

GENERAL NOTES

- Subject property zoned "R-ED" per 02/02/04 comprehensive zoning plan.
- The property was incorporated within the Metropolitan district on December 29, 2003.
- Soils map no. 20 & 21.
- Gross area of site: 4.98 ac.±
- Net area of site: 4.94 ac.± (0.04 ac. steep slopes)
- Density calculations:
 - number of units allowed: 4.94 ac. x 2 = 9.88 units
 - number of units proposed: 9 units
- Open space requirements:
 - open space required (50%): 4.98 ac. x 0.50 = 2.49 ac.
 - Area of proposed buildable lots: 1.40 ac.±
 - Area of proposed public right-of-way: 0.73 ac.±
 - Area of proposed open space:
 - Credited open space provided: 2.49 ac.
 - Non-credited open space provided: 0.02 ac.
 - Total open space provided: 2.51 ac.
- Area of proposed Parcel 'A': 0.20 ac.
- Area of proposed Parcel 'B': 0.14 ac.
- Topography is based on a field run survey prepared by C.B. Miller & Associates in December 2002.
- Wetlands investigation and Forest Stand delineation prepared by Exploration Research Inc. The Project is in conformance with the latest Howard County standards unless waivers have been approved.
- The coordinates shown herein are based upon the Howard County Geodetic Control which is based on the Maryland State Plane coordinate system. Howard Co. Monument Nos. 31E6 and 31E7 were used for this project.
- There are no floodplains, historic structures or cemeteries on-site.
- This plan is subject to compliance with the amended fifth edition of the Howard County Subdivision and Land Development Regulations, effective October 2, 2003.
- Street trees to be provided along both sides of Jeans Way and Road 'A' and will be shown at the final plan stage.
- Landscaping will be shown at the final plan stage.
- Public water and public sewer are proposed to tie into existing Contract No. 14-4096-D.
- This Property has 10' of frontage on a scenic road (Ilchester Road). Within the 10' of frontage, no change is proposed to the view from Ilchester Road. The proposed subdivision is not visible from Ilchester Road.
- Parcel 'A' is a non-buildable parcel to be privately owned and maintained by the owner/developer of Ilchester Heights.
- After recordation of the Ilchester Heights Plat parcel 'B' shall be transferred to the owner of adjacent Parcel 622 free of charge for the purpose of a future public road right-of-way, in lieu of construction of a road at this time. Parcel 'B' is devoid of Development Density for parcel 622.
- Geotechnical subsurface investigation prepared by Herbst Benson and Associates. The test was focusing on presence of ground water and rock.
- Stormwater management for this site is provided by the following methods:
 - This site is exempt from providing Cp.
 - Water quality and recharge for the road and Lots 1 thru 5 and part of Lot 6 is provided in a BMP sand filter.
 - Water quality and recharge for part of Lot 6 and Lots 7 thru 9 is provided by the sheet flow to buffer credits in combination with the level spreaders.
 - Water quality for subarea 4 is provided in the off site facility, Ilchester Hills F-03-176.
 - All Forest Conservation Retention Easements are overlapped with "Natural Area Conservation Credit."
- This plan is subject to Planning Board case #364 approved by Howard County Planning Board on 06/11/04.
- Open Space Lots 10 and 12 are Home Owners Association (H.O.A.) owned and maintained.
- Open Space Lot 11 is Howard County owned and maintained.

PRELIMINARY EQUIVALENT SKETCH PLAN

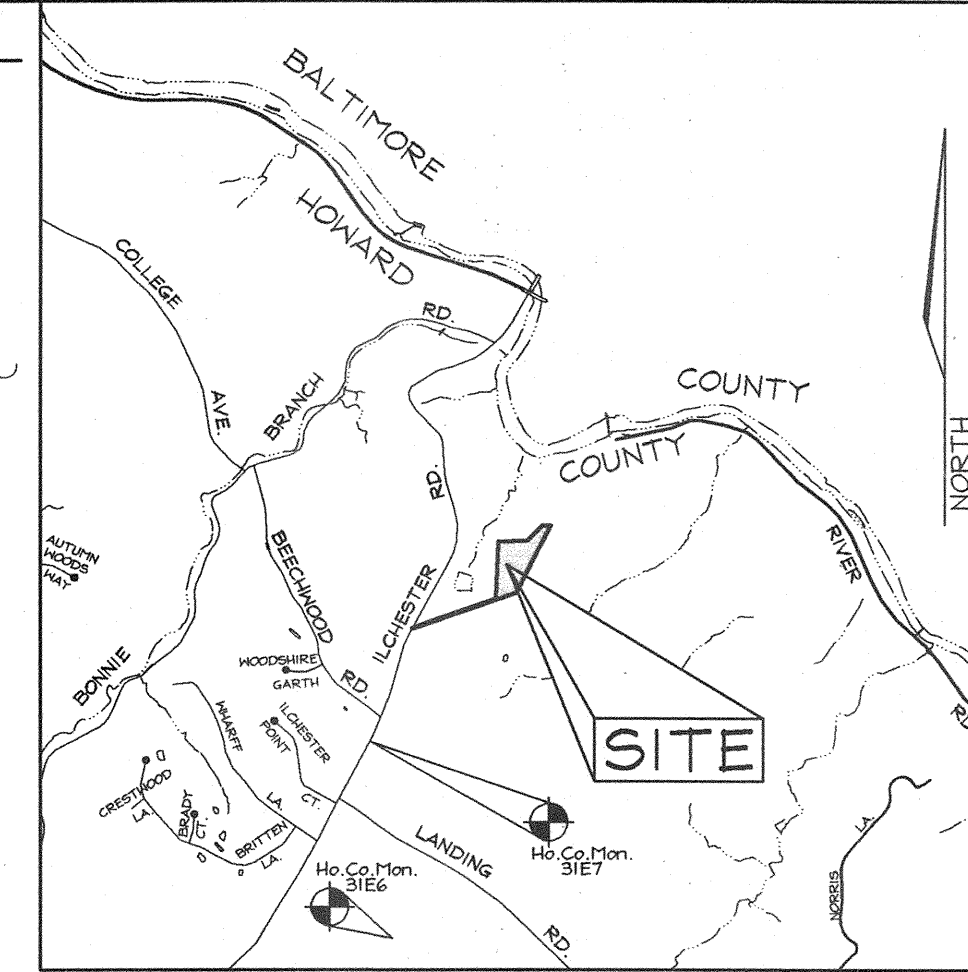
ILCHESTER HEIGHTS

LOTS 1 THRU 9, OPEN SPACE LOTS 10 THRU 12 AND PARCELS 'A' AND 'B'

HOWARD COUNTY, MARYLAND

LEGEND

- Existing Contour
- Proposed Contour
- Direction of Flow
- Existing Spot Elevation
- Proposed Spot Elevation
- Existing Trees
- 15-24.99% Slopes
- 25-50% Slopes



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

Sta. 31E6	N 173,996.145	E 419,619.159	EI.: 147.146 (meters)
	N 570,852.353	E 1,376,700.524	EI.: 482.760 (feet)
Sta. 31E7	N 174,448.165	E 419,864.035	EI.: 145.892 (meters)
	N 572,335.322	E 1,377,503.920	EI.: 478.648 (feet)

SHEET INDEX

DESCRIPTION	SHEET No.
Cover Sheet	1 of 4
Preliminary Plan	2 of 4
Schematic Grading, Landscape & Sediment Control Plan	3 of 4
Preliminary Forest Conservation Plan, Notes and Details	4 of 4

ROAD 'A' CENTERLINE CURVE DATA

CURVE No.	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	275.00'	101.12'	21°04'08"	N08°21'18"14"	100.55'

ROAD CLASSIFICATION

ROAD NAME	CLASSIFICATION	R/W
Jeans Way	Public Access Street	Varies
Road 'A'	Public Access Place	40'

U.S. EQUIVALENT COORDINATE TABLE

POINT	NORTHING	EASTING
55	574,417.9980	1,378,828.9770
56	574,424.4179	1,379,131.7068
59	574,582.0695	1,379,293.0692
60	574,583.1708	1,379,374.7255
63	573,882.9408	1,379,017.9587
64	573,522.4980	1,377,935.6860
65	573,510.1623	1,377,928.8845
103	573,820.3742	1,378,806.2343

