

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: 9-2-15 **ONSITE SEWAGE DISPOSAL SYSTEM** P 557354

APPROVAL DATE: 10/20/15 SEC **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 12800 Linden Church Road

SUBDIVISION: _____ LOT: _____ TAX ID: _____

CONTRACTOR: Earl Preston Jr. Inc. EMAIL: doug@eprestonjr.com

CONTRACTOR ADDRESS: 4045C Federal Hill Road, Jarrettsville, MD 21084 PHONE: 410-294-9521

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: Kishan Amarakesera EMAIL: _____

OWNER ADDRESS: 12800 Linden Church Road PHONE: _____

BAT UNIT MODEL: Norweco TNTLP 600 PUMP SIZE: _____ PUMP TANK CAPACITY: _____

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 11-17-14 DATE RECORDED: 9-2-15

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

TRENCHES:	LINEAR FEET REQUIRED: <u>157</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>12 9'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>

LOCATION: **PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.**

NOTES: This permit should not receive final approval until existing septic tank abandonment is confirmed.

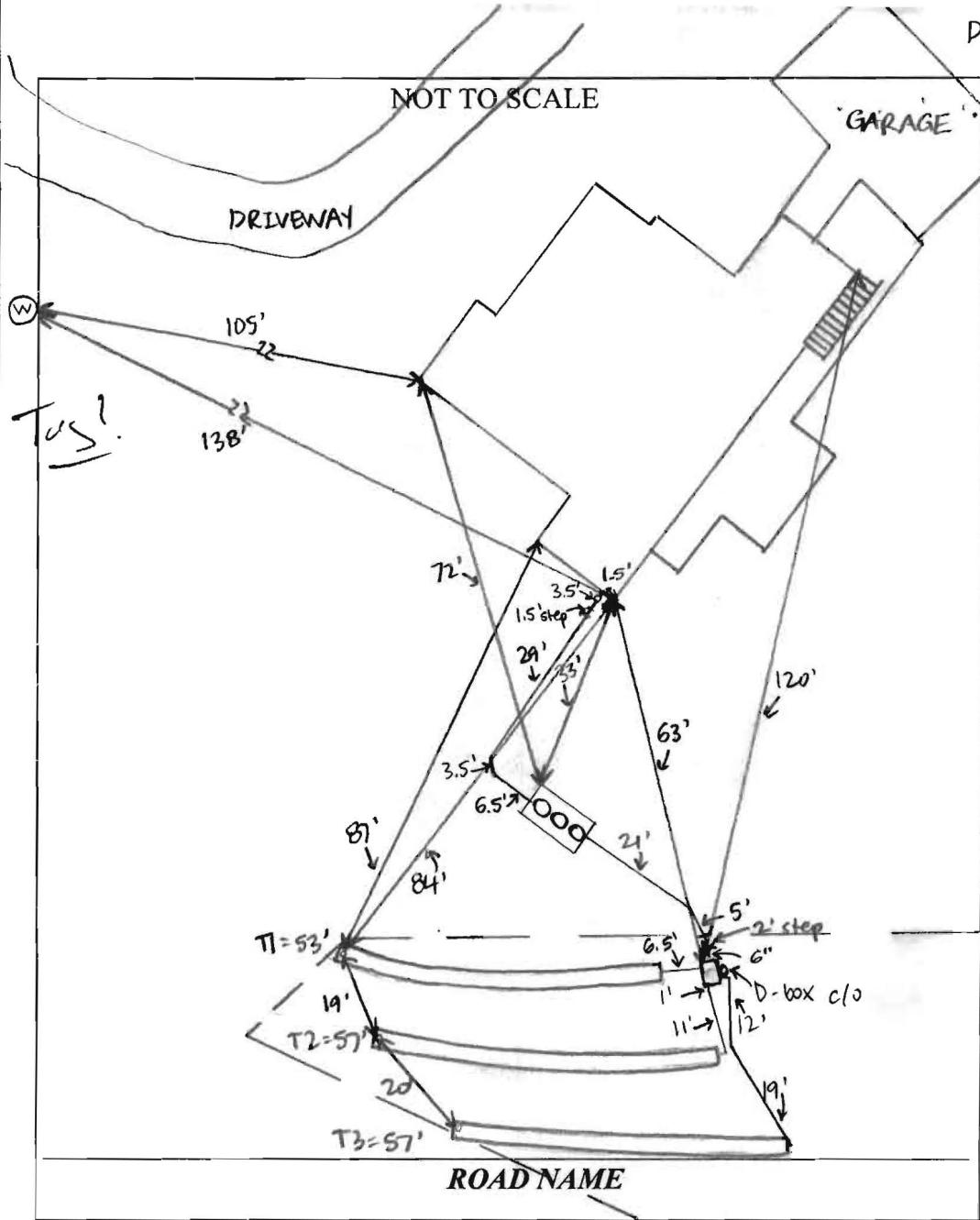
ISSUED BY: Kevin Wolf ISSUE DATE: 9-23-15 EXPIRATION DATE: 9-2-16

