

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: 7/5/17 **ONSITE SEWAGE DISPOSAL SYSTEM** P 561447
 APPROVAL DATE: 07/18/17 **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 11041 Fuzzy Hollow Way
 SUBDIVISION: Melchior Property LOT: 4 TAX ID: 03-596008
 CONTRACTOR: Hatfield's Equipment EMAIL: ken@hatfieldsequipment.com
 CONTRACTOR ADDRESS: P.O Box 519, Annapolis Junction, MD 21771 PHONE: 301-490-4289
 PROPERTY OWNER: Williamsburg Group EMAIL: marinamorrois@williamsburgllc.com
 OWNER ADDRESS: 5485 Harpers Farm Road, Columbia, MD 21044 PHONE: 410-997-5800
 SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Mayer Bro, Inc.
 PUMP MODEL: NA PUMP SIZE NA PUMP TANK CAPACITY: NA

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

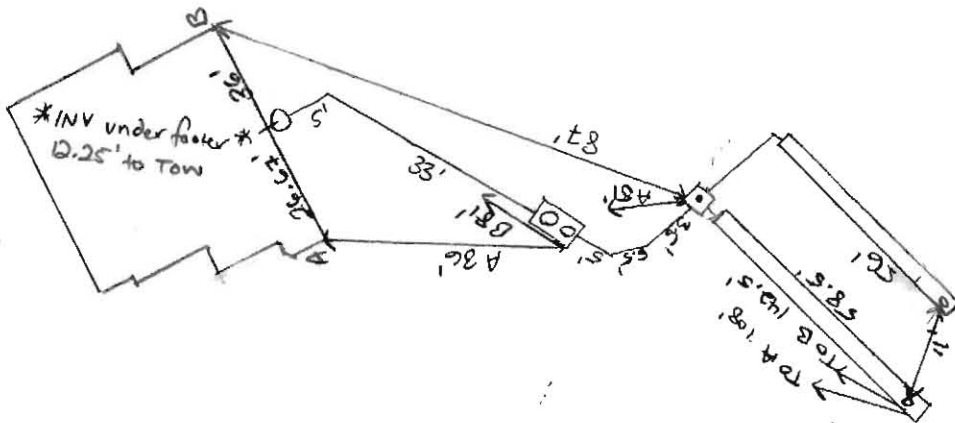
TRENCHES:	LINEAR FEET REQUIRED: <u>113</u>	INLET DEPTH: <u>2.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	<u>Install 2x57' trenches.</u>	

ISSUED BY: Robert Bricker ISSUE DATE: 7/5/17 EXPIRATION DATE: 7/5/18

- 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 1 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.

NOT TO SCALE



ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2.5'	6'
NUMBER OF TRENCHES		2
TOTAL LENGTH		114.5
ABSORPTION AREA		343.5 sqft + Side wall
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK I LEVEL _____

MANUFACTURER Babylon

CAPACITY 2000 GAL

SEAM LOC Top

TANK LID DEPTH 2-3'

BAFFLES yes

BAFFLE FILTER NO

MANHOLE LOC Front/Back

6" PORT LOC Front

WATERTIGHT TEST -

SLOTTED yes

DATE ON LID 5/17

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:

07/07/17 Septic area + trenches staked. D box + covers staked. Checked the ^{topo} height of trenches. ^{marked the trenches} Advised ^{marked the trenches} battfield to use laser level during construction for the area w/ fill towards the house. ~~At~~ Commence Trench construction from Distal end or from second trench stake (f)

INSTALLATION:

