

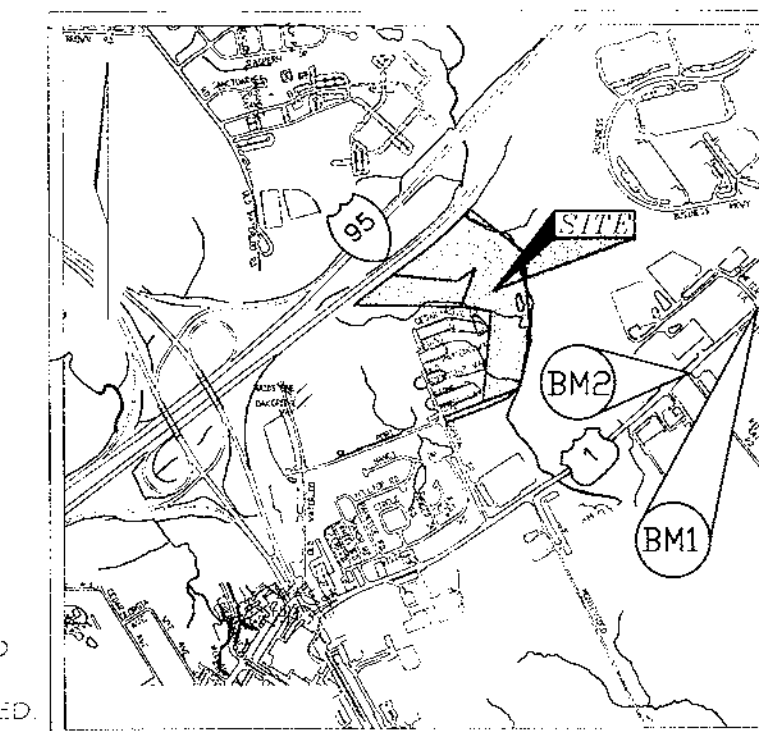
PRELIMINARY PLAN THE OAKS AT WATERS EDGE

SITE DATA

LOCATION: TAX MAP #43 BLOCK 4 PARCELS 279, P/O 5, # 647
1ST ELECTION DISTRICT
EXISTING ZONING: R-1H
BLUE STREAM BULK PARCEL 'A' REF: PLAT # 1442/14422; F-00-126

SITE TABULATIONS

GROSS AREA OF PROPERTY:	33.97 ac.
ZONING:	R1-H
PROPOSED USE:	TRADITIONAL NEIGHBORHOOD DESIGN
AREA OF 100 YEAR FLOODPLAIN:	4.86 ac.
AREA OF 25% OR GREATER SLOPES:	2.21 ac.
NET AREA OF PROPERTY:	27.47 ac.
DENSITY (R-1H):	8 DWELLING UNITS PER NET ACRE
NUMBER OF UNITS ALLOWED:	8 DWELLING UNITS PER NET ACRE x 27.47 (NET ACREAGE) = 219 UNITS ALLOWED
NUMBER OF UNITS PROPOSED:	7 DWELLING UNITS PER NET ACRE x 27.47 (NET ACREAGE) = 192 UNITS PROPOSED
OPEN SPACE REQUIRED:	25% GROSS AREA = 6.99 ac.
OPEN SPACE PROVIDED:	41% GROSS AREA = 11.54 ac.
RECREATIONAL OPEN SPACE REQUIRED:	17% GROSS AREA = 4.77 ac.
RECREATIONAL OPEN SPACE PROVIDED:	19% GROSS AREA = 5.26 ac.
OPEN SPACE DEVOTED TO SMALL SQUARES & FORMAL PARKS REQUIRED:	20% OPEN SPACE = 5.59 ac.
OPEN SPACE DEVOTED TO SMALL SQUARES & FORMAL PARKS PROVIDED:	TO BE SHOWN AT SITE DEVELOPMENT PHASE
RESIDENTIAL PARKING SPACES REQUIRED:	2 SPACES/UNIT = 384
RESIDENTIAL PARKING SPACES PROVIDED:	2.1 SPACES/UNIT = 414 (REFER TO GENERAL NOTE NUMBER 23)
POOL PARKING SPACES REQUIRED:	1 SPACE/10 PERSONS = 19
POOL PARKING SPACES PROVIDED:	1 SPACE/10 PERSONS = 19



VICINITY MAP
SCALE: 1"=200'

BENCHMARKS
SCALE: 1"=200'

