

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ENVIRONMENTAL CONCEPT PLAN
3	CONCEPTUAL EROSION AND SEDIMENT CONTROL PLAN

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Karl Sheehy
 CHIEF, DIVISION OF LAND DEVELOPMENT **8/31/10**
 DATE
W. J. ...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION **8/31/10**
 DATE

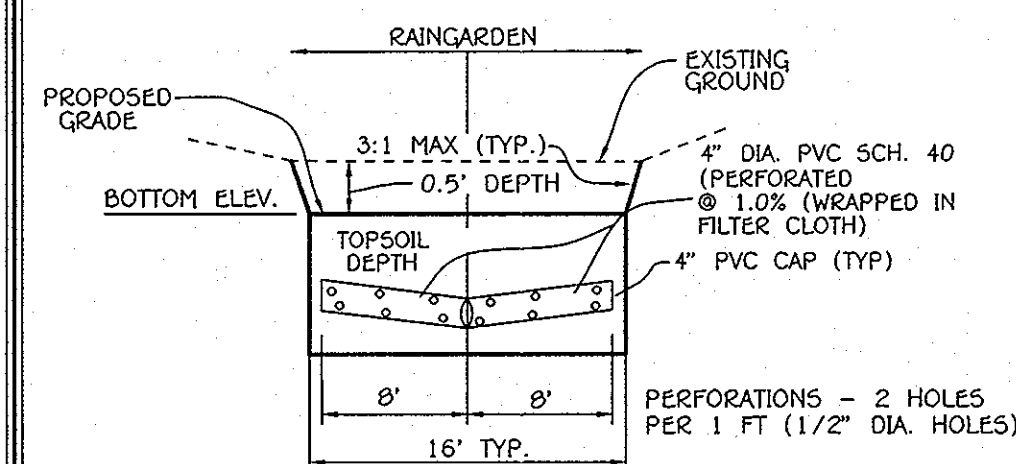
ENVIRONMENTAL CONCEPT PLAN

CHERRYTREE VIEW

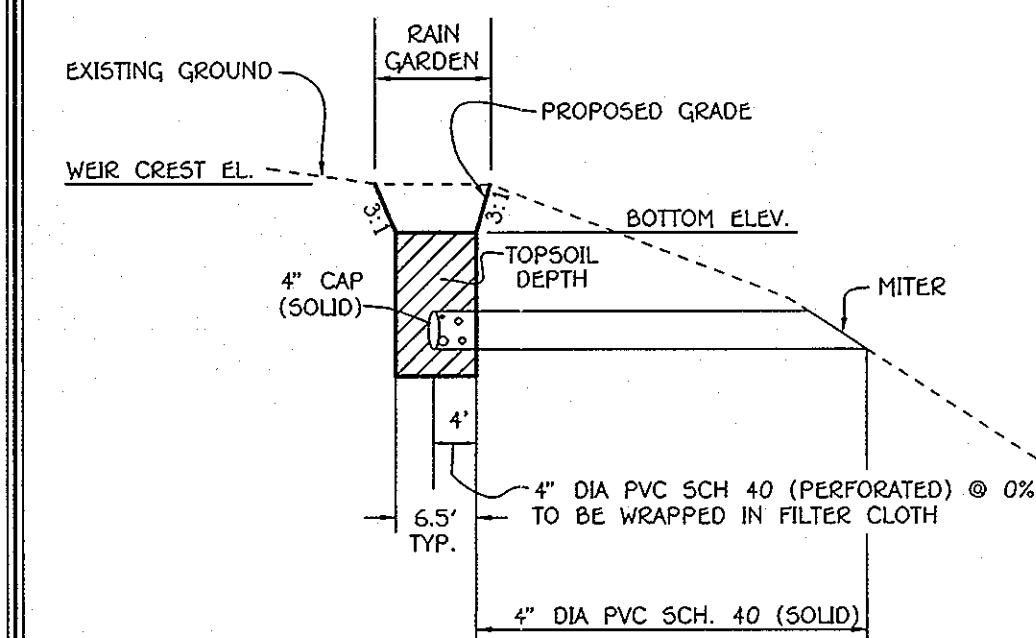
BUILDABLE LOTS 1 - 11

ZONING: R-20

TAX MAP No. 46 GRID No. 11 PARCEL No. 55

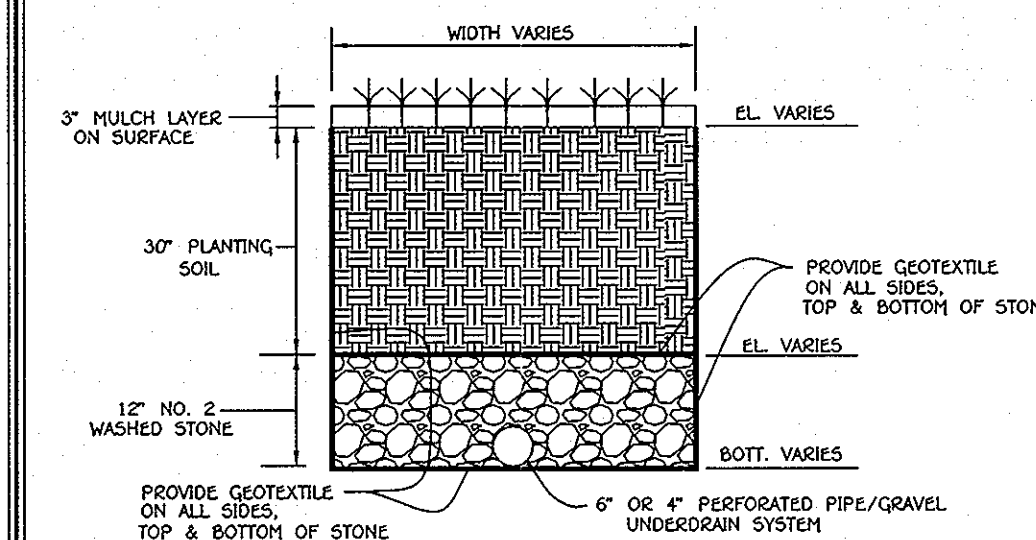


PROFILE ALONG 4" PVC UNDERDRAIN
NO SCALE



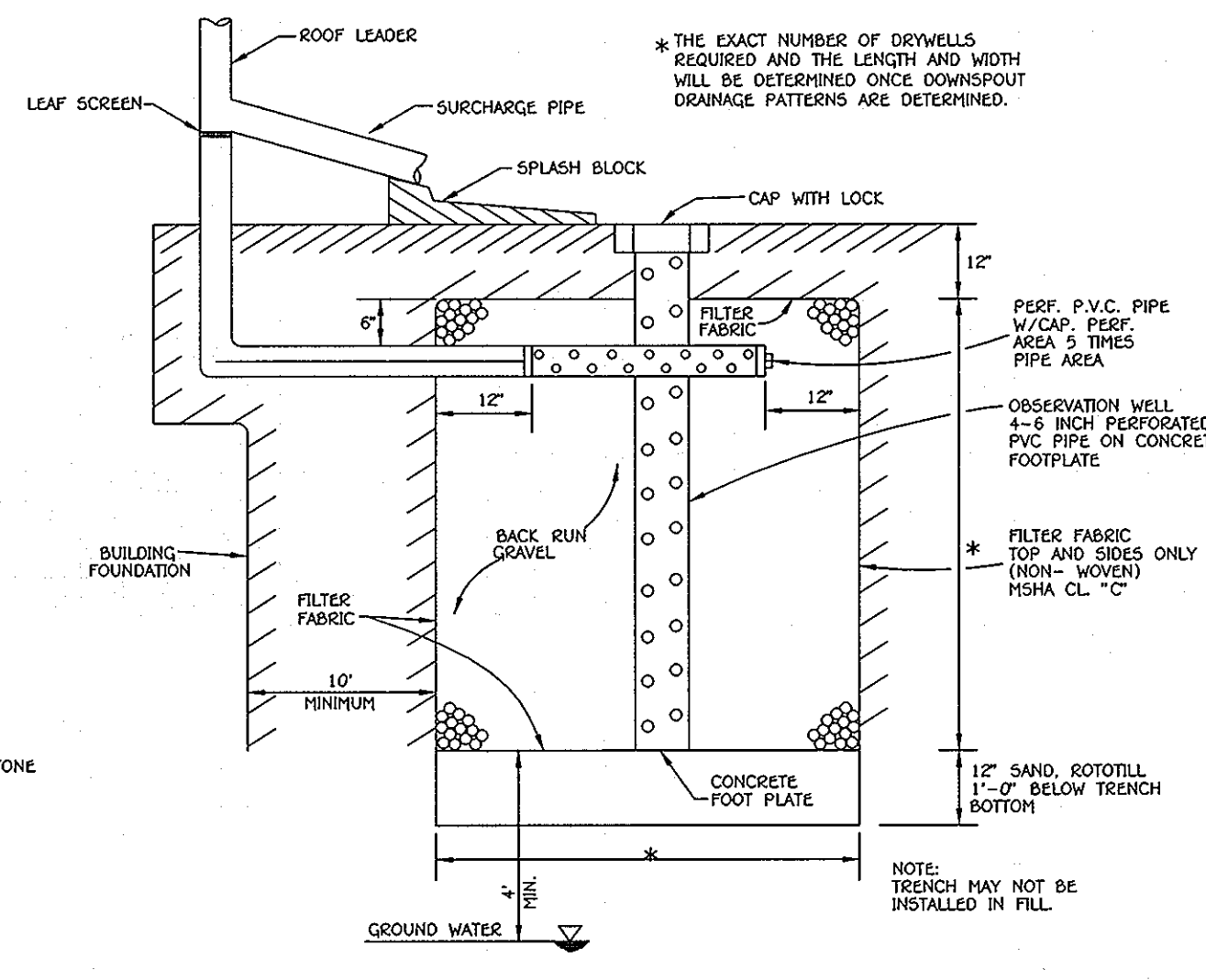
PROFILE ALONG 4" PVC OUTLET
NO SCALE

RAINGARDEN DETAIL
NO SCALE

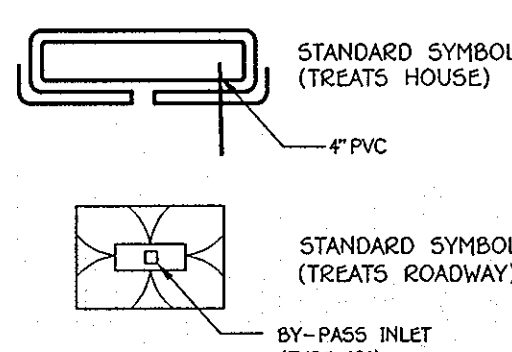