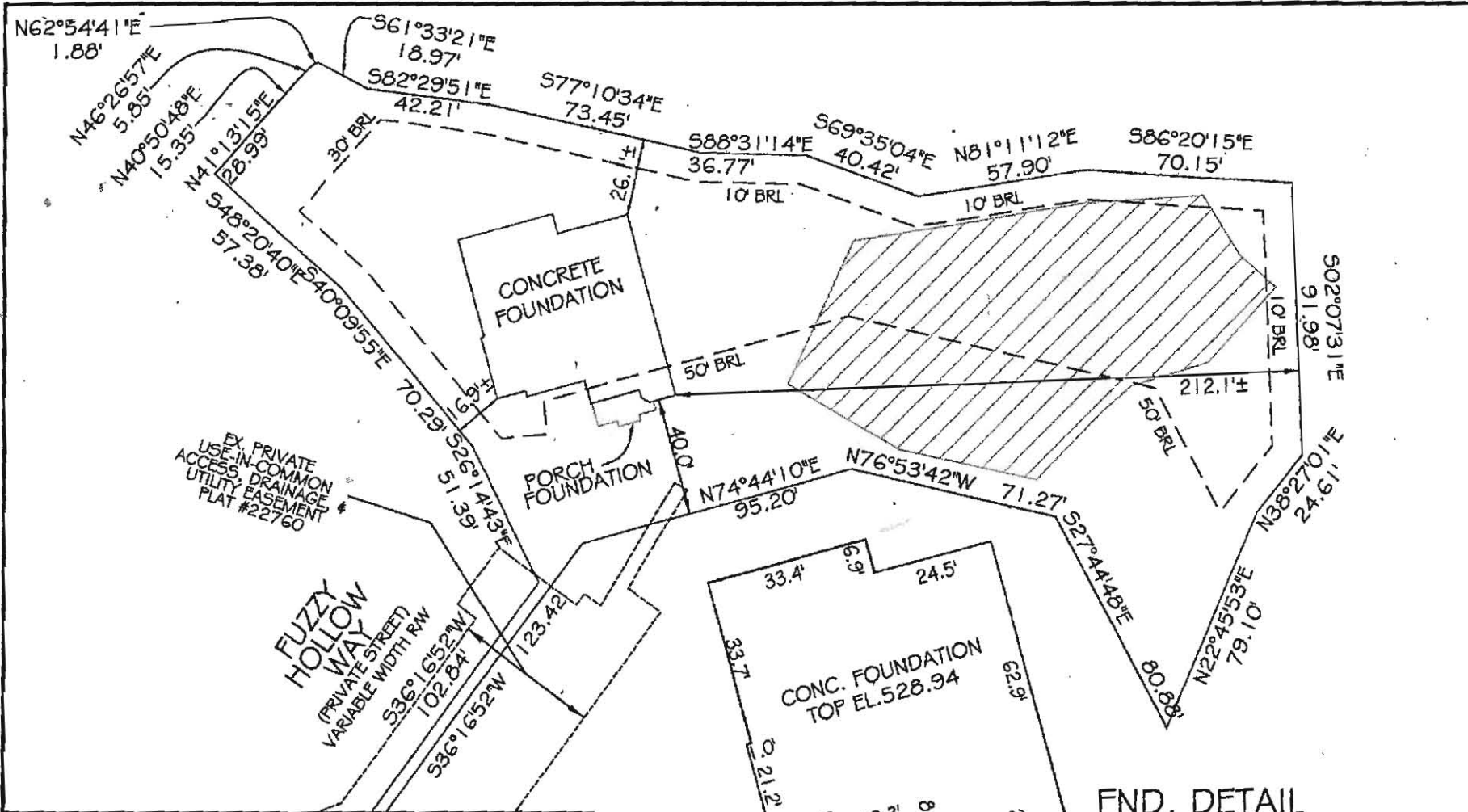
07/14/17 On site after installation of tanks. ~~had~~ ~~removed~~ ~~inlet~~ ~~baflle~~. Approved to backfill house connection. Contractor did not start on far end of trench or from second trench stake, used laser level + marked pipe. Install lower trench 1st. Added ~10' on to the back of the trench. Upper trench markings erased during construction. Fines mixed w/ gravel from construction. Sch 40 PVC Silver line 4" Non Pressure

07/17/17 On site for completion. Took speed level of d box. Approved to backfill (f)

