

Bureau of Environmental Health
 7178 Gateway Drive Columbia, MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

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

RECEIPT DATE: 10/9/2014 **ONSITE SEWAGE DISPOSAL SYSTEM** P 555265

INSTALLATION APPROVAL DATE: _____ **PERMIT** A _____
CONSTRUCTION

PROPERTY ADDRESS: 16045 Field's End Court

SUBDIVISION: Warfield's Grant LOT: P/A TAX ID: 04-357221

CONTRACTOR: _____ EMAIL: _____

CONTRACTOR ADDRESS: _____ PHONE: _____

PROPERTY OWNER: Michael Grodin EMAIL: Mgrodin@mrjs.com

OWNER ADDRESS: 1435 Bay Mead Road, Annapolis, MD 21409 PHONE: 410-353-~~7772~~ 3880

BAT UNIT MODEL: NORWECO Singular TNT BAT UNIT SIZE: LP 500

PUMP CHAMBER CAPACITY (GALLONS): _____ PUMP SIZE: _____

NUMBER OF BEDROOMS: 5 HOUSE SQ. FT. 4,000 APPLICATION RATE: 1.2

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>125</u>	INLET DEPTH: <u>2.5</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>9</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2.5</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:	Set BAT unit per plan. Set distribution box near top center of SDA. Install 2 X 63' trenches on contour at top of SDA, one to each side of d-box.	

ISSUED BY: Robert Bricker ISSUE DATE: 10/9/14 EXPIRATION DATE: 10/9/2015

- 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

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

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
2'	2'	6'-6.5'
NUMBER OF TRENCHES 2		
TOTAL LENGTH 128'		
ABSORPTION AREA 448+		
DISTRIBUTION BOX LEVEL Levelers		
DISTRIBUTION BOX BAFFLE Yes		
DISTRIBUTION BOX PORT Yes		

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes
 MANUFACTURER ^{Superior-LP500} Norweco
 CAPACITY No Info GAL
 SEAM LOC Top
 TANK LID DEPTH ?
 BAFFLES No
 BAFFLE FILTER N/A
 MANHOLE LOC Front, Middle + Rear
 6" PORT LOC None
 WATERTIGHT TEST No
 SLOTTED N/A
 DATE ON LID Dry

~~PUMP/SEPTIC TANK LEVEL N/A~~

~~MANUFACTURER _____
 CAPACITY _____ GAL
 SEAM LOC _____
 TANK LID DEPTH _____
 BAFFLES _____
 BAFFLE FILTER _____
 MANHOLE LOC _____
 6" PORT LOC _____
 WATERTIGHT TEST _____
 SLOTTED _____
 DATE ON LID _____~~

See As-Built Drawing On Separate Sheet

ROAD NAME

PRE-CONSTRUCTION:

10/20/2014 Tank location picked by homeowner and contractor. (Near planned location.) Went over system installation procedures with contractor. Couldn't lay out trenches because contractor didn't have time to get transit. (BB) 10/21/2014 (AM) Trenches laid out. (BB)

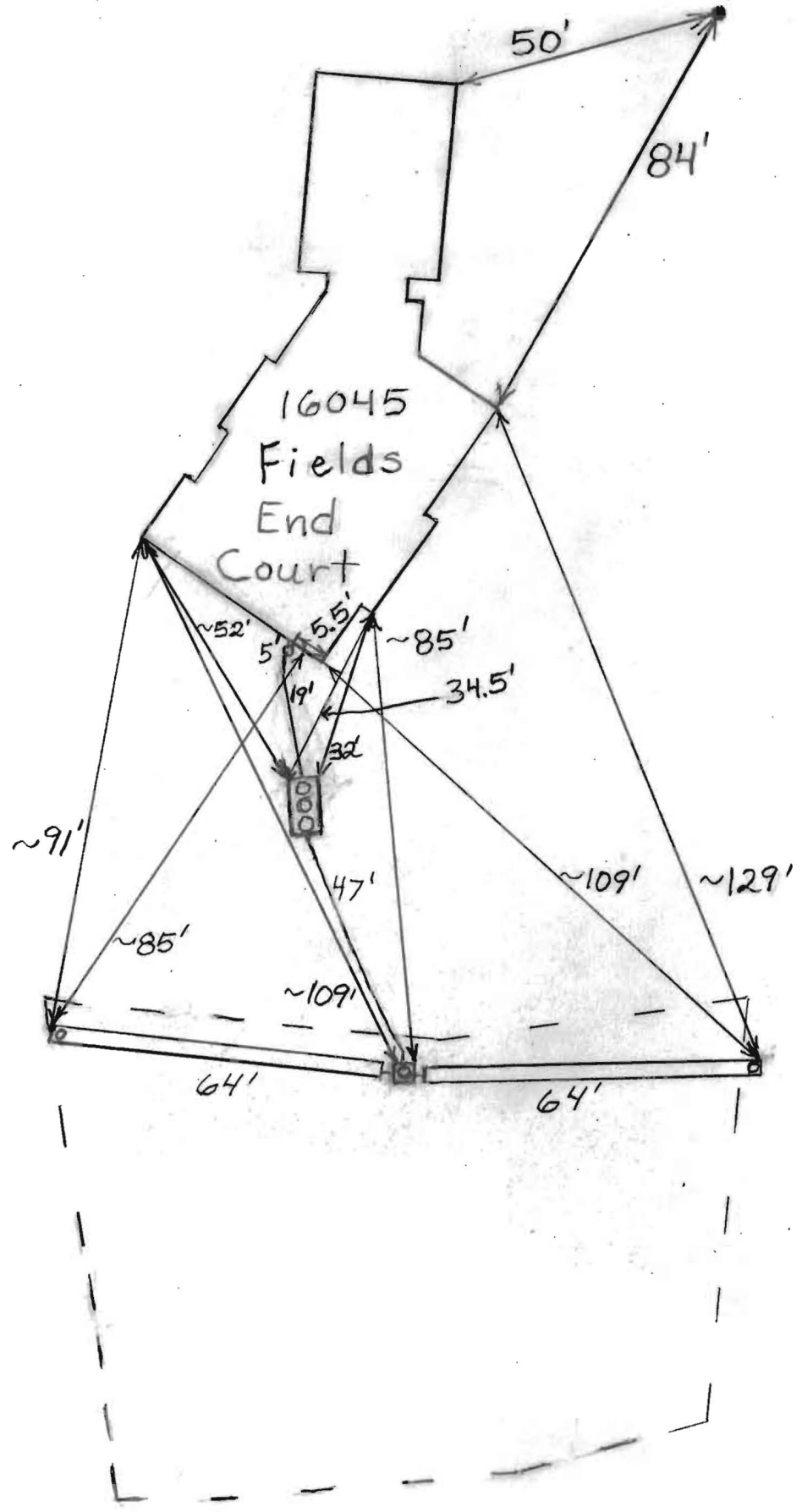
INSTALLATION:

10/21/2014 (PM) Tank set. House connection made. Installer has about half of one trench to finish. Need dist. box levelers and baffle. Rest of system done except for electrical connections. Need BAT certification from BAT inspector. (BB)

FINAL INSPECTOR

DATE OF APPROVAL

H0-95-2591



16045
Fields
End
Court

~91'

~85'

64'

~109'

50'

84'

~52'

5'

5.5'

~85'

34.5'

19'

32

47'

~109'

~129'

64'



BLUEGRASS
MATERIALS COMPANY

305016547

Weighed At: Medford

1111 Medford Road

New Windsor, MD 21776

Location: 2305

Order: 12146

Dispatch:

Date: 10/23/2014

Ship To: CASH2305 - MEDFORD QUARRY - C/S

AG:CMD,05, WHOLE SALE PRICING

Instruct:

PO: BILLINGS OUTBACK SEPTIC

Job #: 16045 FIELDS END CT, WOC

Product: 4STONE - ASTM_#4,LIMESTONE

Carrier: BILLINGSOUTBACK - BILLINGS OUTBACK

Vehicle: MD-B051

StateID#:

Qty: 10.98 ton --- DRIVER ON AT TARE & GROSS ---

Weighmaster:

BLUEGRASS MATERIALS

Deputy Weighmaster:

KATHRYN BAKER

	lb	ton	tne
Gross:	37,660	18.83	17.08
Tare:	15,700	7.85	7.12
Net:	21,960	10.98	9.96

Scale: 2

In: 10:03 am

Out: 10:12 am

PRICE	16.80	184.46
FREIGHT	0.00	0.00
FEE/OTHER		0.00
TAX		11.07
TOTAL		195.53

BLUEGRASS MATERIALS COMPANY

STANDARD TERMS AND CONDITIONS

APPLY.