TYPICAL SECTION - BIO-RETENTION FACILITY

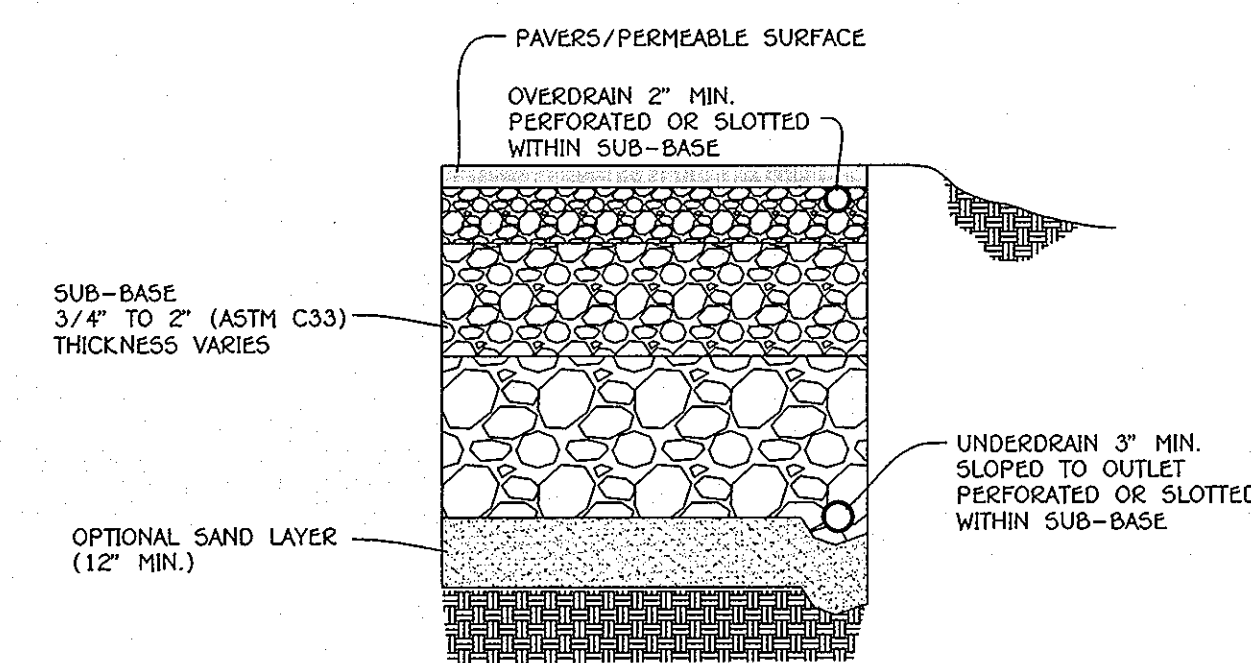
BIO-RETENTION DETAIL
NO SCALE



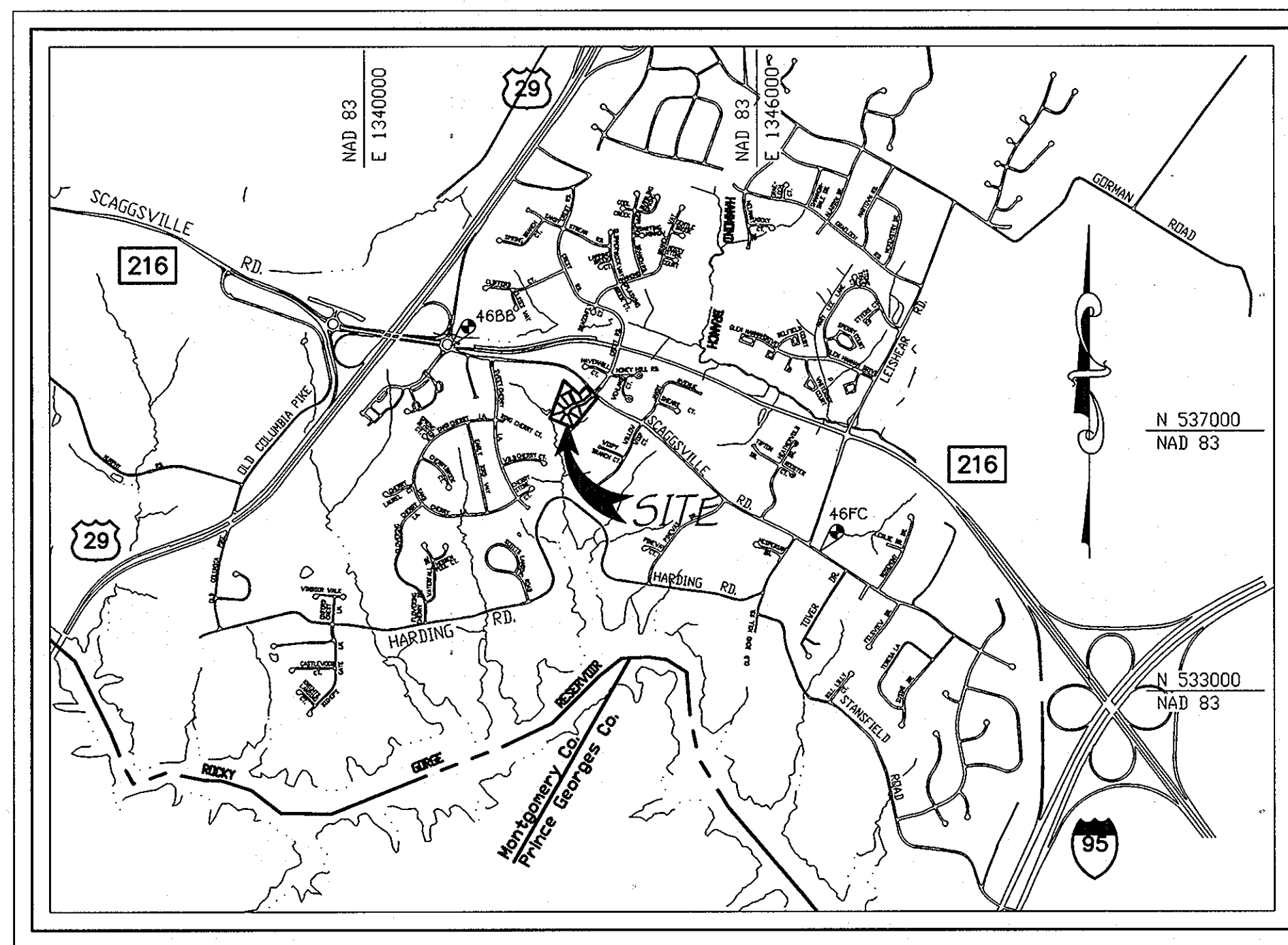
TYPICAL DRY WELL DETAIL
NOT TO SCALE



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 (15% TO 24.9%)
---	EXISTING TREELINE
---	PROPOSED TREELINE
WB	WETLANDS BUFFER
WL	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS



TYPICAL SECTION - PERMEABLE PAVEMENT
w/ OVERDRAIN & UNDERDRAIN
NO SCALE



VICINITY MAP
SCALE: 1" = 2000'

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ESD NARRATIVE:

- THE EXISTING NATURAL RESOURCES ON-SITE CONSIST OF WETLANDS AND ASSOCIATED OFF-SITE STREAM VALLEY IN ADDITION TO OFF-SITE EXISTING WOODS. THESE RESOURCES ARE BEING PROTECTED