FINAL INSPECTOR

DATE OF APPROVAL

07/18/17



FND. DETAIL
SCALE: 1"=30'

THE INFORMATION SHOWN HAS BEEN ESTABLISHED BY CURRENT ACCEPTABLE SURVEY PROCEDURES AND FROM AVAILABLE RECORD INFORMATION. THIS DRAWING IS NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES, LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER FUTURE IMPROVEMENTS. IT WAS PREPARED UNDER MY DIRECT SUPERVISION AND REVIEW IN ACCORDANCE WITH SEC. 09.13.06.06 OF THE ANNOTATED CODE OF MD.

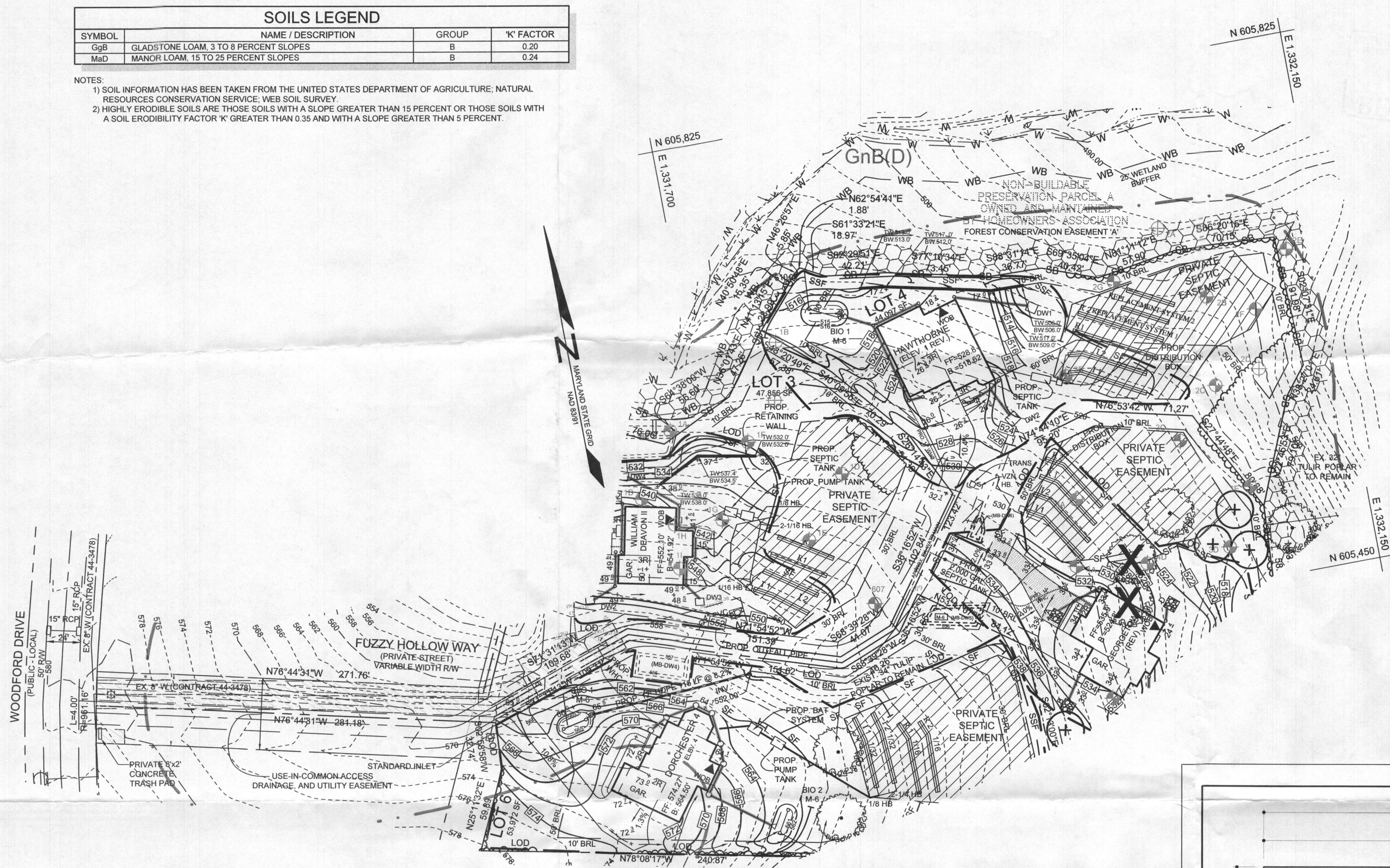
G. Scott Shanaberger
G. SCOTT SHANABERGER PROFESSIONAL SURVEYOR
LICENSE EXPIRATION DATE 4/2/2018
SHANABERGER & LANE PROFESSIONAL LAND SURVEYORS
10849
8726 TOWN AND COUNTRY BLVD., SUITE 201
ELICOTT CITY, MD. 21043
(410)461-9563 FAX: (410)461-9693