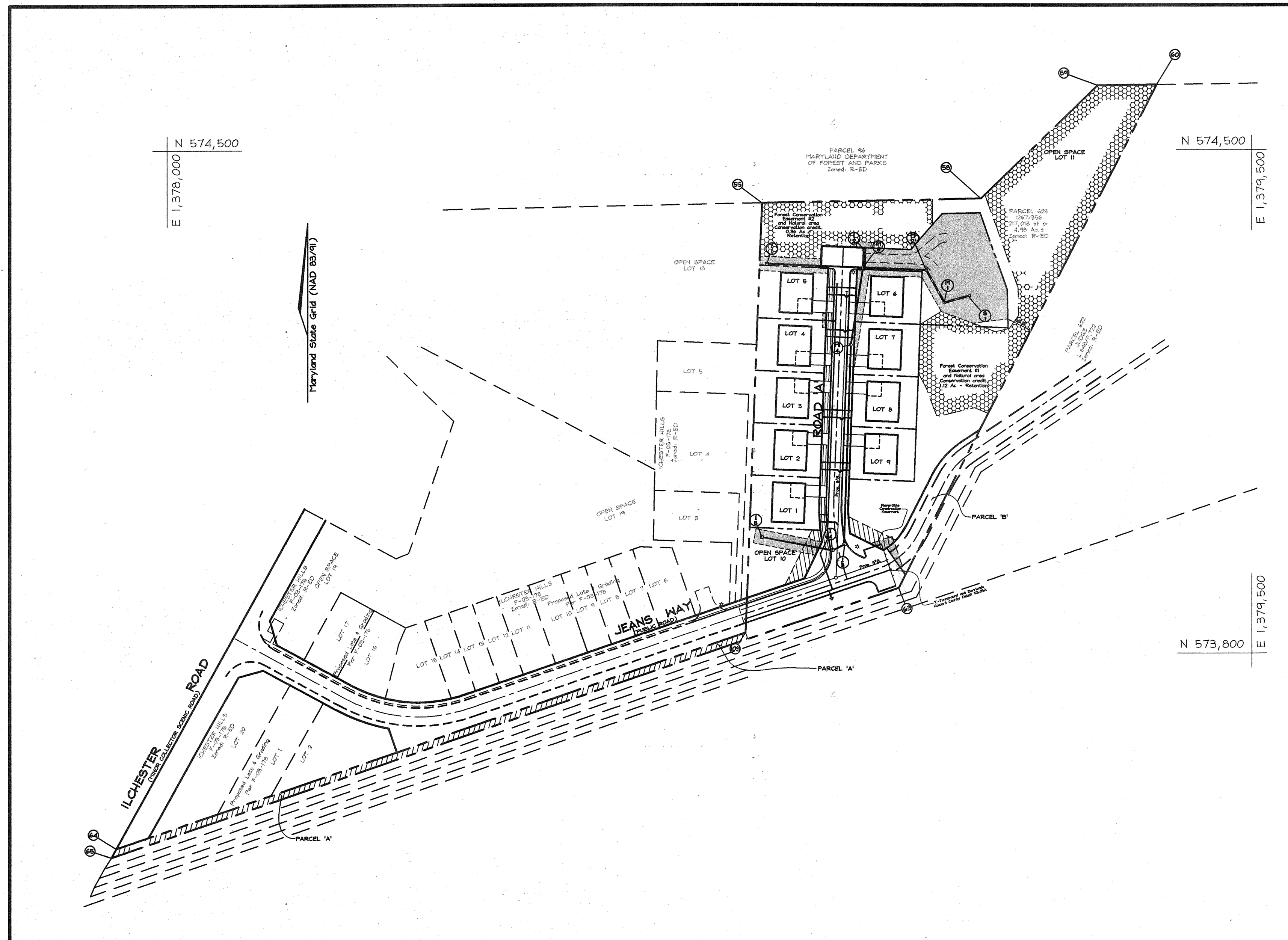
METRIC EQUIVALENT COORDINATE TABLE

POINT	NORTHING	EASTING
55	175,082.9560	420,267.9127
56	175,084.9127	420,360.1850
59	175,132.9647	420,409.3683
60	175,133.3007	420,434.2572
63	174,919.8702	420,325.5145
64	174,810.0070	419,995.6371
65	174,806.2471	419,993.5640
103	174,900.7999	420,260.9807

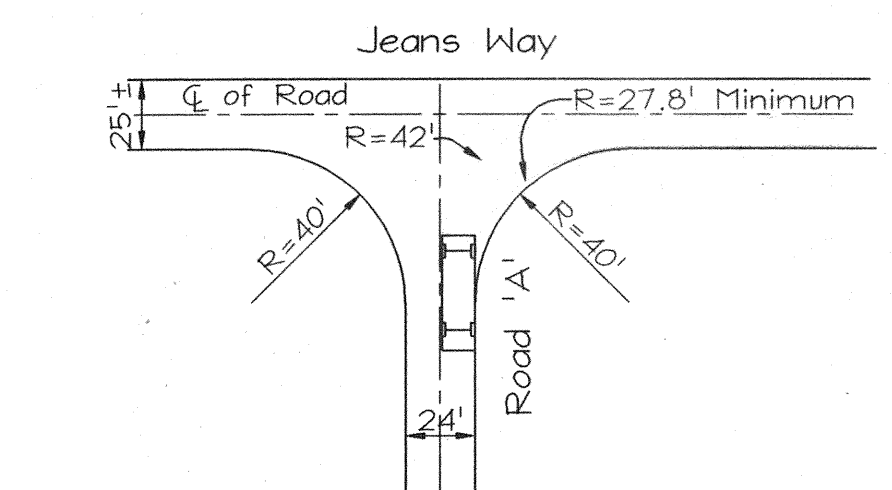
STREET LIGHT TABLE

FIXTURE TYPE	POLE TYPE	LOCATION
100 watt HPS vapor pendant mount, full cutoff, post top colonial	14" bronze fiberglass ornamental	☉ Sta. 4+33.51 14.99' right
100 watt HPS vapor pendant mount, full cutoff, post top colonial	14" bronze fiberglass ornamental	☉ Sta. 0+26.00 30.00' right

Note: Light pole location given at center of base



LOCATION MAP
SCALE: 1"=100'



MINIMUM TURNING PATH FOR SU DESIGN VEHICLES
Not to Scale

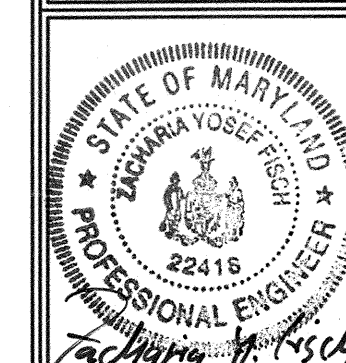
OWNER/DEVELOPER

HK Development
C/O Mr. Robert A. Hale
4635 Ilchester Road
Ellicott City, MD 21043-6819

COVER SHEET

ILCHESTER HEIGHTS
LOTS 1 THRU 9,
OPEN SPACE LOTS 10 THRU 12
AND PARCELS 'A' AND 'B'

TAX MAP 31 GRID 5 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND PARCEL 623



FSH Associates
Engineers Planners Surveyors
8318 Forrest Street Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

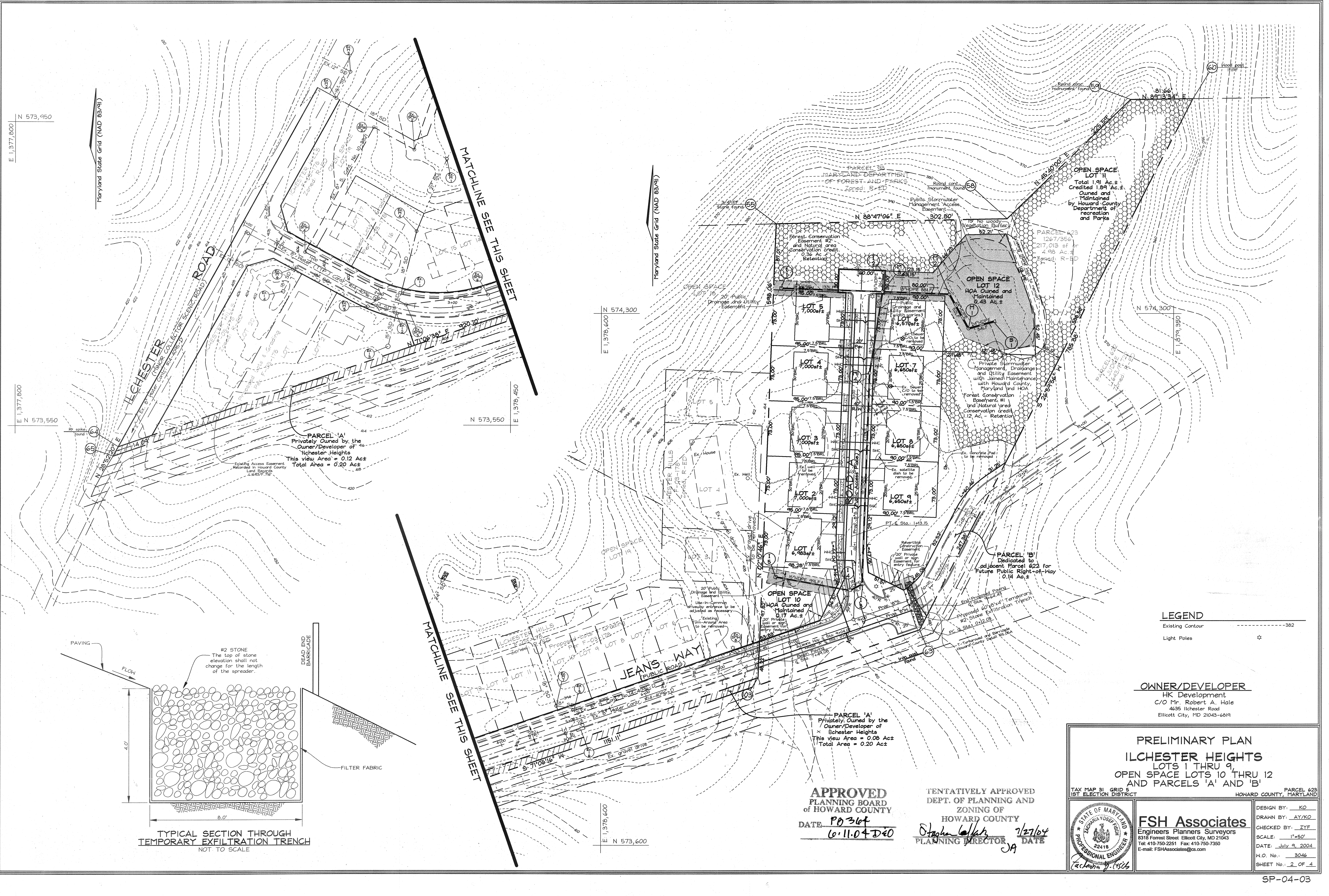
DESIGN BY: KO
DRAWN BY: AY/KO
CHECKED BY: ZYF
SCALE: As Shown
DATE: July 9, 2004
W.O. No.: 3046
SHEET No.: 1 OF 4

APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE: PB 364
6.11.04 D&O

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

PLANNING DIRECTOR DATE
7/23/04 JA



E 1,377,800
N 573,950

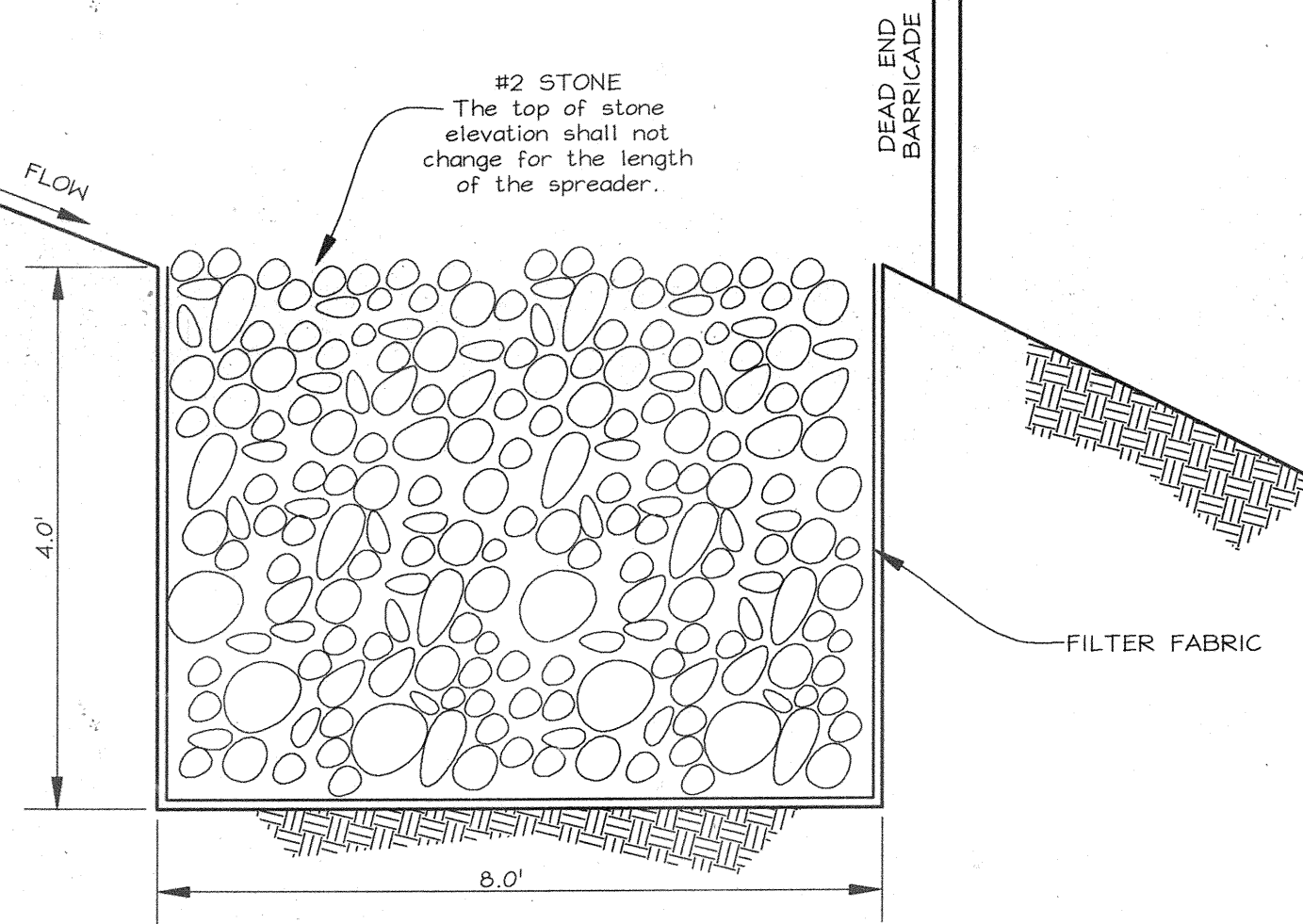
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N 573,550

N 573,550
E 1,376,450

N 574,300
E 1,376,600

N 574,300
E 1,376,350

N 573,600
E 1,376,600



TYPICAL SECTION THROUGH TEMPORARY EXFILTRATION TRENCH
NOT TO SCALE

PARCEL 'A'
Privately Owned by the
Owner/Developer of
Ilchester Heights
This view Area = 0.12 Ac±
Total Area = 0.20 Ac±

PARCEL 'A'
Privately Owned by the
Owner/Developer of
Ilchester Heights
This view Area = 0.08 Ac±
Total Area = 0.20 Ac±

OPEN SPACE
LOT 11
Total 1.91 Ac±
Credited 1.89 Ac±
Owned and
Maintained
by Howard County
Department of
recreation
and Parks

OPEN SPACE
LOT 12
HOA Owned and
Maintained
0.43 Ac±

PARCEL 'B'
Dedicated to
adjacent Parcel 622 for
Future Public Right-of-Way
0.14 Ac±

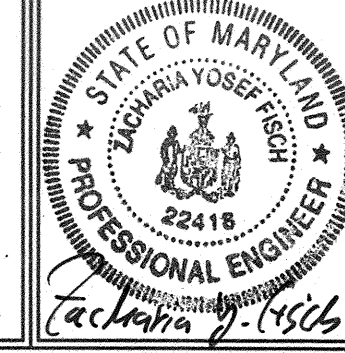
LEGEND

Existing Contour	-----382
Light Poles	☆

OWNER/DEVELOPER
HK Development
C/O Mr. Robert A. Hale
4635 Ilchester Road
Ellicott City, MD 21043-6819

PRELIMINARY PLAN
ILCHESTER HEIGHTS
LOTS 1 THRU 9,
OPEN SPACE LOTS 10 THRU 12
AND PARCELS 'A' AND 'B'

