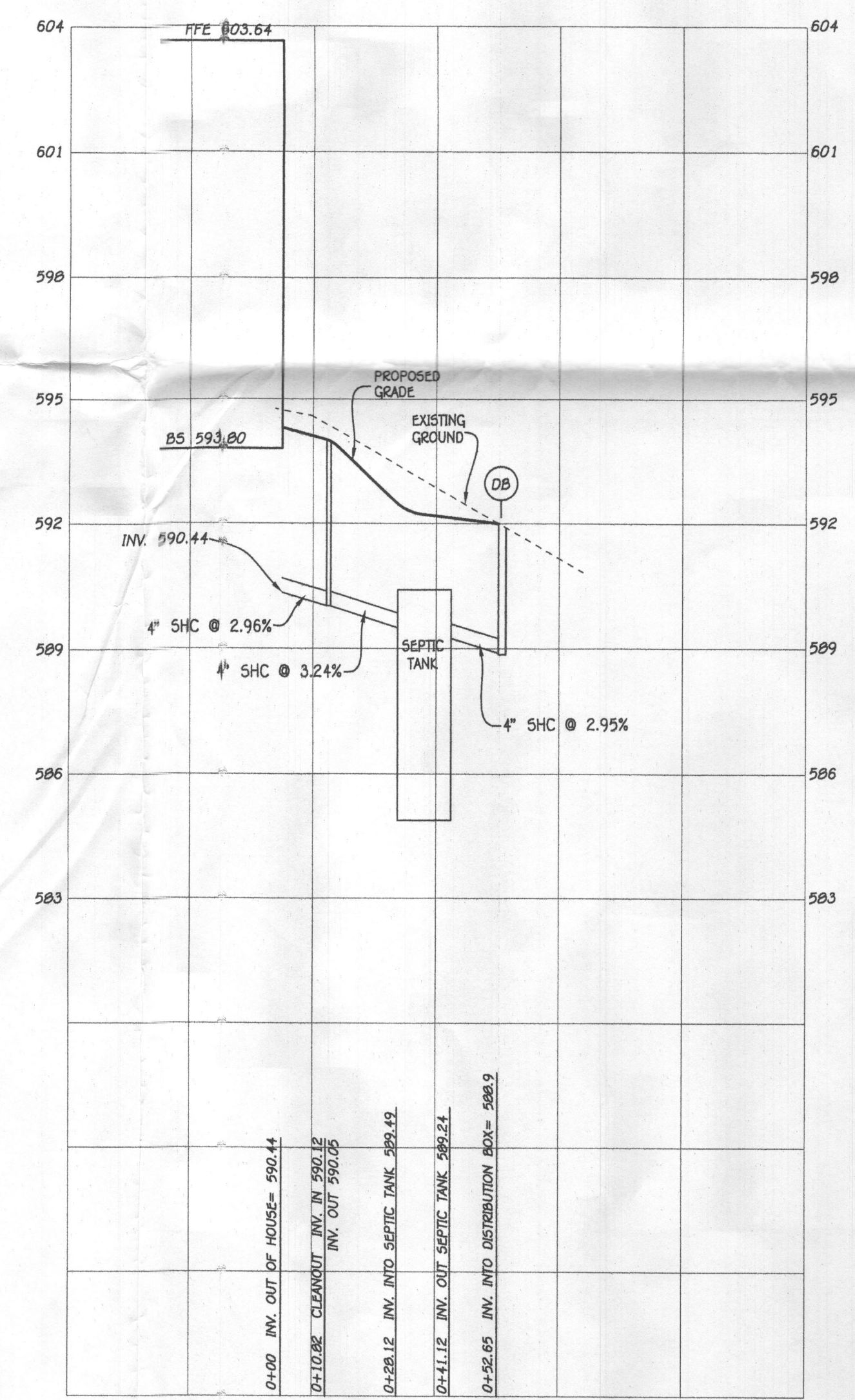
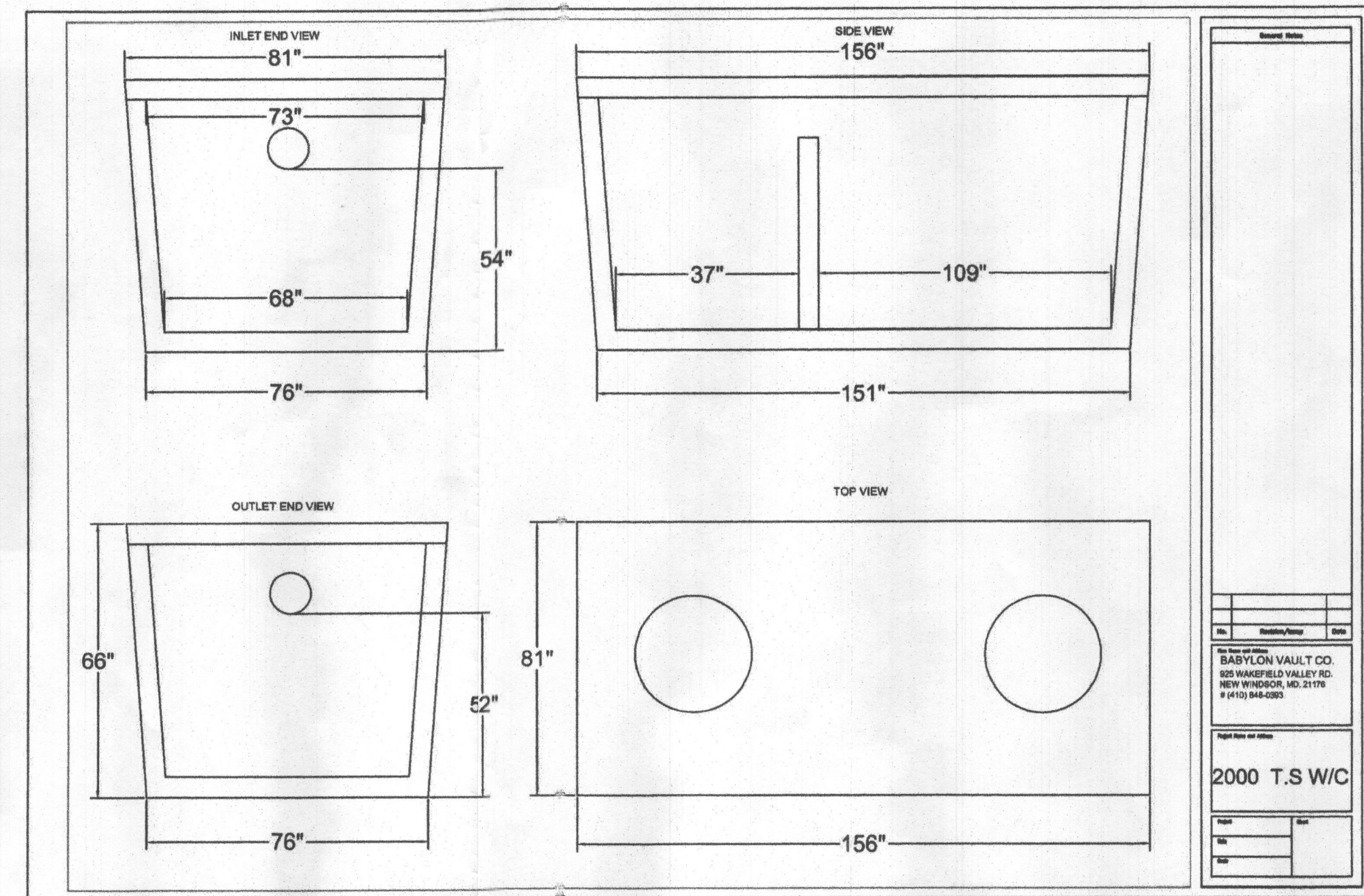


