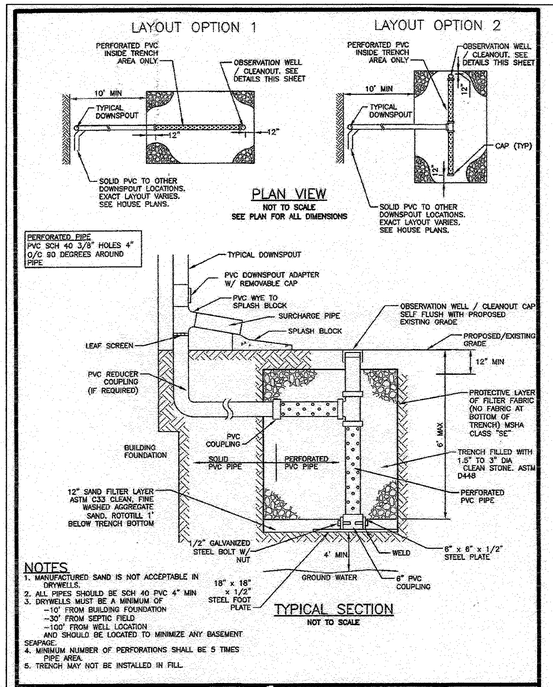
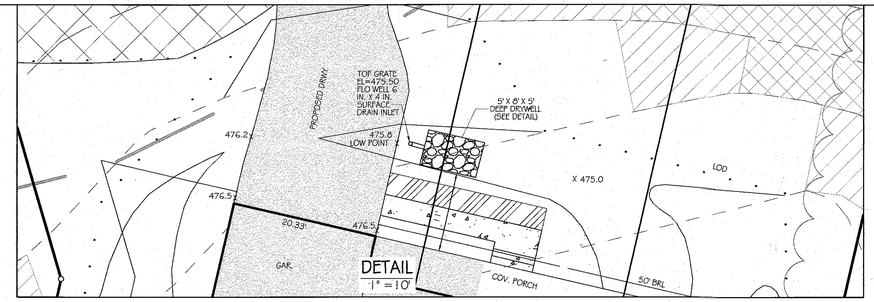


Revised	Howard County, Maryland Department of Public Works	Roof Drain Drywell Private	Detail
Revised 5/11/2007	Approved: Chief, Bureau of Engineering		D-9.01
Approved			

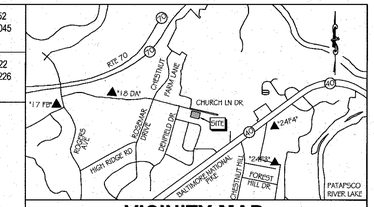


LEGEND

LIMIT OF DISTURBANCE	
CONCRETE SIDEWALK	
6' X 8' X 5' DEEP SWM DOWNSPOUT DRYWELL	
UTILITY POLE	
FIRE HYDRANT	
WATER METER	
SEWER MAN HOLE	
N-2 NON-ROOFTOP DISCONNECT 3' GRASS STRIP GRADED AT LESS THAN 5% SLOPE	
PAVING TO BE REMOVED, TOPSOILED, SEEDED & MULCHED.	
STEEP SLOPES >25% SLOPES	
MODERATE SLOPES 15%-24.9% SLOPES	

