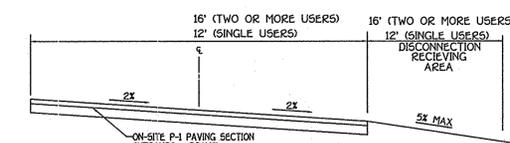


KEY	SPECIES, SIZE	CONDITION	DISPOSITION
A	TULIP POPLAR - 32" DBH	GOOD	TO REMAIN*
B	TULIP POPLAR - 37" DBH	GOOD	TO BE REMOVED WP-12-162
C	TULIP POPLAR - 30" DBH	GOOD	TO REMAIN
D	TULIP POPLAR - 52" DBH	GOOD	TO REMAIN*
E	TULIP POPLAR - 48" DBH	GOOD	TO BE REMOVED WP-12-162
F	TULIP POPLAR - 39" DBH	GOOD	TO REMAIN

\* TREE 'A' AND 'F' ARE WITHIN 10' OF THE PROPOSED DRIVEWAY AND THE AREAS AROUND THESE TREES HAS BEEN GRADED TO MINIMIZE DAMAGE TO THE SURFACE ROOT SYSTEMS. HOWEVER, THERE MAY BE SOME DAMAGE DUE TO THE DRIVEWAY GRADING OPERATIONS.



NOTE: ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.

**TYPICAL PRIVATE DRIVE CROSS SLOPE SECTION**  
NOT TO SCALE

**OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NONROOFTOP RUNOFF (N-2)**

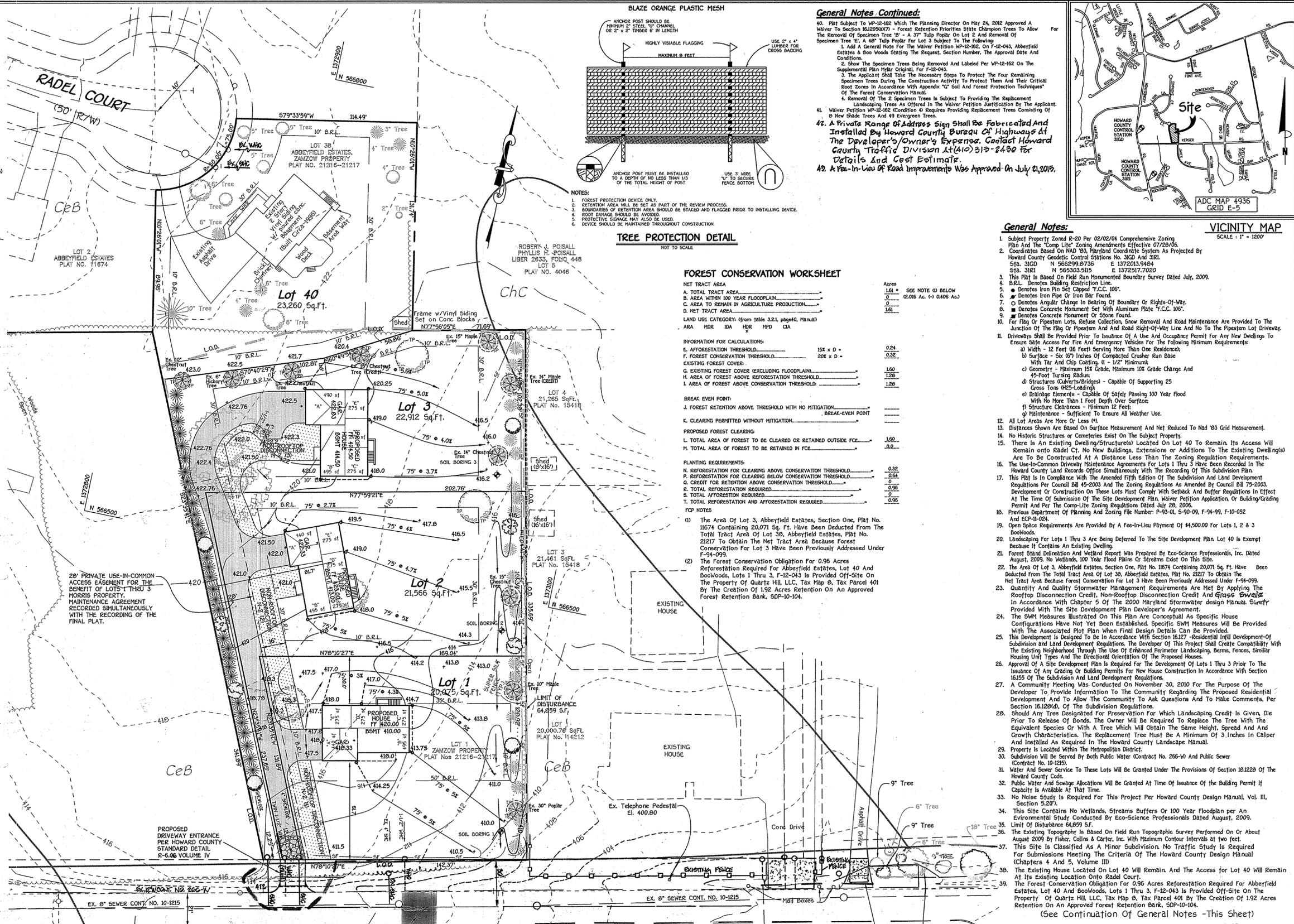
1. MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NOT DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNERS SHALL ENSURE THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

