Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

DILP 2017 SEP 5 PM 12:23
Date Received: _____

Permit No.: B17003342

Building Address: 13290 Triadelphia Mill Rd
City: Clarksville **State:** MD **Zip Code:** 21029
Suite/Apt. # _____ **SDP/WP/BA #:** _____
Census Tract: _____ **Subdivision:** _____
Section: _____ **Area:** _____ **Lot:** _____
Tax Map: _____ **Parcel:** _____ **Grid:** _____
Zoning: _____ **Map Coordinates:** _____ **Lot Size:** _____

Existing Use: Vacant Residential
Proposed Use: Residential
Estimated Construction Cost: $ 1,900,000.00
Description of Work: new single family dwelling.

Occupant/Tenant Name: _____
Was tenant space previously occupied? ☐Yes ☐No
Contact Name: _____
Address: _____
City: _____ **State:** _____ **Zip Code:** _____
Phone: _____ **Fax:** _____
Email: _____

Property Owner's Name: James Smith
Address: 81 Country Manor Dr.
City: Fredericksburg **State:** VA **Zip Code:** 22406
Phone: 443-379-6552 **Fax:** _____
Email: _____

Applicant's Name & Mailing Address, (If other than stated herein)
Applicant's Name: Bev True
Address: 3920 London Bridge Rd
City: Sykesville **State:** MD **Zip Code:** 21784
Phone: 443-318-0933 **Fax:** _____
Email: Bevtrue213@gmail.com.

Contractor Company: TrakHomes, LLC Trakmade Hom
Contact Person: Alex Trukhtman
Address: 10929 Falls Rd
City: Lutherville **State:** MD **Zip Code:** 21093
License No.: 7274
Phone: 443-475-0006 **Fax:** _____
Email: _____

Engineer/Architect Company: GBL Custom Home Des
Responsible Design Prof.: Greg Little
Address: PO Box 237
City: Finksburg **State:** MD **Zip Code:** 21048
Phone: 410-833-8330 **Fax:** 410-833-4702
Email: gbl@gisnet.com

Commercial Building Characteristics	Residential Building Characteristics
Height:	☐ SF Dwelling ☐ SF Townhouse
No. of stories:	Depth / Width
Gross area, sq. ft./floor:	1st floor:
	2nd floor:
Area of construction (sq. ft.):	Basement:
	☐ Finished Basement
Use group:	☐ Unfinished Basement
	☐ Crawl Space
Construction type:	☐ Slab on Grade
☐ Reinforced Concrete	No. of Bedrooms:
☐ Structural Steel	**Multi-family Dwelling**
☐ Masonry	No. of efficiency units:
☐ Wood Frame	No. of 1 BR units:
☐ State Certified Modular	No. of 2 BR units:
	No. of 3 BR units:
	Other Structure:
	Dimensions:
Roadside Tree Protect Permit	Footings:
☐Yes ☑No	Roof:
Roadside Tree Protect Permit #	☐ State Certified Modular
	☐ Manufactured Home

Utilities	
Electric:	☑Yes ☐ No
Gas:	☐ Yes ☐ No
Water Supply	
☐ Public	
☑Private	
Sewage Disposal	
☐ Public	
☑Private	
Heating System	
☐ Electric	☐ Oil
☐ Natural Gas	☑Propane Gas
☐ Other:	
Sprinkler System:	
☑Yes	☐ No
[redacted]	
Building Shell Permit Number:	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COM WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBE THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Bev True, Agent TrakHomes — *Applicant's Signature*
Bevtrue213@gmail.com.
Beverly True — *Print Name*
9/6/17 — *Date*

COMPLETE THIS FORM WHEN DROPPING OFF ANY CORRESPONDENCE AND/OR PLANS TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS COUNTER:

Date: 10/11/17

To: Robert Bricker, Health Dept.
(Person's Name and Division)

From: Bev True, (443) 398-0988
(Your Name, Company Name and Telephone Number)

Subject: Project name Smith

Project site address 13280 Triadelphia Mill Rd.

Permit # B-17003342 **SDP #** _____

Other information pertinent to this project _____

✓ Please check the attachments below that you are submitting with this transmittal:

____ Letter of response to address plan review comment letter

____ Revised plans and/or revised details: When submitting for a complete **re-review, duplicate sets shall be submitted.**

____ Letter Summarizing Changes

____ Energy conservation calculations

✓ Copies of Simplified Floor Plan (be specific).

✓ Health Department Request ____ DPZ/ DED Request ____ Applicant's Request

____ Two sets of single family dwelling model plans to be placed on permanent file: Model name and/or #_____

____ Other _____

Contact Person Information: (Required)

Beverly True
Please Print Name

Telephone No: 443-398-0988

E-Mail Address: truecontractors@comcast.net

PLEASE ASSURE ALL DOCUMENTS AND/OR REVISIONS ARE APPROPRIATELY SIGNED AND SEALED, IF NECESSARY, BY A LICENSED ARCHITECT OR ENGINEER. PLEASE BE ADVISED THAT INSUFFICIENT INFORMATION MAY RESULT IN THE DELAY OF REVIEW BY THE PLANS EXAMINER. THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS WILL CONTACT YOU IF THERE IS A PROBLEM. IN ADDITION, ONCE THE BUILDING PERMIT IS APPROVED BY THE PLAN REVIEW DIVISION AND ALL OTHER REQUIRED SIGNATORY AGENCIES, AND THE BUILDING PERMIT IS READY FOR ISSUANCE, THE PERMIT DIVISION WILL NOTIFY THE APPROPRIATE CONTACT PERSON FOR PERMIT PICK UP. ALL PERMIT STATUS INQUIRIES SHALL BE DIRECTED TO THE PERMIT DIVISION AT 410-313-2455. CODE RELATED QUESTIONS AND PLAN REVIEW INQUIRIES SHALL BE DIRECTED TO THE PLAN REVIEW DIVISION AT 410-313-2436. PLEASE ALLOW A MINIMUM OF FIVE (5) WORKING DAYS FOR ANY PLAN SUBMITTALS TO BE REVIEWED. THANK YOU.

Received by L. Hubman

White-Plan Review / Yellow-Applicant / Pink-Permit Division
t:\Operations\Updated forms\transmit.frm - Rev. 04/2014

