

GENERAL NOTES

- Subject property zoned "R-20" per 07/28/06 Comprehensive Zoning Plan.
- Public water and sewer will be used within this site. Public water will be extended into the site from Contract No. 132-14. Public sewer will be extended into the site from Contract No. 10-1215.
- Gross area of property: 3.971 ac.±
- Area of proposed public R/W total: 0.7055 ac.±
Area of proposed public R/W to SHA: 0.1104 ac.±
Area of proposed public R/W to Howard County: 0.5951 ac.±
- Number of proposed buildable lots: 9
Area of proposed buildable lots: 4.248 ac.±
- Number of proposed open space lots: 2
Area of proposed credited open space: 0.4123 ac.±
Area of proposed non-credited open space: 0.0375 ac.±
- Open space requirements:
a.) Minimum open space required = 5.3995 ac.± x 6% = 0.3239 ac.±
b.) Open space provided = 7% or 0.4123 ac.±
- The lots shown herein comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Boundary survey prepared by Mildenberg Boender & Associates, Inc. on or about June 2003. On-site Topography is based on a field run survey prepared by Mildenberg Boender & Associates, Inc. on or about June 2003. Off-site Topography is based on Howard County 1998 Aerial Survey.
- All existing structures on-site are to be removed.
- Wetlands delineation and report and Forest Stand delineation prepared by Wildman Environmental Services in June 2003 and approved under S-04-007.
- Forest Conservation Plan prepared by Sill, Adcock & Associates, LLC in July 2006.
- This project is within the Metropolitan District.
- This 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 County monument numbers 31R1 and 37B4 were used for this project.
- The noise study for this project was prepared by Mars Group and approved under S-04-007.
- Landscape and street trees are provided for this project in accordance with the Howard County Landscape Manual. Financial surety for the required perimeter trees will be paid with the Developer's Agreement and the design will be shown on the final plans.
- For flag or pipestem lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestem and road right-of-way line and not to the pipestem lot driveway.
- There are no floodplains, wetlands, steep slopes, historic structures or cemeteries on-site.
- All construction shall be in accordance with the latest standards and specifications of Howard County in addition to "SHA" standards and specifications if applicable.
- Existing utilities are located by the use of any or all of the following: Road Construction Plans, Field Surveys, Public Water and Sewer Plans and other available record drawings. Approximate location of the existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to the contractor's operation shall be repaired immediately at the contractor's expense.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Driveway paving to be Howard County standard P-1 paving section. Road "A" paving to be Howard County standard P-2 Paving section (see sheet 2 for details). Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test, prior to construction.
- All traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- Estimates of Earthwork quantities are provided solely for the purpose of calculating fees.
- In accordance with Section 12B of the Howard County Zoning Regulations, bay windows, chimneys or exterior stairways not more than 16 feet in width may project not more than 4 feet into any setbacks, porches or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
- Driveway entrance to be per Howard County Standard Detail R-6.06. Driveway culverts will be shown at Final Plan stage.
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit for any new dwellings to ensure safe access for fire and emergency vehicles per the following requirements:
1) Width - 12 feet (16 feet serving more than one residence);
2) Surface - six (6") inches of compacted crusher run base with tar and chip coating (1-1/2" minimum);
3) Geometry - Maximum 14% grade, Maximum 10% grade change and 45-foot turning radius;
4) Structures (culverts/bridges) - capable of supporting 25 gross tons (H25-loading);
5) Drainage elements - capable of safely passing 100 year flood with no more than 10 feet depth over driveway surface;
6) Maintenance - sufficient to ensure all weather use
- The contractor should be aware that the ground clearance to two existing overhead power lines is approximately 12' in the vicinity of the existing house on Open Space Lot 10.
- Road dedication for Road "A" truncation will be provided with the recordation of F-03-152, on or before January 2, 2007.
- A Design Manual Waiver to Howard County Design Manual Volume IV, Standard Detail R-1.02, which requires a closed section for a public road in the R-20 Zoning, was approved on April 15, 2004, subject to the following conditions:
a.) The applicant must provide road frontage improvements along Maryland Route 103 as per the State Highway Administration.
b.) The applicant shall ensure that all stormwater runoff from this property is adequately discharged to a downstream outfall with no deleterious impacts on downstream properties. To this end, the applicant must verify that existing conveyance systems along and across Maryland Route 103 are adequately sized to convey the 10-year stormwater discharge from this property.
c.) All road frontage improvements shall be coordinated with any required improvements necessary for stormwater runoff conveyance.
d.) The applicant shall provide a sidewalk along the entire area of road frontage improvements required by SHA, subject to SHA approval.
- Stormwater Management is provided for this project. Water quality and recharge obligations will be met by utilizing rooftop disconnects, non-rooftop disconnects and grass channels. Channel protection is not required because the post developed 1 year storm runoff is less than 2 cfs. The Bioretention Facility located on Open Space Lot 10 is for detention purposes only. No Water quality or recharge is necessary to be provided within it to meet this projects obligations.
- A Traffic Study was performed by Mars Group on or about May 2003 and approved under S-04-007.
- Forest Conservation obligations will be fulfilled by a Re-in-lieu of 0.81 acres of compensation in the amount of \$26,482.70 to be paid with the forthcoming final plat.
- Open Space Lots 10 and 11 will be owned and maintained by the Homeowners Association.
- Any existing wells and septic systems located on-site shall be properly sealed and abandoned by a Licensed Well Driller prior to submission of the originals Road Construction Plans for signature.
- WP-07-059, to waive Section 16.12(a)(2) to allow an R-20 zoned Infill subdivision to use 18,000 s.f. lot size and to provide H.O.A. owned open space (12%), was denied on February 2, 2007.
- F-07-004 is subject to the Amended Fifth Edition of the Subdivision Regulations and the 2004 Zoning Regulations. However, the site development plan will be subject to the 2006 Zoning Regulations for the R-20 District (Section 106.D(4)(c)(1)(a)).
- Road frontage improvements in front of Parcel 196 will be coordinated with the Site Development Plan for The Och's Property (F-03-152) once it has been submitted.
- Maryland State Highway approval will be granted prior to approval of the Final Road Construction Plans.
- Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, license no. 32025, expiration date: June 06, 2009

