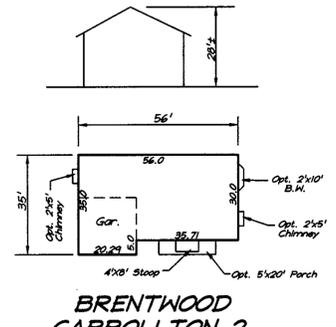


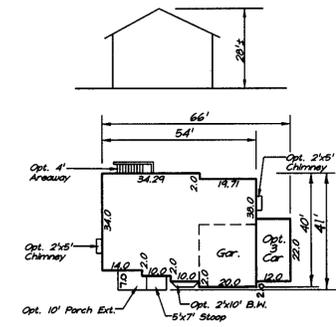
ASTER

2596.00 SF = 8653.33 SF
0.3 Min. Lot Size w/all Options
2756.00 SF = 9186.67 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



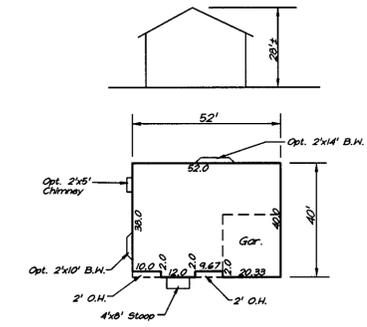
BRENTWOOD CARROLLTON 2

2029.45 SF = 6764.83 SF
0.3 Min. Lot Size w/all Options
2189.45 SF = 7298.17 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



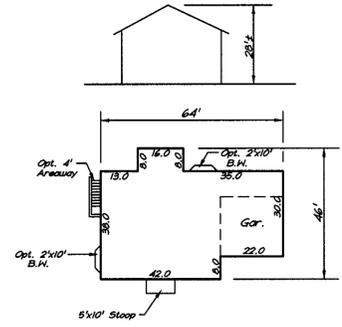
CARROLLTON 1

2490.58 SF = 8301.93 SF
0.3 Min. Lot Size w/all Options
2626.00 SF = 8896.67 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



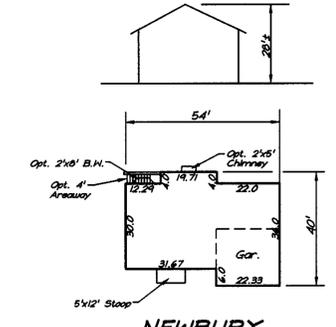
CHANDLER

2266.00 SF = 7553.33 SF
0.3 Min. Lot Size w/all Options
2426.00 SF = 8086.67 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



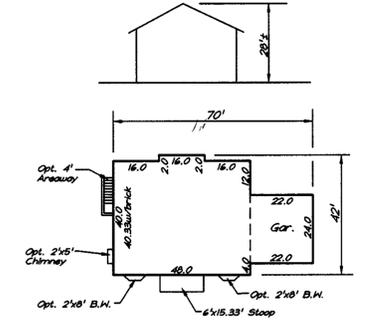
GREENBRIAR

2594.00 SF = 8646.67 SF
0.3 Min. Lot Size w/all Options
2754.00 SF = 9180.00 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



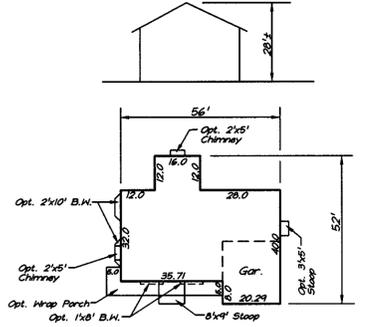
NEWBURY

2004.54 SF = 6681.00 SF
0.3 Min. Lot Size w/all Options
2164.54 SF = 7215.13 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



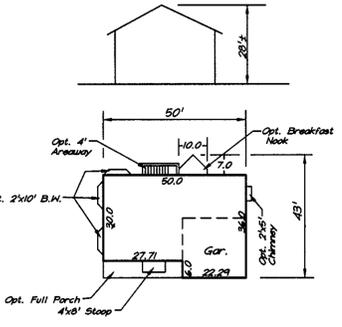
OAKWOOD

2745.98 SF = 9153.27 SF
0.3 Min. Lot Size w/all Options
2925.98 SF = 9686.60 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



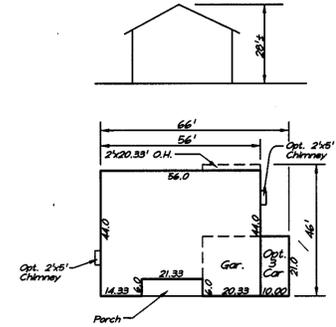
PINEHURST

2549.87 SF = 8479.57 SF
0.3 Min. Lot Size w/all Options
2723.87 SF = 9012.90 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



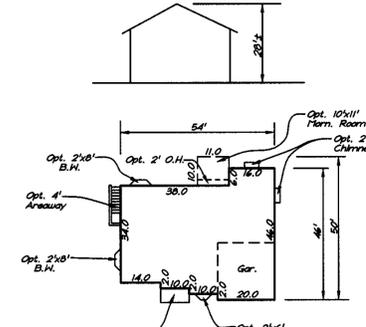
PLYMOUTH

2022.77 SF = 6676.90 SF
0.3 Min. Lot Size w/all Options
2162.77 SF = 7209.23 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



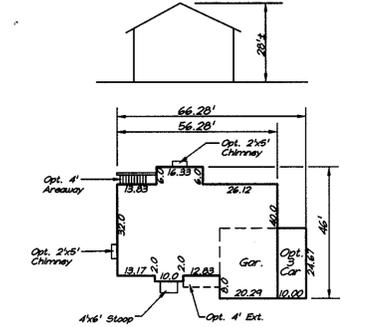
STERLING

2846.66 SF = 9488.87 SF
0.3 Min. Lot Size w/all Options
3006.66 SF = 10022.20 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



WARWICK

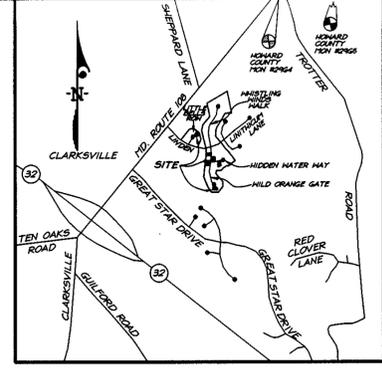
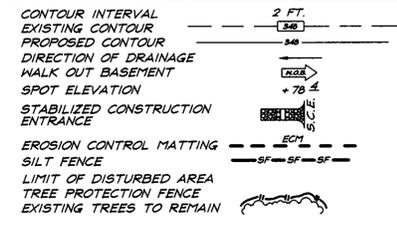
2323.66 SF = 7745.53 SF
0.3 Min. Lot Size w/all Options
2483.16 SF = 8277.20 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck



WESTCHESTER

2636.18 SF = 8453.93 SF
0.3 Min. Lot Size w/all Options
2696.18 SF = 8907.27 SF
0.3 Min. Lot Size w/all Options w/10'x16' Deck

LEGEND



VICINITY MAP
Scale: 1"=2000'

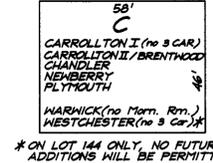
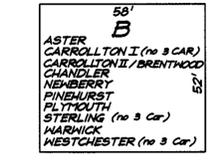
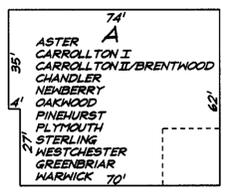
BENCHMARKS:
Howard County Monument 29G4
Intersection of MD. Route 108 and Trotter Road
Howard County Monument 29G5
an additional 2,544'± Northeastly along MD. Route 108 away from Site

SHEET INDEX

DESCRIPTION	SHEET No.
SITE DEVELOPMENT, SEDIMENT & EROSION CONTROL	1-3 of 4
SEDIMENT AND EROSION CONTROL DETAILS	4 of 4

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
5	5712 LITTLE BELLS ROW
144	5808 WILD ORANGE GATE
146	5820 WILD ORANGE GATE
151	5840 WILD ORANGE GATE
153	5845 WILD ORANGE GATE
161	12108 HIDDEN WATERS WAY
169	5813 WILD ORANGE GATE



NOTE: NO EXTERIOR BASEMENT AREAWAY IS ALLOWED TO ENCRoACH INTO ANY B.R.L.

GENERAL NOTES:

- Subject property is zoned: NTSFLD per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is : 1.6358 Acres.
- The total number of lots included in this submission is : 7
- Improvement to property : Single Family Detached
- The maximum lot coverage permitted is : 30%
- Department of Planning and Zoning reference file numbers : S-93-21;P-95-12;F-96-102;F-98-122.
- Utilities shown as existing are taken from approved Water and Sewer plans Contract #34-3586-D, approved Road Construction plans F-96-102, and actual field survey.
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- All roadways are public and existing.
- The existing topography was taken from Road Construction Plans prepared by Morris & Ritchie Associates in January 1996.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monuments Numbers : 29G4 & 29G5
- The contractor shall notify the Department of Public Works/ Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details R.6.03 & R.6.05.
- In accordance with FDP-Phase 222-A, Part V bay windows or chimneys not more than 10 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 3 feet into the front or rear setbacks.
- Stormwater Management is provided per: F-96-102. Quantity Stormwater Management for Section 4, Area 5 is provided by three facilities; the refurbished SWM Pond #1 South of Linden Linthicum Lane (F-96-89), The culvert at Great Star Drive (F-96-110) and SWM Pond #4 in Section 4, Area 4 (F-96-130). Quality Management for this section will be provided by three facilities: A Forebay North of Wild Orange Gate and an Extended Detention Facility within Pond #4 (F-96-130). The subdivision is located in the Patuxent River Area Sub-Basin and is a Class 1 Watershed.
- SHC Elevations shown are at the property lines.