DILP 2017 OCT 11 AM 11:30

Permit # B17003342
13280 Triadelphia Mill Rd

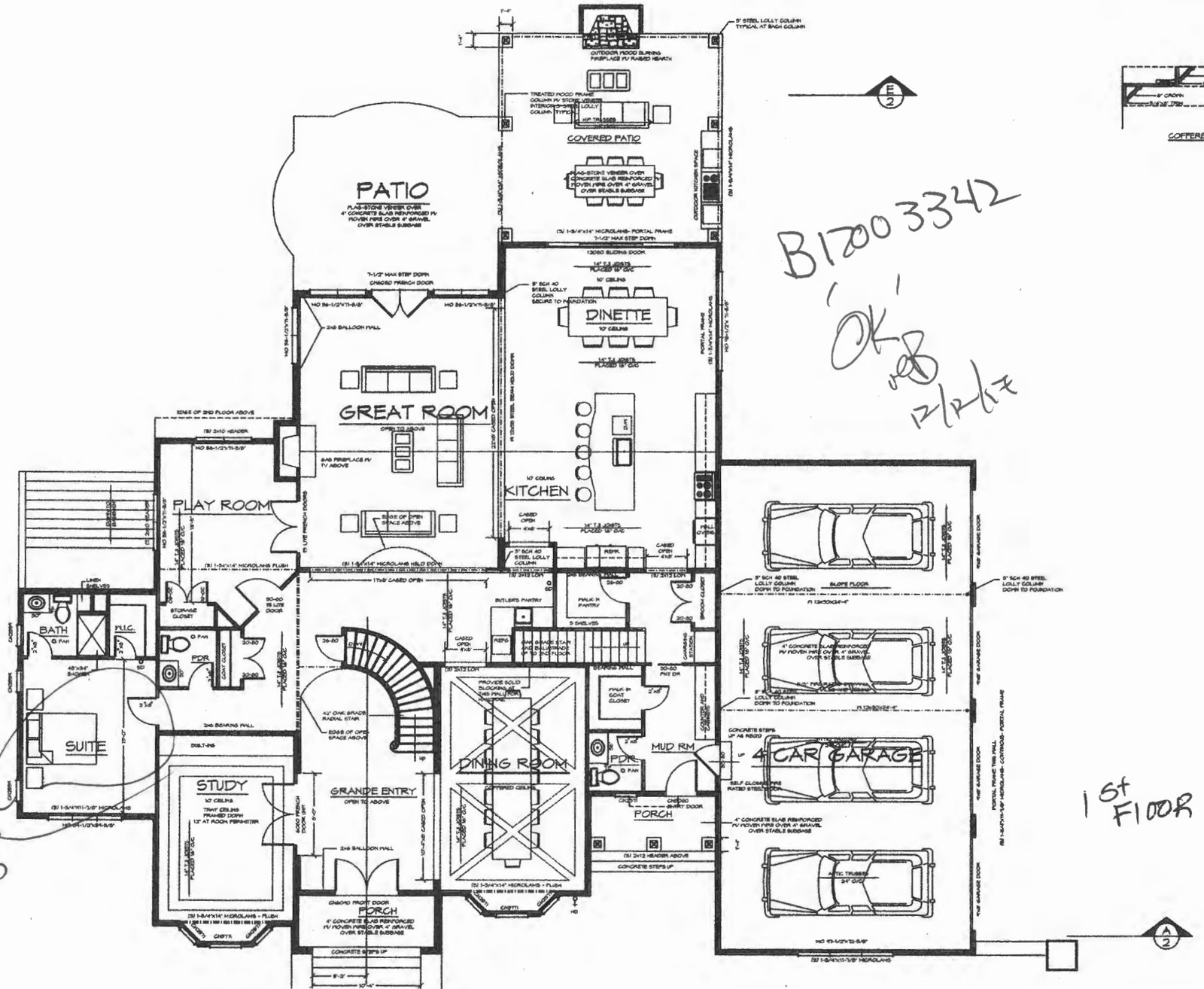
B12003342
OK
12/12/17

LIVE LOADS (in pounds per square foot)	
	LIVE LOAD
LE ATTICA PMD STORAGE. b	10
LE ATTICS PV LIMITED STORAGE. h, g	20
ATTICS & ATTICS SERVED PV FIXED STAIRS.	30
EXTERIOR) & DECKS. c	40
IA.	40
/ HANDRAILS. d	200lb
HPILL COMPONENTS. f	50lb
YRINGLE EARMASTS. g	90lb
EN THAN SLEEPING ROOMS.	40
XOMS.	30
	40

pound per square foot = 0.0479 kPa, 1 square inch = 645 mm2, 1 pound = 4.48 N.
ast garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-inch area.
ccessible attics without storage are those where the minimum clear height between joists and rafters is less inches, or where there are not two or more adjacent trusses with web configurations capable of ocating an assumed rectangle 42 inches high by 24 inches in width, or greater, within the plane of the This live load need not be assumed to act concurrently with any other live load requirements.
ast stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load ver an area of 4 square inches, whichever produces the greater stresses.
ge concentrated load applied in any direction at any point along the top.
ection R502.2.2 for decks attached to exterior walls.
l In-Fill components (all those except the handrail), balusters and panel fillers shall be designed to withstand a ally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to ourrently with any other live load requirement.
ccessible attics with limited storage are those where the minimum clear height between joists and rafters is s, or greater, or where there are two or more adjacent trusses with web configurations capable of ocating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the . The live load need only be applied to those portions of the joists or truss bottom chords where all of the) conditions are met.
ttic area is accessible from an opening not less than 20 inches by 30 inches or less than 36 inches long that is located m clear height in the attic is a minimum of 30 inches.
Slope of the joists or truss bottom chords are no greater than 2 inches vertical to 12 units horizontal.
ired insulation depth is less than the joist or truss bottom chord member depth. The remaining portions of ts or trusses bottom chords shall be designed for a uniformly distributed concurrent live load of not less than 2 lb. ceiling shall be fastened to gypsum board stops.
afety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the ther in-fill components. These loads shall be determined independent of one another, and loads are assumed occur with any other live load.

ARCHED STAIR NOTE.
THE BUILDER / CONTRACTOR SHALL HAVE A QUALIFIED STAIR MANUFACTURER CONDUCT AN ACTUAL FIELD SURVEY AND MEASURE OF THE ROUGH STAIR FRAMING. THE STAIR PROVIDER SHALL PREPARE A DETAILED SHOP DRAWING OF THE STAIR, RAILINGS, AND BALUSTRADE TO PROVIDE TO THE OWNER AND BUILDER PRIOR TO MANUFACTURE AND INSTALLATION.
THE FRAMING AROUND THE ARCHED STAIR SHALL ALSO BE INSPECTED BY THE STAIR MANUFACTURER AND APPROVED.

COFFERED CEILING TRIM DETAILS
SCALE: 3/4"=1'-0"



Bedroom #5

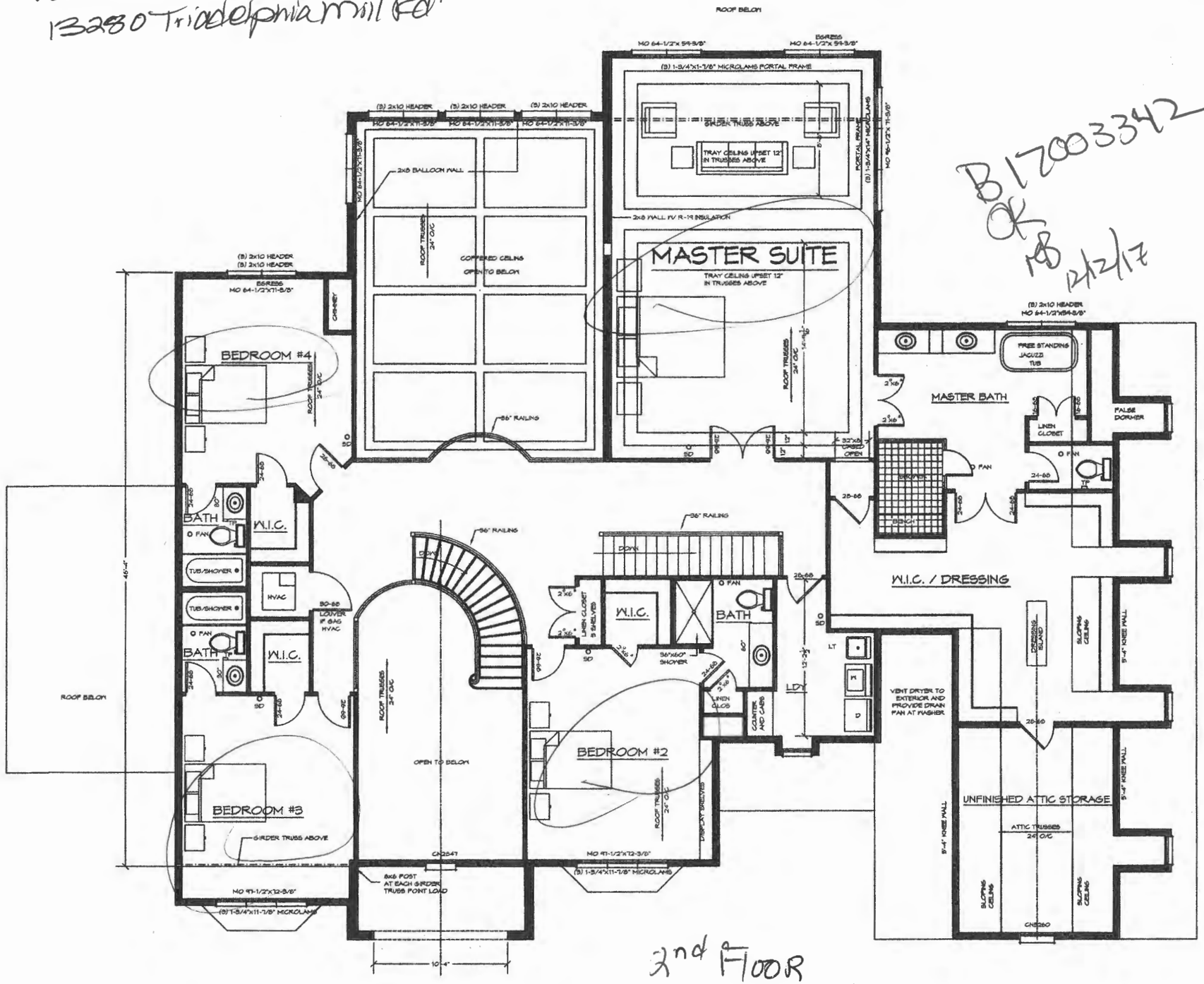
1st FLOOR

THE SMITH RESIDENCE
TANNER HOMES

R613.7 WINDOW SILLS
ALL WINDOWS WHERE THE OPERABLE OPENING IS LOCATED MORE THAN 72" ABOVE FINISHED GRADE OR SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING SHALL BE A MIN. OF 24" ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. GLAZING BETWEEN THE FLOOR AND 24" SHALL BE FIXED OR HAVE OPENINGS THROUGH WHICH A 4" DIA. SPHERE CANNOT PASS.