PRELIMINARY PLAN

BONNIE ORCHARD

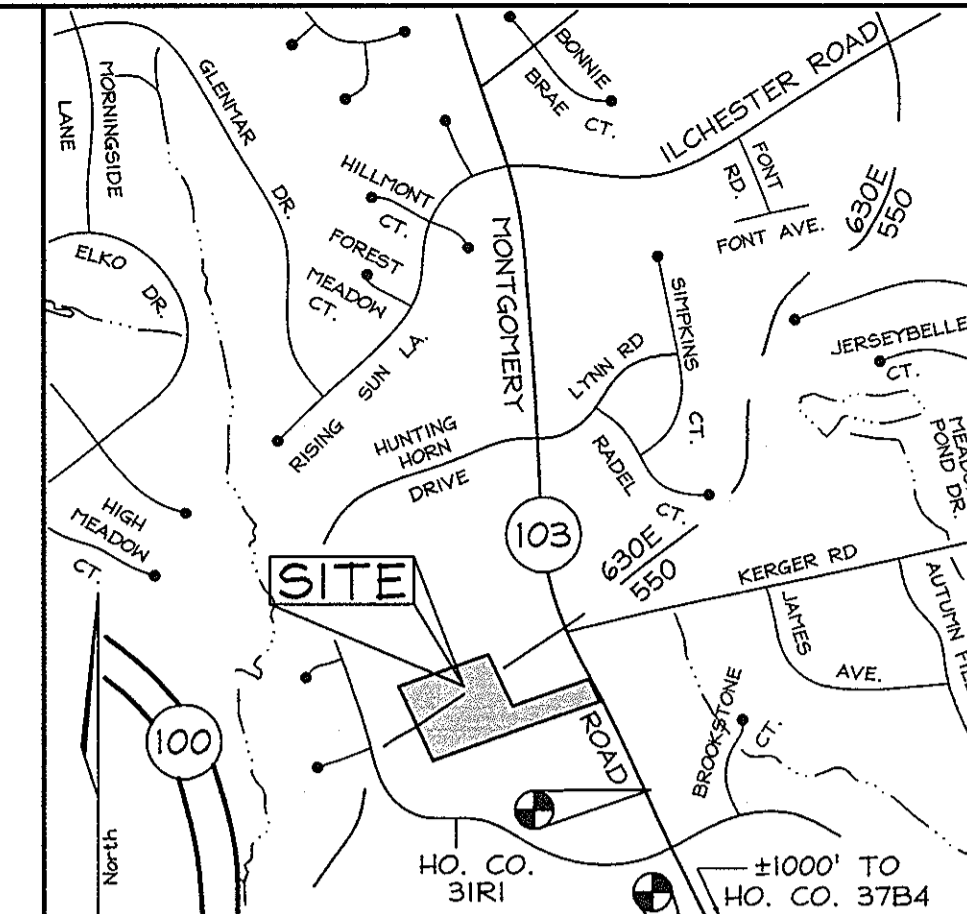
LOTS 1 THRU 9 AND

OPEN SPACE LOTS 10 AND 11

HOWARD COUNTY, MARYLAND

LEGEND

- Existing Contour
- Proposed Contour
- Existing Spot Elevation
- Proposed Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Stormwater Management Boring test hole
- Existing septic cleanout



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

Sta.	31R1	N 565,303.4777 E 1,372,517.7171	El.: 400.99 (feet)
		N 172,304.8446 E 418,344.2369 <td>El.: 122.22 (meters)</td>	El.: 122.22 (meters)
		East side of Montgomery Road, 45.5' south of fire hydrant, 50.0' north of BGE pole #354186	
Sta.	37B4	N 563,928.5542 E 1,373,109.1044	El.: 401.41 (feet)
		N 171,885.7671 E 418,524.4921	El.: 122.35 (meters)
		Southwest side of Montgomery Road and Old Montgomery Road intersection, 41.1' west of sewer manhole, 98.6' east of BGE pole #125675	

U.S. EQUIVALENT COORDINATE TABLE

POINT	NORTHING	EASTING
101	565,927.4300	1,371,751.7720
103	565,676.2084	1,371,871.0759
106	565,772.5583	1,371,312.3386
111	565,405.3914	1,371,480.3586
113	565,698.9018	1,372,300.2055
114	565,807.8579	1,372,248.8166