SPECIAL NOTE:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-96-102 and/or approved Water and Sewer Plans Contract #34-3586-D.

SUBDIVISION NAME	COLUMBIA VILLAGE OF RIVER HILL	SECTION/AREA	4/5	LOTS/PARCELS	5, 144, 146, 151, 153, 161, 169
PLAT NO.	12855	BLOCK NO.	1	TAX MAP NO.	35
WATER CODE	1-12	SEWER CODE	6652500	ELECTION DIST.	5TH
				CENSUS TRACT	6055

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.

DESIGNED	DM	SITE DEVELOPMENT PLAN LOTS 5, 144, 146, 151, 153, 161, 169 COLUMBIA VILLAGE OF RIVER HILL SECTION 4 AREA 5 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR : DOUGLAS HOMES P.O. BOX 628 (7034 DORSETT HALL DRIVE, DORSETT HALL PROFESSIONAL PARK) ELLICOTT CITY, MARYLAND 21048	SCALE	1" = 30'
DRAWN	BLP		DRAWING	1 of 4
CHECKED	jme		JOB NO.	99-010
DATE	2/18/99		FILE NO.	99-011-X

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 Cindy Hamilton
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/1/99
 DATE: 4/14/99
 DATE: 4/14/99

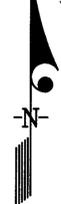


OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

COLUMBIA VILLAGE OF RIVER HILL
PART OF OPEN SPACE LOT 9

HIDDEN WATERS WAY
(PUBLIC ROAD)

COLUMBIA VILLAGE OF RIVER HILL
SECTION 4 AREA 5
OPEN SPACE LOT 141

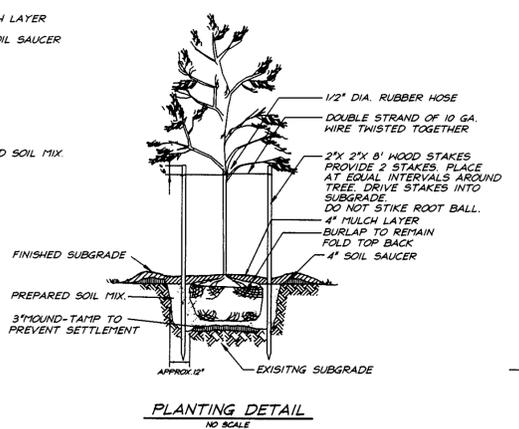
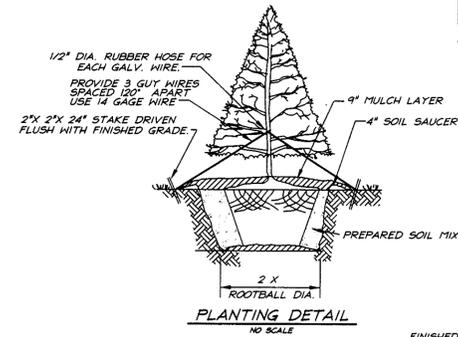


PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QUAN	REMARK
(AR)	ACER RUBRUM OCT. GLORY RED MAPLE	2 1/2"-3" CAL. 12-14' HT.	2	B4B HEAVY
(TC)	PINUS STROBUS WHITE PINE	6'-8' HT.	3	B4B HEAVY

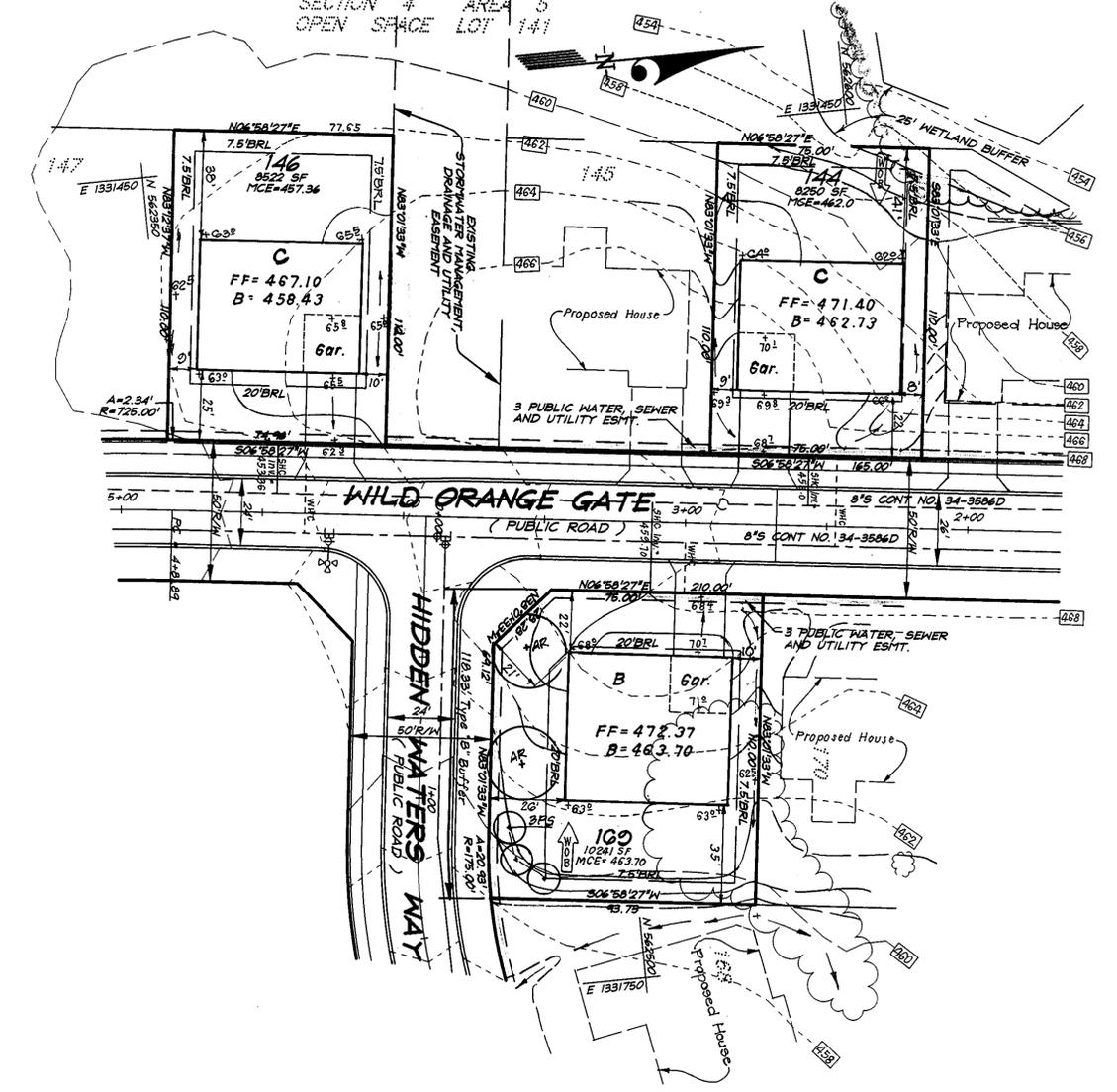
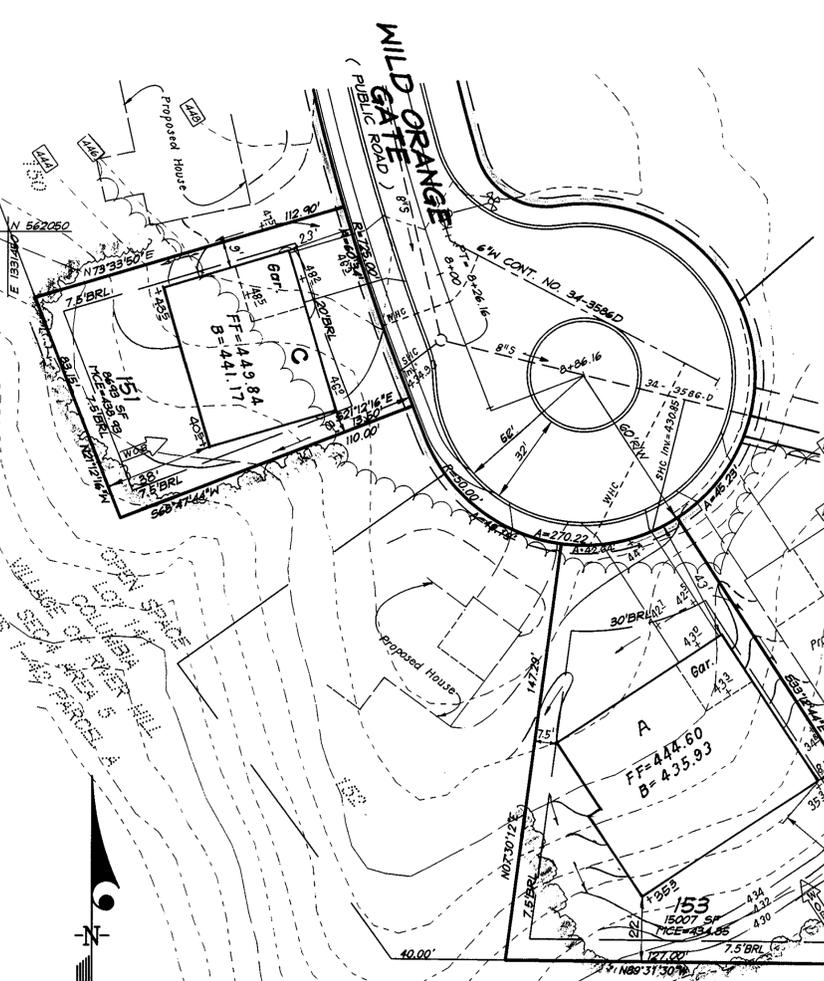
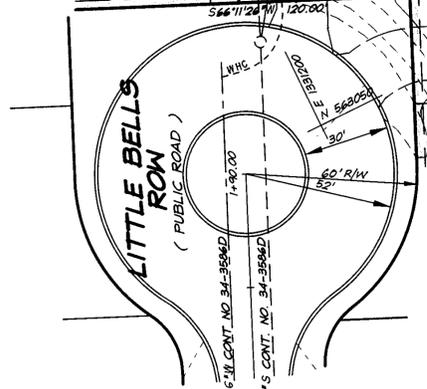
- NOTES:
- All plant materials shall be full and heavy, be well formed and symmetrical, conform to the most current AAN specifications and be installed in accordance with H&D planting specifications.
 - Contractor shall verify location of all underground utilities prior to staking.
 - Final location of plant material may need to vary to meet final field conditions. These shall not be planted in the bottom of drainage swales.