EXCEPTIONS:
1. WINDOWS WHOSE OPENINGS WILL NOT ALLOW A 4"DIA. SPHERE TO PASS THROUGH THE OPENING WHEN THE OPENING IS IN ITS LARGEST OPENED POSITION
2. OPENINGS THAT ARE PROVIDED WITH WINDOW GUARDS THAT COMPLY WITH ASTM F 2006 OR F 2090

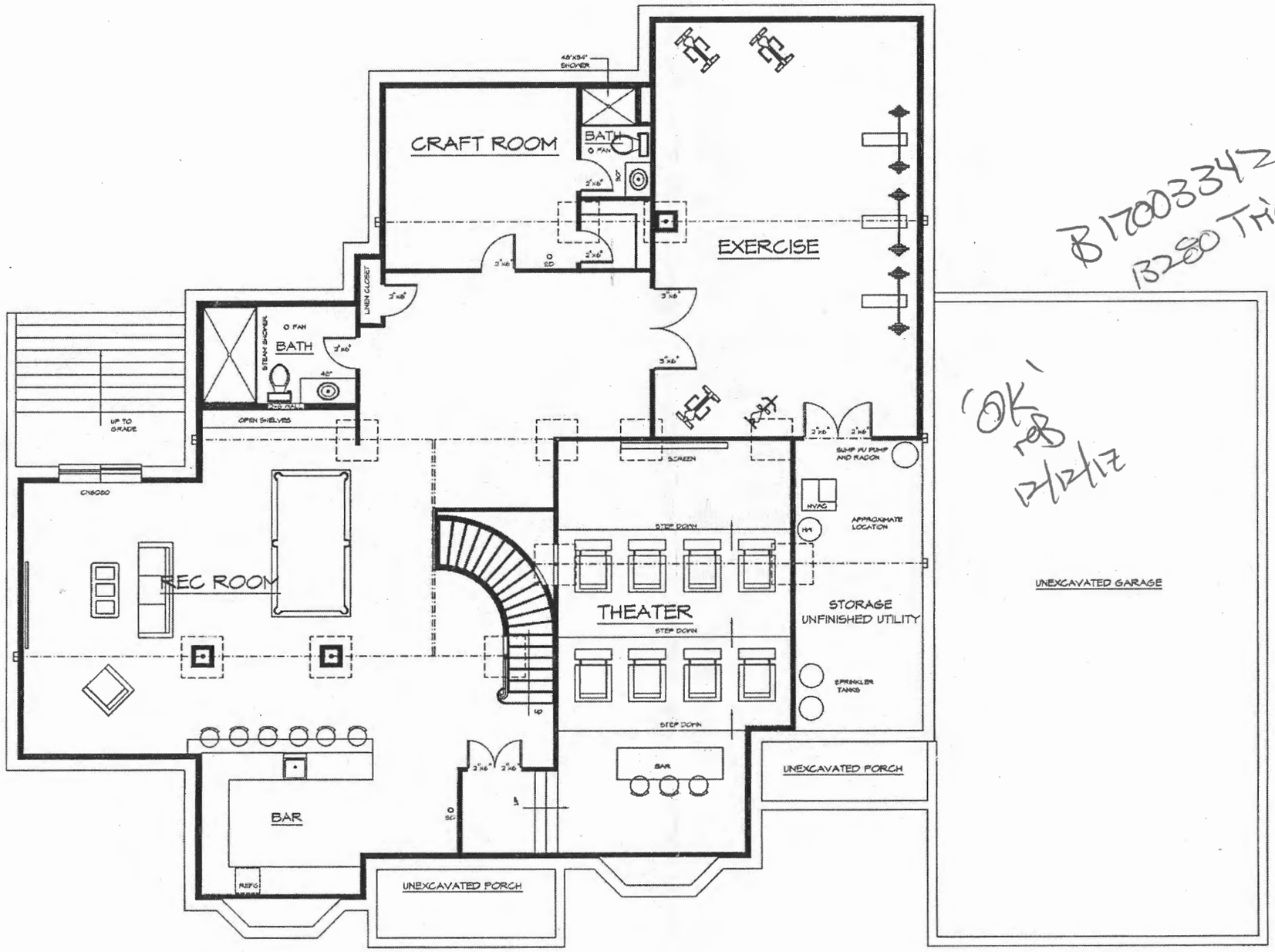
Permit # B 17003342
13280 Tridelphia Mill Rd.



2nd Floor

B17003342
OK
MB 12/12/17

THE SMITH RESIDENCE
7 ANDER HOMES



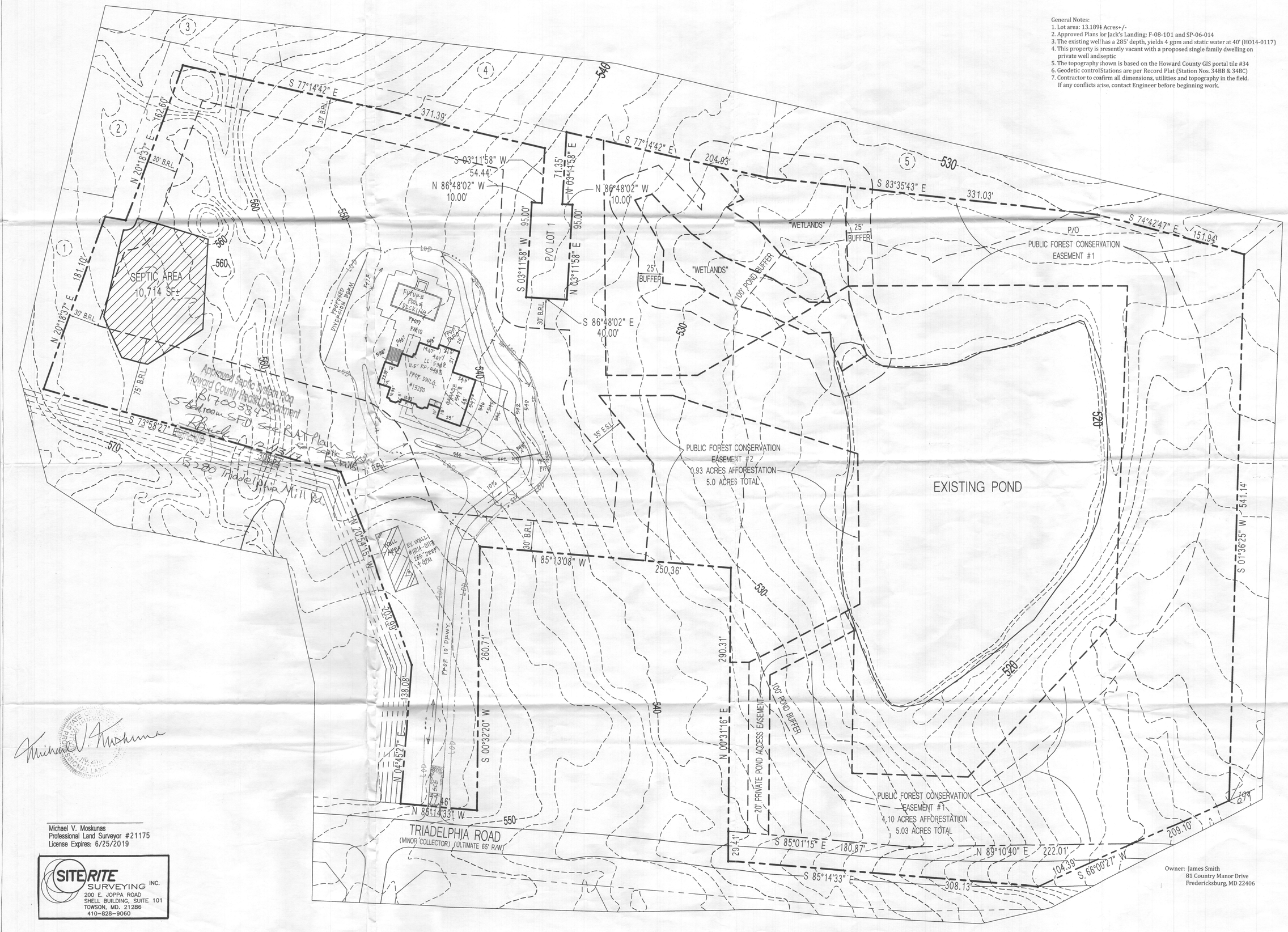
B17003342
13280 Triadelphia Mill Rd.

