



# APPLICATION

## FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) \_\_\_\_\_ TEST TIME \_\_\_\_\_ A# 520093

AGENCY REVIEW: \_\_\_\_\_ DATE 3/12/2004

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH UNKNOWN PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE UNKNOWN IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) WILLIAM S. AND CINDY A. DEVERELIX

DAYTIME PHONE \_\_\_\_\_ CELL \_\_\_\_\_ FAX \_\_\_\_\_

MAILING ADDRESS 1850 FLORENCE RD MOUNT AIRY MD 21771  
STREET CITY/TOWN STATE ZIP

APPLICANT \_\_\_\_\_

DAYTIME PHONE \_\_\_\_\_ CELL \_\_\_\_\_ FAX \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_  
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION  
SUBDIVISION/PROPERTY NAME KOGAN TRUST PROPERTY LOT NO. 1

PROPERTY ADDRESS 1850 SW FLORENCE RD MOUNT AIRY  
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 6 GRID 23 PARCEL(S) 247 PROPOSED LOT SIZE \_\_\_\_\_

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT. \_\_\_\_\_  
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM  
3525-H ELLICOTT MILLS DRIVE, ELLICOTT CITY, MARYLAND 21043-4544 (410) 313-1771 FAX (410) 313-2648  
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

AVP  
1  
Orange  
brown  
silty  
SIL

---

5  
orange  
brown  
cw SIL  
w/ 10-15%  
channey  
frags

2  
orange  
brown  
SIL

---

1/2  
orange  
brown  
SIL

---

4  
orange  
brown  
SIL  
w/ 15-20%  
course  
frags

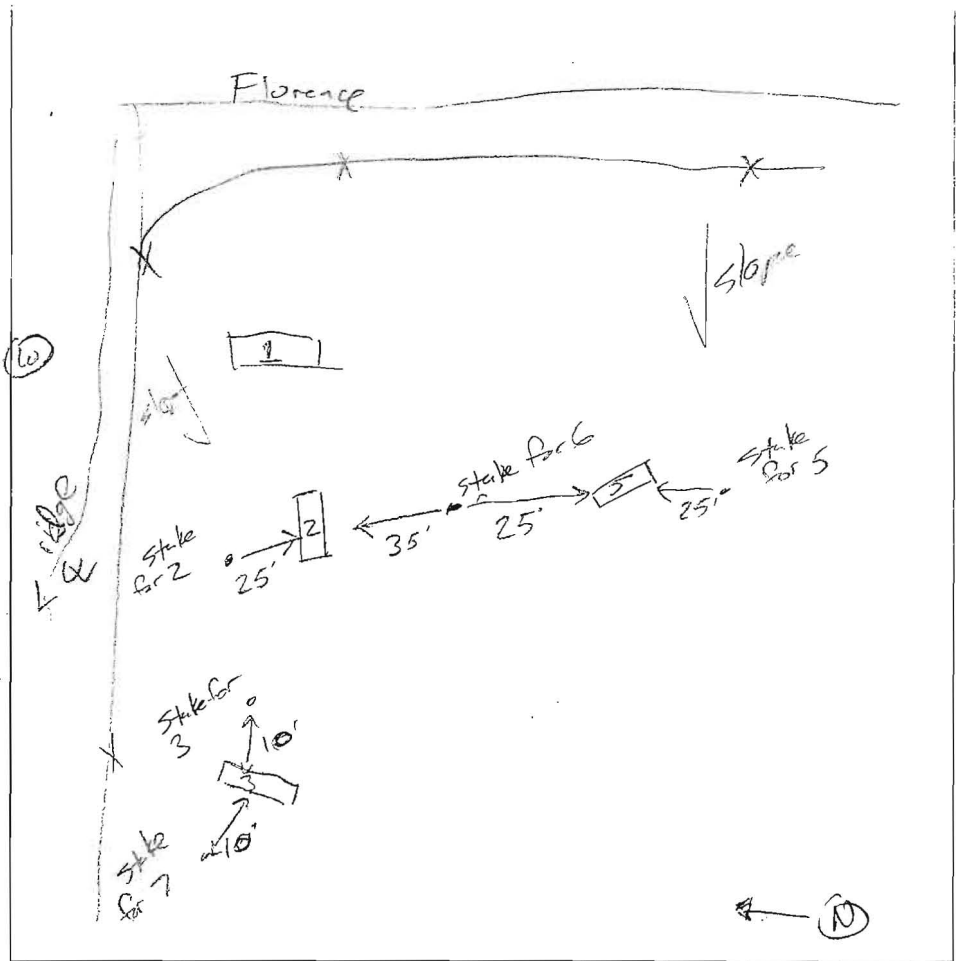
---

10  
hard  
bottom

5  
Brown  
fine L

---

3  
orange brown  
white  
SIL  
w/ 100%  
course  
frags



2  
Orange  
brown  
SIL

---

3  
orange  
brown  
white cw  
SIL  
w/ 10-15%  
course  
frags

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2nd INCH	P/F/H
5/7/04	1	6 / 12 1/2	11:35	11:41	11:51	10	P
	2	5 / 10	11:39	11:44	11:52	8	P
	5	5 / 12	11:45	11:47	11:51	4	P
	3	5 1/2 / 13	11:55	12:05	12:20	15	P