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY: 2204.623 ROUNDED TO 2 DECIMALS
SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION


BLUEGRASS
MATERIALS COMPANY***305016389*****Weighed At: Medford**

1111 Medford Road

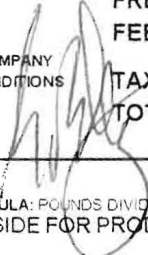
New Windsor, MD 21776

Location: 2305**Order:** 18764 **Dispatch:** 7313 **Date:** 10/21/2014**Ship To:** CASH2305 - MEDFORD QUARRY - C/S
AG:DMD,05,(D525)WHOLE SALE PRICING****PICK UP CHECK******Instruct:** 16045 FIELDS END CT, WOODBINE, MD 21797
GREG 410-353-3880 ****PICK UP CHECK******PO:** REQUIRED**Job #:****Product:** 4STONE - ASTM_#4,LIMESTONE**Carrier:** 1435 - CRAIG CHENOWETH**Vehicle:** MD-5195**StateID#:****Qty:** 22.42 ton --- DRIVER ON AT TARE & GROSS ---

	lb	ton	tne
Weighmaster: BLUEGRASS MATERIALS	Gross: 69,280	34.64	31.42
Deputy Weighmaster: KATHRYN BAKER	Tare: 24,440	12.22	11.09
	Net: 44,840	22.42	20.34

Scale: 2

* Predetermined Tare

In: **PRICE** 16.80 376.66**Out:** 11:41 am **FREIGHT** 5.25 117.71**FEE/OTHER** 0.00BLUEGRASS MATERIALS COMPANY
STANDARD TERMS AND CONDITIONS
APPLY.**TAX** 22.60**TOTAL** 516.97
Signature of Receiving AgentMETRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS
SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION



305016411

Weighed At: Medford
1111 Medford Road
New Windsor, MD 21776

Location: 2305

Order: 18764 Dispatch: 7313 Date: 10/21/2014

Ship To: CASH2305 - MEDFORD QUARRY - C/S
AG:DMD,05,(D525)WHOLE SALE PRICING
PICK UP CHECK

Instruct: 16045 FIELDS END CT, WOODBINE, MD 21797
GREG 410-353-3880 **PICK UP CHECK**

PO: REQUIRED

Job #:

Product: 4STONE - ASTM_#4.LIMESTONE

Carrier: 1498 - STEVEN W BOPST

Vehicle: MD-1038

StateID#:

Qty: 21.48 ton

--- DRIVER ON AT TARE & GROSS ---

Weighmaster:

BLUEGRASS MATERIALS

Deputy Weighmaster:

KATHRYN BAKER

Scale: 2

In: 1:27 pm

Out: 1:36 pm

	lb	ton	tn
Gross:	68,240	34.12	30.95
Tare:	25,280	12.64	11.47
Net:	42,960	21.48	19.49

* Predetermined Tare

PRICE 16.80 360.86

FREIGHT 5.25 112.77

FEE/OTHER 0.00

BLUEGRASS MATERIALS COMPANY
STANDARD TERMS AND CONDITIONS
APPLY.

TAX 21.65

TOTAL 495.28

Signature of Receiving Agent

METRIC CONVERSION FORMULA: POUNDS DIVIDED BY 2204.623, ROUNDED TO 2 DECIMALS
SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

Superior Tank, Inc.

(301) 870-3904

12735 La Plata Road P.O. Box 10
Bryantown, Maryland 20617

Fax (301)274-3292

3/18/2015

RE: FINAL INSTALLATION CERTIFICATION
600 GPD NORWECO TNT SYSTEM

16045 FIELDS END COURT
WOODBINE, MARYLAND

TO WHOM IT MAY CONCERN,

THE HOMEOWNER AND PROJECT REFERENCED ABOVE HAS JUST BEEN UPGRADED TO A NEW SINGULAIR TNT PRE-TREATMENT TANK UNIT. THE SYSTEM WAS INSTALLED TO ALL MANUFACTURES SPECIFICATIONS AND MEETS ALL REQUIREMENTS OF THE MDE-OSDS/BAT UPGRADES. THE SYSTEM IS CERTIFIED AND WARRANTIED BY NORWECO THROUGH SUPERIOR TANK, INC., AS ITS LOCAL MANUFACTURER AND DISTRIBUTOR. THIS APPROVAL CERTIFIES THE NORWECO PRE-TREATMENT SYSTEM ONLY. OPERATION OF THE FACILITY MAY BEGIN IMMEDIAELY.

IF YOU HAVE ANY OTHER QUESTION OR CONCERNS PLEASE FEEL FREE TO CONTACT US.

SINCERELY,



R.J. Earnshaw

H. D.

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 - Recording Fee (No Taxes)
1x 20.00 20.00

Grantor/Grantee Name: grodin
Reference/Control #: 68

LR - Surcharge
1x 40.00 40.00

SubTotal: 60.00
Total: 60.00

REV-Check-BOA 60.00
Number : 3056

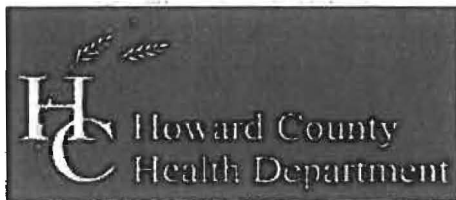
10/15/2013 08:40 CC13-NN

#2100819 /496/109

***** DUPLICATE #001 *****

10/15/2013 08:41 CC13-NN

Thank you for visiting us today



Bureau of Environmental Health
 7178 Columbia Gateway Drive, Columbia, MD 21046-2147
 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/hccohealth
 Twitter: HowardCoHealthDep

000068

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 10th day of OCTOBER, among Michael A & Patricia A. Gradin, 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 3180 Daisy Road, Woodbine, Md. 21797, in the 4th 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 05279 Folio 677.

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.

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.

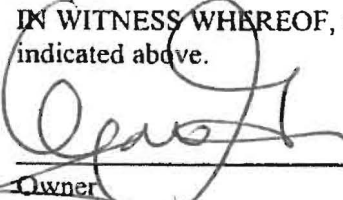
G. This agreement may be voided at any time at the discretion of the County.

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.

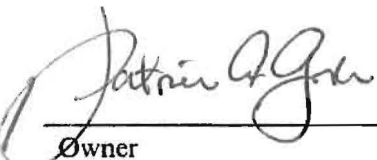
I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

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.



Owner Date 10/5/13
MICHAEL A. GRODIN



Owner Date 10/5/13
PATRICIA A. GRODIN



Howard County Health Department

UP - Recording Fee (Mo
Taxes) 28.00
Referent/Grantor Name: grodin
Reference/Control # = 08
LR - Surcharge 40.00
Subtotal: 68.00
Total: 68.00
#2100314-1 08-41 0213-JH
10/15/2013 08-41 0213-JH
#2100319-000000 - Howard Co
Columbia, CO 805 03 04
Register 08 405



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
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Twitter: HowardCoHealthDep

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

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HAVING AN ADVANCED PRE-TREATMENT SYSTEM

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Handwritten initials and marks on the left margin.

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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.

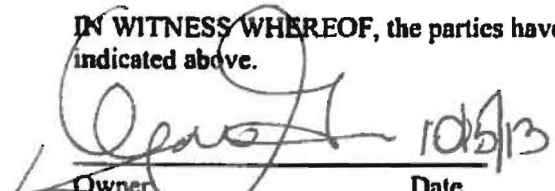
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H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the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

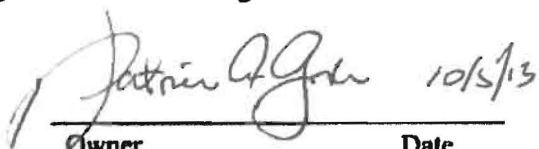
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Owner Date
MICHAEL A. GRODIN



Owner Date
PATRICIA A. GRODIN



10/10/13
Howard County Health Department

LR - Recording Fee (No Taxes)
Grantor/Grantee Name: Grodin
Reference/Control #: 08
LR - Surcharge 40.00
SubTotal: 60.00
Total: 60.00
#2100819-1 08:41 CC13-NH
10/15/2013 CC0503 - Howard Co
#2100819 CC05.03.04 -
Register 04 496

Wall Check
'OK' ref 10/9/2014

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. 2402703000, EFFECTIVE DEC. 4, 1985.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 1' (±).
- 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-95-2591) 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 10/04/2014.



Existing Public Forest Conservation Easements Plat Nos. 11974 & 11975

SYM	LENGTH
FCE-1	S25°16'39"E 115.48'
FCE-2	S82°14'17"E 78.65'
FCE-3	N10°26'58"E 43.92'
FCE-4	S62°29'34"W 62.89'
FCE-5	S03°21'13"E 53.18'
FCE-6	S45°02'58"E 88.81'
FCE-7	S35°50'24"E 119.42'
FCE-8	S30°46'00"E 189.88'
FCE-9	S62°22'00"E 36.14'
FCE-10	S14°27'08"E 38.64'
FCE-11	S70°21'11"W 39.35'
FCE-12	S11°38'22"E 46.26'
FCE-13	N1°18'25"E 32.09'
FCE-14	S38°05'08"E 100.37'
FCE-15	S85°35'27"E 65.33'
FCE-16	N26°53'47"E 77.24'
FCE-17	N58°25'45"E 18.89'
FCE-18	N32°06'13"W 57.26'
FCE-19	N09°09'49"W 129.91'
FCE-20	N80°19'06"W 36.77'
FCE-21	S68°35'05"W 144.53'
FCE-22	N71°02'12"W 60.69'
FCE-23	S11°16'59"W 119.26'
FCE-24	N82°48'27"W 264.81'
FCE-25	S07°49'49"W 46.81'
FCE-26	S82°42'29"E 172.19'
FCE-27	S80°03'43"E 407.89'
FCE-28	N32°48'07"W 56.22'
FCE-29	N23°57'56"E 300.64'
FCE-30	N30°27'23"E 72.95'
FCE-31	S83°53'36"E 30.00'
FCE-32	S06°06'24"W 323.35'
FCE-33	S64°07'56"W 137.91'
FCE-34	N35°05'26"E 36.60'
FCE-35	S82°13'16"E 55.45'
FCE-36	S17°06'11"W 30.55'
FCE-37	S39°06'04"W 26.43'
FCE-38	S39°06'04"W 200.94'
FCE-39	S14°41'17"W 49.82'
FCE-40	S16°28'57"E 63.00'
FCE-41	S49°07'45"W 33.31'
FCE-42	N38°14'18"W 58.83'
FCE-43	N04°29'23"W 70.76'
FCE-44	N35°05'26"E 240.58'
FCE-45	N48°54'12"W 147.96'
FCE-46	N48°16'36"W 193.02'
FCE-47	N65°31'27"W 160.99'
FCE-48	S56°28'55"E 288.31'
FCE-49	S45°12'23"E 45.82'
FCE-50	S28°07'24"E 241.97'