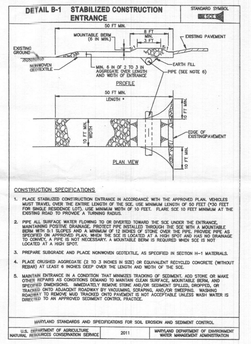
OK
RB
12/12/17

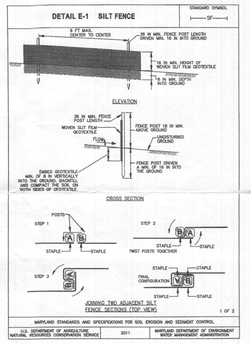
THE SMITH RESIDENCE

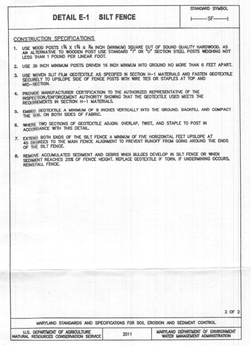
FINISHED BASEMENT PLAN

General Notes:
1. Lot area: 13.1894 Acres+/-
2. Approved Plans for Jack's Landing: F-08-101 and SP-06-014
3. The existing well has a 285' depth, yields 4 gpm and static water at 40' (H014-0117)
4. This property is presently vacant with a proposed single family dwelling on private well and septic
5. The topography shown is based on the Howard County GIS portal tile #34
6. Geodetic controlStations are per Record Plat (Station Nos. 34BB & 34BC)
7. Contractor to confirm all dimensions, utilities and topography in the field. If any conflicts arise, contact Engineer before beginning work.







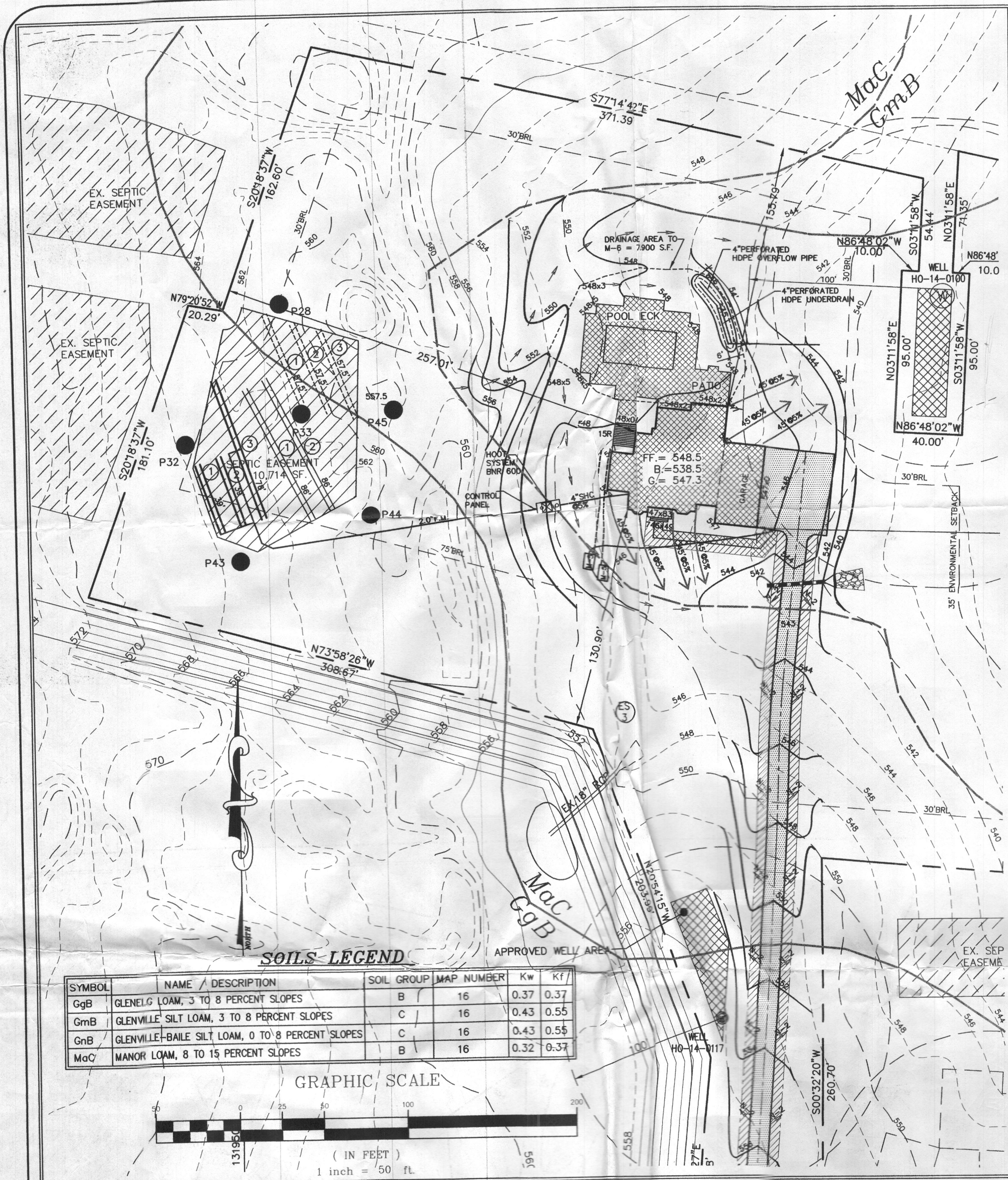


Michael V. Moskunas
Professional Land Surveyor #21175
License Expires: 6/25/2019

SITERITE SURVEYING INC.
200 E. JOPPA ROAD
SHELL BUILDING, SUITE 101
TOWSON, MD. 21286
410-828-9060

Owner: James Smith
81 Country Manor Drive
Fredericksburg, MD 22406

Plot Plan for Building Permit
"Jacks Landing" Plat 23954
Parcel A
#13280 Triadelphia Mill Road
Tax Map: 34 Parcel: 414
Deed: 17637/74
5th Election District
Howard County, MD
Scale: 1"= 40'
August 16, 2017
Job No. 10600



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP	MAP NUMBER	Kw	Kf
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	16	0.37	0.37
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	16	0.43	0.55
GnB	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	C	16	0.43	0.55
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	16	0.32	0.37

GRAPHIC SCALE

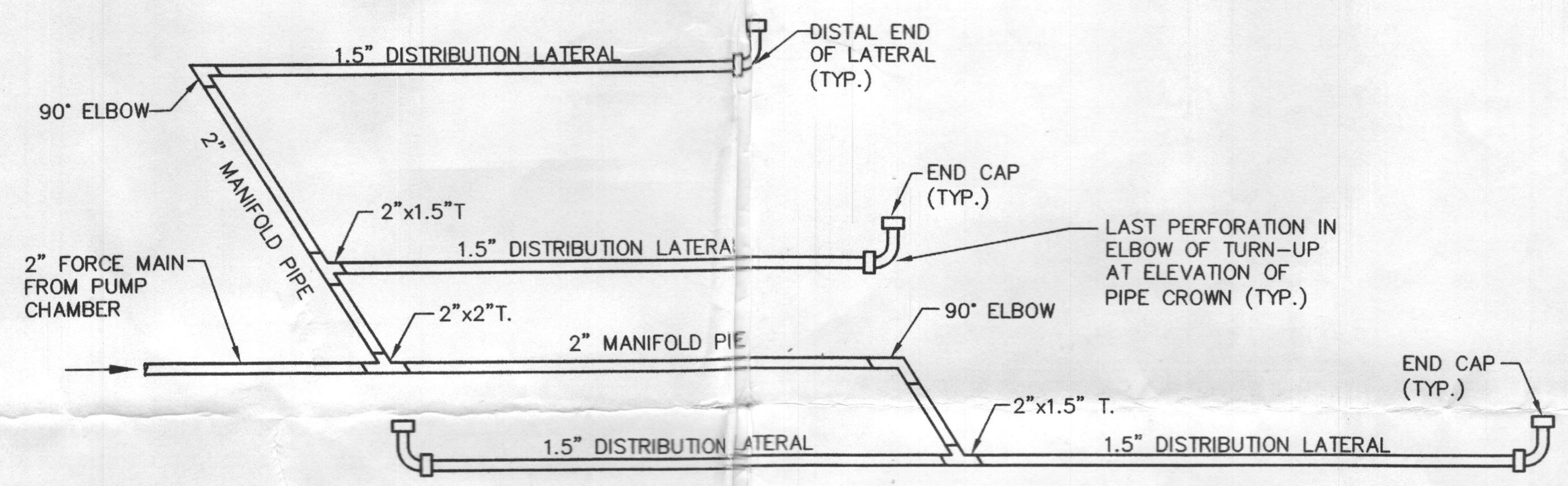
(IN FEET)
1 inch = 50 ft.