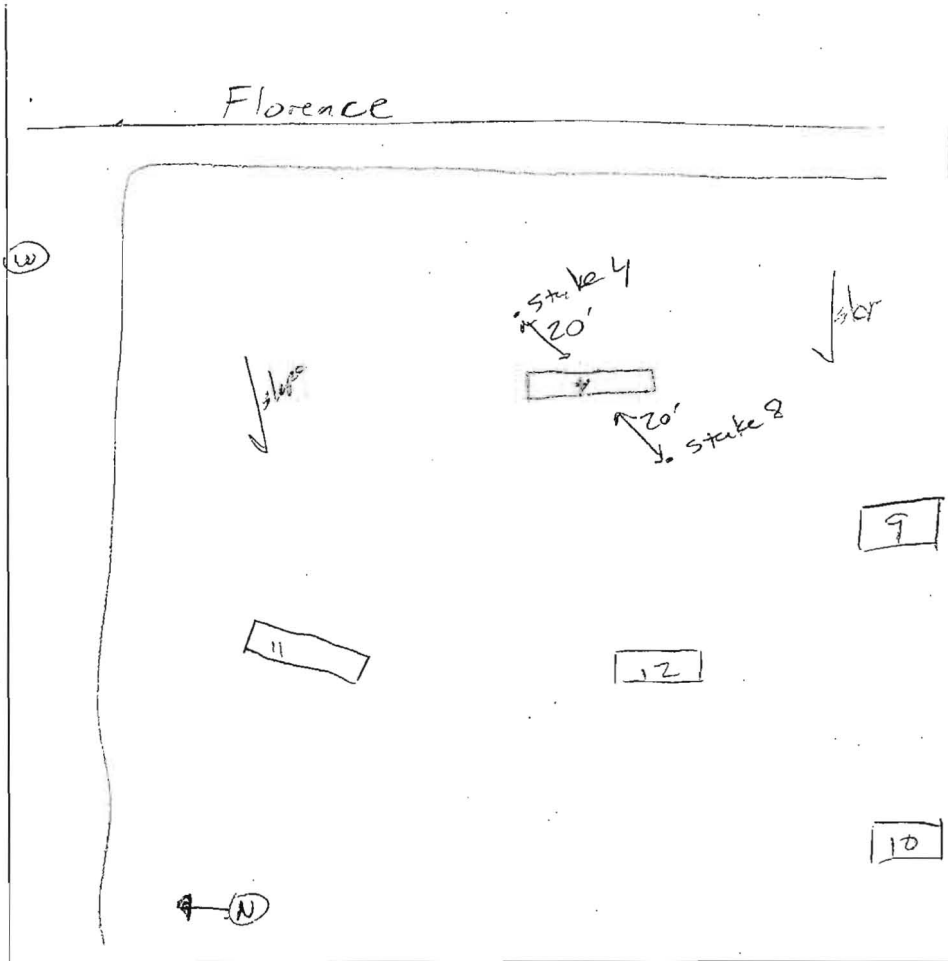
REMARKS Gnot dig; NOTE new hole config

SANITARIAN J. Boris BACKHOE Wagner OTHERS \_\_\_\_\_

TEST HOLES USED IN SDA \_\_\_\_\_ AVG. PERC TIME \_\_\_\_\_ SQ. FT/BR \_\_\_\_\_

TRENCH WIDTH \_\_\_\_\_ INLET DEPTH \_\_\_\_\_ MAX. BOT DEPTH \_\_\_\_\_ EFFECTIVE SW \_\_\_\_\_

AVP  
4  
orange brown SIL  
3 1/2  
orange brown white SIL  
w/ < 15% coarse frags



10  
orange brown SIL  
3 1/2  
orange brown CW SIL  
w/ 15-20% channery frags

11  
orange brown SIL  
3 1/2  
orange brown CW SIL  
w/ 15-20%

9  
orange brown SIL  
3  
orange brown CW SIL  
w/ 10-20% channery frags  
7  
orange brown SIL  
w/ 10-15% friable sap frags

12  
friable sap channers & coarse frags  
9 1/2  
hard bottom

12  
orange brown SIL  
4h  
orange brown CW SIL  
w/ 15-20% friable sap  
9 1/2

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2nd INCH	P/F/H
5/7/04	4	5 1/2 / 12	12:09	12:16	12:25	9	P
5/7/04	11	4 / 9 1/2	12:24	12:45	1:10	25	P
5/7/04	12	5 1/2 / 12 1/2	12:32	12:42	1:00	18	P
5/7/04	10	5 / 12 1/2	12:51	1:00	1:19	9	P
5/7/04	9	5 / 12 1/2	1:10	1:28	1:51	23	P

REMARKS \_\_\_\_\_

SANITARIAN J Borci BACKHOE Weasner OTHERS \_\_\_\_\_

TEST HOLES USED IN SDA \_\_\_\_\_ AVG. PERC TIME \_\_\_\_\_ SQ. FT/BR \_\_\_\_\_

TRENCH WIDTH \_\_\_\_\_ INLET DEPTH \_\_\_\_\_ MAX. BOT DEPTH \_\_\_\_\_ EFFECTIVE SW \_\_\_\_\_

Maryland State Grid Meridian

*Copy of Perc Cert for Kogan Trust signed 11/2/2010*

*see revision 10/3/10*

COMMON ACCESS  
0+00 = 7+94.80 ON  
FLORENCE ROAD

PATRICK CAFFREY  
FRANCES CAFFREY  
KOGAN TRUST  
LOT 10  
TM. 6 P.247  
L.1130 F.528  
ZONED RC-DEO

EX. SEPTIC EASEMENT  
TO REMAIN

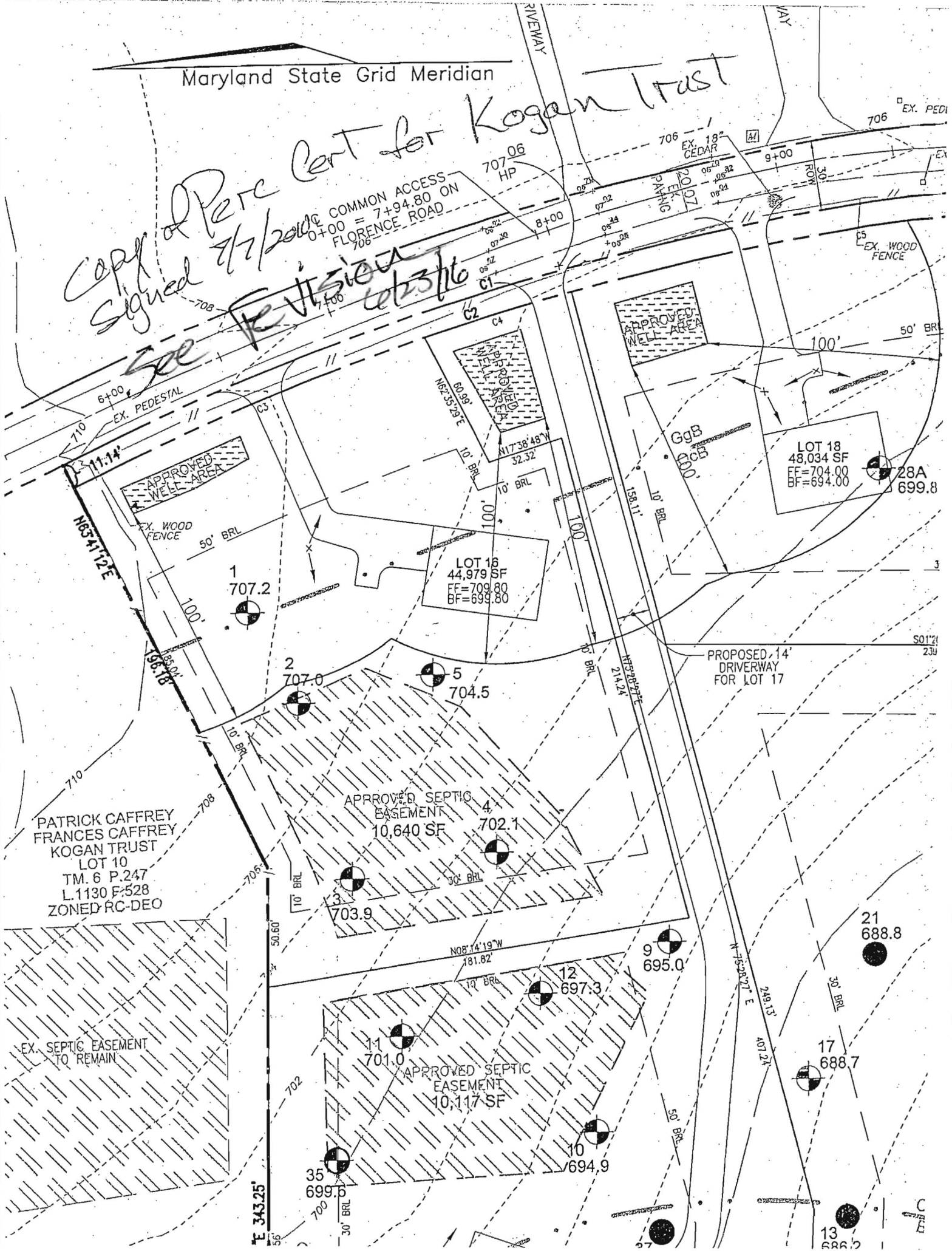
LOT 18  
44,979 SF  
FF=709.80  
BF=699.80