PROFESSIONAL CERTIFICATION
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Robert M. Vetter
Signature Of Professional Engineer
9/13/19
DATE

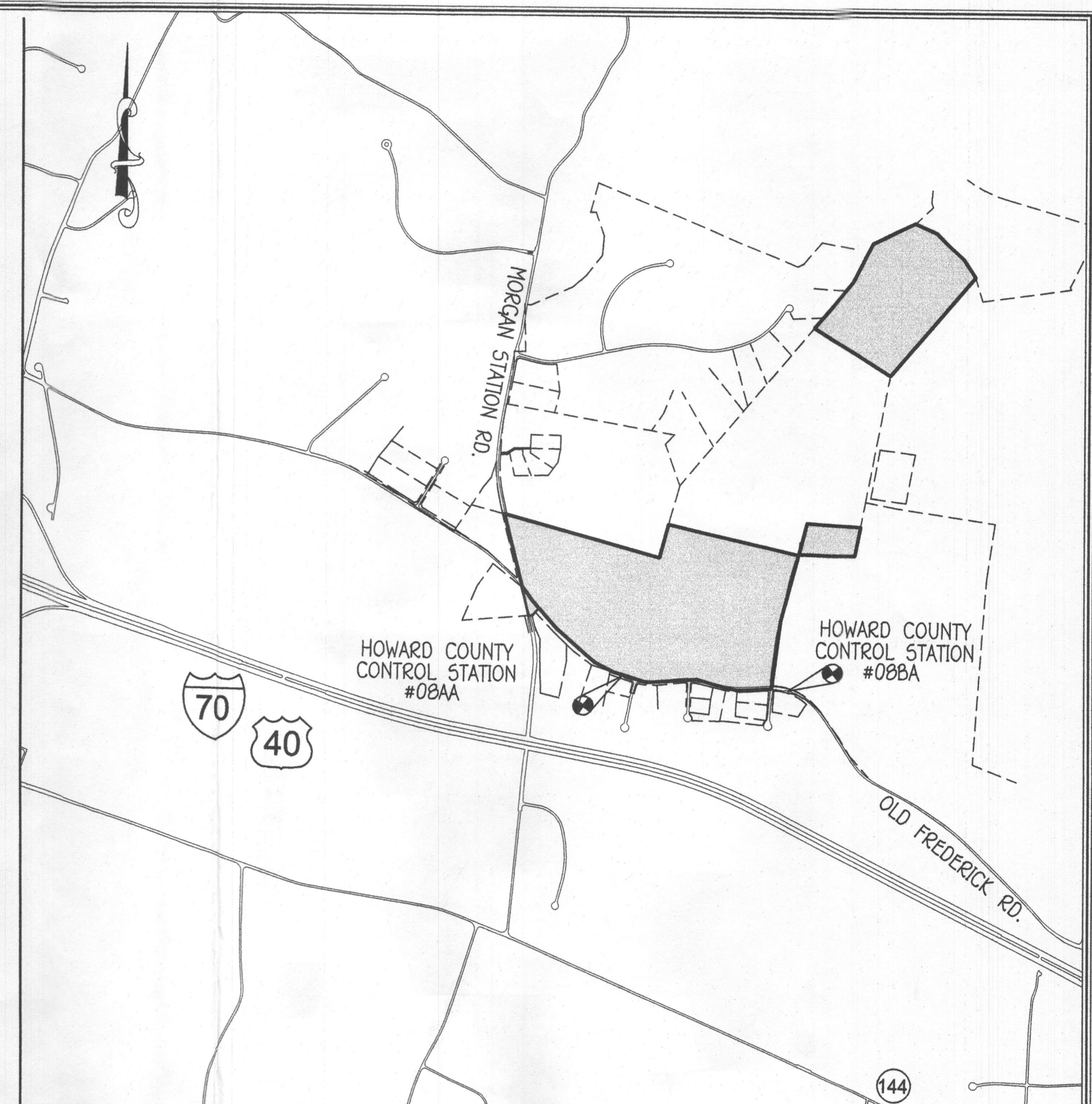
OWNER/DEVELOPER
NV HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MD 21046
410-579-5995



