

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	DEMOLITION PLAN
3	PRELIMINARY EQUIVALENT SKETCH PLAN
4	STORM DRAIN DRAINAGE AREA MAP
5	STORMWATER MANAGEMENT DRAINAGE AREA MAP
6	SEDIMENT AND EROSION CONTROL PLAN
7	SIGHT DISTANCE PLAN & PROFILE

COORDINATE TABLE		
POINT	NORTH	EAST
1	556,949.16	1,330,739.05
2	556,695.71	1,330,405.02
3	556,741.66	1,330,462.41
4	556,757.76	1,330,453.92
5	556,775.02	1,330,445.43
6	556,830.66	1,330,417.83
7	556,873.94	1,330,399.40
8	556,034.91	1,330,550.69
9	556,130.07	1,330,652.68

MODERATE INCOME HOUSING CHART (MIHU) APPLICATION EXEMPTION TRACKING		
TOTAL NUMBER OF LOTS/UNITS PROPOSED		5
NUMBER OF MIHU REQUIRED		1
NUMBER OF MIHU PROVIDED ON-SITE (EXEMPT FROM APFO ALLOCATIONS)		0
NUMBER OF APFO ALLOCATIONS REQUIRED (REMAINING LOTS/UNITS)		5
MIHU FEE-IN-LIEU (INDICATE LOT/UNIT NUMBERS)		LOTS 1-5

MINIMUM LOT SIZE CHART			
LOT No.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	13,275 Sq.Ft.	1,212 Sq.Ft.	12,055 Sq.Ft.
2	13,275 Sq.Ft.	1,189 Sq.Ft.	12,080 Sq.Ft.
3	13,275 Sq.Ft.	780 Sq.Ft.	12,496 Sq.Ft.
4	13,275 Sq.Ft.	372 Sq.Ft.	12,903 Sq.Ft.

ROADWAY INFORMATION CHART			
ROAD NAME	CLASSIFICATION	DESIGN SPEED	EASEMENT WIDTH
DRIVEWAY	PRIVATE USE-IN-COMMON DRIVEWAY	15 M.P.H.	24'

STORMWATER MANAGEMENT PRACTICES					
LOT No.	DRY WELLS (M-5) Y/N, NUMBER, SIZE	MICRO-BIORETENTION (M-6) Y/N, NUMBER	NON-ROOFTOP DISCONNECTION (N-2) Y/N	ROOFTOP DISCONNECTION (N-1) Y/N	BIO-RETENTION FACILITY (F-6) Y/N
1	YES, ONE (1) 4'x8'x4'	NO	NO	NO	NO
2	YES, TWO (2) 4'x8'x4'	YES	NO	NO	NO
3	YES, FOUR (4) 4'x8'x4'	YES	NO	NO	NO
4	YES, FOUR (4) 4'x8'x4'	NO	NO	NO	NO
5	YES, FOUR (4) 4'x8'x4'	NO	NO	NO	YES

STORMWATER MANAGEMENT SUMMARY			
AREA ID	ESDV REQUIRED CU.FT.	ESDV PROVIDED CU.FT.	REMARKS
SITE	3,049	4,273	140% ESDV PROVIDED
TOTAL	3,049	4,273	

GROSS AREA = 1.56 ACRES
 LOD = 1.56 ACRES
 RCN = 55
 TARGET Pe = 1.60

GENERAL NOTES: CONTINUED

- THIS PLAN IS SUBJECT TO WAIVER PETITION WP-19-092 FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.1205(a)(10), WHICH IDENTIFIES SPECIMEN TREES AS A FOREST RETENTION PRIORITY. THIS WAIVER HAS BEEN APPROVED BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING ON MAY 28, 2019 SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE REMOVAL OF SPECIMEN TREES #2 AND #3 MUST BE MITIGATED WITH A 2:1 REPLACEMENT OF A NATIVE SPECIES MEASURING AT LEAST 2" - 3" CALIPER AT THE TIME OF PLANTING. IF POSSIBLE, THEY SHOULD BE REPLACED WITH A RED MAPLE SPECIES OF MAPLE. PROHIBITED FOR PLANT USE PER A POLICY MEMO DATED JULY 1, 2010.
 - THIS ALTERNATIVE COMPLIANCE DOES NOT PERMIT REMOVAL OF ANY OTHER SPECIMEN TREES. ADDITIONAL APPROVAL WILL BE REQUIRED IF ADDITIONAL SPECIMEN TREES ON-SITE ARE REMOVED DURING THE DEVELOPMENT OF THIS PROPERTY.
 - THE REVISED PLANS FOR SP-18-002 MUST BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING WITHIN 30-DAYS OF THE ORIGINAL MAY 16, 2019 DEADLINE (ON OR BEFORE JUNE 16, 2019).
 - IN ACCORDANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND REGULATIONS, SECTION 16.144.(1)(2) STATES THAT IF THE DEPARTMENT OF PLANNING AND ZONING OR THE REVIEW COMMITTEE INDICATES THAT ADDITIONAL INFORMATION IS NEEDED IN ORDER TO DECIDE WHETHER TO APPROVE THE PRELIMINARY PLAN, THE DEVELOPER SHALL PROVIDE THE INFORMATION WITHIN 45 DAYS OF RECEIVING SUCH INDICATION.
- THIS PLAN IS SUBJECT TO DESIGN MANUAL WAIVER FOR AN ALTERNATIVE TEE-TURN AROUND AT THE END OF THE USE-IN-COMMON DRIVEWAY. THIS STANDARD DETAIL R-3.05 TO ALLOW FOR A NON-STANDARD TEE-TURN AROUND AT THE END OF THE USE-IN-COMMON DRIVEWAY. THIS APPROVAL LETTER IS DATED MAY 30, 2019.