BY UTILIZING THE REQUIRED WETLAND BUFFERS AND STREAM BUFFERS FOR THESE FEATURES. THERE ARE NO EXISTING WOODS ON-SITE.
- THE SITE IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSE AS POSSIBLE. NO STREAM IMPACTS ARE PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS.
- THE REDUCTION OF IMPERVIOUS AREA TYPICALLY EXPERIENCED IN R-20 ZONING WILL BE ACHIEVED THRU THE USE OF ALTERNATIVE SURFACES OR PERMEABLE PAVEMENT FOR THE PRIVATE DRIVEWAYS (LOTS 1-11). THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WILL NOT ALLOW PERMEABLE PAVEMENT FOR PUBLIC ROADS AT THIS TIME. HOWEVER, THE USE OF FLOW THRU INLETS DRAWING INTO BIO-RETENTION FACILITIES WITH BYPASS INLETS TO TREAT ROADWAY RUNOFF ARE BEING PROPOSED.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SEVERAL SEDIMENT TRAPS, EACH WITH SMALLER DRAINAGE AREAS TO AVOID THE USE OF ONE LARGE BASIN.
- THE PROPOSED ESD MEASURES SHOWN ON THIS PLAN HAVE MET THE REQUIRED PE FOR THIS SITE. NO ADDITIONAL CHAPTER 3 DEVICES ARE PROPOSED AS ALTERNATIVES TO THE CHAPTER 5 ESD MEASURES.
- THERE ARE NO DESIGN MANUAL WAIVERS PLANNED FOR THIS SITE IN REGARDS TO ENVIRONMENTAL DISTURBANCES.

ENVIRONMENTAL INFORMATION:

- GROSS AREA OF TRACT = 6.5 ACRES
- LIMIT OF DISTURBANCE AREA = 4.65 ACRES*
- IMPERVIOUS AREA = 1.5 ACRES*
- GREEN OPEN AREA = 5.0 ACRES*
- PROPOSED SITE USE: MEDIUM DENSITY RESIDENTIAL
- AREA OF FLOODPLAIN = 0.0 ACRES
- AREA OF 15% OR GREATER SLOPES = 0.4 ACRES*
- FOREST AREA = 0.0 ACRES*
- WETLAND/WETLAND BUFFER AREA = 0.2 ACRES

