

GENERAL NOTES

- All aspects of the project are in accordance with the latest standards and specifications of Howard County unless waivers have been approved.
- Project Background:
Location: Ellicott City, Maryland
Tax Map: Map 16
Tax Map Parcels: 45, 172, & 205
Zoning: RC - DEO (Rural Conservation - Density Exchange Option)
Previous Submittals: 3 rd
Election District: WF 90-06, F 90-128, WF 99-55, S 99-09, P00-05
- Existing zoning: RC - DEO (Rural Conservation - Density Exchange Option) per 1018B3 Comprehensive Zoning Plan.
- Dead References:
a. Parcel 45: Cole Plat Number 3061 Area = 12.51 Ac +/-
b. Parcel 172: Garbutt L 995 / F 123 Area = 64,522 Ac +/-
c. Parcel 205: Takacs L 868 / F 737 Area = 7,256 Ac +/-
BRANTWOOD Sections 3/1 & Future 3/2 Total = 84.59 Ac +/-
- The property shown hereon is based on a field run boundary survey performed by LDE, Inc. dated February 1989.
- Gross Area of Tract: 84.59 Ac +/-
- Area of proposed lots:
a. Buildable Cluster Lots: 28.26 Ac +/-
b. Preservation Parcels: 39.57 Ac +/-
c. Proposed Road R/W: 2.74 Ac +/-
d. Bulk Parcels: 14.50 Ac +/- (Future P00-04)
- Number of Lots / Parcels: 39
(27 Lots + 6 Preservation Parcels + 2 Bulk Parcels. The 2 Bulk Parcels shall be re-subdivided as Section Three - Area Two - P00-04)
a. Buildable Lots: 27
b. Preservation Parcels: 6
i. Buildable: 1
ii. Non-Buildable: 5
c. Bulk Parcels: 2
i. Buildable: 2
ii. Non-Buildable: 0
- This existing site plan shows terrain and approximate locations taken from drawings of public record (F 99-140).
- The topography shown hereon is compiled from Howard County Aerial Photography and proposed grades from the P00-04 plan submission. Horizontal and vertical datum is related to the Maryland State Plane Coordinate System as projected from Howard County control stations No. 16 HD and No. 16 VC (NAD 83).
- The proposed water and sewer systems to be private well and septic. The property is not located within the Metropolitan District.
- There are no existing contiguous slopes 25% or greater which are greater than 20,000 square feet within the boundaries of the site. See S 99-09 for the approved Forest Stand Delineation plan and steep slope analysis.
- Maryland State 144 (On Frederick Road) is a scenic road.
- The Noise Study was submitted and approved under the S99-09 Sketch Plan submission. In addition, the approved report was resubmitted as part of the P00-04 plan submission. No change to the approved S99-09 report is proposed.
- The Sight Distance analysis was approved as part of the S 99-09 report submission.
- The Floodplain Study has been completed as part of this Preliminary Plan submission. An Impact Analysis for the requested change in culvert type has been submitted as part of the P00-04 submission.
- A Foundation/Soil Report shall be completed as part of the Final Plan submission.
- The wetland delineation study was completed as part of the S 99-09 Sketch Plan submission. The wetland area located near the southeast corner of Plat 3061 is not delineated on the LDE, Inc. site plan, November 1999, as a result of a comment from the Department of Planning & Zoning.
- The Traffic Studies titled "Transportation Analysis for Brantwood Sections 3 and 4" dated November 1999 & "Roadway Transportation Analysis for Brantwood Sections 3 & 4 S-99-09" dated February 22, 1999 was approved as part of the S 99-09 Sketch Plan submission.
- The Geotechnical Report was completed by Hilli Carney Engineering Associates, Inc. as part of this Preliminary Plan submission.
- Stormwater management will be as follows:
Fond #4 on Preservation Parcel "A" & "B" and P00 Preservation Parcel "F" Brantwood - Section 2 / Area 1 (F 99-140) by Retention
Fond #5 on Preservation Parcel "D" by Retention

The plan is subject to WF 90-06 & WF 99-55. On 2/23/99, the Planning Director approved the request to waive Section 16.16 (a) to allow grading and removal of vegetative cover within 25 feet of a stream and 75 feet of a stream for the purpose of a road crossing (Seneca Chief Trail) and a driveway crossing to serve two residential lots. The Director's approval is subject to the following conditions:

- The limit of disturbance which is endorsed by this waiver petition for the extension of Seneca Chief Trail shall be only the minimum needed to allow for the construction of a road crossing. The disturbance associated with the crossing must be justified and will be evaluated by the SRC during the subdivision process to ensure that it is minimized to the extent possible.
- The structure used for the Seneca Chief Trail crossing shall be designed to have least impact on the environmental areas.
- This Division acknowledges that stormwater management design at this time is conceptual. As currently proposed, no intrusions into environmental buffers are needed to accommodate these stormwater management features. As the design is refined, the developer may believe that intrusions into the environmental areas may be needed for the purpose of stormwater management. Should that be the case, this Division will require consideration of such intrusions and disturbance through the waiver process, with the submission of a separate water petition to disturb the stream/wetland/floodplain system unless such intrusions are determined to be essential based on the engineering judgement of the SRC agencies.
- The use-in-common driveway to serve Lots 29 (27) & 30 (Preservation Parcel "E") shall be improved to current standards within a 24-foot wide use-in-common access easement. (P00-03)
- All use-in-common driveway maintenance agreements shall be recorded immediately upon recolonization of the plat.
- On the plat, show access restrictions along MD Route 144 frontage except at the location of the proposed public road between Lots 27 (1) & 40 (Parcel H). (Future Section 3 - Area 2 P00-04)

- See Percolation Certification Plan for percolation test locations.
- Street Trees will be provided in accordance with Section 16.13E of the Subdivision and Land Development Regulations.
- Sediment and Erosion Control Plan will be provided as Final Plan Submission.
- The minimum lot areas for Lots 3, 13 & 14 with areas greater than the 50,000 SF minimum as permitted by Section 104 E.C. of the Howard County Zoning Regulations, due to Health Department recommendations. Due to the location of the well for Lot 3, the Howard County Health Department requires an extra wide driveway to meet the location requirements of a well in relationship to the proposed driveway / paving.
Brantwood Section Three Project (P00-03 & P00-04) contains insufficient acreage to support the 29 residential cluster lots.
a. The maximum yield for the Project, based on gross acreage divided by 2, per Section 104.E(1)(b)(2) of the Zoning Regulations is 84.59 Acres / 2 = 42.30 (42) Buildable Entities
b. The By-Right yield for Brantwood Section 3 = Total Acreage / By-Right Yield = Total Buildable Entities for "Brantwood Section 3" 84.59 / 4.25 = 19.90 (20 Units By Right)
c. With this, the Brantwood Section 3 Project:
Section 3 - Area 1 (P00-03) & Section 3 - Area 2 (P00-04) is a density receiving subdivision.
Buildable Units in Brantwood - Section 3 - Area 1 (P00-03) + Buildable Units in Sections Section 3 - Area 2 (P00-04) = Total Proposed Buildable Units
28 (P00-03) + 11 (P00-04) = 39 Buildable Units
d. Proposed Units - By Right Units = Number of Cluster Exchange Option (CEO) Density Units required to be received by a "Selling Parcel"
39 Proposed Units - 19 By-Right Units = 20 CEO Units required.
e. The Brantwood Section 3 Project requires the acquisition of 20 CEO Units from an 85-Acre +/- qualified sending parcel or parcels prior to Final Plat recolonization.

This subdivision utilizes the Cluster Exchange Option (CEO) as described in Section 106 of the Zoning Regulations. The By-Right Density for Section 3 is 84.59 Acres / 4.25 = 19.90 (20) Buildable Units. On April 28, 1999, Brantwood Section 3 received tentative allocations for 35 housing units. P00-03 proposes 28 (27 Buildable Lots & 1 existing home to remain) and P00-04 proposes 11 (9 Buildable Lots & 2 existing homes to remain). The five existing units, 3 from the plat of the "Property of Hugh F. Cole, Jr." - Lots 1 thru 3; Plat # 3061, and the existing units on Parcel 205 and Parcel 172, do not require allocations for housing units, but do require the transfer of development rights (CDR).

Section Three - Area One (P00-03) requires 9 CEO Units (28 Lots - 19 Buildable Units = 9 CEO Units Required)
Section Three - Area Two (P00-04) requires 11 CEO Units (11 Lots Require 11 CEO's since all by right yield was exhausted on P00-03)