LOT 18  
48,034 SF  
FF=704.00  
BF=694.00

APPROVED SEPTIC  
EASEMENT  
10,640 SF

APPROVED SEPTIC  
EASEMENT  
10,117 SF

PROPOSED 14'  
DRIVERWAY  
FOR LOT 17



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

Date: 6/13/16  
To: Robert Bricker ~~Plan review~~ Health Department  
(Person's Name and Division)  
From: Cumberlanddevelopment Custom Homes (301) 252-1122  
(Your Name, Company Name and Telephone Number)  
Subject: Project name Mebdy Wilson  
Project site address 1820 Florence Rd Woodbine MD. 21797  
Permit # B1600 2172 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 \* REVISED TO SHOW SEATING IN GAME ROOM
  - Energy conservation calculations
  - Copies of 3 of 2nd 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)**

Curtis Cumberland  
Please Print Name

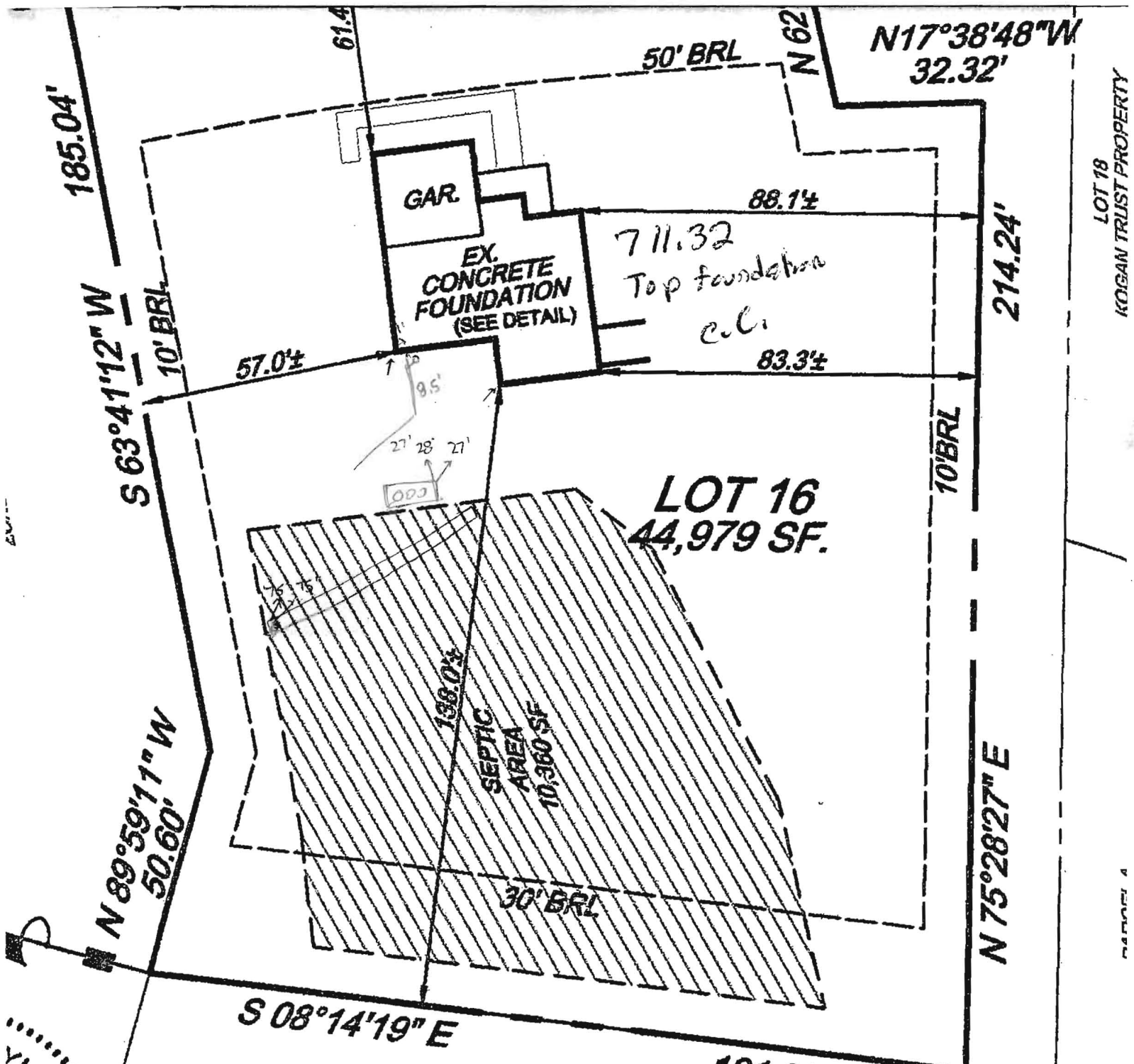
Telephone No: 301 252-1122

E-Mail Address: CumberlanddevCustomHomes@gmail.com

**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 AKH

PER HEALTH DEPT



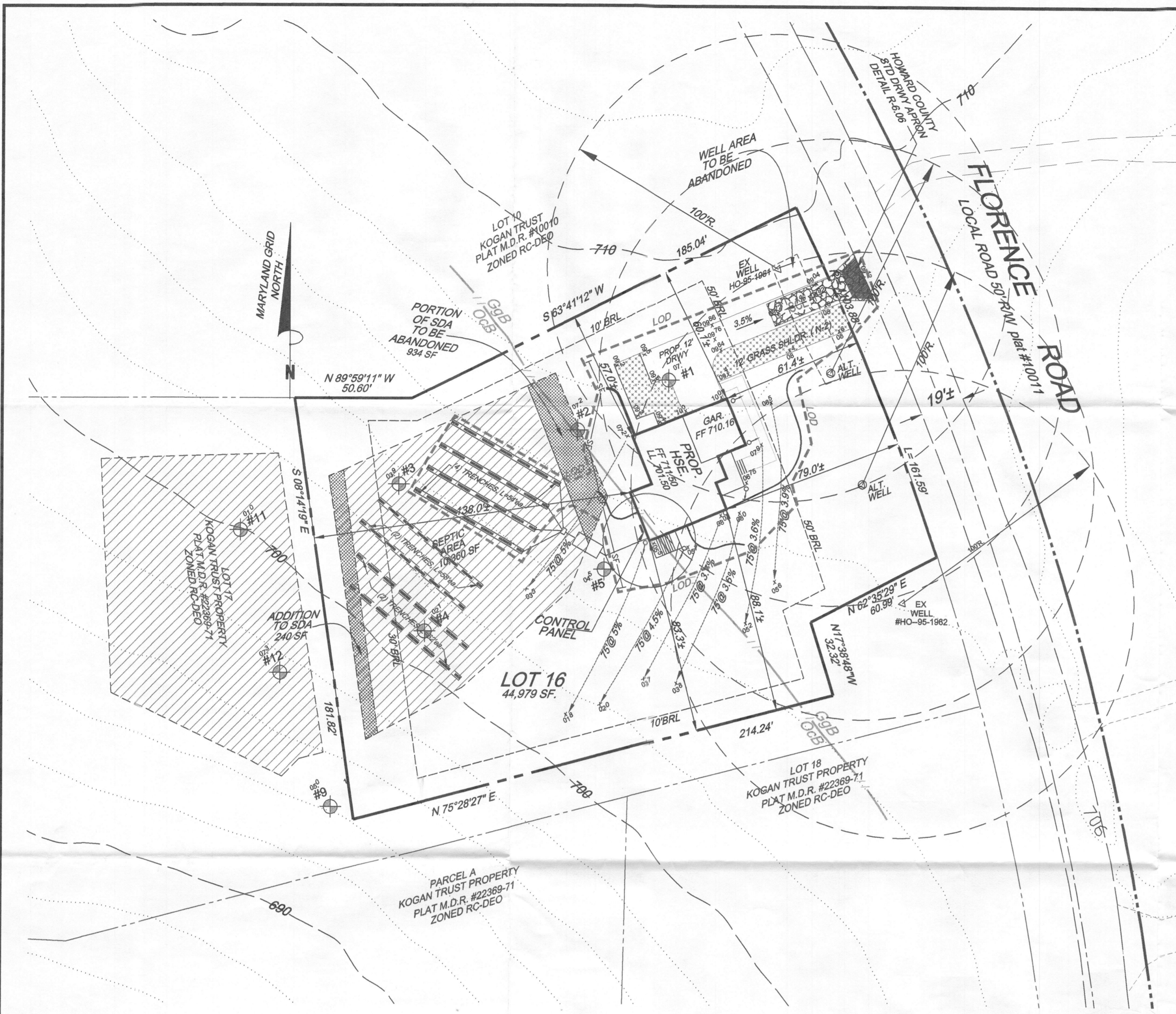
LOT 18  
KOGAN TRUST PROPERTY

LOT 17  
 KOGAN TRUST PROPERTY  
 PLAT M.D.R. #22389-71  
 ZONED RC-DEO

LAND  
 SURVEYOR

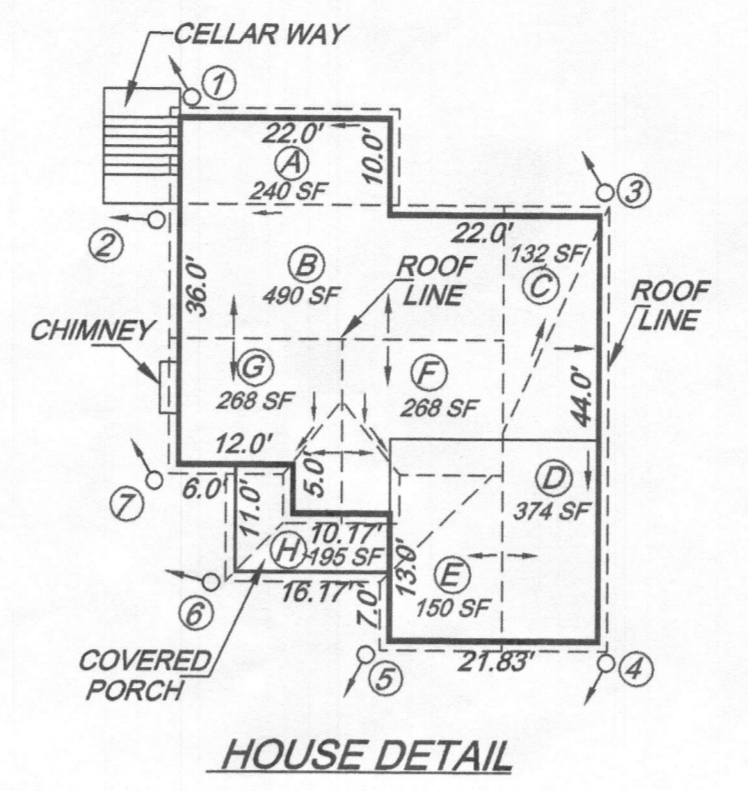