EXISTING HOUSE PHOTO
NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10776 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2995

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

 PLANNING DIRECTOR
 10-25-19
 DATE

OWNER
 MR. LUTFI ON
 8434 HIGH RIDGE ROAD
 ELICOTT CITY, MARYLAND 21043
 410-531-3300

DEVELOPER
 MR. LUTFI ON
 8434 HIGH RIDGE ROAD
 ELICOTT CITY, MARYLAND 21043
 410-531-3300

PRELIMINARY EQUIVALENT SKETCH PLAN

LUTFI PROPERTY

BUILDABLE LOTS 1 THRU 5

ZONING: R-12

TAX MAP No. 35 GRID No. 13

PARCEL No. 56

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST (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.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY FISHER, COLLINS & CARTER, INC. DATED JULY 17, 2017.
- THE COORDINATES ARE BASED ON NAD 83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 34-FB AND NO. 34-FE.
 HOWARD COUNTY MONUMENT NO. 34-FB - N 557,439.9130 E 1,330,191.3224 ELEV. (NAVD83) = 406.148
 HOWARD COUNTY MONUMENT NO. 34-FE - N 558,339.6005 E 1,329,709.0245 ELEV. (NAVD83) = 431.118
- PROPOSED WATER IS PUBLIC (CONTRACT NUMBER 14-1028-D)
 PROPOSED SEWER IS PUBLIC (CONTRACT NUMBER 14-1028-D)
- STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH THE NEW MDE, CHAPTER 5 REGULATIONS AND THE NEW HOWARD COUNTY SWM MANUAL ADOPTED ON OR AROUND MAY 4, 2010. RECHARGE VOLUME WILL BE PROVIDED THROUGH THE USE OF A STONE RESERVOIR. WATER QUALITY AND CHANNEL PROTECTION VOLUME WILL NOT BE NEEDED FOR THIS PROJECT. OVERBANK FLOOD PROTECTION VOLUME AND EXTREME FLOOD VOLUMES ARE NOT REQUIRED FOR THIS SITE. THE STORMWATER MANAGEMENT FACILITY WILL BE PRIVATELY OWNED BY H.O.A. AND JOINTLY MAINTAINED BY H.O.A. AND HOWARD COUNTY.
- EXISTING UTILITIES ARE BASED ON CONT. NO. 34-4918-D (8" S) & 44-3299-D (12" W)
- FLOODPLAIN INFORMATION IS BASED ON FEMA FLOOD MAPS DATED 10/16/12. IT DOES NOT APPEAR THAT THERE IS A FLOODPLAIN ON THIS PROPERTY.
- THE FOREST STAND DELINEATION AND WETLAND DELINEATION FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED MARCH, 2017. THERE ARE NO WETLANDS ON-SITE.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY MARS GROUP DATED MAY 2016 AND APPROVED ON DECEMBER 26, 2018.
- NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- THE GEO-TECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLIS-CARNES, ENGINEERING ASSOCIATE INC. DATED SEPTEMBER 13, 2018.
- BACKGROUND INFORMATION:
 - SUBDIVISION NAME: LUTFI PROPERTY
 - TAX MAP NO. 35
 - PARCELS NO. 96
 - ZONING R-12
 - ELECTION DISTRICT: FIFTH
 - TOTAL AREA OF TRACT = 1.56 ACRES
 - NUMBER OF PROPOSED LOTS: 5
 - NUMBER OF OPEN SPACE LOTS: 0
 - AREA OF BUILDABLE LOTS = 1.56 ACRES
 - AREA OF OPEN SPACE LOTS: 0.00 ACRES
 - AREA OF ROADWAY TO BE DEDICATED: 0.00 ACRES
 - PREVIOUS FILE NUMBERS: ECP 17-038 (FORMERLY SUNDSTRUM PROPERTY), WP-18-080, WP-19-092
 - AREA OF FLOODPLAIN = 0.00 ACRES
 - AREA OF 25% AND GREATER SLOPES = 0.05 ACRES
 - NET AREA OF TRACT = 1.51 AC.
- THIS SUBDIVISION PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE 2004 ZONING REGULATIONS PER COUNCIL BILL NO. 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL NO. 75-2003 NAD THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE 7/28/06. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS OR PARCELS MUST COMPLY WITH SETBACKS AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF A BUILDING OR GRADING PERMIT APPLICATION.
- SUBJECT PROPERTY IS ZONED R-12 PER THE COMPREHENSIVE ZONING PLAN.
- OPEN SPACE REQUIREMENTS:
 - AREA OF OPEN SPACE REQUIRED = 1.56 X 0% = 0.125 ACRES
 - AREA OF OPEN SPACE PROVIDED = 0.00 ACRES. A FEE-IN-LIEU PAYMENT OF \$6000.00 (4 LOTS X \$1,500.00) WILL BE REQUIRED WITH THE FINAL PLAT SUBMISSION.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-190.
- EXISTING STRUCTURES LOCATED ON SITE ARE TO BE RAZED AS SHOWN ON THE PLAN.
- BOUNDARY OUTLINE BASED ON A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, INC. DATED JULY 17, 2017.
- THERE IS ONE AREA OF STEEP SLOPES LOCATED ON THIS PROPERTY AS DEFINED BY THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.116.b. (0.19 AC.)
- THE FOREST CONSERVATION ACT REQUIREMENTS FOR THIS PROJECT WILL BE MET THROUGH A FEE-IN-LIEU PAYMENT OF \$9,801.00 (0.3 AC. X \$3267.00/Sq.Ft. X \$33.75/Sq.Ft.) FOR THE REQUIRED 0.3 ACRES OF AFFORESTATION OBLIGATION.
 No Clearing, Grading or Construction is Permitted Within the Forest Conservation Easement; However, Forest Management Practices As Defined in The Deed Of Forest Conservation Easement Are Allowed.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND THE ROAD R/W LINE AND NOT THE PIPESTEM LOT DRIVEWAY.
- NO CEMETERIES OR HISTORIC STRUCTURES EXIST WITHIN THIS SUBDIVISION.
- THE LANDSCAPE SURETY IN THE AMOUNT OF \$ 9,090.00 FOR THE PERIMETER LANDSCAPE REQUIREMENTS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT FOR THIS SUBDIVISION.
- PERIMETER LANDSCAPING FOR THIS DEVELOPMENT SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. FINAL LANDSCAPING REVIEW AND SURETY IS DEFERRED UNTIL THE FINAL SUBDIVISION PLAN STAGE.
- SIGN POSTS: ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT OF WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3" LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE FIGHT AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (125 TONS LOADING)
 - DRAINAGE ELEMENTS CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER THE DRIVEWAY SURFACE.
 - STRUCTURE CLEARANCES - MINIMUM 12- FEET.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAM OR THEIR REQUIRED BUFFERS.
- FOR THE USE COMMON DRIVEWAY FOR LOTS 1 - 5, A PRIVATE RANGE ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER'S/OWNER'S EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATE.
- SOILS INFORMATION TAKEN FROM SOIL SURVEY MAP NO. 23, HOWARD COUNTY, MARYLAND.
- THIS PLAN IS SUBJECT TO WAIVER PETITION WP-18-080 FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.1205(a)(10), WHICH IDENTIFIES SPECIMEN TREES AS A FOREST RETENTION PRIORITY. THIS WAIVER HAS BEEN APPROVED BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING ON APRIL 12, 2018 SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE REMOVAL OF SPECIMEN TREE #1 MUST BE MITIGATED WITH A 3:1 REPLACEMENT OF A NATIVE SPECIES MEASURING AT LEAST 2" CALIPER AT PLANTING. IF POSSIBLE, IT SHOULD BE REPLACED WITH A SPECIES OF MAPLE. SILVER MAPLES ARE PROHIBITED FOR PLANT USE PER A POLICY MEMO DATED JULY 1, 2010.
 - THE REMOVAL OF SPECIMEN TREE #5 MUST BE MITIGATED WITH A 2:1 REPLACEMENT OF A NATIVE SPECIES MEASURING AT LEAST 1 1/2" TO 2" CALIPER AT PLANTING. IF POSSIBLE, IT SHOULD BE REPLACED WITH A RED OAK OR OTHER SPECIES OF OAK.
 - THIS ALTERNATIVE COMPLIANCE DOES NOT PERMIT REMOVAL OF ANY OTHER SPECIMEN TREES. ADDITIONAL APPROVAL WILL BE REQUIRED IF ADDITIONAL SPECIMEN TREES ON-SITE ARE REMOVED DURING THE DEVELOPMENT OF THIS PROPERTY.
 - PROVIDE A DETAILED NOTE ON ALL SUBSEQUENT PLANS DETAILING THIS ALTERNATIVE COMPLIANCE REQUEST, INCLUDING SECTIONS, DATE AND CONDITIONS OF APPROVAL.
- LOTS 1 THRU 5 ARE SUBJECT TO SECTION 109.D.E OF THE ZONING REGULATIONS. AT LEAST 10% OF THE DWELLING UNITS SHALL BE MODERATE INCOME HOUSING UNITS (MIHU) OR AN ALTERNATIVE COMPLIANCE WILL BE PROVIDED. THE DEVELOPER SHALL EXECUTE AN M.I.H.U. AGREEMENT WITH THE DEPARTMENT OF HOUSING TO INDICATE HOW THE M.I.H.U. REQUIREMENT WILL BE MET. THE M.I.H.U. AGREEMENT AND COVENANTS WILL BE RECORDED SIMULTANEOUSLY WITH THE RECORDED PLAT IN THE OFFICE OF HOWARD COUNTY, MARYLAND. THIS DEVELOPMENT WILL MEET M.I.H.U. ALTERNATIVE COMPLIANCE BY A FEE-IN-LIEU TO THE DEPARTMENT OF HOUSING FOR EACH REQUIRED UNIT.
 - MODERATE INCOME HOUSING UNIT (M.I.H.U.) TABULATION:
 - M.I.H.U. REQUIRED = (5 LOTS X 10%) = 1 M.I.H.U.
 - M.I.H.U. PROVIDED = DEVELOPER WILL PURSUE ALTERNATIVE COMPLIANCE BY PAYING A FEE-IN-LIEU TO THE HOWARD COUNTY HOUSING DEPARTMENT FOR THE UNITS REQUIRED BY THE DEVELOPMENT.
 - AN EXECUTED M.I.H.U. AGREEMENT WITH THE HOWARD COUNTY HOUSING DEPARTMENT HAS BEEN COMPLETED AND WILL BE RECORDED AND WILL BE RECORDED SIMULTANEOUSLY WITH THE RECORDED PLAT.
- THE DEVELOPER WILL BE RESPONSIBLE FOR PAYMENT OF A FEE-IN-LIEU OF PROVIDING ROAD FRONTAGE IMPROVEMENTS AT THE FINAL DESIGN PORTION OF THIS PROJECT.