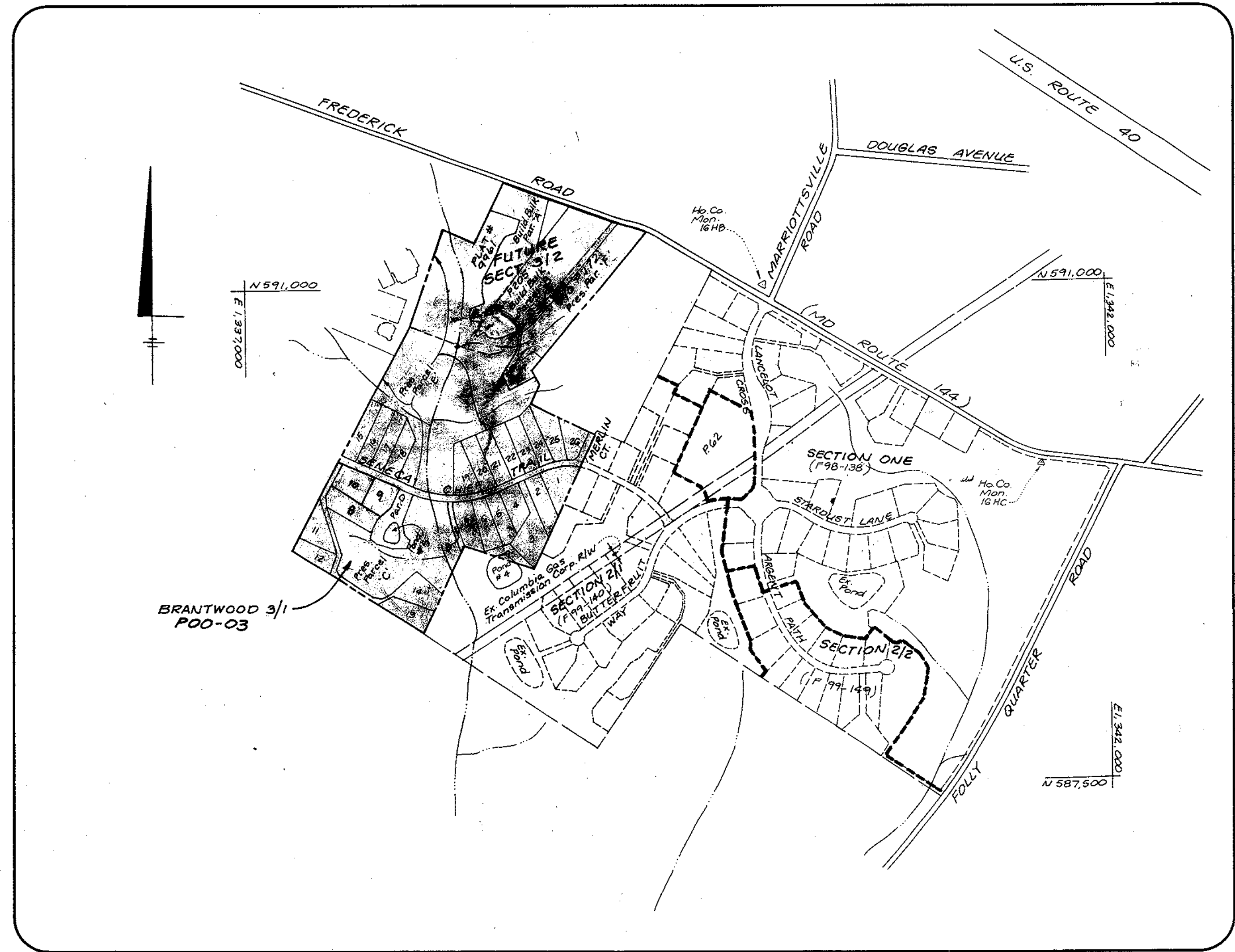
This area designates a private easement of 10,000 sf as required by the Maryland State Department of the Environment for individual septic disposal. Improvements of any nature in this area are restricted until public sewerage is available. These easements shall become null and void upon connection to a public sewerage system. The County Health Officer shall have the authority to grant variances for encroachments into the private sewerage easement. Recolonization of a modified easement shall not be necessary.
The lots shown hereon comply with the minimum ownership width and lot area as required by the Maryland State Department of the Environment.
All existing well and septic areas located within 100 feet of the property are shown, where applicable.
All proposed wells to be drilled prior to final plat signature approval.
Groundwater appropriations permit must be approved for Lots 1 - 26, prior to final plat signature approval.
Tree Protection Fence or Ditch Orange Fence shall be placed around the perimeter of the sewage disposal easement prior to any construction of road or lot improvements to ensure that placement of fill material upon the easement area will not occur.
The existing dwellings and structures located on Preservation Parcel "E" and Buildable Bulk Parcel "A" & "B" are currently occupied and will remain as homes within the subdivision.

S 99-09 received 35 tentative housing allocations on 4/28/99. The property which makes up the "Section Three" (P00-03 & P00-04) subdivision has 9 existing allocations for a total of 40 housing allocations.

P00-03 - Section Three / Area One will utilize 27 of the 35 housing allocations received through S 99-09 and 1 of the 5 existing allocations from the Garbutt, Takacs & Cole Properties, for a total of 28 housing allocations.
P00-04 - Section Three / Area Two will utilize the remaining 8 of the 35 housing allocations received through S 99-09 and 3 of the 5 existing allocations from the Garbutt, Takacs & Cole Properties, for a total of 11 housing allocations.

With the recording of the Final Subdivision Record Plat, 34 of the 35 tentative housing allocations received by S 99-09 will be permanently granted to Brantwood Sections "3". The remaining one (1) tentative housing allocation will be forfeited.

APPROVED: For Private Water and Private Sewerage
Howard County Health Department.
Dina M. M... DA
S... DA



LOCATION MAP
Scale: 1" = 600'

PRELIMINARY PLAN

BRANTWOOD SECTION THREE - AREA ONE

3rd Election District - Howard County, Maryland

The plan is subject to WF 00-55. On January 28, 2000, the Planning Director approved the request to waive Section 16.16 (a) to allow grading and removal of vegetative cover within 25 feet of a stream and 75 feet of a stream for the purpose of a road crossing for Seneca Chief Trail. Approval is subject to the following conditions:
1. Show the design approved by this waiver on subsequent plans.
2. Comply with the attached comments from the Soil Conservation District (SCD) with respect to the design of Crossing #1 for Seneca Chief Trail. (See the Comment Liv. from SCD letter dated 12/19/99) Revise the preliminary plan submission to comply with the recommendations of SCD. In addition, although Crossing #2 (the driveway for the Garbutt dwelling and new Lot 27) is not a subject of this petition, the developer is advised to give consideration to SCD's recommendation concerning the shoulder width and endstop. He advised that this shared drive must meet use-in-common driveway standards.
The Planning Director denied the request to waive Section 16.18 (f)(1) for a new use-in-common access point for 2 lots from Maryland Route 144 (a limited access Minor Arterial roadway classification), based on the following:
1. Safe access can be provided from a local road to be constructed within the subdivision. Approval of an Access point for Lots 10 & 11 onto Maryland Route 144 would nullify the intent of the Regulations, would be contrary to the purpose of the road classification, and would be detrimental to the public interest of safety and efficient traffic flow. The developer has failed to justify why his proposal would be a better alternative.

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
Angela D. ... PLANNING DIRECTOR
DATE: 6/29/00



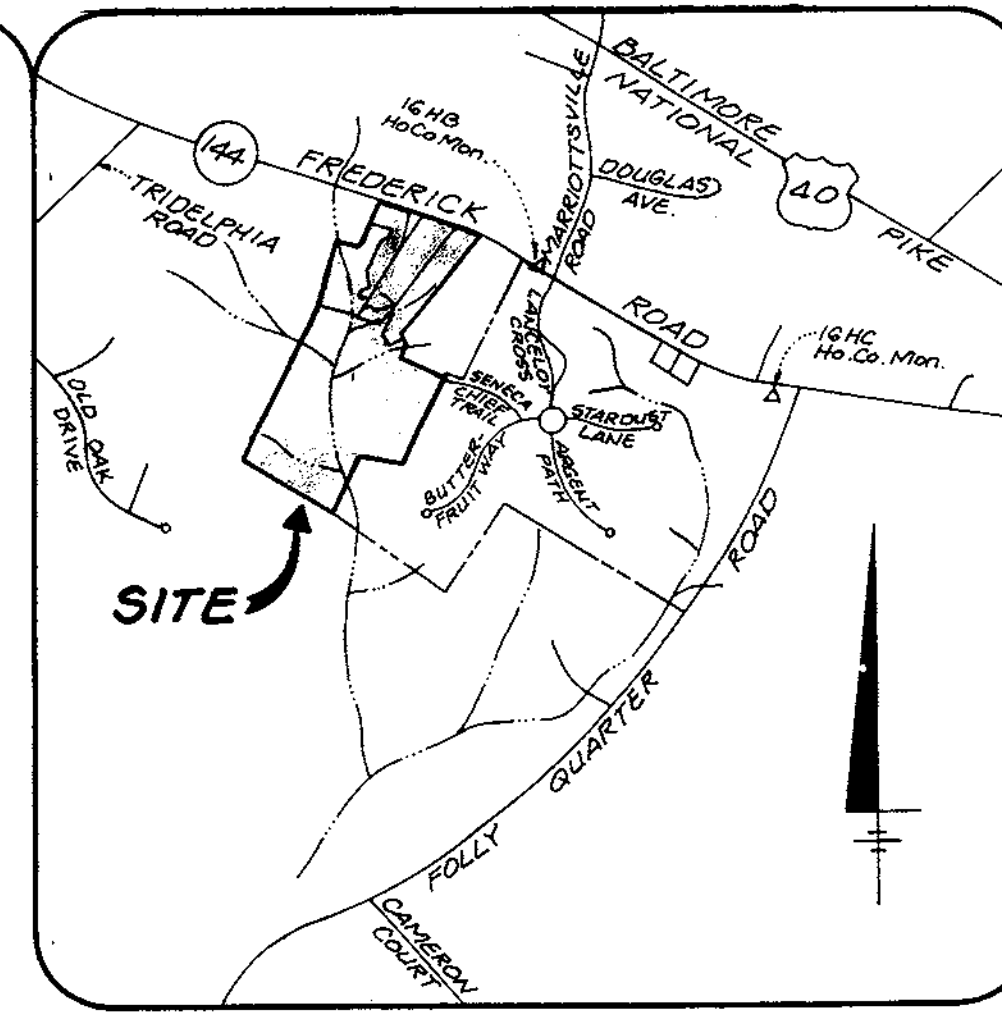
OWNERS

- Parcel 172: George & Gertrude Garbutt, 11363 Frederick Road, Ellicott City, Md. 21042
- Parcel 45: Hugh F. Cole, Jr., 8935 P Columbia 100 Pkwy, Columbia, Md. 21045
- Parcel 205: Wendy E. Takacs, 11407 Frederick Rd., Ellicott City, Md. 21042

BENCHMARKS

Howard County Monument # 16HC
Elevation: 449.451
Description: Concrete Monument 2' below surface, South side MD 144, 0.1 Mile West Folly Quarter Road

Howard County Monument # 16HB
Elevation: 540.658
Description: Concrete Monument flush with surface, 21.9' South of centerline MD 144, 147.5' West of Marriottsville Road



VICINITY MAP
Scale 1" = 2000'

INDEX OF SHEETS

Sheet #	Description
1	Preliminary Plan - Cover Sheet
2	Preliminary Plan
3	Preliminary Grading Plan
4	Preliminary Landscape & Forest Conservation Plan
5	Preliminary Landscape & Forest Conservation Plan