Existing Public 100 Year Floodplain Plat No. 11975

SYM	LENGTH
FP-1	S39°34'35"E 211.25'
FP-2	S21°18'11"E 77.85'
FP-3	N38°00'00"W 157.44'
FP-4	N13°00'00"W 220.00'
FP-5	N27°00'00"W 88.37'
FP-6	N27°00'00"W 116.63'
FP-7	N40°17'03"W 89.87'

Existing Public 100 Year Floodplain Plat No. 11973

SYM	LENGTH
FP-1	N28°07'24"W 241.97'
FP-2	N45°12'23"W 45.82'
FP-3	N62°18'55"W 288.31'
FP-4	S65°31'27"E 160.99'
FP-5	S46°16'36"E 193.02'
FP-6	S48°54'12"E 147.96'

Existing 25' Wetland Buffer Plat No. 11975

SYM	LENGTH
WB-1	S21°26'23"E 104.71'
WB-2	S25°32'19"E 53.02'
WB-3	S71°51'27"E 123.17'
WB-4	S63°02'11"W 36.16'
WB-5	S70°02'16"W 87.06'
WB-6	S56°19'03"W 114.35'
WB-7	N88°48'44"W 74.95'
WB-8	N17°22'47"W 111.61'
WB-9	N84°18'55"E 126.12'
WB-10	N43°34'30"E 41.92'
WB-11	N25°42'02"E 79.18'
WB-12	N59°58'07"E 49.93'
WB-13	N18°24'49"W 77.65'
WB-14	N40°21'49"W 107.28'
WB-15	N22°30'15"W 92.00'
WB-16	N25°40'10"W 106.17'
WB-17	N66°42'31"W 51.39'
WB-18	N72°33'32"W 120.49'
WB-19	N80°16'08"W 58.19'
WB-20	N28°10'11"W 23.79'
WB-21	N14°40'38"E 24.63'
WB-22	N65°37'27"E 27.46'

Existing Stream Buffer Plat No. 11973

SYM	LENGTH
S-1	N48°08'47"W 83.64'
S-2	N57°28'58"W 37.23'
S-3	N36°29'04"W 15.06'
S-4	N23°57'23"W 85.09'
S-5	N32°40'05"W 44.51'
S-6	N54°21'09"W 90.11'
S-7	N21°57'35"W 62.16'
S-8	N51°58'12"W 45.42'
S-9	N78°19'51"W 38.83'
S-10	N86°39'48"W 48.92'
S-11	N45°50'51"W 71.35'
S-12	S64°20'14"E 41.17'
S-13	S76°42'37"E 50.65'
S-14	N74°48'01"E 58.18'
S-15	S55°01'54"E 40.09'
S-16	S79°32'55"E 38.90'
S-17	S04°37'25"E 14.99'
S-18	S32°47'42"E 40.16'
S-19	S44°25'08"E 34.24'
S-20	S65°29'42"E 44.40'
S-21	S88°27'41"E 23.74'
S-22	S52°04'15"E 21.99'
S-23	S23°28'26"E 91.25'
S-24	S38°23'43"E 58.69'



Match Line See
 Sheet 2 OF 2
 (Match Line Only -
 Not A Lot Line)

FOUNDATION LOCATION: 5/21/14
 FINAL LOCATION:
 BOUNDARY SURVEY:
 SCALE: 1"=100'
 DATE: 5/21/14
 DRAWN BY: JML
 CHECKED BY: JML
 PROJECT No.: 04085-3001

DEED REFERENCE: LIBER 15483, FOLIO 001
 ADDRESS: #3180 DAISY ROAD
 BASEMENT ELEVATION = 545.4'±
 FIRST FLOOR ELEVATION = 555.4'±
 BUILDING PERMIT 13003418

Existing Public Forest Conservation Easements Plat Nos. 11974 & 11975

SYM	LENGTH
FCE-1	S25°15'39"E 115.48'
FCE-2	S82°14'17"E 78.65'
FCE-3	N50°26'58"E 43.92'
FCE-4	S50°29'34"W 62.89'
FCE-5	S03°21'13"E 53.18'
FCE-6	S45°02'58"E 88.81'
FCE-7	S35°50'24"E 118.42'
FCE-8	S30°46'00"E 189.88'
FCE-9	S52°22'00"E 35.14'
FCE-10	S14°27'08"E 38.84'
FCE-11	S70°12'11"W 39.35'
FCE-12	S11°58'22"E 46.28'
FCE-13	N78°18'25"E 32.09'
FCE-14	S38°05'08"E 100.37'
FCE-15	S85°35'27"E 65.33'
FCE-16	N26°53'47"E 77.24'
FCE-17	N58°25'45"E 18.89'
FCE-18	N32°06'13"W 57.28'
FCE-19	N09°09'49"W 129.91'
FCE-20	N80°19'06"W 36.77'
FCE-21	S68°35'05"W 144.53'
FCE-22	N71°02'12"W 80.59'
FCE-23	S11°18'59"W 119.28'
FCE-24	N87°48'27"W 284.81'
FCE-25	S07°49'49"W 45.81'
FCE-26	S82°42'29"E 172.19'
FCE-27	S80°03'43"E 407.89'
FCE-28	N32°46'07"W 56.22'
FCE-29	N23°57'56"E 300.64'
FCE-30	N30°27'23"E 72.95'
FCE-31	S83°53'36"E 30.00'
FCE-32	S06°06'24"W 323.35'
FCE-33	S84°07'56"W 137.91'
FCE-34	N35°05'28"E 36.80'
FCE-35	S82°13'16"E 55.45'
FCE-36	S17°06'11"W 30.55'
FCE-37	S39°06'04"W 28.43'
FCE-38	S39°06'04"W 200.94'
FCE-39	S14°41'17"W 49.82'
FCE-40	S16°28'57"E 63.00'
FCE-41	S49°07'45"W 33.31'
FCE-42	N38°14'18"W 58.83'
FCE-43	N04°29'23"W 70.76'
FCE-44	N35°05'26"E 240.58'
FCE-45	N48°54'12"W 147.96'
FCE-46	N46°16'36"W 193.02'
FCE-47	N65°31'27"W 160.99'
FCE-48	S56°28'45"E 288.31'
FCE-49	S45°12'23"E 45.82'
FCE-50	S28°07'24"E 241.97'

Existing 25' Wetland Buffer Plat No. 11975

SYM	LENGTH
WB-1	S21°26'23"E 104.71'
WB-2	S25°32'19"E 53.02'
WB-3	S71°51'27"E 123.17'
WB-4	S63°02'11"W 38.18'
WB-5	S70°02'16"W 97.06'
WB-6	S56°19'03"W 114.35'
WB-7	N88°48'44"W 74.95'
WB-8	N17°22'47"W 111.61'
WB-9	N84°18'55"E 126.12'
WB-10	N43°34'30"E 41.92'
WB-11	N25°42'02"E 79.18'
WB-12	N59°58'07"E 49.93'
WB-13	N18°24'49"W 77.65'
WB-14	N40°21'49"W 107.28'
WB-15	N22°30'15"W 92.00'
WB-16	N25°40'10"W 108.17'
WB-17	N68°42'31"W 51.39'
WB-18	N72°33'32"W 120.49'
WB-19	N80°16'08"W 58.19'
WB-20	N28°10'11"W 23.79'
WB-21	N14°40'38"E 24.63'
WB-22	N65°37'27"E 27.46'

Existing Stream Buffer Plat No. 11973

SYM	LENGTH
S-1	N48°06'47"W 83.64'
S-2	N57°26'58"W 37.23'
S-3	N36°20'04"W 15.06'
S-4	N23°32'23"W 85.09'
S-5	N32°40'05"W 44.51'
S-6	N54°21'09"W 90.11'
S-7	N21°33'35"W 62.18'
S-8	N51°18'12"W 45.42'
S-9	N78°51'17"W 38.83'
S-10	N86°09'48"W 48.92'
S-11	N45°01'14"W 71.35'
S-12	N54°01'44"E 41.17'
S-13	S76°23'37"E 50.65'
S-14	N74°8'01"E 58.18'
S-15	S55°15'44"E 40.09'
S-16	N79°25'55"E 38.90'
S-17	S04°27'25"E 14.99'
S-18	S32°44'22"E 40.16'
S-19	S44°32'08"E 34.24'
S-20	S65°24'22"E 44.40'
S-21	S88°24'41"E 23.74'
S-22	S51°01'15"E 21.99'
S-23	S23°22'26"E 91.25'
S-24	S38°24'43"E 58.69'

Existing Public 100 Year Floodplain Plat No. 11975

SYM	LENGTH
FP-1	S39°34'35"E 211.25'
FP-2	S21°18'11"E 77.85'
FP-3	N36°00'00"W 157.40'
FP-4	N13°00'00"W 220.00'
FP-5	N27°00'00"W 88.37'
FP-6	N27°00'00"W 116.63'
FP-7	N40°17'03"W 89.87'

