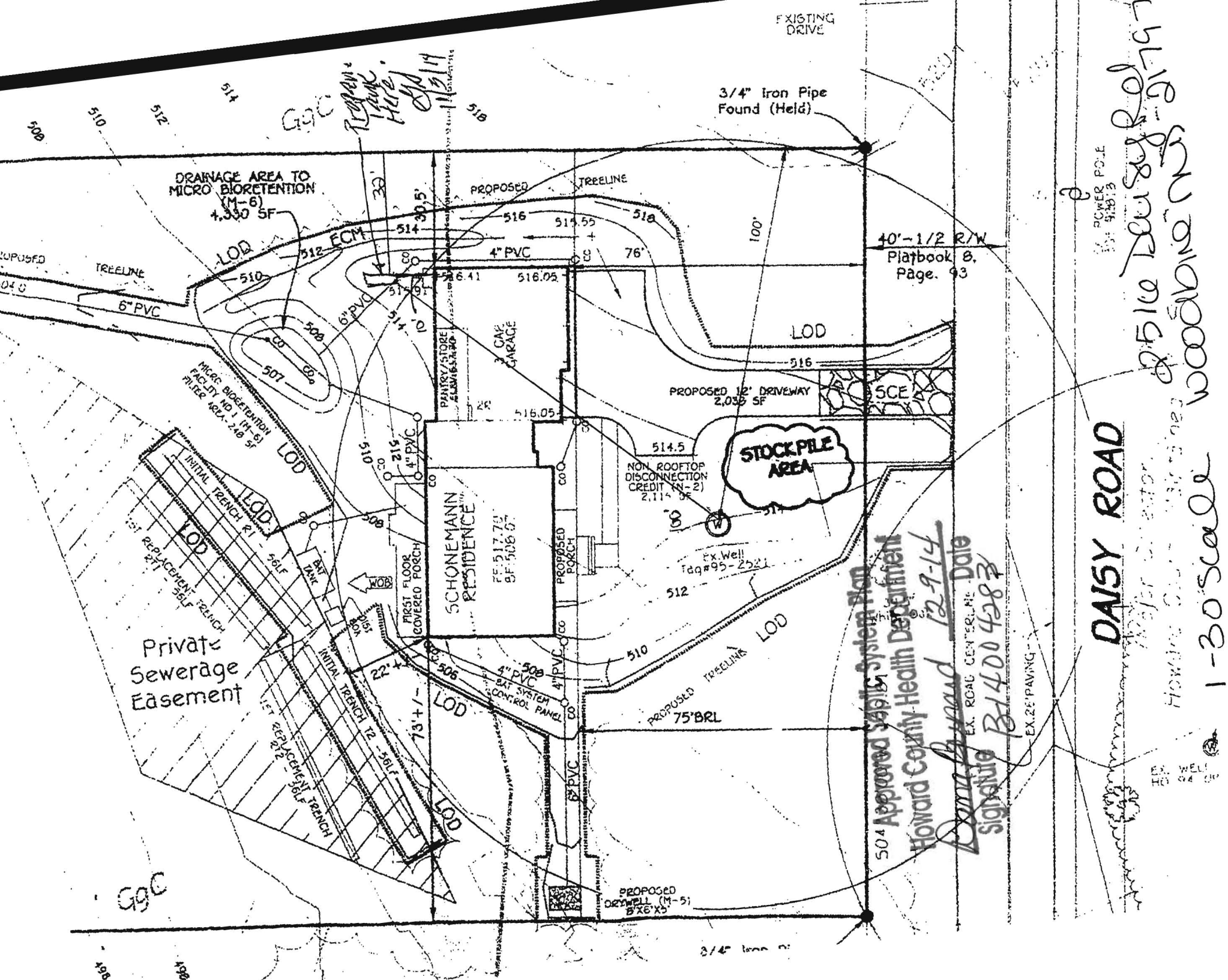