- NOTES:
1. ACCURACY OF BUILDING MEASUREMENTS: 0.1'
 2. ACCURACY OF SETBACK DIMENSIONS: 0.3'
 3. ACCURACY OF ELEVATIONS: 0.1'
 4. THE PROPERTY SHOWN HEREON LIES IN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 24027C0060D DATED: 11/06/2013.
 5. BEARINGS AND DISTANCES SHOWN HEREON ARE FROM A SUBDIVISION PLAT ENTITLED "MELCHIOR PROPERTY, LOTS 3 THROUGH 6 AND NONBUILDABLE PRESERVATION PARCEL A" SHEETS 1-5 OF 5, RECORDED IN PLATS #22758-22762

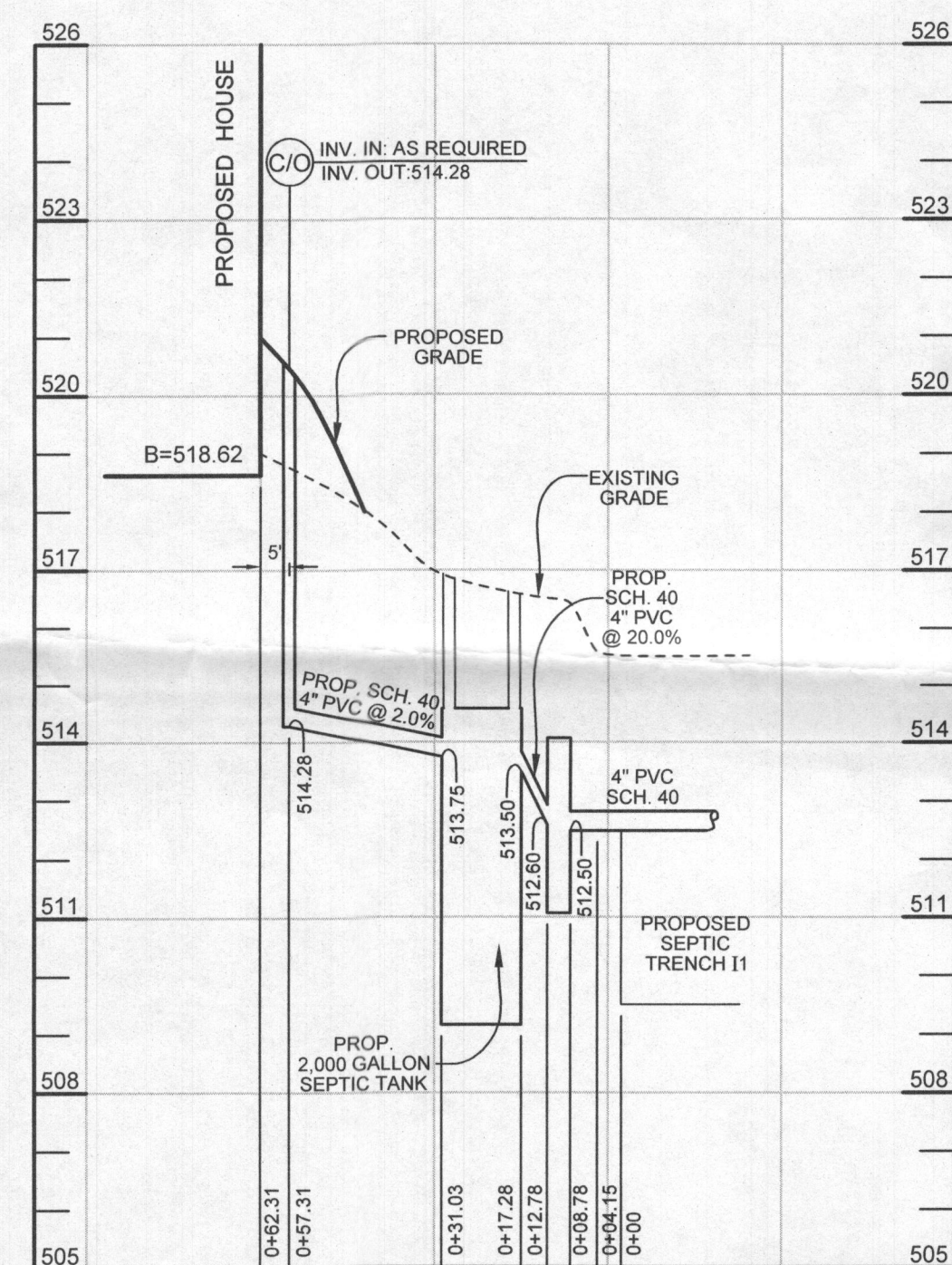
FOUNDATION LOCATION DRAWING
LOT 4 MELCHIOR PROPERTY
11041 FUZZY HOLLOW WAY
PLAT # 22758-22762
TAX MAP 10 GRID 13 PARCEL 184
3rd ELECTION DISTRICT
HOWARD COUNTY, MD.
SCALE: 1"=50' DATE: 5/4/17