GENERAL NOTES

- THIS SUBDIVISION PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS AMENDED ON OCTOBER, 2003.
- SUBJECT PROPERTY ZONED R-20 PER 02/02/04 COMPREHENSIVE ZONING PLAN.
- a. GROSS AREA OF TRACT = 6.541 AC.*
b. AREA OF FLOODPLAIN = 0.00 AC.*
c. AREA OF 25% OR GREATER SLOPES = 0.00 AC.*
- AREA OF PROPOSED ROAD R/W = 0.90 AC.*
- a. AREA OF PROPOSED BUILDABLE LOTS = 5.635 AC.*
b. AREA OF PROPOSED OPEN SPACE LOTS = 0.00 AC.*
c. AREA OF OPEN SPACE REQUIRED = (6.541 x 6%) = 0.39 AC.*
d. AREA OF NON-CREDITED OPEN SPACE = 0.00 AC.*
e. AREA OF CREDITED/TOTAL OPEN SPACE PROVIDED = 0.00 AC.* (FEE-IN-LIEU) SEE NOTE 28
- NUMBER OF LOTS PROPOSED: 11 LOTS
a. BUILDABLE = 11
b. OPEN SPACE LOTS = 0
- PRIOR HOWARD COUNTY PROJECT NUMBERS: ECP-11-003
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- WATER IS PUBLIC (CONTRACT NO. 354-W & 20-1777). SEWER IS PUBLIC (CONTRACT NO. 20-1777)
- SOILS INFORMATION TAKEN FROM SOIL SURVEY, HOWARD COUNTY, MARYLAND.
- BOUNDARY OUTLINE BASED ON FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. DATED ON OR ABOUT MAY, 2010.
- ALL EXISTING STRUCTURES LOCATED ON SITE ARE TO REMAIN UNLESS OTHERWISE NOTED.
- TOPOGRAPHIC CONTOURS BASED ON FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, INC. DATED MAY, 2010.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 466B AND 46FC WERE USED FOR THIS PROJECT.
HOWARD COUNTY STATION 466B N 538306.50150000 E 1341329.15640000 ELEVATION: 422.64'
HOWARD COUNTY STATION 46FC N 535145.94450000 E 1346954.84270000 ELEVATION: 403.75'
- THERE ARE NO AREAS OF STEEP SLOPES LOCATED ON THIS PROPERTY AS DEFINED BY THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.116.B
- STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY AND MARYLAND 37B SPECIFICATIONS. RECHARGE VOLUME WILL BE PROVIDED THROUGH THE USE OF A STONE RESERVOIR LOCATED BENEATH THE PROPOSED MICRO BIO-RETENTION AREAS. THESE FIVE (5) MICRO BIO-RETENTION FACILITIES PROVIDE THE REQUIRED WATER QUALITY VOLUMES FOR ROAD IMPROVEMENTS PROPOSED. THE DESIGN IS IN COMPLIANCE WITH MDE CHAPTER 5. OVERBANK FLOOD PROTECTION VOLUME AND EXTREME FLOOD VOLUMES ARE NOT REQUIRED FOR THIS SITE. THE FIVE (5) MICRO BIO-RETENTION FACILITIES WILL BE PRIVATELY OWNED BY H.O.A. AND JOINTLY MAINTAINED BY H.O.A. AND HOWARD COUNTY. THE TEN (10) BIO-RETENTION FACILITIES LOCATED ON THE BUILDABLE LOTS (1 THRU 5) PROVIDE W/W & REV FOR THE PROPOSED DWELLINGS AND ARE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER. DRYWELLS ARE PROPOSED FOR LOT 10. PERMEABLE PAVEMENT IS PROPOSED FOR THE INDIVIDUAL DRIVEWAYS FOR LOTS 1 THRU 11. THREE (3) RAINGARDENS ARE ALSO PROPOSED FOR LOTS 7, 8 & 10 TO PROVIDE ADDITIONAL W/W & REV.
- THERE IS NO FLOODPLAIN WITHIN THIS SITE.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED JUNE, 2010.
- THE FOREST CONSERVATION REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION REQUIRING 1.0 ACRE OF ON-SITE AFFORESTATION WILL BE FULFILLED BY A FEE-IN-LIEU PAYMENT OF \$32,670.00 BASED ON (\$0.75 PER SQ.FT. x 43,560 SQ.FT) AT FINAL PLAN STAGE.
- THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY HILLIS-CARNES, DATED JULY, 2010.
- THE FOREST STAND DELINEATION AND WETLAND DELINEATION FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED JUNE, 2010.
- 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 \$10,500.00 BASED ON 34 SHADE TREES @ \$300/TREE AND 2 EVERGREEN TREES @ \$150/TREE WILL BE PROVIDED AS PART OF THE DEVELOPER'S AGREEMENT AT FINAL PLAN STAGE.
- STREET LIGHTS WILL BE REQUIRED IN THIS DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL VOLUME II (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- A FEE-IN-LIEU PAYMENT FOR OPEN SPACE FOR 10 NEW LOTS AT \$1,500.00 PER LOT FOR A TOTAL OF \$15,000.00 WILL BE PAID TO THE DEPARTMENT OF RECREATION AND PARKS AT THE FINAL PLAN STAGE.

ENVIRONMENTAL CONCEPT PLAN CHERRYTREE VIEW BUILDABLE LOTS 1 - 11

ZONING: R-20
 TAX MAP No. 46 GRID No. 11 PARCEL No. 55
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: AUGUST 24, 2010
 SHEET 1 OF 3

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SOURCE OFFICE PARK - 10272 BALTIMORE NATIONAL FEE
 GLENNON CRT. MARYLAND 21042
 (410) 461-2895

OWNER
 HILEY A. OENOROFF & WF.
 10909 SCAGGSVILLE ROAD
 LAUREL, MARYLAND 20723
 ATTN: MR. DONALD R. REUWER, JR.
 443-367-0422

DEVELOPER
 FAL DEVELOPERS, L.L.C.
 5300 DORSEY HALL DRIVE, SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 ATTN: MR. DONALD R. REUWER, JR.
 443-367-0422



8-25-10
DATE

"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 2-22-11."