ENVIRONMENTAL INFORMATION:
 1. GROSS AREA OF TRACT = 1.56 ACRES
 2. LIMIT OF DISTURBANCE AREA = 1.52 ACRES+
 3. IMPERVIOUS AREA = 0.45 ACRES+
 4. GREEN OPEN AREA = 1.11 ACRES+
 5. PROPOSED SITE USE: SINGLE FAMILY DETACHED HOMES.
 6. AREA OF FLOODPLAIN = 0.00 ACRES
 7. AREA OF 15% OR GREATER SLOPES = 0.44 ACRES+
 8. FOREST AREA = 0.9 ACRES+ (FEE-IN-LIEU)
 9. WETLAND/WETLAND BUFFER AREA = 0.00 ACRES

SPECIMEN TREE CHART				
NO.	DBH	COMMON NAME	SCIENTIFIC NAME	CONDITION
ST-1	57"	SILVER MAPLE	ACER SACCHARINUM	GOOD
ST-2	47.5"	SILVER MAPLE	ACER SACCHARINUM	POOR CONDITION, NOTABLE ROT
ST-3	32"	RED MAPLE	ACER RUBRUM	POOR CONDITION, NOTABLE ROT
ST-4	49"	TULIP POPLAR	LIRIODENDRON TULIPIFERA	GOOD CONDITION-OFFSITE
ST-5	35.5"	RED OAK	QUERCUS RUBRA	POOR CONDITION, NOTABLE ROT IN CANOPY

ST-1, ST-2, ST-3 & ST-5 ARE TO BE REMOVED

"Professional certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-21."

 ALDO R. VITUCCI, P.E.
 9/25/19
 DATE

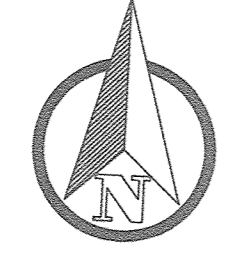
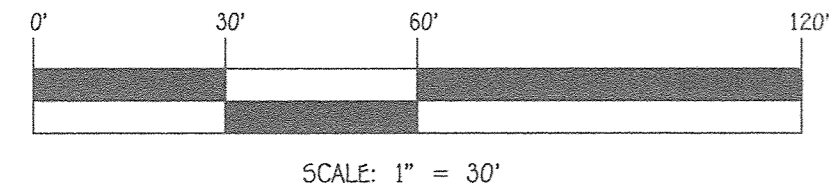
PRELIMINARY EQUIVALENT SKETCH PLAN
LUTFI PROPERTY
 LOTS 1 THRU 5
 ZONING: R-12
 TAX MAP No. 35 GRID No. 13 PARCEL No. 56
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: SEPTEMBER 25, 2019
 SHEET 1 OF 7

SOILS LEGEND

SOIL	NAME	Kw	CLASS
GbB	Gladstone loam, 3 to 8 percent slopes	0.20	B
GbC	Gladstone loam, 8 to 15 percent slopes	0.20	B
GmB	Glenville silt loam, 3 to 8 percent slopes	0.37	C
MaD	Manor loam, 15 to 25 percent slopes	0.24	B

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas

LEGEND	
SYMBOL	DESCRIPTION
---492---	EXISTING CONTOUR 2' INTERVAL
---490---	EXISTING CONTOUR 10' INTERVAL
---	SLOPES (25% AND GREATER)
---	SOILS LIMIT
---	TO BE RAZED/REMOVED
---	SLOPES (15% TO 24.9%)
---	EXISTING TREELINE



TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

[Signature]
 PLANNING DIRECTOR

10-25-19
 DATE

OWNER
 MR. LUTTI ON
 8434 HIGH RIDGE ROAD
 ELLCOTT CITY, MARYLAND 21043
 410-531-3300

DEVELOPER
 MR. LUTTI ON
 8434 HIGH RIDGE ROAD
 ELLCOTT CITY, MARYLAND 21043
 410-531-3300

"Professional certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-21"

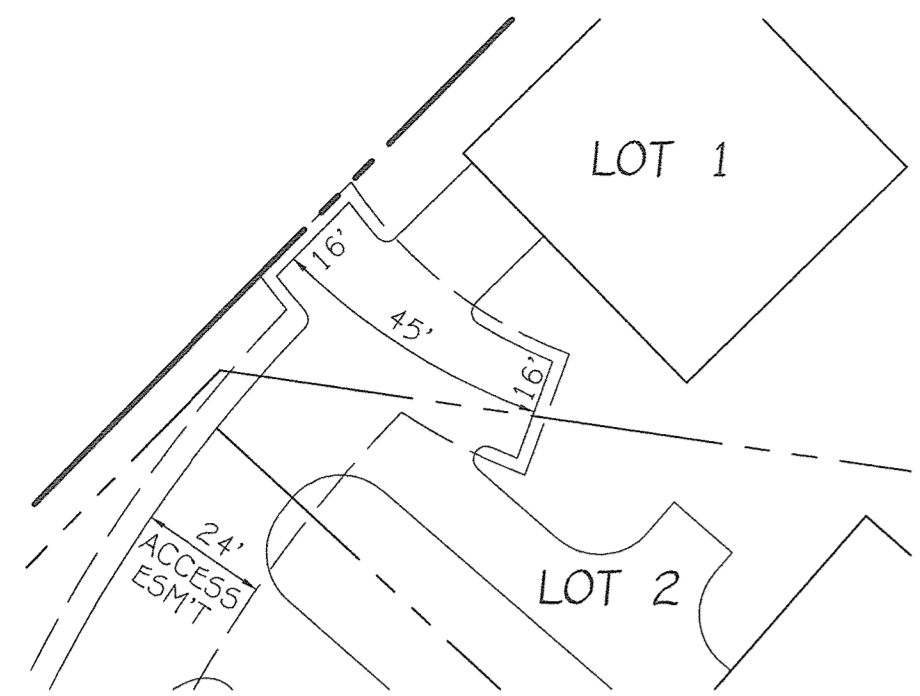
[Signature]
 ALDO N. VITUCCI, P.E.

9/25/19
 DATE

DEMOLITION PLAN
LUTTI PROPERTY
 LOTS 1 THRU 5

ZONING: R-12 PARCEL No. 56
 TAX MAP No. 35 GRID No. 13
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: SEPTEMBER 25, 2019
 SHEET 2 OF 7

I:\2019\11\059\Engineering\DWG\SP-18-002 Drawings\11059 sheet 2 SP DEMO plan.dwg, Sheet 2, 1 of 1



DRIVEWAY TURN AROUND
SCALE: 1" = 30'

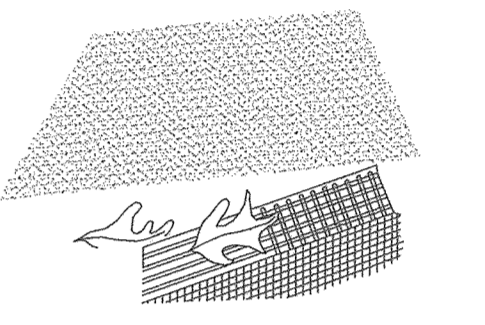
NOTE:
1. THIS PLAN IS SUBJECT TO DESIGN MANUAL WAIVER FOR THE ALTERNATE T-TURN AROUND THAT WAS APPROVED ON MAY 30, 2019. SEE GENERAL NOTE NUMBER 37.
2. THIS PLAN INDICATES AN ADDRESS SIGN AT THE ENTRANCE WAY TO THE SUBDIVISION. A MORE DETAILED SIGN WITH THE FIRE AND RESCUE SERVICES WILL BE SHOWN ON THE FINAL PLAN.

PRIVATE REFUSE PAD LANDSCAPING	
4' x 8' PAD NUMBER:	PAD NO. 1
NUMBER OF TREES REQUIRED:	
SHADE TREES	---
EVERGREEN TREES	---
SHRUBS	0
NUMBER OF TREES REQUIRED:	
SHADE TREES	---
EVERGREEN TREES	---
SHRUBS - (AZALEA 'BLAAW'S PINK' / BLAAW'S PINK AZALEA PLANTED 18"-24" APART)	0

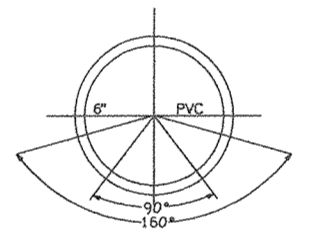
SCHEDULE A PERIMETER LANDSCAPE EDGE							
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED	
						SHADE TREES	EVERGREEN TREES
P-1	ADJACENT TO ROADWAY	B	198.35'	NO	NO	4	5
P-2	ADJACENT TO PERIMETER	A	360.24'	NO	NO	6	5
P-3	ADJACENT TO PERIMETER	A	200.70'	NO	NO	3	4
P-4	ADJACENT TO PERIMETER	A	359.00'	NO	NO	6	5

--- DENOTES ADDITIONAL SHADE TREES TO REPLACE THE SPECIMEN TREES PER GENERAL NOTE NO. 36 - QTY. = 9.

LEGEND	
SYMBOL	DESCRIPTION
---492---	EXISTING CONTOUR 2' INTERVAL
---490---	EXISTING CONTOUR 10' INTERVAL
---492---	PROPOSED CONTOUR 2' INTERVAL
---490---	PROPOSED CONTOUR 10' INTERVAL
+499.50	SPOT ELEVATION
---SF---	SILT FENCE
---SSF---	SUPER SILT FENCE
---	DRAINAGE LIMITS
---	SOILS LIMIT
L.O.D.	LIMIT OF DISTURBANCE
---	PROPOSED STREET TREE
---	RECREATIONAL OPEN SPACE
---	SLOPES (24.9% AND GREATER)
---	SLOPES (15% TO 24.9%)
---	EXISTING TREETRINE
---	PROPOSED TREETRINE
WB	WETLANDS BUFFER
WL	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS



GUTTER DRAIN FILTER DETAIL
NOT TO SCALE



SCH 40 PVC PERFORATED UNDERDRAIN PIPE DETAIL FOR HORIZONTAL DRAIN PIPE
NO SCALE

NOTES:
UNDERDRAIN PIPE SHALL BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM 756, TYPE P5 20 OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED 4" RIGID PIPE (e.g., PVC OR HDPE).