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GgB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	B	0.20
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	0.24

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.



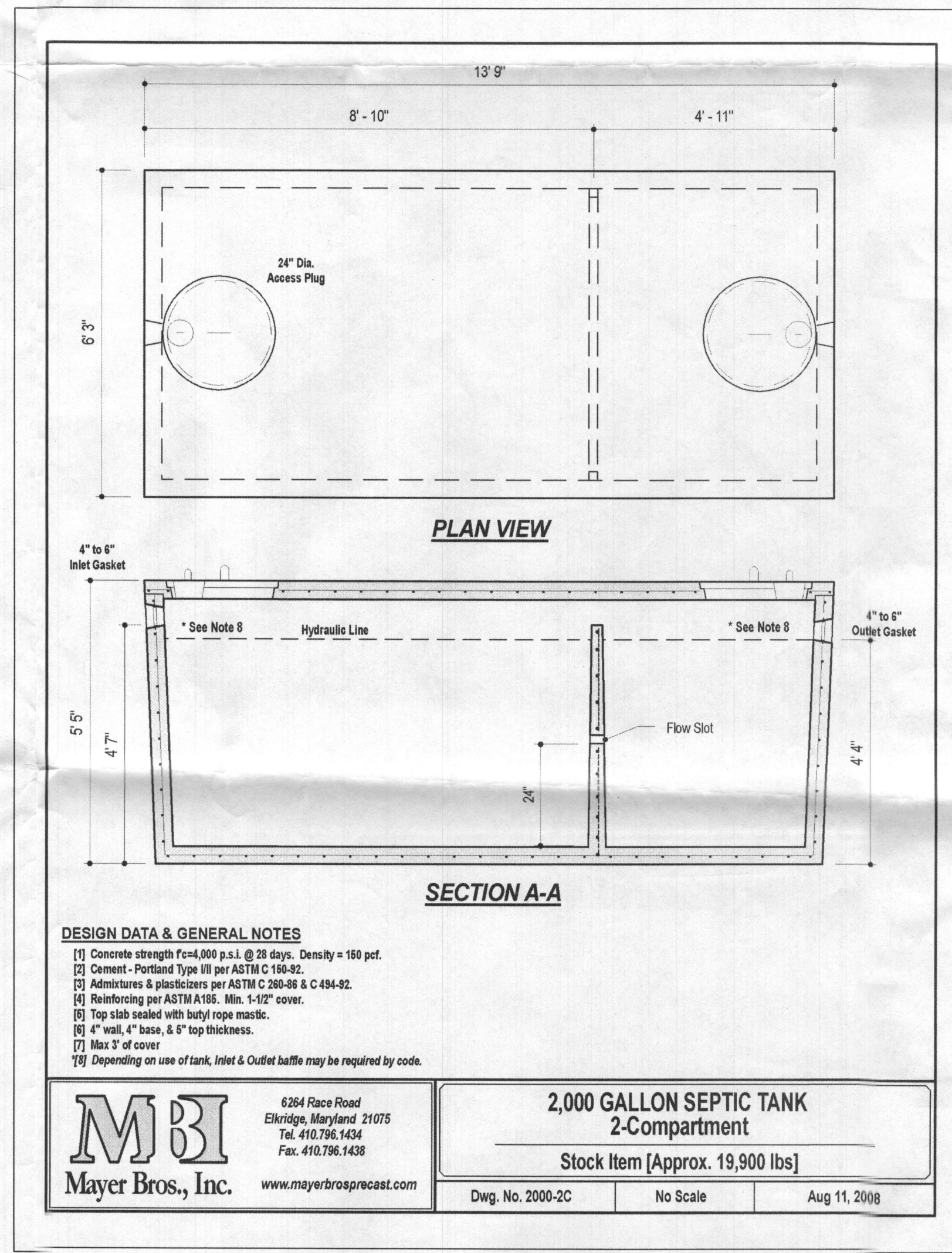
PLAN VIEW
SCALE: 1"=50'



ONSITE SEWAGE DISPOSAL SYSTEM PROFILE
 VERTICAL SCALE: 1"=3'
 HORIZONTAL SCALE: 1"=30'

SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- REPLACEMENT SYSTEM 1:
 - APPLICATION RATE: 1.2
 - EFFECTIVE AREA BEGINNING DEPTH: 2.5'
 - BOTTOM MAXIMUM DEPTH: 6'
- DESIGN FLOW:
 - 8 BEDROOMS AT 150 GPD
 - 6X150 GPD = 900 GPD
- SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 - DESIGN FLOW (900 GPD) / APPLICATION RATE (1.2) = 750 SF
- SIDEWALL REDUCTION CREDIT:
 - TRENCH WIDTH (W) = 3'
 - TRENCH EFFECTIVE DEPTH (D) = 3.5'
 - (W x D) / (W + 2D) X 100 = 45%
- LINEAR LENGTH OF TRENCH REQUIRED:
 - DRAIN FIELD SQUARE FOOTAGE (750) X SIDEWALL REDUCTION CREDIT (45%) / TRENCH WIDTH (3') = 112.5'
- LINEAR LENGTH OF TRENCH PROVIDED = 113'
- TWO TRENCHES 56.5 LF EACH
- EXISTING GRADE: TRENCH I1: 515.0'
- INVERT: TRENCH I1: 512.5'
- EXISTING GRADE: TRENCH I2: 512.5'
- INVERT: TRENCH I2: 510.0'



- DESIGN DATA & GENERAL NOTES
- Concrete strength $f_c=4,000$ p.s.i. @ 28 days. Density = 150 pcf.
 - Cement - Portland Type III per ASTM C 150-92.
 - Admixtures & plasticizers per ASTM C 266-98 & C 494-92.
 - Reinforcing per ASTM A198. Min. 5-1/2" cover.
 - Top slab sealed with butyl rope mastic.
 - 4" wall, 4" base, & 5" top thickness.
 - Max 3" of cover.
 - Depending on use of tank, Inlet & Outlet baffles may be required by code.