Minimum Lot Size Tabulation

Lot No.	Gross Area	Pipstem Area	Minimum Lot Size
3	41,171 sq ft	11,171 sq ft	50,000 sq ft
9	53,970 sq ft	5,580 sq ft	48,390 sq ft
11	47,327 sq ft	1,803 sq ft	45,524 sq ft
12	47,042 sq ft	5,108 sq ft	41,934 sq ft
13	59,528 sq ft	11,629 sq ft	47,899 sq ft
14	42,349 sq ft	13,261 sq ft	49,088 sq ft
27	58,700 sq ft	4,100 sq ft	54,600 sq ft
RP 16'	1,092,485 sq ft	1,996 sq ft	1,090,489 sq ft

COORDINATE TABLE

Point #	Northing	Easting	Description
60)	589175.896	1336242.992	Fence Corner
95)	589566.705	1337152.326	Stone Found
96)	589227.663	1337453.302	---
97)	589046.648	1337915.899	---
107)	589989.343	1338358.663	---
112)	590309.120	1338026.180	Concrete Monument
113)	590177.185	1337957.066	Fence Corner
152)	590765.649	1337115.215	Stone
223)	590411.438	1337974.876	---
225)	591416.761	1338765.866	---
226)	591501.787	1338658.215	---
227)	591757.655	1337710.887	Iron Pipe Found
236)	591244.073	1337963.226	Iron Bar Found / TSA
249)	591524.607	1337359.078	Iron Pipe Found / TSA
250)	591402.073	1338063.373	Iron Pipe Found / TSA
260)	591616.564	1338231.580	---
503)	591608.386	1338231.580	---

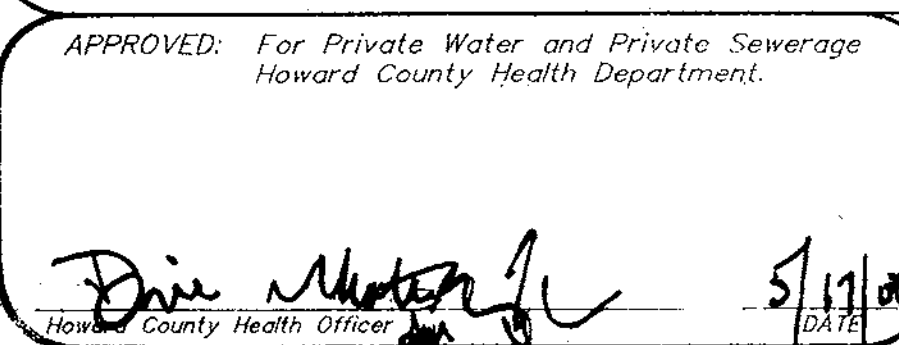
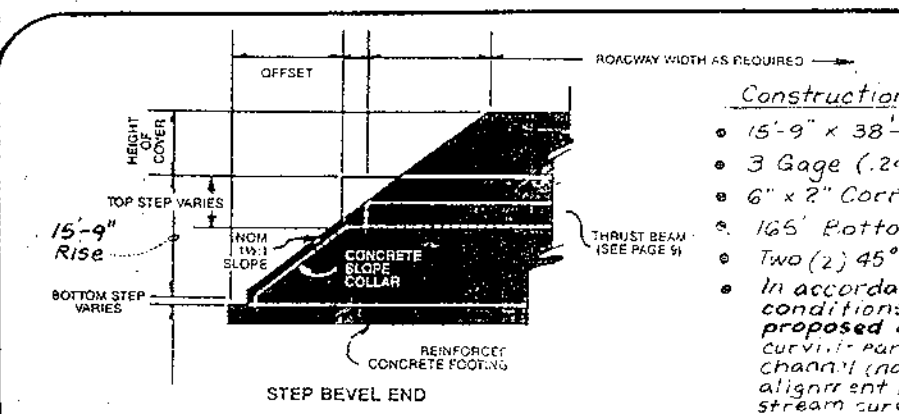
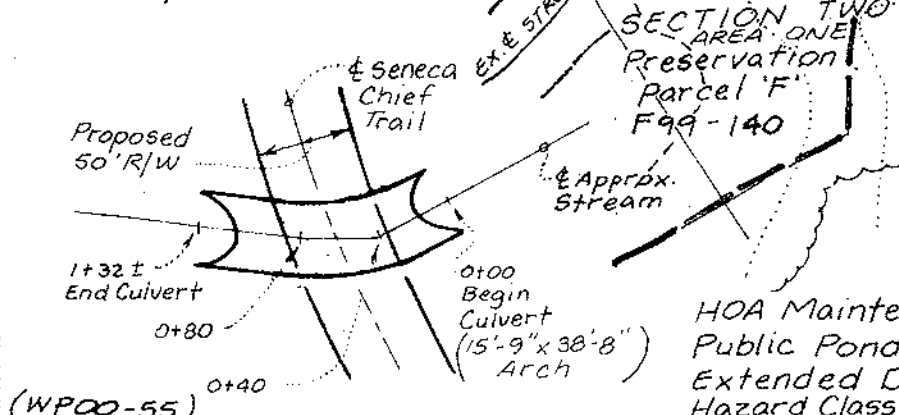
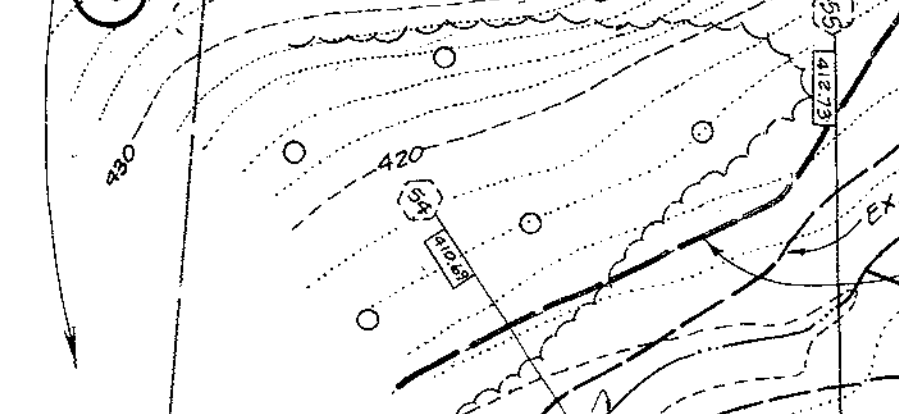
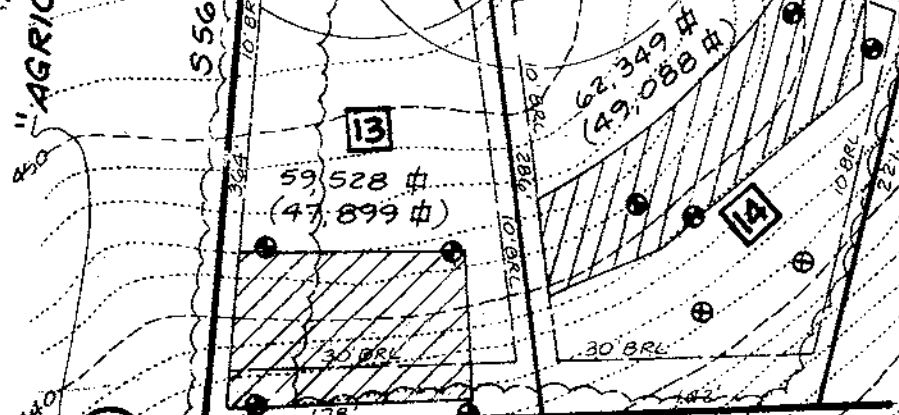
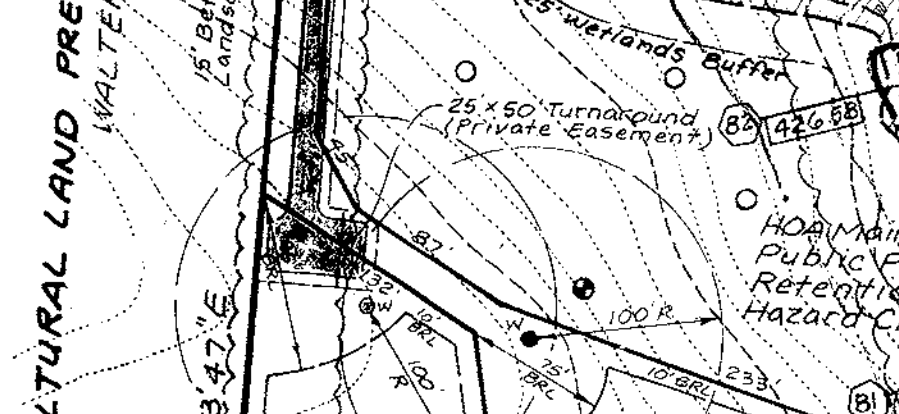
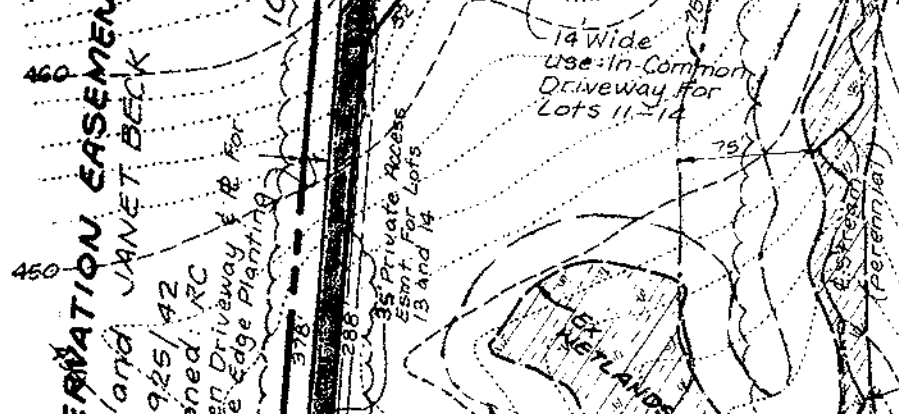
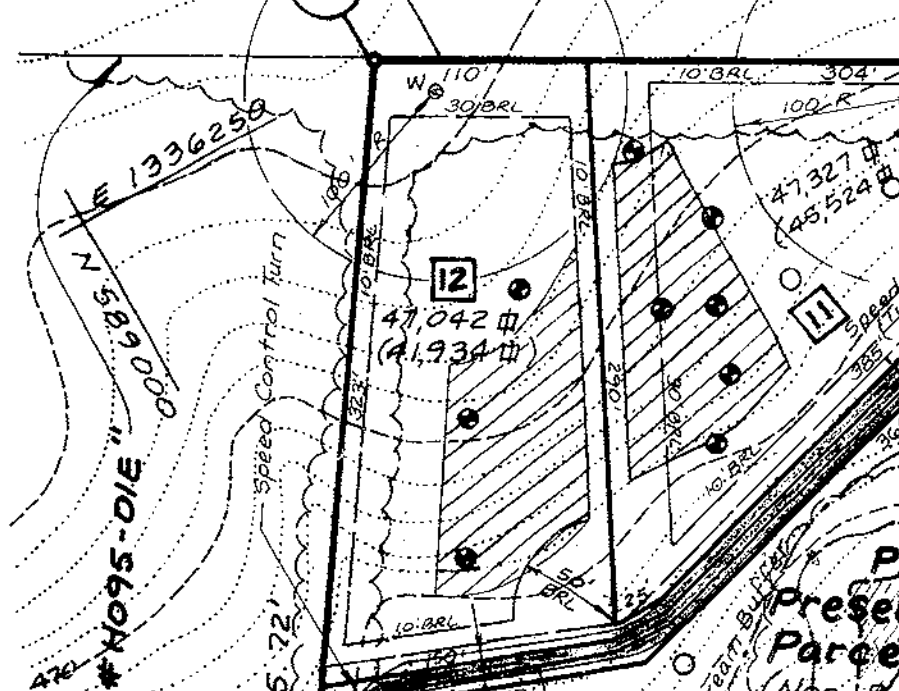
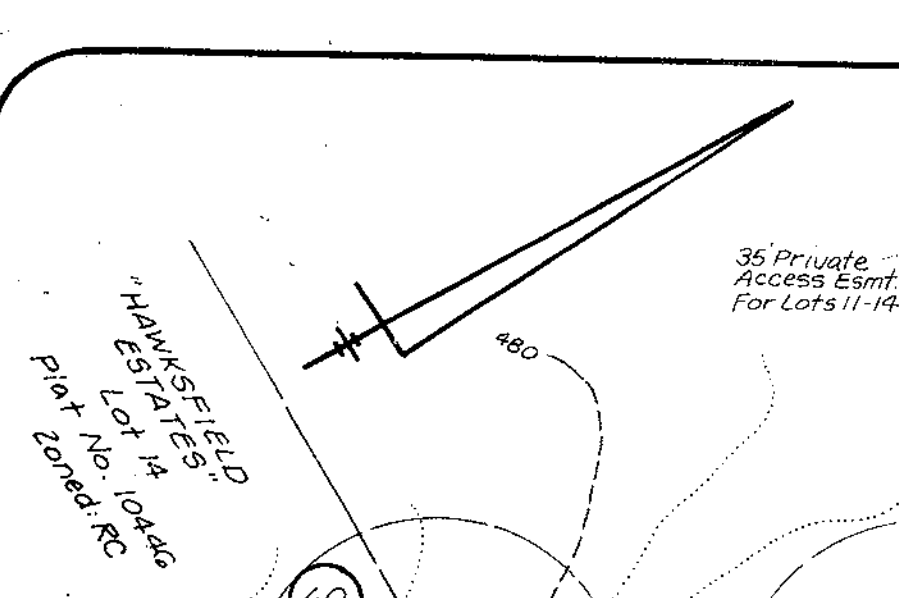
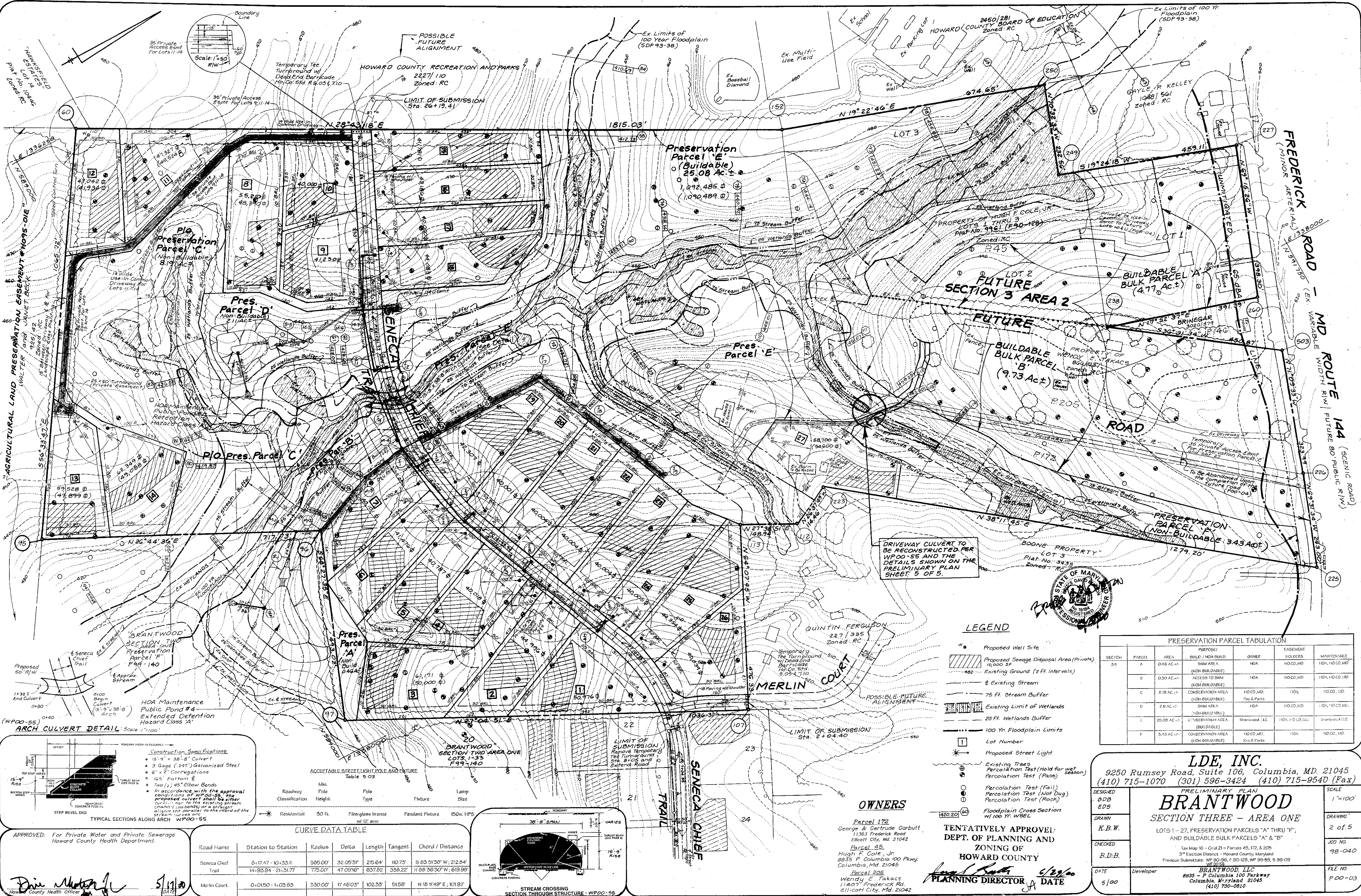
LDE, INC.
9250 Rumsey Road, Suite 106, Columbia, MD. 21045
(410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