TAX MAP 31 GRID 5
1ST ELECTION DISTRICT

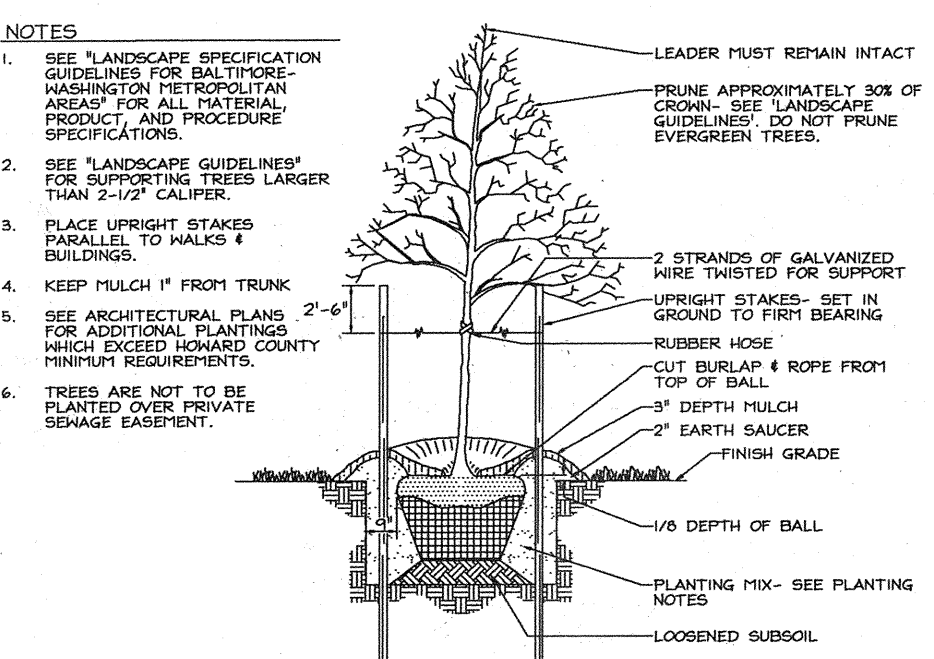
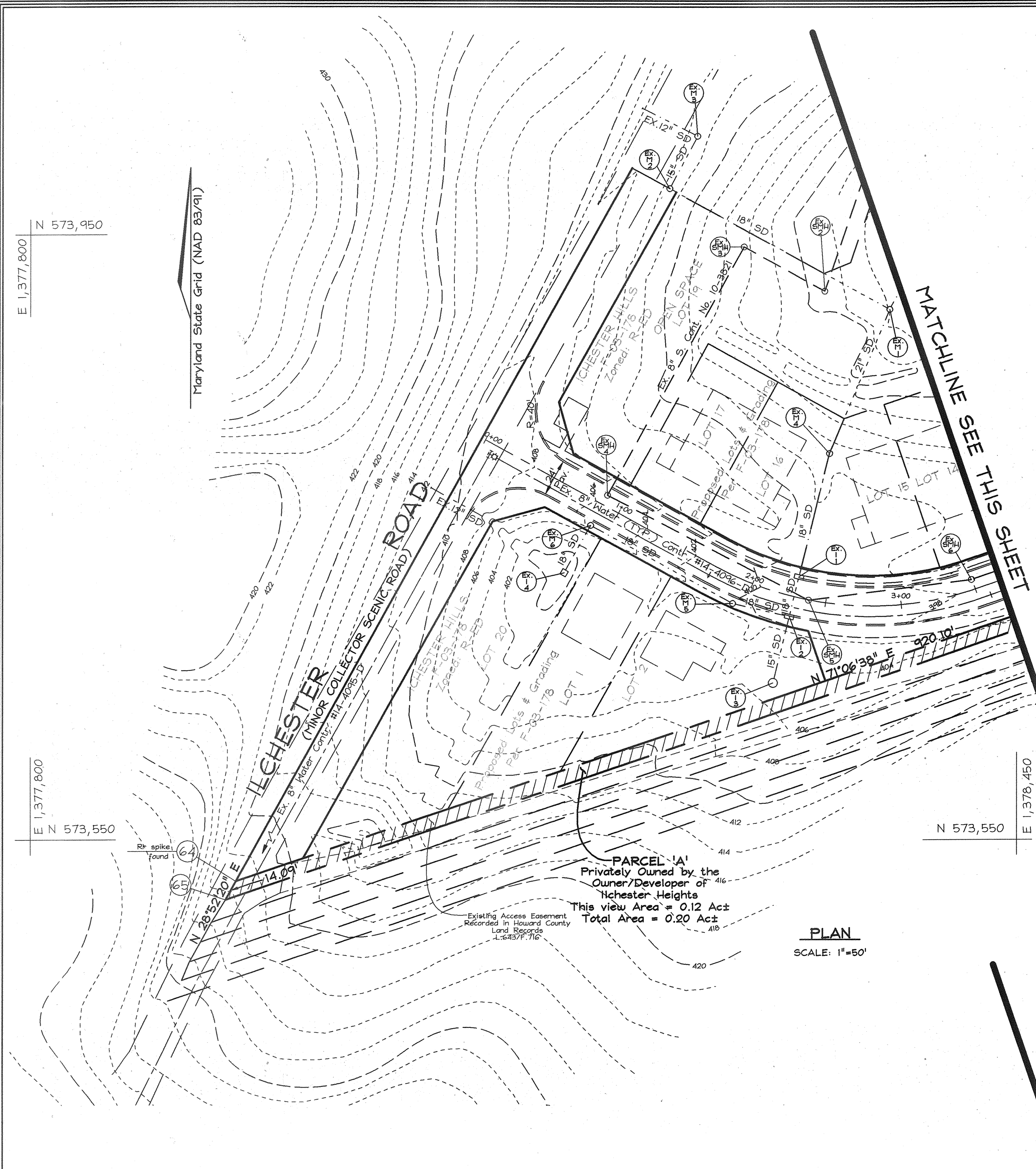


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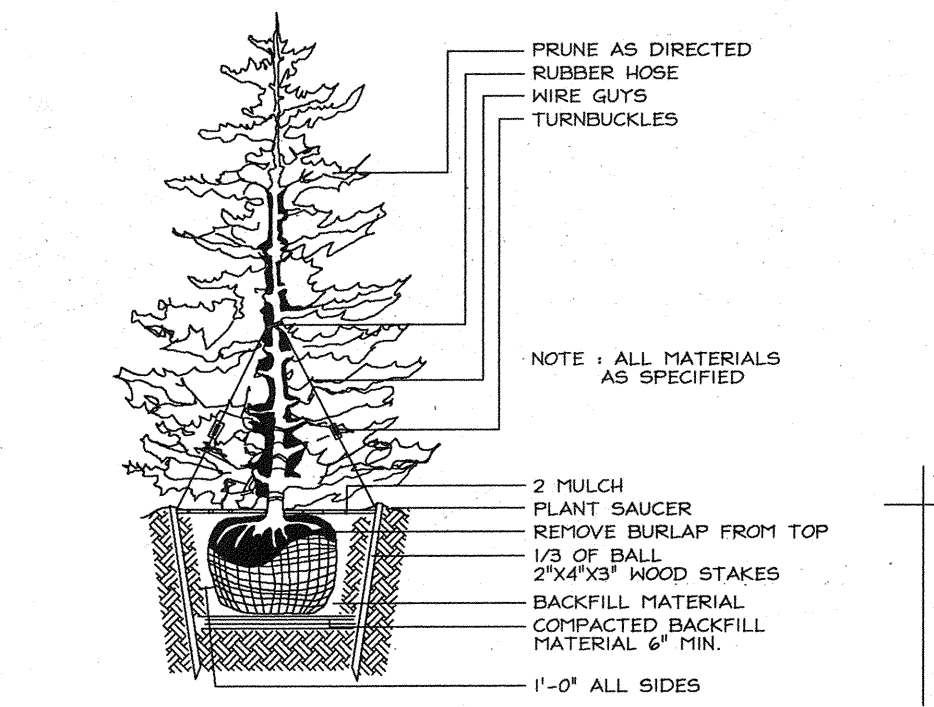
DESIGN BY: KO
DRAWN BY: AY/KO
CHECKED BY: ZTF
SCALE: 1"=50'
DATE: July 9, 2004
P.L.O. No.: 3046
SHEET No.: 2 OF 4

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: PO 364
6-11-04 DED

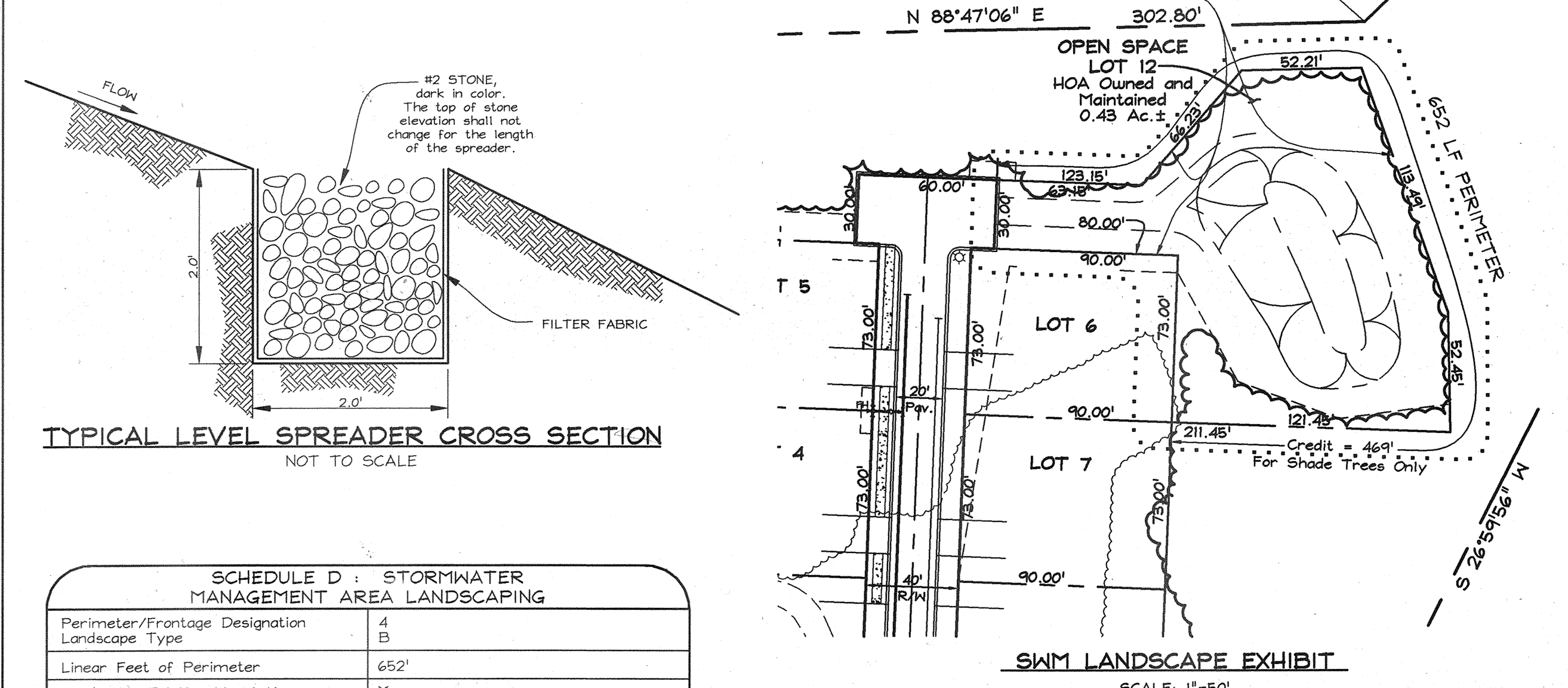
TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY
Stephen J. A. 7/27/04
PLANNING DIRECTOR DATE JA



