	SHEET INDEX
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ENVIRONMENTAL CONCEPT PLAN
3	SCHEMATIC GRADING, SEDIMENT & EROSION CONTROL PLAN
4	STORMWATER MANAGEMENT DETAILS, SEDIMENT & EROSION CONTROL NOTES AND DETAILS
5	DRAINAGE AREA MAP

This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual.

Volumes I and II (effective October 2000, revised May 2009) will be satisfied on this project. The goal of creating hydrology similar to that of Woods in Good Condition will be accomplished through

the use of the practices contained within Chapter 5 of said manual. The achievement of this goal

This property is located on Tax Map #20, Parcel #140 and is zoned RC-DEO in accordance with the

mostly forested, a portion of the parcel is open fields and does not contain forest on it.

Howard County Zoning Regulations. The address of this property is known as 3355 Jennings Chapel Road.

The forest is counting as being cleared because there are no retention easements located on the lots.

by private well and septic. The majority of the runoff drains through existing swales located at the rear

of lots 1 and 3 from the south toward an existing off-site stream flowing along the northern boundary.

Wetlands, wetland and stream buffers, floodplain and steep slopes do not exist on this project.

Nature flow patterns will be maintained. Runoff from the proposed house will be treated with

III. Reduction of impervious areas through better site design, alternative surfaces and Nonstructural

Earth Dikes, Stone Outlet Trap and Super Silt Fence will be utilized to provide erosion and sediment

V. Implementation of ESD Planning Techniques and practices to the Maximum Extent Practicable (MEP)

The drainage from this area drains into the Cattail Creek Stream located to the northeast of the site which

drains into the Patuxent River Watershed Area. We are treating the proposed houses by 13 (M-5) Drywells and

the roadway is treated by (N-1) Non-rooftop disconnection and the remaining roadway and 1 portion of the house on lot 3

is treated by a single micro-bioretention facility. Per the 2004 web soil survey the soils on-site consist of "GaB and GaC"

There are not any wetlands, wetland buffer, stream buffer, floodplain's and steep slopes on-site. The proposed houses will be served

will remove the requirement of providing Channel Protection Volume.

The property was previously recorded as plat #24071 on 1/27/17. Lot 2 is

Glenela loam, Type B soils and "GmB" Glenville silt loam, a type C soil.

13-dry wells (M-5) before entering the existing swale to the rear.

A shared driveway is proposed to provide access to the proposed houses.

This driveway is treated by a non-rooftop disconnection credit (N-2).

IV. Integration of Erosion and Sediment Controls into Stormwater Strategy

The full required E5D volume is being provided.

ENVIRONMENTAL CONCEPT PLAN

SQUARE WOODS

LOTS 1 THRU 3

A Resubdivision of Lot 2, Recorded As "Casasco Property, Lots 1 And 2" Plat Nos. 24070 Thru 24071

ZONED: RC-DEO TAX MAP No. 20 PARCEL No. 140

ADC MAP BOOK: PAGE 15 BLOCK F6 VICINITY MAP

4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

5CALE : 1" = 1200

LEGEND

VI. Request for Design Manual Waiver

No Waivers are required

II. Maintenance of Natural Flow Patterns

----- EXISTING 2' CONTOURS - EXISTING 10' CONTOURS EXISTING TREE LINE EXISTING WOOD FENCE EXISTING 15% - 24.99% SLOPES SOIL LINES AND TYPES DENOTES EXISTING WELL ~~~~~ DENOTES PROPOSED TREELINE

DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE DENOTES DIVERSION FENCE DENOTES SUPER SILT FENCE DENOTES LIMIT OF DISTURBANCE

DENOTES BUILDING RESTRICTION LINE

I FISHER, COLLINS & CARTER, INC.

PROFESSIONAL CERTIFICATION

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. 30306, EXPIRATION DATE: 01/12/2010.