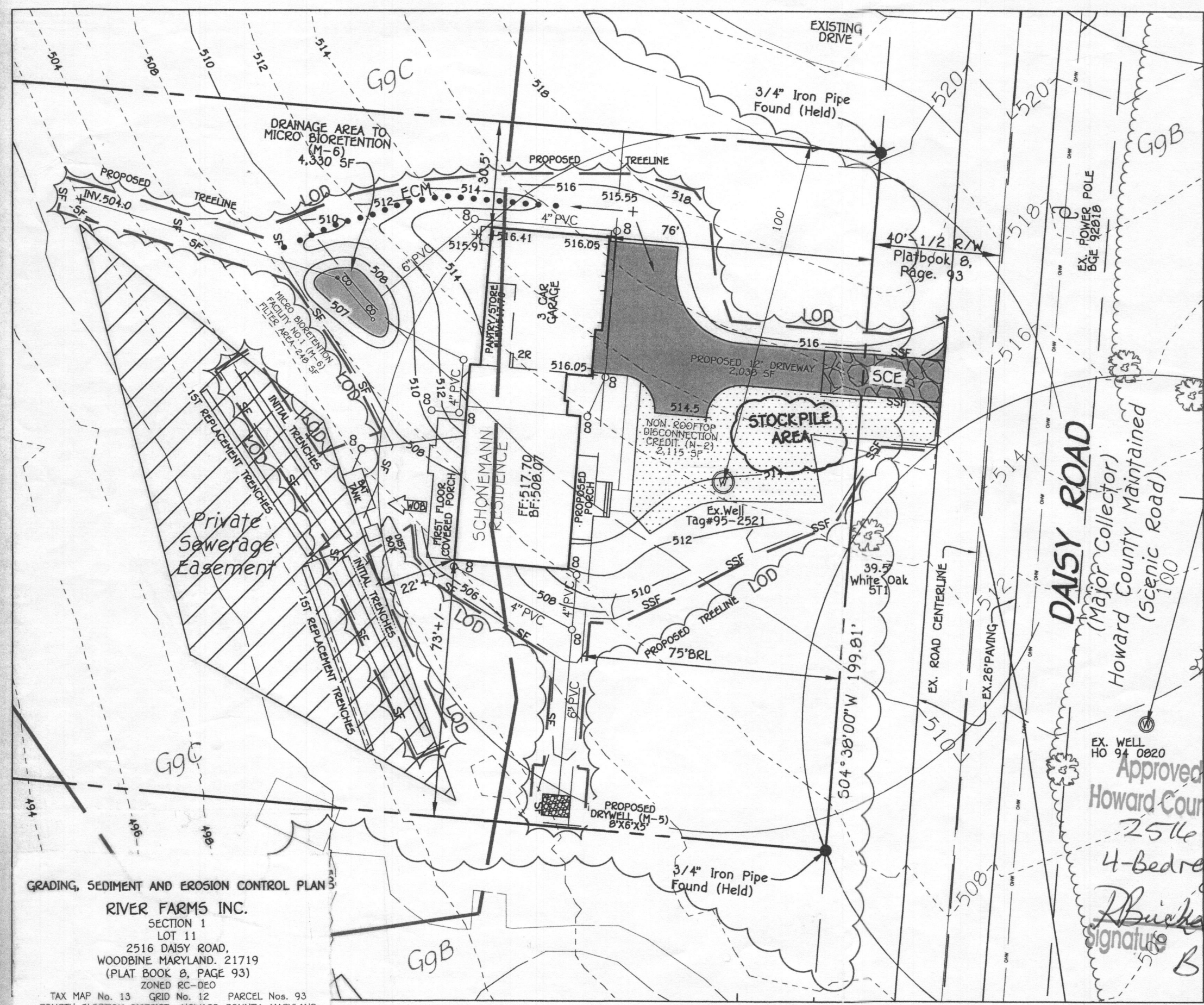