Cover Sheet
BRANTWOOD SECTION THREE - AREA ONE
LOTS 1 - 27, PRESERVATION PARCELS "A" THRU "E", AND BUILDABLE BULK PARCELS "A" & "B"

SCALE: As Shown
DRAWN: K.B.W.
CHECKED: B.D.B.
DATE: 5/10/00

Job No. 98040
File No. P 00-03

Developer: BRANTWOOD, LLC
8835 - P Columbia 100 Parkway
Columbia, Maryland 21045
(410) 780-0810



LEGEND

- Proposed Well Site
- Proposed Sewage Disposal Area (Private) 10,000 SF
- Existing Ground (2 ft. intervals)
- Existing Stream
- 75 ft. Stream Buffer
- Existing Limit of Wetlands
- 25 ft. Wetlands Buffer
- 100 Yr. Floodplain Limits
- Lot Number
- Proposed Street Light
- Existing Trees
- Percolation Test (Hold for wet season)
- Percolation Test (Fall)
- Percolation Test (Not Dug)
- Percolation Test (Rock)
- Floodplain Cross Section w/ 100 Yr. WSEL

PRESERVATION PARCEL TABULATION

SECTION	PARCEL	AREA	PURPOSE / BUILD / NON-BUILD	OWNER	EASEMENT HOLDERS	MAINTENANCE
311	A	0.46 AC +/-	SWIM AREA (NON-BUILDABLE)	HQA	HQCO, MD	HQA, HQCO, MD
	B	0.30 AC +/-	ACCESS TO SWIM (NON-BUILDABLE)	HQA	HQCO, MD	HQA, HQCO, MD
	C	8.19 AC +/-	CONSERVATION AREA (NON-BUILDABLE)	Pres. & Parks	HQA	HQA, HQCO, MD
	D	2.11 AC +/-	SWIM AREA (NON-BUILDABLE)	HQA	HQCO, MD	HQA, HQCO, MD
	E	25.00 AC +/-	CONSERVATION AREA (BUILDABLE)	Drainwood, LLC	HQA, HQCO, MD	Drainwood, LLC
	F	3.43 AC +/-	CONSERVATION AREA (NON-BUILDABLE)	Pres. & Parks	HQA	HQA, HQCO, MD

OWNERS

- Parcel 172: George & Gertrude Garbutt, 11363 Frederick Road, Ellicott City, Md. 21042
- Parcel 45: Hugh F. Cole, Jr., 8835 P. Columbia, 100 Pkwy, Columbia, Md. 21045
- Parcel 205: Wendy E. Takacs, 11407 Frederick Rd., Ellicott City, Md. 21042