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Victor Steinhilber 3/31/10
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
William 8/31/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SPECIMEN TREE CHART

SYMBOL	SPECIES, SIZE	COMMENT
	BLACK OAK, 51" DBH	GOOD CONDITION
	NORWAY MAPLE, 32" DBH	GOOD CONDITION, NON-NATIVE SPECIES

STORMWATER MANAGEMENT PRACTICES

LOT No.	DRY WELL	PERMEABLE PAVING	BIO-RETENTION	RAINGARDEN	ESDv = REQ'D.	ESDv = PROV'D.
1		X	X		35.25 Cu.Ft.	42.2 Cu.Ft.
2		X	X		56.62 Cu.Ft.	62.0 Cu.Ft.
3		X	X		43.56 Cu.Ft.	55.5 Cu.Ft.
4		X	X		34.85 Cu.Ft.	46.2 Cu.Ft.
5		X	X		38.33 Cu.Ft.	40.9 Cu.Ft.
6		X	X		38.33 Cu.Ft.	40.9 Cu.Ft.
7		X	X	X	40.95 Cu.Ft.	76.0 Cu.Ft.
8		X	X	X	69.2 Cu.Ft.	69.36 Cu.Ft.
9		X	X	X	38.33 Cu.Ft.	39.68 Cu.Ft.
10	X	X		X	42.25 Cu.Ft.	57.37 Cu.Ft.
11		X				

LOT 11 HAS AN EXISTING DWELLING TO REMAIN WITH A PROPOSED DRIVEWAY ENTRANCE.

SOILS LEGEND

SOIL	NAME	CLASS
**Ba	Baile silt loam	D
GjB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
GjC3	Glenelg loam, 8 to 15 percent slopes, severely eroded	B
GjD3	Glenelg loam, 15 to 25 percent slopes, severely eroded	B

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

LEGEND

- DENOTES PERMEABLE PAVEMENT
- DENOTES TYPICAL DRY WELL
- DENOTES BIO-RETENTION FACILITY (FOR ROADWAY RUNOFF)
- DENOTES BIO-RETENTION FACILITY (FOR ROOFTOP RUNOFF)
- DENOTES RAINGARDEN (FOR ROOFTOP RUNOFF)
- DENOTES 15% - 24.99% SLOPES

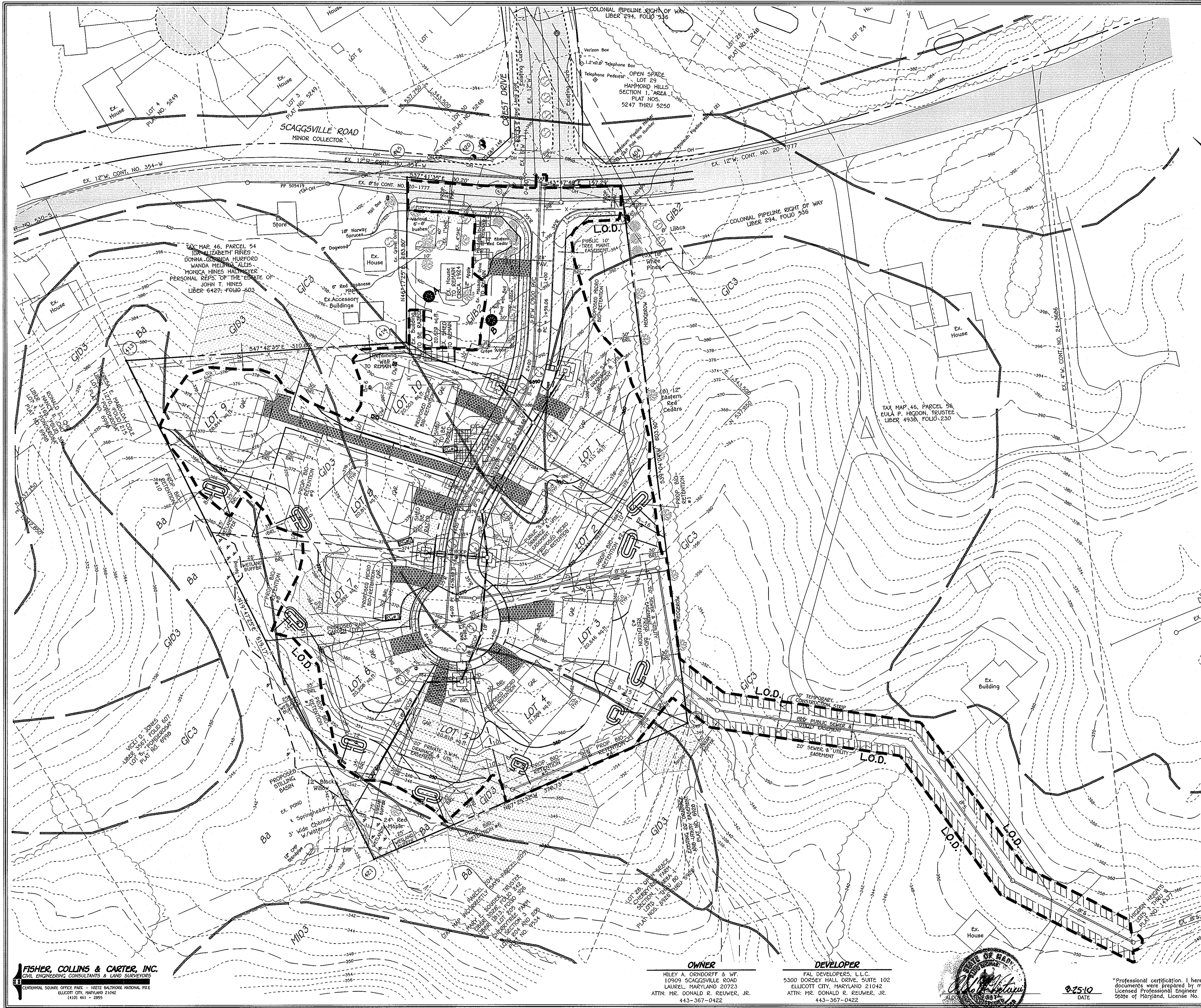
NOTE:
 1. THE TWO SPECIMEN TREES LOCATED ON-SITE ON LOT 11 ARE TO REMAIN.
 2. THERE ARE NO EXISTING SLOPES 25% OR GREATER LOCATED ON-SITE.