Existing Public 100 Year Floodplain Plat No. 11973

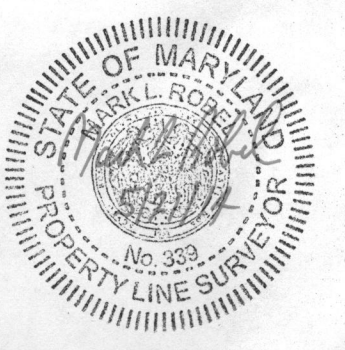
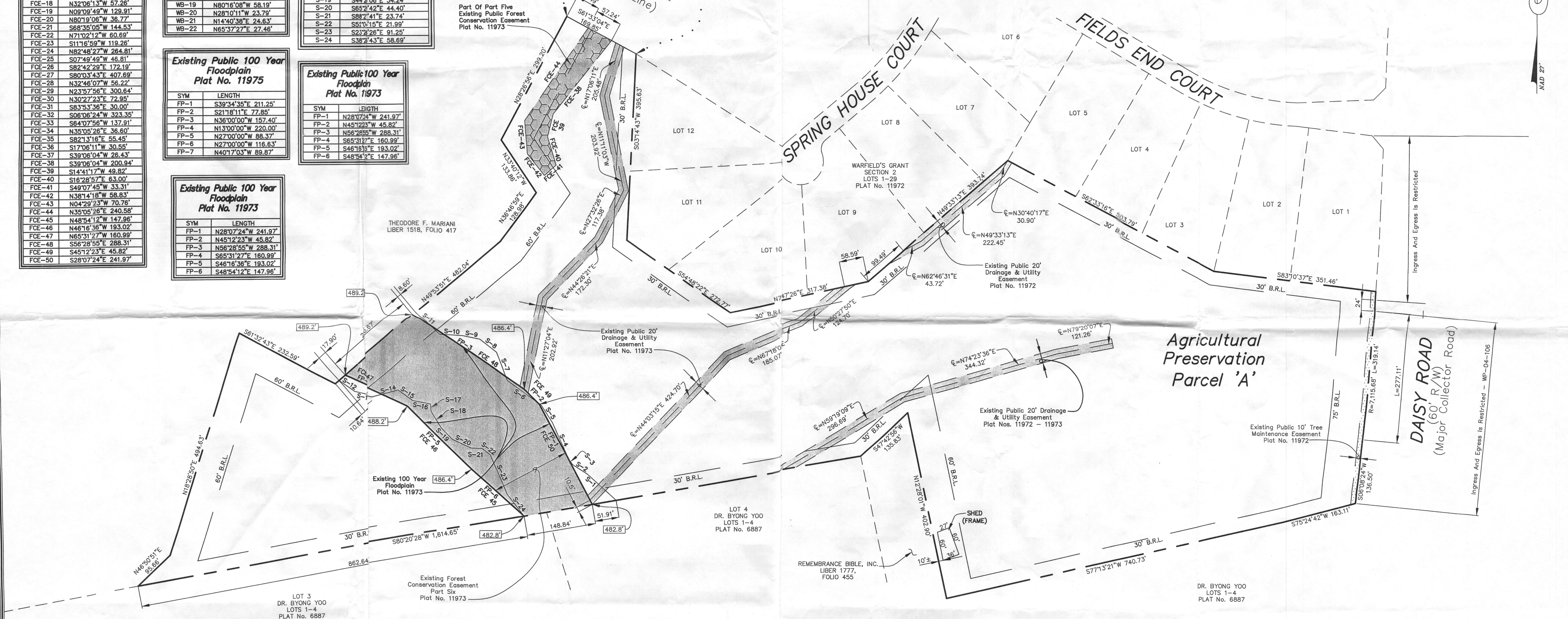
SYM	LENGTH
FP-1	N28°07'24"W 241.97'
FP-2	N45°12'23"W 45.82'
FP-3	N56°28'55"W 288.31'
FP-4	S65°31'27"E 160.99'
FP-5	S48°16'36"E 193.02'
FP-6	S48°54'12"E 147.96'

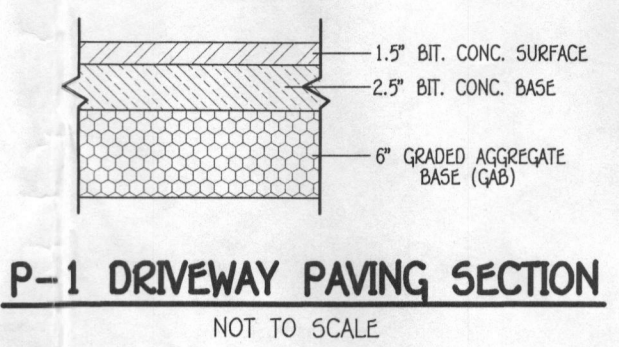
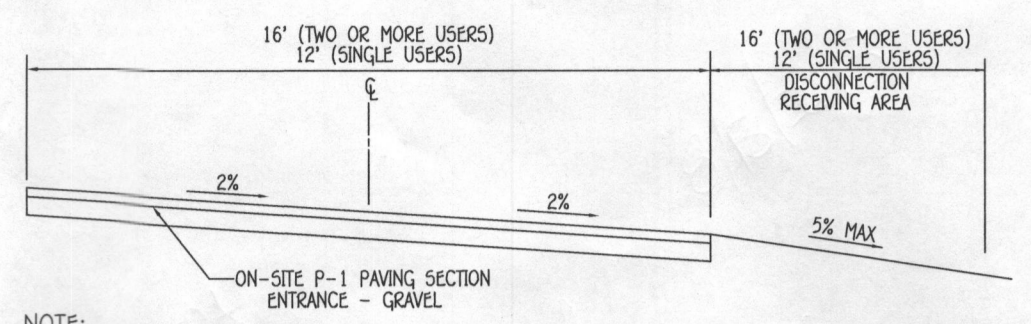
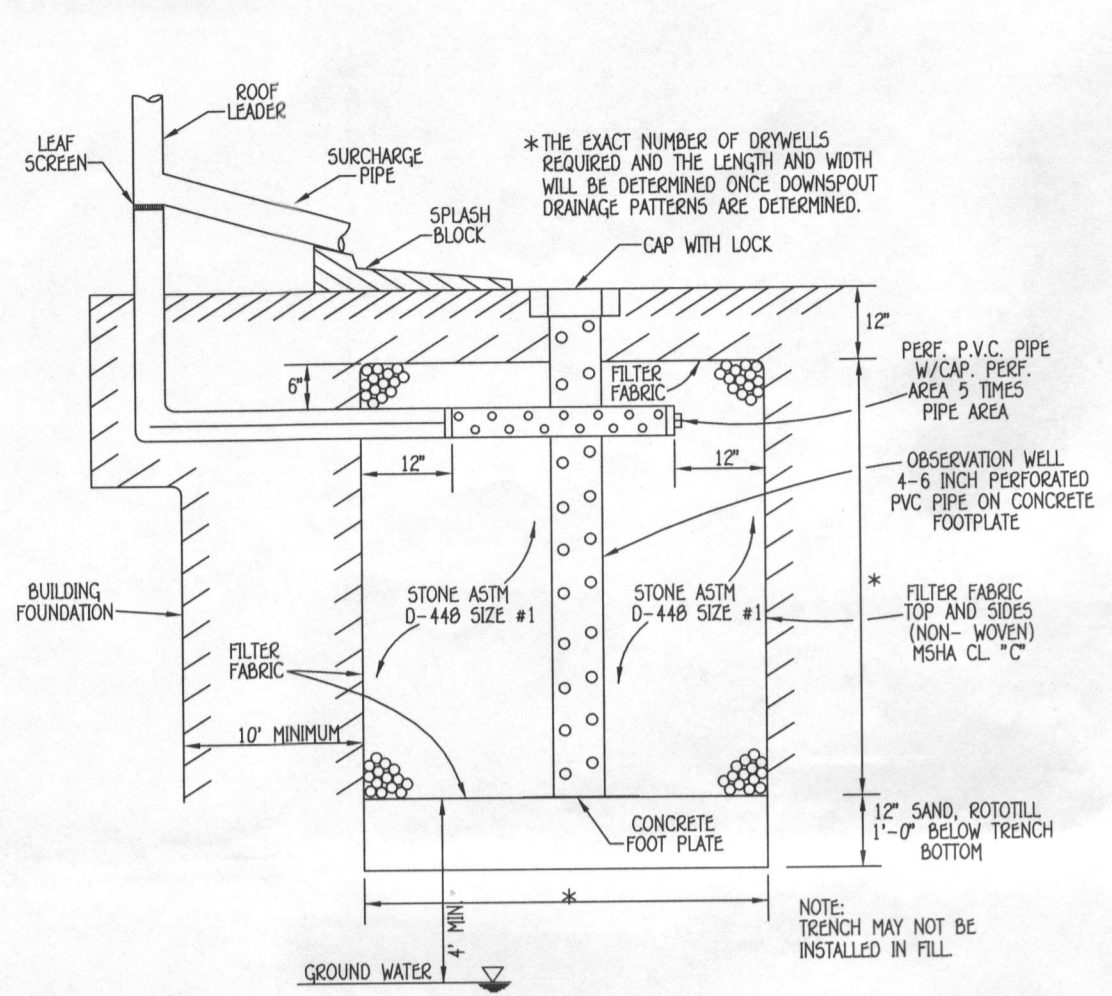
Existing Public 100 Year Floodplain Plat No. 11973

SYM	LENGTH
FP-1	N28°07'24"W 241.97'
FP-2	N45°12'23"W 45.82'
FP-3	N56°28'55"W 288.31'
FP-4	S65°31'27"E 160.99'
FP-5	S48°16'36"E 193.02'
FP-6	S48°54'12"E 147.96'

Match Line
See Sheet 2
(Match Line Only -
Not A Lot Line)