SHEET INDEX

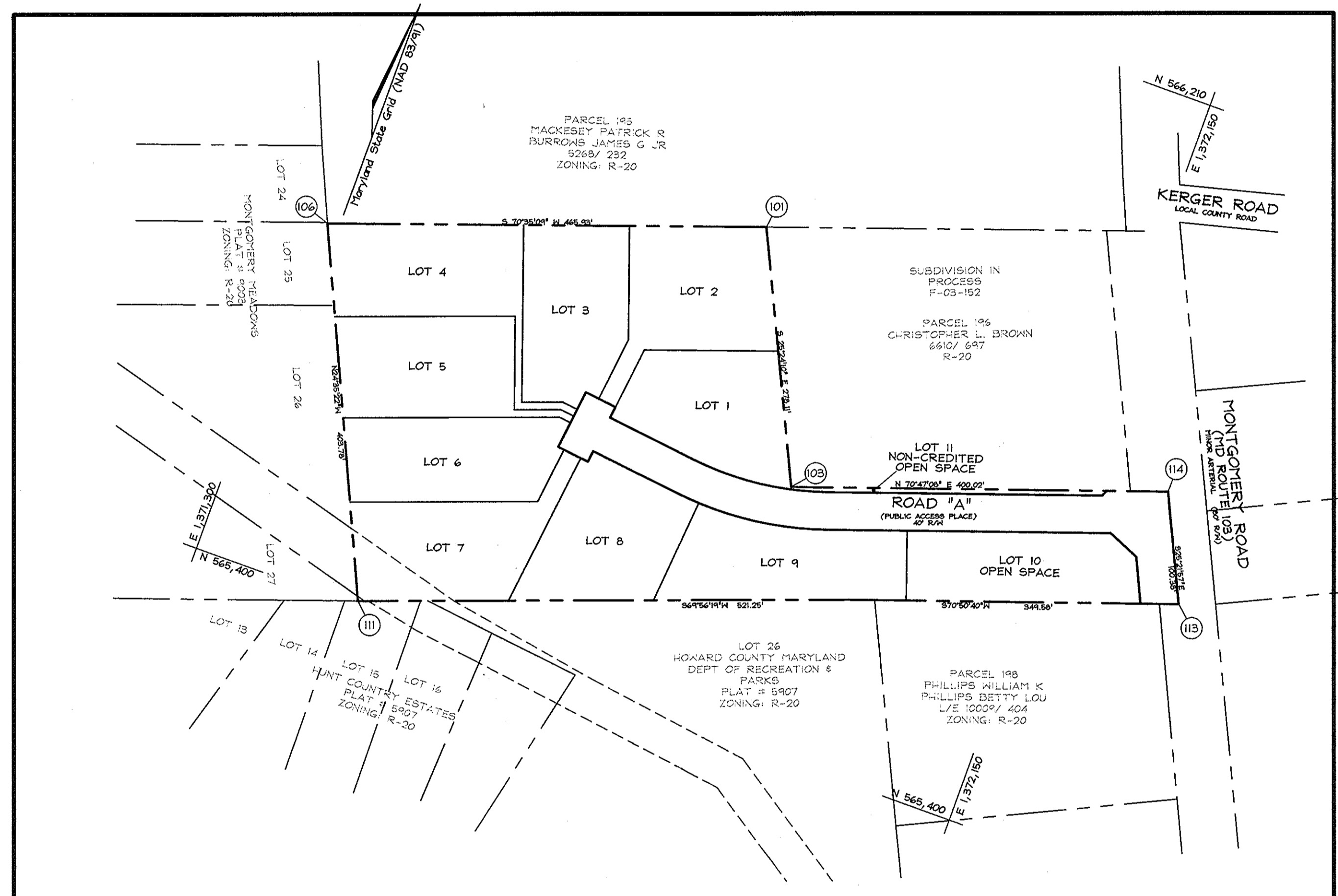
DESCRIPTION	SHEET No.
Cover Sheet	1 of 4
Preliminary Plan	2 of 4
Preliminary Grading, Sediment and Erosion Control Plan	3 of 4
Preliminary Landscaping and Forest Conservation Plan	4 of 4

ROAD CLASSIFICATION

ROAD NAME	CLASSIFICATION	R/W
Road "A"	Public Access Place	40'

MINIMUM LOT SIZE CHART

LOT NUMBER	GROSS AREA (sf)	PIPESTEM AREA (sf)	MINIMUM LOT SIZE
2	21,395±	1,381±	20,004±
4	21,267±	1,266±	20,001±
5	20,547±	504±	20,043±
7	20,246±	244±	20,002±



LOCATION MAP
SCALE: 1"=100'

OWNER/DEVELOPER

Bonnie Orchard, LLC
8835-P Columbia 100 Parkway,
Columbia, MD 21045
410.730.1810

COVER SHEET

BONNIE ORCHARD
LOTS 1 THRU 9 AND OPEN SPACE LOTS 10 AND 11
DPZ FILE NO.S: SP-03-016 (VOIDED 01.20.04), S-04-007, F-03-152, M-132, 10-1215, WP-07-059
TAX MAP 31 GRID 20 PARCELS 565 & 595
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Sill · Adcock & Associates · LLC
Engineers · Surveyors · Planners
3300 North Ridge Road, Suite 160
Ellicott City, Maryland 21114
Phone: 443.325.7682 Fax: 443.325.7685
Email: info@saaalland.com

Design By: PS/JT
Drawn By: PS/JT
Checked By: PS
Scale: As Shown
Date: AUG. 14, 2007
Project #: 06-010
Sheet #: 1 of 4

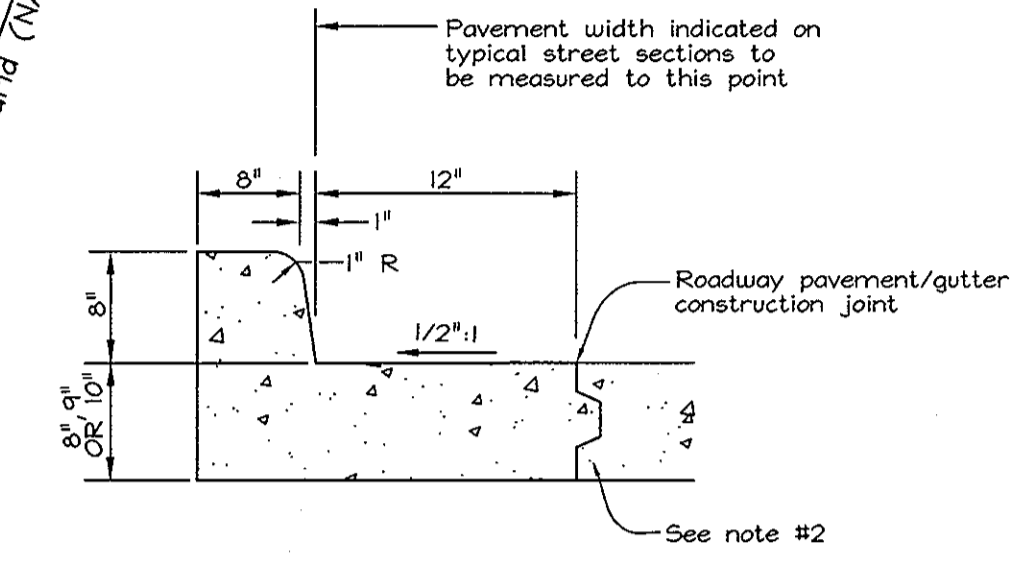
TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Frank D. Lytle
PLANNING DIRECTOR