PLAN

SCALE: 1" = 50'

**ENVIRONMENTAL CONCEPT PLAN
 CHERRYTREE VIEW
 BUILDABLE LOTS 1 - 11**

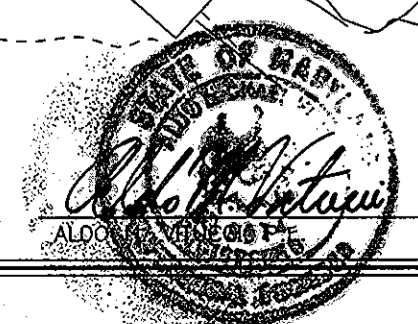
ZONING: R-20
 TAX MAP No. 46 GRID No. 11 PARCEL No. 55
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: AUGUST 24, 2010
 SHEET 2 OF 3



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SOURCE OFFICE, PAUL - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-8995

OWNER
 HILEY A. ORNDORFF & WF.
 10909 SCAGGSVILLE ROAD
 LAUREL, MARYLAND 20723
 ATTN: MR. DONALD R. REUWER, JR.
 443-367-0422

DEVELOPER
 PAL DEVELOPERS, L.L.C.
 5300 DORSEY HALL DRIVE, SUITE 102
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 ATTN: MR. DONALD R. REUWER, JR.
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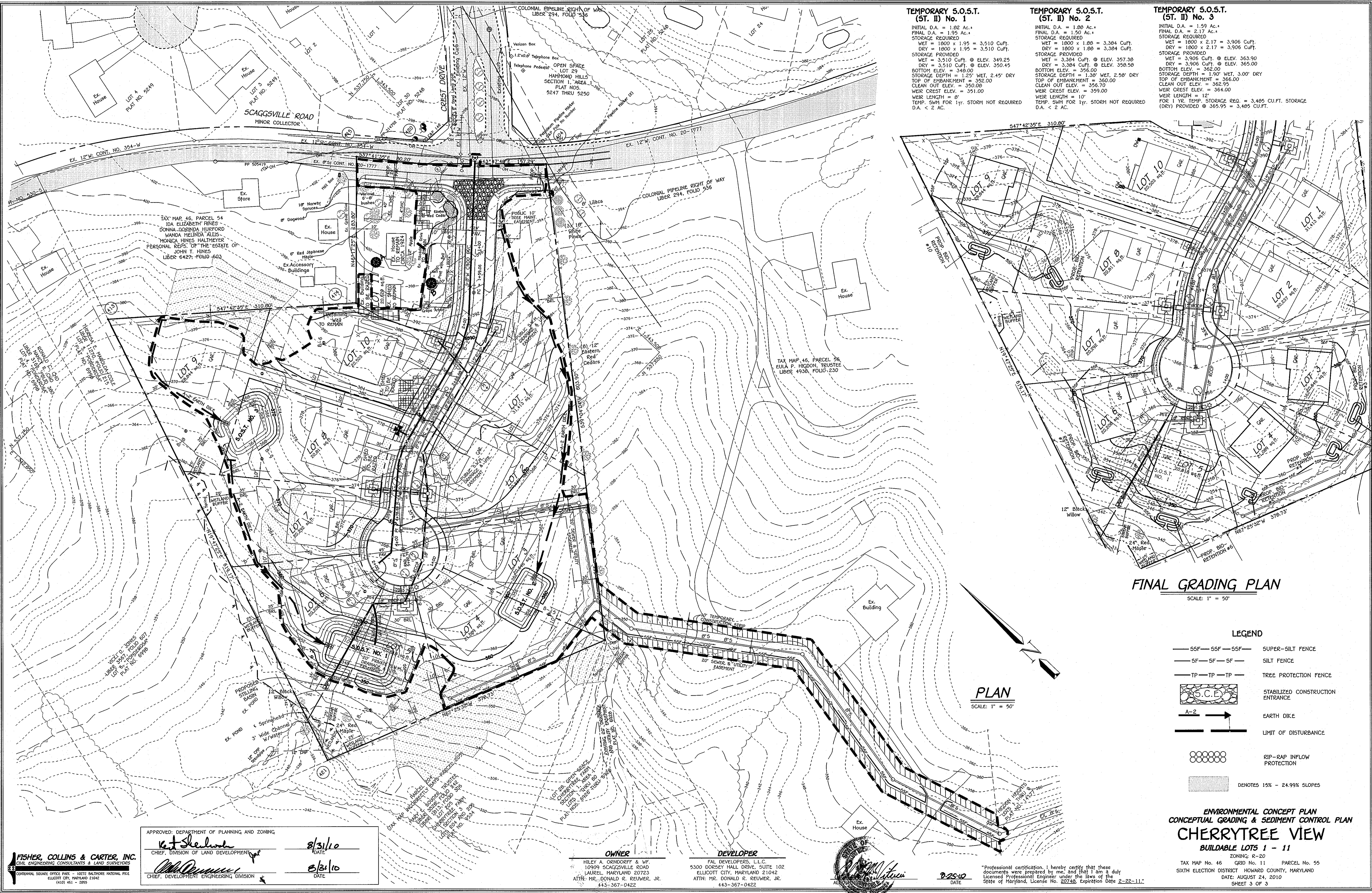
8/25/10
 DATE