SEPTIC TRENCH SIZING

SYSTEM	APPLICATION RATE (GPD / SF)	MAXIMUM FLOW RATE (GPD)	AREA OF REQUIRED TRENCH (SF)	TRENCH WIDTH (FT)	LENGTH OF REQUIRED TRENCH (LF)	EFFECTIVE DEPTH BEGINS (FT)	TRENCH BOTTOM DEPTH (FT)	TRENCH REDUCTION FACTOR**	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	MINIMUM TRENCH SPACING (FT)	NUMBER OF TRENCHES	PROVIDED TRENCH LENGTH (FT)
PRIMARY	0.8	750	937.5	3	312.5	4.5	7.5	0.50	156.25	10.0'	3	2X39' 1X78'
SECONDARY	0.8	750	937.5	3	312.5	4.5	7.0	0.55	171.9	10.0'	2	86'
TERTIARY	0.8	750	937.5	3	312.5	4.5	7.0	0.55	171.9	10.0'	3	57'

LOW PRESURE DOSING SYSTEM – INITIAL INSTALLATION

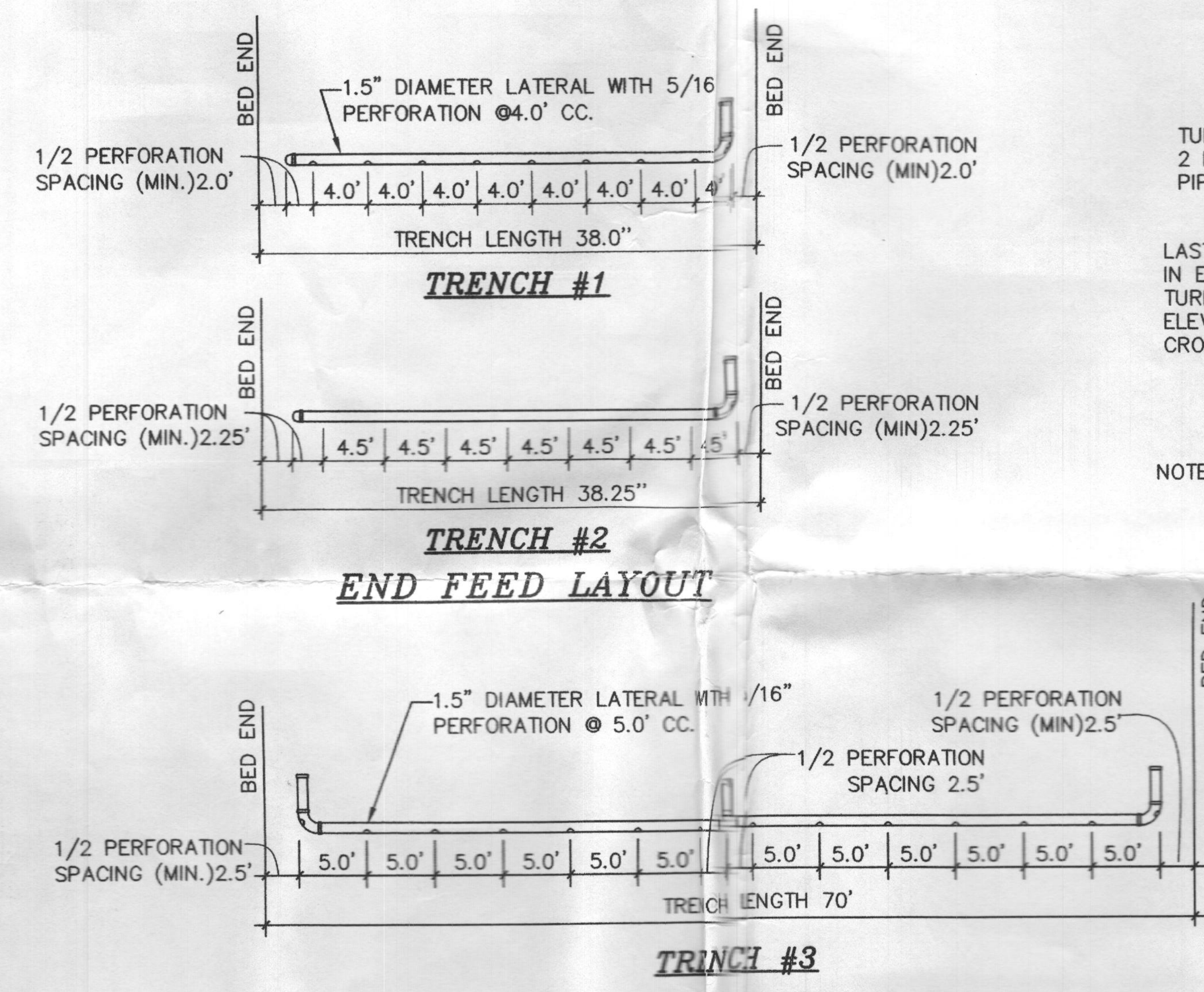
TRENCH	GROUND ELEVATION	PIPE INV. ELEVATION	TRENCH LENGTH (FT)	LATERAL LENGTH (FT)	PERFORATION DIAMETER (IN)	PRESURE HEAD (FT)	PERFORATION FLOW RATE (GMP)	PERFORATION SPACING (FT)	NUMBER OF PERFORATIONS	TRENCH FLOW RATE (GPM)
1	565.50	561.50	38.00	34.00	5/16	2.0	1.63	4.0	9	14.67
2	565.00	561.00	37.75	33.75	5/16	2.5	1.82	4.5	8	14.56
3	564.50	560.50	75.00	70.00	5/16	3.0	1.99	5.0	14	27.86

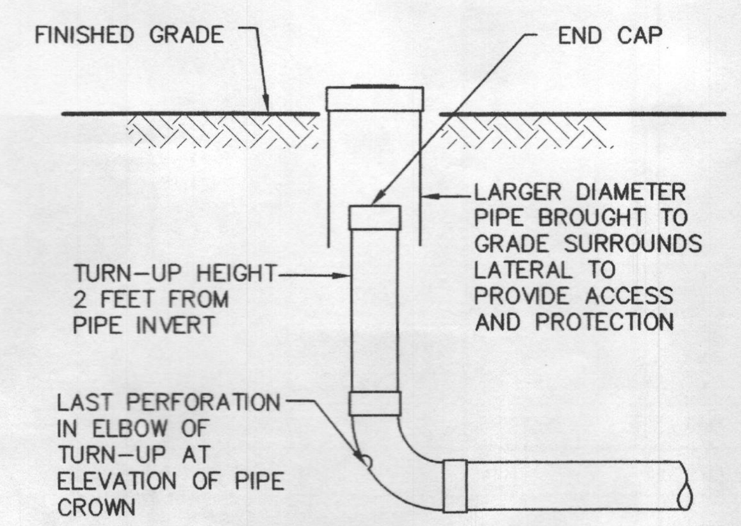


CENTER FEED MANIFOLD DISTRIBUTION NETWORK SCHEMATIC

NOT TO SCALE

NOTE: ALL PIPE ARE SCH. 40 PVC ROGED PIPE

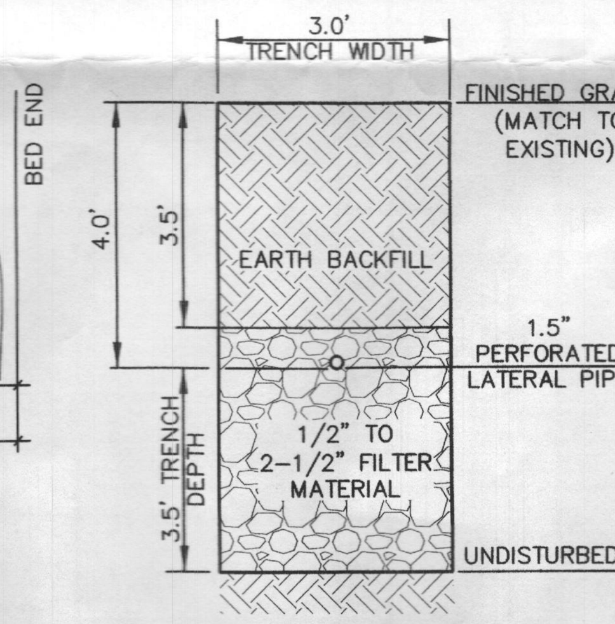




TURN-UP DETAIL

NOT TO SCALE

NOTE: PLACE AN OBSERVATION PIPE IN THE GRAVEL BED AT DISTAL END OF EACH TRENCH SEGMENT



TRENCH DETAIL

NOT TO SCALE

LOW PRESURE DOSING SYSTEM

NO. OF BEDROOMS.: 5 BEDROOMS
TRENCH LENGTH: TRENCH #1 = 38.0'
TRENCH #2 = 38.25'
TRENCH #3 = 70.0' (3A AND 3B = 35.0' EACH)
FLOW METHOD: GRAVITY TO TANK
MANIFOLD TYPE: COMBINATION OF END AND CENTER FEED MANIFOLD
HOLE DIAMETER: 5/16"
HOLE SPACING: LATERAL #1 = 4.5' (FIGURE 4.4)
LATERAL #2 = 5.0'
LATERAL #3A AND 3B = 5.5'
LATERAL LENGTH: LATERAL #1 = 34.00'
LATERAL #2 = 33.75'
LATERAL 3A AND 3B = 32.50' EACH
HOLES NO/LATERAL: LATERAL #1 = 9
LATERAL #2 = 8
LATERAL 3A AND 3B = 7 EACH
LATERAL DIAMETER: 1.5" (FIGURE 4.4)
PRESSURE HEAD: LATERAL #1 = 2.0'; LATERAL #2 = 2.5'; LATERAL 3=3'
ORIFICE DISCHARGE: LATERAL #1 = 1.63GPM; LATERAL #2 = 1.82
LATERAL DISCHARGE: (NO. OF HOLES x ORIFICE DISCHARGE)
LATERAL #1 = 14.67
LATERAL #2 = 14.56
LATERAL #3A AND 3B = 13.93 EACH
SYSTEM DISCHARGE: **57.09**