- 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 SEPTIC 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 15003369
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- 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		3
TOTAL LENGTH		167'
ABSORPTION AREA		501' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES - OFF TO SIDE

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	BACK RIVER / NORWECO
CAPACITY	1300 GAL
SEAM LOC	TOP
TANK LID DEPTH	1-2'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT, MID, REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	4-13-15

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: 10/19/15 Met contractor on site for layout. SDA stakes and BAT stakes present. Some fill in SDA directly behind house but initial system is on native soil. Laid out 3x53' trenches on contours, 9' between to avoid trees in area. Verified contractor's certification to install Norweco tank. (SC)

INSTALLATION: 10/19/15 House connection made. Tank installed, not yet connected to house. T1 dug and left open. Contractor filling with stone, using transit to check depth. D-box installed. Some bigger rocks hit partway through T1, grade to ~3' below only. 7' to bottom, 3.5' to stone. (SC) 10/20/15 T2 + T3 finished + left open. Buried trash at start of T2 but all above stone. Removed tree at end of T3. Levelled speed levelers on D-box. Aerator on Norweco works and alarm sounds. D-box cleanout off side, not directly over. (SC) 10/20/15 BAT startup received, old tank abandoned by Fogles in 2014. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 10/20/15

Area at 4
(total) 156.5

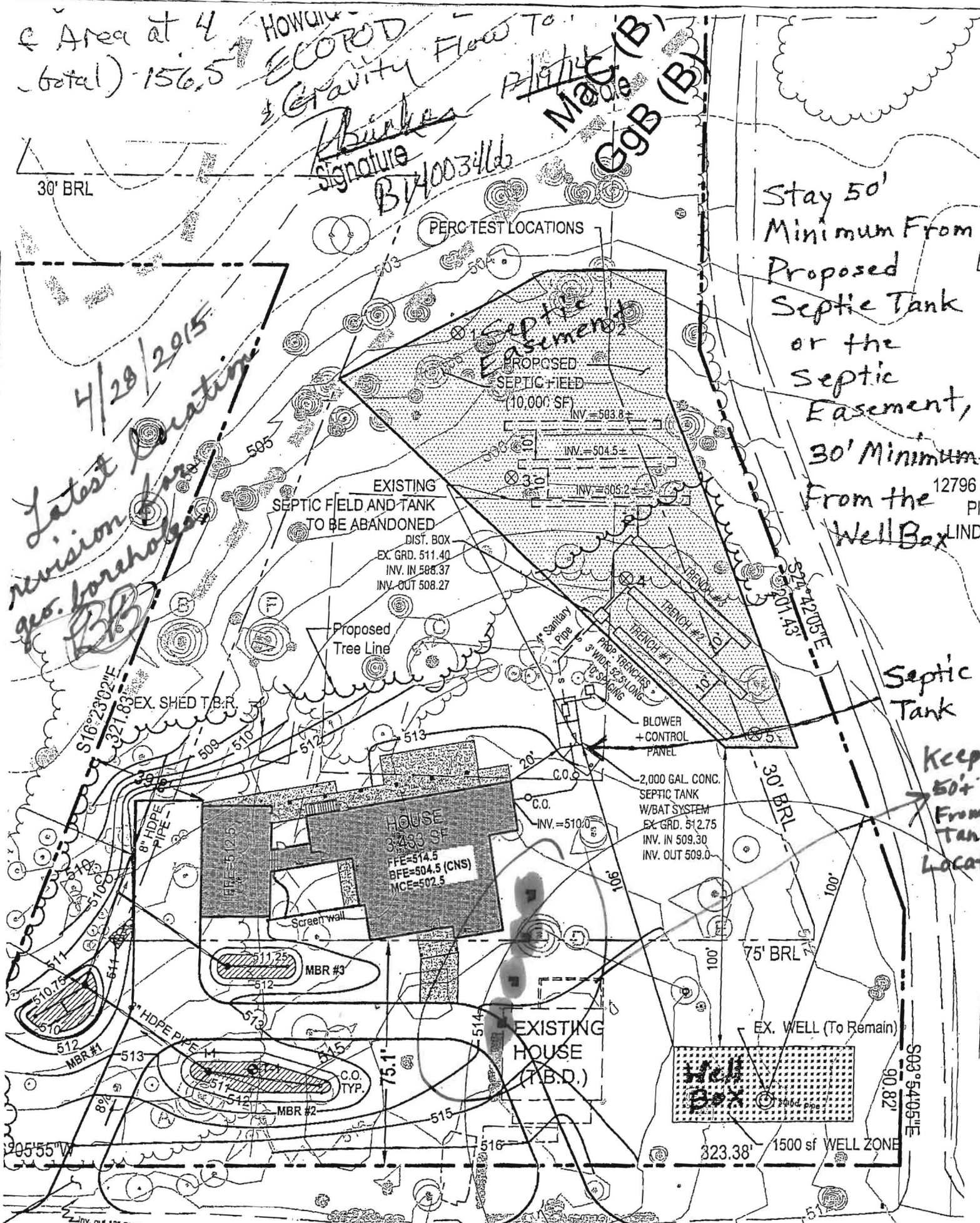
HOWAII
ECOPROD
Gravity Flow To

Signature
BY 400344d

MAG (B)
GGB (B)

Stay 50'
Minimum From
Proposed
Septic Tank
or the
Septic
Easement,
30' Minimum
From the
Well Box

4/28/2015
Latest
revision for
geo. borahogs



Keep
50'
From
Tank
Locat

LINDEN CHURCH ROAD

FOR DRIVEWAY, SEE STD.
DETAIL R-6.06

Asphalt Paving

Back River Pre-Cast, LLC

PO BOX 329
Glyndon, MD 21071
Phone # 410-833-3394
Fax # 410-833-4116

Letter of Certification

This is to certify that the Norweco Singlair TNT 600 GPD Septic Tank installed at 12800 Linden Church Rd., Clarksville, MD 21029 on October 19, 2015 was installed according to the manufacture's specifications.

Installer: Jason Barrett

Property Owner: Kishan Amaraekera

Permit #



MATTHEW GECKLE

Vice-President



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

Twitter: HowardCoHealthDep

original forwarded
to Land Record
on 9/2/15
\$60 paid.

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

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 17th day of November 2014 among Kishan Amarasekera
and Radhika Wijetunge, hereinafter collectively referred to as
"Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at
12800 Linden Church Road, Clarksville Maryland, in the 5th Election District of Howard
County, Maryland, and the deed to same is recorded or shall be recorded among the Land
Records of Howard County, Maryland in Liber 190 Folio 111.

WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal
system with an advanced pre-treatment system, utilizing best available technology to perform
nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective
January 1, 2013. The pre-treatment device being installed is Ecopod E75NCA.

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County to develop accurate and thorough test results.
- B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.
- D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.
- E. This agreement shall run with the land and upon Owner's taking title to the Lot shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Lot that the system shall require

maintenance or other attention. Upon taking title to the Lot, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