SCHEDULE A PERIMETER LANDSCAPE EDGE			LOT 169
Category	Adjacent to Roadways		
Landscape Type			B
Perimeter/Perimeter			13.33
Number of Plants Required			
Shade Trees	(1/20)	2	
Evergreen Trees	(1/40)	3	
Number of Plants Provided			
Shade Trees		2	
Evergreen Trees		3	
Surety Amount			\$1050.00

* Comments: Planting to be provided per the New Town Alternative Compliance method



APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 4/15/99
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/15/99
 DIRECTOR



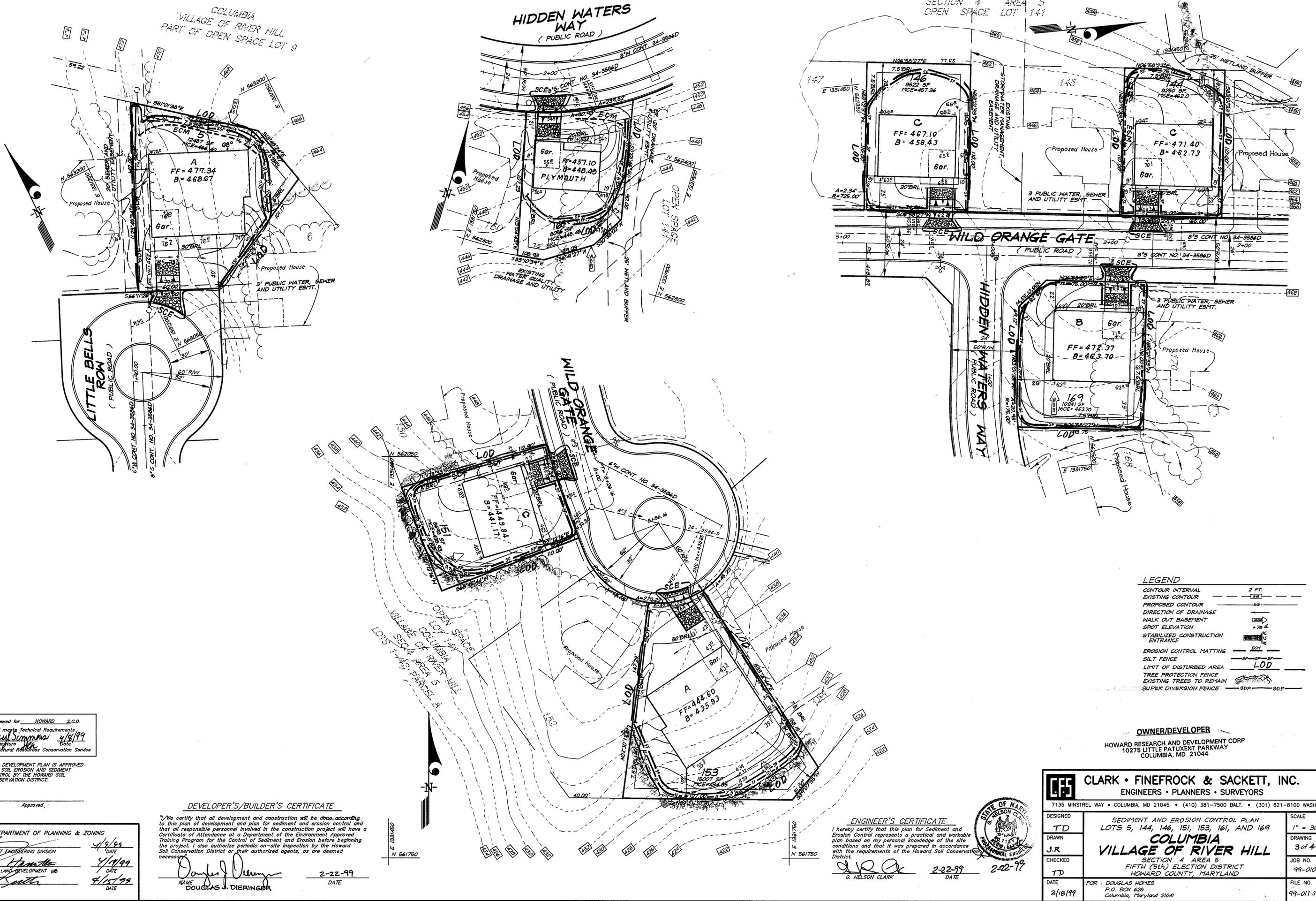
BONDING NOTE:
 THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
 FINANCIAL SURETY FOR THE REQUIRED LANDSCAPE TREES IN THE AMOUNT OF \$1050.00 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION.

DEVELOPER'S/BUILDERS CERTIFICATE
 I/We certify that the landscaping shown on this plan will be done according to plan, section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a Certificate of Landscape Installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.
 Name: Douglas J. Dieringer Date: 2-22-99

OWNER/DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044



CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS			
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.			
DESIGNED	SITE DEVELOPMENT PLAN		SCALE
DM	LOTS 5, 144, 146, 151, 153, 161, AND 169		1" = 30'
DRAWN	COLUMBIA VILLAGE OF RIVER HILL		DRAWING
JR	SECTION 4 AREA 5		2 of 4
CHECKED	FIFTH (5th) ELECTION DISTRICT		JOB NO.
J.M.E.	HOWARD COUNTY, MARYLAND		99-010
DATE	FOR: DOUGLAS HOMES		FILE NO.
2/18/99	P.O. BOX 628		99-011-X
	Columbia, Maryland 21041		



LEGEND

CONTOUR INTERVAL	2 FT.
EXISTING CONTOUR	---
PROPOSED CONTOUR	---
DIRECTION OF DRAINAGE	→
WALK OUT BASEMENT	---
SPOT ELEVATION	+ 78.4
STABILIZED CONSTRUCTION ENTRANCE	---
EROSION CONTROL MATTING	---
SILT FENCE	---
LIMIT OF DISTURBED AREA	LOD
TREE PROTECTION FENCE	---
EXISTING TREES TO REMAIN	---
SUPER DIVERSION FENCE	SDF

OWNER/DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.

DESIGNED	TD	SEDIMENT AND EROSION CONTROL PLAN	SCALE
DRAWN	J.R.	LOTS 5, 144, 146, 151, 153, 161, AND 169	1" = 30'
CHECKED	TD	COLUMBIA VILLAGE OF RIVER HILL	DRAWING
DATE	2/18/99	SECTION 4 AREA 5	3 of 4
		FIFTH (5th) ELECTION DISTRICT	JOB NO.
		HOWARD COUNTY, MARYLAND	99-010
		FOR: DOUGLAS HOMES	FILE NO.
		P.O. BOX 628	99-011 SJE
		Columbia, Maryland 21041	