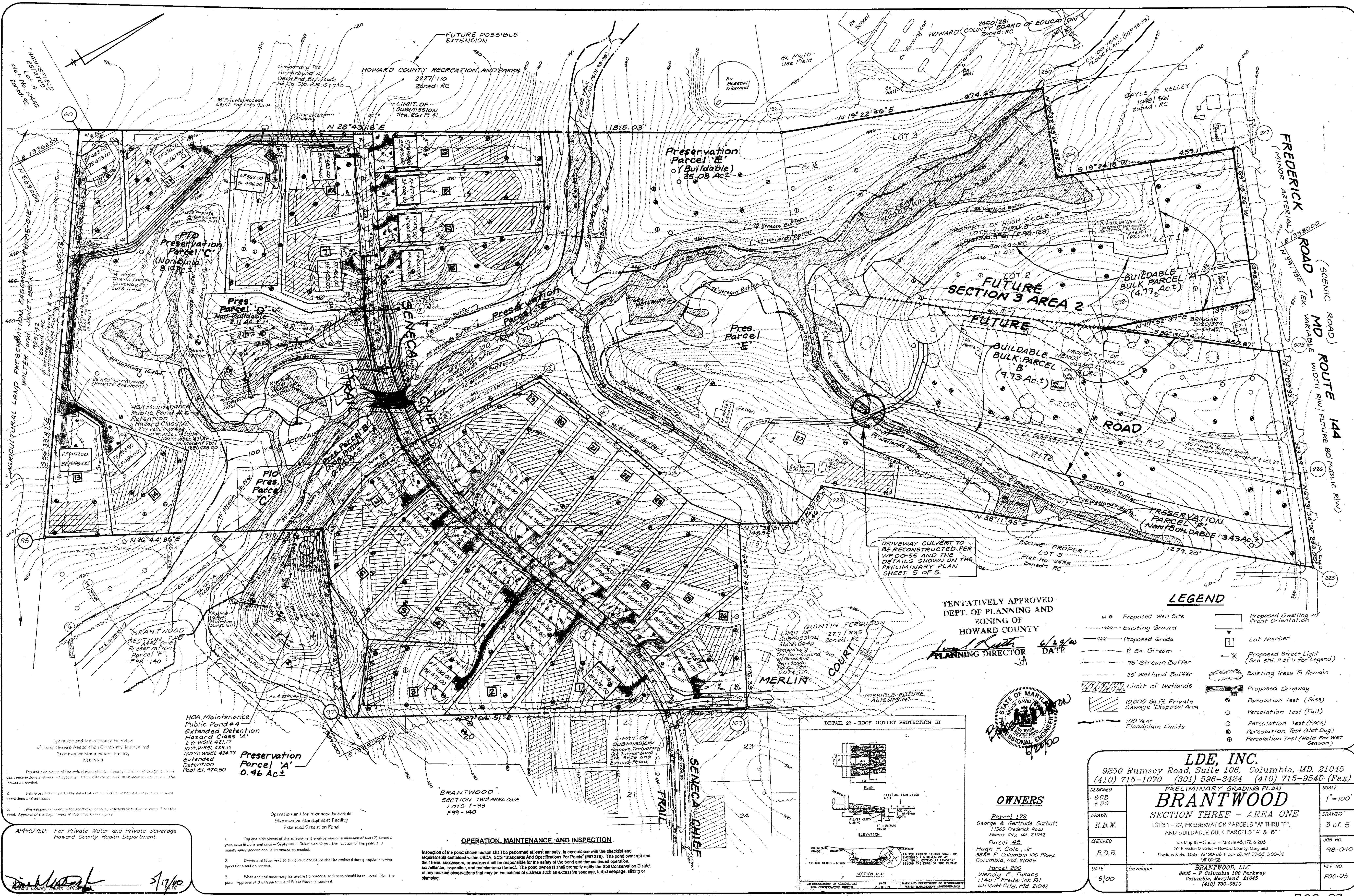
TENTATIVELY APPROVED

DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
 PLANNING DIRECTOR
 DATE: 6/22/00

LDE, INC.
 9250 Rumsey Road, Suite 106, Columbia, MD. 21045
 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

BRANTWOOD
 SECTION THREE - AREA ONE
 LOTS 1-27, PRESERVATION PARCELS "A" THRU "F", AND BUILDABLE BULK PARCELS "A" & "B"

DESIGNED: B.O.B.
 DRAWN: K.B.W.
 CHECKED: E.D.B.
 DATE: 5/00



UNDEVELOPED
ESTABLISHED
PLAT NO. 10-04-06
Zoned: RC

AGRICULTURAL LAND PRESERVATION EASEMENT #1005-DIE
WALTER and JANET BECK
PLAT NO. 10-04-06
Zoned: RC

HOA Maintenance
Public Pond #4
Extended Detention
Hazard Class 'A'
2 1/2% WSEL 421.17
10 Yr. WSEL 423.12
100 Yr. WSEL 424.73
Extended
Detention
Pool El. 420.50

HOA Maintenance
Public Pond #4
Extended Detention
Hazard Class 'A'
2 1/2% WSEL 421.17
10 Yr. WSEL 423.12
100 Yr. WSEL 424.73
Extended
Detention
Pool El. 420.50

OPERATION, MAINTENANCE, AND INSPECTION
Inspection of the pond shown hereon shall be performed at least annually, in accordance with the checklist and requirements contained within USDA, SCS "Standards and Specifications For Ponds" (MD 378). The pond owner(s) and their heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, surveillance, inspection, and maintenance thereof. The pond owner(s) shall promptly notify the Soil Conservation District of any unusual observations that may be indications of distress such as excessive seepage, turbid seepage, sludging or slumping.

1. Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes, the bottom of the pond, and maintenance access should be mowed as needed.

2. D-bins and sizer next to the outlet structure shall be removed during regular mowing operations and as needed.

3. When deemed necessary for aesthetic reasons, sediment should be removed from the pond. Approval of the Department of Public Works is required.

APPROVED: For Private Water and Private Sewerage
Howard County Health Department.

3/17/10
DATE

BRANTWOOD SECTION TWO AREA ONE
LOTS 1-33
F99-140

QUINTIN FERGUSON
227 395
Zoned: RC

DRIVEWAY CULVERT TO BE RECONSTRUCTED PER WP 00-55 AND THE DETAILS SHOWN ON THE PRELIMINARY PLAN SHEET 5 OF 5.

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

PLANNING DIRECTOR
DATE: 6/25/10

LEGEND

- W Well Proposed Well Site
- 462 Existing Ground
- 462 Proposed Grade
- E Ex. Stream
- 75' Stream Buffer
- 25' Wetland Buffer
- Limit of Wetlands
- 10,000 Sq. Ft. Private Sewage Disposal Area
- 100 Year Floodplain Limits
- Proposed Dwelling w/ Front Orientation
- Lot Number
- Proposed Street Light (See sht 2 of 5 for Legend)
- Existing Trees To Remain
- Proposed Driveway
- Percolation Test (Pass)
- Percolation Test (Fail)
- Percolation Test (Rock)
- Percolation Test (Not Dug)
- Percolation Test (Hold For Wet Season)

OWNERS

Parcel 172
George & Gertrude Garbutt
11563 Frederick Road
Ellicott City, Md. 21042

Parcel 45
Hugh F. Cole, Jr.
8835 P Columbia 100 Pkwy.
Columbia, Md. 21045

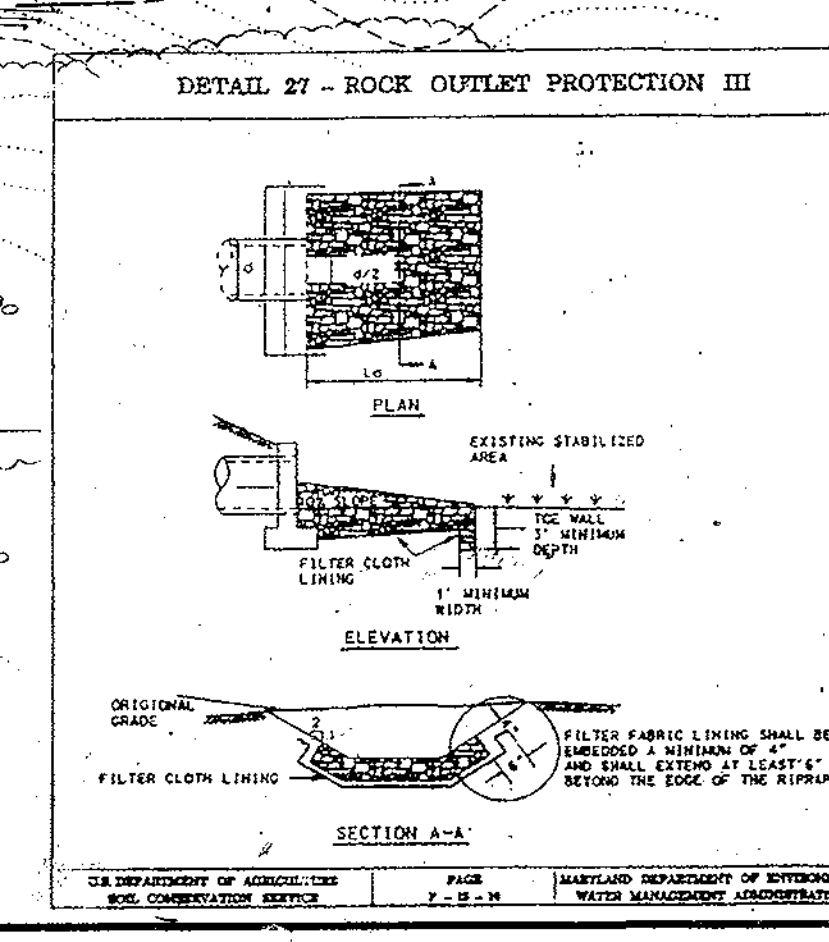
Parcel 206
Wendy C. Takacs
1140 Frederick Rd.
Ellicott City, Md. 21042