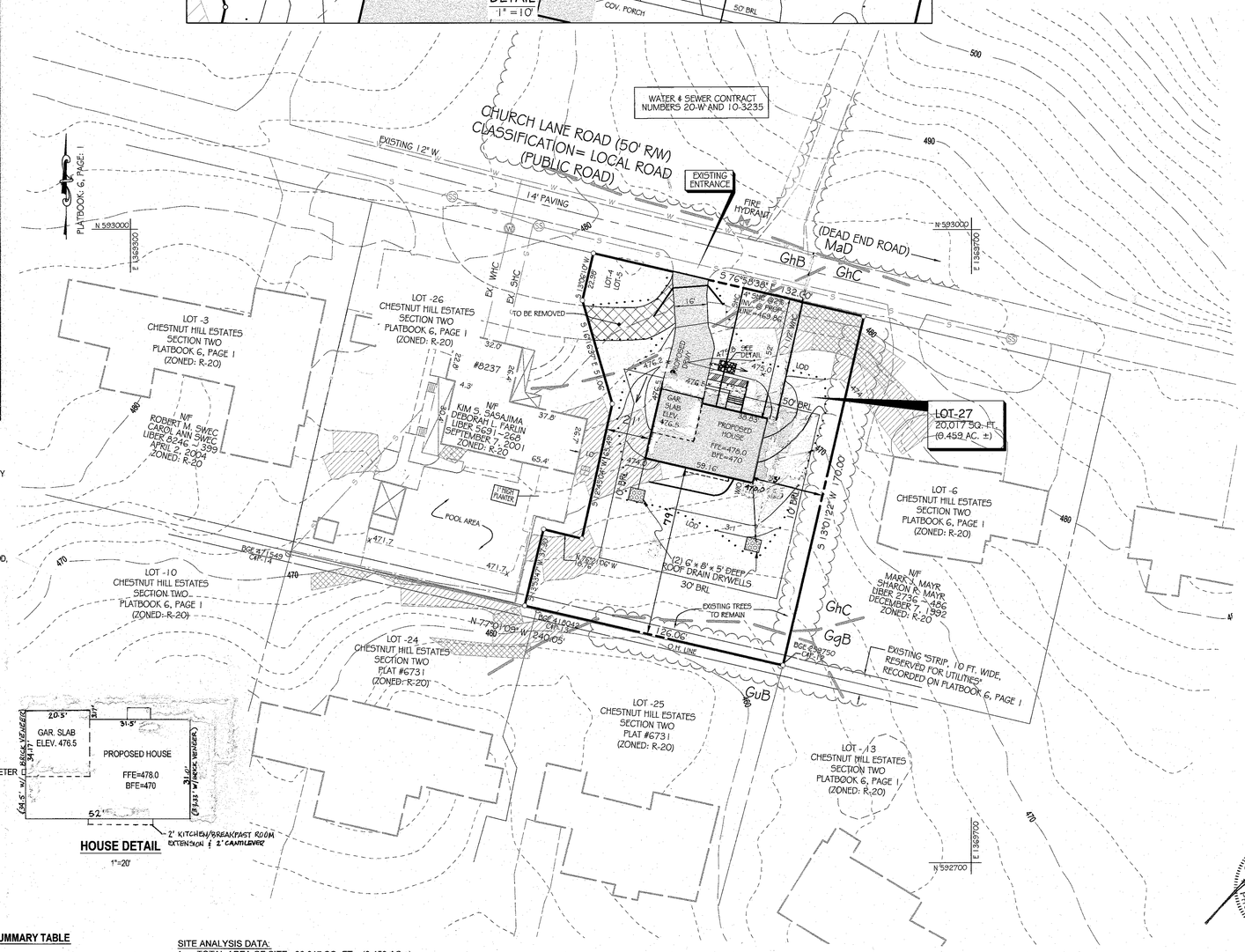
"17 FB" = NORTH - 593214.452
EAST - 1365669.045
ELEV. - 456.24

"18 DA" = NORTH - 593334.422
EAST - 1367582.226
ELEV. - 483.16



VICINITY MAP

SCALE: 1" = 2000'
ADC MAP: 21 GRID NO. C-4



GENERAL NOTES:

1. 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.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
3. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY RTF ASSOCIATES DATED SEPTEMBER 2014 AND SUPPLEMENTED WITH COUNTY GIS DATA.
4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS "17 FB" AND "18 DA" WERE USED FOR THIS PROJECT.
5. EXISTING UTILITIES ARE BASED ON CONTRACT DRAWINGS NO. 20-W AND 10-3235 FOR WATER AND SEWER.
6. ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
7. SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE
8. FOR DRIVEWAY ENTRANCE DETAILS, REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-8.06
9. ADC MAP-21 C-4
10. PREVIOUS COUNTY FILE NUMBER = F-15-035, ECP-15-079
11. BRL = BUILDING RESTRICTION LINE
12. FIELD VERIFICATION OF SITE CONDITIONS AND NATURAL RESOURCES MAP WAS PERFORMED SEPTEMBER 2014 BY RTF ASSOCIATES, INC.
13. ALL AREAS SHOWN HEREON ARE MORE OR LESS.
14. GRAVITY SEWER SERVICE WILL NOT BE AVAILABLE FOR BASEMENT. EJECTOR PUMP WILL BE REQUIRED FOR BASEMENT SEWER SERVICE.
15. THE SUBJECT PROPERTY IS ZONED R-20 PER THE 10/6/13 COMPREHENSIVE ZONING PLAN.
16. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
    WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE)
    SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING(1 - 1 1/2" MIN)
    GEOMETRY - MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
    STRUCTURE (CULVERS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
    DRAINAGE ELEMENTS - SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
    MAINTENANCE - SUFFICIENT TO INSURE ALL-WEATHER USE
17. THE LOT/PARCEL IS EXEMPT FROM SECTION 16-1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION SINCE THE EXISTING LOT IS LESS THAN 40,000 S.F. IN SIZE.
18. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE METROPOLITAN DISTRICT WHERE THE PROPOSED HOUSE WILL BE SERVED BY PUBLIC WATER AND SEWER.
19. IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 10 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACKS.
20. NO CEMETERIES OR HISTORIC SITES ARE LOCATED ON THIS PROPERTY
21. THERE ARE NO WETLANDS, WETLAND BUFFERS, STREAMS OR STREAM BUFFERS ON SITE.
22. EXISTING TREES ON SITE TO REMAIN.
23. LANDSCAPING IS NOT REQUIRED SINCE THIS IS AN INTERNAL LOT OF THE SUBDIVISION.

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

A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.

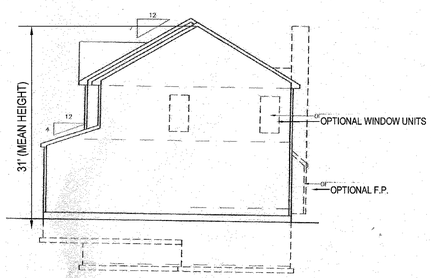
B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.

C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.

D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.

E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

F. 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.



RIGHT SIDE ELEVATION

N.T.S.

HOUSE DETAIL

1"=20'

ESD SUMMARY TABLE

M-5 (DW) ROOF DRAIN DRYWELL
IMPERVIOUS AREA = 2318 SQ. FT. (ROOFTOP)
Pe = 1 INCH
ESDv REQUIRED = 184 CU. FT.
ESDv PROVIDED = 192 CU. FT.

M-5 (DW) DRIVEWAY DRYWELL
IMPERVIOUS AREA = 910 SQ. FT. (DRWY)
Pe = 1 INCH
ESDV REQUIRED = 190 CU. FT.
ESDv PROVIDED = 200 CU. FT.

N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF
IMPERVIOUS AREA = 85 SQ. FT. (SIDEWALK)
ESDV REQUIRED = 7 CU. FT.
ESDV PROVIDED = 7 CU. FT.

SITE ANALYSIS DATA:

1. TOTAL AREA OF SITE= 20,017 SQ. FT.± (0.459 AC.±)
2. AREA OF MODERATE STEEP SLOPES (15%-24.9%)= 1776 SQ.FT.± OR 0.040 AC.±
3. AREA OF STEEP SLOPES (>25%)= 697 SQ. FT.± OR 0.016 AC.±
4. AREA OF HIGHLY ERODIBLE SOILS= NONE
5. AREA OF WETLANDS/ BUFFER= NONE
6. AREA OF 100 YEAR FLOOD PLAIN= NONE
7. AREA OF FOREST= NONE
8. AREA OF EXISTING IMPERVIOUS= 910 SQ.FT. ±
9. AREA OF PROPOSED IMPERVIOUS= 3312 SQ.FT.± (0.076 AC.±)
10. PROPOSED IMPERVIOUS BREAKDOWN
    PROPOSED HOUSE = 2317 SQ.FT.± (INCLUDES COVERED PORCH)
    PROPOSED DRIVEWAY = 910 SQ.FT.±
    PROPOSED SIDEWALK = 85 SQ. FT.±
10. TOTAL NET IMPERVIOUS AREA = 2402 SQ. FT.± (0.055 AC.±)
11. PERCENT IMPERVIOUS = 12%
12. TOTAL AREA OF DISTURBANCE= 8783 SQ. FT.±
13. TOTAL AREA OF TREE REMOVAL= NONE
14. WATERSHED= 02131108 (PATAPSCO RIVER)