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark
2-22-99
2-22-99

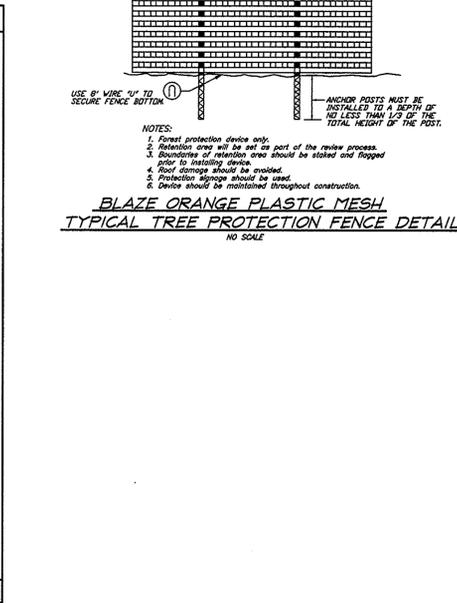
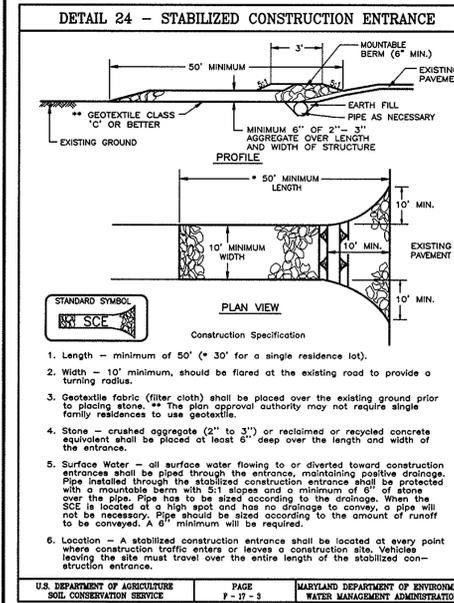
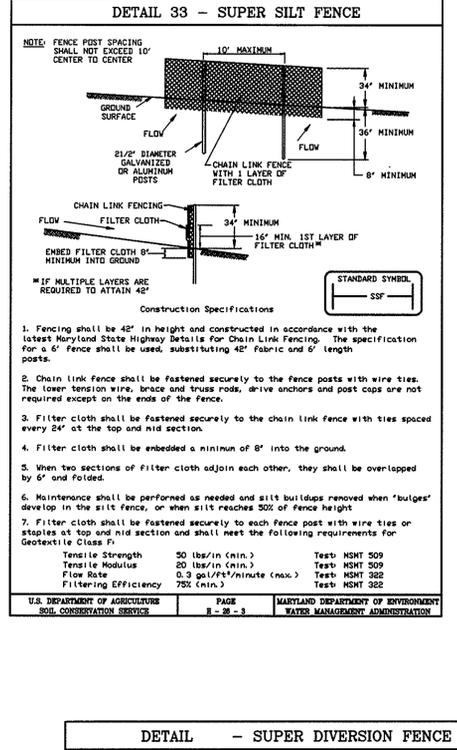
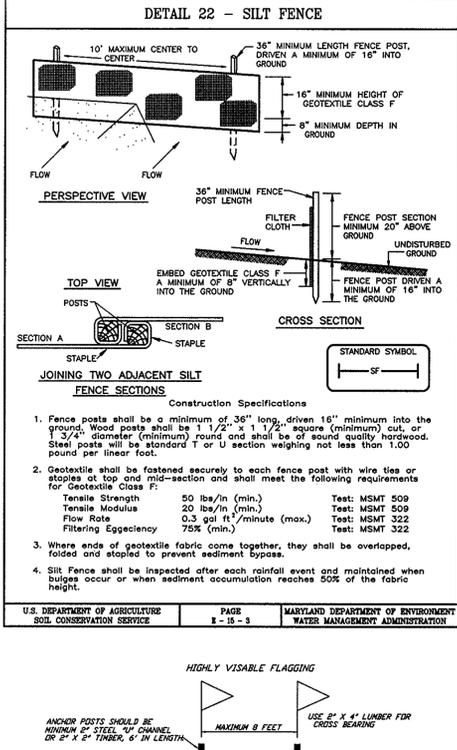
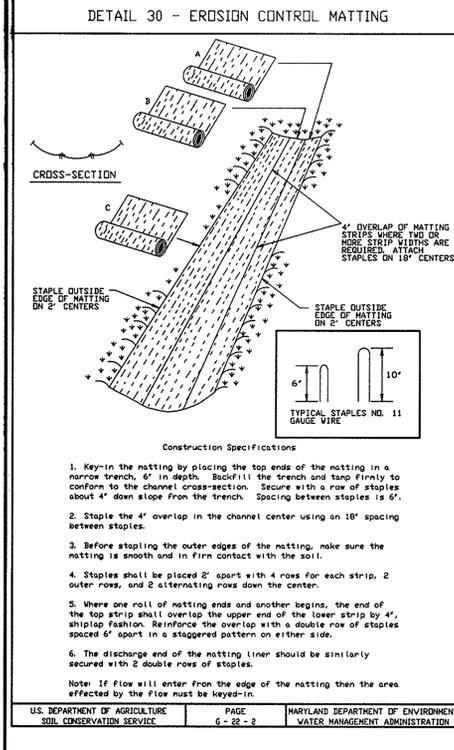
DEVELOPER'S/BUILDER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Douglas J. Dieringer
2-22-99
NAME DOUGLAS J. DIERINGER DATE

Reviewed for HOWARD S.C.D. and meets Technical Requirements
Cheryl Simmons 4/9/99
Signature Date
U.S. Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: DEPARTMENT OF PLANNING & ZONING
4/9/99
4/19/99
4/15/99



21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

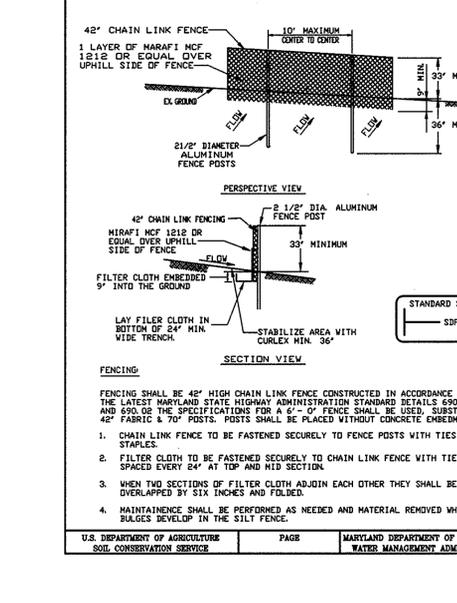
Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where the nature of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish adequate supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains materials toxic to plant growth.
 - The soil is so acidic that treatment with lime is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for erosion stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given site type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate authority. Regardless, topsoil shall not be a mixture of contrasting textural subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, loam, or other materials larger than 1 and 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-6 pounds (200-600 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting topsoil specifications, obtain test results indicating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1% correct by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No seed or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4" - 6" higher in situation.
 - Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that seeding or sodding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E-28-3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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PERMANENT SEEDING NOTES

APPLY TO GRADES OR CLEARING AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. If not previously loosened:

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (70 lbs/100 sq ft.) and 600 lbs per acre 10-10-10 fertilizer (74 lbs/100 sq ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 100 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/100 sq ft.).
- Acceptable - Apply 2 tons per acre dolomitic limestone (70 lbs/100 sq ft.) and 1000 lbs per acre 10-10-10 fertilizer (73 lbs/100 sq ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/100 sq ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (2 lbs/100 sq ft.) of seeding linseed. During the period of October 16 thru February 28, protect site by applying 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed, Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/100 sq ft.) of untreated straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (5 gal/100 sq ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 340 gallons per acre (8.5 gal/100 sq ft.) for anchoring.

MANTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. If not previously loosened:

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (74 lbs/100 sq ft.).

SEEDING: For the periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/100 sq ft.) for the period May 1 thru August 14, seed with 3 lbs. per acre of seeding linseed (0.7 lbs/100 sq ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/100 sq ft.) of untreated straw mulch immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (5 gal/100 sq ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 340 gallons per acre (8.5 gal/100 sq ft.) for anchoring.

REFER TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR DATA AND METHODS NOT COVERED.

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (316-085).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1984 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within:
 - 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1.
 - 14 calendar days for all interior sediment control structures.
- All sedimentation practices shall be fenced and warning signs posted around their perimeter in accordance with VEH, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above, in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seedings, and temporary seeding and mulching as to all other disturbed or graded areas on the project site.
- Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- SITE ANALYSIS:**

Total Area of Site:	1.64 Acres
Area Disturbed:	1.60 Acres
Area to be roofed or paved:	0.63 Acres
Area to be vegetatively stabilized:	1.02 Acres
Total Cut:	140.67
Total Fill:	1875.67
Offsite Water/Borrow Area Location:	
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other grading or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
- The total amount of silt fence = 1700 LF
- The total amount of super silt fence = 160 LF
- The total amount of earth dikes =

#1 It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and its grading permit number at the time of construction.

CONSTRUCTION SEQUENCE:

1. Obtain grading permit.	NO. OF DAYS
2. Install tree protection fence.	7
3. Install sediment and erosion control devices and stabilize slopes.	14
4. Excavate for foundations, rough grade and temporarily stabilize.	60
5. Construct structures, sidewalks and driveways.	60
6. Final grade, install Erosion Control Matting and stabilize in accordance with standards and specifications.	14
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7
* Delay construction of houses on lots:	N/A

Reviewed for: HOWARD S.C.D.
and meets Technical Requirements
Carol Simmons 4/8/99
Signature
U.S. Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John C. Robertson 4/16/99
Approved

APPROVED: DEPARTMENT OF PLANNING & ZONING
4/15/99
DATE
4/15/99
DATE
4/15/99
DATE

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Douglas J. Diebinger
NAME
2-22-99
DATE

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark
NAME
2-22-99
DATE

CLARK • FINEFROCK & SACKETT, INC.

ENGINEERS • PLANNERS • SURVEYORS

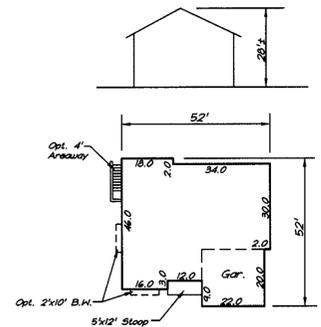
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.