DATE: 8/2/07

STREET LIGHT CHART			
SYMBOL	STATION	OFFSET	DESCRIPTION
☼	0+43	22' right	150 watt hps on a 14' black fiberglass pole
	4+00	13' right	100 watt hps on a 14' black fiberglass pole
	6+60	18' left	100 watt hps on a 14' black fiberglass pole

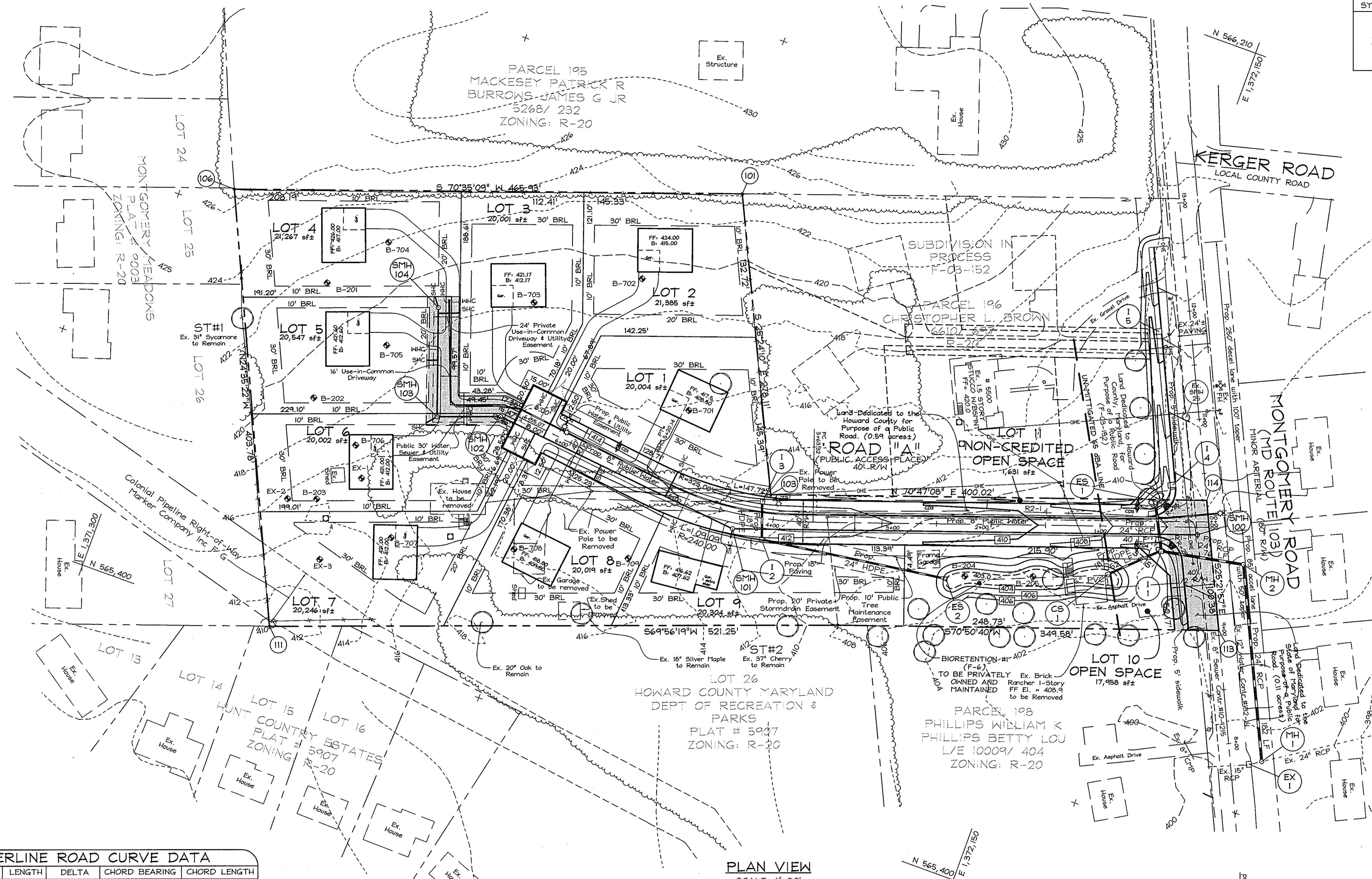
STREET SIGN CHART			
SYMBOL	STATION	OFFSET	DESCRIPTION
P	0+48	16' left	R1-1 "STOP"
	1+50	13' right	R2-1 "SPEED LIMIT 25"