BM1 - 4332 N 55° 05' 10" W 137° 17' 6" E
BM2 - 4336 N 55° 06' 10" W 137° 06' 6" E

GENERAL NOTES

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCE: L 4389 / F 156, L 4389 / F 144
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PERFORMED BY VOGEL & ASSOCIATES, INC. DATED JANUARY, 1998.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY AERIAL PHOTOGRAMMETRIC MAP PERFORMED BY POTOMAC AERIAL SURVEY, DATED MARCH, 1996.
- COORDINATE DATUM IS BASED ON THE MARYLAND COORDINATE SYSTEM (NAD 83) AS PROJECTED BY THE FOLLOWING HOCO GEODETIC CONTROL STATIONS: 4332 & 4336.
- WATER AND SEWER FOR THIS PROJECT TO TIE TO A PUBLIC SYSTEM. EXISTING WATER CONTRACT NUMBER 14-3564-D. EXISTING SEWER CONTRACT NUMBER 5445. THE ONSITE WATER TO BE PUBLIC, THE ONSITE SEWER TO BE PRIVATE.
- STORMWATER MANAGEMENT (2 YR AND 10 YR) TO BE PROVIDED FOR THE PROPOSED PUBLIC ROAD AND THE FIRST AREA OF DEVELOPMENT OF THIS SUBMISSION. STORMWATER MANAGEMENT FOR THE BALANCE OF THE DEVELOPMENT TO BE ADDRESSED AT THE SITE DEVELOPMENT PLAN STAGE. STORMWATER MANAGEMENT FOR THIS DEVELOPMENT TO BE EXTENDED DETENTION (THIS PHASE) AND A WET POND FOR THE FUTURE DEVELOPMENT.
- WETLANDS AND STREAMS SHOWN ONSITE ARE BASED ON A FIELD INVESTIGATION PERFORMED BY CAMPBELL-NOLAN ASSOCIATES DATED MARCH, 2000.
- FLOODPLAIN SHOWN ONSITE IS BASED ON HOWARD COUNTY FLOODPLAIN STUDY #0264, DEEP RUN FLOODPLAIN STUDY DATED JANUARY, 1997, AND STUDY DATED JANUARY 08, 2001 BY VOGEL & ASSOCIATES, INC.
- FOREST STAND DELINEATION PLAN PREPARED BY DENNIS J. LABARE DATED NOVEMBER, 1996.
- FOREST CONSERVATION PLAN PREPARED BY CAMPBELL-NOLAN ASSOCIATES DATED MARCH, 2000.
- APFO TRAFFIC STUDY AND CHAPTER 5 STUDY PREPARED BY LEE CUNNINGHAM AND ASSOCIATES DATED DECEMBER, 1995 AND APPROVED UNDER 5-99-13 ORIGINAL STUDY SUPPLEMENTED BY THE TRAFFIC GROUP DATED JUNE 7, 2000.
- A NOISE STUDY WAS PERFORMED BY VOGEL & ASSOCIATES, INC. DATED MARCH, 2000, AND REVISED SEPTEMBER 2000.
- ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN THE LANDSCAPE MANUAL SHALL BE COMPLIED WITH.
 - PUBLIC STREET TREES WILL BE PROVIDED AT THE FINAL PLAN STAGE.
 - PERIMETER LANDSCAPING, STORMWATER MANAGEMENT SCREENING NOISE WALL/EARTH BERM AND OTHER INTERNAL LANDSCAPING TO BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE.
- STREET LIGHTING IS REQUIRED FOR THE PROPOSED PUBLIC ROAD.
- SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- STORMWATER FACILITY # 2 SHOWN ON THIS PLAN IS AN APPROXIMATION OF ITS ULTIMATE SIZE AND SHAPE. IT IS UNDERSTOOD THAT THIS FACILITY HAS NOT BEEN FINAL DESIGNED AND ITS SIZE AND SHAPE MAY CHANGE PRIOR TO SITE DEVELOPMENT PLAN STAGE.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETERY LOCATIONS ON SITE.
- STORMWATER MANAGEMENT SOIL BORINGS FOR THIS SITE ARE BASED ON A GEOTECHNICAL ANALYSIS PROVIDED BY ENGINEERING CONSULTING SERVICES DATED MARCH, 2000.
- THE INTERIOR ROADS WILL BE PRIVATELY OWNED AND MAINTAINED. THE TRASH COLLECTION TO BE PRIVATE. THE PROPOSED SMIF #1 WILL BE PRIVATELY OWNED AND MAINTAINED. THE FUTURE SMIF #2 TO BE PRIVATELY OWNED AND PRIVATELY MAINTAINED.
- THIS PLAN IS SUBJECT TO HP 97-89 ON APRIL 3, 1997 THE PLANNING DIRECTOR APPROVED THE REQUEST TO WAIVE SECTION 16.119 (a) TO NOT REQUIRE A SECOND VEHICULAR ACCESS POINT FOR A PROJECT GENERATING OVER 1,000 ADT VOLUMEN AND SECTION 16.116 (a) (1) AND (2) (ii) TO PERMIT GRADING OR THE REMOVAL OF VEGETATIVE COVER WITHIN 25 FEET OF A PERMANENT AND WITHIN 75 FEET OF A PERENNIAL STREAM FOR THE CONSTRUCTION OF TWO 16' WIDE EMERGENCY BYPASS ROADS AND A NOISE BARRIER/BERM, SUBJECT TO CONDITIONS.
- TWO OFF STREET PARKING SPACES HAVE BEEN PROVIDED FOR ALL UNITS, EITHER ADJACENT TO THE UNIT OR WITHIN 200' OF THE UNIT IN ACCORDANCE WITH SECTION 133 (B) (a.) OF THE HOWARD COUNTY ZONING REGULATIONS.
- THIS SUBDIVISION IS DESIGNED IN ACCORDANCE WITH SECTION 126 (5) (TRADITIONAL RESIDENTIAL NEIGHBORHOODS) OF THE HOWARD COUNTY ZONING REGULATIONS.
- THE MAXIMUM ALLOWED UNITS PER DENSITY AND APPROVED SKETCH PLAN IS 219 UNITS, THE NUMBER OF UNITS PROPOSED BY THIS PLAN IS 192.
- THE DWELLING UNITS PROPOSED ARE SINGLE FAMILY CONDOMINIUM. GENERAL COMMON ELEMENTS HAVE BEEN DESIGNATED PER THIS PLAN. LIMITED COMMON ELEMENTS WILL BE DETERMINED AT THE SITE DEVELOPMENT PLAN STAGE. GENERAL COMMON ELEMENTS SHALL BE MAINTAINED BY A CONDOMINIUM ASSOCIATION. LIMITED COMMON ELEMENTS WILL BE MAINTAINED BY INDIVIDUAL UNIT OWNERS.
- ALL 25 PERCENT STEEP SLOPES ON SITE CONTAIN LESS THAN 20,000 SF OF CONTIGUOUS AREA.
- ALL PRIVATE ROADS WILL BE REVIEWED AT TIME OF SITE DEVELOPMENT PLAN.
- REAR ROOF DRAINS ON DOWNSLOPE CONDITION UNITS WILL BE DIRECTED TO THE FRONT OF THE UNIT TO INSURE THAT ROOF AREAS WILL BE MANAGED BY THE STORM WATER MANAGEMENT FACILITY.
- IN ACCORDANCE WITH SECTIONS 103 A.1, B. F AND 128.6 OF THE HOWARD COUNTY ZONING REGULATIONS (TRADITIONAL RESIDENTIAL NEIGHBORHOOD) 20% OF THE REQUIRED OPEN SPACE REQUIREMENTS WILL BE PROVIDED AS SQUARES AND SMALL FORMAL PARKS. AT LEAST 25% OF THE PERIMETER OF EACH SQUARE OR FORMAL PARK SHALL FRONT ON A STREET OR PRIVATE DRIVE. THIS INFORMATION WILL BE PROVIDED IN DETAIL AT THE SITE DEVELOPMENT PLAN STAGE.
- OPEN SPACE LOTS 1 AND 2 WILL BE DEDICATED TO HOWARD COUNTY OPEN SPACE LOTS 3 THRU 10 WILL BE DEDICATED TO THE CONDOMINIUM ASSOCIATION.
- THE DEVELOPMENT ENGINEERING DIVISION HAS REVIEWED THE PUBLIC ROAD AND ASSOCIATED IMPROVEMENTS WITH THIS PRELIMINARY PLAN. THE OTHER ASPECTS OF THIS DEVELOPMENT WILL BE REVIEWED WITH THE SITE DEVELOPMENT PLAN.

COORDINATE CHART

No.	Northing	Easting
1	4660.2617	1124.0134
2	4620.5261	1124.0134
3	4627.8452	1124.0134
4	4617.1747	1124.0134
5	4617.8469	1124.0134
6	4619.3447	1124.0134
7	4619.7134	1124.0134
8	4617.0601	1124.0134
9	4615.1652	1124.0134
10	4615.1436	1124.0134
11	4616.6038	1124.0134
12	4615.2195	1124.0134
13	4615.7468	1124.0134
14	4615.4136	1124.0134
15	4613.8466	1124.0134
16	4617.1594	1124.0134

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	SMIF#1 801 LF	SMIF#2 719 LF
CREDIT FOR EXISTING TREES (NO. YES AND NO)	YES, 345 LF	YES, 230 LF
CREDIT FOR OTHER TREES (NO. YES AND NO)	NO	NO
NUMBER OF TREES TO BE PLANTED	0%	0%
NUMBER OF SHADE TREES TO BE PLANTED	12 SHADE TREES	12 SHADE TREES
NUMBER OF EVERGREEN TREES TO BE PLANTED	23 EV. TREES	24 EV. TREES
NUMBER OF SHADE TREES TO BE PLANTED	12 SHADE TREES	12 SHADE TREES
NUMBER OF EVERGREEN TREES TO BE PLANTED	23 EV. TREES	24 EV. TREES

SCHEDULE A PERIMETER LANDSCAPE EDGE

PERIMETER TYPE	2'	3'	4'	5'	6'	7'
Linear Feet of Perimeter	721	1427	861	435	947	1430
Credit for Existing Trees (No. Yes and No)	721	Yes 1427	215	No	Yes 80	Yes 840
Credit for Other Trees (No. Yes and No)	No	No	No	No	No	No
Number of Plants to be Planted	0	0	0	0	0	0
Number of Shade Trees to be Planted	0	0	0	0	0	0
Number of Evergreen Trees to be Planted	0	0	0	0	0	0
Number of Small Formal Parks to be Planted	0	0	0	0	0	0
Number of Other Plants to be Planted	0	0	0	0	0	0