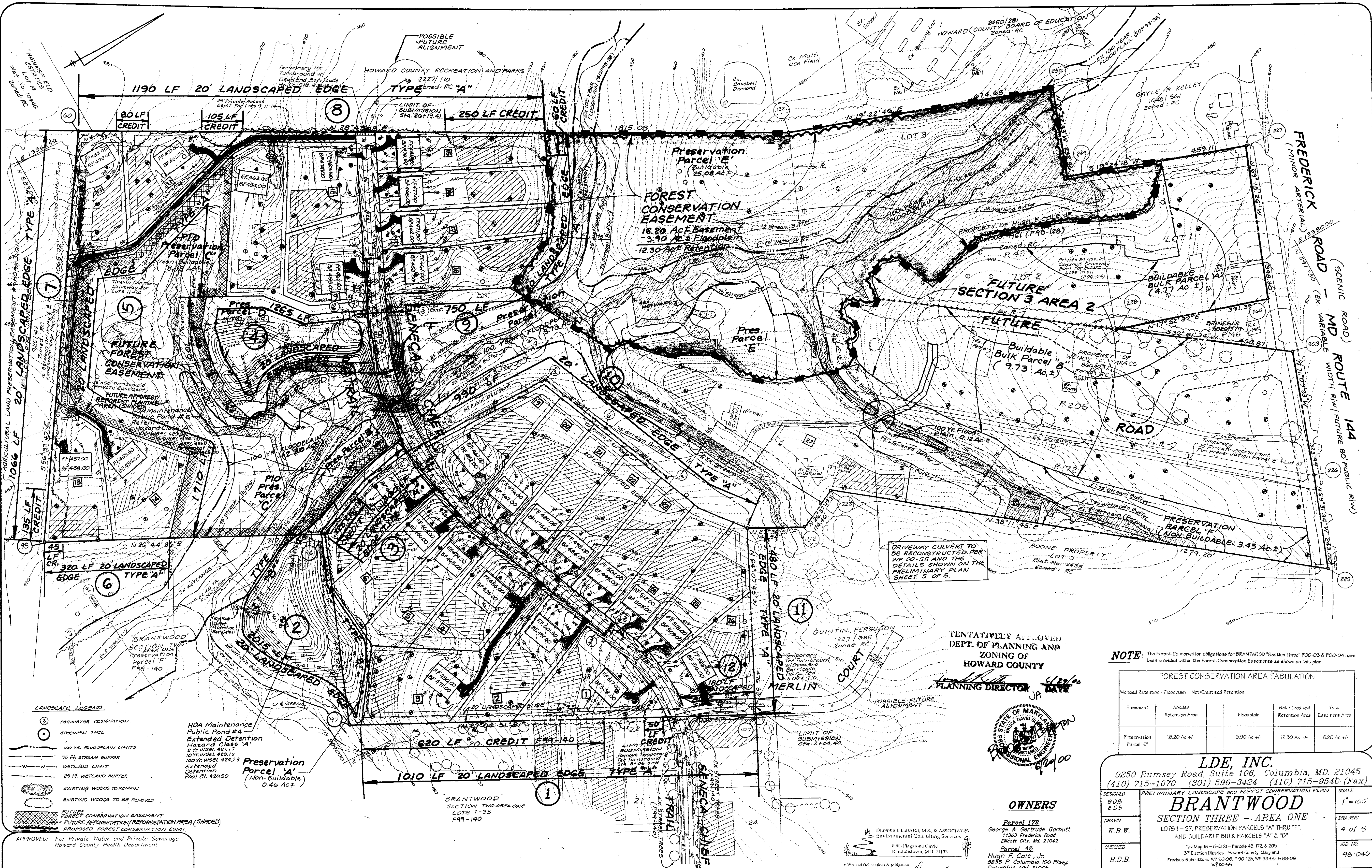
LDE, INC.
9250 Rumsey Road, Suite 106, Columbia, MD. 21045
(410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

DESIGNED: BDB, EDS
DRAWN: K.B.W.
CHECKED: E.D.B.
DATE: 5/00

SCALE: 1"=100'
DRAWING: 3 of 5
JOB NO.: 98-040
JOB DATE: 98-040

DEVELOPER: BRANTWOOD, LLC
8835 P Columbia 100 Parkway
Columbia, Maryland 21045
(410) 730-0810





LANDSCAPE LEGEND

- PERIMETER DESIGNATION
- SPECIMEN TREE
- 100 YR. FLOODPLAIN LIMITS
- 75 FT. STREAM BUFFER
- WETLAND LIMIT
- 25 FT. WETLAND BUFFER
- EXISTING WOODS TO REMAIN
- EXISTING WOODS TO BE REMOVED
- FUTURE FOREST CONSERVATION EASEMENT
- FUTURE AFFORESTATION/REFORESTATION AREA (SHADED)
- PROPOSED FOREST CONSERVATION ESMT

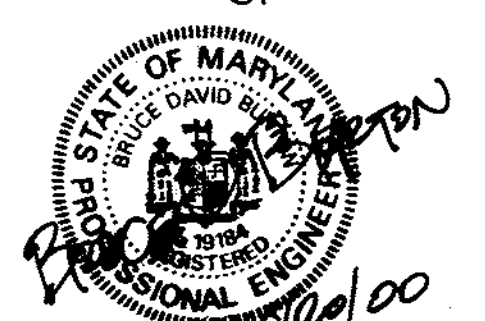
HOA Maintenance
Public Pond #4
Extended Detention
Hazard Class 'A'
2 Yr. WSEL 481.17
10 Yr. WSEL 483.12
100 Yr. WSEL 426.73
Extended Detention
Pool El. 420.50

Preservation Parcel 'A'
(Non-Buildable)
0.46 Ac ±

APPROVED: For Private Water and Private Sewerage
Howard County Health Department.

Die Matusz
DATE 5/11/00

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY
PLANNING DIRECTOR
DATE 6/20/00



OWNERS

Parcel 172
George & Gertrude Carbutt
11363 Frederick Road
Elliott City, Md. 21042

Parcel 45
Hugh F. Cole, Jr.
8835 P. Columbia 100 Pkwy.
Columbia, Md. 21045

Parcel 205
Wendy E. Takacs
11407 Frederick Rd.
Elliott City, Md. 21042

DENNIS J. LABARE, M.S., & ASSOCIATES
Environmental Consulting Services
8903 Haystone Circle
Randallstown, MD 21133

Wetland Delineation & Mitigation
Stream Assessment & Restoration
Water Quality Monitoring
Microbiological Toxicology
Forest Stand Delineation
Forest Conservation Plans

Qualified Professional, MDPCA
Ph: (410) 922-7424

NOTE: THIS PLAN IS NOT FOR GRADING
SEE SHEET 3 OF 5 FOR GRADING.

NOTE: The Forest Conservation obligations for BRANTWOOD "Section Three" P00-03 & P00-04 have been provided within the Forest Conservation Easement as shown on this plan.

FOREST CONSERVATION AREA TABULATION

Easement	Wooded Retention Area	Floodplain	Net / Credited Retention Area	Total Easement Area
Preservation Parcel "E"	16.20 Ac ±	3.90 ac ±	12.30 Ac ±	16.20 Ac ±

Wooded Retention - Floodplain = Net/Credited Retention

LDE, INC.
9250 Rumsey Road, Suite 106, Columbia, MD. 21045
(410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

DESIGNED: BDB, EDS
DRAWN: K.B.W.
CHECKED: B.D.B.
DATE: 5/10/00

PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN
BRANTWOOD
SECTION THREE - AREA ONE
LOTS 1 - 27, PRESERVATION PARCELS "A" THRU "F",
AND BUILDABLE BULK PARCELS "A" & "B"

SCALE: 1" = 100'
DRAWING: 4 of 5
JOB NO.: 98-040
PREVIOUS SUBMITTALS: WP 90-96, F 90-123, WP 99-55, 9 99-09, WP 00-55

DEVELOPER: BRANTWOOD, LLC
8835 P. Columbia 100 Parkway
Columbia, Maryland 21045
(410) 730-0810

FILE NO.: P00-03

SCHEDULE D - POND #3 & #5 STORMWATER MANAGEMENT AREA LANDSCAPING	
Linear Feet of Perimeter	3280
Number of Trees Required	66 82
Credit for Existing Vegetation (Yes, No, and %)	Yes 700 LF 14 Shade 18 Evergrn.
Credit for Other Landscaping (Yes, No, and %)	No
Number of Trees Provided	To Be Provided At Final Plan Review
Shade Trees (1:50)	
Evergreen Trees (1:40)	

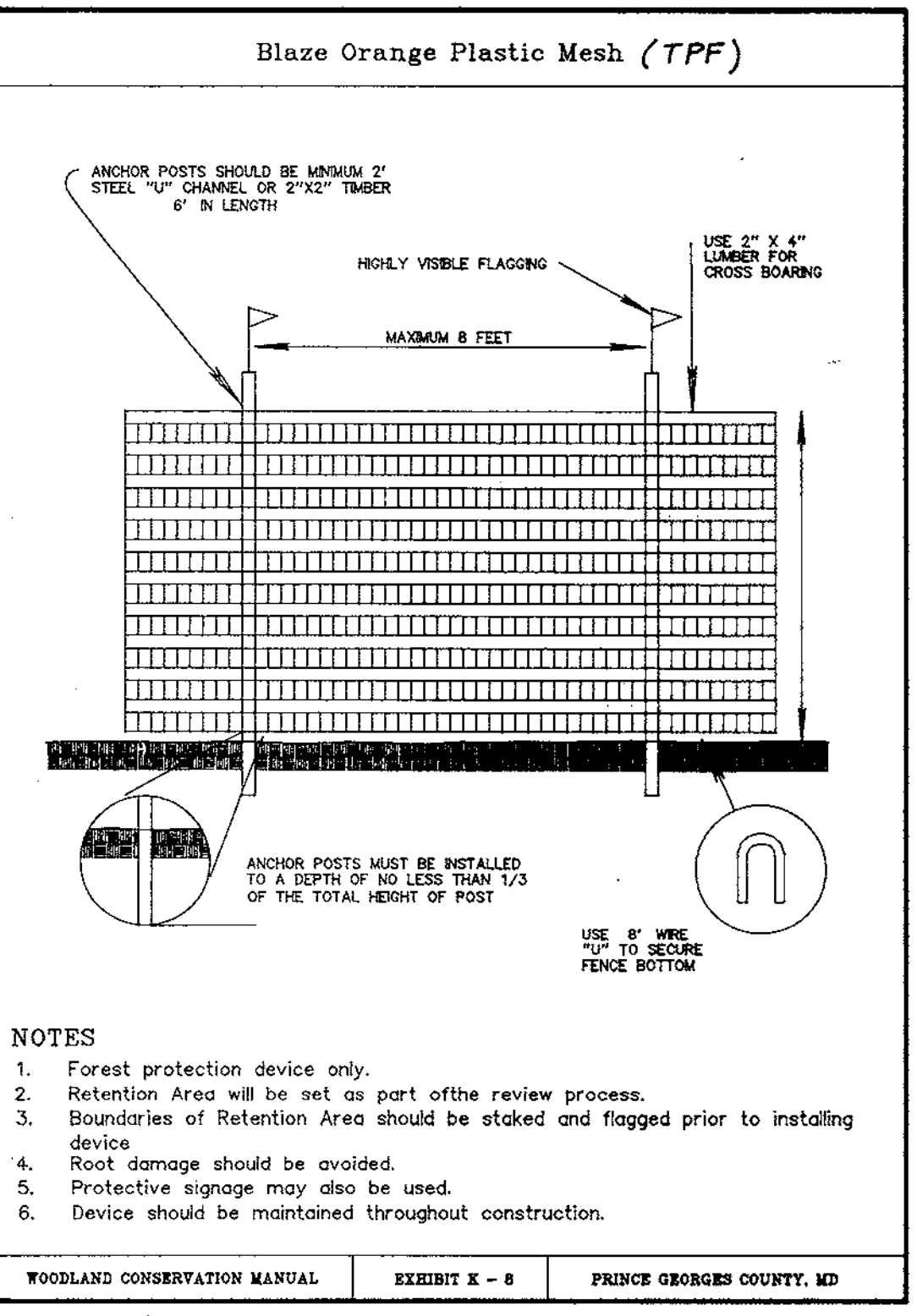
SCHEDULE A PERIMETER LANDSCAPE EDGE		
Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	B	A
Linear Feet of Roadway Frontage / Perimeter	180	7816 LF
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	No	Yes 1470 LF (24 Shade)
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	No	No
Number of Plants Required	43 Shade 5 Evergreen	132 Shade *
Number of Plants Provided	To Be Provided At Final Plan Review	To Be Provided At Final Plan Review
Shade Trees (1:50)		
Evergreen Trees (1:40)		
Other Trees (2:1 substitution)		
Shrubs (10:1 substitution)		
(Describe plant substitution credits below if needed)		