MINIMUM DOSE:

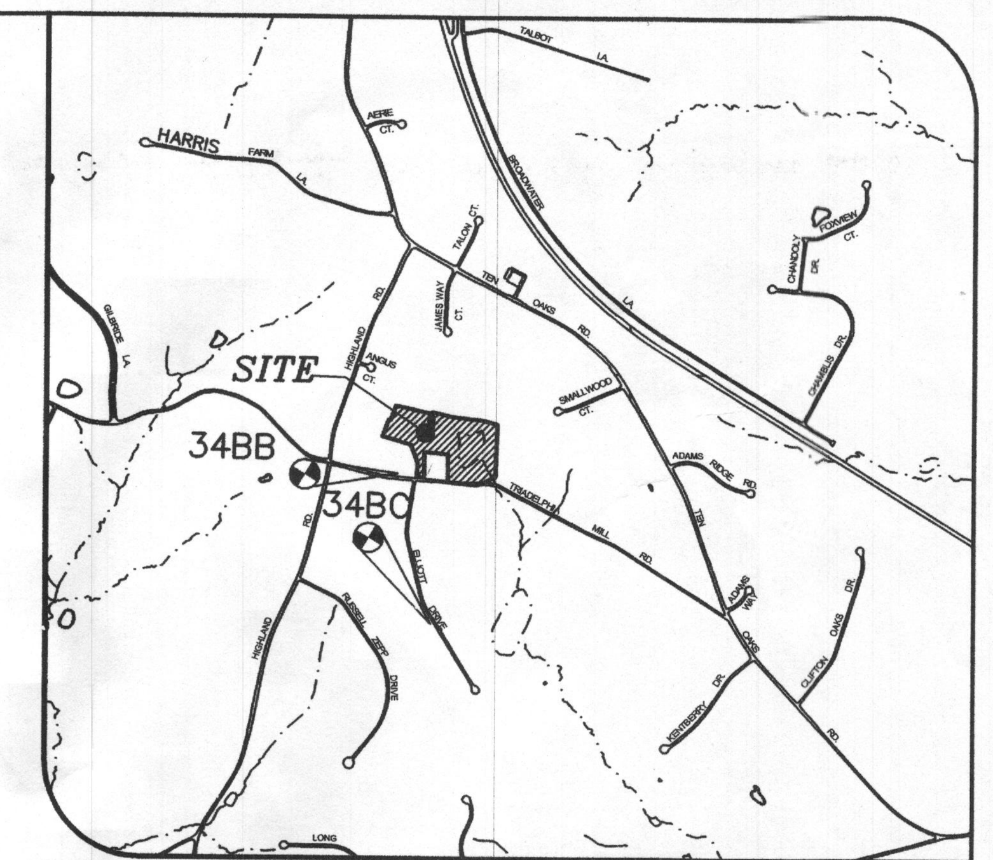
5xLATERAL VOL.+MANIFOLD VOL.+FORCE MAIN VOL.
FORCE MAIN DIAMETER: 2.0" (TABLE 4.4)
MANIFOLD DIAMETER: 2.0"
LATERAL VOLUME: 14.6 CAL.
(34.0x10.6\100)+(33.75x10.6\100)+(2x35.0x10.6\100)
MANIFOLD AND FORCE MAIN VOLUME:
43.5 GAL. (257x17.4\100)
MINIMUM DOSE: **117.72 GAL.** (5x14.6+44.72)
6 DISCHARGES PER DAY
VOLUME PER DISCHARGE (750\6) **125 GAL. > 117.72 GAL.**

TOTAL HEAD:

DYNAMIC HEAD+STATIC HEAD+OPERATING HEAD
F.M. AND MANIFOLD FRICTION LOSS: 15.47
FITTINGS FRICTION LOSS: 3.97 (4x90°ELBOW, 7' PER FITTING=28' OF PIPE)
+(3x90° TEE, 10' PER FITTING=30' OF PIPE)
+(2x45°ELBOW, 4' PER FITTING=8' OF PIPE)
LATERAL SAFETY FACTOR: 1.5'
STATIC HEAD: 24.9'
DISTAL HEAD: 2.0'
TOTAL DYNAMIC HEAD: **47.84'** (15.47+3.97+1.5+24.9+2.0)
USE GOULDS PUMP WE10H.

BAT SYSTEM CHART

DESCRIPTION	ELEVATION
FINISHED GRADE AT SEPTIC TANK	548.00
INVERT INTO TANK	543.39
EXTERIOR BOTTOM OF TANK	538.65
INTERIOR BOTTOM OF TANK	538.98
PUMP OFF	540.23
PUMP ON	540.94
HIGH WATER ALARM	542.23
WATER LEVEL	543.23
INVERT OUT OF TANK	544.91
FINISHED GRADE AT TRENCH #1	565.50
INVERT INTO TRENCH #1	561.50
FINISHED GRADE AT TRENCH #2	565.00
INVERT INTO TRENCH #2	561.00
FINISHED GRADE AT TRENCH #3	564.50
INVERT INTO TRENCH #3	560.50
TOTAL DYNAMIC HEAD	47.84'
DOSED VOLUME	125 GAL
PUMP RUNTIME	2.19 MIN.



VICINITY MAP

SCALE : 1" = 2000'
ADC MAP 24 GRID E-8

GENERAL NOTES:

1. THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
2. PARCEL BACKGROUND:
   TAX MAP : 34
   PARCEL : 414
   LOT: BUILDABLE PRESERVATION PARCEL "A"
   DEED REFERENCE: LIBER 17637 FOLIO 74
   ELECTION DISTRICT : FIFTH
   ZONING : RR-DEO.
   AREA : 13.19 AC±
3. 2' TOPOGRAPHY FOR THE DEVELOPED AREAS IS BASED ON FIELD RUN SURVEY PERFORMED BY MILDENBERG, BOENDER & ASSOC., INC. ON OR ABOUT DECEMBER 2016.
4. PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
5. THIS AREA DESIGNATES A PRIVATE SEWERAGE AREA OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS AREA 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 SEWERAGE AREA. RECORDATION OF A MODIFIED SEWERAGE AREA SHALL NOT BE NECESSARY.
6. ANY CHANGES TO THE LOCATION OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED PLAN MAY BE REQUIRED.
7. THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
8. WELL TAG# HO-14-0117 HAS BEEN SHOW AS PER THE APPROVED PERCOLATION CERTIFICATION REVISION PLAN.
9. ANY WELLS OR SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELL AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

BEST AVAILABLE TECHNOLOGY (BAT) SITE PLAN NOTES

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 DEPTH OF THE BAT PER THE MANUFACTOR'S SPECIFICATION IS 3.0' FEET.
3. THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURER'S SPECIFICATIONS.
4. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
5. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
6. WITHIN ONE (1) MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TOTHE MARYLAND DEPARTMENT OF THE ENVIROMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
7. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
8. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY.
9. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.

NOTE:
NO GRAVITY SEWER TO THE BASEMENT.
EJECTOR PUMP TO BE PROVIDED FOR BASEMENT SERVICE.

ON-SITE SEWAGE DISPOSAL SYSTEM:

RESIDENTIAL SYSTEM DESIGN: HOOT 600 BNR
5 BEDROOM HOUSE (LIVING AREA = 2,330 SQ.FT.)
150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER /DAY
150 X 5 = 750 GPD

PRIMARY SYSTEMS
PERC RATE = 6-15 MINUTES/INCH
APPLICATION RATE = 0.8 GPD/SQ.FT.
DESIGN FLOW ÷ APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
750 ÷ 0.8 = 937.5 SQ.FT.
SQ.FT. REQUIRED ÷ WIDTH OF TRENCH = LENGTH OF TRENCH
937.5 ÷ 3.0' = 312.5 FT
USE 36" OF GRAVEL BELOW DRAIN PIPE
312.5 X 0.50 = 156.25
USE TWO (2) TRENCHES (39') AND ONE (1) TRENCH 78'
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.
MINIMUM TANK CAPACITY:= 600 GALLONS
PUMP: GOULDS MODEL WE7H

SECONDARY SYSTEMS
PERC RATE = 6-15 MINUTES/INCH
APPLICATION RATE = 0.8 GPD/SQ.FT.
DESIGN FLOW ÷ APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
750 ÷ 0.8 = 937.5 SQ.FT.
SQ.FT. REQUIRED ÷ WIDTH OF TRENCH = LENGTH OF TRENCH
937.5 ÷ 3.0' = 312.5 FT
USE 30" OF GRAVEL BELOW DRAIN PIPE
312.5 X 0.55 = 193.75
USE TWO (2) TRENCHES (86')
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.