PERIMETER TREES SCHEDULE

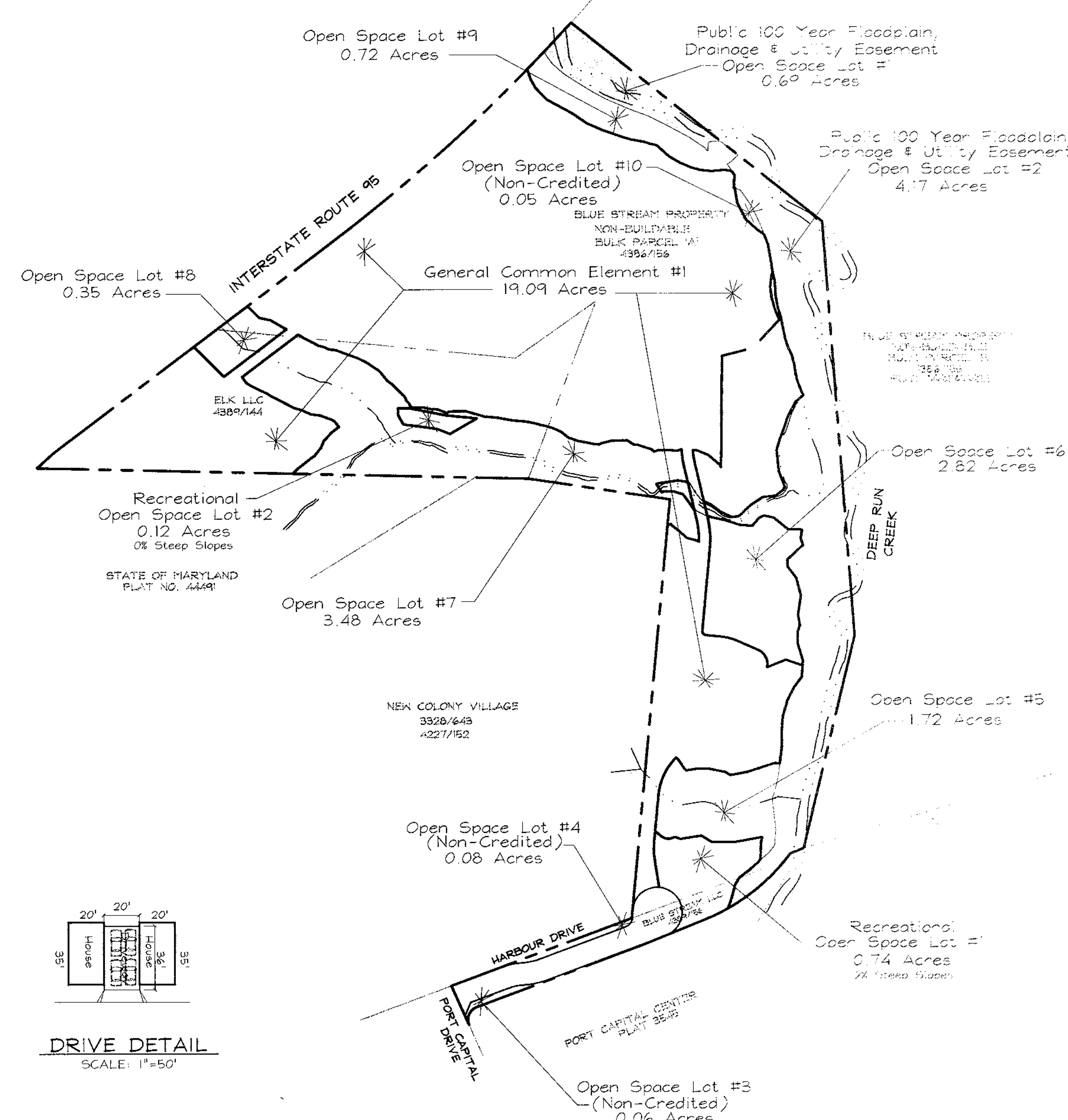
SIZE	CAT
2 1/2" - 3" Cal.	B & C
2 1/2" - 3" Cal.	B & C

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
U1	UNSATURATED SAND, 0 TO 15 PERCENT SLOPES	B
U2	UNSATURATED SAND, 15 TO 25 PERCENT SLOPES	C
U3	UNSATURATED SAND, 25 TO 35 PERCENT SLOPES	A
U4	UNSATURATED SAND, 35 TO 45 PERCENT SLOPES	A
U5	UNSATURATED SAND, 45 TO 55 PERCENT SLOPES	D
U6	UNSATURATED SAND, 55 TO 65 PERCENT SLOPES	C
U7	UNSATURATED SAND, 65 TO 75 PERCENT SLOPES	C
U8	UNSATURATED SAND, 75 TO 85 PERCENT SLOPES	B
U9	UNSATURATED SAND, 85 TO 95 PERCENT SLOPES	B
U10	UNSATURATED SAND, 95 TO 100 PERCENT SLOPES	B
U11	UNSATURATED SAND, 10 TO 15 PERCENT SLOPES	B
U12	UNSATURATED SAND, 15 TO 25 PERCENT SLOPES	B
U13	UNSATURATED SAND, 25 TO 35 PERCENT SLOPES	B
U14	UNSATURATED SAND, 35 TO 45 PERCENT SLOPES	B
U15	UNSATURATED SAND, 45 TO 55 PERCENT SLOPES	B
U16	UNSATURATED SAND, 55 TO 65 PERCENT SLOPES	B
U17	UNSATURATED SAND, 65 TO 75 PERCENT SLOPES	B
U18	UNSATURATED SAND, 75 TO 85 PERCENT SLOPES	B
U19	UNSATURATED SAND, 85 TO 95 PERCENT SLOPES	B
U20	UNSATURATED SAND, 95 TO 100 PERCENT SLOPES	B

POOL CALCULATIONS

DESIGN POOL SIZE	50'x30' or 1500sf
POOL DEPTH	30'x25' or 750 sf
POOL DEPTH	30'x25' or 750 sf
NUMBER OF POOLS	1
DESIGN CAPACITY	1 PERSON PER 12 SF
DESIGN CAPACITY	1 PERSON PER 15 SF
DESIGN CAPACITY	1 PERSON PER 300 SF
DESIGN CAPACITY	31 PERSONS
DESIGN CAPACITY	62.5 PERSONS



DRIVE DETAIL
SCALE: 1"=50'

LOCATION MAP
SCALE: 1"=200'

OPEN SPACE	REQUIRED	PROVIDED
HOWARD COUNTY OPEN SPACE		
100 YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT OPEN SPACE LOT #1 (To be Dedicated to Howard Co.)		21,872 sf or 0.69 ac.
100 YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT OPEN SPACE LOT #2 (To be Dedicated to Howard Co.)		38,954 sf or 0.89 ac.
TOTAL HOWARD COUNTY OPEN SPACE	0 sf or 0.00 ac.	60,826 sf or 1.38 ac.
CONDOMINIUM ASSOCIATION OPEN SPACE		
OPEN SPACE LOT #3 (NON-CREDITED)		2,152 sf or 0.05 ac.
OPEN SPACE LOT #4 (NON-CREDITED)		3,569 sf or 0.08 ac.
OPEN SPACE LOT #5		24,481 sf or 0.56 ac.
OPEN SPACE LOT #6		27,028 sf or 0.62 ac.
OPEN SPACE LOT #7		37,416 sf or 0.86 ac.
OPEN SPACE LOT #8		17,233 sf or 0.39 ac.
OPEN SPACE LOT #9		11,476 sf or 0.26 ac.
OPEN SPACE LOT #10 (NON-CREDITED)		4,393 sf or 0.10 ac.
TOTAL CONDOMINIUM ASSOCIATION OPEN SPACE	83,845 sf or 1.92 ac.	83,845 sf or 1.92 ac.
TOTAL ALL OPEN SPACE	83,845 sf or 1.92 ac.	83,845 sf or 1.92 ac.
RECREATIONAL OPEN SPACE		
RECREATIONAL OPEN SPACE LOT #1		12,366 sf or 0.28 ac.
RECREATIONAL OPEN SPACE LOT #2		4,334 sf or 0.10 ac.
TOTAL RECREATIONAL OPEN SPACE	33,600 sf or 0.77 ac.	33,600 sf or 0.77 ac.
GENERAL COMMON ELEMENT		
GENERAL COMMON ELEMENT #1		65,212 sf or 1.49 ac.
PUBLIC RIGHT-OF-WAY (HARBOR DRIVE)		12,796 sf or 0.29 ac.
GROSS AREA OF PROPERTY		431,822 sf or 9.91 ac.