Reed Norton 11/17/2014
Howard County Health Department

[Signature] 11/12/14
Owner #1 Signature Date

KISHAN AMARASEKERA
Owner #1 Print Name

Buyer #1 Signature Date

Buyer #1 Print Name

[Signature] 11/12/14
Owner #2 Signature Date

RADHIKA WISETUNGE
Owner #2 Print Name

Buyer #2 Signature Date

Buyer #2 Print Name

12800 Lenden Church Rd.
Clarksville, MD.

Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21045
410-313-5850

=====
LR - Agreement Recording Fee
1x 20.00 20.00

Grantor/Grantee Name: Amarasekera
Reference/Control #: 220

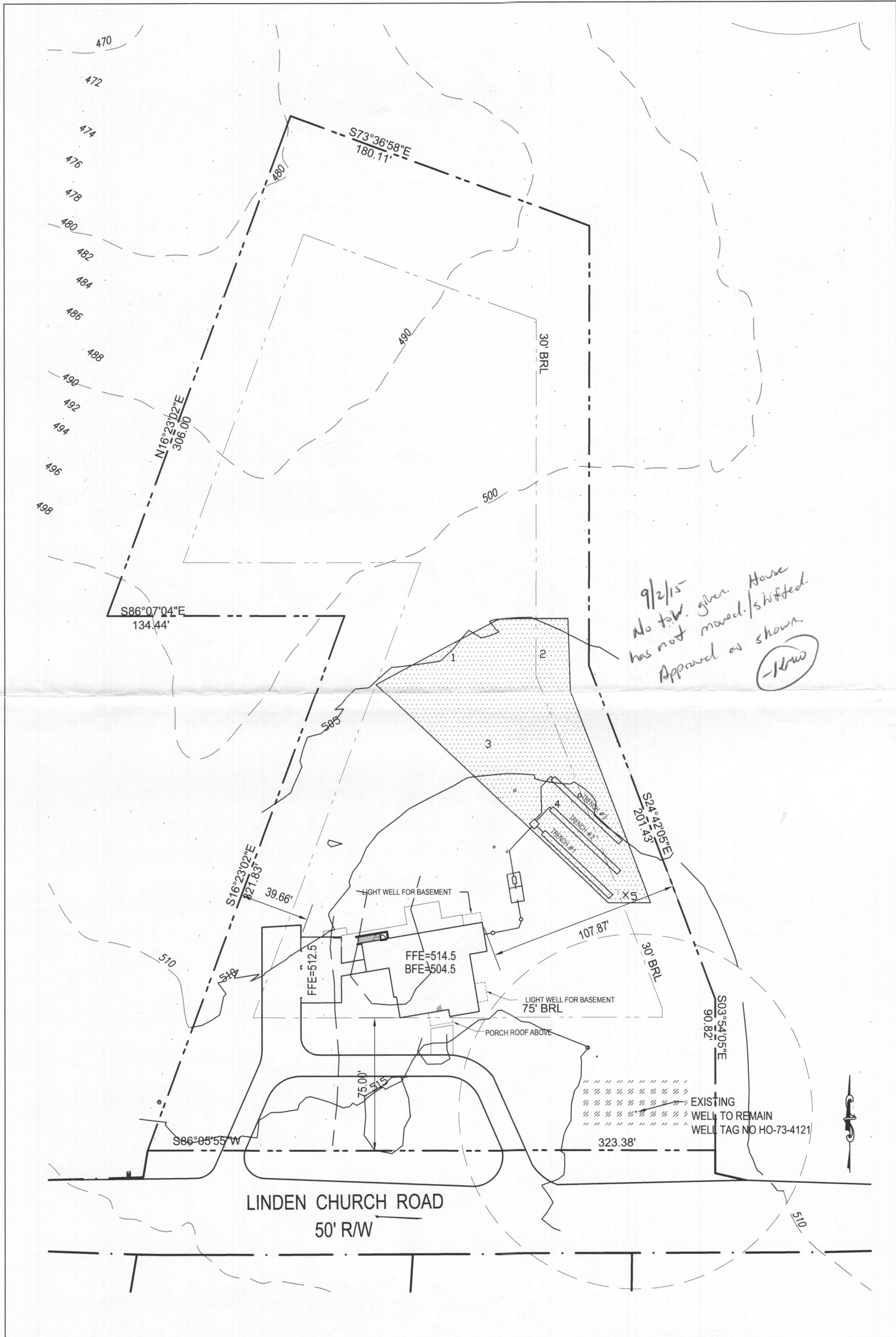
LR - Agreement Surcharge
1x 40.00 40.00

=====
SubTotal: 60.00
Total: 60.00

=====
REV-Cash 60.00

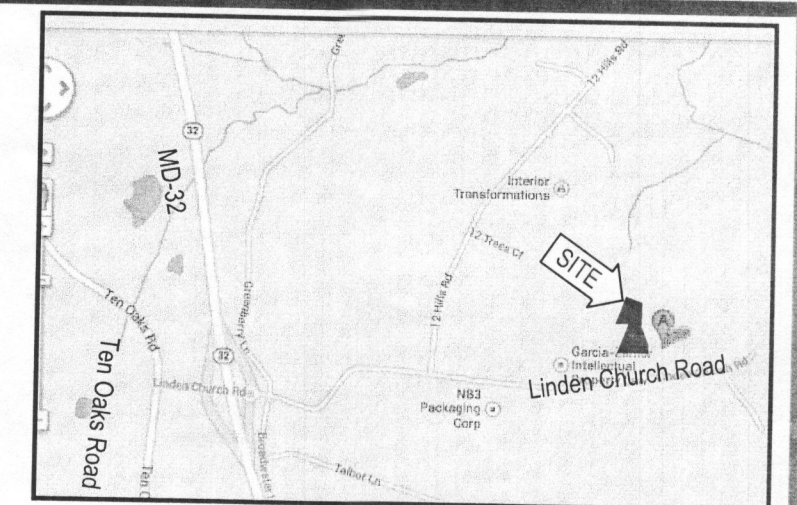
09/02/2015 15:04 CC13-KD
#4787640 /1342/109
***** DUPLICATE #001 *****

09/02/2015 15:05 CC13-KD
Thank you for visiting us today



LEGEND

- SETBACK LINE
- PROPERTY BOUNDARY
- ADJOINING BOUNDARY
- 100- EX. MINOR CONTOURS
- 102- EX. MAJOR CONTOURS
- ⊗ PASSED PERCOLATION TEST
- 464--- PROPOSED CONTOURS
- SOIL LINE
- ▭ PROPOSED SEPTIC FIELD
- EXISTING TREELINE
- PROPOSED TREELINE
- ⊙ EXISTING TREE
- ⊙ SPECIMEN TREE
- ⊕ T-1 TEST PIT LOCATION



VICINITY MAP
SCALE: 1"=1000'

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 MANUFACTURER'S SPECIFICATION IS 3.0 FEET.
3. THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
4. THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
5. WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
6. ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
7. AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
8. THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.