GRADING, SEDIMENT AND EROSION CONTROL PLAN
RIVER FARMS INC.
SECTION 1
LOT 11
2516 DAISY ROAD,
WOODBINE MARYLAND. 21719
(PLAT BOOK 8, PAGE 93)
ZONED RC-DEO
TAX MAP No. 13 GRID No. 12 PARCEL Nos. 93
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: OCTOBER 3, 2014
SHEET 2 OF 2

SEDIMENT CONTROL PLAN

DAISY ROAD

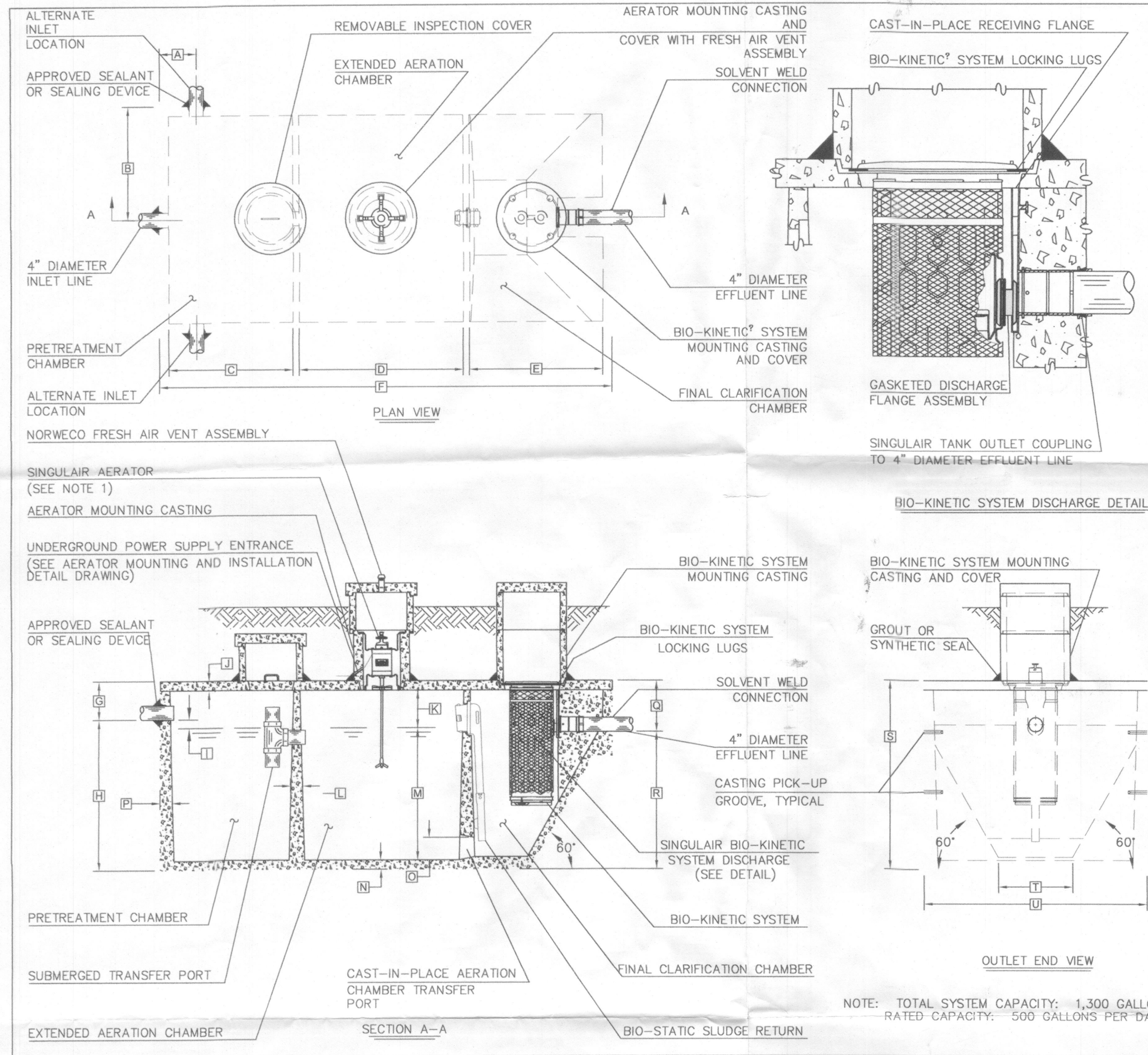
(Major Collector)
Howard County Maintained
(Scenic Road)

Approved Septic System Plan
Howard County Health Department
2516 Daisy Road
4-Bedroom SFD approved
as shown
Signature: *R. Buckner* Date: 11/25/2014
B14003689

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED
BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER





GENERAL NOTES:

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

PROJECT ENGINEER'S APPROVAL:
(I) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

DATE: _____
NAME: _____

CONTRACTOR'S CERTIFICATION:
(I) HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