**LEGEND**

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- PROPOSED CONTOUR
- SHEET FLOW (5% MAX)
- DISCONNECTED IMPVIOUS AREA
- DISCONNECTION RECEIVING AREA
- NOTE: UNIT SIZE SHOWN REFLECT NOMINAL BUILDING SIZE AND IS SUBJECT TO FINAL ARCHITECTURE. FINAL DOWNSPOUT LOCATIONS SUBJECT TO FINAL ARCHITECTURE.
- SOILS LINES AND TYPE
- SPECIMEN TREE
- LIMIT OF DISTURBANCE (L.O.D.)
- SUPER SILT FENCE
- TREE PROTECTION
- PROPOSED EVERGREEN TREE
- PROPOSED SHADE TREES

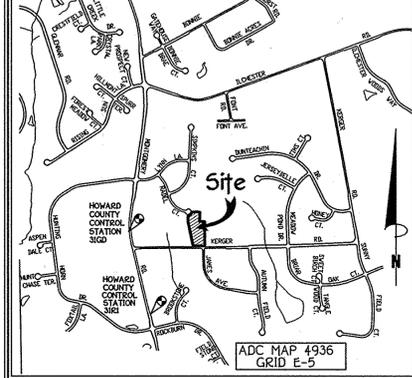
Lot No.	Address	Disconnection Of Rooftop Runoff (Number)	Disconnection Of Non-Rooftop Runoff (CY)	Grass Swale
1	544-2 Kerger Road	Y	Y	Y
2	544-4 Kerger Road	Y	Y	Y
3	544-6 Kerger Road	Y	Y	Y

SOIL	NAME	CLASS
ChC	Chillum-Russell loams, 5 to 10 percent slopes	B
CeB	Chillum loam, 2 to 5 percent slopes	B
Fa	Fallingston sandy loam, 0 to 2 percent slopes	B
SaC	Sassafras loam, 5 to 10 percent slopes	B
UsB	Urban land-Sassafras-Beltville complex, 0 to 5 percent slopes	C
UsD	Urban land-Sassafras-Beltville complex, 5 to 1 percent slopes	C



**General Notes Continued:**

1. Add a General Note For The Waiver Petition WP-12-162, On F-12-043, Abbeyfield Estates & Boo Woods Siting The Request, Section Number, The Approval Date And Conditions.
2. Show The Specimen Trees Being Removed And Labeled Per WP-12-162 On The Supplemental Plan Hjar Original, For F-12-043.
3. The Applicant Shall Take The Necessary Steps To Protect The Four Remaining Specimen Trees During The Construction Activity To Protect Them And Their Critical Root Zones In Accordance With Appendix "G" Soil And Forest Protection Techniques Of The Forest Conservation Manual.
4. Removal Of The 2 Specimen Trees Is Subject To Providing The Replacement Landscaping Trees As Offered In The Waiver Petition Justification By The Applicant.
5. New Shade Trees And 49 Evergreen Trees.
6. A Private Range Of Address Sign Shall Be Fabricated And Installed By Howard County Bureau Of Highways At The Developer's/Owner's Expense. Contact Howard County Traffic Division At (410) 312-2430 For Details And Cost Estimate.
7. A Fee-In-Lieu Of Road Improvements Was Approved On July 21, 2010.