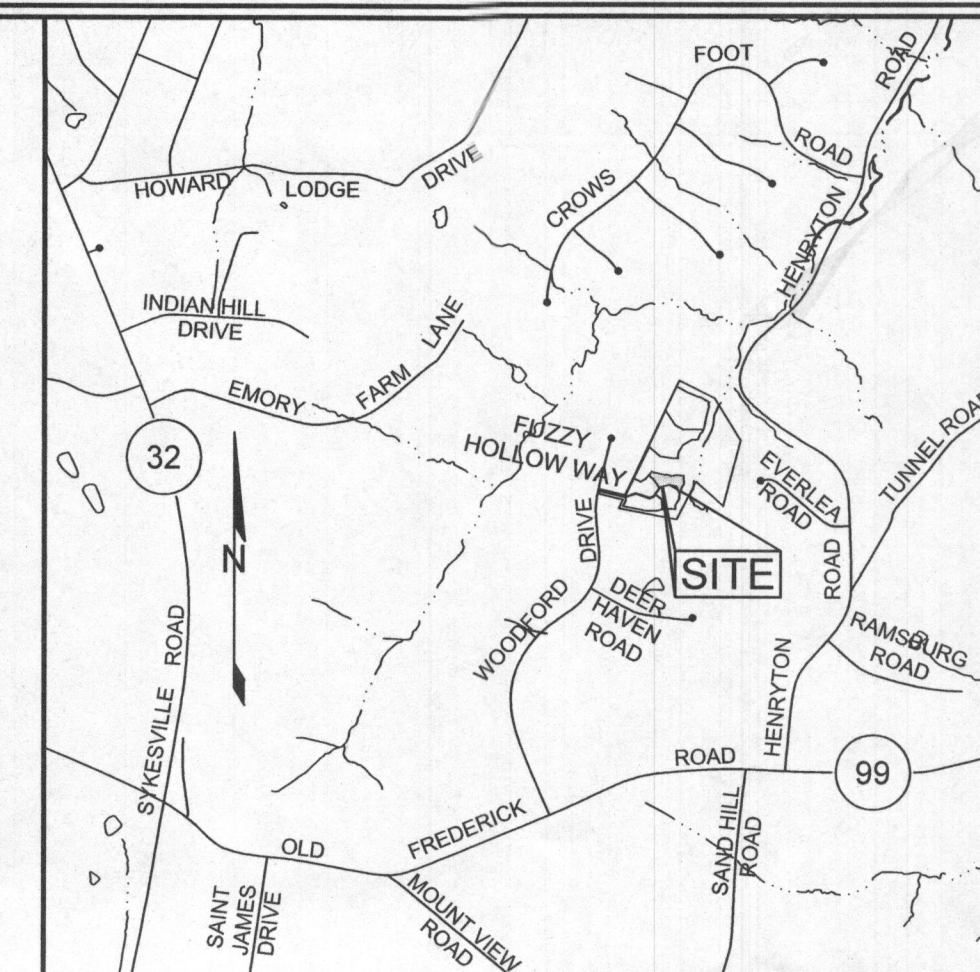
M B
 Mayer Bros., Inc.
 6264 Race Road
 Elkridge, Maryland 21075
 Tel. 410.796.1434
 Fax. 410.796.1436
 www.mayerbrosprecast.com

2,000 GALLON SEPTIC TANK
 2-Compartment
 Stock Item [Approx. 19,900 lbs]

Dwg. No. 2000-2C No Scale Aug 11, 2008

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING TREE
- SOIL BOUNDARY
- EXISTING FOREST CONSERVATION EASEMENT PER F-13-075
- PROPOSED ROOF LEADER (4" PVC TYP. WITH DOWNSPOUT)
- PROPOSED BIORETENTION FACILITY (M-6)
- EX. SEPTIC EASEMENT
- PROPOSED 1.5" WHC
- PERCOLATION TEST HOLE, PASSED
- PERCOLATION TEST HOLE, FAILED
- PROPOSED SEPTIC TRENCH, INITIAL SYSTEM
- PROPOSED SEPTIC TRENCH, REPLACEMENT SYSTEM



VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

- SUBJECT PROPERTY ZONED RR-DEO PER 10/06/13 COMPREHENSIVE ZONING PLAN.
- TOTAL AREA OF LOT = 44,818 SF OR 1.0289 AC.±
- PUBLIC WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
- THIS AREA DESIGNATES A PRIVATE SEWAGE AREA. OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS 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 SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
- WATER WILL BE PUBLIC (CONTRACT # 44-4791-D). WATER SERVICE TO THIS LOT WILL BE GRANTED UNDER PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE VIA CONNECTIONS TO EXISTING CONTRACT # W-44-5473.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN-GRADE OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN FIELD LOCATED.
- THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY MILDENBERG, BOENDER AND ASSOC. IN OCTOBER 2012.
- THE TOPOGRAPHY SHOWN ON LOT 4 HAS BEEN FIELD RUN BY SHANBERGER & LANE IN JANUARY 2017. THE TOPOGRAPHY SHOWN OUTSIDE OF LOT 4 HAS BEEN FIELD RUN BY CHRISTOPHER CONSULTANTS, INC. IN NOVEMBER 2004. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004.
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE NRCS WEB SOIL SURVEY WEBSITE. HOWARD COUNTY SOIL MAP GRID # 4 & SOILS MAP - GRID 183
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS, NUMBERS 09H2 AND 10G6, WERE USED FOR THIS PROJECT.
- THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES WITHIN THE PROJECT BOUNDARY.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL DITCHES AND SWALES WILL HAVE SOIL STABILIZATION MATTING UNLESS SOD IS BEING UTILIZED.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS WAIVERS HAVE BEEN APPROVED.
- REFUSE COLLECTION, SNOW REMOVAL, AND ROAD MAINTENANCE FOR PIPESTEM LOTS ARE PROVIDED TO THE JUNCTION OF THE PUBLIC ROAD AND THE PIPESTEM DRIVEWAY. COUNTY TRASH AND RECYCLING COLLECTION WILL BE AT WOODFORD DRIVE WITHIN 5' OF THE COUNTY ROADWAY.
- DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MINIMUM)
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING)
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- LIMIT OF DISTURBANCE = 26,468 ± SQ. FT.
- LOTS 3, 5 AND 6 ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- 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.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- SEPTIC TANK TO BE THE MAYER BROTHERS 2,000 GALLON TWO COMPARTMENT SEPTIC TANK OR EQUIVALENT.

Approved Septic System Plan
 Howard County Health Department
 2000-gal Septic Tank
 to gravity drainfield
 B1200582
 3/17/2017
 Signature

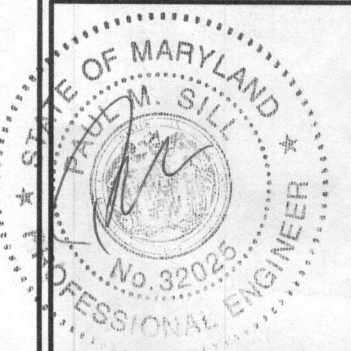
OWNER/DEVELOPER

WILLIAMSBURG GROUP
 5465 HARRERS FARM ROAD
 COLUMBIA, MARYLAND 21044

ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

MELCHIOR PROPERTY
 LOT 4
 11041 FUZZY HOLLOW WAY

TAX MAP 10 GRID 13 3RD ELECTION DISTRICT PARCEL 184 HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
 11130 Dovedale Court, Suite 200
 Marriottsville, Maryland 21104
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: AEA
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: MARCH 12, 2017
 PROJECT #: 15-023
 SHEET #: 1 of 1

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. 32025, EXPIRATION DATE: JUNE 20, 2017.