Part of Part Five
Existing Public Forest
Conservation Easement
Plat No. 11973





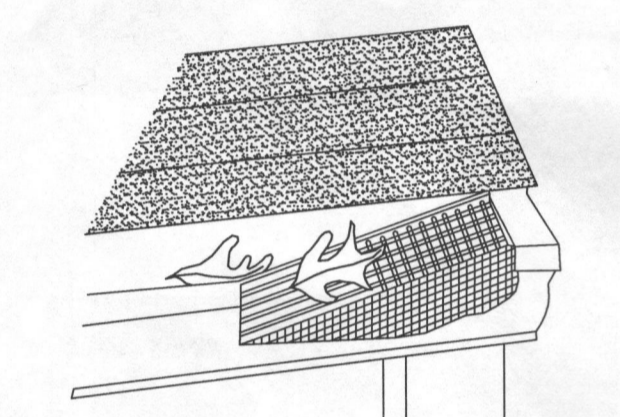
OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, DISCONNECTION OF ROOFTOP (N-1) AND RUNOFF (N-2)

1. MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE CONTRACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- D. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- E. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REVISED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

DRYWELL NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	*L x W x D
1	500 SQ.FT.	42 CF	45 CF	100%	6' x 5' x 5'
2	500 SQ.FT.	50 CF	53 CF	100%	7' x 5' x 5'
3	500 SQ.FT.	60 CF	60 CF	100%	8' x 5' x 5'
4	500 SQ.FT.	65 CF	72 CF	100%	8' x 6' x 5'



STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
3. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
4. FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.

IMPERVIOUS AREA

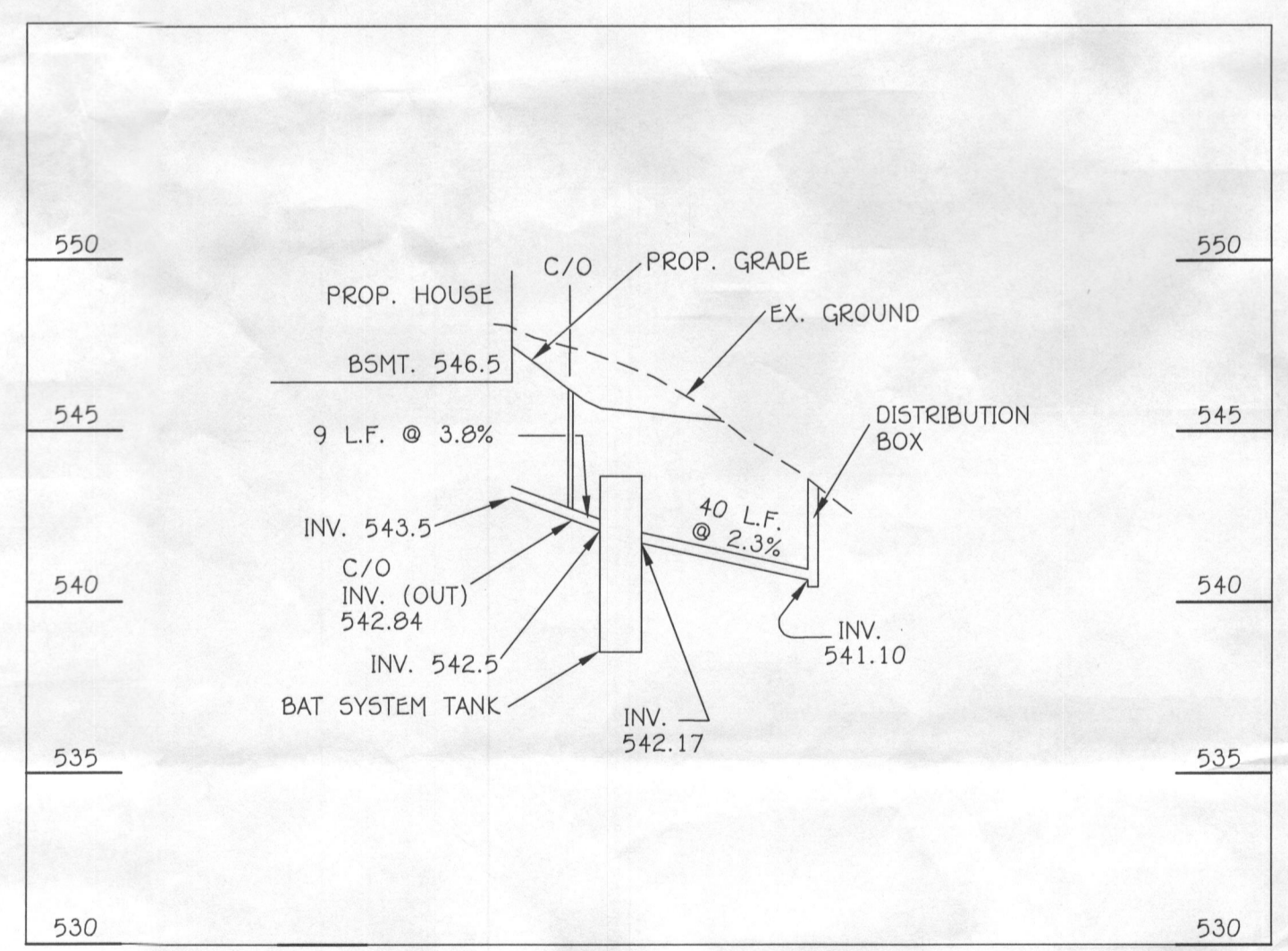
HOUSE	3,160 SQUARE FEET
DRIVEWAY	1,110 SQUARE FEET
TOTAL	4,270 SQUARE FEET

LOT NO.	ADDRESS	DISCONNECTION OF ROOFTOP RUNOFF (N-1) Y/N	DISCONNECTION OF NON ROOFTOP RUNOFF (N-2) Y/N	DRYWELLS (M-5) NUMBER
PARCEL 257	6457 E. HAVILAND MILL ROAD	YES	YES	4

AREA ID	ESD _V REQUIRED (CUBIC FEET)	ESD _V PROVIDED (CUBIC FEET)	REMARKS
PARCEL 257	338	356	FOUR (4) DRYWELLS (M-5) ROOFTOP DISCONNECTION (N-1) & NON-ROOFTOP DISCONNECTION (N-2)
TOTAL	338	356	

CALCULATE THE PE PROVIDED AS FOLLOWS:
 $PE \text{ PROVIDED} = \frac{ESD_V \times 12}{R_v \times A} = \frac{356 \times 12}{0.99 \times (10.97 \text{ ACRES})} = \frac{4272}{10.855} = 393.95 = 1.19' \text{ VS } 1.0'$
 AS SUCH, 115% (1.19/1.0) OF THE REQUIRED ESD VOLUME HAS BEEN PROVIDED.
 AREA = 1.00 ACRES
 RCN = 95
 TARGET PE = 1.0'

CONCLUSION:
 AS DEMONSTRATION BY THE ABOVE SUMMARY, ESD TO THE MEP HAS BEEN MET FOR THIS SITE; THEREFORE, IT IS RECOMMENDED THAT THE PROPOSED METHODS OF PROVIDING SWM FOR THIS PROJECT BE APPROVED.



SEWAGE SYSTEM PROFILE

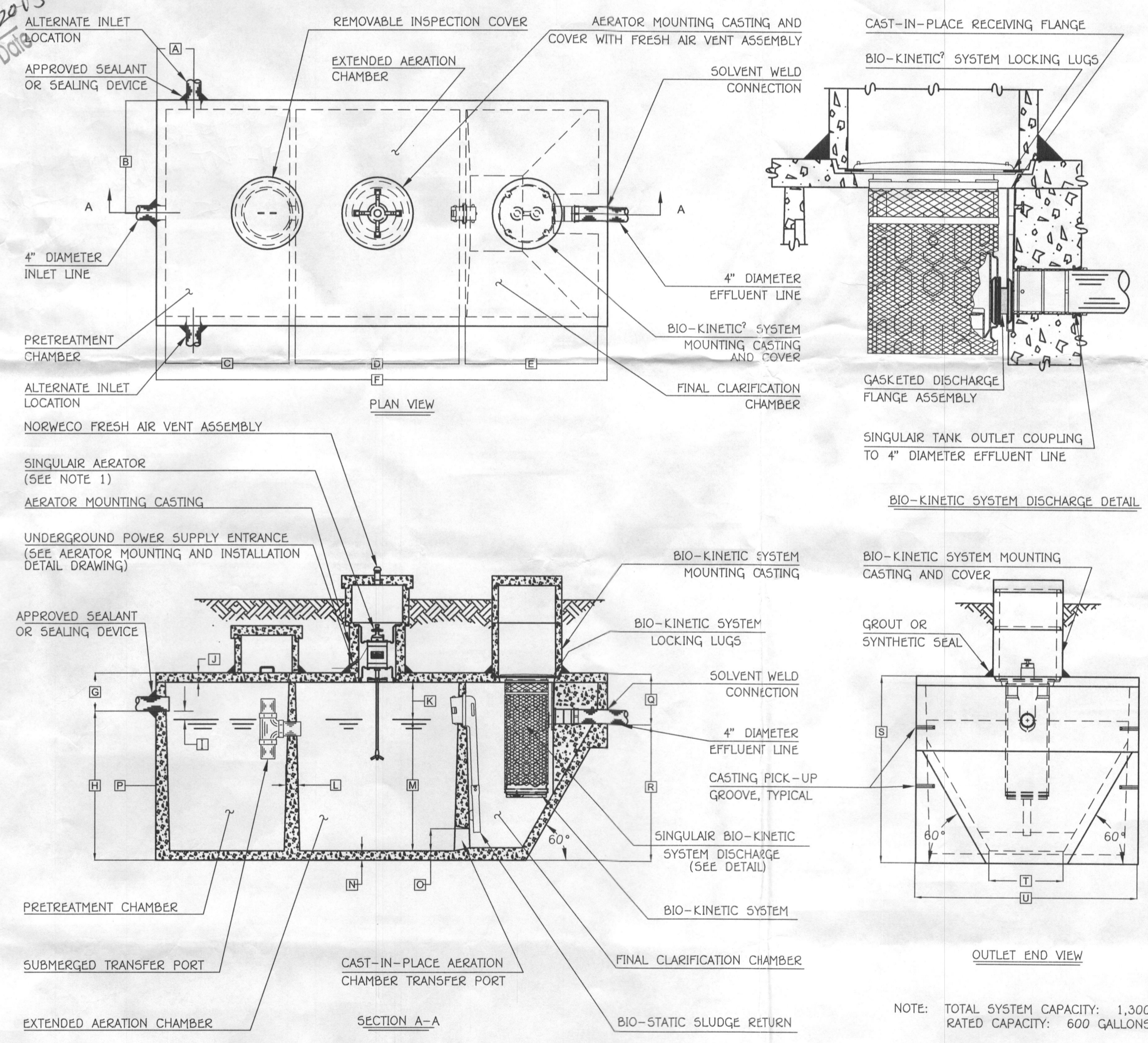
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