DESIGNED	TD	SCALE	NTS
DRAWN	BH	DRAWING	4 of 4
CHECKED	TD	JOB NO.	99-010
DATE	2/18/99	FILE NO.	99-011-5E

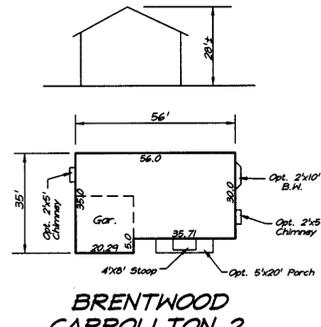
SEDIMENT AND EROSION CONTROL PLAN
LOTS 5, 144, 146, 151, 153, 161 #1 69
COLUMBIA VILLAGE OF RIVER HILL
SECTION 4 AREA 5
FIFTH (5th) ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: DOUGLAS HOMES
P.O. BOX 628 (5034 DORSEY HALL DRIVE,
DORSEY HALL PROFESSIONAL PARK)
ELLIOTT CITY, MARYLAND 21828

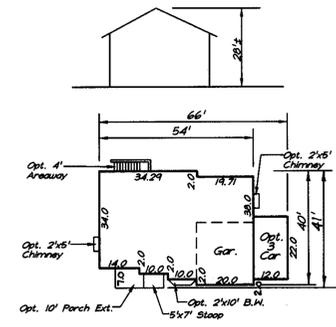
SDP 99-06



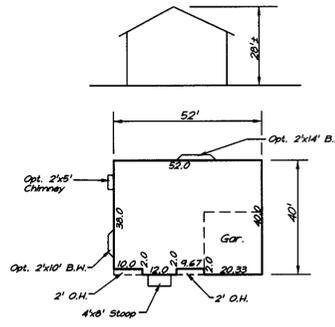
ASTER
 2596.00 SF = 8653.33 SF
 0.3 Min. Lot Size w/all Options
 2756.00 SF = 9106.67 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



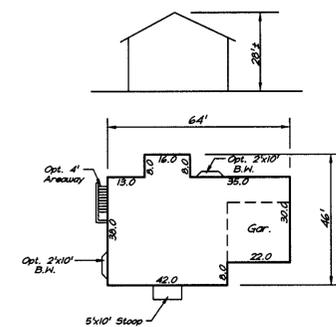
BRENTWOOD CARROLLTON 2
 2229.45 SF = 6764.83 SF
 0.3 Min. Lot Size w/all Options
 2189.45 SF = 7298.17 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



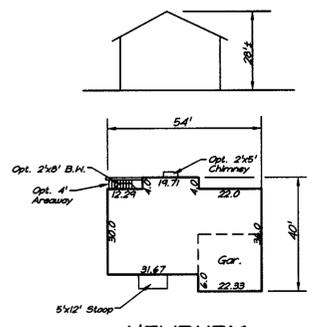
CARROLLTON 1
 2490.58 SF = 8301.93 SF
 0.3 Min. Lot Size w/all Options
 2650.58 SF = 8833.27 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



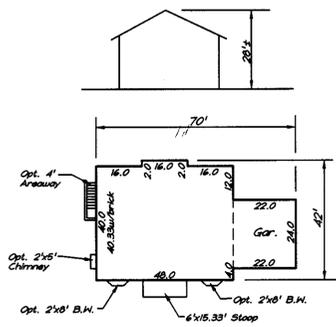
CHANDLER
 2266.00 SF = 7553.33 SF
 0.3 Min. Lot Size w/all Options
 2426.00 SF = 8006.67 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



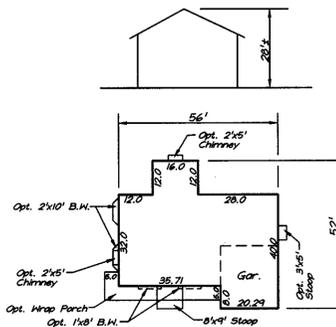
GREENBRIAR
 2594.00 SF = 8646.67 SF
 0.3 Min. Lot Size w/all Options
 2754.00 SF = 9100.00 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



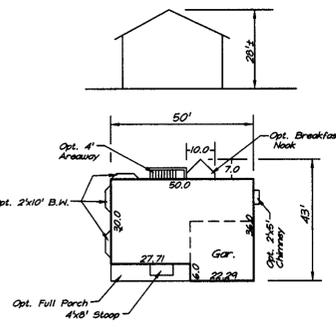
NEWBURY
 2004.54 SF = 6681.80 SF
 0.3 Min. Lot Size w/all Options
 2164.54 SF = 7215.13 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



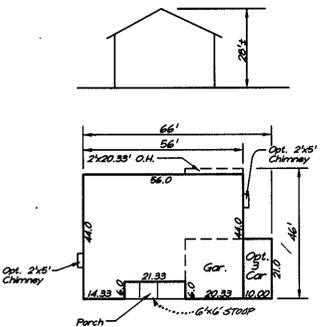
OAKWOOD
 2745.90 SF = 9153.27 SF
 0.3 Min. Lot Size w/all Options
 2925.90 SF = 9646.60 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



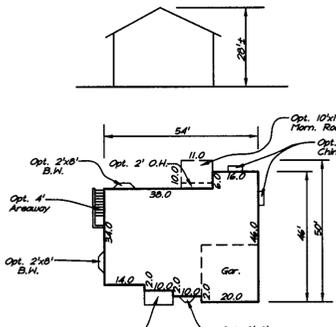
PINEHURST
 2543.97 SF = 8479.57 SF
 0.3 Min. Lot Size w/all Options
 2703.87 SF = 9012.90 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck
 2878.00 SF = 9826.67 SF
 0.3 Min. Lot Size w/all opt. incl. 10'x16' DECK (NO W/10'x16' PORCH)



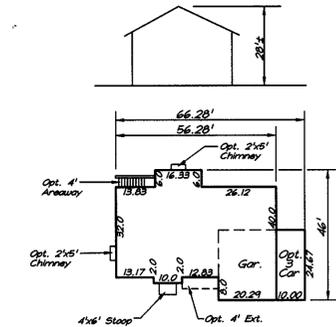
PLYMOUTH
 2002.77 SF = 6675.90 SF
 0.3 Min. Lot Size w/all Options
 2162.77 SF = 7209.23 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



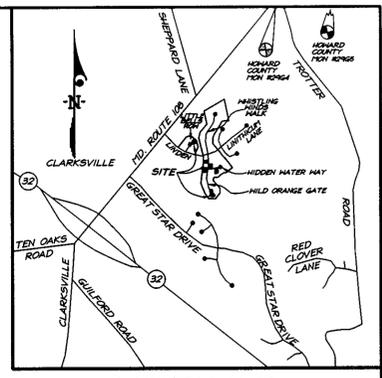
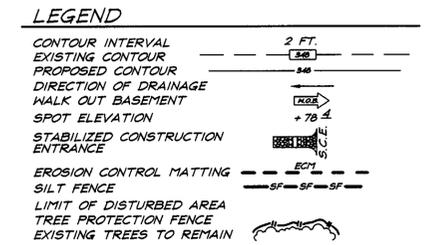
STERLING
 2846.66 SF = 9408.87 SF
 0.3 Min. Lot Size w/all Options
 3006.66 SF = 10022.20 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck
 2413 = 8043 SF
 0.3 MIN Lot size w/15'x10' Stoop
 2693 = 8843 SF
 0.3 MIN Lot size w/16'x16' Stoop incl. 12'x15' DECK



WARWICK
 2323.66 SF = 7745.53 SF
 0.3 Min. Lot Size w/all Options
 2483.16 SF = 8277.20 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck



WESTCHESTER
 2636.18 SF = 8453.93 SF
 0.3 Min. Lot Size w/all Options
 2696.18 SF = 8907.27 SF
 0.3 Min. Lot Size w/all Options w/10'x16' Deck

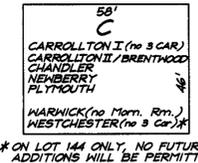
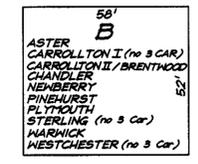
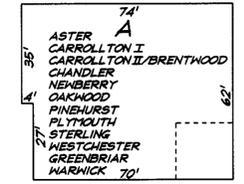


VICINITY MAP
 Scale: 1"=2000'

BENCHMARKS:
 Howard County Monument 2964
 Intersection of MD. Route 108 and Trotter Road
 Howard County Monument 2965
 on additional 2,544' Northeastly along MD. Route 108 away from Site

SHEET INDEX	
DESCRIPTION	SHEET No.
SITE DEVELOPMENT, SEDIMENT & EROSION CONTROL	1-3 of 4
SEDIMENT AND EROSION CONTROL DETAILS	4 of 4

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
5	5712 LITTLE BELLS ROW
144	5808 WILD ORANGE GATE
146	5820 WILD ORANGE GATE
151	5840 WILD ORANGE GATE
153	5848 WILD ORANGE GATE
161	12108 HIDDEN WATERS WAY
169	5813 WILD ORANGE GATE



NOTE: NO EXTERIOR BASEMENT AREA IS ALLOWED TO ENFORCE INTO ANY B.M.L.