TERTIARY SYSTEM:
PERC RATE = 6-15 MINUTES/INCH
APPLICATION RATE = 0.8 GPD/SQ.FT.
DESIGN FLOW ÷ APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
750 ÷ 0.8 = 937.5 SQ.FT.
SQ.FT. REQUIRED ÷ WIDTH OF TRENCH = LENGTH OF TRENCH
937.5 ÷ 3.0' = 312.5 FT
USE 30" OF GRAVEL BELOW DRAIN PIPE
312.5 X 055 = 171.88
USE THREE (3) TRENCHES (57.3')
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.

DEVELOPER

ZANDER HOMES
10829 FALLS ROAD
LUTHERVILLE, MD. 21092
443-421-2800

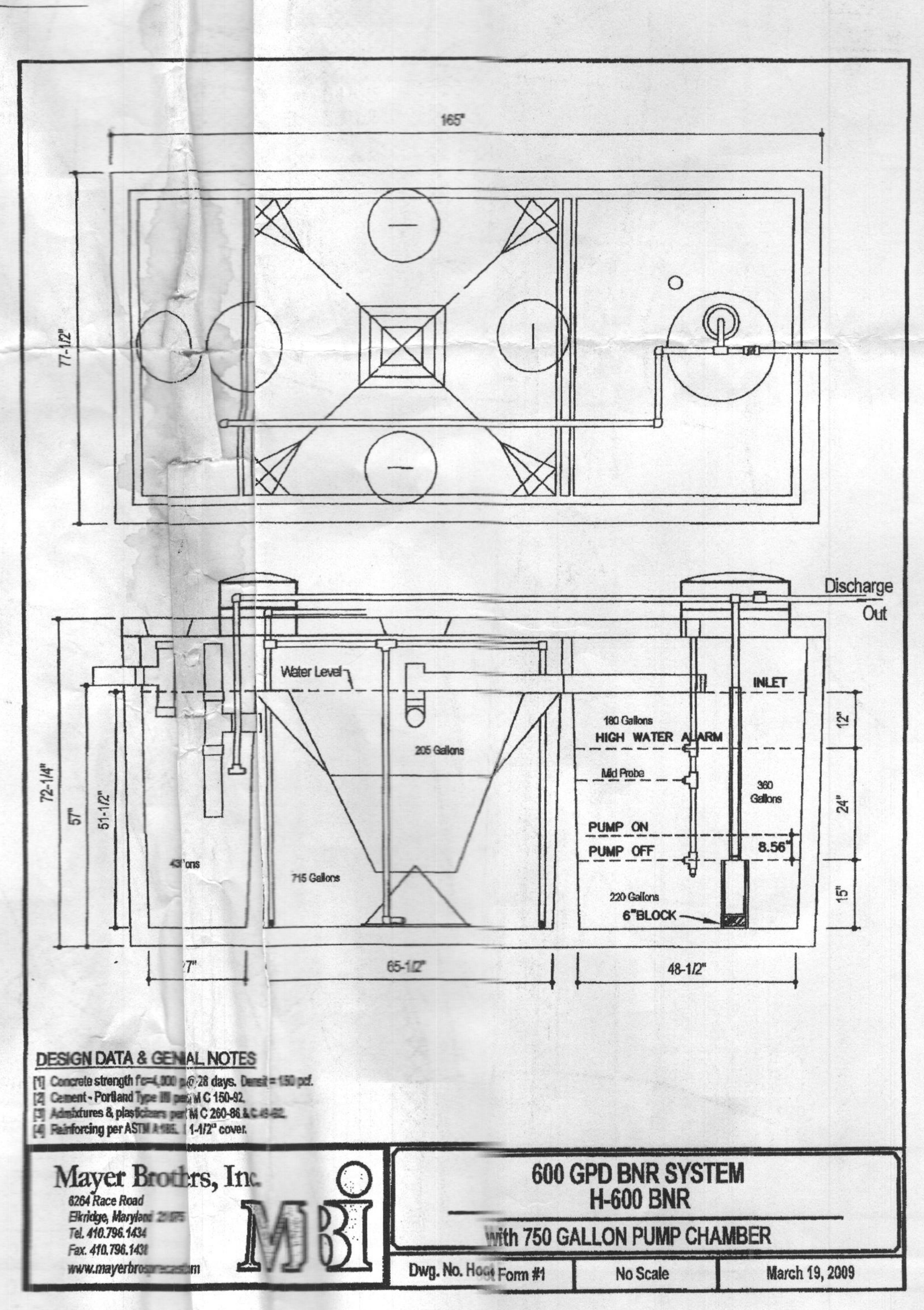
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP. DATE 9/03/18.