ENGINEER'S CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

EARL D. COLLINS
 10.9.13
 DATE

*Approved Septic System Plan
 Howard County Health Department
 BAT Site Plan Sheet 2 of 2
 NORWECO Singulair
 10/11/2013
 Date*



BAT SYSTEM DETAIL

NOT TO SCALE

Label	Dimension	Label	Dimension
A	1'-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	

- 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.

*NORWECO Singulair
 bioKinetic wastewater
 Treatment system
 Model: TNT LP-500
 per Dave Howard
 ref*

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

ADDRESS:
 16045 FIELD'S END COURT
 WOODBINE, MD 21797

BAT INSTALLATION NOTES AND DETAILS

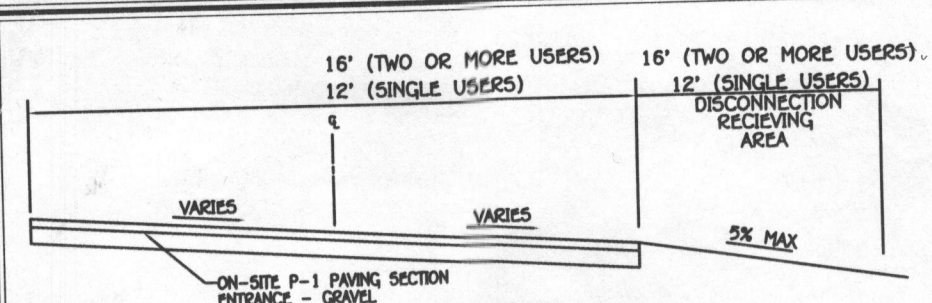
WARFIELD'S GRANT
 AGRICULTURAL PRESERVATION PARCEL 'A'

OWNER/DEVELOPER
 MICHAEL A. & PATRICIA A. GROOM
 1435 BAYHEAD ROAD
 ANNAPOLIS, MARYLAND 21401

ZONED RC-DEO
 TAX MAP NO. 13 GRID NO.: 23 PARCEL NO.: 128
 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2013



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. 9753, EXPIRATION DATE: 2/28/14.
 EARL D. COLLINS
 10.9.13
 DATE



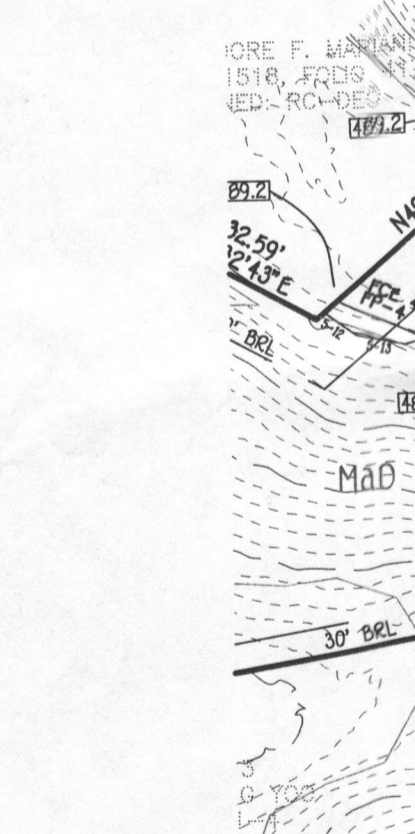
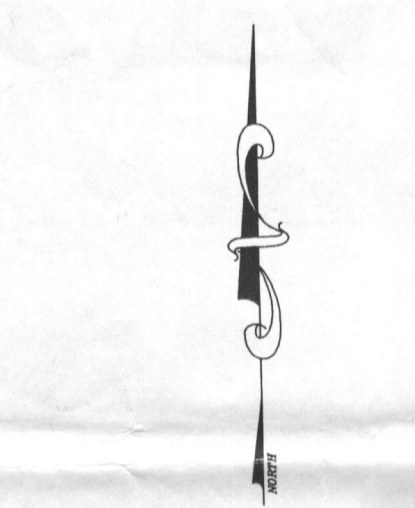
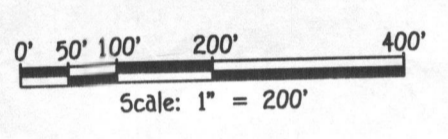
TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION
NOT TO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF NON-ROOFTOP RUNOFF (M-2)

1. MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE CONSTRUCTION OR DEVELOPMENT OF IMPERVIOUS AREAS. FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

SOIL	NAME	CLASS
Co	CODORUS AND HARBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES	C
GgA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	B
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B
GmA	GLENVILLE SILT LOAM, 0 TO 3 PERCENT SLOPES	C
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B
MkF	MANOR-BRINKLOW COMPLEX, 25 TO 65 PERCENT SLOPES, VERY ROCKY	B

NOTES:
* HYDRIC SOILS AND/OR CONTAINS HYDRIC INCLUSIONS
** MAY CONTAIN HYDRIC INCLUSIONS
† GENERALLY ONLY WITHIN 100-YEAR FLOODPLAIN AREAS



OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUAL MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT, ANNUAL REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME I, TABLE A.1 AND 2.
B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAKES AND WIRES.
C. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACEMENT TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER APPLIED.
D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM ONCE PER MONTH AND AFTER EACH HEAVY STORM.

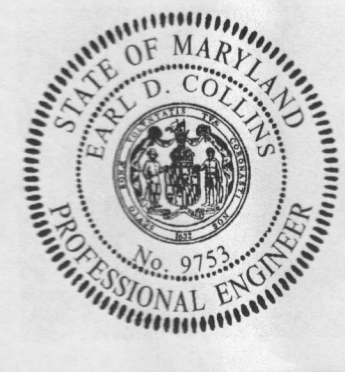
NOTE:
TEMPORARY OR PERMANENT STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE MINIMUM INTERVALS REQUIRED, WHICHEVER IS MORE RESTRICTIVE, BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

ENGINEER'S CERTIFICATE

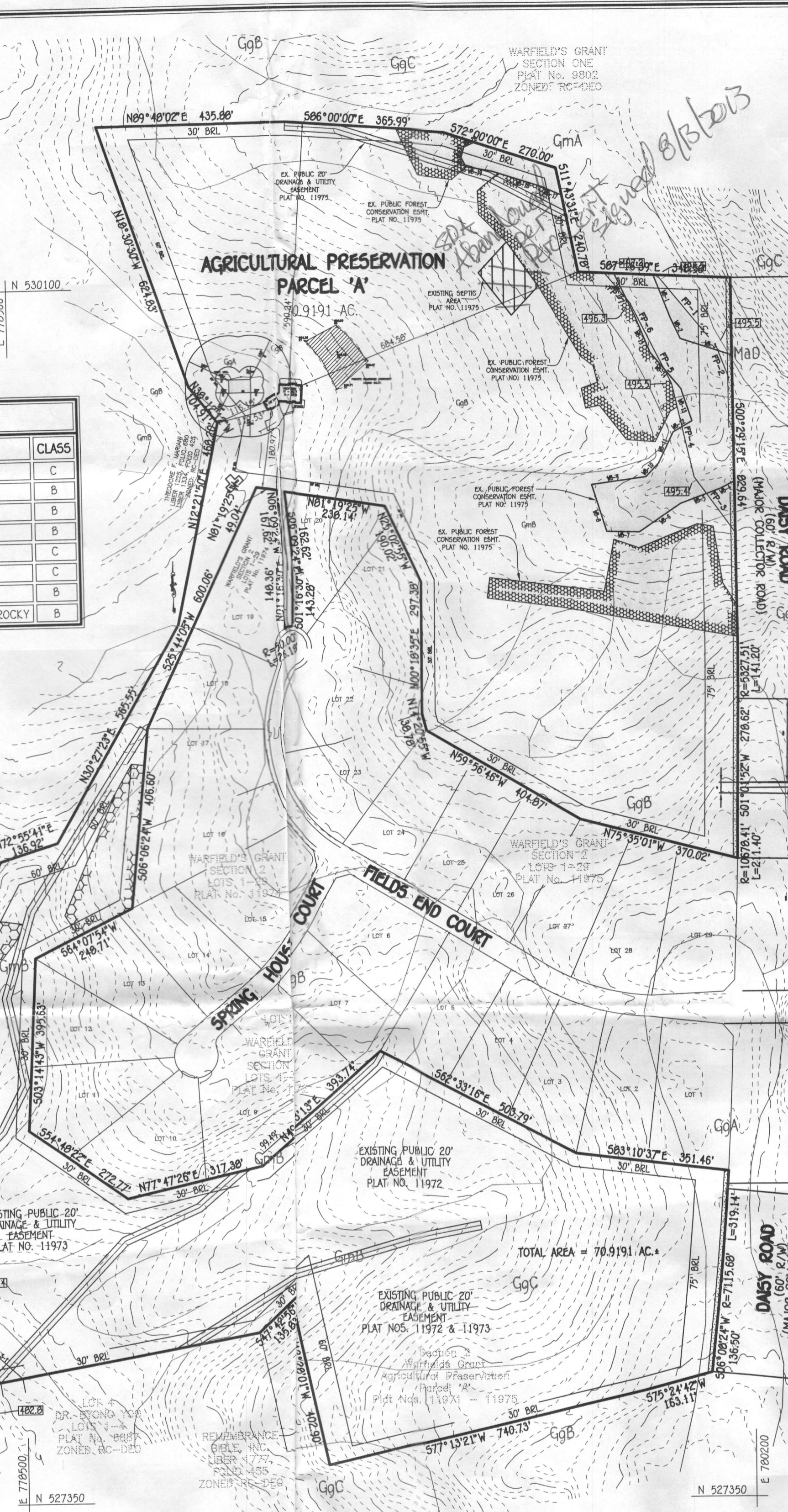
"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL PRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN CONCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
EARL D. COLLINS
DATE: 10.9.13