**FOUNDATION CER**  
**LOT 16**  
**"KOGAN TRUST"**  
**#1820 FLOREN**  
**SINGLE FAMILY DET**

ALL SETBACK DISTANCES ARE 1 FT. +/-  
 THIS PLAT IS NOT INTENDED FOR USE IN ESTABLISHING  
 PROPERTY LINES AND DOES NOT CONSTITUTE A BOUNDARY  
 SURVEY.  
 THIS IS OF THE BENEFIT TO THE CONSUMER ONLY



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

1. Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The areas receiving runoff should be protected from future compaction or development of impervious areas. In commercial areas, foot traffic should be discouraged as well.



HOUSE DETAIL

SOILS LEGEND					
SYMBOL	NAME/DESCRIPTION	SOIL GROUP	K-VALUE	K-VALUE	HYDRO GROUP
GgB	Glenelg loam, 3 to 8 percent slopes	c	0.28	*	NOT HYDRO
OcB	Ocoquan loam, 3 to 8 percent slopes	B	0.37	*	NOT HYDRO

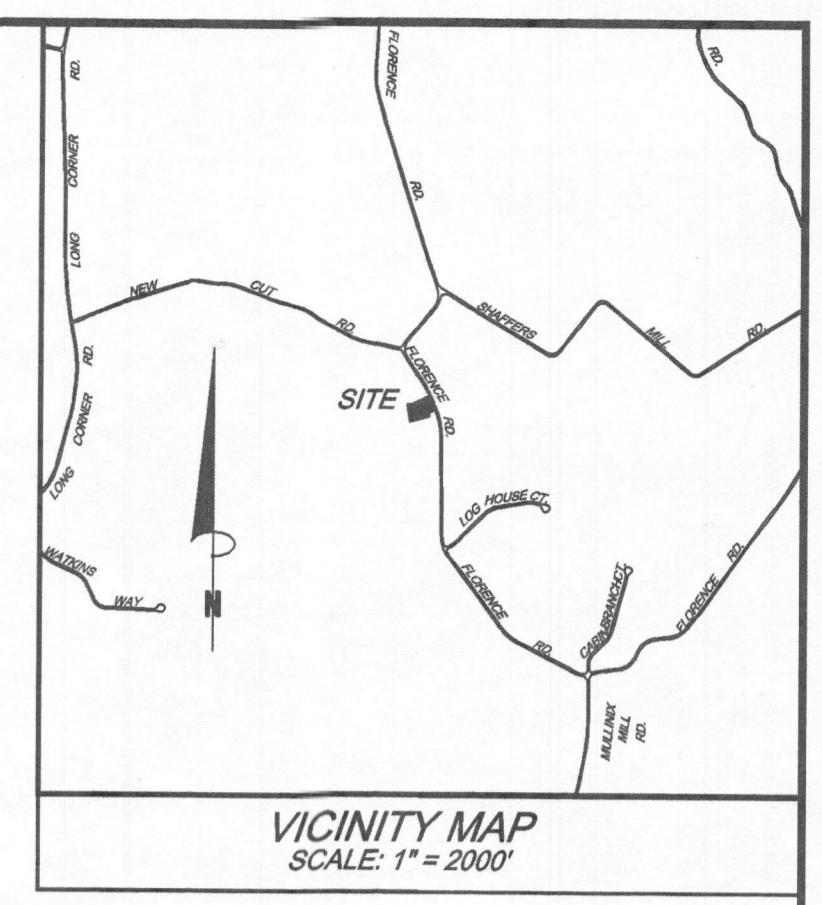
SOIL TYPES BASED ON HOWARD COUNTY SOIL SURVEY MAP # 1 DAMASCUS NE, MARYLAND

**LEGEND-SWM- MDE DESIGNATION**

DRIVE SLOPE N-2 DENOTES NON-ROOFTOP RUNOFF DISCONNECT (EXISTING DRIVE, PAVEMENT)  
 N-1 DENOTES ROOFTOP RUNOFF

STORMWATER MANAGEMENT PRACTICE CHART-ESD (SEE NOTES)						
LOT NO.	AREA NO.	AREA	IMPV. AREA	R <sub>v</sub>	R <sub>f</sub>	SWMP PRACTICE (L.I.D.)
16	16D	44,979	4076	0%	0.13	1.0' 487 N-F# 2, 158 SF, N-2 = 1,941