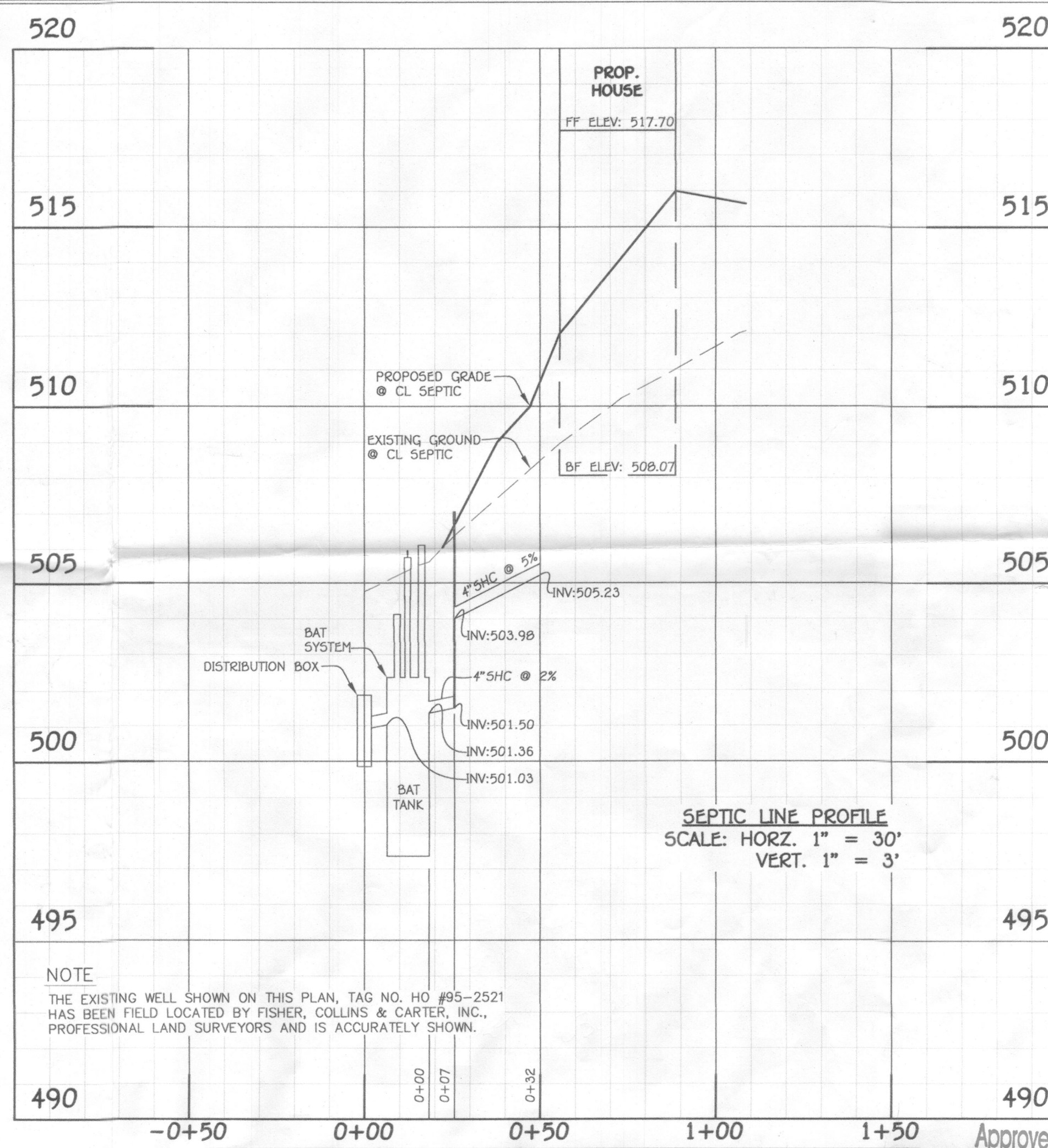