PROFESSIONAL CERTIFICATE

"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. 9753, EXPIRATION DATE: 2/28/14."
EARL D. COLLINS
DATE: 10.9.13

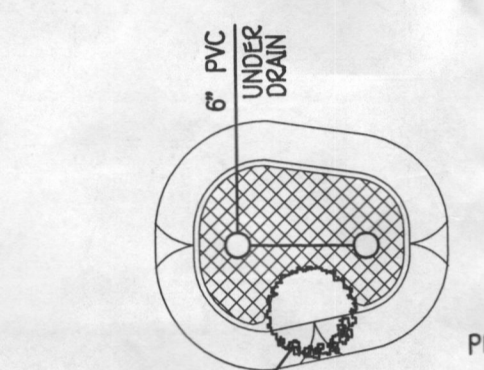


FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10276 BALDORVILLE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895



GENERAL NOTES

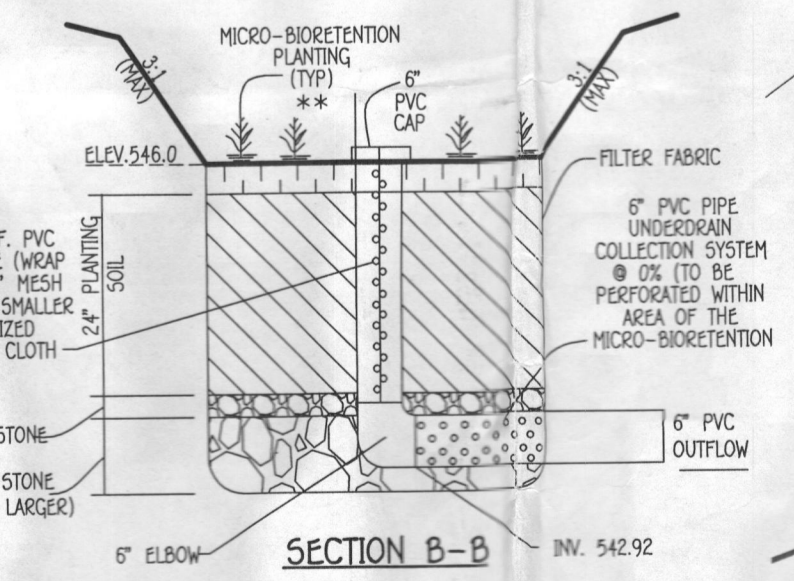
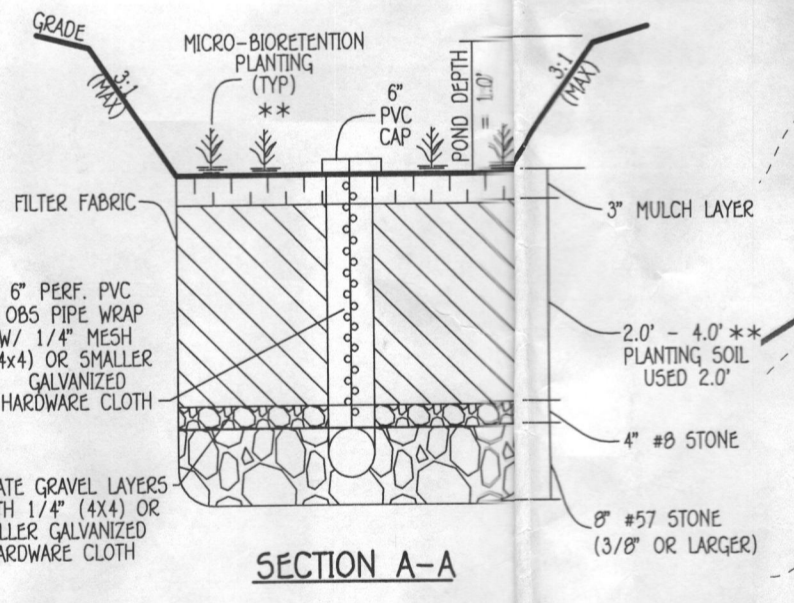
- Subject Property Zoned RC-DEO Per 2/02/04 Comprehensive Zoning Plan And Comp Lite Zoning Regulations Effective 7/28/05.
- Coordinates Based On NAD 83 Maryland Coordinate System as Projected by Howard County Geodetic Control Stations: No. 3331001 N 531787.387, E. 780346.629 And No. 3431002 N. 531987.895 N 531987.895, E. 780852.234
- This Plan is Based On Field Topography Provided by Fisher, Collins & Carter, Inc. And Supplemented With Howard County GIS Information. Boundary is based on Deed dated November 9, 1966 and recorded in the Land Records of Howard County, Maryland in Liber 461 Folio 710.
- B.S.C.L. Denotes Building Restriction Line.
- Previous Department of Planning And Zoning File No.'s Are: F-95-36 And F-05-003.
- A Driveway Shall Be Provided Prior To Issuance Of A Use And Occupancy Permit For The New Dwelling To Ensure Safe Access For Fire And Emergency Vehicles Per The Following (Minimum) Requirements:
a) Width - 12 Feet (16 Feet Serving More Than One Residence);
b) Surface - Six (6") Inches Of Compacted Crusher Run Base With Tar And Chip Coating (1 - 1/2" Minimum);
c) Geometry - Maximum 15% Grade, Maximum 10% Grade Change And 45-Foot Turning Radius;
d) Structures (Culverts/Bridges) - Capable Of Supporting 25 Gross Tons (H25-Loading);
e) Drainage Elements - Capable Of Safely Passing 100 Year Flood With No More Than 1 Foot Depth Over Surface;
f) Maintenance - Sufficient To Ensure All Weather Use.
- All Lot Area Is More Or Less (+/-).
- The Maximum Erosion Possible In Accordance With The Maryland Stormwater Design Manual, Volumes I & II, Effective In May Of 2010. The Proposed Practice Will Be Located On The Individual Lot By Micro-Bioretenation (M-6) For Portions Of The Proposed House, Rooftop Disconnection For A Portions Of Proposed House, And Non-Rooftop Disconnection For The Proposed Individual Driveway. These Practices Shall Be Privately Owned And Maintained In Accordance With Individual Declarations Of Covenants.
- There Are No Existing Structures On-site.
- No Comertices Exist On This Site Based On A Visual Site Visit And Based On An Examination Of The Howard County Cemetery Inventory Map And No Historic Structures Sites Or Features Exist.
- The Forest Conservation Obligation Was Addressed With F-95-36. However, A Forest Conservation Developer Agreement Was Executed And Survival Surety Was Posted Under F-05-003 Because The Developer Of F-95-36 Had Defaulted And These Property Owners (Garden's) Have Agreed To Fulfill The Forest Conservation Obligation. There Are No Landscaping Requirements Per Section 16.1202 (vi) Of The Howard County Code And Forest Conservation Act Since It Is A Re-subdivision That Does Not Create Additional Lots.
- This Property Is Not Located Within The Metropolitan District And Will Be Served By Private Well And Private Septic Systems.



NOTE:
PLANT MATERIAL MUST COVER AT LEAST 50% OF THE SURFACE AREA OF THE MICRO-BIORETENTION.
*SEE PLANT MATERIAL CHARTS FOR QUANTITIES AND SPACING.