**General Notes:**

1. Subject Property Zoned R-20 Per 02/02/04 Comprehensive Zoning Plan And The "Comp-Lite" Zoning Amendments Effective 07/23/08.
2. Coordinates Based On NAD 83, Maryland Coordinate System As Projected By Howard County Geodetic Control Stations No. 3100 And 3101.
3. 3100: N 565299.8735 E 1372003.9484
- 3101: N 565303.5115 E 1372017.7020
3. This Plat Is Based On Field Run Monumented Boundary Survey Dated July, 2009.
4. B.L. Denotes Building Restriction Line.
5. Denotes Iron Pin Set Capped T.C.C. 100'.
6. Denotes Iron Pipe Or Iron Bar Found.
7. O Denotes Angular Change In Bearing Of Boundary Or Rights-Of-Way.
8. Denotes Concrete Monument Set With Aluminum Plate T.C.C. 100'.
9. Denotes Concrete Monument Of Stone Found.
10. 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 No To The Pipestem Lot Driveway.
11. Driveways 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 For The Following Minimum Requirements:
  - a) Width - 12 Feet (6 Feet) Serving More Than One Residence;
  - b) Surface - Six (6) Inches Of Compacted Crusher Run Base With Tar And Chip Coating 1/2" Minimum;
  - c) Geometry - Minimum 1% Grade, Maximum 1% Grade Change And 45-Foot Turning Radius;
  - d) Structures (Culverts/Bridges) - Capable Of Supporting 25 Gross Tons (50,000 Lbs.);
  - e) Drainage Elements - Capable Of Safely Passing 100 Year Flood With No More Than 1 Foot Depth Over Surface;
  - f) Structure Clearances - Minimum 12 Feet;
  - g) Maintenance - Sufficient To Ensure All Weather Use.
12. All Lot Areas Are More Or Less (±).
13. Distances Shown Are Based On Surface Measurement And Not Reduced To NAD 83 Grid Measurement.
14. No Historic Structures Or Cemeteries Exist On The Subject Property.
15. There Is An Existing Dwelling/Structure(s) Located On Lot 40 To Remain. Its Access Will Remain Into The Subject Property. No New Buildings, Extensions Or Additions To The Existing Dwellings Are To Be Constructed At A Distance Less Than The Zoning Regulation Requirements.
16. The Use-In-Common Driveway Maintenance Agreements For Lots 1 Thru 3 Have Been Recorded In The Howard County Land Records Office Simultaneously With The Recording Of This Subdivision Plat.
17. This Plat Is In Accordance With The Amended Fifth Edition Of The Subdivision And Land Development Regulations Per Council Bill 45-2003 And The Zoning Regulations As Amended By Council Bill 75-2003. Development Or Construction On These Lots Must Comply With Setback And Buffer Regulations In Effect At The Time Of Submission Of The Site Development Plan, Waiver Petition Application Or Building/Grading Permit And Per The Comp-Lite Zoning Regulations Dated July 28, 2006.
18. Previous Department Of Planning And Zoning File Number: P-93-01, S-90-09, F-94-99, F-10-052 And ECP-11-024.
19. Open Space Requirements Are Provided By A Fee-In-Lieu Payment Of \$4,500.00 For Lots 1, 2 & 3 Bookwoods.
20. Landscaping For Lots 1 Thru 3 Are Being Deferred To The Site Development Plan. Lot 40 Is Exempt Because It Contains An Existing Dwelling.
21. Forest Stand Delineation And Wetland Report Was Prepared By Eco-Science Professionals, Inc. Dated August, 2009. No Wetlands, 100 Year Flood Plains Or Streams Exist On This Site.
22. The Area Of Lot 3, Abbeyfield Estates, Section One, Plat No. 11674 Containing 22,912 Sq. Ft. Have Been Deducted From The Total Tract Area Of Lot 38, Abbeyfield Estates, Plat No. 21217 To Obtain The Net Tract Area Because Forest Conservation For Lot 3 Have Been Previously Addressed Under F-94-099.