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

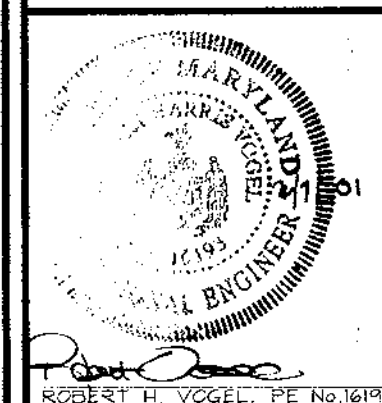
PLANNING DIRECTOR DATE

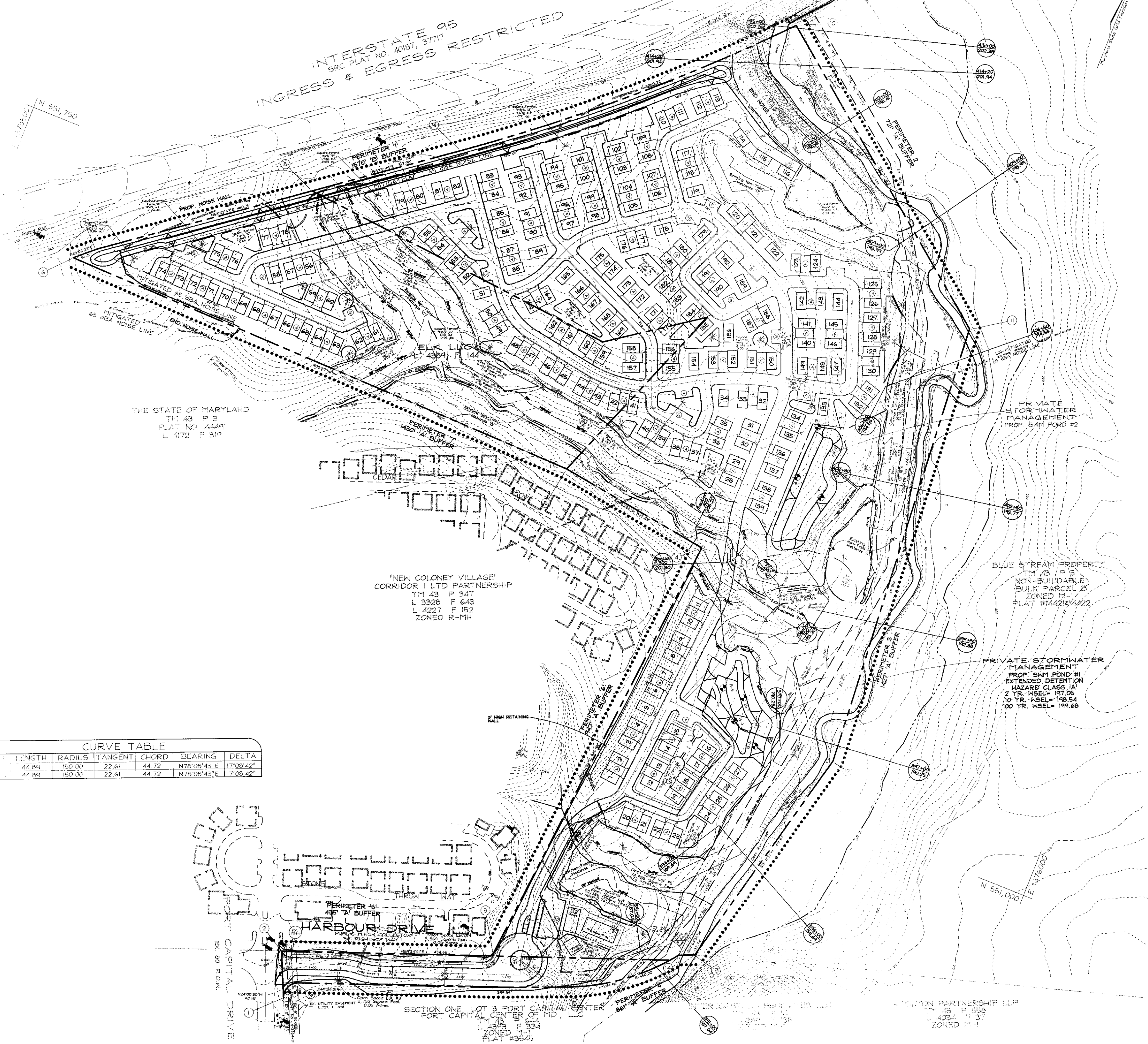
OWNER/DEVELOPER
BLUE STREAM LLC
c/o NORTHERN TRADING L.L.C.
P.O. BOX 416
ELLCOTT CITY, MD 21041

TITLE SHEET
THE OAKS AT WATERS EDGE
A RESUBDIVISION OF BLUE STREAM
PROPERTY NON-BUILDABLE PARCEL 'A'
& ELK LLC PARCEL 279
TAX MAP #43 BLOCK 4 PARCEL 279, P/O 5, # 647
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REFERENCE: S-97-01, F-75-05, 2B 96W-1, WP-97-89, F-00-126

VOGEL & ASSOCIATES
ENGINEERS-ARCHITECTS-PLANNERS
3891 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5028 Fax 410.465.3966

DESIGN BY: D.D.S. JR.
DRAWN BY: D.D.S. JR.
CHECKED BY: R.H.V.
DATE: Feb. 06, 2001
SCALE: AS SHOWN
W.O. NO.: 99-178





INTERSTATE 95
 SRC PLAT NO. 40187, 37117
 INGRESS & EGRESS RESTRICTED

THE STATE OF MARYLAND
 TM 43 P 3
 PLAT NO. 44491
 L 4172 F 319

"NEW COLONY VILLAGE"
 CORRIDOR I LTD PARTNERSHIP
 TM 43 P 347
 L 3328 F 643
 L 4227 F 152
 ZONED R-MH

BLUE STREAM PROPERTY
 TM 43 P 5
 NON-BUILDABLE
 BULK PARCEL B
 ZONED M-1
 PLAT 31442 & 14422

PRIVATE STORMWATER
 MANAGEMENT
 PROP. SHM POND #1
 EXTENDED DETENTION
 HAZARD CLASS 'A'
 2 YR. WSEL = 197.06
 10 YR. WSEL = 198.54
 100 YR. WSEL = 199.68

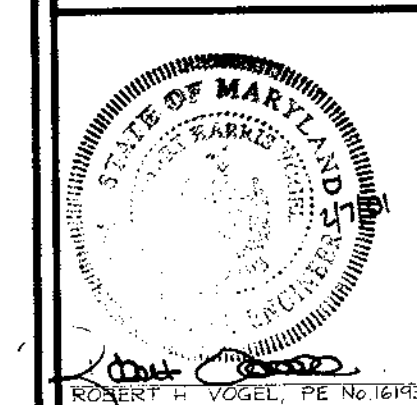
TENTATIVELY APPROVED
 DEPT. OF PLANNING AND
 ZONING OF
 HOWARD COUNTY
April S. Kater 2/20/01
 PLANNING DIRECTOR DATE

OWNER/DEVELOPER
 BLUE STREAM LLC
 c/o NORTHERN TRADING LLC
 P.O. BOX 46
 ELLICOTT CITY, MD 21041

CURVE TABLE					
LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
44.84	150.00	22.61	44.72	N78°08'43"E	17°08'42"
44.84	150.00	22.61	44.72	N78°08'43"E	17°08'42"