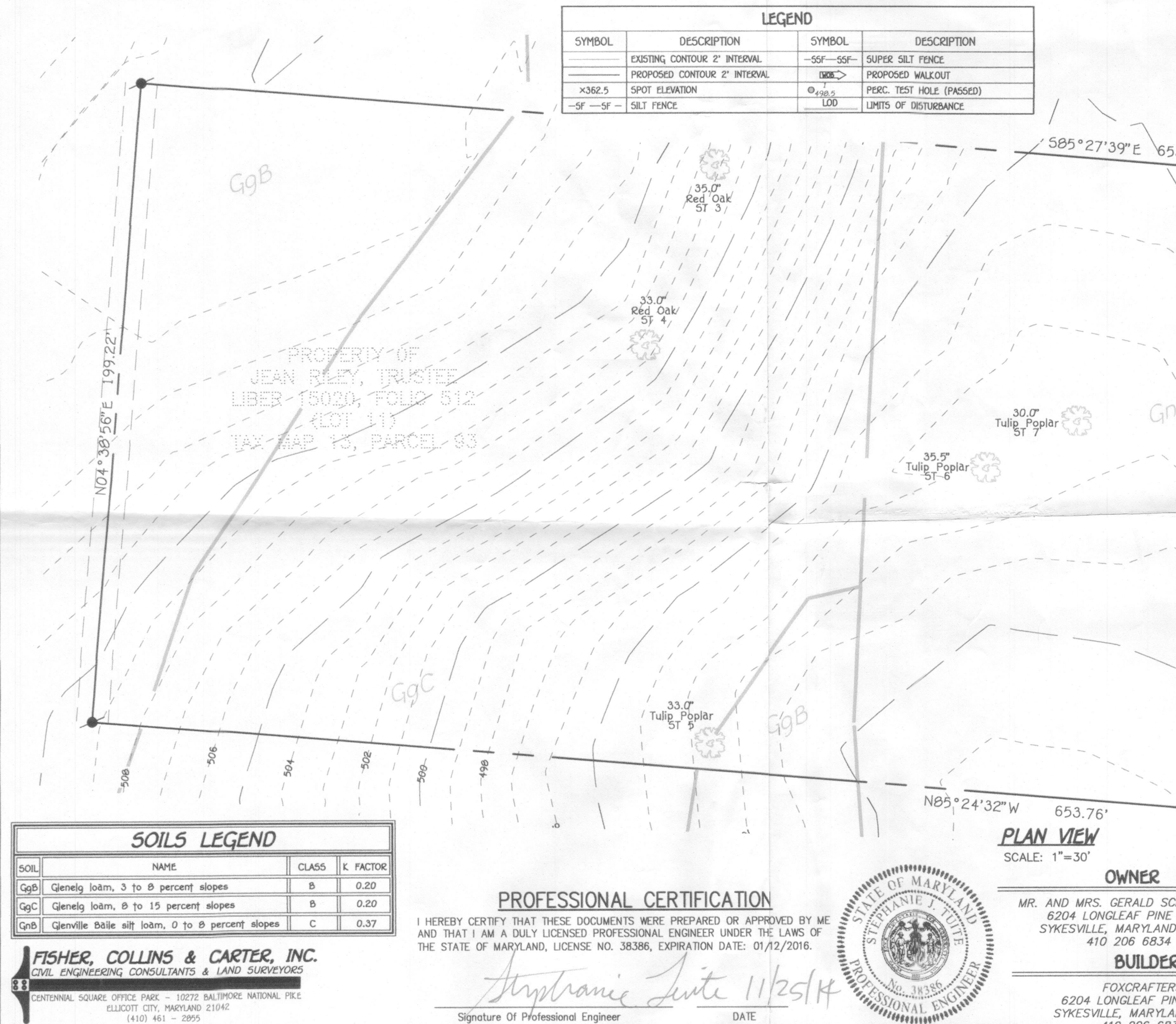
DATE: _____
NAME: _____