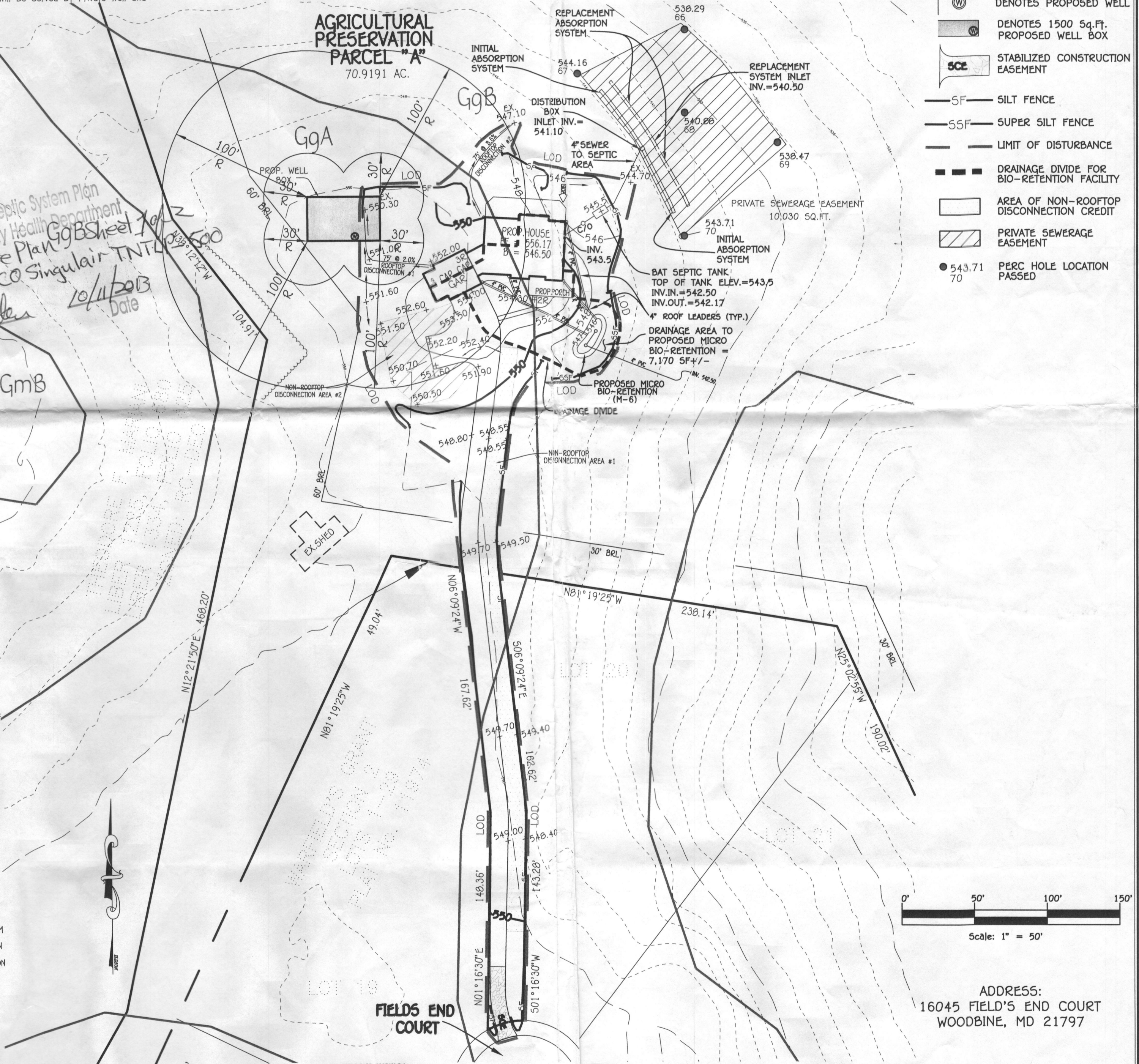
QUANTITY	NAME	MAXIMUM SPACING (FT.)
12	MIXED PERENNIALS	1.5 TO 3.0 FT.
1	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION

MICRO-BIORETENTION PLANTING DETAIL
NOT TO SCALE

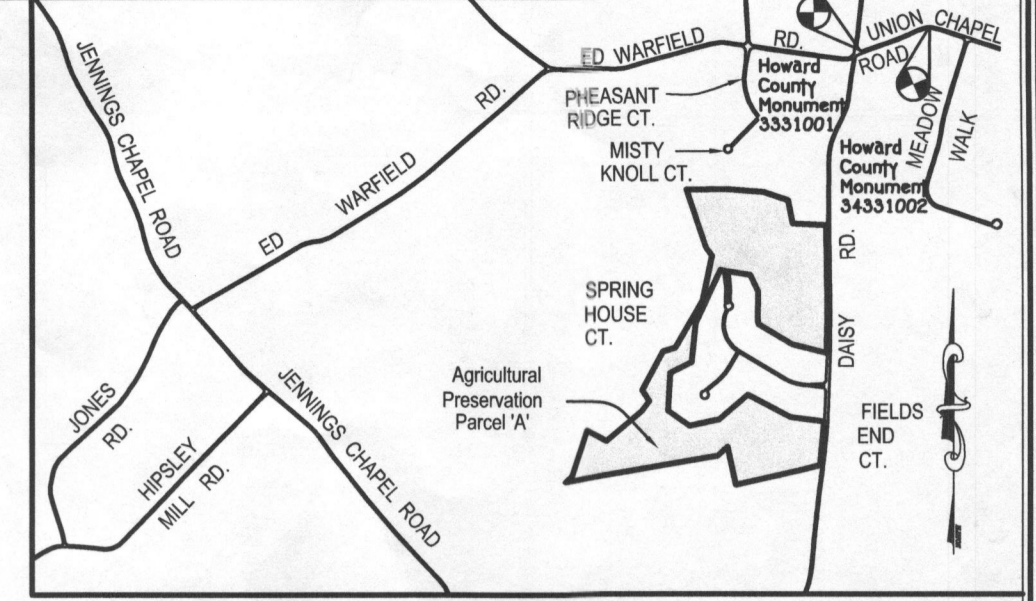


- There Are Forest And Wetlands Existing On-Site Beyond The Limit Of Disturbance.
- This Plan Is In Compliance With The Amended Fifth Edition Of The Subdivision And Land Development Regulations Per Council Bill 45-2003 And The Zoning Regulations As Amended By Council Bill 75-2003. Development Or Construction On This Lot Must Conform With Setback And Buffer Regulations In Effect At The Time Of Submission Of The Site Development Plan, Waiver Petition Application, Or Building/Grading Permit And Per The Comp-Lite Zoning Regulations Dated July 28, 2006.
- Noise Study Is Not Required For This Project Per Howard County Design Manual, Volume III, Section 5.2.(F).
- A Community Meeting Is Not Required Per Section 16.128(d), Of The Subdivision Regulations, Since No New Lots Are Being Created.
- All Construction Shall Be In Accordance With The Latest Standards And Specifications Of Howard County.
- The Contractor Shall Notify The Department Of Public Works/Bureau Of Engineering/Construction Inspection Division At (410) 313-1880 At Least Five (5) Working Days Prior To The Start Of Work. The Contractor Shall Notify "Miss Utility" At 1-800-257-7777 At Least 48 Hours Prior To Any Excavation Work Being Done, And Supplemented With Howard County GIS Information.
- Existing Utilities shown are based on available construction drawings.
- There Are No Floodplains, 15-24.9% Slopes, 25% Or Greater Slopes, Wetlands, Streams, Or Their Buffers Within The Limit Of Disturbance.
- There Are No Disturbances To Environmental Features.
- No New Lots Are Being Created.
- Site Area: 70.9191 Acres (Approximately 3,089,235.9 sq.ft).
- Limit Of Disturbance: 41,510 Square Feet.
- Deed Reference: Liber 5279, Folio 677.
- Adjustments To Septic Easement Area Are Not Permitted Without Additional Testing.
- The Lot Shown Hereon Complies With The Minimum Ownership Width And Lot Area As Required By The Maryland State Department Of The Environment.
- Existing Wells And/Or Sewerage Easements Within 100 Feet Of The Property Have Been Shown From All Reasonable Efforts.
- Well shall Be Drilled Prior To Building Permit.
- Any Changes To A Private Sewerage Easement Shall Require A Revised Perc Certification Plan. This Area Designates A Private Sewerage Area Of At Least 10,000 Square Feet (4+/- Prior To March 1972, At Least Enough Area To Accommodate An Initial And Two Replacement Systems) As Required By The Maryland State Department Of The Environment For Individual Sewage Disposal. 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 Sewerage Area. Recordation Of A Modified Sewerage Area Shall Not Be Necessary.

AGRICULTURAL PRESERVATION PARCEL A
70.9191 AC.



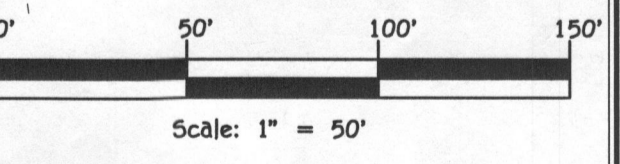
GRADING AND SEIIMENT CONTROL PLAN
SCALE: 1" = 50'



VICINITY MAP
SCALE: 1" = 1200'
ADC MAP 16, A5

LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- SOIL LINES AND TYPES
- DENOTES PROPOSED WELL
- DENOTES 1500 SQ.FT. PROPOSED WELL BOX
- STABILIZED CONSTRUCTION EASEMENT
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- DRAINAGE DIVIDE FOR BIO-RETENTION FACILITY
- AREA OF NON-ROOFTOP DISCONNECTION CREDIT
- PRIVATE SEWERAGE EASEMENT
- 543.71 70 PERC HOLE LOCATION PASSED



ADDRESS:
16045 FIELDS END COURT
WOODBINE, MD 21797

SITE PLAN FOR BAT INSTALLATION WARFIELD'S GRANT
AGRICULTURAL PRESERVATION PARCEL A'

OWNER/DEVELOPER
MICHAEL A. & PATRICIA A. GRODIN
1435 BAYHEAD ROAD
ANNAPOLIS, MARYLAND 21401

TAX MAP NO.: 13 GRID NO.'S: 23 PARCEL NO.: 128
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: OCTOBER, 2013