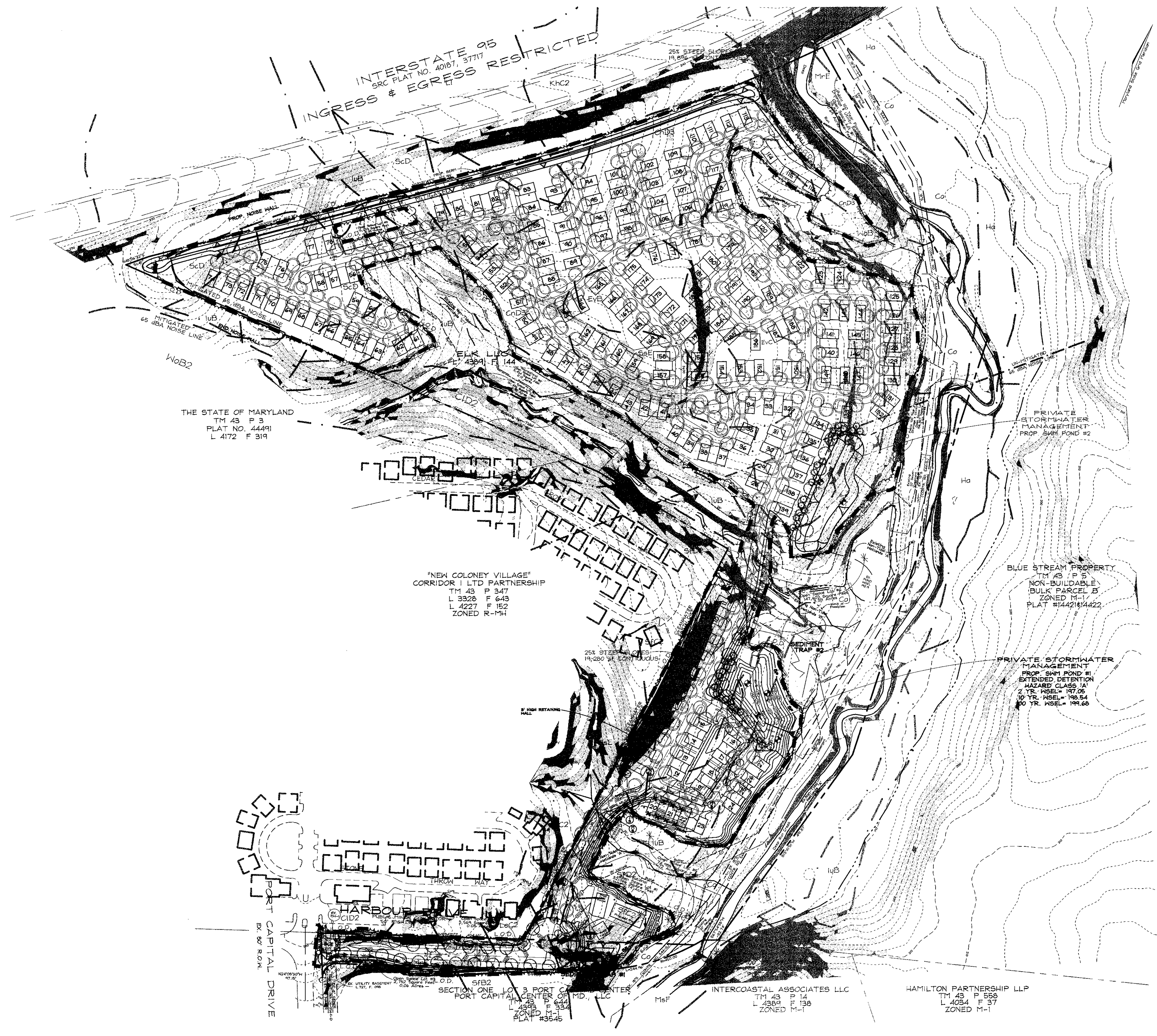
PRELIMINARY SITE PLAN
THE OAKS AT WATERS EDGE
 A RESUBDIVISION OF BLUE STREAM
 PROPERTY NON-BUILDABLE PARCEL 'A'
 # ELK LLC PARCEL 279
 TAX MAP #43 BLOCK 4 PARCEL 279, P/O 5, # 647
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 REFERENCE: S-97-01, F-75-05, ZB 966-M, WP-97-89, F-00-126

VOGEL & ASSOCIATES
 ENGINEERS/SURVEYORS/PLANNERS
 3581 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
 Tel 410.461.5828 Fax 410.465.3986



DESIGN BY: D.D.S. JR.
 DRAWN BY: D.D.S. JR.
 CHECKED BY: RHV
 DATE: Feb. 06, 2001
 SCALE: 1"=100'
 N.O. NO.: 99-178

2 OF 5



INTERSTATE 95
SRC PLAT NO. 40187, 37717
INGRESS & EGRESS RESTRICTED

THE STATE OF MARYLAND
TM 43 P 3
PLAT NO. 44491
L 4172 F 319

"NEW COLONEY VILLAGE"
CORRIDOR I LTD PARTNERSHIP
TM 43 P 347
L 3308 F 643
L 4227 F 152
ZONED R-MH

PRIVATE STORMWATER
MANAGEMENT
PROP SWM POND #2

BLUE STREAM PROPERTY
TM 43 P 5
NON-BUILDABLE
BULK PARCEL B
ZONED M-1
PLAT #14421814422

PRIVATE STORMWATER
MANAGEMENT
PROP SWM POND #1
EXTENDED DETENTION
HAZARD CLASS 1A
2 YR. WSEL = 197.05
10 YR. WSEL = 198.54
50 YR. WSEL = 199.68

PORT CAPITAL DRIVE
SECTION ONE LO 3 PORT C
PORT CAPITAL CENTER OF MD, LLC
L 4593 F 634
L 4594 F 635
ZONED M-1
PLAT #3545

INTERCOASTAL ASSOCIATES LLC
TM 43 P 14
L 4034 F 37
ZONED M-1

HAMILTON PARTNERSHIP LLP
TM 43 P 558
L 4034 F 37
ZONED M-1

LEGEND

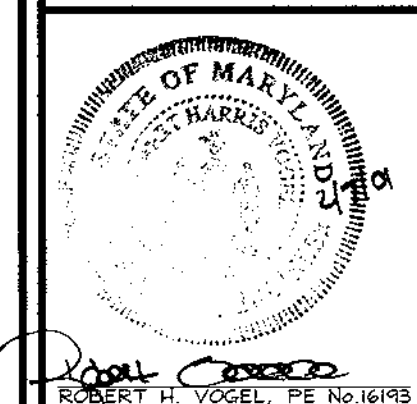
Existing Contour	-----382
Proposed Contour	-----382
Spot Elevation	+82.53
Existing Trees to Remain	(Symbol)
Soils Divide	NeB2 KeB2
LIMIT OF DISTURBANCE	L.O.D.
SLOPES 25% OR GREATER	(Symbol)
SLOPES 15% TO 24.99%	(Symbol)

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY
James H. Smith 2/20/01
PLANNING DIRECTOR DATE

OWNER/DEVELOPER
BLUE STREAM L.L.C.
c/o NORTHERN TRADING L.L.C.
P.O. BOX 416
ELlicott CITY, MD 21041

PRELIMINARY GRADING PLAN
THE OAKS AT WATERS EDGE
A RESUBDIVISION OF BLUE STREAM
PROPERTY NON-BUILDABLE PARCEL 'A'
ELK LLC PARCEL 279
TAX MAP #43 BLOCK 4 PARCEL 279, P/O 5, # 647
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REFERENCE: S-97-01, F-75-05, ZB 966-M, WP-97-89, F-00-126

VAVOGL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3681 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3966



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DRAWN BY: D.D.S. JR.
CHECKED BY: R.H.V.
DATE: Feb. 06, 2001
SCALE: 1"=100'
W.O. NO.: 99-178

3 SHEET OF 5

- LEGEND**
- EXISTING FOREST
 - PROPOSED TREELINE
 - FOREST RETENTION AREA
 - REFORESTATION AREA
 - FOREST RETENTION SIGNAGE
 - REFORESTATION SIGNAGE
 - FOREST CONSERVATION EASEMENT
 - SOILS
 - PROTECTIVE TREE FENCE
 - 100 YEAR FLOODPLAIN
 - NONTIDAL WETLANDS
 - L.O.D.
 - LIMIT OF DISTURBANCE
 - SLOPES 25% & GREATER