23. The Forest Conservation Obligation For 0.96 Acres Reforestation Required For Abbeyfield Estates, Lot 40 And Bookwoods, Lots 1 Thru 3, F-12-043 Is Provided Off-Site On The Property Of Quartz Hill, LLC, Tax Map B, Tax Parcel 401 By The Creation Of 1.92 Acres Retention On An Approved Forest Retention Bank, SDP-10-104.
24. The Forest Conservation Obligation For 0.96 Acres Reforestation Required For Abbeyfield Estates, Lot 40 And Bookwoods, Lots 1 Thru 3, F-12-043 Is Provided Off-Site On The Property Of Quartz Hill, LLC, Tax Map B, Tax Parcel 401 By The Creation Of 1.92 Acres Retention On An Approved Forest Retention Bank, SDP-10-104.
25. This Development Is Designed To Be In Accordance With Section 16127 - Residential Land Development-Of Subdivision And Land Development Regulations. The Developer Of This Project Shall Create Compatibility With The Existing Neighborhood Through The Use Of Enhanced Perimeter Landscaping, Berms, Fences, Similar Housing Unit Types And The Directional Orientation Of The Proposed Houses.
26. Approval Of A Site Development Plan Is Required For The Development Of Lots 1 Thru 3 Prior To The Issuance Of Any Grading Or Building Permits For New House Construction In Accordance With Section 16155 Of The Subdivision And Land Development Regulations.
27. A Community Meeting Was Conducted On November 30, 2010 For The Purpose Of The Developer To Provide Information To The Community Regarding The Proposed Residential Development And To Allow The Community To Ask Questions And To Make Comments, Per Section 16128(d), Of The Subdivision Regulations.
28. Should Any Tree Designated For Preservation For Which Landscaping Credit Is Given, Die Prior To Release Of Bonds, The Owner Will Be Required To Replace The Tree With The Equivalent Species Or With A Tree Which Will Obtain The Same Height, Spread And And Growth Characteristics. The Replacement Tree Must Be A Minimum Of 3 Inches In Caliper And Installed As Required In The Howard County Landscape Manual.
29. Property Is Located Within The Metropolitan District.
30. Subdivision Will Be Served By Both Public Water (Contract No. 266-W) And Public Sewer (Contract No. 10-125).
31. Water And Sewer Service To These Lots Will Be Granted Under The Provisions Of Section 16122B Of The Howard County Code.
32. Public Water And Sewer Allocations Will Be Granted At Time Of Issuance Of The Building Permit If Capacity Is Available At That Time.
33. No Noise Study Is Required For This Project Per Howard County Design Manual, Vol. III, Section 5.2(F).
34. This Site Contains No Wetlands, Streams Buffers Or 100 Year Floodplain Per An Environmental Study Conducted By Eco-Science Professionals Dated August, 2009.
35. Limit Of Disturbance 64,899 Sq. Ft.
36. The Existing Topography Is Based On Field Run Topographic Survey Performed On Or About August 2009 By Fisher, Collins & Carter, Inc. With Maximum Contour Intervals at two feet.
37. This Site Is Classified As A Minor Subdivision. No Traffic Study Is Required For Submissions Meeting The Criteria Of The Howard County Design Manual (Chapters 4 And 5, Volume III).
38. The Existing House Located On Lot 40 Will Remain And The Access For Lot 40 Will Remain At Its Existing Location Onto Radel Court.
39. The Forest Conservation Obligation For 0.96 Acres Reforestation Required For Abbeyfield Estates, Lot 40 And Bookwoods, Lots 1 Thru 3, F-12-043 Is Provided Off-Site On The Property Of Quartz Hill, LLC, Tax Map B, Tax Parcel 401 By The Creation Of 1.92 Acres Retention On An Approved Forest Retention Bank, SDP-10-104.