\*LOT-18 IMPERVIOUS AREA = 4076 SF  
 SWMP-SITE DESIGN SATISFIED BY THE FOLLOWING LOW IMPACT DEVICES  
 N-1 DENOTES DISCONNECTION OF ROOFTOP RUNOFF  
 N-2 DENOTES DISCONNECTION OF NON-ROOFTOP RUNOFF = 1" GRASS SHAVER



VICINITY MAP  
SCALE: 1" = 2000'

**GENERAL NOTES**

- OWNER: MELODY WILSON  
 ARCH: CURTIS CUMBERLAND  
 CUMBERLAND DEVELOPMENT CUSTOM HOMES  
 2883 DUNNALL ROAD,  
 WOODBINE, MD. 21797  
 DEED REFERENCE: LIBER 15950, FOLIO 026  
 DATE: APRIL 28, 2016  
 GRANTOR: CINDY A. DEVEREUX
- TAX MAP 006, GRID 23, PARCEL 247
- THE BOUNDARY SHOWN HEREON IS BASED UPON RECORDED PLAT OF THE "KOGAN TRUST PROPERTY" PLAT M.D.R. #22389-71
- WATER SERVICE IS PRIVATE, SEWER SERVICE IS PRIVATE
- THERE IS NO 100 YEAR FLOOD PLAIN LOCATED ON THIS PROPERTY BASED ON FEMA INSURANCE RATE MAP COMMUNITY PANEL #6407700100
- TOPOGRAPHY SHOWN HEREON IS FIELD RUN BASED UPON HOWARD COUNTY GIS DATA NAVD83, CONTOUR INTERVAL = 2 FT., FIELD VERIFIED BY CRC & ASSOC.
- THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100 FT. OF THE SUBJECT PROPERTY UNLESS OTHERWISE SHOWN HEREON.
- EXISTING WELLS #HO-95-1981 & #HO-95-1982 SHOWN HEREON HAVE BEEN FIELD LOCATED AND SHOWN ACCURATELY.
- SUBJECT PROPERTY IS ZONED RC-DEO

**HEALTH DEPARTMENT NOTES**

- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH AND AREA REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- THE AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF 10,000 SQ.FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENTS.
- EXISTING WELLS #HO-95-1981 AND #HO-95-1982 SHOWN HEREON HAVE BEEN FIELD LOCATED AND SHOWN ACCURATELY.
- THERE ARE NO EXISTING WELLS AND SEPTIC SYSTEMS WITHIN 100% OF THE LOT LINES SHOWN HEREON UNLESS NOTED OTHERWISE.  
 ⊕ DENOTES "PASSED" PERCOLATION TEST  
 ⊖ DENOTES "FAILED" PERCOLATION TEST
- THE NEAREST WATER INTAKE STRUCTURE IS FOUR MILES+ AWAY.

**SEPTIC SYSTEM DESIGN:**

DESIGN FLOW: 4-BEDROOM DWELLING DESIGN FLOW, = 600 GPD  
 PERCOLATION TEST TIME < 15 MINUTES  
 DEEP TRENCH WIDTH W = 2', DEPTH OF STONE = 2' BELOW INVERT OF PIPE  
 LENGTH OF TRENCH REQ'D = 214 LF  
 USE (4) TRENCHES L = 54' EACH  
 (B.A.T. SYSTEM)  
 PRE-TREATMENT UNIT - SHALL BE MODEL TMTLP UNIT BY NORWECO OR APPROVED EQUAL CAPACITY = 600 GPD  
 CONTROL PANEL - SHALL BE NORWECO SINGULAR TMT CONTROL PANEL AS MANUFACTURED BY NORWECO OR APPROVED EQUAL  
 PRE-TREATMENT UNIT VAULT - SHALL BE A PRE-CASTE CONCRETE VAULT, MANUFACTURED BY BACK RIVER PRECAST, INC. OR APPROVED EQUAL  
 SEPTIC SYSTEM DATA: (4-BEDROOM DWELLING)  
 BASMT, F.F. ELEVATION = 701.5  
 INVERT 4" SS @ BLDG. ELEV. = 713.18  
 PRE-TREATMENT UNIT - (VAULT)  
 FINISH GRADE = ELEV. 708.00  
 INVERT (IN) = ELEV. 702.73  
 INVERT (OUT) = ELEV. 702.40  
 DISTRIBUTION BOX  
 FINISH GRADE = ELEV. 705.0  
 INVERT (IN) = ELEV. 702.29  
 INVERT (OUT) = ELEV. 702.20  
 INITIAL SYSTEM  
 TRENCH #1 (T1) GRD ELEV. 705.8  
 INVERT (IN) ELEV. 701.9  
 TOP OF STONE ELEV. 702.47  
 BOTTOM OF STONE ELEV. 698.9  
 TRENCH #2 (T2) GRD ELEV. 705.1  
 INVERT (IN) ELEV. 701.1  
 TOP OF STONE ELEV. 701.77  
 BOTTOM OF STONE ELEV. 698.1  
 TRENCH #3 (T3) GRD ELEV. 704.5  
 INVERT (IN) ELEV. 700.5  
 TOP OF STONE ELEV. 701.17  
 BOTTOM OF STONE ELEV. 698.5  
 TRENCH #4 (T4) GRD ELEV. 703.9  
 INVERT (IN) ELEV. 699.9  
 TOP OF STONE ELEV. 700.57  
 BOTTOM OF STONE ELEV. 697.9

**SITE ANALYSIS**

TOTAL AREA SITE	1.0326 ACRES (44,979 SF.)
AREA OF WETLANDS AND THEIR BUFFERS	0.0 ACRES (0.0 SF)
AREA OF STREAMS AND THEIR BUFFERS	0.0 ACRES (0.0 SF)
AREA OF FLOODPLAIN AND THEIR BUFFERS	0.0 ACRES (0.0 SF)
AREA OF MODERATE STEEP SLOPES 15% - 34.9%	0.0 ACRES
AREA OF STEEP SLOPES - 25% OR GREATER	0.0 ACRES
AREA OF FOREST	0.0 ACRES (0.0 SF)
AREA OF ERODIBLE SOILS	0.0 ACRES (0.0 SF)
AREA DISTURBED	0.2709 ACRES (11801 SF)
AREA TO BE ROOFED	0.0490 ACRES (2135 SF)
AREA TO BE PAVED	0.0446 ACRES (1941 SF)
TOTAL IMPERVIOUS AREA	0.0936 ACRES (4,076 SF)
AREA TO BE VEGETATIVELY STABILIZED	0.1173 ACRES (5,123 SF)
TOTAL VOLUME CUT	425 CY.
TOTAL VOLUME FILL	425 CY.