TYPICAL TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE



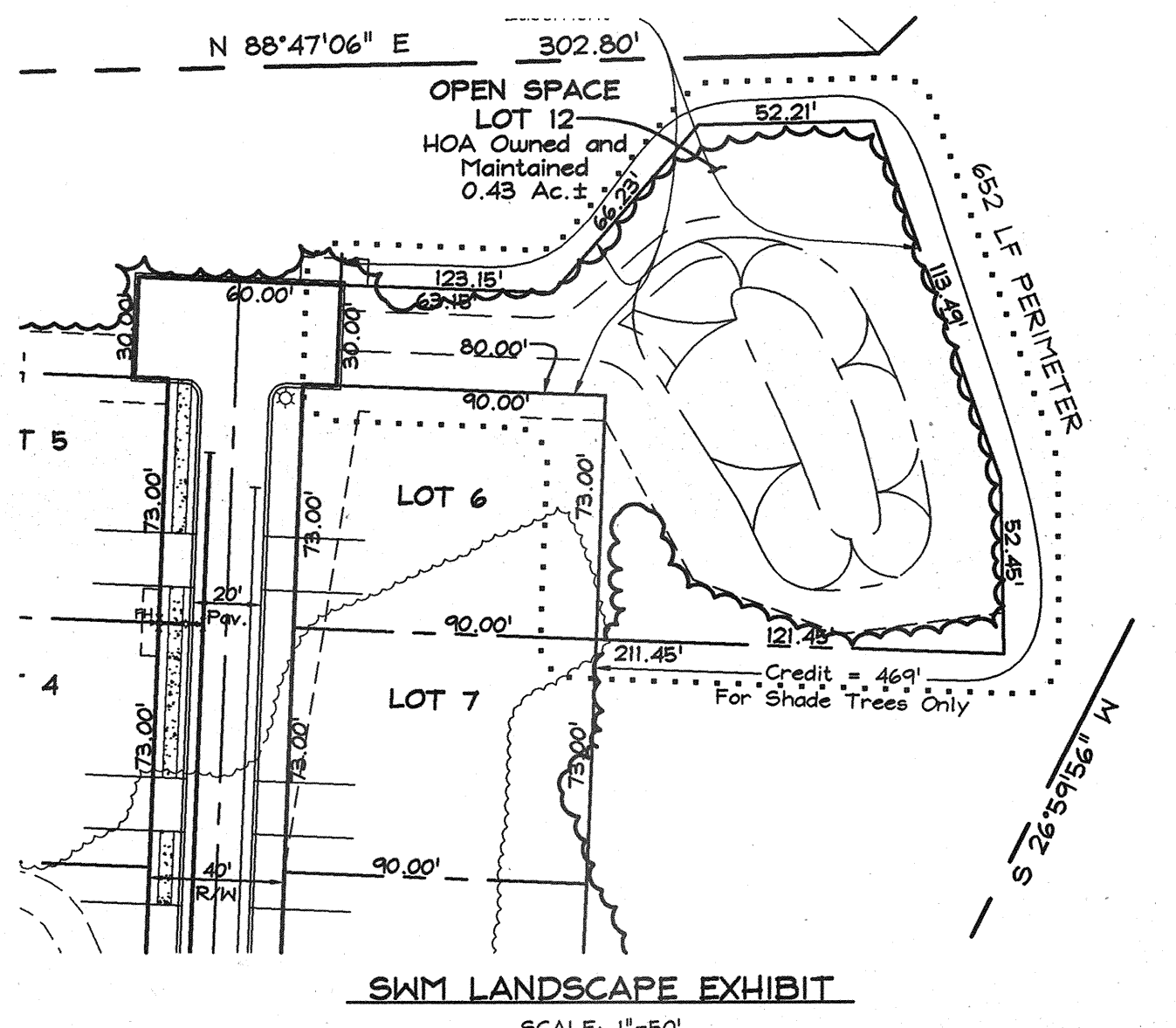
TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



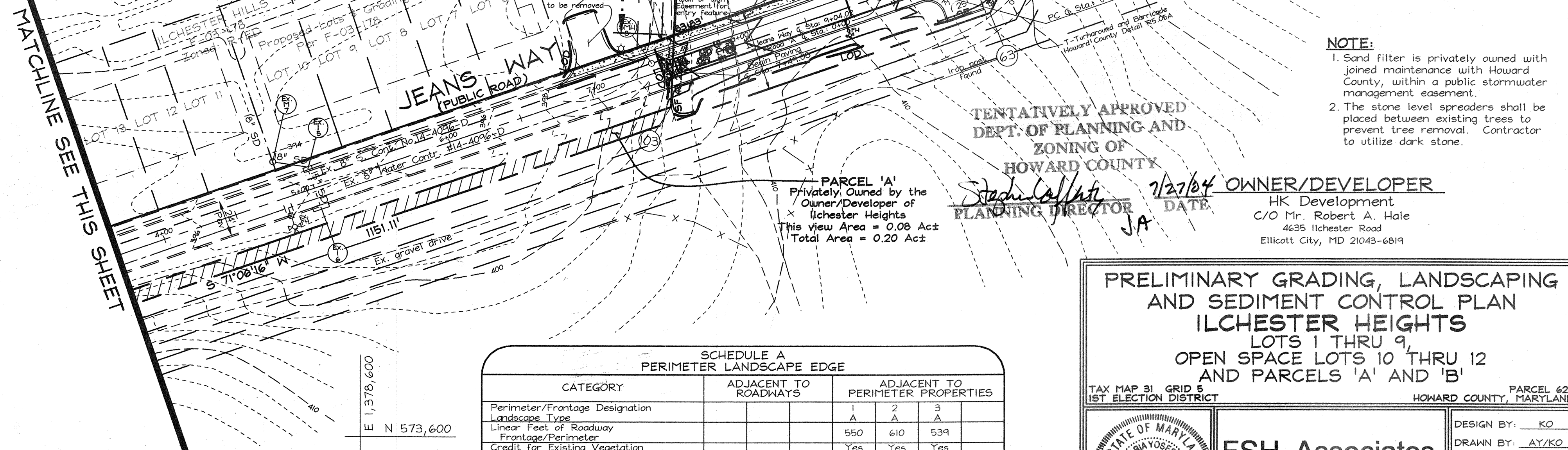
TYPICAL LEVEL SPREADER CROSS SECTION
NOT TO SCALE

SCHEDULE D : STORMWATER MANAGEMENT AREA LANDSCAPING

Perimeter/Frontage Designation	A	B
Linear Feet of Perimeter	652'	
Credit for Existing Vegetation (No, Yes and Linear Feet)	Yes 469'	(For Shade Trees Only)*
Remaining Perimeter Length	183'	
Credit for Wall, Fence or Berm (No, Yes and %)	No	
Number of Trees Required	1:50 4*	1:40 17
Shade Trees (1:50)		
Evergreen Trees (1:40)		



SWM LANDSCAPE EXHIBIT
SCALE: 1"=50'



MATCHLINE SEE THIS SHEET

Maryland State Grid (NAD 83/91)

MATCHLINE SEE THIS SHEET

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES		
		1	2	3
Perimeter/Frontage Designation		A	A	A
Linear Feet of Roadway		550	610	539
Credit for Existing Vegetation (Yes, No, Linear Feet)		Yes 75LF	Yes 610LF	Yes 514LF
Remaining Perimeter Length		(475LF)	(0 LF)	(25LF)
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)		No	No	No
Remaining Perimeter Length				
Number of Plants Required				
Shade Trees	1:60	1:60	1:60	0
Evergreen Trees	-	-	-	-
Shrubs	-	-	-	-

PLAN
SCALE: 1"=50'

OPEN SPACE LOT II
Total 1.91 Ac.±
Credited 1.89 Ac.±
Owned and Maintained by Howard County Department of Recreation and Parks

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE **PB 367**
6.11.04 D#0

TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY

PLANNING DIRECTOR *John J. ...* **DATE** **7/27/04**
OWNER/DEVELOPER
HK Development
C/O Mr. Robert A. Hale
4635 Ilchester Road
Elliott City, MD 21043-6819

PRELIMINARY GRADING, LANDSCAPING AND SEDIMENT CONTROL PLAN
ILCHESTER HEIGHTS
LOTS 1 THRU 9
OPEN SPACE LOTS 10 THRU 12
AND PARCELS 'A' AND 'B'

TAX MAP 31 GRID 5
1ST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

DESIGN BY: **KO**
DRAWN BY: **AT/KO**
CHECKED BY: **ZYF**
SCALE: **As shown**
DATE: **July 9, 2004**
W.O. No.: **3046**
SHEET No.: **3 OF 4**

FSH Associates
Engineers Planners Surveyors
8318 Forrest Street, Elliott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@earthlink.net

STATE OF MARYLAND
PROFESSIONAL ENGINEER
22418
Caclaria G. ...

NOTE:
1. Sand filter is privately owned with joined maintenance with Howard County, within a public stormwater management easement.
2. The stone level spreaders shall be placed between existing trees to prevent tree removal. Contractor to utilize dark stone.