"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 2-22-11."

TEMPORARY S.O.S.T. (ST. II) No. 1
 INITIAL D.A. = 1.82 AC.
 FINAL D.A. = 1.95 AC.
 STORAGE REQUIRED
 WET = 1800 x 1.95 = 3,510 CU.FT.
 DRY = 1800 x 1.95 = 3,510 CU.FT.
 STORAGE PROVIDED
 WET = 3,510 CU.FT. @ ELEV. 349.25
 DRY = 3,510 CU.FT. @ ELEV. 350.45
 BOTTOM ELEV. = 348.00
 STORAGE DEPTH = 1.25' WET, 2.45' DRY
 TOP OF EMBANKMENT = 352.00
 CLEAN OUT ELEV. = 350.08
 WEIR CREST ELEV. = 351.00
 WEIR LENGTH = 8'
 TEMP. SWM FOR 1yr. STORM NOT REQUIRED
 D.A. < 2 AC.

TEMPORARY S.O.S.T. (ST. II) No. 2
 INITIAL D.A. = 1.89 AC.
 FINAL D.A. = 1.90 AC.
 STORAGE REQUIRED
 WET = 1800 x 1.89 = 3,384 CU.FT.
 DRY = 1800 x 1.89 = 3,384 CU.FT.
 STORAGE PROVIDED
 WET = 3,384 CU.FT. @ ELEV. 357.38
 DRY = 3,384 CU.FT. @ ELEV. 358.58
 BOTTOM ELEV. = 356.00
 STORAGE DEPTH = 1.38' WET, 2.58' DRY
 TOP OF EMBANKMENT = 360.00
 CLEAN OUT ELEV. = 358.70
 WEIR CREST ELEV. = 359.00
 WEIR LENGTH = 10'
 TEMP. SWM FOR 1yr. STORM NOT REQUIRED
 D.A. < 2 AC.

TEMPORARY S.O.S.T. (ST. II) No. 3
 INITIAL D.A. = 1.59 AC.
 FINAL D.A. = 2.17 AC.
 STORAGE REQUIRED
 WET = 1800 x 2.17 = 3,906 CU.FT.
 DRY = 1800 x 2.17 = 3,906 CU.FT.
 STORAGE PROVIDED
 WET = 3,906 CU.FT. @ ELEV. 363.90
 DRY = 3,906 CU.FT. @ ELEV. 365.00
 BOTTOM ELEV. = 362.00
 STORAGE DEPTH = 1.90' WET, 3.00' DRY
 TOP OF EMBANKMENT = 366.00
 CLEAN OUT ELEV. = 362.95
 WEIR CREST ELEV. = 364.00
 WEIR LENGTH = 12'
 FOR 1 YR. TEMP. STORAGE REQ. = 3,485 CU.FT. STORAGE (DRY) PROVIDED @ 365.95 = 3,485 CU.FT.



FINAL GRADING PLAN

SCALE: 1" = 50'

LEGEND

- SSF—SSF—SSF— SUPER-SILT FENCE
- SF—SF—SF— SILT FENCE
- TP—TP—TP— TREE PROTECTION FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- A-2 → EARTH DIKE
- — — — — LIMIT OF DISTURBANCE
- RIP-RAP INFLOW PROTECTION
- DENOTES 15% - 24.99% SLOPES

**ENVIRONMENTAL CONCEPT PLAN
 CONCEPTUAL GRADING & SEDIMENT CONTROL PLAN
 CHERRYTREE VIEW
 BUILDABLE LOTS 1 - 11**

ZONING: R-22
 TAX MAP No. 46 GRID No. 11 PARCEL No. 55
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 DATE: AUGUST 24, 2010
 SHEET 3 OF 3

APPROVED: DEPARTMENT OF PLANNING AND ZONING
K. J. Shelton
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/31/10

W. J. [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/31/10

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 10712 BALTIMORE NATIONAL FREE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2899



9-25-10
 DATE

"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. 202749, Expiration Date 2-22-11."

I:\2010\1014\1014 ECP CONCEPTUAL SEDIMENT AND EROSION CONTROL PLAN FOR ECP SHEET 3.dwg, 8/24/2010 11:24:22 PM, James