MSHA TYPE 'A' CONCRETE COMBINATION CURB AND GUTTER

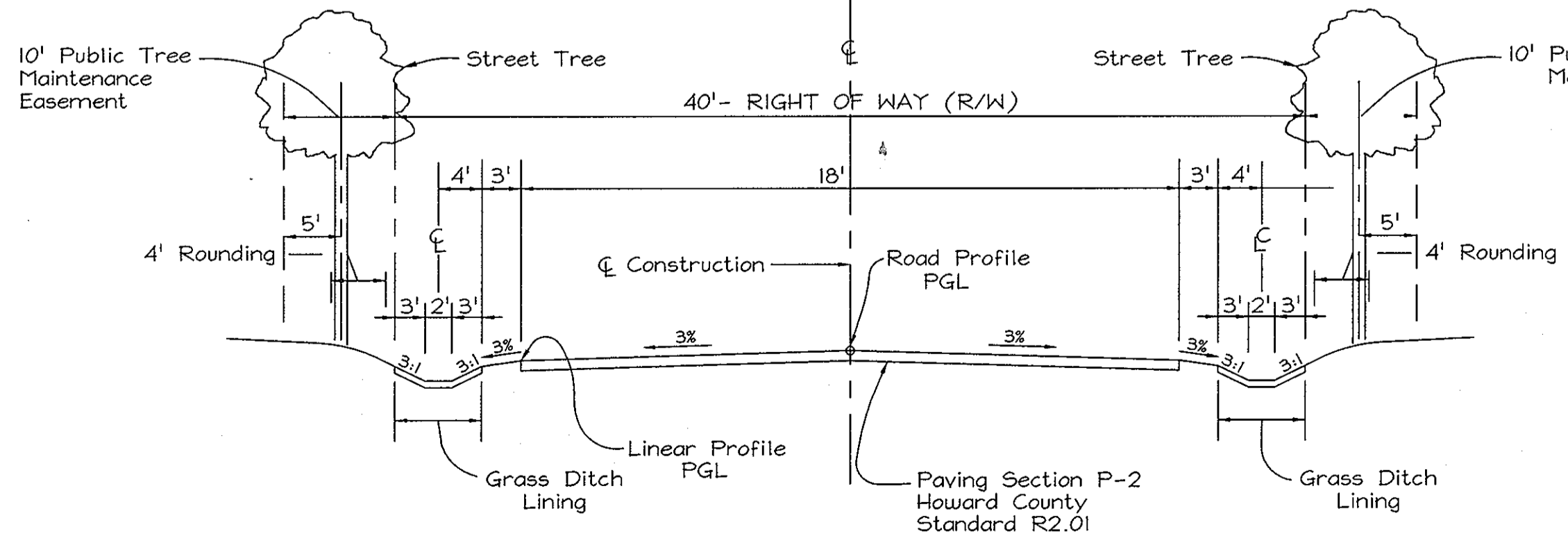
MD. NO. 620.02
NOT TO SCALE

- NOTES:
- Slope gutter pan 1/2" per foot toward flow line on all roadways including super-elevated sections. Except interchange ramps.
 - Provide Key and Longitudinal tie bar as required.
 - Maximum joint spacing for concrete curb and gutter is 10'.



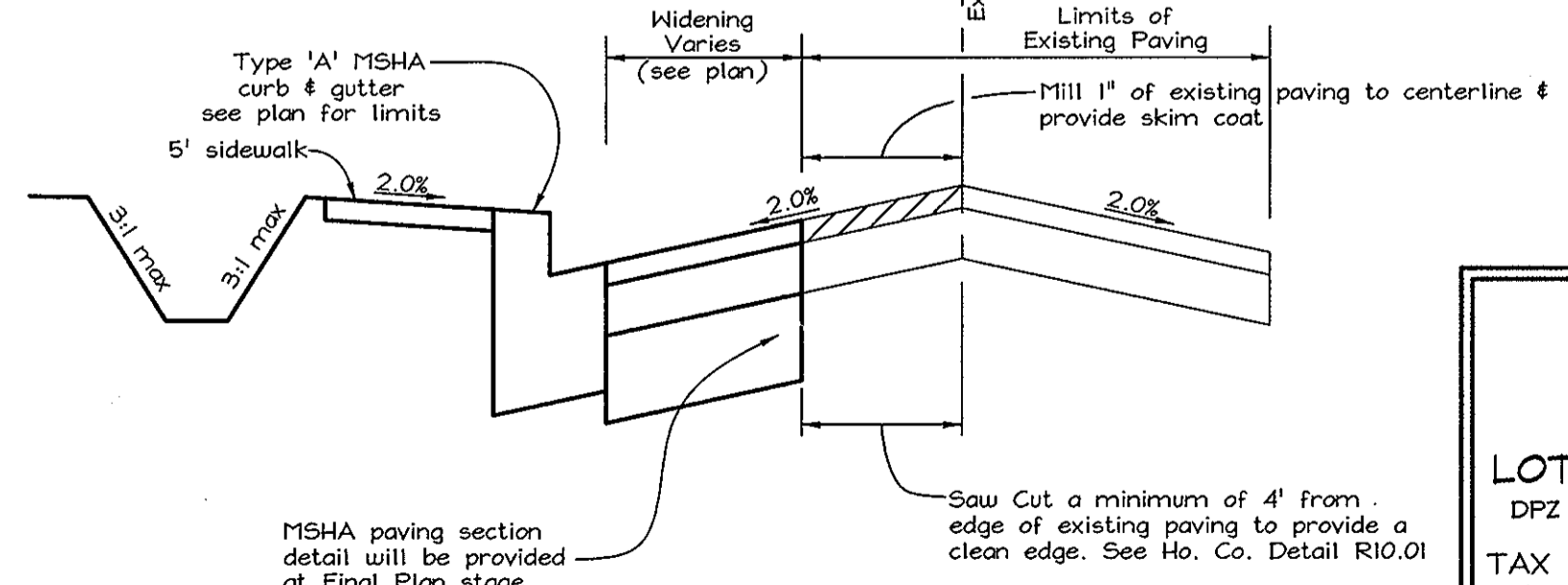
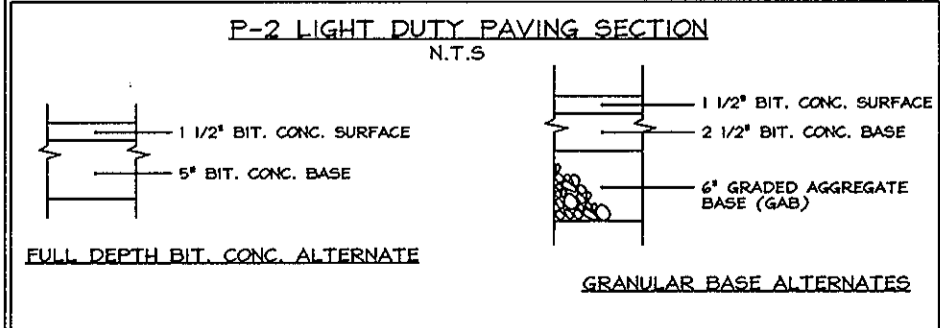
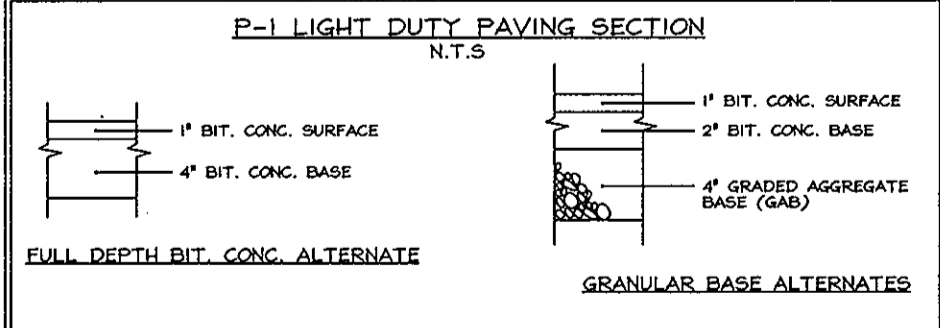
PLAN VIEW
SCALE: 1"=50'