OWNER:  
MELODY WILSON  
7404 OLD CHAPEL DR.  
BOWIE, MD. 20715  
(tel.) 301-717-9349

BUILDER:  
CUMBERLAND DEVELOPMENT CUSTOM HOMES  
C/O CURTIS CUMBERLAND  
2883 DUNNALL RD.  
WOODBINE, MD. 21797  
(tel.) 301-252-1122

**LEGEND**

- WELL LOCATION
- ALTERNATE WELL LOCATION
- EXISTING SEPTIC LOCATION
- ABANDON SEPTIC AREA LOCATION
- ADDITION TO SEPTIC AREA LOCATION
- EX. PROPERTY LINE
- EX RIGHT-OF-WAY
- PROP. LOT LINES
- EX EASEMENTS
- EX CONTOURS
- PROP. CONTOURS
- EX TREEWOODS LINE
- PROP. TREEWOODS LINE
- EX WETLANDS
- SOILS LINE
- LIMIT OF DISTURBANCE
- DENOTES SLOPES 25% OR GREATER
- DENOTES SLOPES 15-25%

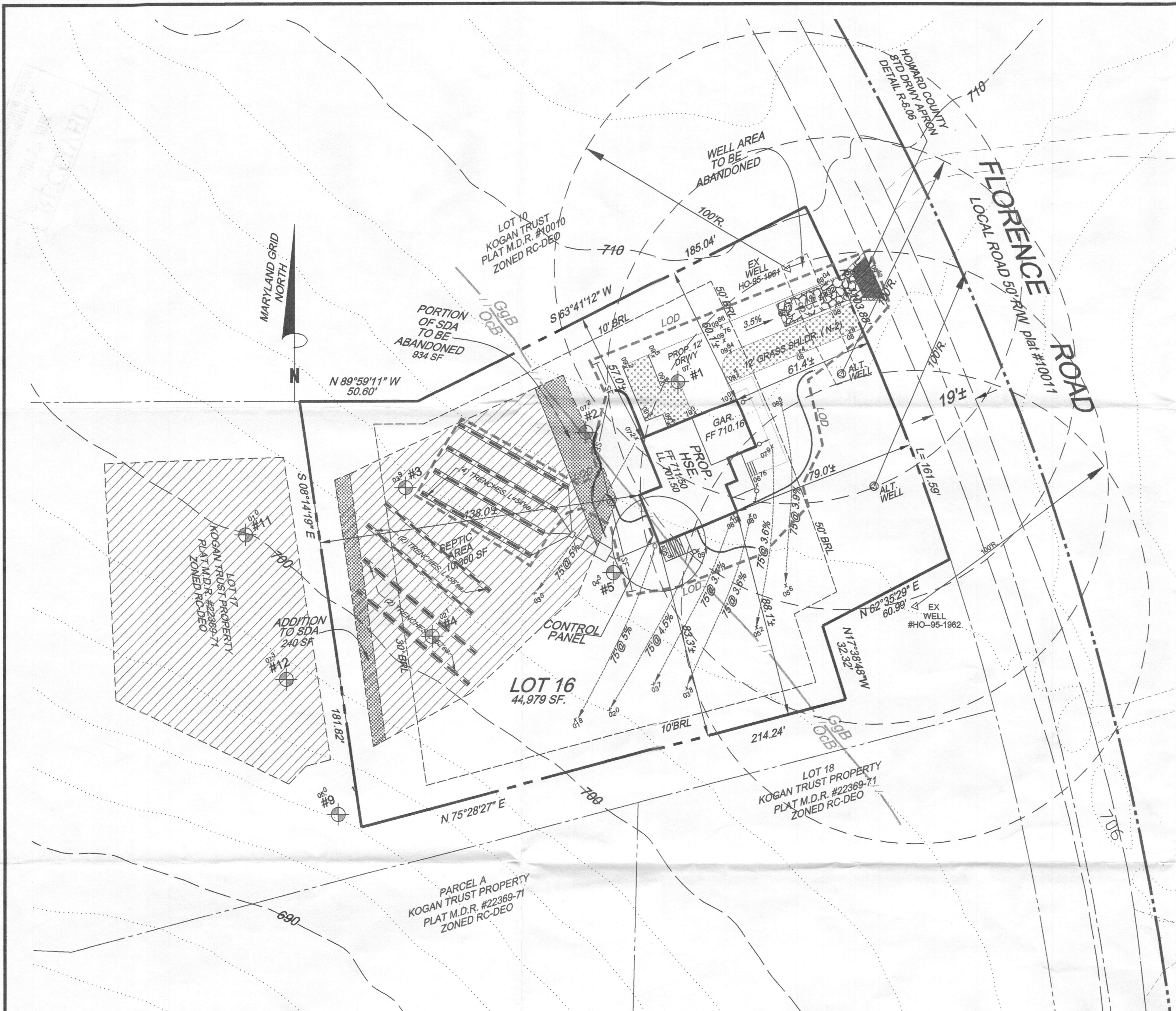
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 CHIEF, PLANNING AND ZONING DEVELOPMENT  
 DATE  
 CHIEF, DEVELOPMENT ENGINEERING  
 DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS  
 CHIEF, HEALTH OFFICER  
 DATE: 6/23/2016

**PERCOLATION CERTIFICATION**  
 I HEREBY CERTIFY THAT THE PERCOLATION TEST LOCATIONS SHOWN HEREON ARE TO THE BEST OF MY KNOWLEDGE ARE CORRECT AS SHOWN.  
 Charles R. Crocken 6-17-16  
 CHARLES R. CROCKEN, P.E. MD. LICENSE REG. NO. 7803  
 EXPIRATION DATE 4-22-2017

**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. 7803 EXPIRATION DATE 4-22-2017.  
 Charles R. Crocken 6-17-16  
 CHARLES R. CROCKEN, P.E. MD. LICENSE REG. NO. 7803  
 DATE

REVISED PERCOLATION CERTIFICATION PLAN  
 LOT 16  
 "KOGAN TRUST PROPERTY"  
 #1820 FLORENCE RD  
 SINGLE FAMILY DETACHED  
 PLAT M.D.R. #22389-71  
 ZONED RC-DEO  
 FOURTH ELECTION DISTRICT TAX MAP #06, GRID 23, PARCEL 247  
 HOWARD COUNTY, MARYLAND  
 Prepared by:  
 CHARLES R. CROCKEN AND ASSOCIATES, INC.  
 902 LEE AVE.  
 SYKESVILLE, MARYLAND 21157  
 Tel. (410) 549-2708  
 SCALE: 1" = 30'  
 DATE: 05/09/16  
 SHEET 1 OF 1



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

1. Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The areas receiving runoff should be protected from future compaction or development of impervious areas. In commercial areas, foot traffic should be discouraged as well.

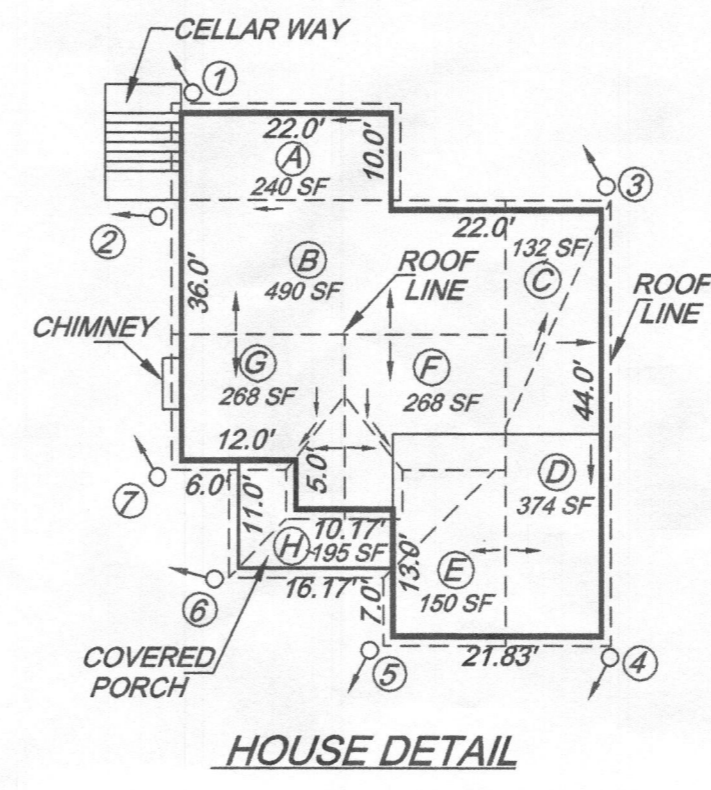
SOILS LEGEND					
SYMBOL	NAME/DESCRIPTION	SOIL GROUP	K-VALUE	K-VALUE	HYDRIC GROUP
GgB	Glenhig loam, 3 to 8 percent slopes	c	0.28	+	NOT HYDRIC
OcB	Ocoquan loam, 3 to 5 percent slopes	B	0.37	+	NOT HYDRIC