PERIMETER SUMMARY				
Perimeter No.	Buffer Type	Linear Feet / Buffer Type	Required Plants	Comments
1	A	1010	17	Credit 470 LF (11 Shade)
3	A	300	5	Credit 125 LF (2 Shade)
5	A	1710	29	
6	A	320	5	Credit 45 LF (1 Shade)
7	A	1066	18	Credit 135 LF (2 Shade)
8	A	1190	20	Credit 435 LF (7 Shade)
9	A	750	13	Credit 60 LF (1 Shade)
10	A	990	17	
11	A	480	8	
12	B	180	9	
TOTAL	REQ'D.	PLANTS:	141	SHADE

SWM PERIMETER SUMMARY 1:50 Shade 1:40 Evergreen				
Perimeter No.	Buffer Type	Linear Feet / Buffer Type	Required Plants	Comments
2	B	2015	40 Shade 50 Evergrn	
4	B	1265	26 Shade 32 Evergrn	Credit 700 LF
Total Required Plants: 66 Shade 82 Evergreen				

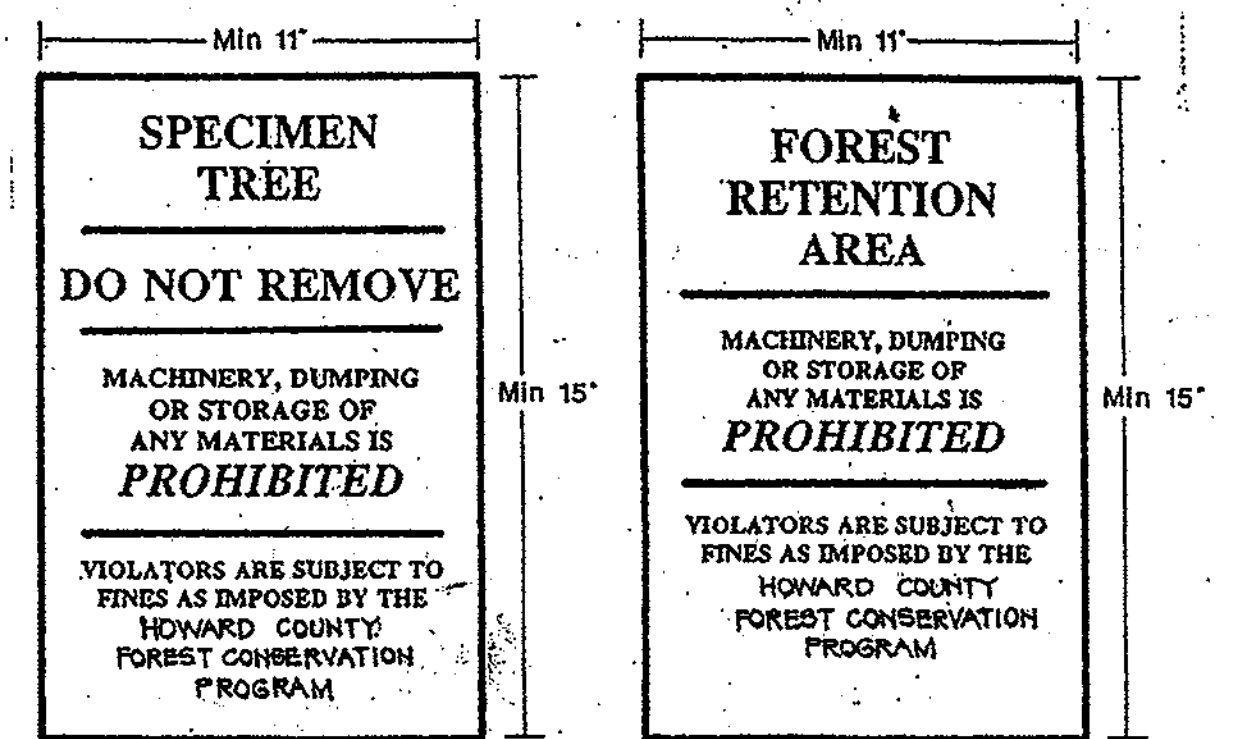
* May Be Less Shade If Evergreens are Substituted @ a 2:1 Rate.

TOTAL REQUIRED LANDSCAPE TREES SECTION 3/1 = 207 Shade * 82 Evergreen *
* Required Trees May Be Decreased By The Approved Credit Areas At Final Plan Review

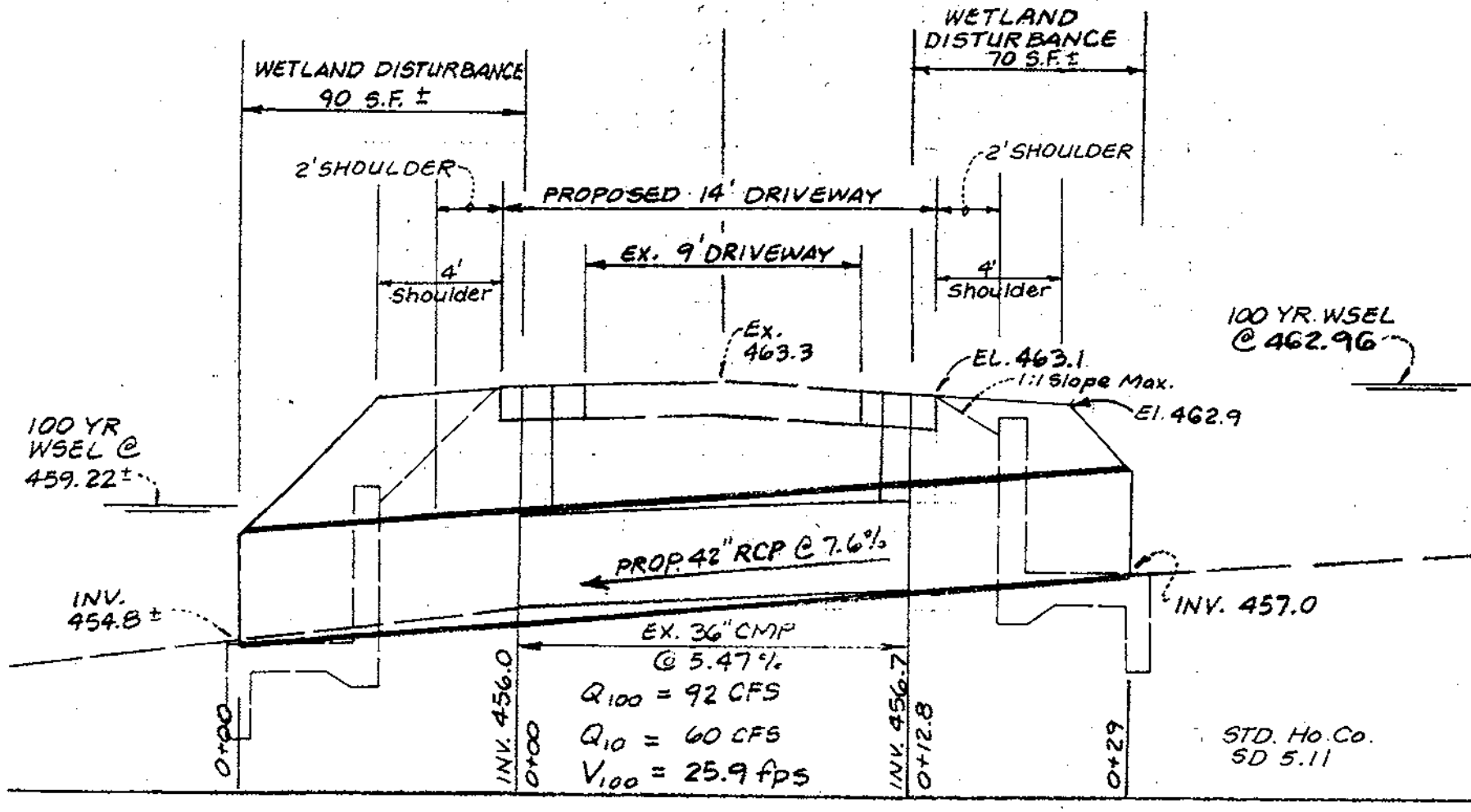


FOREST CONSERVATION EASEMENT STANDARD NOTES:

The Forest Conservation Easement has been established to fulfill the requirements of Section 16.1200 of the Howard County Code, Forest Conservation Act. 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.