CRITICAL DIMENSIONS

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

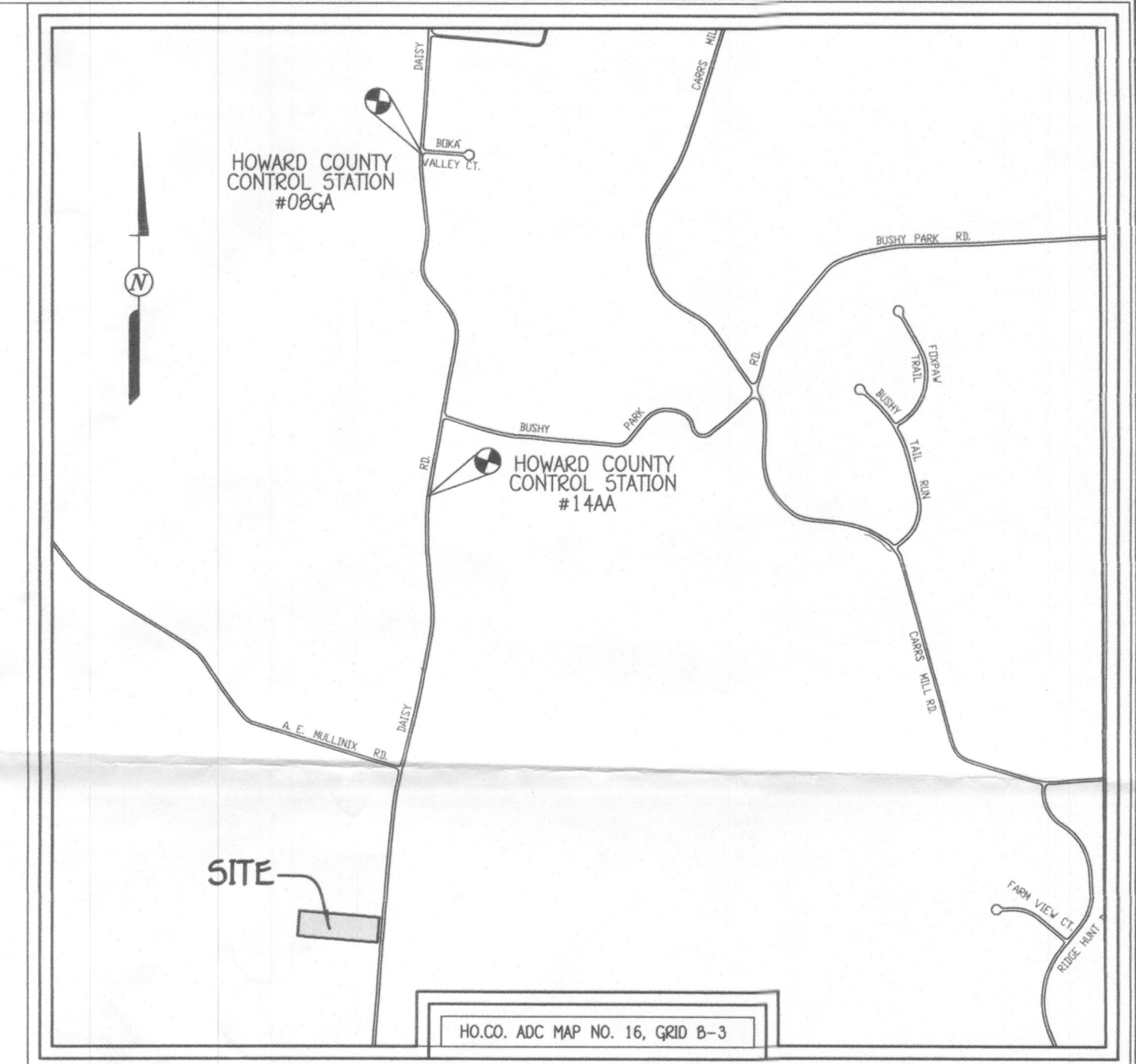
U.S. AND FOREIGN PATENTS PENDING

norweco 3-26-07 B
BDS
JMM
10-16-00
NTS
PC-5-7091



TRENCH DESIGN

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT INTO TRENCH	DEPTH OF TRENCH FROM EX.GROUND	DEPTH OF TRENCH FROM BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
T1	504.0	500.5	499.5	3.5'	4.5'	499.5	5.0'	3.0'	10.0'
T2	502.5	499.0	498.5	3.5'	4.5'	498.5	5.0'	3.0'	10.0'
E1	503.0	499.5	499.0	3.5'	4.5'	499.0	5.0'	3.0'	14.0'
E2	502.0	498.5	498.0	3.5'	4.5'	498.0	5.0'	3.0'	14.0'
E3	500.7	497.2	496.7	3.5'	4.5'	496.7	5.0'	3.0'	14.0'
E4	499.5	496.0	495.5	3.5'	4.5'	495.5	5.0'	3.0'	14.0'



BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #14AA - HORIZONTAL - (NAD '83)
(LOCATED 77.4' SOUTH OF BG&E POLE #377382 & 83.3' SW OF BG&E POLE #272942)
N 599.438.275, E 1,294.825.928
ELEVATION = 554.90 - VERTICAL - (NAVD '88)