CENTERLINE ROAD CURVE DATA					
CURVE No.	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	345.00'	156.82'	26°02'37"	N83°48'27"E	155.27'



TYPICAL ROADWAY SECTION CLASSIFICATION: PUBLIC ACCESS PLACE

ROADS: ROAD 'A'
DESIGN SPEED: 25 MPH
NOT TO SCALE



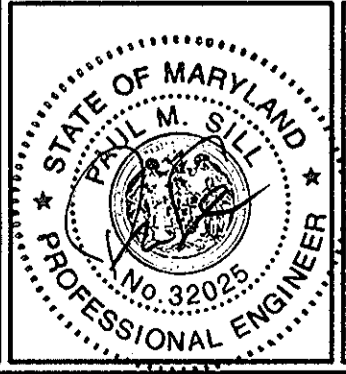
WIDENING DETAIL (Typ.)
Montgomery Road (MD 103)
NOT TO SCALE

OWNER/DEVELOPER

Bonnie Orchard, LLC
8835-P Columbia 100 Parkway,
Columbia, MD 21045
410.730.1810

PRELIMINARY PLAN BONNIE ORCHARD

LOTS 1 THRU 9 AND OPEN SPACE LOTS 10 AND 11
DPZ FILE NO.5: SP-03-018 (VOIDED 01.20.04), S-04-007, F-03-152, W-132, 10-1215, WP-07-059
TAX MAP 31 GRID 20 PARCELS 565 & 595
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