STREET TREES REQUIRED:
Required: 1 Tree per 40 ft Road
3/1 Has 1800 ft Road x 2 Sides = 3600 ft ± Road
(3600 / 40 = 90 Trees Required at Final Plan Stage)



USE-IN-COMMON DRIVEWAY CULVERT (POD-03)
(LOT 27, PRES. PARCEL 'E' AND SWM POND #G)
SCALE: 1" = 5' HORIZ.
1" = 5' VERT.
(REFER TO NOTE THIS SHEET)

FOREST PROTECTION PROCEDURES - PRECONSTRUCTION PHASE

- Stress Reduction and Protection of Specimen Trees Isolated from Forest Retention Areas and General Forest Retention Areas (As They May Apply)
- The edge of the woods to be protected will be marked (staked or flagged) in the field per the limits of disturbance shown in the approved Final Construction Plans prior to the start of construction activity. All areas within protective fences are to be considered "off limits" to any construction activities. The protective fencing shall be installed at the outside edge of forested areas and specimen trees to be retained and should be combined with sediment control devices when possible. The limit of the critical root zone and therefore the location of the protective devices is to be determined as follows:
Isolated Specimen Trees - 1.5 feet of protective radius per inch of DBH
Edge of Forested Area - 1 foot of protective radius/inch of DBH or an eight foot protective radius, which ever is greater.
 - Construction activities expressly prohibited within the preservation areas are:
Placing or stockpiling backfill or top soil in protected areas
Falling trees into protected area
Driving construction equipment into or through protected areas
Burning in or in close proximity to protected areas
Stacking or storing supplies of any kind
Concrete wash-off areas
Conducting trenching operations
Grading beyond the limits of disturbance
Parking vehicles or construction equipment
Removal of root mat or topsoil
Siting and construction of:
Utility lines
Access roads
Impervious surfaces
Stormwater management devices
Staging areas

- Protective fencing (see Figure "Protective Fencing") shall be the responsibility of the general contractor. The general contractor shall affix signs to the fencing at 25' minimum intervals indicating that these areas are "Forest Retention Area" or "Specimen Tree" (see Figures "Signage"). The general contractor shall take great care to assure the restricted areas are not violated and that root systems are protected from smothering, flooding, excessive wetting from de-watering operations, off-site run-off, spillage, and drainage or solutions containing materials hazardous to tree roots.
- The general contractor shall be responsible for any tree damaged or destroyed within the preservation areas whether caused by the contractor, his agents, employees, sub-contractors, or licensees.
- Foot traffic shall be kept to a minimum in the protective areas.
- All trees which are not to be preserved within fifty feet of any tree preservation areas are to be removed in a manner that will not damage those trees that are designated for preservation. It is highly recommended that tree stumps within this fifty foot area be ground out with a stump grinding machine to minimize damage.
- The general contractor shall designate a "wash out" area on-site for concrete trucks which will not drain toward a protected area.
- A pre-construction meeting shall be held with local authorities before any disturbance has taken place on site.

FOREST PROTECTION PROCEDURES - CONSTRUCTION PHASE

Forest and tree conditions should be monitored during construction and corrective measures taken when appropriate.

- The following shall be monitored:
- Soil compaction
 - Root injury - prune and monitor; consider crown reduction
 - Limb injury - prune and monitor
 - Flooded conditions - drain and monitor; correct problem
 - Drought conditions - water and monitor; correct problem
 - Other stress signs - determine reason, correct and monitor

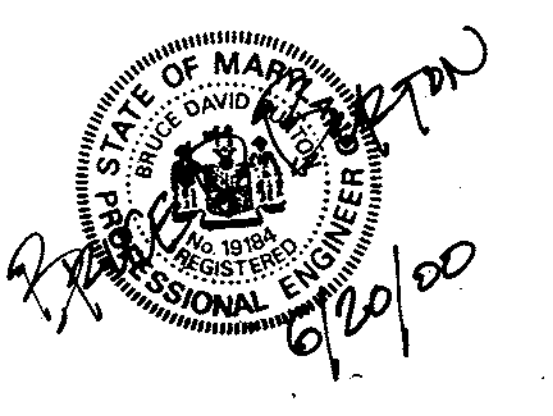
FOREST PROTECTION PROCEDURES - POST CONSTRUCTION PHASE

- The following measures shall be taken:
- Corrective measures if damages were incurred due to negligence:
 - Stress reduction
 - Removal of dead or dying trees. This may be done only if trees pose an immediate safety hazard
 - Removal of temporary structures:
 - No burial of discarded materials will occur on-site within the conservation area.
 - No open burning within 200 feet of a wooded area.
 - All temporary forest protection structures will be removed after construction.
 - Remove temporary roads by removing stone or broadcasting mulch; pre-construction elevation should be maintained.
 - Aerate compacted soil.
 - Replant disturbed sites with trees, shrubs and/or herbaceous plants.
 - Retain signs for retention areas or specimen trees.
 - A County official shall inspect the entire site.

APPENDIX E
FOREST CONSERVATION WORKSHEET

ACRES	(100th acre)
I. BASIC SITE DATA	
Gross Site Area	24.58
Area Within 100 Year Floodplain	5.05
Area Within Agricultural Use or Preservation Forest (if Applicable)	32.56
Net Tract Area	43.58
Land Use Category (R-RD, R-RM, R-S, CMO, I)	R-RM
II. INFORMATION FOR CALCULATIONS	
A. Net Tract Area	43.58
B. Reforestation Threshold (25 % x A)	11.00
C. Afforestation Minimum (20 % x A)	8.72
D. Existing Forest on Net Tract Area	18.07
E. Forest Areas to be Cleared	25.51
F. Forest Areas to be Retained	5.08
G. Forest Areas Cleared Above Reforestation Threshold (D-E, if F is equal to or greater than D, Alternate 1)	20.43
H. Forest Areas Cleared Below Reforestation Threshold (D-E, if applicable)	N/A - 1.80
I. Forest Areas Retained Above Reforestation Threshold (F-B, Retention Credit, if applicable)	1.80
III. DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION	
1. REFORESTATION	
If existing forest areas equal or exceed the afforestation minimum (if D equals or is more than C), and no clearing of existing forest resources is proposed, reforestation requirements may apply.	
GO TO SECTION IV	
If existing forest areas equal or exceed the afforestation minimum (if D equals or is more than C), and no clearing of existing forest resources is proposed, no reforestation is required. No further calculations are needed.	
2. AFFORESTATION	
If existing forest areas are less than the afforestation minimum (if D is less than C), afforestation requirements apply.	
GO TO SECTION V	
IV. REFORESTATION CALCULATIONS	
A. Net Tract Area	43.58
B. Reforestation Threshold (25 % x A)	11.00
C. Existing Forest on Net Tract Area	18.07
D. Forest Areas to be Cleared	25.51
E. Forest Areas to be Retained	5.08
F. Forest Areas Cleared Above Reforestation Threshold (D-E, if F is equal to or greater than D, Alternate 1)	20.43
G. Forest Areas Cleared Below Reforestation Threshold (D-E, if applicable)	N/A - 1.80
H. Forest Areas Retained Above Reforestation Threshold (F-B, Retention Credit, if applicable)	1.80
SELECT THE ALTERNATIVE THAT APPLIES:	
1. CLEARING ABOVE THE THRESHOLD ONLY	
If forest areas to be retained equal or are greater than the reforestation threshold (if E equals or is greater than B), the following calculations apply:	
Reforestation for clearing above threshold (G x 1/4)	1.27
Credits for forest areas retained above threshold (I - Retention Credits)	1.80
Net Reforestation required (G x 1/4) - I	-0.61
If the total reforestation requirement is equal to or less than 0, no reforestation is required.	
No reforestation is required.	

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
PLANNING DIRECTOR
DATE 6/29/00
JA



DENNIS LIBANE, M.S., & ASSOCIATES
Environmental Consulting Services
8835 P. Columbia 100 Pkwy.
Columbia, MD 21045
Tel: (410) 922-7476
Fax: (410) 922-7476

From Appendix "E"

II. INFORMATION FOR CALCULATIONS	
A. Net Tract Area	43.58
B. Reforestation Threshold (25 % x A)	11.00
C. Afforestation Minimum (20 % x A)	8.72
D. Existing Forest on Net Tract Area	18.07
E. Forest Areas to be Cleared	25.51
F. Forest Areas to be Retained	5.08
Break Even Point Calculation	
Reforestation Threshold (25 % x A)	11.00
Existing Forest on Net Tract Area	18.07
Maximum "Break Even Point" Clearing Proposed Forest to be Retained on Tract Area	3.90
Forest Areas Cleared Above Reforestation Threshold	12.27
Forest Areas Retained Above Reforestation Threshold (Retention Credits)	1.80
Since we propose less clearing on the "Net Tract Area" than the "Break Even Point" clearing:	
Reforestation Required =	0.00

GENERAL NOTES

- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and Landscape Manual.
- Financial Surety for the required landscaping will be posted as part of the Department of Public Works Developer's Agreement.
- The Forest Conservation obligations for BRANTWOOD "Section Three" POD-03 & POD-04 have been provided within the Forest Conservation Easements as shown on this plan.

OWNERS

Parcel 172
George & Gertrude Garbutt
11363 Frederick Road
Ellicott City, Md. 21042

Parcel 45
Hugh F. Cole, Jr.
8835 P. Columbia 100 Pkwy.
Columbia, Md. 21045

Parcel 205
Wendy E. Takacs
11407 Frederick Rd.
Ellicott City, Md. 21042

LDE, INC.
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(410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

Preliminary Landscape & Forest Conservation Tabulation & Details

BRANTWOOD
SECTION THREE - AREA ONE

LOTS 1 - 27, PRESERVATION PARCELS "A" THRU "F", AND BUILDABLE BULK PARCELS "A" & "B"

SCALE AS SHOWN
DRAWING 5 OF 5
JOB NO. 98-040
FILE NO. P00-03

DESIGNED: D.J.L., B.D.B.
DRAWN: K.B.W.
CHECKED: B.D.B.
DATE: 5/00

Developer: BRANTWOOD, LLC
8835 - P. Columbia 100 Parkway
Columbia, Maryland 21045
(410) 930-0810

APPROVED: For Private Water and Private Sewerage
Howard County Health Department.

Howard County Health Officer
DATE 5/17/00