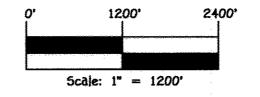
SITE ANALYSIS DATA CHART

TOTAL GREEN OPEN AREA = 8.93 Ac. *

TOTAL IMPERVIOUS AREA = 0.84 Ac. ±

AREA OF ERODIBLE SOILS = 1.01 Ac.+

TOTAL AREA OF THIS SUBMISSION = 9.774 ac. * LIMIT OF DISTURBED AREA = 222,504 Sq. Ft. or 5.100 Ac+. PRESENT ZONING DESIGNATION = RC-DEO (PER 10/06/13 COMPREHENSIVE ZONING PLAN). PROPOSED USE: RESIDENTIAL SUBDIVISION (SINGLE FAMILY DETACHED) OPEN SPACE ON SITE: N/A RECREATIONAL AREA PROVIDED: N/A BUILDING COVERAGE OF SITE: 11,550 SQ.FT. OR 0.265 Ac. * PREVIOUS HOWARD COUNTY FILES: F-16-120 TOTAL AREA OF FLOODPLAIN: 0.00 Ac. TOTAL AREA OF SLOPES: 25% or GREATER = 0.00 Ac. 15%-24.99% = 0.00 Ac. (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA) TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 Ac*
TOTAL AREA OF STREAMS (INCLUDING BUFFER) = 0.00 Ac* TOTAL AREA OF FOREST = 3.77 Ac. +



GENERAL NOTES

1. PROPERTY ZONED RC-DEO PER 10/6/13 COMPREHENSIVE ZONING PLAN. A. TOTAL TRACT AREA = 9.774 Ac+
B. AREA OF PROPOSED ROAD R/W = 0.00 Ac+ AREA OF PROPOSED BUILDABLE LOTS = 9.774 Ac+

3. NUMBER OF LOTS/PARCELS PROPOSED = 3

4. SOILS INFORMATION TAKEN FROM NRCS WEB SOIL SURVEY. SOILS MAP #9.

5. FOREST STAND & WETLANDS DELINEATION REPORT DATED JANUARY, 2017 WAS PREPARED BY ECO-SCIENCE PROFESSIONAL, INC.

6. THERE ARE NO STEEP SLOPES OF 25% OR GREATER ON SITE. 7. NO CEMETERIES EXIST ON SITE BY VISUAL OBSERVATION OR LISTED IN AVAILABLE HOWARD COUNTY CEMETERY INVENTORY MAI

8. THERE ARE NO HISTORIC HOUSE STRUCTURES ON-SITE.

9. SITE IS ADJACENT TO ONE SCENIC ROAD (JENNINGS CHAPEL ROAD. A SCENIC ROADS REPORT HAS BEEN PROVIDED BY FISHER, COLLINS & CARTER, INC. DATED 01/20/17.

10. A TRAFFIC STUDY IS NOT REQUIRED FOR THIS MINOR SUBDIVISION.

11. THERE IS ONE EXISTING STRUCTURE (SHED) AND WOOD FENCING LOCATED ONSITE. BOTH ARE TO BE REMOVED. 12. ALL LOTS AREAS ARE MORE OR LESS.

12. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING

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)) 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) STRUCTURE CLEARANCES - MINIMUM 12 FEET:

G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.

13. ALL EXISTING WELL AND SEPTIC COMPONENTS TO BE ABANDONED OR REPLACED MUST BE PROPERLY ABANDONED AND REPLACEMENT COMPONENTS APPROVED BY THE HEALTH DEPARTMENT PRIOR TO SIGNATURE

14. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE

16. A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON AUGUST 22, 2016.

17. THERE IS ONE EXISTING SEPTIC SYSTEM LOCATED ONSITE (TO BE USED FOR PROPOSED LOT 3). THERE IS ONE EXISTING WELL LOCATED ON LOT 3 (TO BE USED FOR PROPOSED LOT 3).

18. It is area designates a private sewerage easement of at least 10,000 square feet 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 EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY

19. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT

20. ANY CHANGES TO THE PRIVATE SEWERAGE AREA SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.

21. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION

22. THERE ARE NO AREAS OF 100-YEAR FLOODPLAIN ON THIS PROJECT.

23. FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBDIMISION WILL BE FULFILLED BY THE USE OF A FOREST BANK.

24. PERIMETER LANDSCAPING FOR THIS DEVELOPMENT SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDINISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL FINAL LANDSCAPING REVIEW AND SURETY is deferred until the final subdivision plan stage.

26. THE EXISTING TOPOGRAPHY INFORMATION SHOWN IS BASED ON HOWARD COUNTY AERIAL CONTOURS AND SUPPLEMENTED WITH A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED ON OR ABOUT 7/21/16 BY FISHER, COLLINS &

27. BOUNDARY INFORMATION IS BASED ON A SURVEY PERFORMED ON OR ABOUT FEBRUARY, 2016 BY FISHER, COLLINS & CARTER, INC.

25. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAVERS HAVE BEEN APPROVED.