INITIAL SYSTEM CALCULATIONS

DESIGN FLOW
5 BEDROOMS AT 150 gpd PER BEDROOM = 750 gpd
APPLICATION RATE = 0.8 gpd/sq.ft.

SQUARE FOOTAGE OF DRAINFIELD REQUIRED = DESIGN FLOW / APPLICATION RATE = 750 / 0.8 = 937.5 SQ.FT.

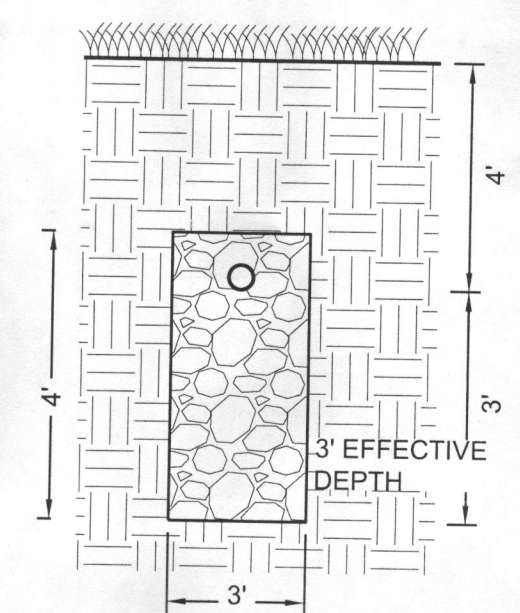
TRENCH WIDTH (W) = 3'; TRENCH DEPTH (D) = 7'-4" = 3'

SIDEWALL REDUCTION CREDIT = (W+2)/(W+1+2D) x 100 = 0.5

LINEAR LENGTH OF TRENCH REQUIRED = 937.5 SQ.FT. X 0.5 / 3' = 156.25'

PROVIDE 3 TRENCHES (TOTAL 157.5' IN LENGTH) FOR THE INITIAL SYSTEM

TRENCH INFO				
TRENCH	TRENCH LENGTH	GROUND @ TRENCH	INV. INTO TRENCH	BOTTOM OF TRENCH
1	52.5	512.00	508.00	505.00
2	52.5	511.00	507.00	504.00
3	52.5	510.00	506.00	503.00



TRENCH DETAIL
NOT TO SCALE

THIS AREA DESIGNATES A PRIVATE SEWERAGE AREA OF AT LEAST 10,000 SQ.FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDED OF REVISED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.

SOIL TABLE		
SYMBOL	NAME/DESCRIPTION	TYPE
GgB	Glenelg loam, 3 to 8 percent slopes	B
GmB	Glenville silt loam, 3 to 8 percent slopes	C
MaC	Manor loam, 8 to 15 percent slopes	B

BENCHMARKS

HOWARD COUNTY BENCHMARK - 31AB (CONC. MONUMENT)
N 573984.47 E 1369949.46 ELEV. 499.93
LOCATION: IN AN ELECTRICAL TRANSMISSION TOWER EASEMENT 86' FROM TRANS. TOWER 281A AND 114.2' FROM TRANS. TOWER 281. APPROXIMATELY 0.2 MILES EAST OF #4641 NEW CUT ROAD.

HOWARD COUNTY BENCHMARK - 31DA (CONC. MONUMENT)
N 571982.66 E 1372145.07 ELEV. 451.64
LOCATION: EAST SIDE OF ROLLING TOP ROAD, APPROXIMATELY 0.1 MILES NORTH OF ORCHARD ROAD.