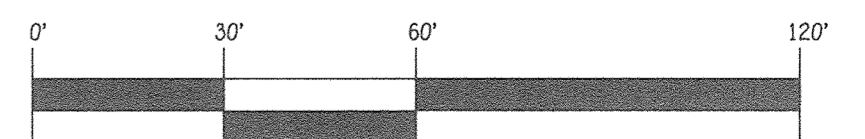
PERFORATIONS SHALL BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4 x 4) GALVANIZED HARDWARE CLOTH.

GRAVEL LAYER SHALL BE (NO. 57 STONE PREFERRED) AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.

THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.

A RIGID, NON PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQ.FT.) TO PROVIDE A CLEANOUT PORT AND MONITOR PERFORMANCE OF THE FILTER.

A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".



SCALE: 1" = 30'

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DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

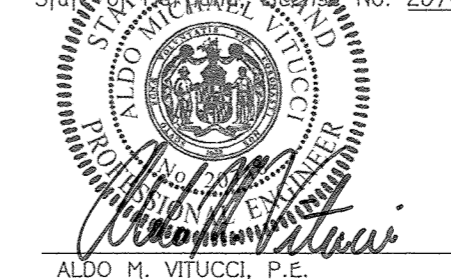
PLANNING DIRECTOR *[Signature]*

10-25-19
DATE

OWNER
MR. LUTFI ON
8434 HIGH RIDGE ROAD
ELLCOTT CITY, MARYLAND 21043
410-531-3300

DEVELOPER
MR. LUTFI ON
8434 HIGH RIDGE ROAD
ELLCOTT CITY, MARYLAND 21043
410-531-3300

"Professional certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-21."



9/25/19
DATE

PRELIMINARY EQUIVALENT SKETCH PLAN

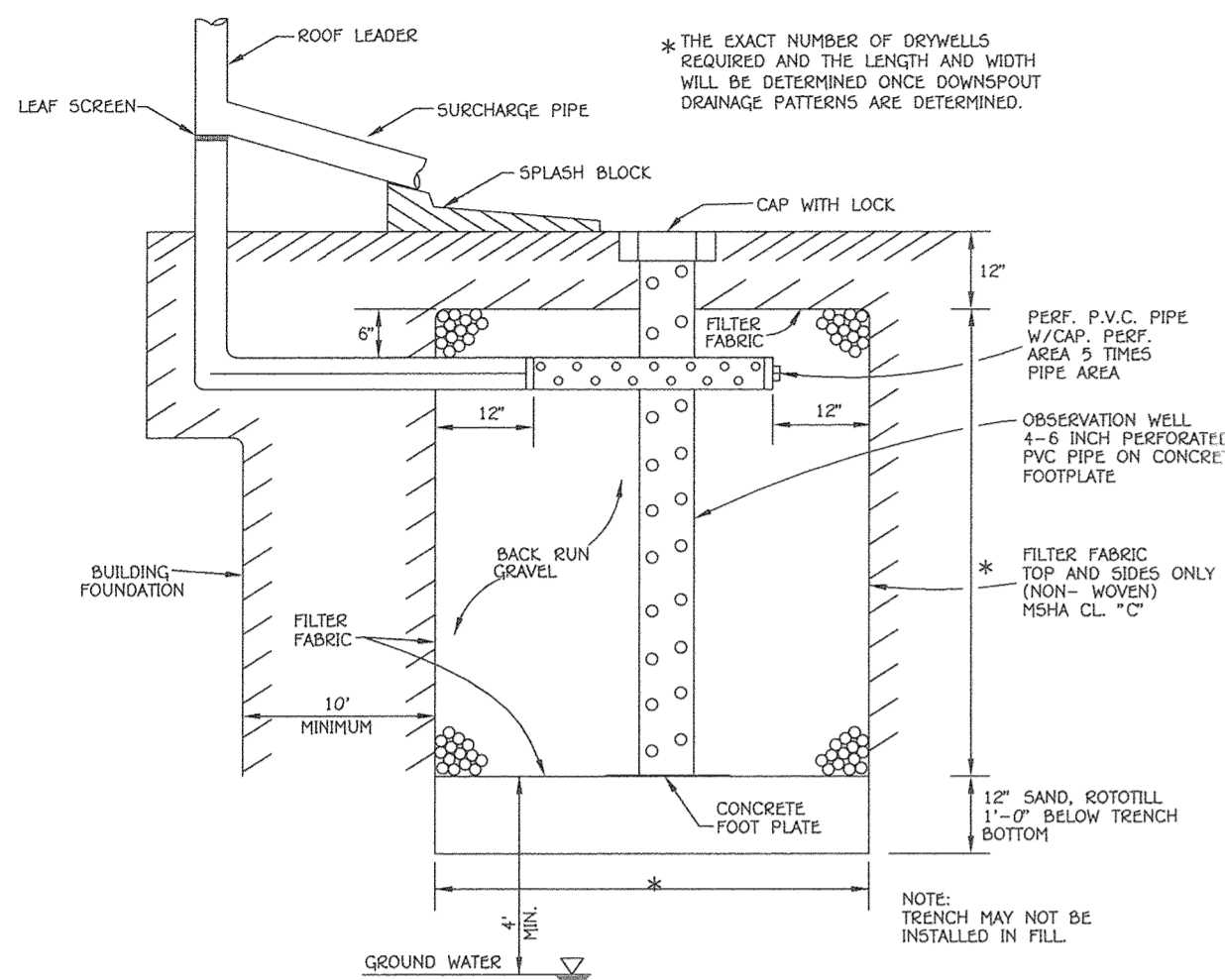
LUTFI PROPERTY
LOTS 1 THRU 5

ZONING: R-12
TAX MAP No. 35 GRID No. 13 PARCEL No. 56
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: SEPTEMBER 25, 2019
SHEET 3 OF 7

SOILS LEGEND

SOIL	NAME	CLASS
GbB	Gladstone loam, 3 to 8 percent slopes	B
GbC	Gladstone loam, 8 to 15 percent slopes	B
Gmb	Glennville silt loam, 3 to 8 percent slopes	C
MaD	Manor loam, 15 to 25 percent slopes	B