- GENERAL NOTES:**
- Subject property is zoned: NTSFLD per 10-18-93 Comprehensive Zoning Plan.
 - The total area included in this submission is: 1.6358 Acres.
 - The total number of lots included in this submission is: 7
 - Improvement to property: Single Family Detached
 - The maximum lot coverage permitted is: 30%
 - Department of Planning and Zoning reference file numbers: S-93-21; F-96-12; F-96-102; F-98-122.
 - Utilities shown as existing are taken from approved Water and Sewer plans Contract #34-3586-D, approved Road Construction plans F-96-102, and actual field survey.
 - Any damage to county owned rights-of-way shall be corrected at the developer's expense.
 - All roadways are public and existing.
 - The existing topography was taken from Road Construction Plans prepared by Morris & Ritchie Associates in January 1996.
 - The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monuments Numbers: 2964 & 2965
 - The contractor shall notify the Department of Public Works/ Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours prior to the start of work.
 - The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
 - For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details R.6.03 & R.6.05.
 - In accordance with FDP-Phase 222-A, Part V bay windows or chimneys not more than 10 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 3 feet into the front or rear setbacks.
 - Stormwater Management is provided per: F-96-102. Quantity Stormwater Management for Section 4, Area 5 is provided by three facilities; the refurbished SWM Pond #1 South of Linden Linthicum Lane (F-96-89), The culvert at Great Star Drive (F-96-110) and SWM Pond #4 in Section 4, Area 4 (F-96-130). Quality Management for this section will be provided by three facilities: A Forebay North of Wild Orange Gate and an Extended Detention Facility within Pond #4 (F-96-130) The subdivision is located in the Patuxent River Area Sub-Basin and is a Class 1 Watershed.
 - SHC Elevations shown are at the property lines.

SPECIAL NOTE:
 This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-96-102 and/or approved Water and Sewer Plans Contract #34-3586-D.

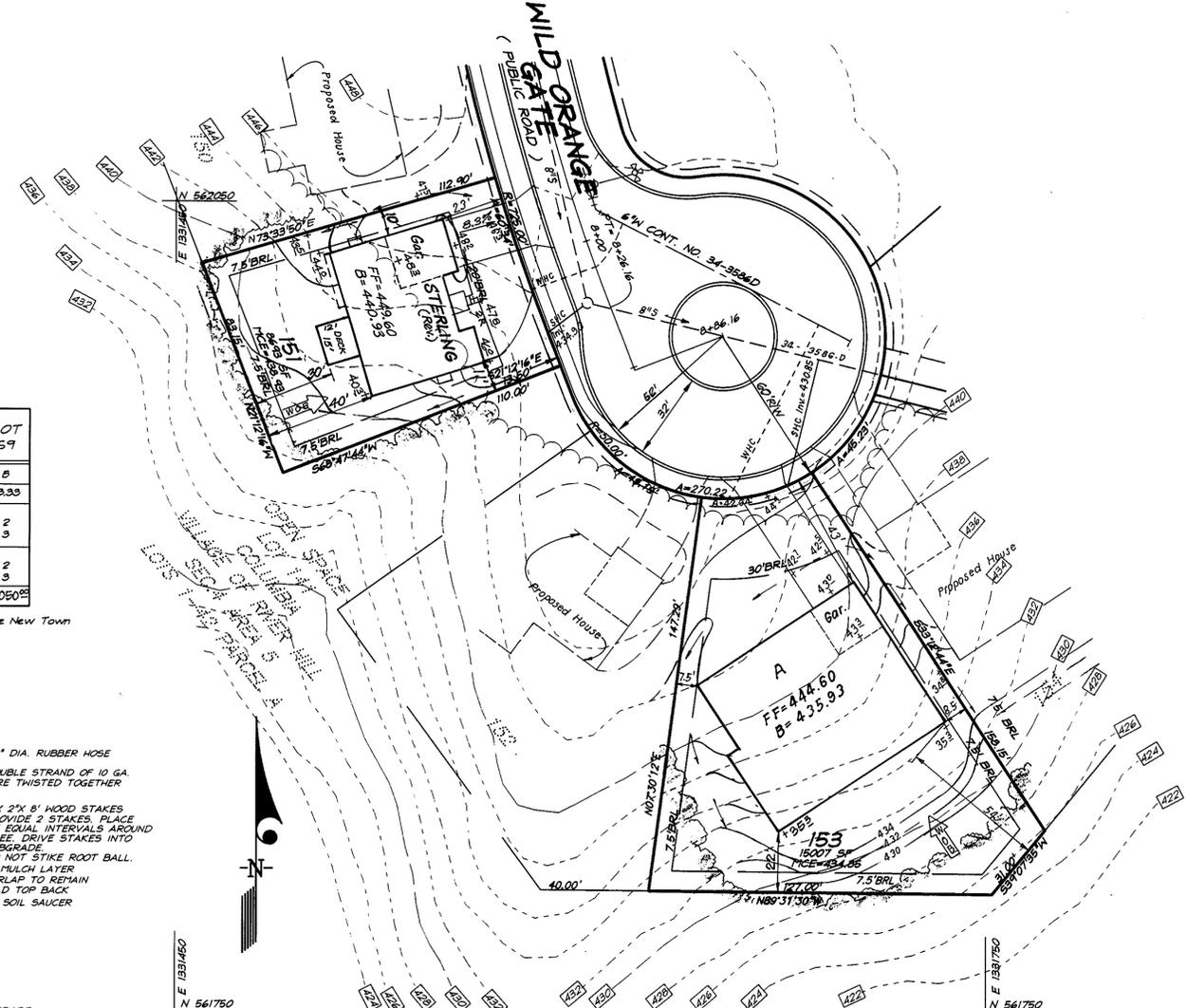
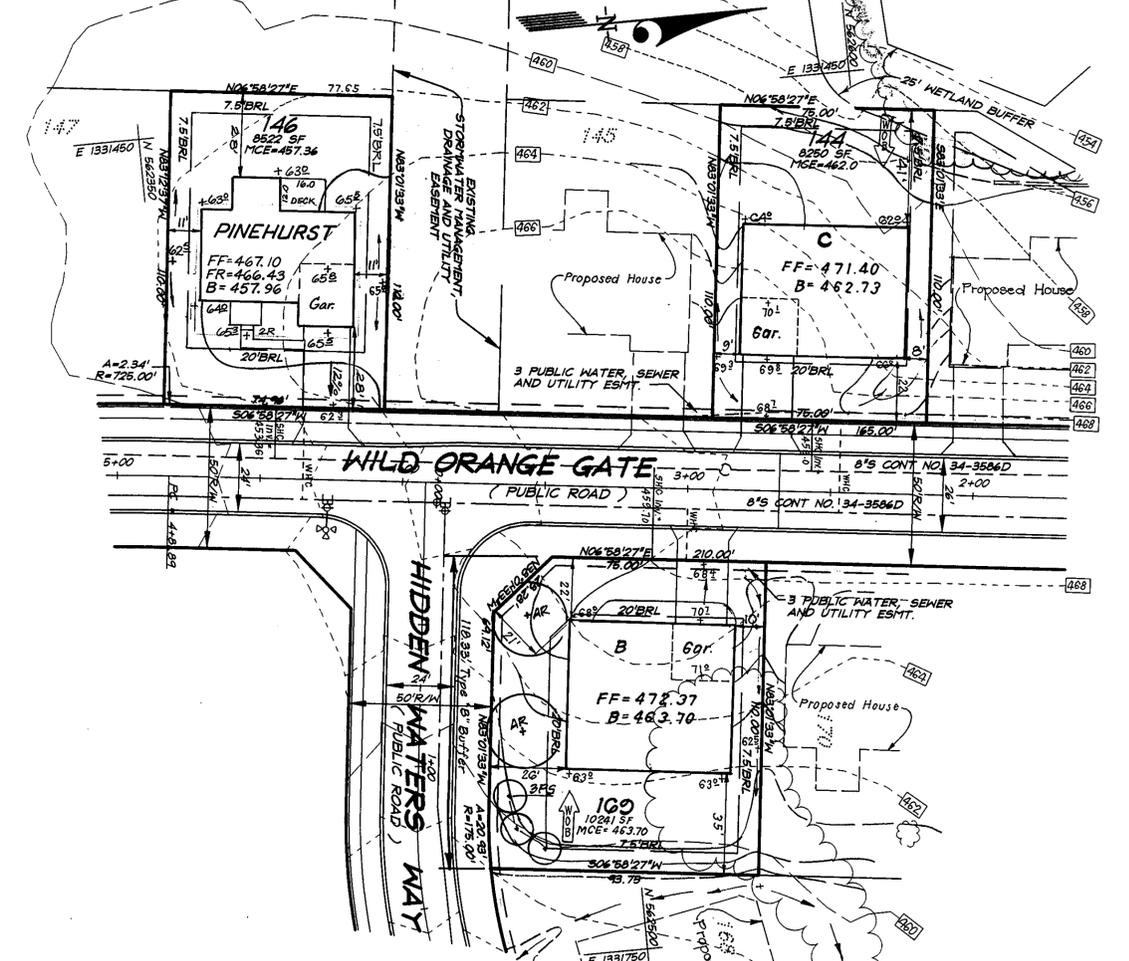
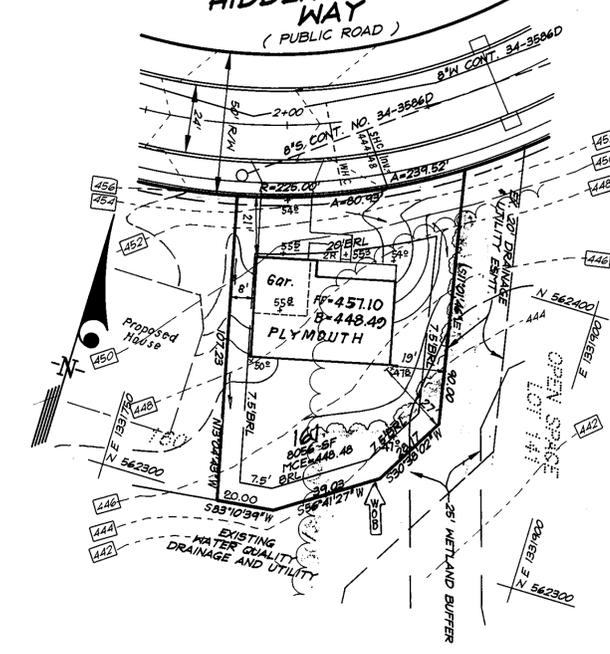
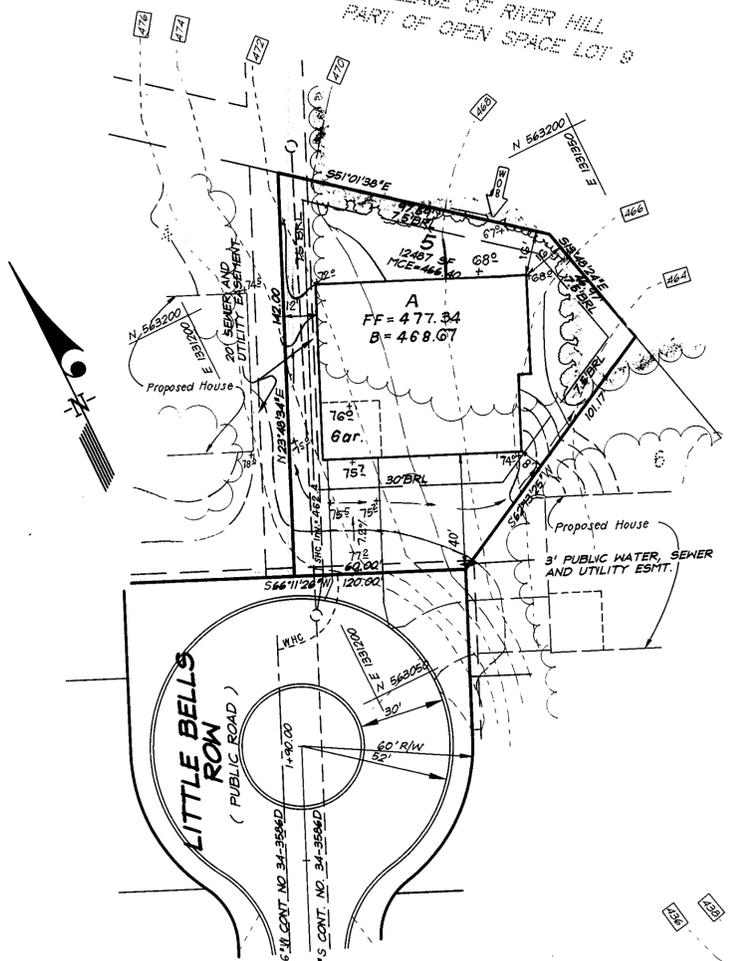
APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/16/99