SOIL TYPES BASED ON HOWARD COUNTY SOIL SURVEY MAP # 1 DAMASCUS NE, MARYLAND

**LEGEND-SWM- MDE DESIGNATION**

DRIVEY SLOPE N-2 DENOTES NON-ROOFTOP RUNOFF DISCONNECT (EXISTING DRIVEY PAVEMENT)

N-1 DENOTES ROOFTOP RUNOFF



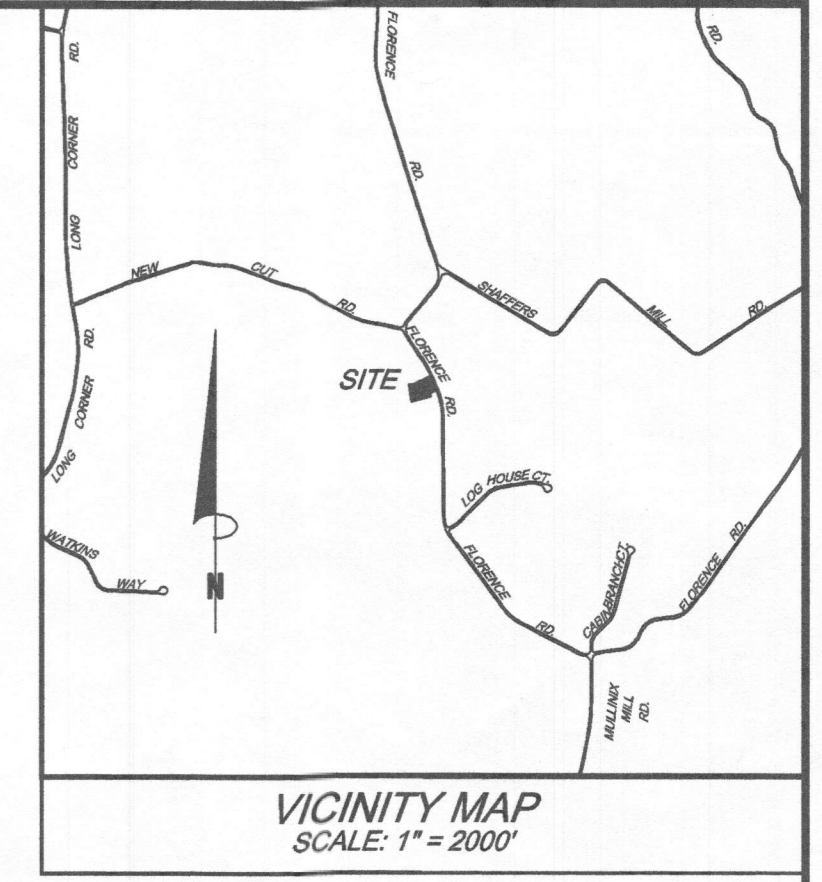
STORMWATER MANAGEMENT PRACTICE CHART-ESD (SEE NOTES)										
LOT NO.	AREA (AC)	AREA (SF)	IMP. %	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	SWM PRACTICE (L/D)
#16	1820	44,979	40%	9%	0.13	1.0'	48'	N-1	2,126 SF, N-2 = 1,841'	

\*LOT-16 IMPERVIOUS AREA = 40% SF

SWM- SITE DESIGN SATISFIED BY THE FOLLOWING LOW IMPACT DEVICES

1/16-1 DENOTES DISCONNECTION OF ROOFTOP RUNOFF

1/16-2 DENOTES DISCONNECTION OF NON-ROOFTOP RUNOFF - 1" GRASS SHADE



**GENERAL NOTES**

- OWNER: MELODY WILSON  
CUMBERLAND DEVELOPMENT CUSTOM HOMES  
2863 DUVALL ROAD,  
WOODBINE, MD. 21797
- DEED REFERENCE: LIBER 15850, FOLIO 026  
DATE: APRIL 28, 2016  
GRANTOR: CINDY A. DEVEREUX
- TAX MAP 006, GRID 23, PARCEL 247
- THE BOUNDARY SHOWN HEREON IS BASED UPON RECORDED PLAT OF THE 'KOGAN TRUST PROPERTY' PLAT M.D.R. #22369-71
- WATER SERVICE IS PRIVATE, SEWER SERVICE IS PRIVATE
- THERE IS NO 100 YEAR FLOOD PLAIN LOCATED ON THIS PROPERTY BASED ON FEMA INSURANCE RATE MAP COMMUNITY PANEL #2402700100
- TOPOGRAPHY SHOWN HEREON IS FIELD RUN BASED UPON HOWARD COUNTY GIS DATA NAV086, CONTOUR INTERVAL = 2 FT. FIELD VERIFIED BY CRC & ASSOC.
- THERE ARE NO WELLS OR SEPTIC SYSTEMS WITHIN 100 FT OF THE SUBJECT PROPERTY UNLESS OTHERWISE SHOWN HEREON.
- EXISTING WELLS #HO-95-1961 & #HO-95-1962 SHOWN HEREON HAVE BEEN FIELD LOCATED AND SHOWN ACCURATELY.
- SUBJECT PROPERTY IS ZONED RC-DEO

**HEALTH DEPARTMENT NOTES**

- THE LOT SHOWN HEREON COMPLES WITH THE MINIMUM OWNERSHIP, WIDTH AND AREA REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- THE AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF 10,000 SQ.FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENTS.
- EXISTING WELLS HO-95-1961 AND HO-95-1962 SHOWN HEREON HAVE BEEN FIELD LOCATED AND SHOWN ACCURATELY.
- THERE ARE NO EXISTING WELLS AND SEPTIC SYSTEMS WITHIN 1000' OF THE LOT LINES SHOWN HEREON UNLESS NOTED OTHERWISE.  
⊕ DENOTES "PASSED" PERCOLATION TEST  
⊖ DENOTES "FAILED" PERCOLATION TEST
- THE NEAREST WATER INTAKE STRUCTURE IS FOUR MILES+ AWAY.