**FOREST CONSERVATION EASEMENT
(FOREST RETENTION AREA 1)**
64,376.1 SQUARE FEET
1.48 ACRES

**FOREST CONSERVATION EASEMENT
(FOREST RETENTION AREA 2)**
141,180.1 SQUARE FEET
3.24 ACRES

**FOREST CONSERVATION EASEMENT
(FOREST RETENTION AREA 3)**
52,539.3 SQUARE FEET
1.21 ACRES

**FOREST CONSERVATION EASEMENT
(REFORESTATION AREA A)**
37,946.6 SQUARE FEET
0.87 ACRES

THE STATE OF MARYLAND
TM 43 P 3
PLAT NO. 44491
L 4172 F 319

"NEW COLONY VILLAGE"
CORRIDOR I LTD PARTNERSHIP
TM 43 P 347
L 3328 F 643
L 4227 F 152
ZONED R-MH

BLUE STREAM PROPERTY
TM 43 P 5
NON-BUILDABLE
BULK PARCEL B
ZONED M-1

PUBLIC STORMWATER MANAGEMENT
DRAINAGE AND UTILITY EASEMENT
PROF. SWM POND #1
EXTENDED DETENTION
HAZARD CLASS 'A'
2 YR. WSEL= 197.05
10 YR. WSEL= 198.54
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TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

[Signature] 2/20/04
PLANNING DIRECTOR DATE

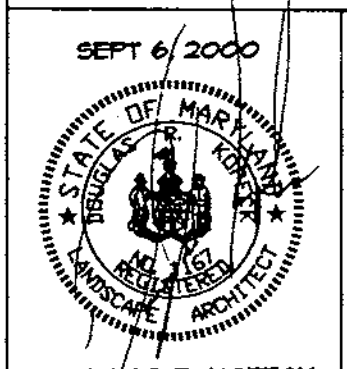
OWNER/DEVELOPER

BLUE STREAM L.L.C.
c/o NORTHERN TRADING L.L.C.
P.O. BOX 416
ELLCOTT CITY, MD 21041

**FOREST CONSERVATION PLAN
AT WATERS EDGE**
A RESUBDIVISION OF THE BLUESTREAM PROPERTY
NON-BUILDABLE BULK PARCEL A AND ELK L.L.C. BULK PARCEL 279
TAX MAP #43 PARCEL 279, P/O 5, & 647
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REFERENCE: S-97-01, F-75-05, ZB 966-M, WP-97-89

CNA
campbell & nolan associates, inc.

Civil Engineers • Land Surveyors • Landscape Architects
Planners • Geotechnical Engineers • Environmental Engineers
P.O. Box 441 • Bel Air, Maryland 21014-0441
(410)879-7200 • (410)838-2784 • Fax (410)838-1811
E-mail: cncinc@erdc.com



DESIGN BY: R.A.R.
DRAWN BY: R.A.R./D.M.H.
CHECKED BY: D.R.K.
DATE: SEPT 6, 2000
PROJECT NO.: 00009
SCALE: 1"=100'
W.O. NO.: 99-178
REVISED: 6/2/00 D.M.H.
4 SHEET OF 5

ENGINEERING PROVIDED BY:
VOGEL & ASSOCIATES
3801 Park Avenue, Suite 101 • Bel Air, Maryland 21034
Tel: 410.481.3000 Fax: 410.481.3001

PORT CAPITAL DRIVE
EX. 80' ROW
HARBOR DRIVE
PUBLIC ACCESS DRIVE
THROW WAY
SECTION ONE LOT 3 PORT CAPITAL CENTER
PORT CAPITAL CENTER OF MD, LLC
TM 43 P 644
L 4383 F 334
ZONED M-1

INTERCOASTAL ASSOCIATES LLC
TM 43 P 14
L 4389 F 138
ZONED M-1

EXISTING 100 YR FLOODPLAIN
DRAINAGE AND UTILITY EASEMENT
PLAT # CMP 1545

HAMILTON PARTNERSHIP LLP
TM 43 P 558
L 4034 F 37
ZONED M-1

HOWARD COUNTY FOREST CONSERVATION WORKSHEET

I. BASIC SITE AREA	ACRES (1/10 acre)
GROSS SITE AREA	33.97 ACRES
AREA WITHIN 100 YEAR FLOODPLAIN	4.29 ACRES
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL (if applicable)	0.00 ACRES
NET TRACT AREA	29.68 ACRES
LAND USE CATEGORY (R-RD, R-RMD, R-S, C/I/O, I) M-1	RMH
II. INFORMATION FOR CALCULATIONS	
A. NET TRACT AREA	29.68 ACRES
B. REFORESTATION THRESHOLD (20% X A)	5.930 ACRES
C. AFFORESTATION MINIMUM (15% X A)	4.452 ACRES
D. EXISTING FOREST ON NET TRACT AREA	27.81 ACRES
E. FOREST AREAS TO BE CLEARED	21.68 ACRES
F. FOREST AREAS TO BE RETAINED	5.93 ACRES

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 clearing of forest is proposed, reforestation requirements may apply.

GO TO SECTION IV

If existing forests exceed the afforestation minimum (if D equals or is more than C), and clearing of existing forest resources is proposed, no reforestation is required. No further calculations are needed.

GO TO SECTION V

IV. REFORESTATION CALCULATIONS	
A. NET TRACT AREA	29.68 ACRES
B. REFORESTATION THRESHOLD (20% X A)	5.930 ACRES
D. EXISTING FOREST ON NET TRACT AREA	27.81 ACRES
E. FOREST AREA TO BE CLEARED	21.68 ACRES
F. FOREST AREAS TO BE RETAINED	5.930 ACRES
G. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD (D-E, if F equals or is greater than B, Alternate 1) (D-E, if F is less than B, Alternate 2)	21.68 ACRES
H. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD (B-E, if applicable)	0.00 ACRES
I. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD (F-E, Retention Credit, if applicable)	0.00 ACRES

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 F equals or is greater than B), the following calculations apply:

REFORESTATION FOR CLEARING ABOVE THRESHOLD
G x 1/4 = 5.42 ACRES

CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD
I = Retention Credit = 0.00 ACRES

TOTAL REFORESTATION REQUIRED
(G x 1/4) - I = 5.42 ACRES

If the total reforestation requirement is equal to or less than 0, no reforestation is required.

2. CLEARING BELOW THE THRESHOLD

If forest areas to be retained are less than the reforestation threshold (if F less than B), the following calculations apply:

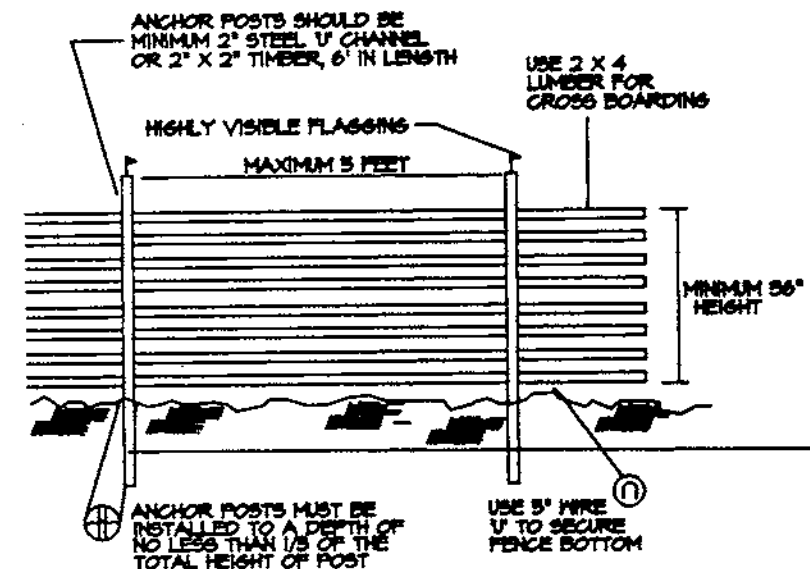
REFORESTATION FOR CLEARING ABOVE THRESHOLD
G x 1/4 = 0.00 ACRES