8. Coordinates Based on Nad '83, Maryland coordinate system as projected by Howard County Geodetic Control Stations Nos CONTROL STATION NO. 2082 N 500,346.30 ELEV. 577.92

E 1,287,505.58 N 589,965,19

29. THIS PROPERTY IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT. PRIVATE WELL AND SEPTIC WILL BE UTILIZED FOR THIS PROJECT

30. STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, STORMWATER MANAGEMENT IS BEING PROVIDED BY THE USE OF THREE AREAS OF (M-5) DRYWELLS, ONE (M-6) MICRO-BIORETENTION FACILITY AND ONE AREA OF (N-1) NON-ROOFTOP DISCONNECTION. FACILITIES TO MEET AND EXCEED THE ESD VOLUME.

1. STORM WATER MANAGEMENT DEVICES LOCATED ON INDIVIDUAL LOTS WILL BE OWNED AND MAINTAINED BY THAT PARTICULAR LOT OWNER AND SUBJECT TO THE REQUIREMENTS OF A RECORDED DECLARATION OF COVENANT, SWM DEVICES LOCATED WITHIN THE PUBLIC R/W WILL BE PRIVATELY OWNED AND JOINTLY MAINTAINED, AND SWM DEVICES LOCATED ON PARCELS WILL BE OWNED AND MAINTAINED BY THE H.O.A., SWM FACILITIES SERVING PUBLIC ROADS, BUT LOCATED ON PRIVATE LOTS WILL BE PRIVATELY OWNED AND JOINTLY MAINTAINED

32. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.

33. ALL WELLS MUST BE DRILLED PRIOR TO HOWARD COUNTY HEALTH DEPARTMENT SIGNATURE OF THE FINAL PLAT.

34. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR REDLINE REVISION PLAN, REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR REDLINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN

35. THERE IS AN AREA OF ERODIBLE SOILS LOCATED TOWARDS THE REAR OF THE PROPERTY

Owner/Developer

Paul A. Casasco And

Jennifer K. Casasco

TITLE SHEET

ENVIRONMENTAL CONCEPT PLAN SQUARE WOODS

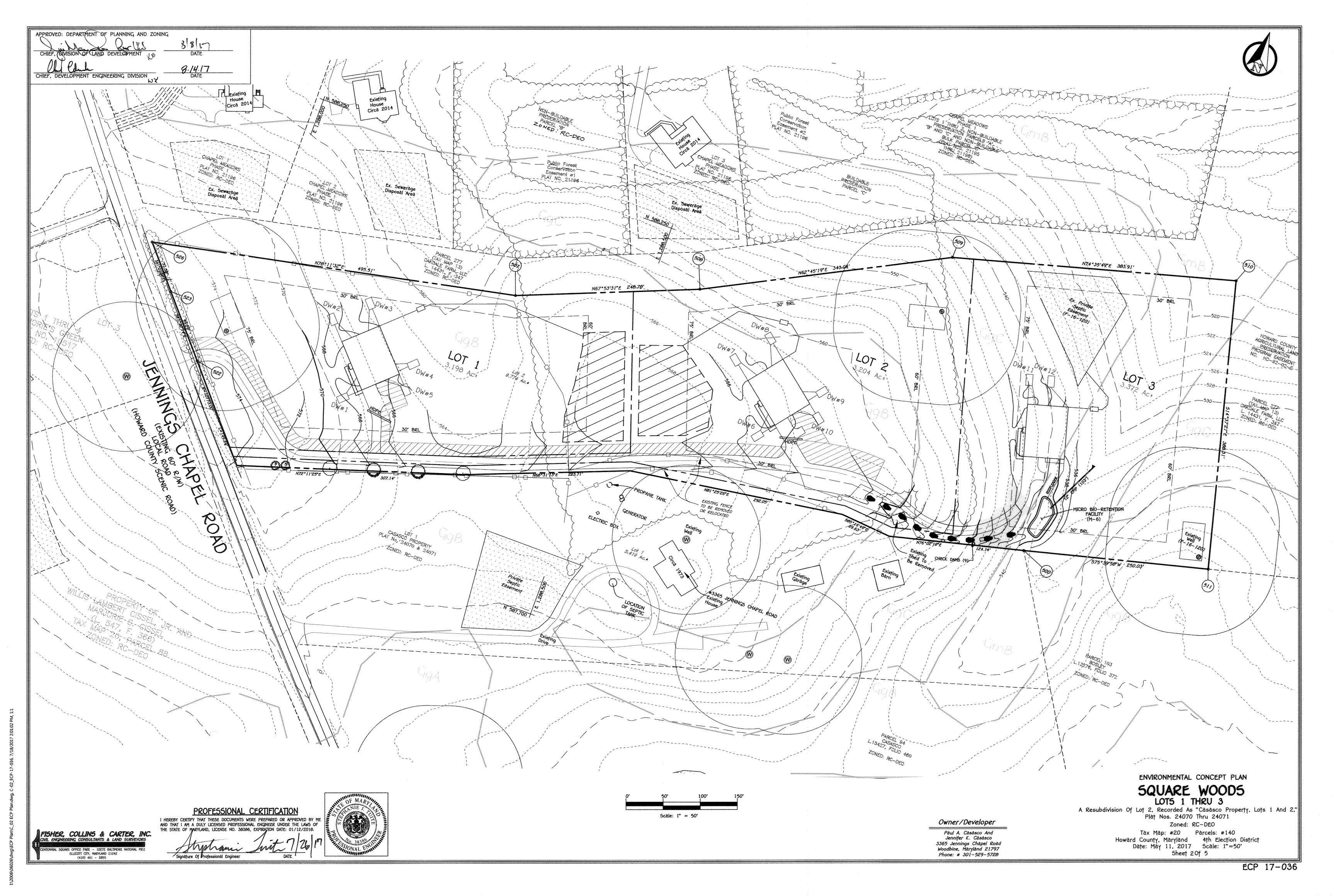
A Resubdivision Of Lot 2, Recorded As "Casasco Property, Lots 1 And 2," Plat Nos. 24070 Thru 24071

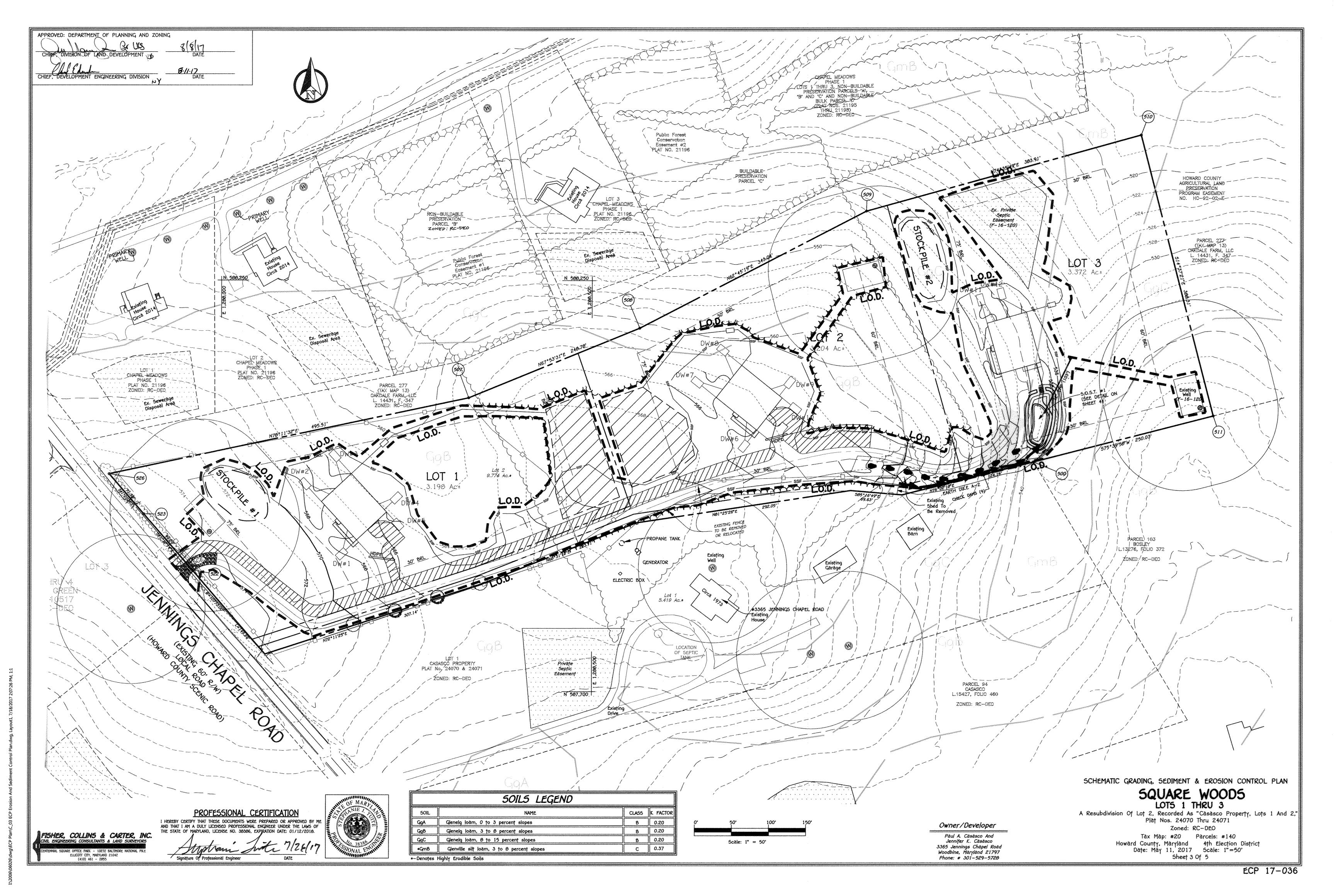
> Tax Map: #20 Parcels: #140 Howard County, Maryland 4th Election District