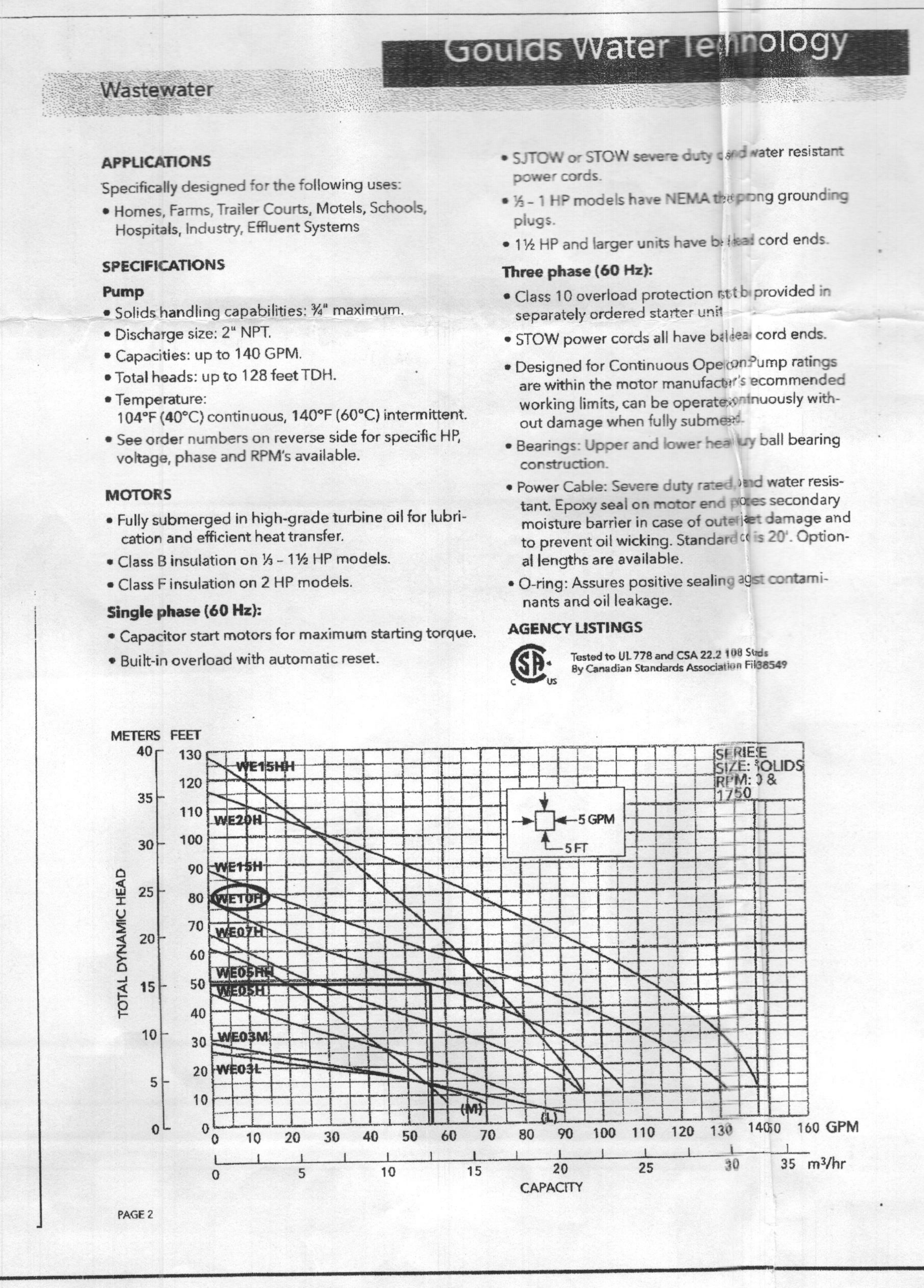
R. JACOB HIKMAT, P.E. — 12/12/17 — DATE

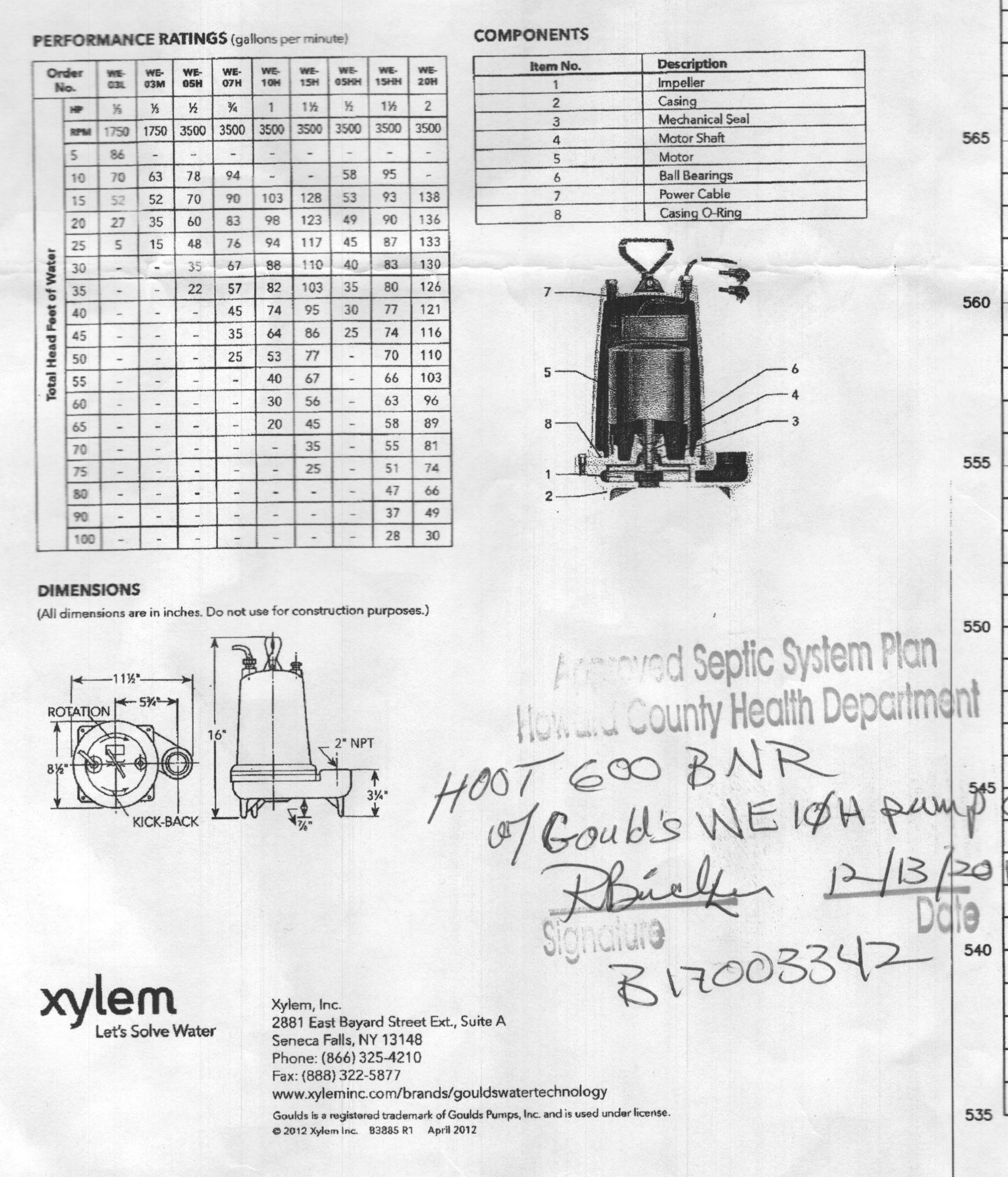
STATE OF MARYLAND · R. JACOB HIKMAT · No. 17942 · PROFESSIONAL ENGINEER

WELL CERTIFICATION:

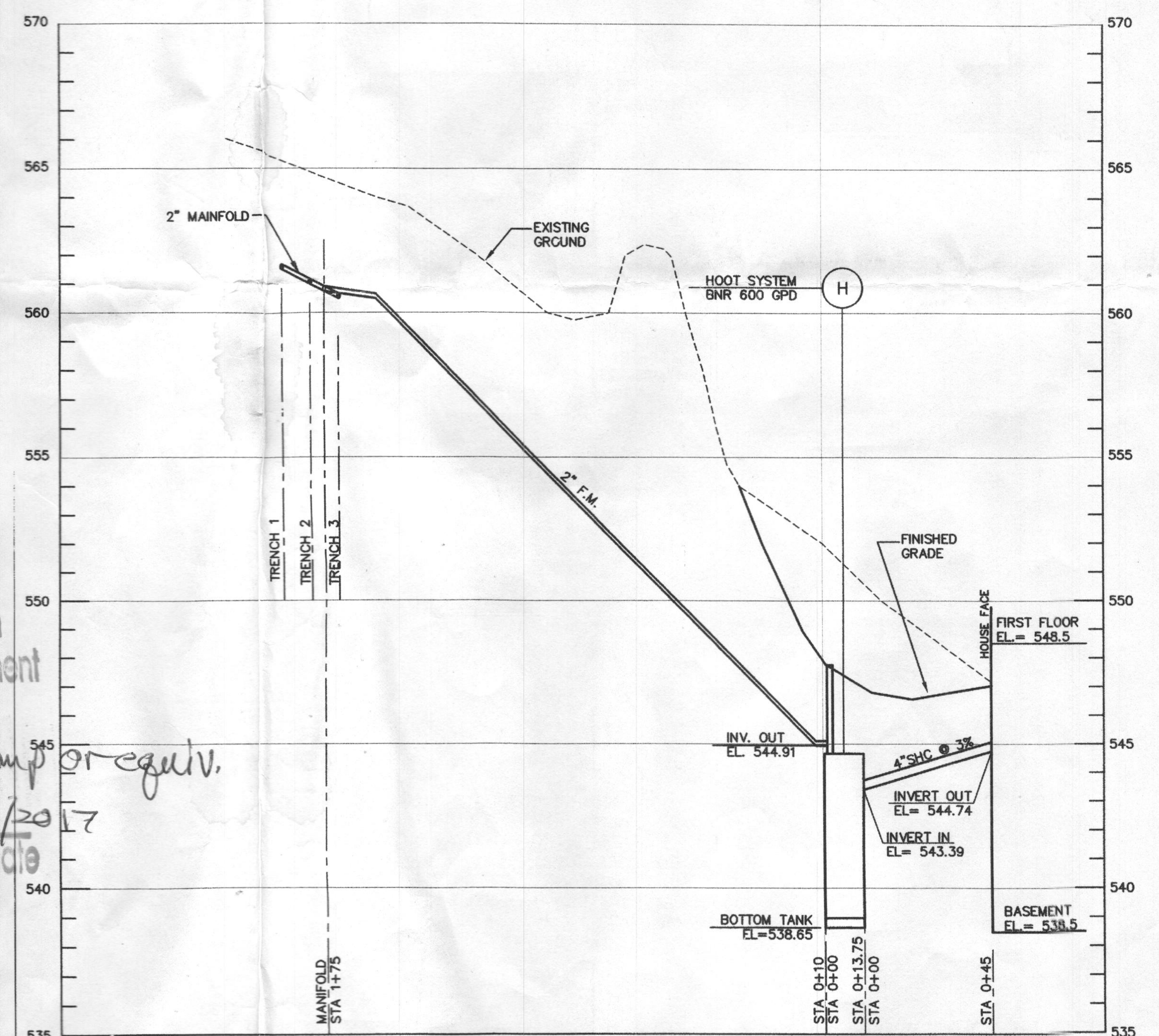
THE EXISTING WELL, TAG NO. HO-14-0117, HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN







Approved Septic System Plan
Howard County Health Department
HOOT 600 BNR
w/ Goulds WE 10H pump or equiv.
Signature — 12/13/2017 — Date
B17003342



PROFILE – PRIVATE SEWER

SCALE: 1"=50' HOR.
1"=5' VERT.

project	date
17-014	DEC. 2017
illustration	engineering
MMM	MMM
scale	approval
1"=50'	RJH

no. | description | date — revisions

JACK'S LANDING
BUILDABLE PRESERVATION PARCEL "A"
TAX MAP 34, PARCEL 414, PLAT 23952-55
FIFTH ELECTION DISTRICT — HOWARD COUNTY, MARYLAND

ONSITE SEWAGE DISPOSAL SYSTEM PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.

Approved 12/13/2017