(See Continuation Of General Notes - This Sheet)

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Ket Stalder* 10/01/13  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 9/16/13  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 1072 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
1000 461 - 2022

**Owner/Developer**

Craig J. Morris And  
Cara Whitehead  
5420 Radel Court  
Ellicott City, Maryland 21043  
410-461-6771



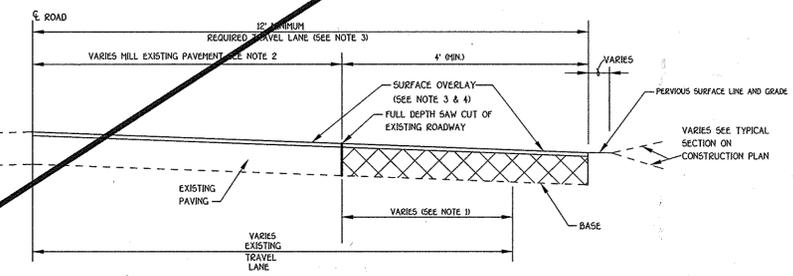
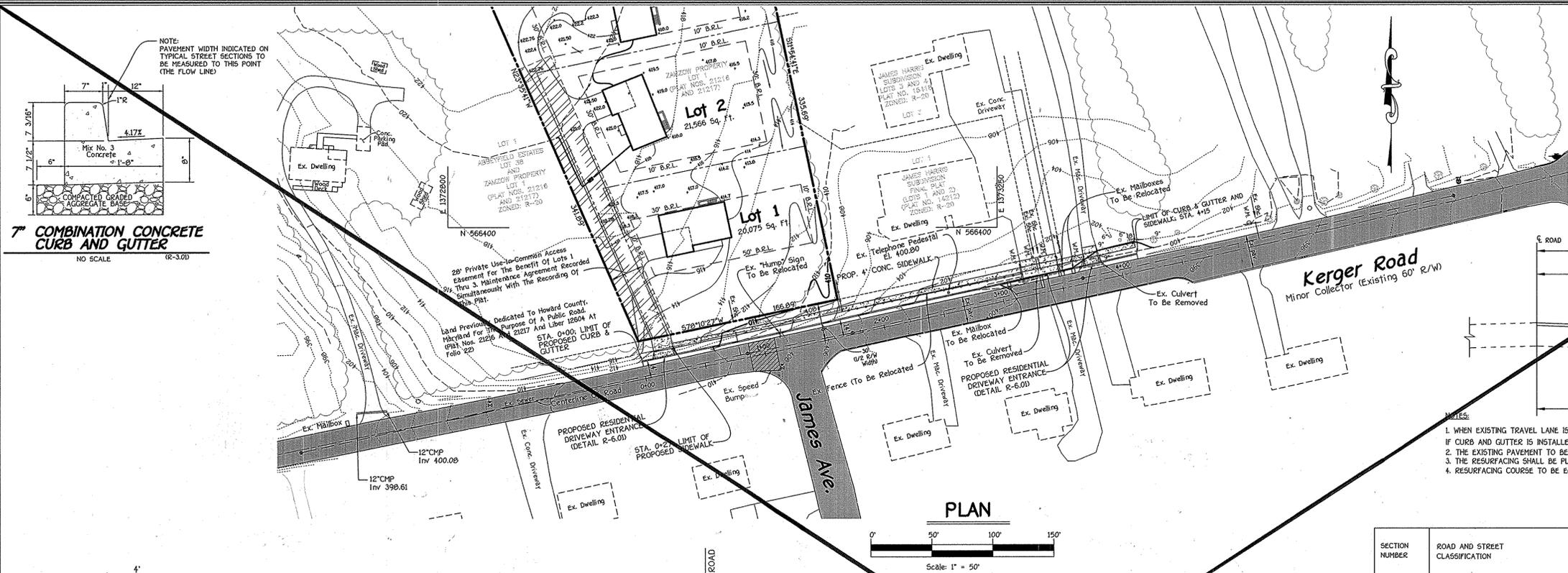
Terrell A. Fisher, PE #9757  
Professional Certification I Herewith Certify That These Documents Were Prepared Or Approved By Me, And That I Am A duly Licensed Professional Engineer Under The Laws Of The State Of Maryland, License No. 9757, Expiration Date: March 3, 2014.