Forest Tree Protection and Management Notes

- Tree protection devices shall be installed prior to any grading or land clearing.
- After the boundaries of the retention areas have been staked and flagged and before any disturbance has taken place a pre-construction meeting with the Howard County Inspector is required.
- Provide maintenance to tree protection devices and signage to maintain their integrity throughout the duration of the project.
- Attachment of signs to tree protection devices to maintain their integrity throughout the duration of the project.
- Any significant changes made to the Forest Conservation Plan shall be made with the prior approval of the Howard County Dept Of Planning and Zoning.
- No burial of discarded material is permitted within the Forest Conservation and Planting areas.
- No open burning within 100 feet of wooded areas is permitted.
- Post construction phase.
 - Inspect existing trees around the perimeter of the site for signs of root or trunk damage and excessive soil compaction.
 - Remove dead or dying trees and evaluate for hazard tree removal.
 - All temporary forest protection devices will be removed after construction.
- Following completion of construction, prior to use, the county inspector shall inspect the entire site for compliance with this Forest Conservation Plan.
- A licensed Arborist or Forester should be retained for this service as needed.

FOREST CONSERVATION EASEMENT TABLE

EASEMENT	TYPE	AREA (ACRES)
1	RETENTION	1.12
2	RETENTION	0.36
TOTAL		1.48

FOREST CONSERVATION WORKSHEET

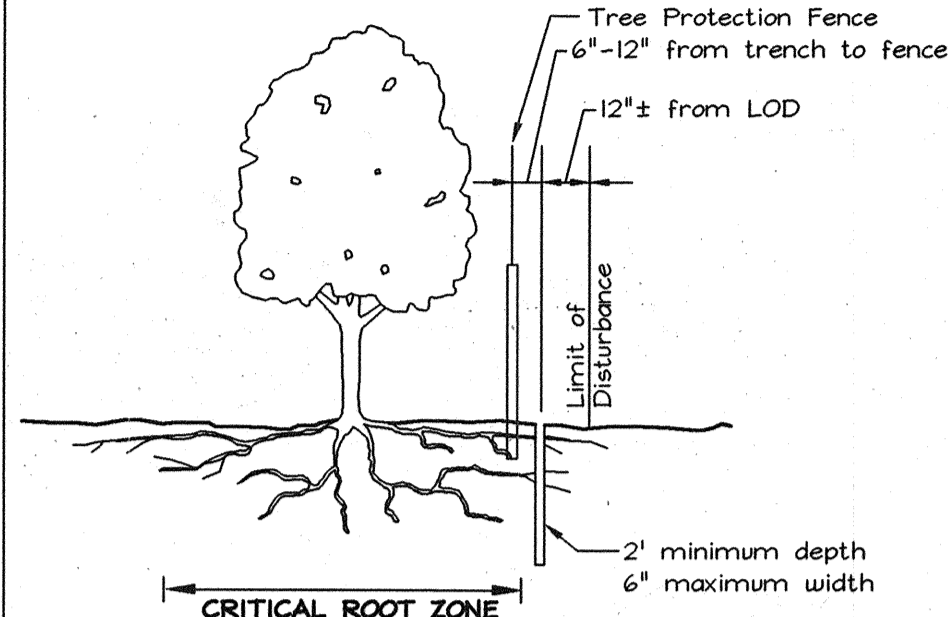
Net Tract Area	Acres
A. Total Tract Area	4.98
B. Area Within 100 Year Floodplain	--
C. Other deductions	--
D. Net Tract Area	4.98
Zoning Use Category: RESIDENTIAL-SUBURBAN	
Land Use Category	
E. Afforestation Minimum (15 % x D)	0.75
F. Conservation Threshold (20 % x D)	1.00
Existing Forest Cover	
G. Existing Forest on Net Tract Area	2.66
H. Forest Area Above Conservation Threshold	1.66
Breakeven Point	
I. Forest Retention Above Threshold with no Mitigation	1.33
J. Clearing Permitted without Mitigation	1.33
Proposed Forest Clearing	
K. Forest Areas to be Cleared	1.18
L. Forest Areas to be Retained	1.48
Planting Requirements	
M. Reforestation for Clearing Above Threshold	0.30
N. Reforestation for Clearing Below the Threshold	0
P. Credit for Retention Above Conservation Threshold	0.48
Q. Total Reforestation Required	0
R. Total Afforestation Required	0
S. Total Reforestation and Afforestation Requirement	0

SPECIMEN TREES

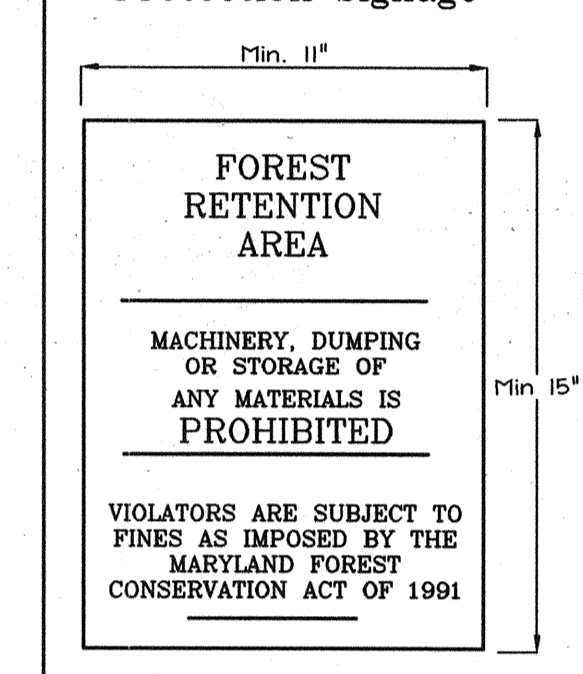
Key	Name	Scientific Name	Size	Condition	Retained
ST-1	White Oak	Quercus alba	33"	Fair	NO
ST-2	Black Oak	Quercus velutina	39"	Fair	NO
ST-3	Tulip Poplar	Liriodendron tulipifera	31"	Fair	NO
ST-4	Tulip Poplar	Liriodendron tulipifera	33"	Good	NO
ST-5	Red Oak	Quercus rubra	32"	Fair	NO
ST-6	Tulip Poplar	Liriodendron tulipifera	34"	Good	NO
ST-7	Tulip Poplar	Liriodendron tulipifera	30"	Good	YES
ST-9	Red Oak	Quercus rubra	31"	Fair	NO
ST-10	Tulip Poplar	Liriodendron tulipifera	46"	Fair	NO
ST-11	Tulip Poplar	Liriodendron tulipifera	31"	Good	NO
ST-12	Tulip Poplar	Liriodendron tulipifera	30"	Fair	NO
ST-13	Red Oak	Quercus rubra	35"	Fair	YES
ST-14	Red Oak	Quercus rubra	39"	Fair	NO
ST-15	Red Oak	Quercus rubra	37"	Fair	NO
ST-16	Red Oak	Quercus rubra	39"	Good	NO
ST-17	Tulip Poplar	Liriodendron tulipifera	32"	Good	NO
ST-18	Black Cherry	Prunus serotina	34"	Poor	NO
ST-20	Tulip Poplar	Liriodendron tulipifera	33"	Fair	YES
ST-21	Tulip Poplar	Liriodendron tulipifera	33"	Poor	YES
ST-22	Tulip Poplar	Liriodendron tulipifera	31"	Good	YES
ST-23	Red Oak	Quercus rubra	35"	Poor	YES
ST-24	Tulip Poplar	Liriodendron tulipifera	41"	Poor	YES
ST-25	Tulip Poplar	Liriodendron tulipifera	36"	Fair	YES

ST-8 was re-evaluated and not found to be large enough
ST-19 fell down in a storm

ROOT PRUNING



Forest Retention Area Protection Signage



Forest Conservation Narrative

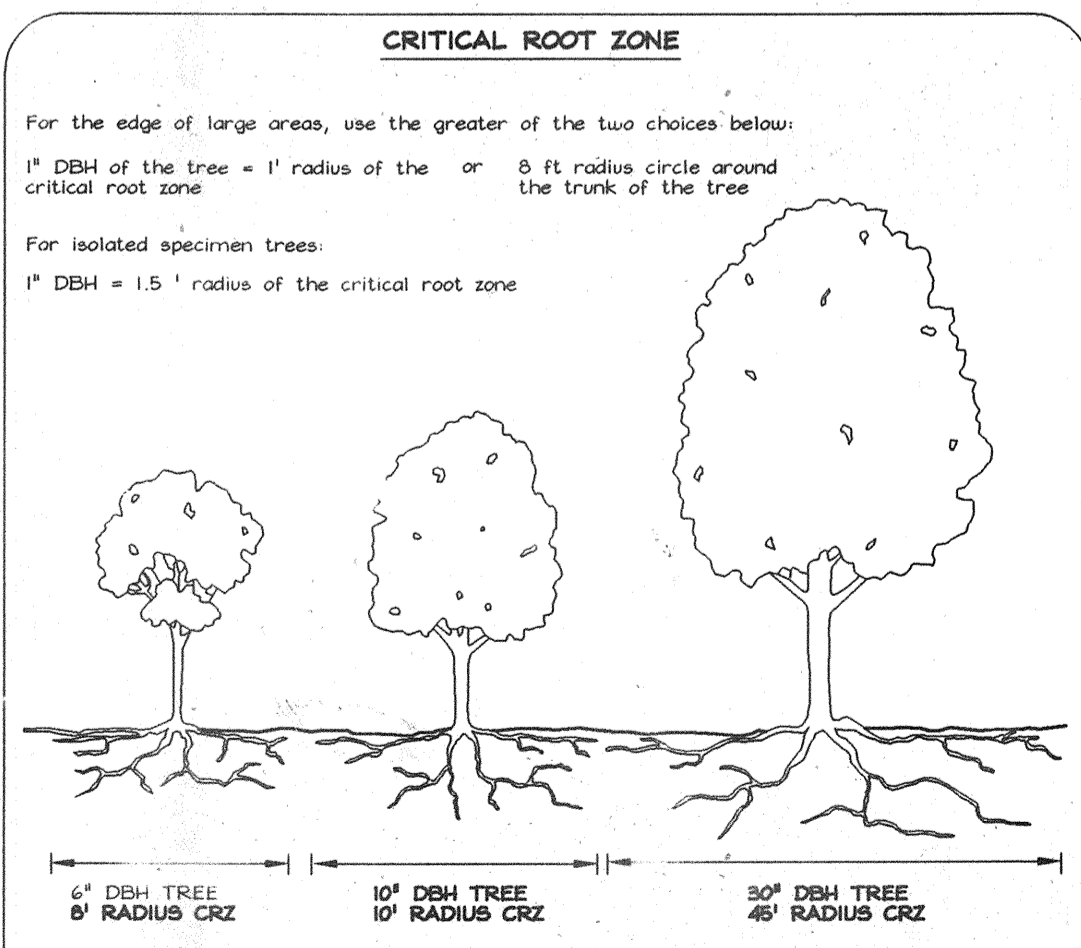
This Forest Conservation Plan complies with the Howard County Manual of 1998 and the Maryland Forest Conservation Act of 1991.