B.M.#2 - HOWARD COUNTY CONTROL STATION #08CA - HORIZONTAL - (NAD '83)
(LOCATED 42.1' NE OF C&P POLE #25 AND 16.5' NW OF BG&E POLE #542475)
N 602.165.193, E 1,294.794.871
ELEVATION = 550.64 - VERTICAL - (NAVD '88)

GENERAL NOTES

- SUBJECT PROPERTY ZONED: RC-DEO
- TOTAL AREA OF PROPERTY: 2.994 AC.
- LIMIT OF DISTURBANCE: 19,368 SQ. FT. OR 0.44 ACRES.
- SITE WILL UTILIZE PRIVATE WELL AND SEPTIC TANK. TAG #952521, HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT FEBRUARY 2014.
- LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE. CONTRACTOR/BUILDER TO VERIFY ELEVATION IN THE FIELD BEFORE BEGINNING ANY CONSTRUCTION.
- BOUNDARY OUTLINE BASED ON FIELD-RUN NONUMENTED BOUNDARY SURVEY PERFORMED ON/ OR ABOUT FEBRUARY 2014 BY FISHER, COLLINS & CARTER, INC.
- FIELD RUN TOPOGRAPHIC SURVEY CONDUCTED BY FISHER, COLLINS & CARTER, INC. IN FEBRUARY, 2014 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHIC INFORMATION.
- NO WETLANDS OR STEEP SLOPES EXIST ON THIS LOT.
- STREAM, AND STREAM BUFFER EXIST TO THE REAR OF THE PROPERTY. EXISTING 20' PRIVATE DRAINAGE & UTILITY EASEMENT TAKEN FROM PLAT BOOK 8, PAGE 93.
- SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY.
- PREVIOUS DPZ FILE NOS.: PB 8, PG 23, F-15-023.
- THIS PLAN COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY EXECUTION OF A DECLARATION OF INTENT FOR CLEARING UNDER 20,000 SQUARE FEET FOR FOREST, 19,368 SQUARE FEET, IS PROPOSED TO BE CLEARED.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS 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 EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.
- NO STRUCTURES EXIST ON THIS PROPERTY.

BAT NOTES

- 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 COVER OVER THE BAT SHALL BE 3 FEET.
- THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
- THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
- 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.
- ANY ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- AN AGREEMENT AND EASEMENT HAS BEEN COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, LIBER 15817, FOLIO 130.
- THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
- SURFACE RUNOFF SHALL BE DIRECTED AROUND THE BAT TANK.

SEPTIC SYSTEM DESIGN
4 BEDROOM HOUSE
LOADING RATE = 600 GPD
APPLICATION RATE = 1.2
EFFECTIVE SIDEWALL BEGINS AT 5.0 FEET
TRENCH DEPTH = 3 FEET
TRENCH WIDTH (W) = 2 FEET
EFFECTIVE DEPTH (D) = 3.0 FEET
COEFFICIENT OF REDUCTION OF TRENCH LENGTH = (W+2)/(W+1+2D) = 0.44
SF OF DRAINFIELD = 600 GPD / 1.2 = 500 SF
TRENCH LENGTH = 500 SF / 2 = 250 FEET
SIDEWALL REDUCTION CREDIT = 250 X 0.44 = 111.11 LF

SEPTIC SYSTEM ELEVATIONS
FFE = 517.70
BSE = 508.07
INV. OUT OF HOUSE = 505.23
TOP OF BAT TANK = 502.36
COVER OVER BAT TANK = 3 FT TO 4 FT
INVERT INTO BAT TANK = 501.36
INVERT OUT OF BAT TANK = 501.03
INVERT INTO DISTRIBUTION BOX = 500.94
INVERT OUT OF DISTRIBUTION BOX = 500.44

BAT SITE PLAN FOR BAT INSTALLATION

RIVER FARMS INC.
SECTION 1
LOT 11
2516 DAISY ROAD,
WOODBINE MARYLAND, 21719
(PLAT BOOK 8, PAGE 93)
ZONED RC-DEO
TAX MAP No. 13 GRID No. 12 PARCEL Nos. 93
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 24, 2014
SHEET 1 OF 1