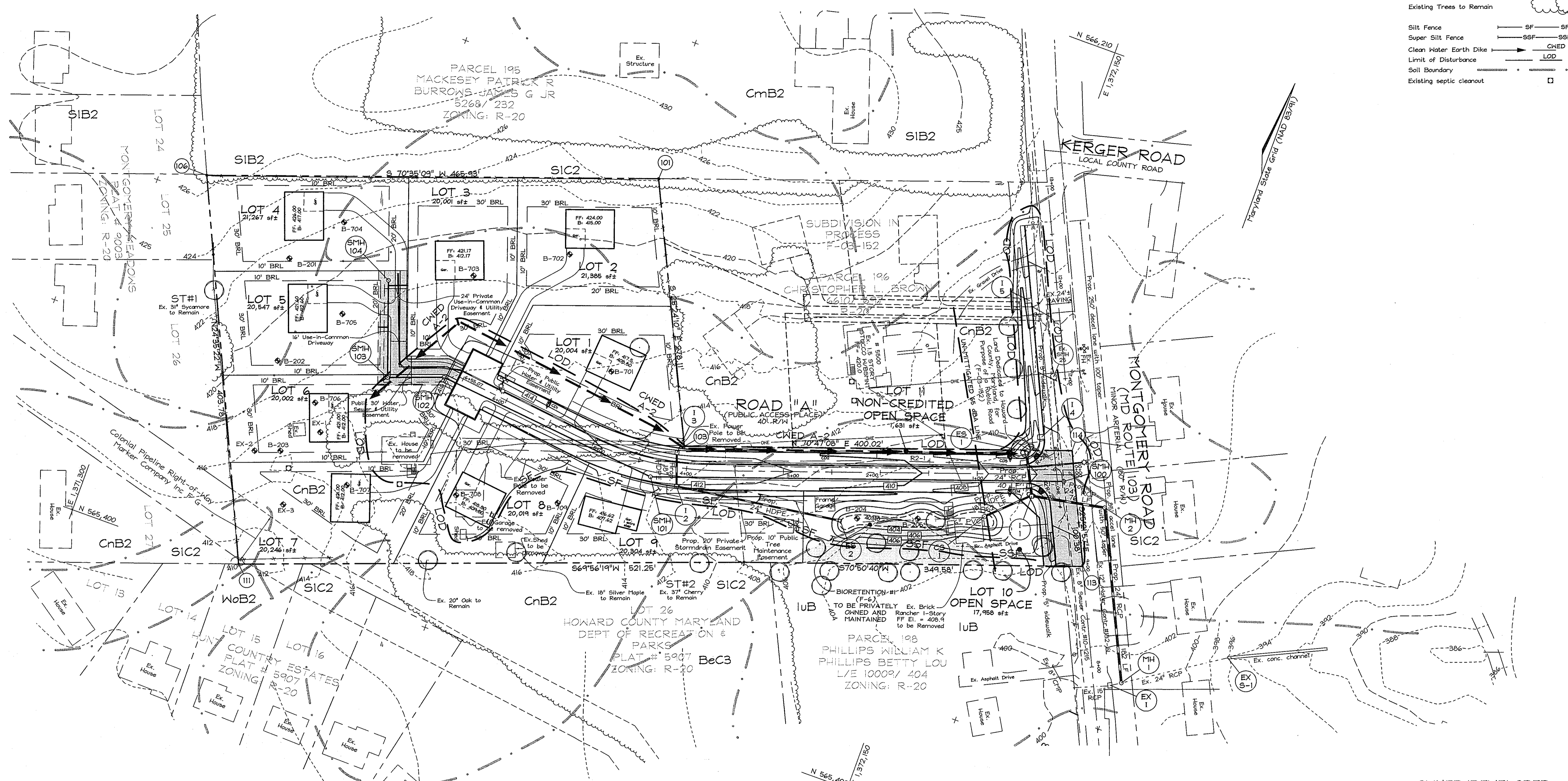
Sill Adcock & Associates · LLC
Engineers · Surveyors · Planners
3300 North Ridge Road, Suite 160
Ellicott City, Maryland 21043
Phone: 443.325.7682 Fax: 443.325.7685
Email: info@saaland.com

Design By: PS/JT
Drawn By: PS/JT
Checked By: PS
Scale: AS SHOWN
Date: AUG 14, 2007
Project #: 06-010
Sheet #: 2 of 4

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Mark A. Caylor
PLANNING DIRECTOR
DATE: 8/2/07

LEGEND	
Existing Contour	-----382
Proposed Contour	-----82
Spot Elevation	+82.53
Direction of Flow	→
Existing Trees to Remain	
Silt Fence	SF SF
Super Silt Fence	SSF SSF
Clean Water Earth Dike	CWED A-1
Limit of Disturbance	LOD
Soil Boundary	-----
Existing septic cleanout	□



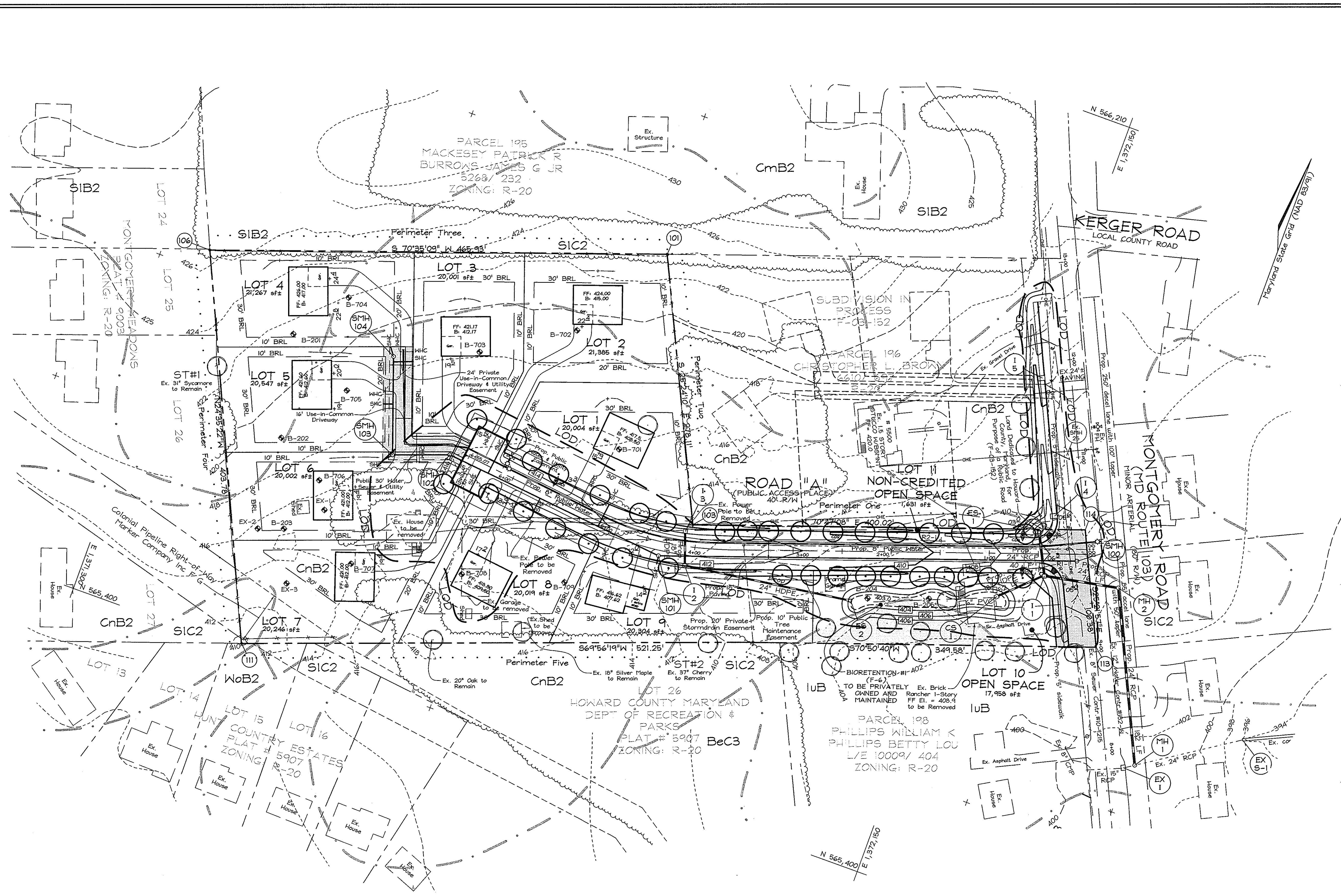
OWNER/DEVELOPER
 Bonnie Orchard, LLC
 8835-P Columbia 100 Parkway,
 Columbia, MD 21045
 410.730.1810