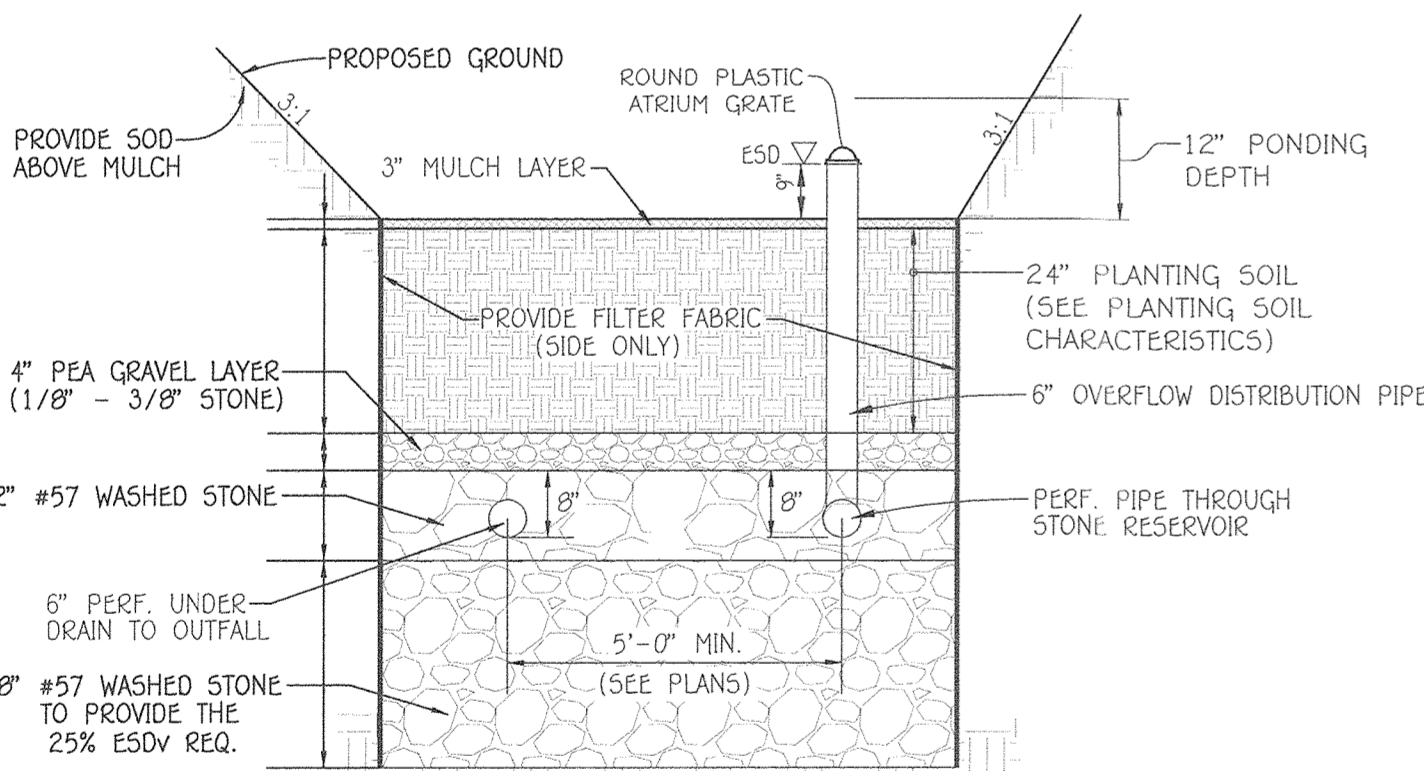
- NOTES:
- Hydric soils and/or contains hydric inclusions
 - May contain hydric inclusions
 - Generally only within 100-year floodplain areas



TYPICAL DRY WELL DETAIL
NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR DRYWELLS (M-5)

- The owner shall inspect the monitoring wells and structures on a quarterly basis and after every heavy storm event.
- 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.
- 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.
- The maintenance log book shall be available to Howard County for inspection to insure compliance with operation and maintenance criteria.
- Once the performance characteristics of the infiltration facility have been verified, the monitoring schedule can be reduced to an annual basis unless the performance data indicates that a more frequent schedule is required.



MICRO BIO-RETENTION SECTION WITH 6" OVERFLOW DISTRIBUTION PIPE
NO SCALE

Operation And Maintenance Schedule For Privately Owned & Maintained Bio-Retention Areas (M-6)

- The HOA shall maintain the plant material, mulch layer and soil layer annually, maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.
- The HOA shall perform a plant in the spring and in the fall each year, during the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material. Treat diseased trees and shrubs and replace all deficient stakes and wires.
- The HOA shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
- The HOA shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