REFORESTATION FOR CLEARING BELOW THRESHOLD
H x 2 = 0.00 ACRES

TOTAL REFORESTATION REQUIRED
(G x 1/4) + (H x 2) = 0.00 ACRES

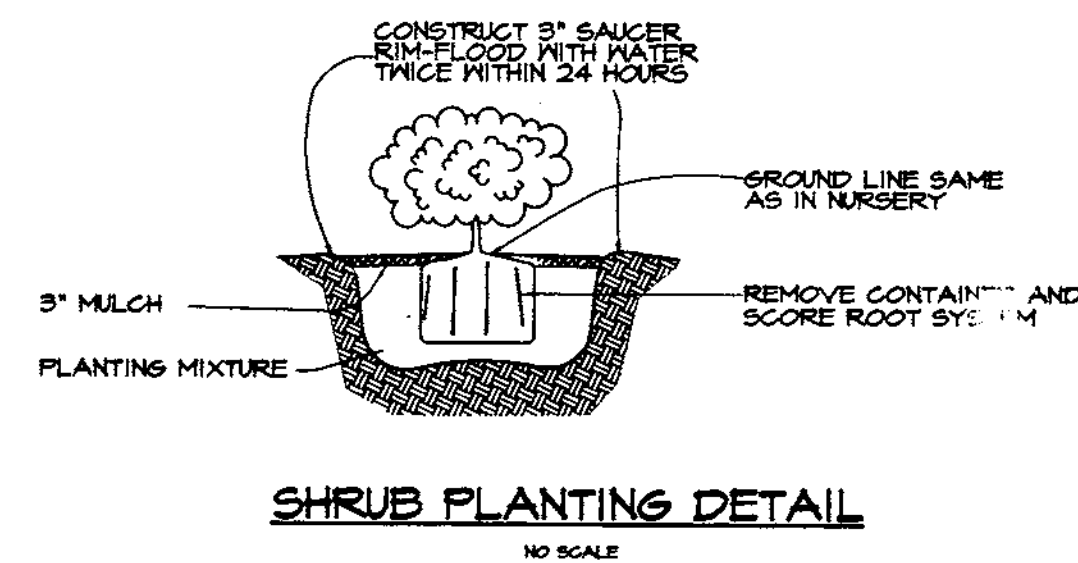
Since clearing occurs below the threshold, no forest retention credit is possible.

BLAZE ORANGE PLASTIC MESH

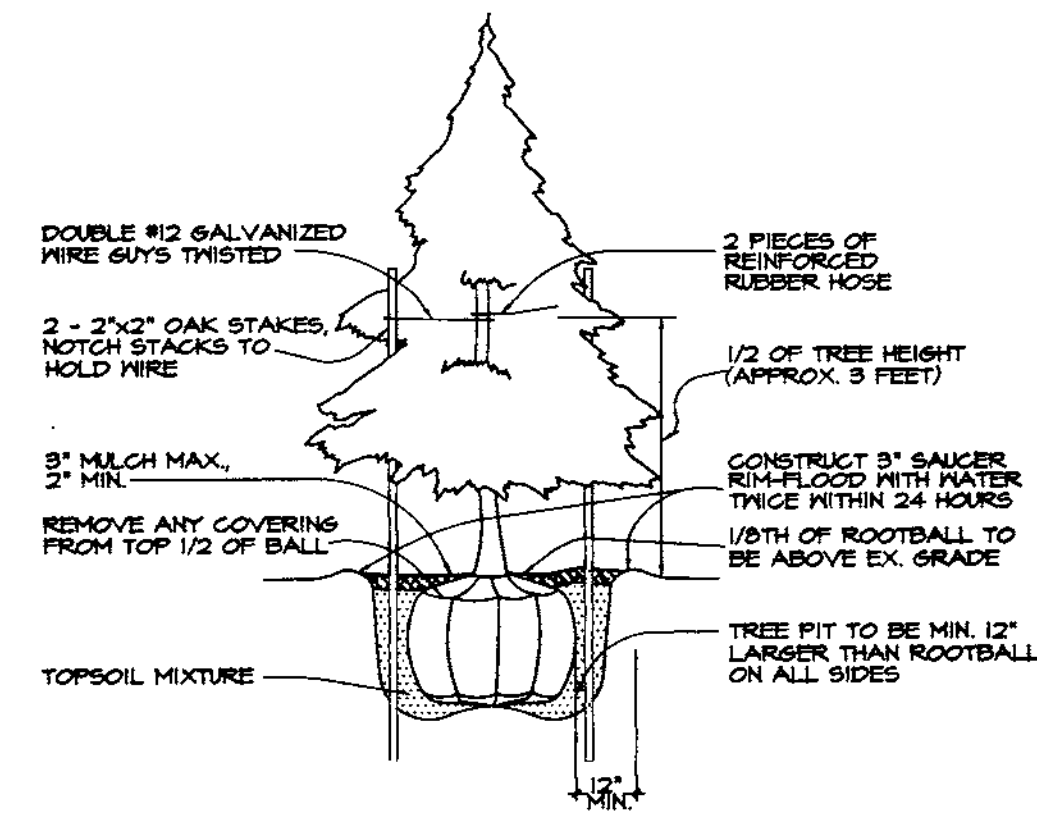


- NOTES:
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA SHALL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND PLANNED PRIOR TO INSTALLING DEVICE.
 - ROOT DAMAGE SHOULD BE AVOIDED.
 - PROTECTIVE DAMAGING MAY ALSO BE USED.
 - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