The site consists of 4.98 Ac. of which 2.66 Ac. are forested. These woodlands have been preserved to the maximum extent possible, resulting in retention within two Forest Conservation Easements of 1.48 Ac. There is no mitigation required for this development.

Due to the large number of Specimen Trees, it is necessary to remove several to accommodate development and required Storm Water Management facilities.

Financial surety for the Forest conservation, retention, must be posted as part of the Developers agreement in the amount of \$12,893.80 (64,469 sf of retention @ \$0.20 per square foot).

NOT CONTINUED - AREA CONTAINS NO FOREST RESOURCES

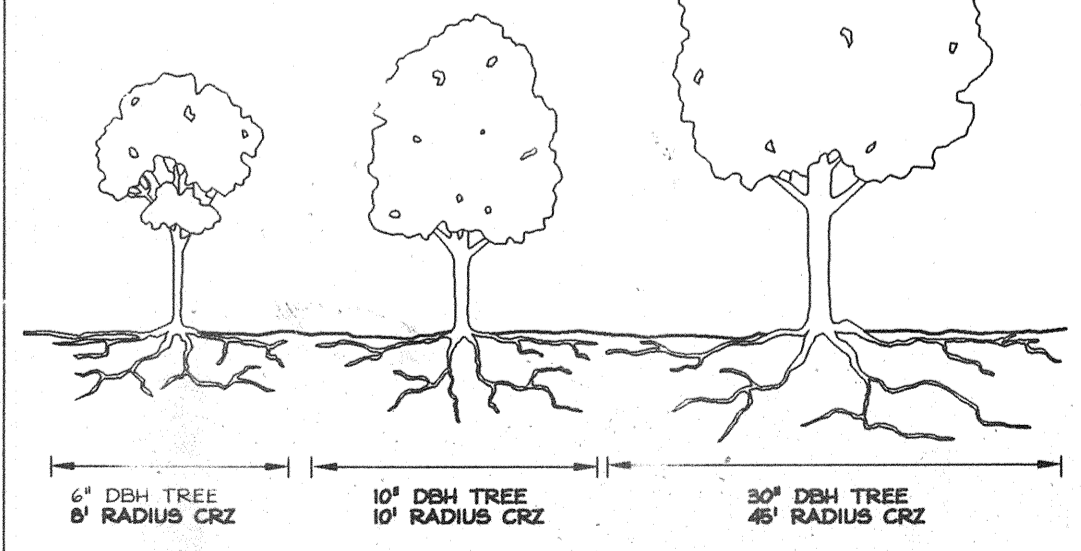


For the edge of large areas, use the greater of the two choices below:

1" DBH of the tree = 1' radius of the CRZ or 8 ft radius circle around critical root zone

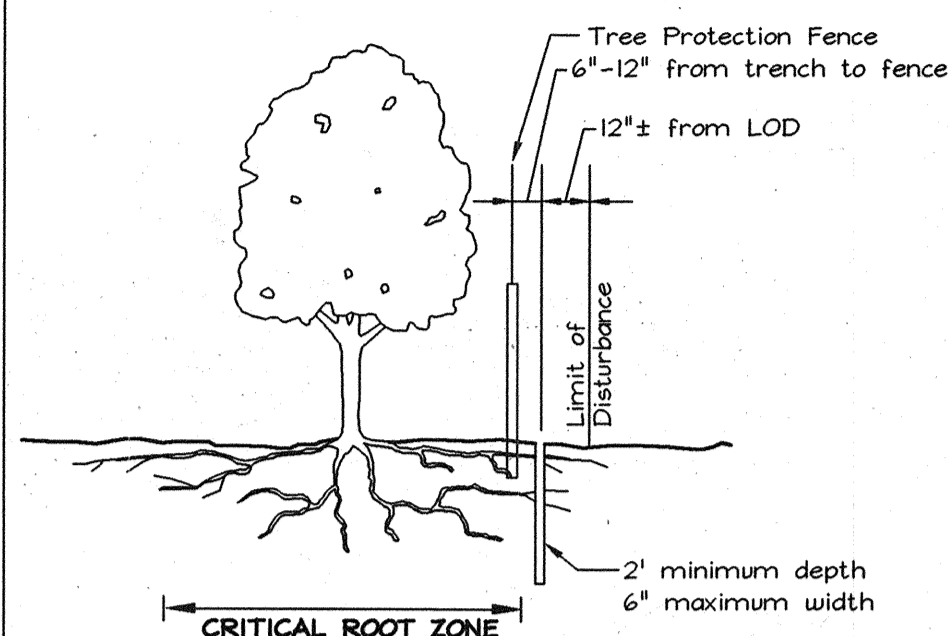
For isolated specimen trees:

1" DBH = 1.5' radius of the critical root zone

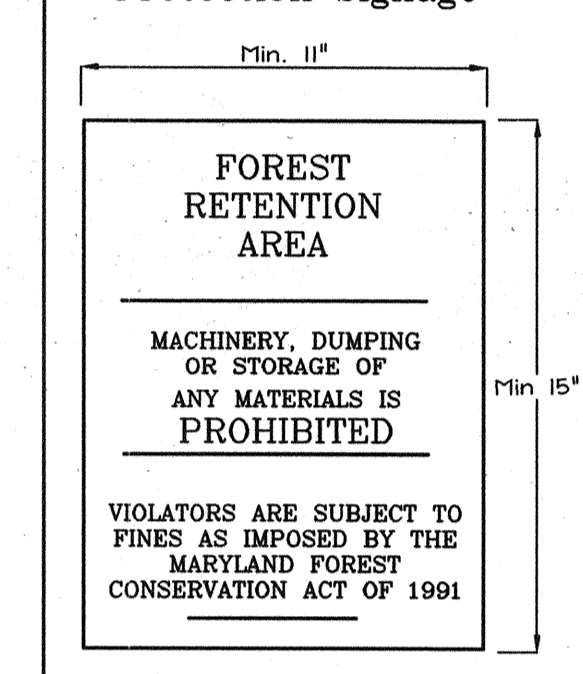


APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, DIVISION OF LAND DEVELOPMENT	CHIEF, BUREAU OF HIGHWAYS
DATE	DATE

- Retention areas shall be set prior to construction
- Boundaries of retention areas shall be flagged, and location of trench shall be specified by ERI Qualified Professional.
- Roots shall be cut cleanly with root pruning equipment. Where roots > 1" are found, trenching shall be done by air spade or hand tools. Roots > 1" shall be cut with a hand saw.
- Trench shall be immediately backfilled with soil removed or high organic content soil.
- Any other techniques shall be approved by the ERI Qualified Professional before implementation.