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21046
(410) 461-2888



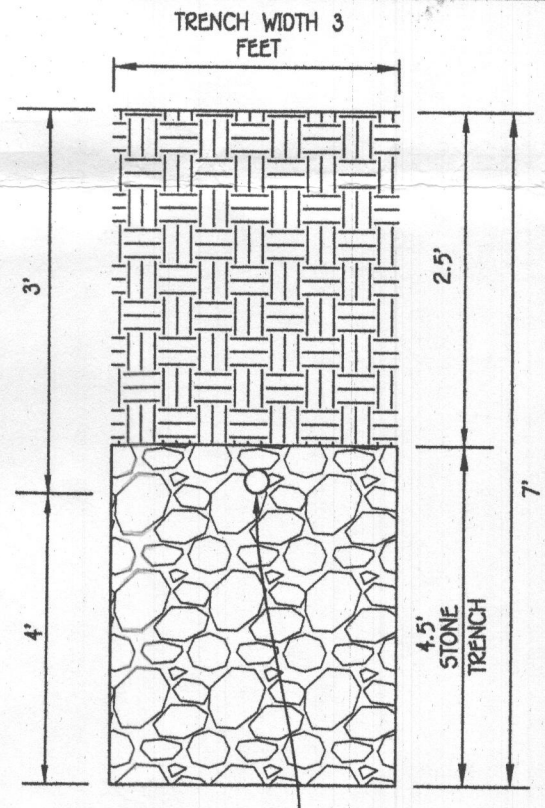
SEPTIC PROFILE
SCALE: 1" = 30'



VICINITY MAP
SCALE: 1" = 1200'

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BSE 593.80
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INV. INTO DISTRIBUTION BOX = 588.9
INV. OUT OF DISTRIBUTION BOX = 588.0

TRENCH DATA:
TRENCH 1:
EX. GROUND ABOVE = 591.0
INV. IN = 588.0
BOTTOM TRENCH = 584.0
TRENCH 2:
EX. GROUND ABOVE = 589.9
INV. IN = 586.9
BOTTOM TRENCH = 582.9



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

1ST REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 3 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = .416
TRENCH LENGTH = 750 SF x .416 = 312.00 FEET
(USE 2 TRENCHES AT 156.00 L.F.)
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

2ND REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 3 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = .416
TRENCH LENGTH = 750 SF x .416 = 312.00 FEET
(USE 2 TRENCHES AT 156.00 L.F.)
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

3RD REPLACEMENT SYSTEM
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 6 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 3 FEET
TRENCH DEPTH = 7 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 4 FEET
SF OF DRAINFIELD = 900 GPD / 1.2 = 750 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = .416
TRENCH LENGTH = 750 SF x .416 = 312.00 FEET
(USE 2 TRENCHES AT 156.00 L.F.)
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11' USE 11'

**SEPTIC SYSTEM
INSTALLATION SITE PLAN
LOT 28**
15212 TORINO WAY
FAIRLANE FARMS
PHASE TWO
ZONED: RC-DEO
GRID NO.: 2
TAX MAP NO.: 8
5TH ELECTION DISTRICT
SCALE: 1" = 30'
DATE: AUGUST 13, 2018
SHEET 1 OF 1

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
28	15212 TORINO WAY