**PRELIMINARY GRADING,
 SEDIMENT AND EROSION CONTROL PLAN
 BONNIE ORCHARD**
 LOTS 1 THRU 9 AND OPEN SPACE LOTS 10 AND 11
 DPZ FILE NO.S: SP-03-016 (VOIDED 01.20.04), S-04-007, F-03-152, W-132, 10-1215,
 WP-07-054
 TAX MAP 31 GRID 20 PARCELS 565 & 595
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

	Sill Adcock & Associates - LLC	Design By: PS/JT
	Engineers - Surveyors - Planners	Drawn By: PS/JT
	3300 North Ridge Road, Suite 160 Ellicott City, Maryland 21043 Phone: 443.325.7682 Fax: 443.325.7685 Email: info@silladcock.com	Checked By: PS
		Scale: 1"=50'
		Date: AUG 14, 2010
		Project #: 06-010
		Sheet #: 3 of 4

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Danish L. Weyl
 PLANNING DIRECTOR 28 8/2/10 DATE



LEGEND

Existing Contour	-----382
Proposed Contour	-----382
Existing Spot Elevation	382.3
Proposed Spot Elevation	+825.5
Direction of Flow	→
Existing Trees to Remain	
Light Poles	
Prop. Street Trees	

Forest Conservation Worksheet 2.2

Net Tract Area			
A.	Total Tract Area	A =	5.40
B.	Deductions	B =	0.00
C.	Net Tract Area	C =	5.40
Land Use Category		Input the number "1" under the appropriate land use zoning, and limit to only one entry	
	ARA	MDR	IDA
	0	0	0
		HDR	MPD
		1	0
			CIA
			0
D.	Afforestation Threshold (Net Tract Area x 15%)	D =	0.81
E.	Conservation Threshold (Net Tract Area x 20%)	E =	1.08
Existing Forest Cover			
F.	Existing Forest Cover within the Net Tract Area	F =	0.00
G.	Area of Forest Above Conservation Threshold	G =	0.00
Break Even Point			
H.	Break Even Point	H =	0.00
I.	Forest Clearing Permitted Without Mitigation	I =	0.00
Proposed Forest Clearing			
J.	Total Area of Forest to be Cleared	J =	0.00
K.	Total Area of Forest to be Retained	K =	0.00
Planting Requirements			
L.	Reforestation for Clearing Above the Conservation Threshold	L =	0.00
M.	Reforestation for Clearing Below the Conservation Threshold	M =	0.00
N.	Credit for Retention above the Conservation Threshold	N =	0.00
P.	Total Reforestation Required	P =	0.00
Q.	Total Afforestation Required	Q =	0.81
R.	Total Planting Requirement	R =	0.81

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES				
	1	2	3	4	5
Perimeter/Frontage Designation					
Linear Feet of Roadway Frontage/Perimeter	400	145	466	404	350
Credit for Existing Vegetation (Yes, No, Linear Feet)	No	No	No	No	No
Remaining Perimeter Length					
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	No	No	No	No	No
Remaining Perimeter Length					
Number of Plants Required	1:60 7	1:60 3	1:60 8	1:60 7	1:60 6
Shade Trees	-	-	-	-	-
Evergreen Trees	-	-	-	-	-
Shrubs	-	-	-	-	-

STREET TREE SCHEDULE

STREET NAME	LF REQUIRED	TREES REQUIRED	TREES PROVIDED
Road 'A'	1,400	35	35

- GENERAL NOTES**
- Landscaping and street trees are provided for this project in accordance with the Howard County Landscape Manual. Financial surpluses will be paid with the Developer's Agreement.
 - Forest Conservation obligations will be fulfilled by a fee-in-lieu of 0.81 acres of afforestation in the amount of \$86,462.70 to be paid with the forthcoming final plat.
 - Planting for the Bioretention Facility will be shown at Final Plan.
 - At the time of installation, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.
 - The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

OWNER/DEVELOPER
 Bonnie Orchard, LLC
 8835-P Columbia 100 Parkway,
 Columbia, MD 21045
 410.730.1810

PRELIMINARY LANDSCAPING AND FOREST CONSERVATION PLAN
BONNIE ORCHARD
 LOTS 1 THRU 9 AND OPEN SPACE LOTS 10 AND 11
 DPZ FILE NO.S: SP-03-018 (VOIDED 01.20.04), S-04-007, F-03-152, W-132, 10-1215, WP-07-059
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Design By: PS/JT
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 Date: AUG. 14, 2007
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 Sheet #: 4 of 4

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Mark D. Cagle
 PLANNING DIRECTOR
 8/22/07
 DATE

8/14/07
Larry A. Thompson
 DNR Qualified Professional