Forest Retention Area Protection Signage



Forest Conservation Narrative

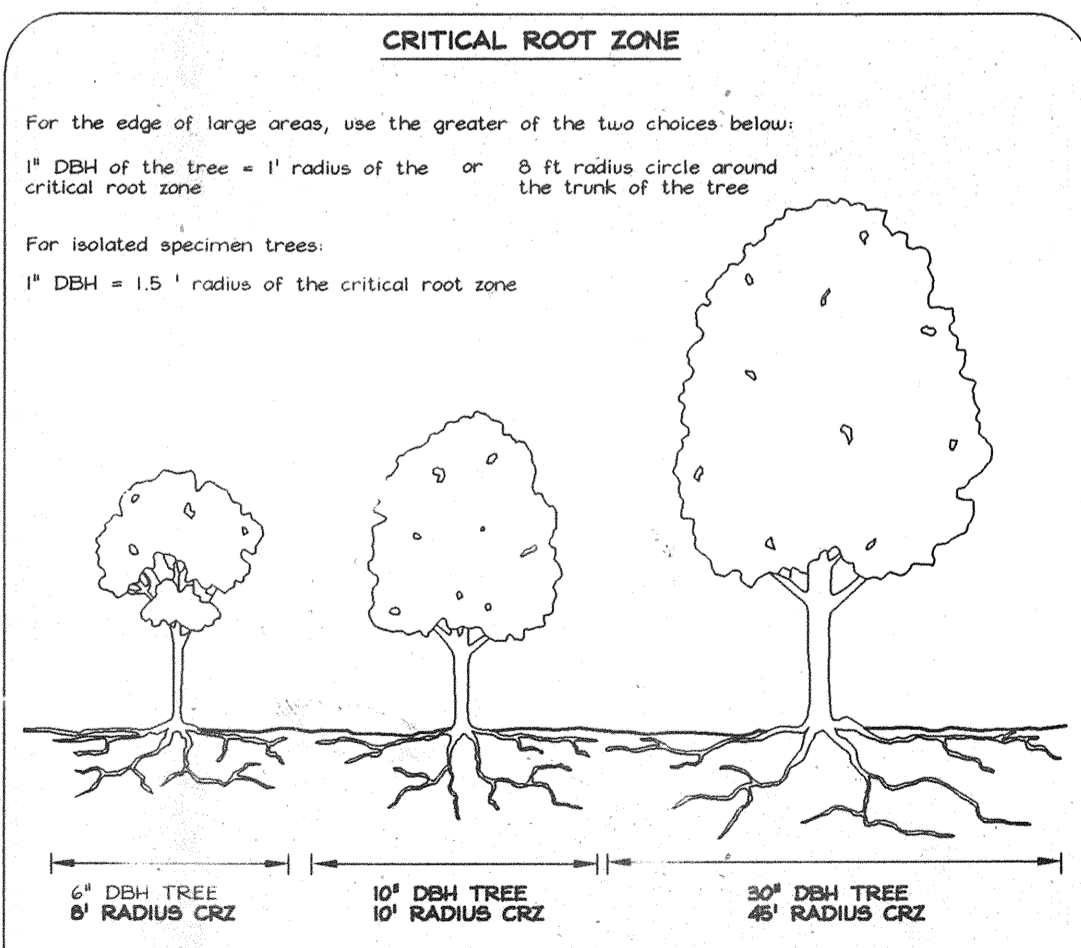
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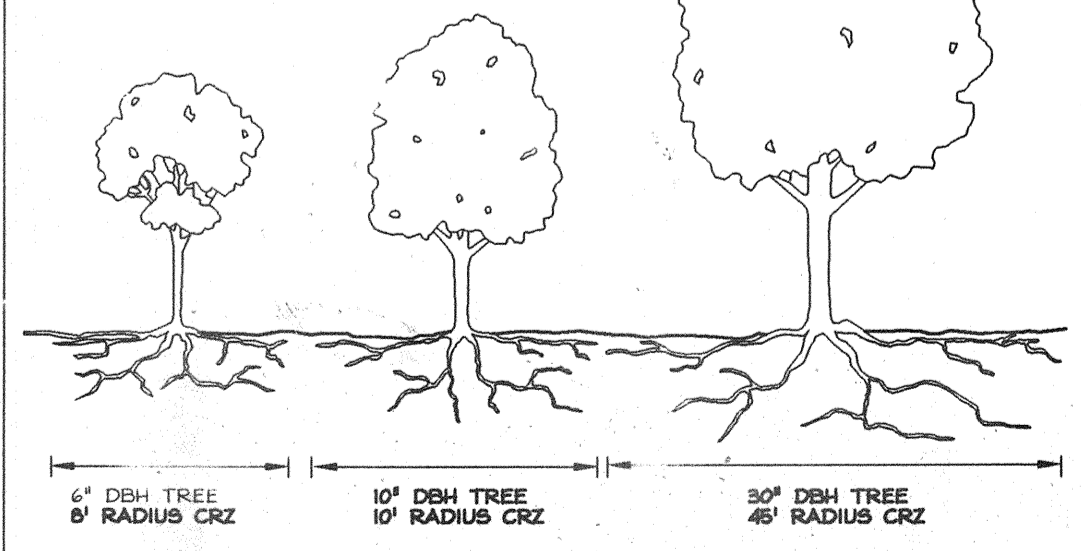


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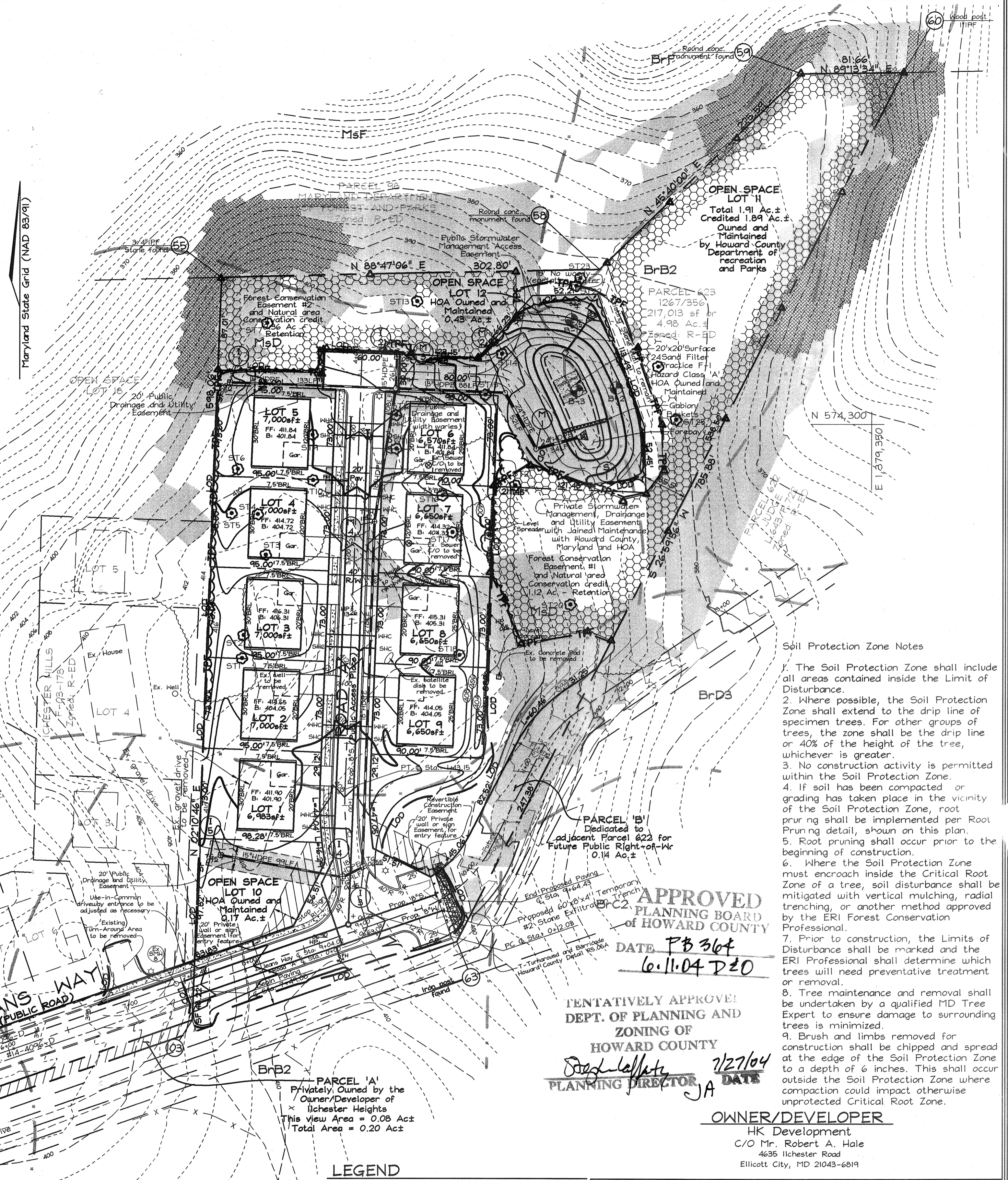
1" DBH of the tree = 1' radius of the CRZ or 8 ft radius circle around critical root zone

For isolated specimen trees:

1" DBH = 1.5' radius of the critical root zone



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, DIVISION OF LAND DEVELOPMENT	CHIEF, BUREAU OF HIGHWAYS
DATE	DATE



LEGEND

- Existing Contour: ---
- Proposed Contour: - - -
- Spot Elevation: +82.53
- Direction of Flow: →
- Property Boundary Line: ———
- Soils Division Line: - - -
- Tree Protection Fence: ———
- Forest Easement Signage: ▲
- Forest Conservation Easement: [Symbol]

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: 7/27/04
PLANNING DIRECTOR: JA

OWNER/DEVELOPER
HK Development
C/O Mr. Robert A. Hale
4635 Ilchester Road
Ellicott City, MD 21043-6819

FOREST CONSERVATION PLAN
ILCHESTER HEIGHTS
LOTS 1 THRU 9
OPEN SPACE LOTS 10 THRU 12
AND PARCELS 'A' AND 'B'

TAX MAP 31 GRID 5
1ST ELECTION DISTRICT

EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
8318 FOREST STREET
ELICOTT CITY, MARYLAND 21043
TEL: (410) 750-1100 FAX: (410) 750-7880
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DESIGN BY: SH
DRAWN BY: AB
CHECKED BY: ZYF
SCALE: 1"=50'
DATE: July 9, 2004
P.L.O. No.: 3046
SHEET No.: 4 OF 4