NO.	REVISIONS	DATE
2	ADD NOTES TO STERLING	5-13-99
1	ADD NOTES TO PINEHURST	5-10-99

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044



SUBDIVISION NAME: COLUMBIA VILLAGE OF RIVER HILL		SECTION/AREA: 4/5	LOTS/PARCELS: 5, 144, 146, 151, 153, 161, 169
PLAT NO. 12895	BLOCK NO. 1	ZONE: NTSFLD	TAX MAP NO. 35
ELECTION DIST. 5TH		CENSUS TRACT 6055	
WATER CODE: 1-12		SEWER CODE: 6652500	
CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS			
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.			
DESIGNED: DM	SITE DEVELOPMENT PLAN		SCALE: 1" = 30'
DRAWN: BLP	LOTS 5, 144, 146, 151, 153, 161, 169		DRAWING: 1 of 4
CHECKED: jme	COLUMBIA VILLAGE OF RIVER HILL		JOB NO.: 99-010
DATE: 2/18/99	SECTION 4 AREA 5 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND		FILE NO.: 99-011-X

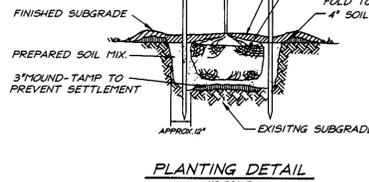
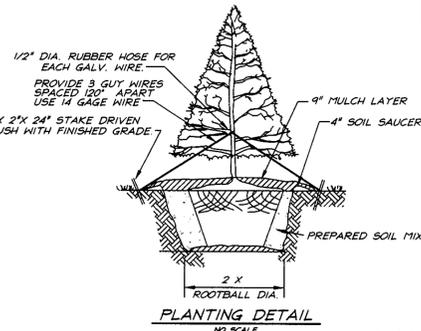


PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QUAN.	REMARK
(AR)	ACER RUBRUM OCT. GLORY RED MAPLE	2 1/2"-3" CAL. 12-14' HT.	2	BMB HEAVY
(TC)	PINUS STOBUS WHITE PINE	6'-8' HT.	3	BMB HEAVY

- NOTES:
- All plant materials shall be full and heavy, be well formed and symmetrical conform to the most current AAN specifications and be installed in accordance with H&D planting specifications.
 - Contractor shall verify location of all underground utilities prior to digging.
 - Final location of plant material may need to be varied to meet final field conditions. Trees shall not be planted in the bottom of drainage swales.

SCHEDULE A PERIMETER LANDSCAPE EDGE			LOT
Category	Adjacent to Roadways		159
Landscape Type			B
Frontage/Perimeter			1833
Number of Plants Required			
Shade Trees	(1/50)		2
Evergreen Trees	(1/40)		3
Number of Plants Provided			
Shade Trees			2
Evergreen Trees			3
Surety Amount			\$1050.00

* Comments: Planting to be provided per the New Town Alternative Compliance method



APPROVED: DEPARTMENT OF PLANNING & ZONING
DATE: 4/14/99
DATE: 4/14/99
DATE: 4/15/99

REVISIONS		DATE
2	REV. HSE 3 GRD LOT 151 FROM 'C' BOX TO STERLING. (REV.)	5-13-99
1	REV. HSE 4 GRD LOT 146, FROM 'C' BOX TO PINEHURST	5-10-99