NO.	REVISION	DATE
1	REMOVE ROAD IMPROVEMENTS & ADD FEE-IN-LIEU APPROVAL NOTE	9/7/13
	REVISION	DATE

Supplemental Plan, Landscape, Forest Conservation  
Topography And Soils  
**Abbeyfield Estates**  
Lot 40 And  
**Bookwoods**  
Lots 1 Thru 3  
A Resubdivision Of Lot 38, Abbeyfield Estates, As Shown On Plats Entitled "Abbeyfield Estates, Lot 38 And Zamow Property, Lot 1" And Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 21216 & 21217  
TAX MAP 31, GRID 21, PARCEL 216 & P/O PARCEL 206  
FIRST ELECTION DISTRICT - HOWARD COUNTY, MARYLAND  
ZONING R-20  
SCALE: 1" = 30' OCTOBER 3, 2012  
SHEET 1 OF 2

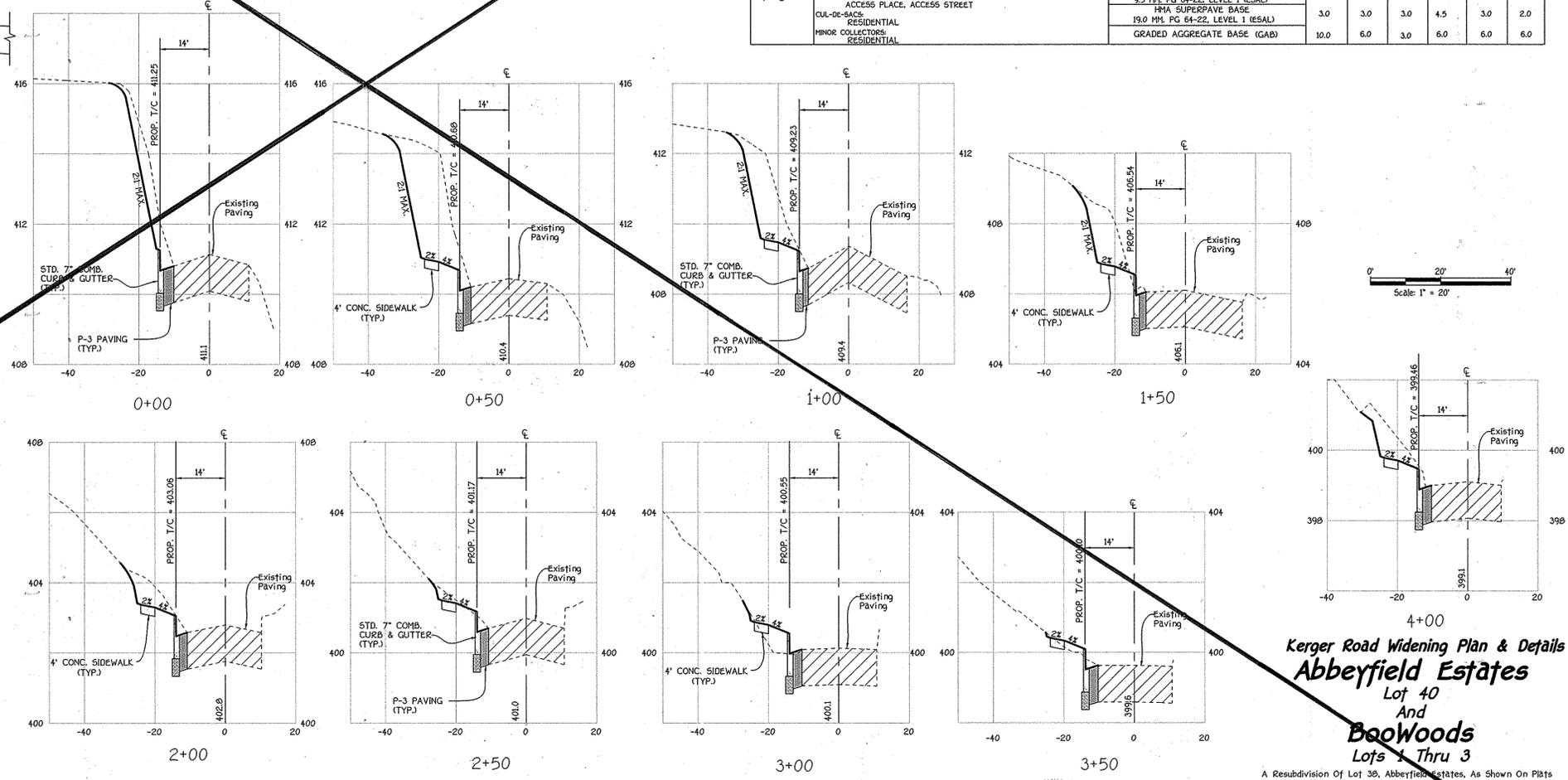
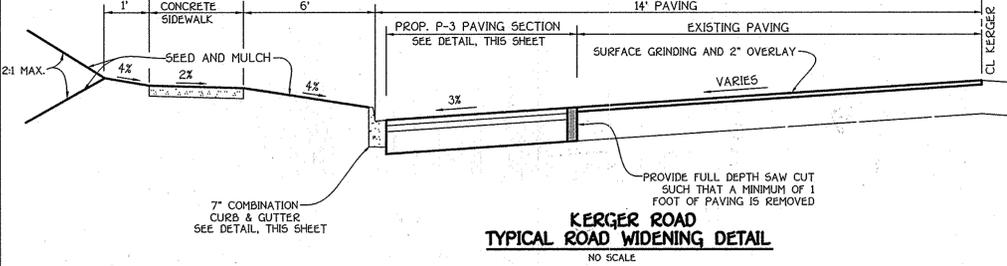
F-12-043