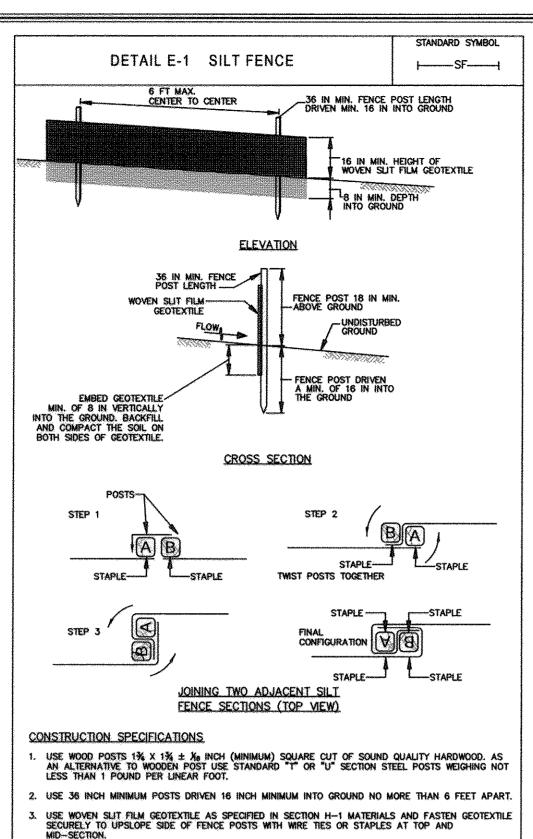
3365 Jennings Chapel Road Date: May 11, 2017 Scale: 1"=50" Woodbine, Maryland 21797 Sheet 1 Of 5 Phone: # 301-529-5728

8/8/17

DEVELOPMENT ENGINEERING DIVISION







PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.

EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE AUGMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

GROUND WATER ! abla

DRY WELL DETAIL (M-5)

NOT TO SCALE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

*THE EXACT NUMBER OF DRYWELLS REQUIRED AND THE LENGTH AND WIDTH

WILL BE DETERMINED ONCE DOWNSPOUT DRAINAGE PATTERNS ARE DETERMINED.