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE # 3671, EXPIRATION DATE: 02/2019

OWNER/DEVELOPER

Kishan Amarasekera
9200 Rumsey Road, Suite 205
Columbia, MD 21045
(410) 992-3424

BAT PLAN

12800 LINDEN CHURCH ROAD

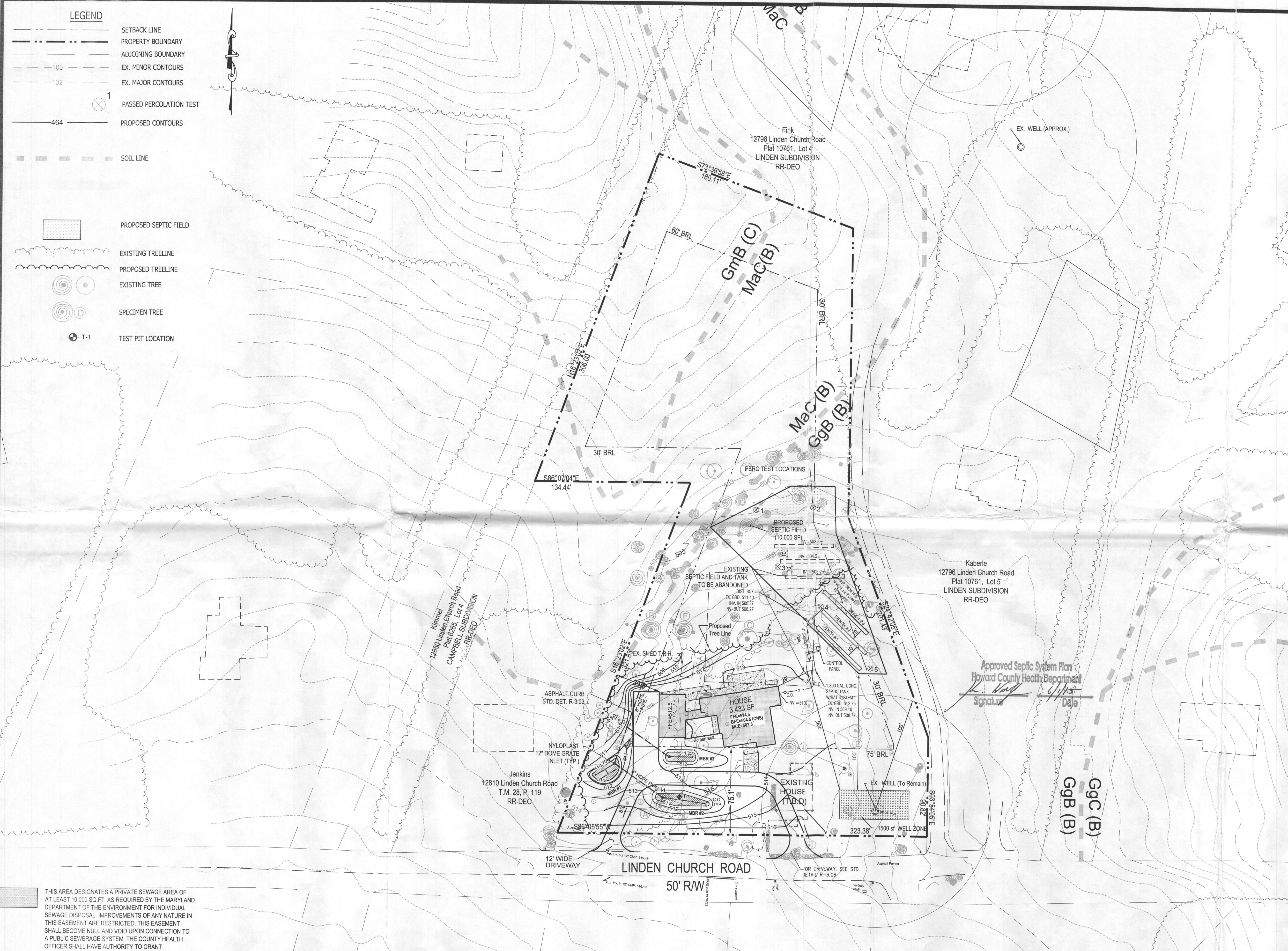
PLAT NO. 10761 LOT 3
RECORDED IN LIBER 13364, FOLIO 426
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TAX MAP - 28 GRID - 17 PARCEL - 721