**SEPTIC SYSTEM DESIGN:**

DESIGN FLOW: 4 - BEDROOM DWELLING DESIGN FLOW, = 800 GPD  
PERCOLATION TEST TIME < 15 MINUTES  
DEEP TRENCH WIDTH W = 2', DEPTH OF STONE = 2' BELOW INVERT OF PIPE  
LENGTH OF TRENCH REQ'D = 214 LF  
(USE 4) TRENCHES @ 54' EACH

(B.A.T. SYSTEM)  
PRE-TREATMENT UNIT - SHALL BE MODEL TINTLP UNIT BY NORWECO OR APPROVED EQUAL CAPACITY = 800 GPD  
CONTROL PANEL - SHALL BE NORWECO SINGLE-TRAY CONTROL PANEL AS MANUFACTURED BY NORWECO OR APPROVED EQUAL  
PRE-TREATMENT UNIT VAULT - SHALL BE A PRE-CASTE CONCRETE VAULT, MANUFACTURED BY SACK RIVERS PRECAST, INC. OR APPROVED EQUAL  
SEPTIC SYSTEM DATA: (4 - BEDROOM DWELLING)  
BASMT. F.F. ELEVATION = 701.5  
INVERT 4" SS @ BLDG. ELEV. = 713.18

PRE-TREATMENT UNIT - (VAULT)  
FINISH GRADE = ELEV. 705.00  
INVERT (IN) = ELEV. 702.73  
INVERT (OUT) = ELEV. 702.40

DISTRIBUTION BOX  
FINISH GRADE = ELEV. 705.0  
INVERT (IN) = ELEV. 702.28  
INVERT (OUT) = ELEV. 702.20

INITIAL SYSTEM  
TRENCH #1 (T1) GRD. ELEV. 705.9  
INVERT (IN) = ELEV. 701.8  
TOP OF STONE ELEV. 702.47  
BOTTOM OF STONE ELEV. 698.9

TRENCH #2 (T2) GRD. ELEV. 705.1  
INVERT (IN) = ELEV. 701.1  
TOP OF STONE ELEV. 700.57  
BOTTOM OF STONE ELEV. 699.1

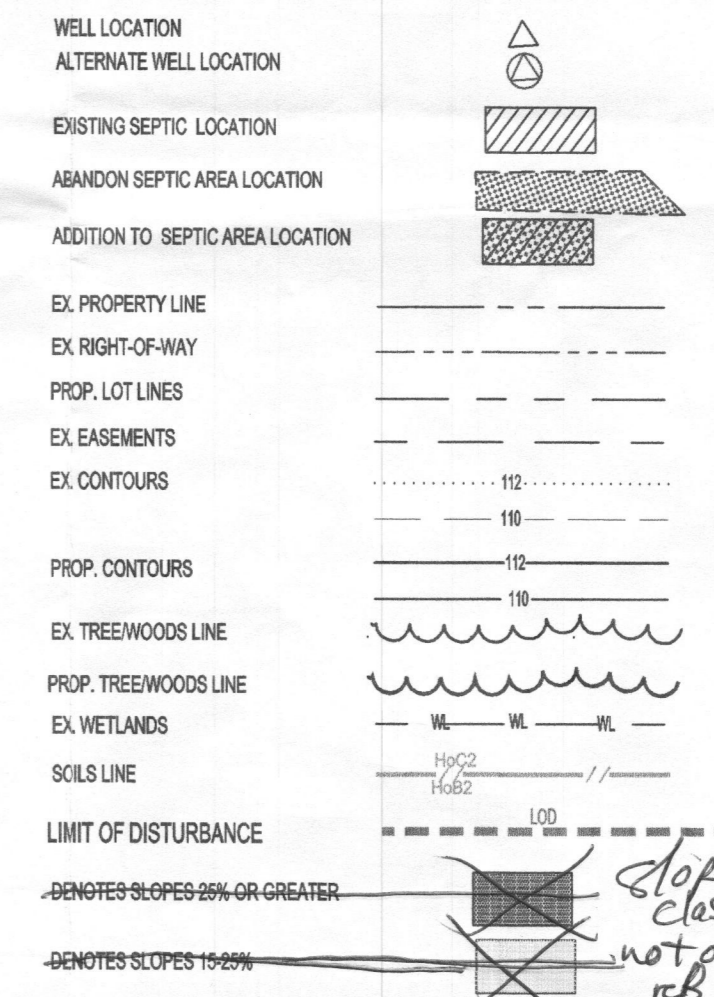
TRENCH #3 (T3) GRD. ELEV. 704.5  
INVERT (IN) = ELEV. 700.5  
TOP OF STONE ELEV. 701.17  
BOTTOM OF STONE ELEV. 698.5

TRENCH #4 (T4) GRD. ELEV. 703.9  
INVERT (IN) = ELEV. 699.9  
TOP OF STONE ELEV. 700.57  
BOTTOM OF STONE ELEV. 699.9

**SITE ANALYSIS**

TOTAL AREA SITE	1.0326 ACRES (44,979 SF)
AREA OF WETLANDS AND THEIR BUFFERS	0.0 ACRES (0.0 SF)
AREA OF STREAMS AND THEIR BUFFERS	0.0 ACRES (0.0 SF)
AREA OF FLOODPLAIN AND THEIR BUFFERS	0.0 ACRES (0.0 SF)
AREA OF MODERATE STEEP SLOPES 15% - 24.9%	0.0 ACRES
AREA OF STEEP SLOPES - 25% OR GREATER	0.0 ACRES
AREA OF FOREST	0.0 ACRES (0.0 SF)
AREA OF ERODABLE SOILS	0.0 ACRES (0.0 SF)
AREA DISTURBED	0.2709 ACRES (11901 SF)
AREA TO BE ROOFED	0.0490 ACRES (2135 SF)
AREA TO BE PAVED	0.0448 ACRES (1941 SF)
TOTAL IMPERVIOUS AREA	0.0938 ACRES (4078 SF)
AREA TO BE VEGETATIVELY STABILIZED	0.1173 ACRES (7,723 SF)
TOTAL VOLUME CUT	425 CY.
TOTAL VOLUME FILL	425 CY.

**LEGEND**



OWNER:  
MELODY WILSON  
FROM OLD CHASEL DR.  
BOWIE, MD. 20715  
(tel.) 301-717-9349

BUILDER:  
CUMBERLAND DEVELOPMENT CUSTOM HOMES  
C/O CURTIS CUMBERLAND  
2863 DUVALL RD.  
WOODBINE, MD. 21797  
(tel.) 301-265-1122

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

\_\_\_\_\_  
CHIEF, DIVISION LAND DEVELOPMENT

\_\_\_\_\_  
CHIEF, DEVELOPMENT ENGINEERING

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

\_\_\_\_\_  
HOWARD COUNTY HEALTH OFFICER

6/23/2016  
DATE

**PERCOLATION CERTIFICATION**

I HEREBY CERTIFY THAT THE PERCOLATION TEST LOCATIONS SHOWN HEREON ARE TO THE BEST OF MY KNOWLEDGE ARE CORRECT AS SHOWN.

\_\_\_\_\_  
CHARLES R. CROCKEN, PE, MD LICENSE REG. NO. 7803  
(EXPIRATION DATE 4-22-2017)

**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. 7803 EXPIRATION DATE 4-22-2017

\_\_\_\_\_  
CHARLES R. CROCKEN, PE, MD LICENSE REG. NO. 7803

REVISED PERCOLATION CERTIFICATION PLAN	
NO.	DATE
1	6/15/2017

REVISED PERKCHD COMMENTS  
REVISION

**"KOGAN TRUST PROPERTY"**  
#1820 FLORENCE RD

SINGLE FAMILY DETACHED  
PLAT M.D.R. #22369-71  
ZONED RC-DEO

FOURTH ELECTION DISTRICT TAX MAP #06, GRID 23, PARCEL 247  
HOWARD COUNTY, MARYLAND

Prepared by:  
**CHARLES R. CROCKEN AND ASSOCIATES, INC.**  
902 LEE AVE.  
SYKESVILLE, MARYLAND 21157  
Tel. (410) 549-2708

SCALE: 1" = 30'

DATE: 05/08/16

SHEET 1 OF 1