ADDRESS CHART	
LOT PARCEL #	STREET ADDRESS
27	8233 CHURCH LANE ROAD

PERMIT INFORMATION CHART					
SUBDIVISION NAME		SECTION/AREA		LOT/ PARCEL NO.	
CHESTNUT HILL ESTATE		N/A		LOT-27	
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
23117	13	R-20	18	2ND	602600
WATER CODE		SEWER CODE			
0070		0070			

SITE DEVELOPMENT PLAN FOR
INDIVIDUAL LOT - RESIDENTIAL
OF
LOT - 27

CHESTNUT HILL ESTATES

AS RECORDED ON W.A.R. PLAT # 23117
8233 CHURCH LANE ROAD
2ND ELECTION DISTRICT, HOWARD CO. MD
TAX MAP: 18, GRID: 13, PARCEL: 178
ZONING = R-20
COUNTY FILE # SDP-15-064
UTILITY CONTRACT NO 20-W AND 10-3235

TITLE REFERENCE	OWNER / DEVELOPER
HARMONY BUILDERS, INC. LIBER 16116 ~ 367 MARCH 27, 2015	HARMONY BUILDERS, INC. 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 410-461-0833

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	JR	4-11-16 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT		4-14-16 DATE
DIRECTOR		4-15-16 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT :

HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

ON-SITE STORM WATER MANAGEMENT PRACTICES	IMPERVIOUS AREA TREATED	DRAINAGE AREA
(M-5) DW - ROOF DRAIN DRYWELL	2318 SQ.FT.	2318 SQ.FT.
(N-2) DISCONNECTION OF NON-ROOFTOP RUNOFF	85 SQ.FT.	85 SQ.FT.
(M-5) DW - DRIVEWAY DRAIN DRYWELL	910 SQ. FT.	910 SQ. FT.

SOILS TABLE

MAP UNIT SYMBOL	MAP UNIT NAME	K FACTOR RATING	HYDROLOGIC GROUP	HIGHLY ERODIBLE	HYDRIC
GhB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	0.28	B	NO	NO
GhC	GLENELG URBAN LAND COMPLEX, 8 TO 15 PERCENT SLOPES	0.28	B	NO	NO
GuB	GLENELG URBAN LAND UDORTHENTS COMPLEX, 0 TO 8 PERCENT SLOPES	0.43	C	YES	NO

REVISIONS	
DATE	REASON
11-12-2015	COUNTY COMMENTS
12-15-2015	COUNTY COMMENTS
3-17-2016	DRWY SWM
11-10-16	CHANGE HOUSE MODEL

JOHN E. LEMMERMAN
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 21096
EXP. 8-3-17

STATE OF MARYLAND JOHN E. LEMMERMAN No. 21096 PROFESSIONAL LAND SURVEYOR

STATE OF MARYLAND JACOB WRIGHT No. 17982 PROFESSIONAL ENGINEER

RTF Associates, Inc.
LAND SURVEYORS & PLANNERS
142 EAST MAIN STREET WESTMINSTER, MD 21157
410-848-2040 FAX# 443-289-8942 410-876-1222
EMAIL: RTF142@GMAIL.COM WWW.RTFSURVEYING.COM

CHECKED BY: JEL DATE: 11/10/2015
DRAWN BY: MEB DATE: 5/04/2015
SCALE: 1" = 30'

RTF JOB#: 15-03 COUNTY FILE: SDP-15-064 SHEET: 1 OF 1

SDP-15-064