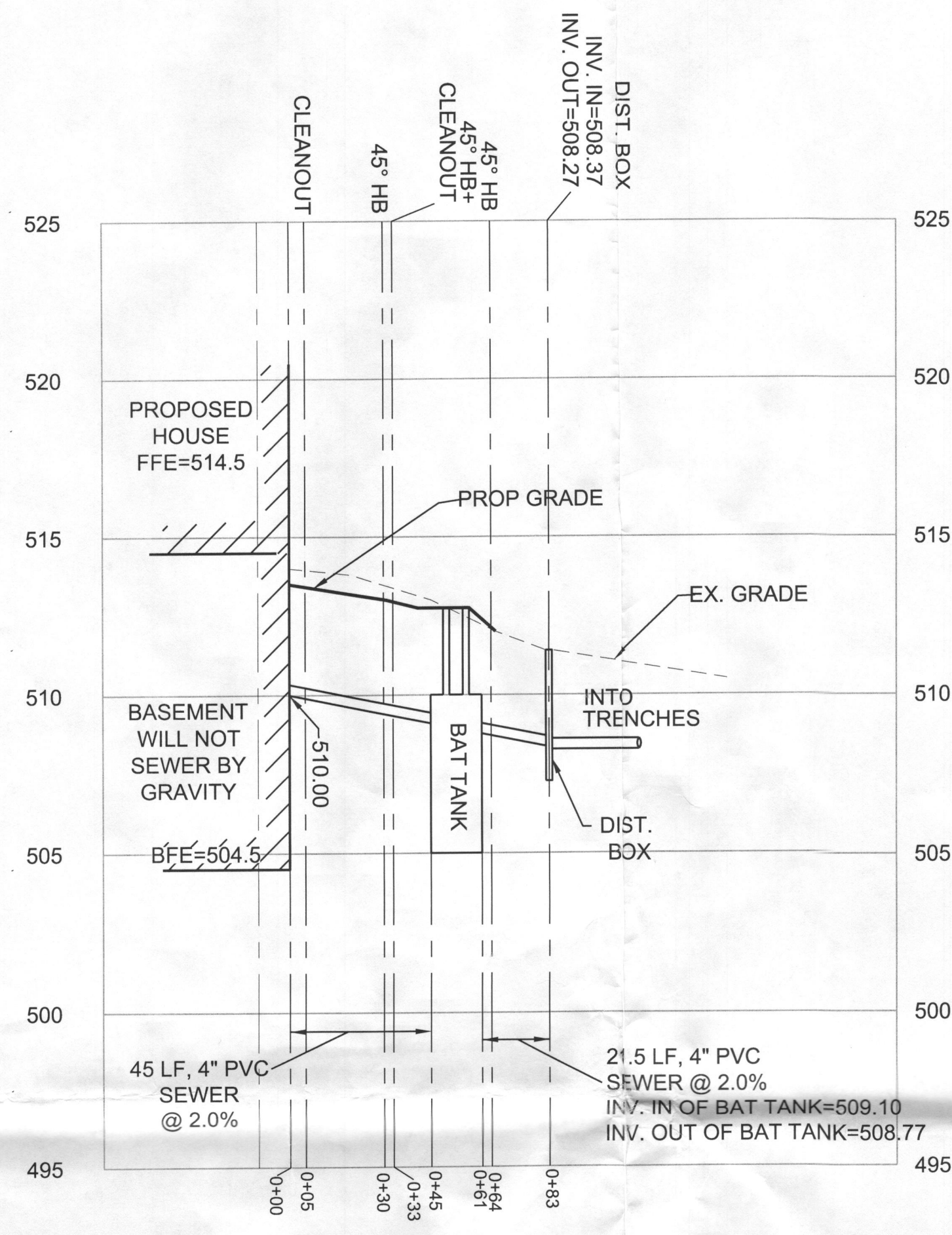
SCALE: 1" = 40'