—CAP WITH LOCK

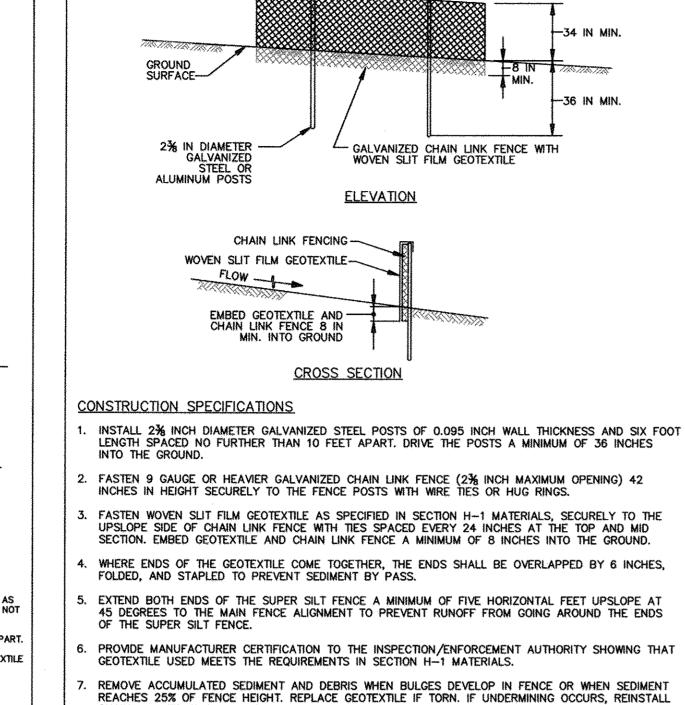
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

SCREEN-

BUILDING

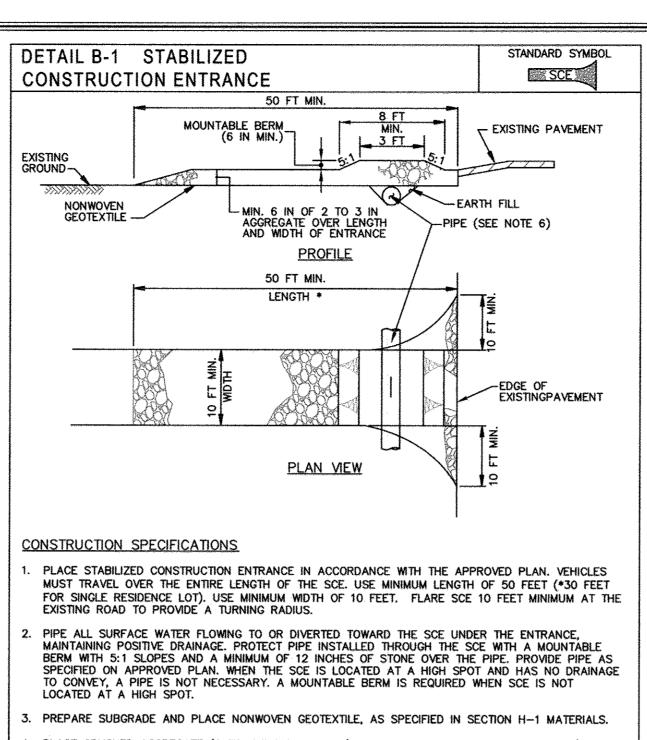
FOUNDATION-

__LEADER

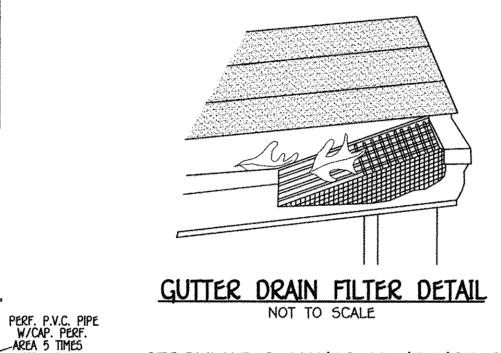


DETAIL E-3 SUPER SILT FENCE

├──SSF──



4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION



CHAIN LINK FENCING AND GEOTEXTILE.

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

STORMWATER MANAGEMENT NOTES

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5. "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.

MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN

4. FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.

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

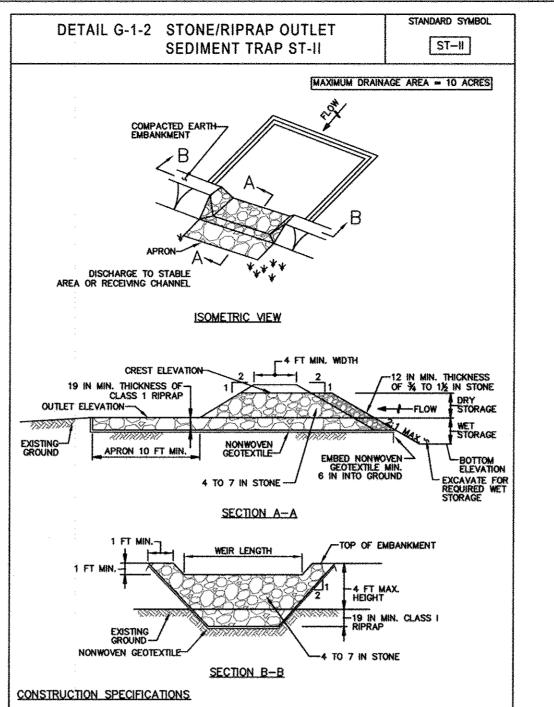
A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT. B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH

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 A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE

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

DRY WELL CHART								
DRYWELL NO.	AREA OF ROOF TO DRYWELL	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	L W D	REMARK5		
1	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 1		
2	1,000 SQ. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 1		
3	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 1		
4	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 1		
5	1,000 SQ. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 1		
6	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 2		
7	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 2		
8	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 2		
9	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 2		
10	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 2		
11	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 3		
12	1,000 5Q. FT.	305 C.F.	540 C.F.	100%*	15' x 9' x 4'	LOT 3		
APEA OF TREATMENT EXCEEDS THAT REQUIRED								

* AREA OF TREATMENT EXCEEDS THAT REQUIRED. NOTE: ROOFTOP AREA IS THE MAXIMUM TO EACH DRYWELL ONLY.



CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.

USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.

CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST, COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.

MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.

PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP, OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP, EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.

USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR. USE CLASS I RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.

PLACE 1 FOOT OF CLEAN 1/4 TO 11/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR.

CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.

). STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF

1. REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (50% OF WET STORAGE DEPTH), DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE, KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION, REMOVE ANY TREES, BRUSH, OR OTHER WOODLY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY, MAINTAIN LINE CRADE AND CROSS SECTION.

. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL

13. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1) A MINIMUM OF 40 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID) PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).

2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.

b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-5). TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND

ESTABLISHMENT OF GRASSES. 5) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE

HOWARD COUNTY SEDIMENT CONTROL INSPECTOR. 6) SITE ANALYSIS: 9.774 ACRES

TOTAL AREA OF SITE (THIS SUBMISSION) AREA DISTURBED 5.108 ACRES AREA TO BE ROOFED OR PAVED 0.84 ACRES AREA TO BE VEGETATIVELY STABILIZED 4.268 ACRES TOTAL CUT 5,000 CU.YDS. (unadjusted)

5,000 CU.YDS. (unadjusted) TOTAL FILL WASTE AREA LOCATION ON-SITE 7) ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF

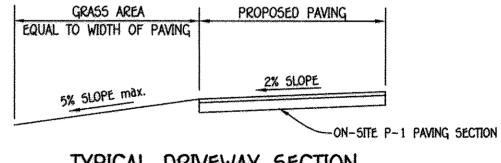
UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. B) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

9) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS

11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.



TYPICAL DRIVEWAY SECTION FOR NON-ROOFTOP DISCONNECT CREDIT

NOT TO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED. DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) 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 COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

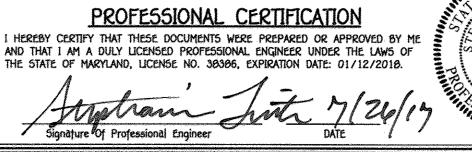
STORMWATER MANAGEMENT DETAILS. SEDIMENT & EROSION CONTROL NOTES AND DETAILS

SQUARE WOODS LOTS 1 THRU 3

A Resubdivision Of Lot 2, Recorded As "Casasco Property, Lots 1 And 2," Plat Nos. 24070 Thru 24071

Zoned: RC-DEO Tax Map: #20 Parcels: #140 Howard County, Maryland 4th Election District Date: May 11, 2017 Scale: 1"=50" Sheet 4 Of 5

FISHER, COLLINS & CARTER, INC. VIL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855



PIPE AREA

FILTER FABRIC TOP AND SIDES

(NON- WOVEN) M5HA CL "C"