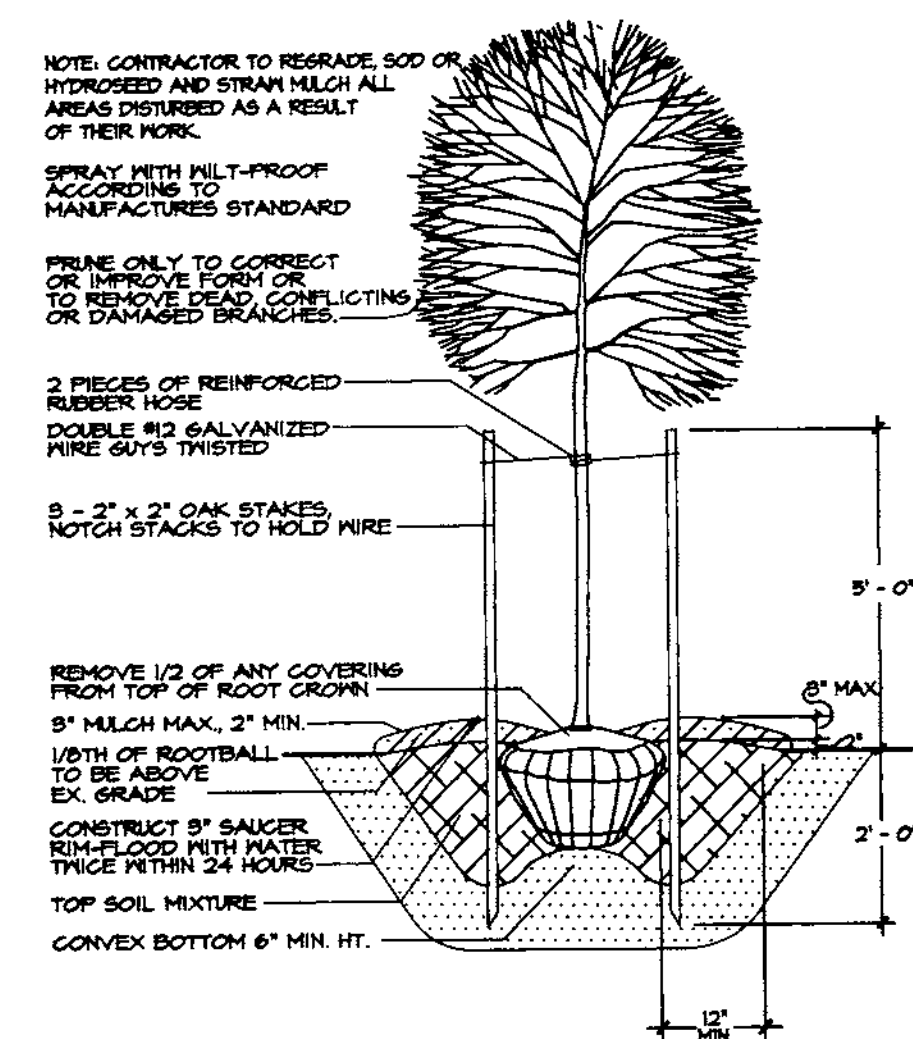
TREE PROTECTION FENCING



SHRUB PLANTING DETAIL
NO SCALE



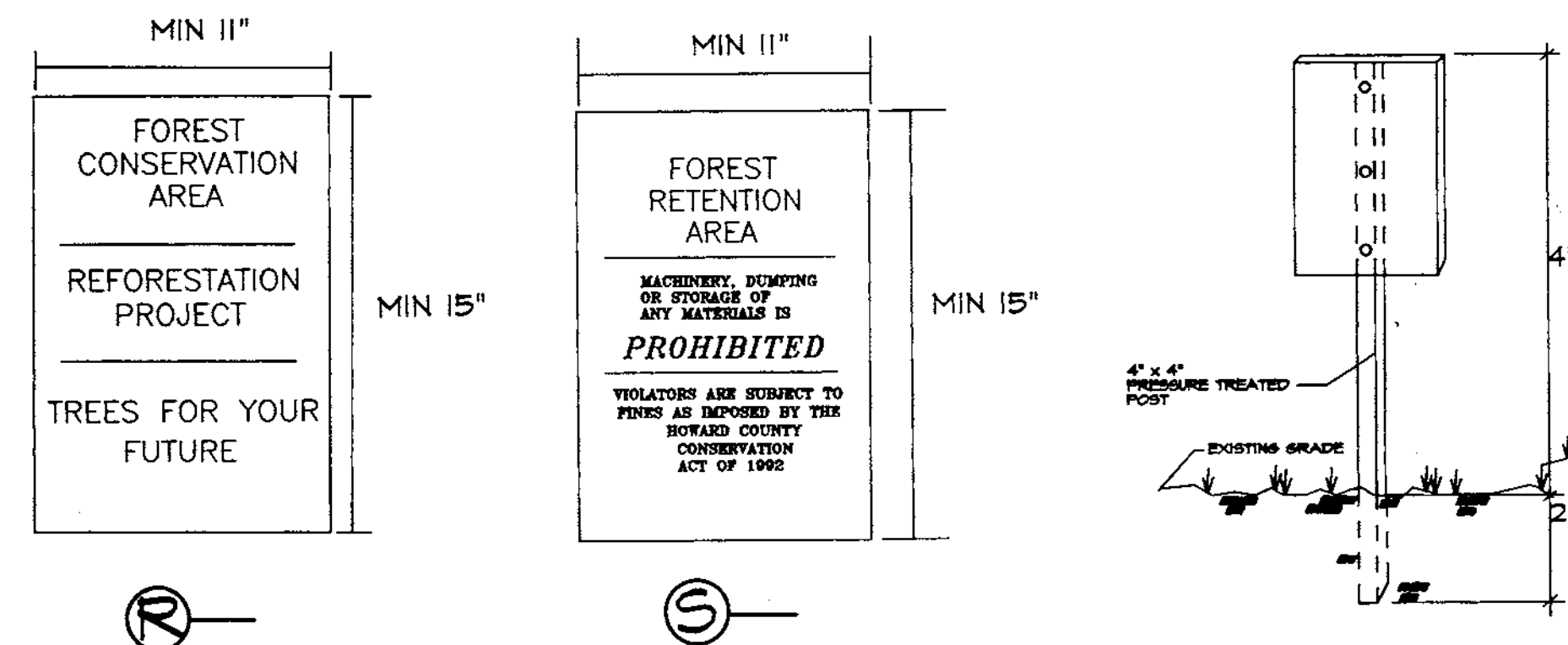
EVERGREEN PLANTING DETAIL
NOT TO SCALE



TREE PLANTING DETAIL
NOT TO SCALE

Reforestation Plantings

Quantity	Botanical Name/Common Name	Size	Spacing
25	Acer rubrum Red Maple	1" Cal. B&B	15 x 15
14	Diospyros virginiana Persimmon	2'-3' Container	11 x 11
14	Fraxinus americana White Ash	1" Cal. B&B	15 x 15
14	Juglan nigra Black Walnut	2'-3' Container	11 x 11
14	Juniperus virginiana Eastern Red Cedar	2'-3' Container	11 x 11
15	Liquidambar styraciflua American Sweet Gum	1" Cal. B&B	15 x 15
14	Prunus serotina Black Cherry	2' - 3' Container	11 x 11
20	Quercus rubra Red Oak	1" Cal. B&B	15 x 15
14	Sassafras albidum Sassafras	2' - 3' Container	11 x 11
70	Cephalanthus occidentalis Button Bush	12" - 18" Container	8 x 8
70	Viburnum dentatum Arrowwood Viburnum	12" - 18" Container	8 x 8



FOREST RETENTION & REFORESTATION SIGN DETAIL

PLANT SCHEDULE

FOREST CONSERVATION REQUIREMENTS

FOREST RETENTION: 6.20 ACRES
 REFORESTATION REQUIRED: 5.42 ACRES
 REFORESTATION SHOWN: 0.87 ACRES

NOTE: THE ADDITIONAL 4.55 ACRES OF REFORESTATION WILL BE ACCOMPLISHED THROUGH PURCHASE OF REFORESTATION CREDIT FROM THE HOWARD COUNTY APPROVED, WINKLER FOREST CONSERVATION BANK

REFORESTATION REQUIREMENTS:
 5.42 ACRES OR 236,045 SF
 1" Caliper trees or
 (200 Trees per acre)
 Hardwood Seedlings or
 (350 whips per acre)
 Seedlings
 (100 seedlings per acre)

REFORESTATION PROVIDED:
 0.87 ACRES or 37,946.6 SF
 1" Caliper trees
 74 @ 200 Trees per acre
 Seedlings - with tree shelters
 70 @ 350 whips per acre
 Seedlings
 140 @ 700 seedlings per acre

TENTATIVELY APPROVED
 DEPT. OF PLANNING AND ZONING OF
 HOWARD COUNTY

[Signature] 2/20/01
 PLANNING DIRECTOR, DATE
 OWNER/DEVELOPER

BLUE STREAM L.L.C.
 c/o NORTHERN TRADING L.L.C.
 P.O. BOX 416
 ELLICOTT CITY, MD 21041

**FOREST CONSERVATION PLAN
 THE OAKS
 AT WATERS EDGE**

A RESUBDIVISION OF THE BLUESTREAM PROPERTY
 NON-BUILDABLE BULK PARCEL A AND ELK L.L.C. BULK PARCEL 279
 TAX MAP #43 PARCEL 279, P/O 5, & 647
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 REFERENCE: S-97-01, F-75-05, ZB 966-M, WP-97-89

CNA
 campbell & nolan associates, inc.

Civil Engineers • Land Surveyors • Landscape Architects
 Planners • Geotechnical Engineers • Environmental Engineers
 P.O. Box 441 • Del. Av. Maryland 21014-0441
 (410)873-7200 • (410)838-2784 • Fax (410)838-1811
 E-mail: cna@cna.com

SEPT. 6, 2000

DESIGN BY: R.A.R.
 DRAWN BY: R.A.R./D.M.H.
 CHECKED BY: D.R.K.
 DATE: SEPT 6, 2000
 PROJECT NO: 00009
 SCALE: 1"=100'
 W.O. NO.: 99-178
 REVISED: 6/2/00 D.M.H.
 SHEET OF 5

ENGINEERING PROVIDED BY:
VOGEL & ASSOCIATES
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