JOB NO.: 14111

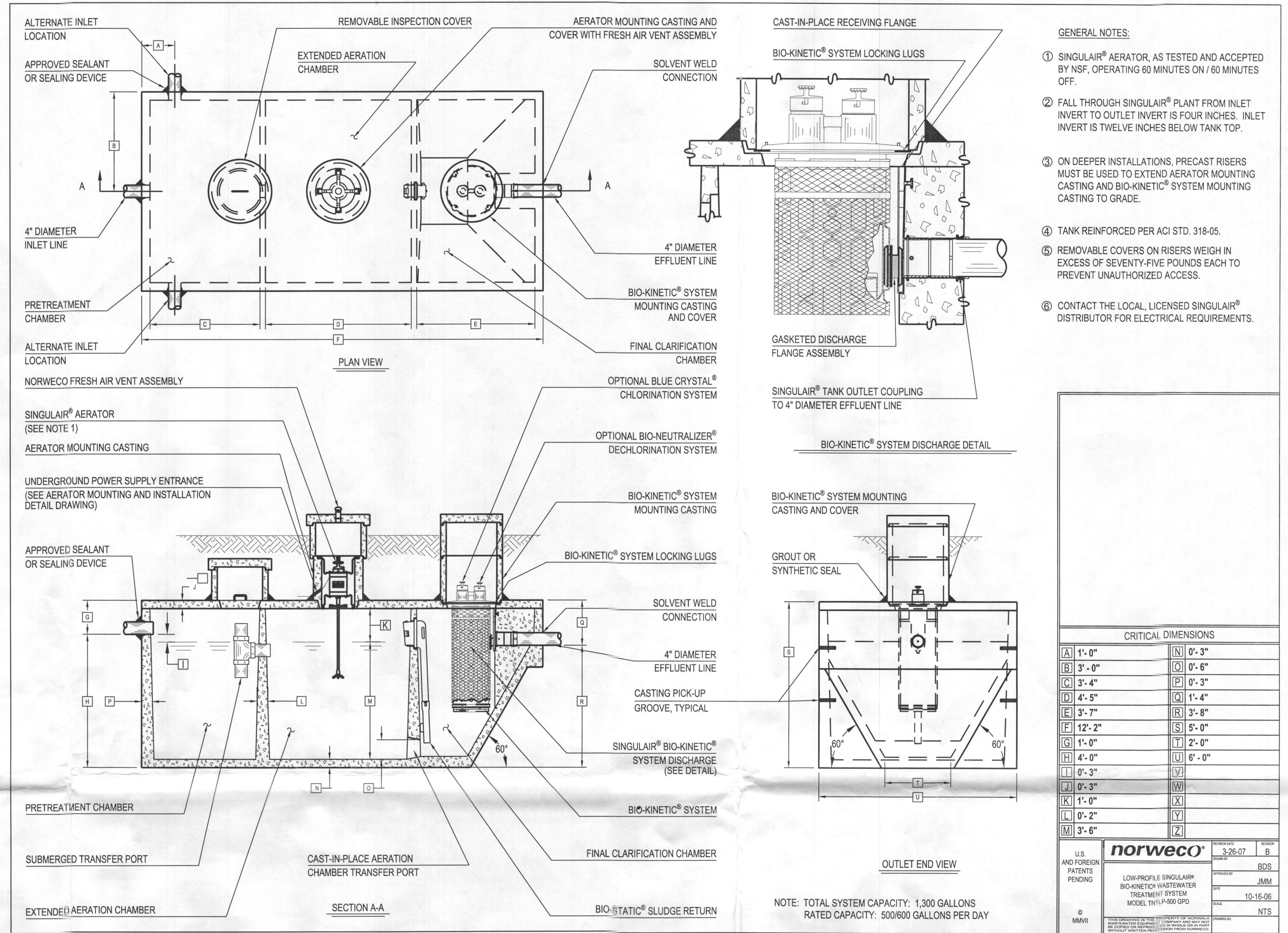
DATE: December 15, 2014

SHEET: 1 OF 2





BAT SYSTEM PROFILE
SCALE: 1" = 40' H; 1" = 4' V



- GENERAL NOTES:**
- 1 SINGULAR[®] AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 60 MINUTES OFF.
 - 2 FALL THROUGH SINGULAR[®] PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
 - 3 ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC[®] SYSTEM MOUNTING CASTING TO GRADE.
 - 4 TANK REINFORCED PER ACI STD. 318-05.
 - 5 REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
 - 6 CONTACT THE LOCAL, LICENSED SINGULAR[®] DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.

CRITICAL DIMENSIONS			
A	4'-0"	N	0'-3"
B	3'-0"	O	0'-6"
C	3'-4"	P	0'-3"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-8"
F	12'-2"	S	5'-0"
G	1'-0"	T	2'-0"
H	4'-0"	U	6'-0"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	3'-6"	Z	

NOTE: TOTAL SYSTEM CAPACITY: 1,300 GALLONS
RATED CAPACITY: 500/600 GALLONS PER DAY

U.S. AND FOREIGN PATENTS PENDING	norweco	DATE: 3-26-07	BY: BGS
LOW-PROFILE SINGULAR [®] BIO-KINETIC [®] WASTEWATER TREATMENT SYSTEM MODEL IN/PL-1000 GPD	DESIGNER: JMM	DATE: 10-16-06	BY: NTS

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE # 3671, EXPIRATION DATE: 9/22/16

REVISIONS	
5/20/15	REVISE BAT SYSTEM MODEL, INVERT ELEVATIONS

OWNER/DEVELOPER
Kishan Amarasekera
9200 Rumsey Road, Suite 205
Columbia, MD 21045
(410) 992-3424

MOBIUS TECHNOLOGIES, INC.
6755 BUSINESSPARKWAY
SUITE 209
ELKRRIDGE, MD 21075
Ph: (410) 998-2061
Fax: (855) 434-6688

Details for BAT Installation
12800 LINDEN CHURCH ROAD
PLAT NO. 10761 LOT 3
RECORDED IN LIBER 13364, FOLIO 426
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TAX MAP - 28 GRID - 17

SCALE: As shown JOB NO.: 14111 DATE: December 15, 2014 SHEET: 2 OF 2