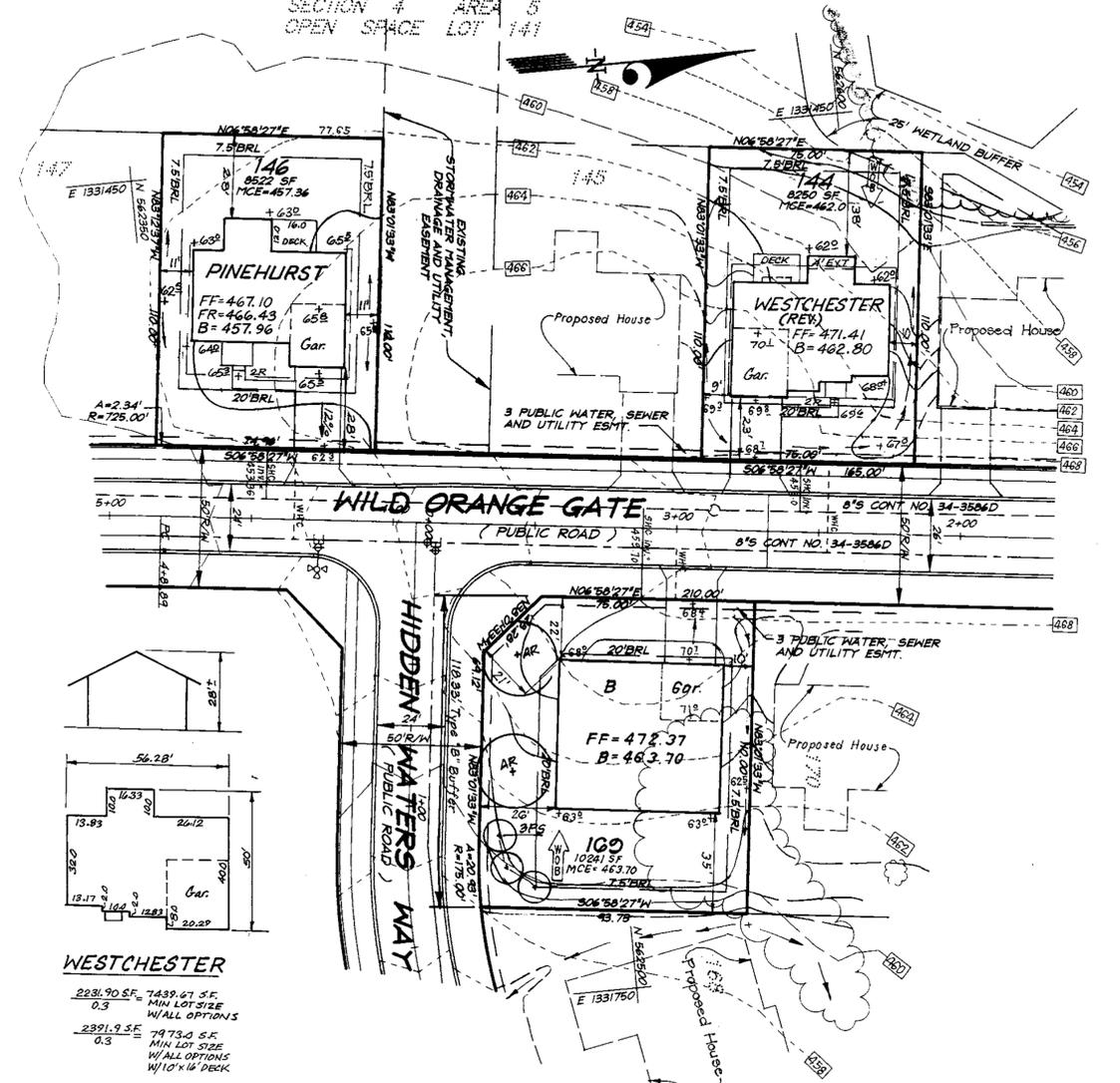
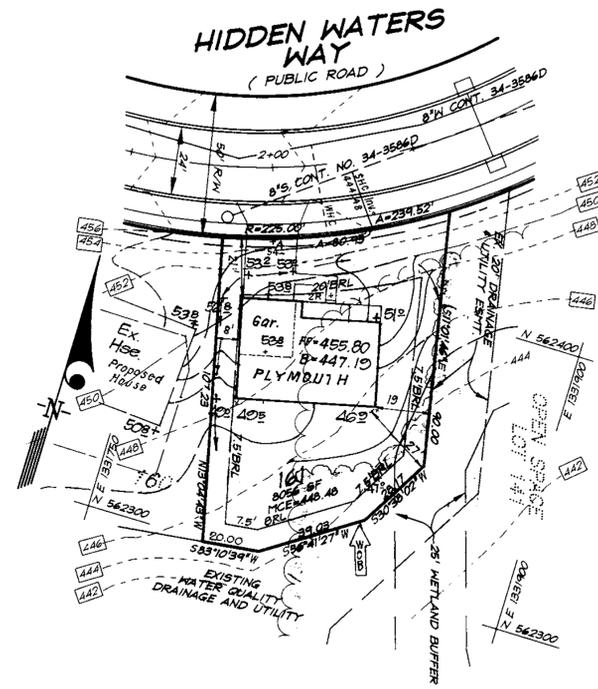
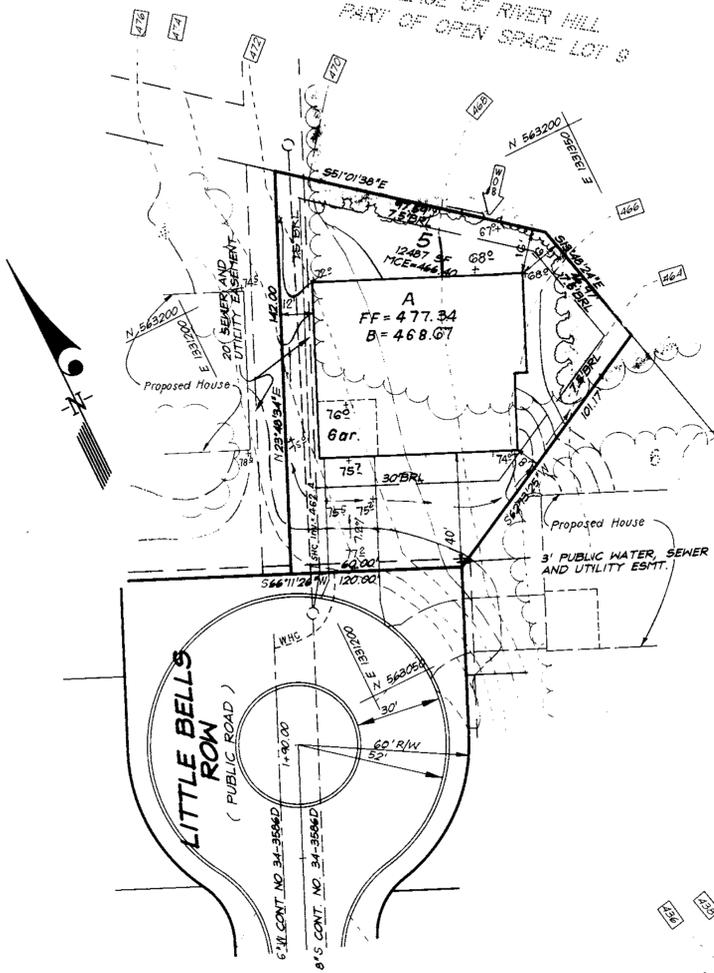
BONDING NOTE:
THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
FINANCIAL SURETY FOR THE REQUIRED 5 LANDSCAPE TREES IN THE AMOUNT OF \$1050.00 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION.

DEVELOPER'S/BUILDERS CERTIFICATE
I/We certify that the landscaping shown on this plan will be done according to plan, section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a Certificate of Landscape Installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.
Name: Douglas J. Dieringer
Date: 2-22-99

OWNER/DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.

DESIGNED	DM	SITE DEVELOPMENT PLAN	SCALE
DRAWN	JR	LOTS 5, 144, 146, 151, 153, 161, AND 169	1" = 30'
CHECKED	J.M.E.	COLUMBIA VILLAGE OF RIVER HILL	DRAWING
DATE	2/18/99	SECTION 4 AREA 5 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	2 of 4
		FOR: DOUGLAS HOMES P.O. BOX 628 Columbia, Maryland 21041	JOB NO. 99-010
			FILE NO. 99-011-X



WESTCHESTER

2231.90 SF = 7439.61 SF.
0.3 MIN LOT SIZE
W/ALL OPTIONS

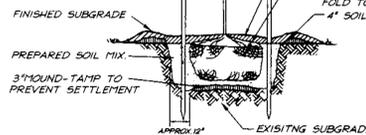
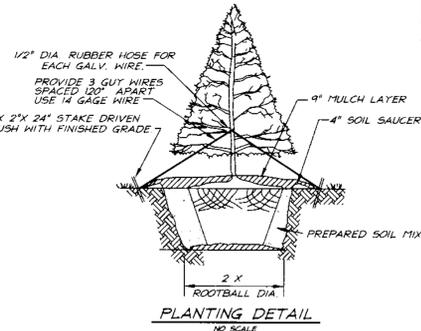
2391.9 SF = 7973.4 SF.
0.3 MIN LOT SIZE
W/ALL OPTIONS
W/10'x14' DECK

PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QUAN	REMARK
AR	ACER RUBRUM OCT. GLORY RED MAPLE	2 1/2" - 3" CAL 12-14' HT.	2	BAB HEAVY
TC	PINUS STROBUS WHITE PINE	6'-8' HT.	3	BAB HEAVY

- NOTES:**
- All plant materials shall be full and heavy, be well formed and symmetrical, conform to the most current AAN specifications and be installed in accordance with H&D planting specifications.
 - Contractor shall verify location of all underground utilities prior to digging.
 - Final location of plant material may need to vary to meet final field conditions. Trees shall not be planted in the bottom of drainage swales.

SCHEDULE A PERIMETER LANDSCAPE EDGE		
Category	Adjacent to Roadways	LOT 151
Landscape Type		8
Frontage/Perimeter		10.33
Number of Plants Required		
Shade Trees (1/20)		2
Evergreen Trees (1/40)		3
Number of Plants Provided		
Shade Trees		2
Evergreen Trees		3
Surety Amounts		\$1050.00

* Comments: Planting to be provided per the New Town Alternative Compliance method.



PLANTING DETAIL
NO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

DATE: 4/2/99

DATE: 4/14/99

DATE: 4/15/99

OWNER/DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044

NO.	REVISIONS	DATE
1	Rev. H&D GRD LOT 146 FROM 'C' BOX TO PINEHURST	5-10-99
2	Rev. H&D GRD LOT 151 FROM 'C' BOX TO STERLING (REV.)	5-13-99
3	Rev. H&D GRD LOT 144 FROM 'C' BOX TO WESTCHESTER & ADD H&D TYPE TO PLAN	8-18-99
4	Rev. H&D GRD LOT 161 TO SHOW AS-BUILT CONDITIONS	8-9-00

BONDING NOTE:
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 5 LANDSCAPE TREES IN THE AMOUNT OF \$1050.00 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION.

DEVELOPER'S/BUILDERS CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to plan, section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a Certificate of Landscape Installation, accompanied by an equal quantity of plant materials, will be submitted to the Department of Planning and Zoning.

Name: Douglas J. Dieringer Date: 2-22-99

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.

DESIGNED	DM	SITE DEVELOPMENT PLAN LOTS 5, 144, 146, 151, 153, 161, AND 169	SCALE
DRAWN	JR		1" = 30'
CHECKED	J.H.E.	COLUMBIA VILLAGE OF RIVER HILL SECTION 4 AREA 5 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING
DATE	2/18/99		2 of 4
FOR: DOUGLAS HOMES P.O. BOX 628 Columbia, Maryland 21041		FILE NO.	99-011-X