'-O" BELOW TRENCH

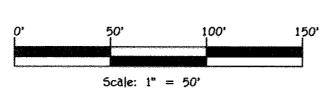
TRENCH MAY NOT BE

INSTALLED IN FILL

OBSERVATION WELL

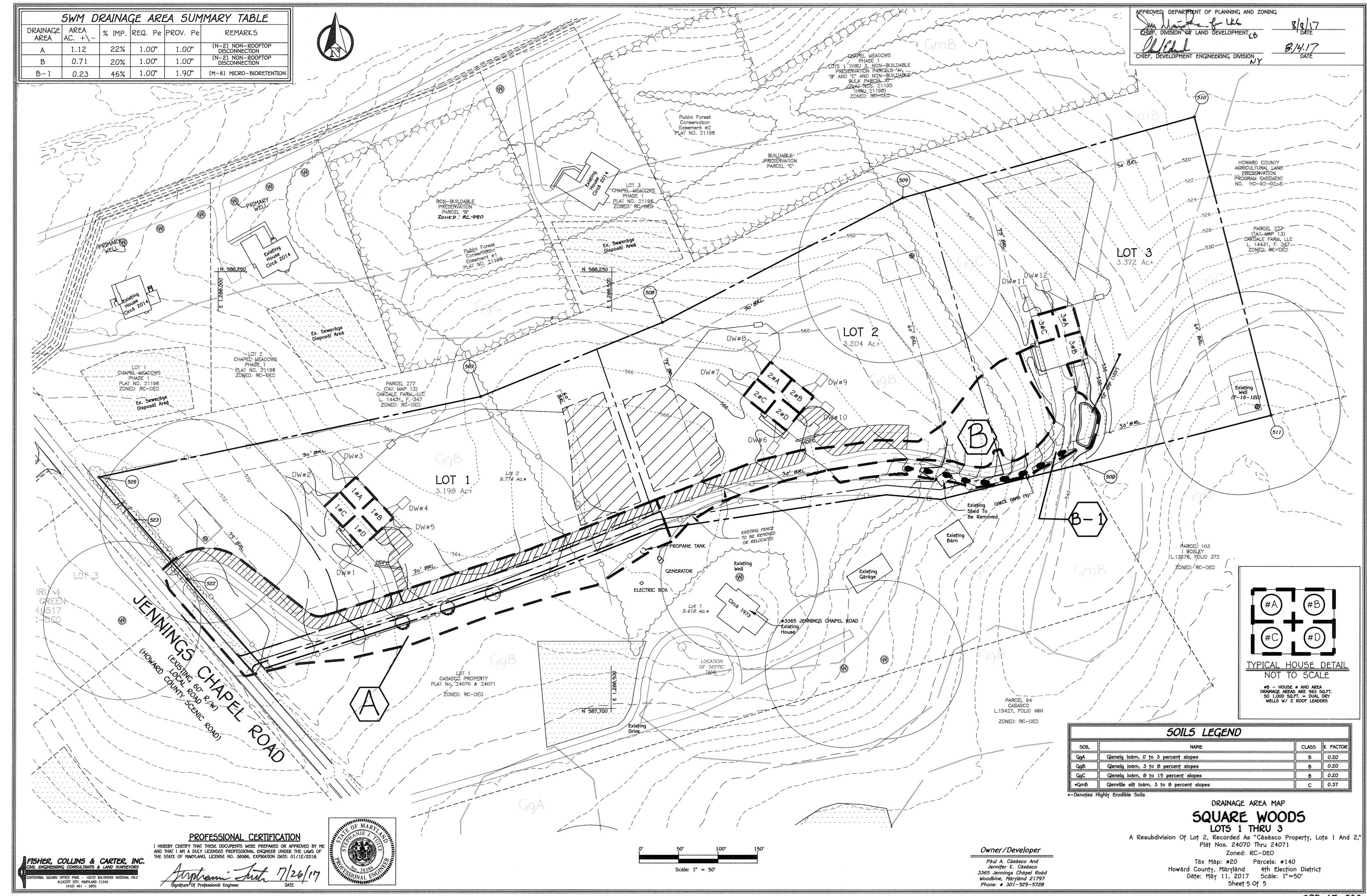
4-6 INCH PERFORATED

PVC PIPE ON CONCRETE



Owner/Developer Paul A. Casasco And Jennifer K. Casasco 3365 Jennings Chapel Road Woodbine, Maryland 21797

Phone: # 301-529-5728



ECP 17-036