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HOWARD COUNTY

PLANNING DIRECTOR

10-28-19
DATE

OWNER
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DEVELOPER
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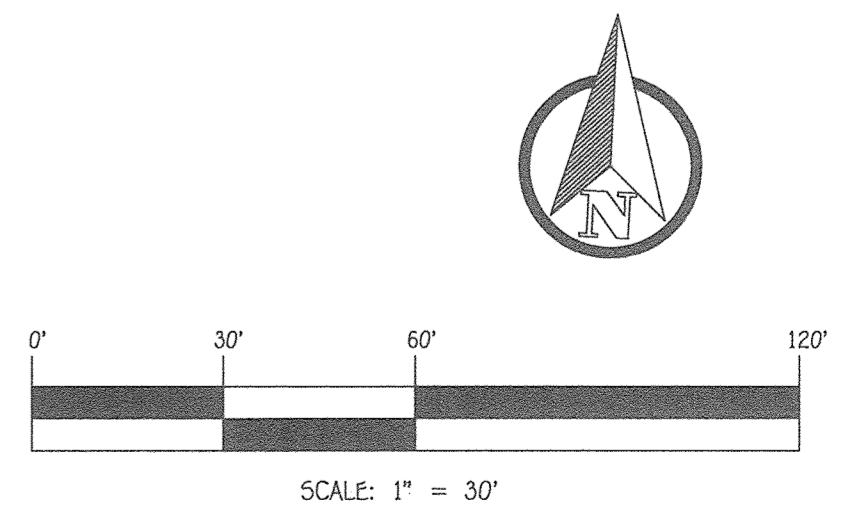
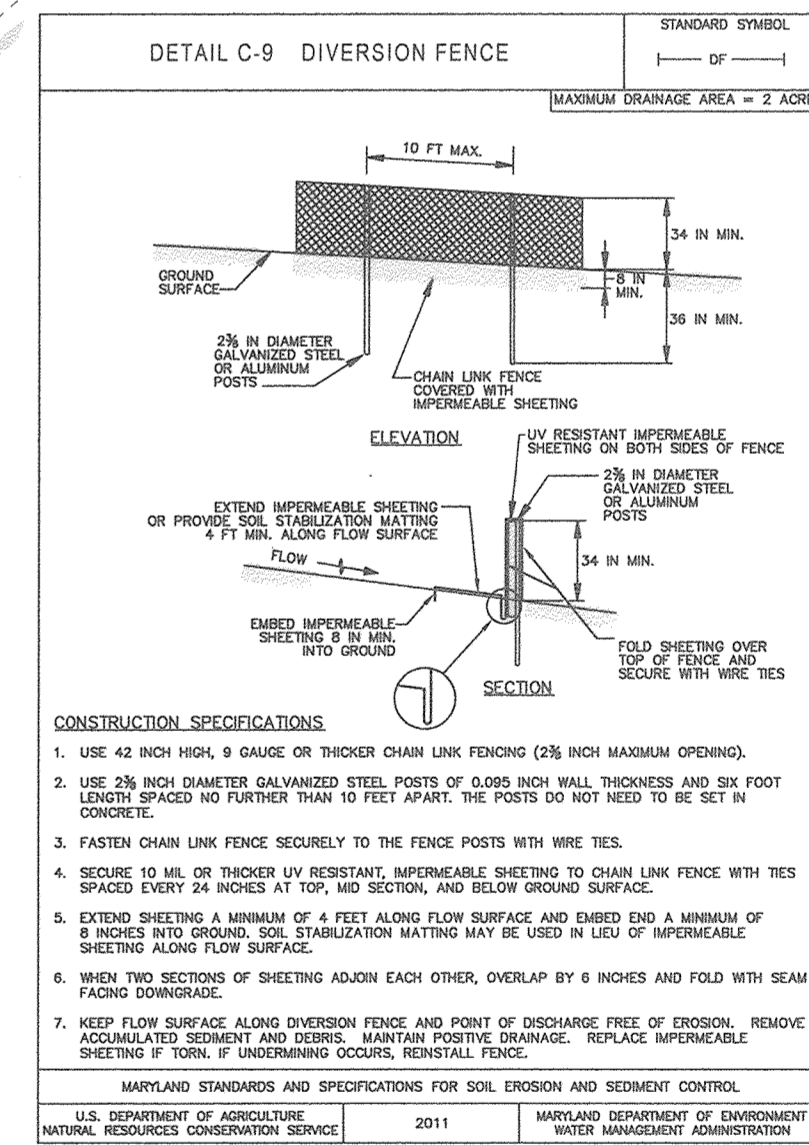
ALDO T. VITUCELI, P.E.
7/25/19
DATE

LEGEND

SYMBOL	DESCRIPTION
---492---	EXISTING CONTOUR 2' INTERVAL
---490---	EXISTING CONTOUR 10' INTERVAL
---492---	PROPOSED CONTOUR 2' INTERVAL
---490---	PROPOSED CONTOUR 10' INTERVAL
+499.50	SPOT ELEVATION
-5F-5F	SILT FENCE
-55F-55F	SUPER SILT FENCE
---	DRAINAGE LIMITS
---	SOILS LIMIT
L.O.D.	LIMIT OF DISTURBANCE
---	PROPOSED STREET TREE
---	RECREATIONAL OPEN SPACE
---	SLOPES (24.9% AND GREATER)
---	SLOPES (15% TO 24.9%)
---	EXISTING TREELINE
---	PROPOSED TREELINE
WB	WETLANDS BUFFER
WL	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS

DRAINAGE AREA DATA

STRUCTURE NO.	DRAINAGE AREA	AREA	"C"	ZONED	% IMP.
I-1	A	0.21 AC	0.40	R-12	22%
I-2	B	0.09 AC	0.37	R-12	18%
I-3	C	0.38 AC	0.30	R-12	8%
I-4	D	0.06 AC	0.61	R-12	52%
CULVERT	E	1.16 AC	0.38	R-12	19%



**DRAINAGE AREA MAP
PRELIMINARY EQUIVALENT SKETCH PLAN
LUTTI PROPERTY
LOTS 1 THRU 5**

ZONING: R-12
TAX MAP No. 35 GRID No. 13 PARCEL No. 56
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: SEPTEMBER 25, 2019
SHEET 4 OF 6

SOILS LEGEND

SOIL	NAME	Kw	CLASS
GbB	Gladstone loam, 3 to 8 percent slopes	0.20	B
GbC	Gladstone loam, 8 to 15 percent slopes	0.20	B
*GmB	Glenville silt loam, 3 to 8 percent slopes	0.37	C
MaD	Manor loam, 15 to 25 percent slopes	0.24	B

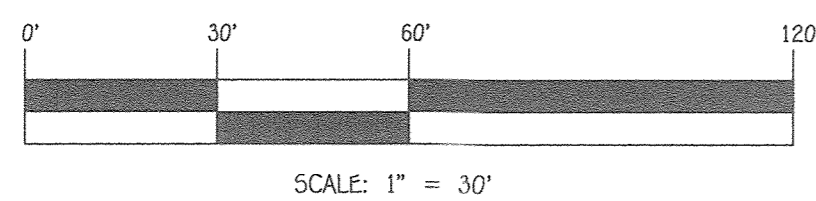
- NOTES:
- * Hydric soils and/or contains hydric inclusions
 - ** May contain hydric inclusions
 - † Generally only within 100-year floodplain areas

LEGEND

SYMBOL	DESCRIPTION
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---490---	EXISTING CONTOUR 10' INTERVAL
---492---	PROPOSED CONTOUR 2' INTERVAL
---490---	PROPOSED CONTOUR 10' INTERVAL
+499.50	SPOT ELEVATION
-SF-	SILT FENCE
-SSF-SSF	SUPER SILT FENCE
---	DRAINAGE LIMITS
---	SOILS LIMIT
L.O.D.	LIMIT OF DISTURBANCE
⊙	PROPOSED STREET TREE
▨	RECREATIONAL OPEN SPACE
▨	SLOPES (24.9% AND GREATER)
▨	SLOPES (15% TO 24.9%)
---	EXISTING TREELINE
---	PROPOSED TREELINE
WB	WETLANDS BUFFER
WL	WETLANDS LIMITS
FF	FLOODPLAIN LIMITS

SWM DRAINAGE AREA SUMMARY TABLE

DRAINAGE AREA	AREA AC. +/-	ESD#	TYPE	REMARKS
A	0.668	1	F-6	BIO-RETENTION
B	0.104	2	M-6	MICRO BIO-RETENTION
C	0.155	3	M-6	MICRO BIO-RETENTION
D	0.0143	4	M-5	DRYWELL
E	0.0286	5&18	M-5	DRYWELLS
F	0.0143	6	M-5	DRYWELL
G	0.0143	7	M-5	DRYWELL
H	0.0143	8	M-5	DRYWELL
I	0.0143	9	M-5	DRYWELL
J	0.0143	10	M-5	DRYWELL
K	0.0143	11	M-5	DRYWELL
L	0.0143	12	M-5	DRYWELL
M	0.0143	13	M-5	DRYWELL
N	0.0143	14	M-5	DRYWELL
O	0.0143	15	M-5	DRYWELL
P	0.0143	16	M-5	DRYWELL
Q	0.0143	17	M-5	DRYWELL



TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR *[Signature]* **10-25-19**
DATE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2299

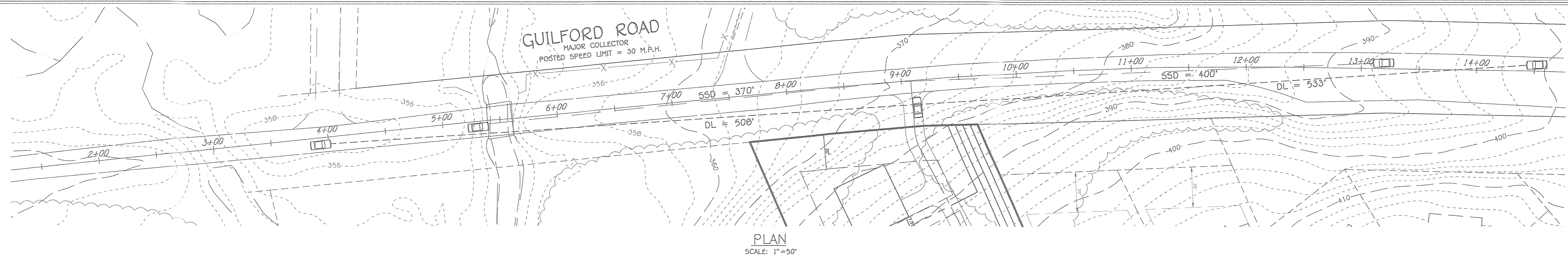
OWNER
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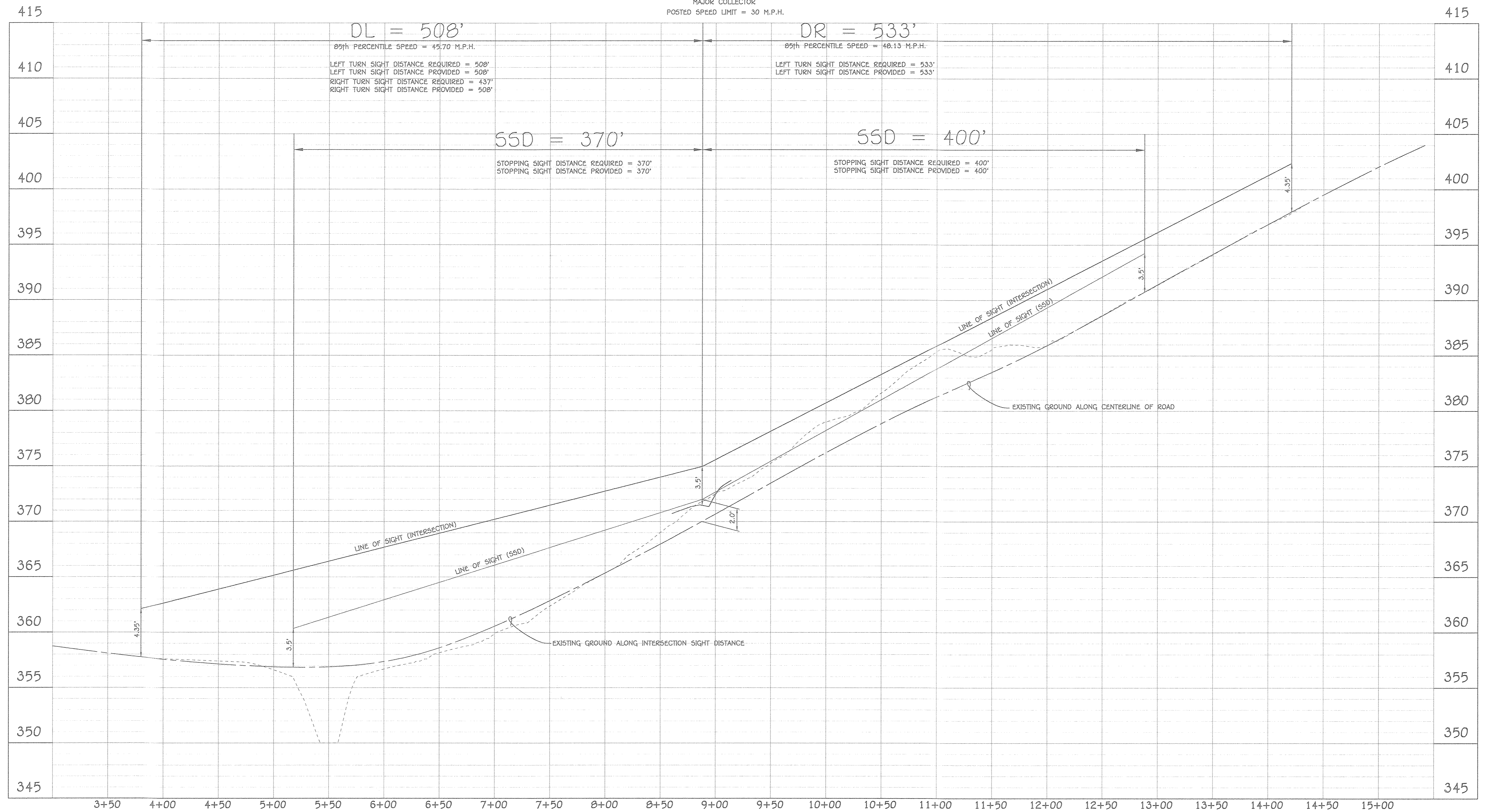
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[Signature]
ALDO H. VITUCCI, P.E. **9/25/19**
DATE

SWM DRAINAGE AREA MAP
SKETCH EQUIVALENT PRELIMINARY PLAN
LUTFI PROPERTY
LOTS 1 THRU 5
ZONING: R-12
TAX MAP No. 35 GRID No. 13 PARCEL No. 56
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: SEPTEMBER 23, 2019
SHEET 5 OF 7



Guilford Road
MAJOR COLLECTOR
POSTED SPEED LIMIT = 30 M.P.H.



TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR

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ALDO M. VITUCCI, P.E.
 9/25/19
 DATE

SIGHT DISTANCE PLAN & PROFILE
LUTFI PROPERTY
LOTS 1 THRU 5

TAX MAP No. 35 GRID No. 13 PARCEL No. 56
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: SEPTEMBER 25, 2019
SHEET 7 OF 7

1:201111059EngineeringDwgSP 18-002 Drawings\11028 SHEET 7 sight distance Plan.dwg, sight distance, 1:1