APPROVED: DEPARTMENT OF PUBLIC WORKS		
CHIEF, BUREAU OF HIGHWAYS	<i>[Signature]</i>	9/20/13
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
CHIEF, DIVISION OF LAND DEVELOPMENT	<i>[Signature]</i>	10/04/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	<i>[Signature]</i>	9/16/13
REVISIONS		
NO.	DESCRIPTION	DATE



1. WHEN EXISTING TRAVEL LANE IS LESS THAN THE REQUIRED 12' LANE CONTRACTOR SHALL REMOVE A MINIMUM OF 1' FULL DEPTH OF THE EXISTING ROADWAY.
2. IF CURB AND GUTTER IS INSTALLED, PROVIDE A MINIMUM OF 4" OF WIDENING FROM FACE OF GUTTER PAN.
3. THE EXISTING PAVEMENT TO BE RESURFACED SHALL BE MILLED AT DEPTH OF 1 1/2" (MINIMUM).
4. THE RESURFACING SHALL BE PLACED TO THE CENTERLINE OF THE ROADWAY.
5. RESURFACING COURSE TO BE EQUAL TO THE SURFACE COURSE OF THE TYPICAL PAVEMENT SECTION.

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO 4.5		5 TO 7		7	
			MIN HMA WITH GAB	HMA WITH CONSTANT GAB	MIN HMA WITH GAB	HMA WITH CONSTANT GAB	MIN HMA WITH GAB	HMA WITH CONSTANT GAB
P-3	PARKING DRIVE AISLES	HMA SUPERPAVE FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	1.5
	RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	9.5 MM PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0
	LOCAL ROADS	HMA SUPERPAVE INTERMEDIATE SURFACE	1.0	1.0	1.0	1.0	1.0	1.0
	ACCESS PLACE, ACCESS STREET	9.5 MM PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0
	CUL-DE-SACS	HMA SUPERPAVE BASE	3.0	3.0	3.0	4.5	3.0	2.0
	RESIDENTIAL	19.0 MM PG 64-22, LEVEL 1 (ESAL)	10.0	6.0	3.0	6.0	6.0	6.0
	MINOR COLLECTORS	GRADED AGGREGATE BASE (GAB)	10.0	6.0	3.0	6.0	6.0	6.0
	RESIDENTIAL							



**Kerger Road Widening Plan & Details**  
**Abbeylefield Estates**  
Lot 40  
And  
**Boo Woods**  
Lots 1 Thru 3

A Re subdivision of Lot 30, Abbeylefield Estates, As Shown On Plats Entitled "Abbeylefield Estates, Lot 30 And Zanzow Property, Lot 1" And Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 21216 And 21217.  
Zoned: R-20  
Tax Map: 31, Grid: 21, Parcel: 359 & P/O 2006  
First Election District - Howard County, Maryland  
Date: October 3, 2012 Scale: As Shown  
Sheet 2 of 2

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 461-2855

**Owner/Developer**  
Craig J. Morris And Cara Whitehead  
5420 Ridel Court  
Ellicott City, Maryland 21043  
410-461-6771

Professional certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20740, Expiration Date 2-22-13.

*[Signature]*  
ALDO  
PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS
1	10/1/13	AS SHOWN PER APPROVAL OF PER-IN-CHARGE OF ROAD IMPROVEMENTS

9/20/13  
DATE

F-12-043