

**GENERAL NOTES**

- This plan is subject to compliance with the Fourth Edition of the Howard County subdivision regulations.
- Public water and sewer to be utilized.
- The Contractor shall notify utility companies or agencies at least five(5) working days before starting work shown on these plans:  
Verizon 1.800.743.0033/410.224.9210  
AT&T 1.800.252.1133  
State Highway Administration 410.631.5533  
BGE(Contractor Services) 410.850.4620  
BGE(Underground Damage Control) 410.707.0530  
Pisa Utility 1.800.257.7777  
Colonial Pipeline Company 410.795.1390  
Howard County, Bureau of Public Works, Bureau of Utilities 410.313.4000  
Howard County Health Department 410.313.2640
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1860 at least five (5) working days prior to the start of work.
- Topography is based on a field run survey prepared by C.B. Miller and Associates in November 2000.
- Soils map no. 25.
- There are no wetlands on site as certified by Exploration Research Inc., also there are no flood plains, historic structures or cemeteries on-site.
- A.P.F.O. traffic study prepared by Street Traffic Studies L.T.D. and approved under Sketch/Preliminary SP 01-07 on 6/24/01.
- The project is within the metropolitan district.
- Landscape is provided and approved under the certified landscape plan on file with F-02-109 and will be planted at the completion of site work. See Sequence of Construction, Sheet 3.
- The lots shown herein comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Project is subject to a waiver from section 2.3.3.B.2 in Design Manual Volume III to allow a 10% grade within 200' prior to T-turnaround and from table 2.02 and figure 2.02 to reduce the length of the vertical curve to 60'. Both waivers were approved in a comment/approval letter dated 3-24-01.
- In accordance with section 128 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.
- Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- 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 the pipestem lot driveway.
- All driveway culverts will be 12" circular or equivalent area. Contractor shall determine type of material (HDPE, CMP or Conc.).
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit to ensure safe access for fire and emergency vehicles per the following requirements:  
A) Width - 12 feet (14 feet serving more than one residence).  
B) Surface - six (6") inches of compacted crusher run base with tar and chip coating (1-1/2" Minimum).  
C) Geometry - Maximum 15% grade, Maximum 10% grade change and 45-foot turning radius;  
D) Structures (culverts/bridges) - capable of supporting 25 gross tons (H25-loading);  
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.
- Forest conservation obligations have been addressed under F-02-109. Forest conservation obligations for this site are met by retention of 0.36 Ac. of forest within open space Lot 8 and a five-in-line of restoration of 0.12 Ac. in the amount of \$2,615.60. The forest conservation easements established under F-02-109 to fulfill the requirements of section 16.1200 of the Howard County code. No clearing, grading, or construction is permitted within the forest conservation easements, however, forest management practices as defined in the deed of forest conservation easement are allowed.
- All Sewer House Connections to be a minimum of 2%.
- For Sewer House Connection elevations see Sewer House Connection Chart this sheet.
- The coordinates shown herein are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System.  
Howard County Monument No. 37GC and 37GD were used for this project.
- Under Final Plan No. F-02-109, SMH Note Quality (NQ) is provided within a "Dry Swale" system which will be privately owned with maintenance by H.O.A.
- Individual rooftops of lots 3, 6 & 7 are treated for water quality with rooftop disconnects, in combination with dry wells on lots 6 and 7.
- Any damage to the County's right-of-way shall be corrected at the developer's expense.
- The technical report for this project was prepared by Herby, Benson and Associates dated Dec. 12, 2000 and approved under Preliminary equivalent Sketch SP 01-07.

**SITE ANALYSIS DATA CHART**

- Total project area: 1.445 Acres
- Area of plan submission: 1.445 Acres
- Limit of disturbed area: 1.315 Acres
- Subject property zoned "R-SC" per 10/18/93 Comprehensive Zoning Plan.
- Proposed uses for site: 4 structures: single family detached
- Floor space on each level of building(s) per use: see house templates this sheet
- Total number of units allowed: 7
- Total number of units proposed: 7
- Building coverage of site: 0.265 acres; 5.45% of gross lot area
- Howard County file references: SP-01-07; F-02-109; Cont.# 24-3456-D; Plat # 15774

**SHEET INDEX**

DESCRIPTION	SHEET No.
Site Development Plan	1 of 3
Sediment and Erosion Control Plan	2 of 3
Sediment Erosion Control and Site Details	3 of 3

**ADDRESS CHART**

LOTS	STREET
1	8100 Arbor View Way
2	8104 Arbor View Way
3	8108 Arbor View Way
4	8112 Arbor View Way
5	8116 Arbor View Way
6	8107 Arbor View Way
7	8103 Arbor View Way

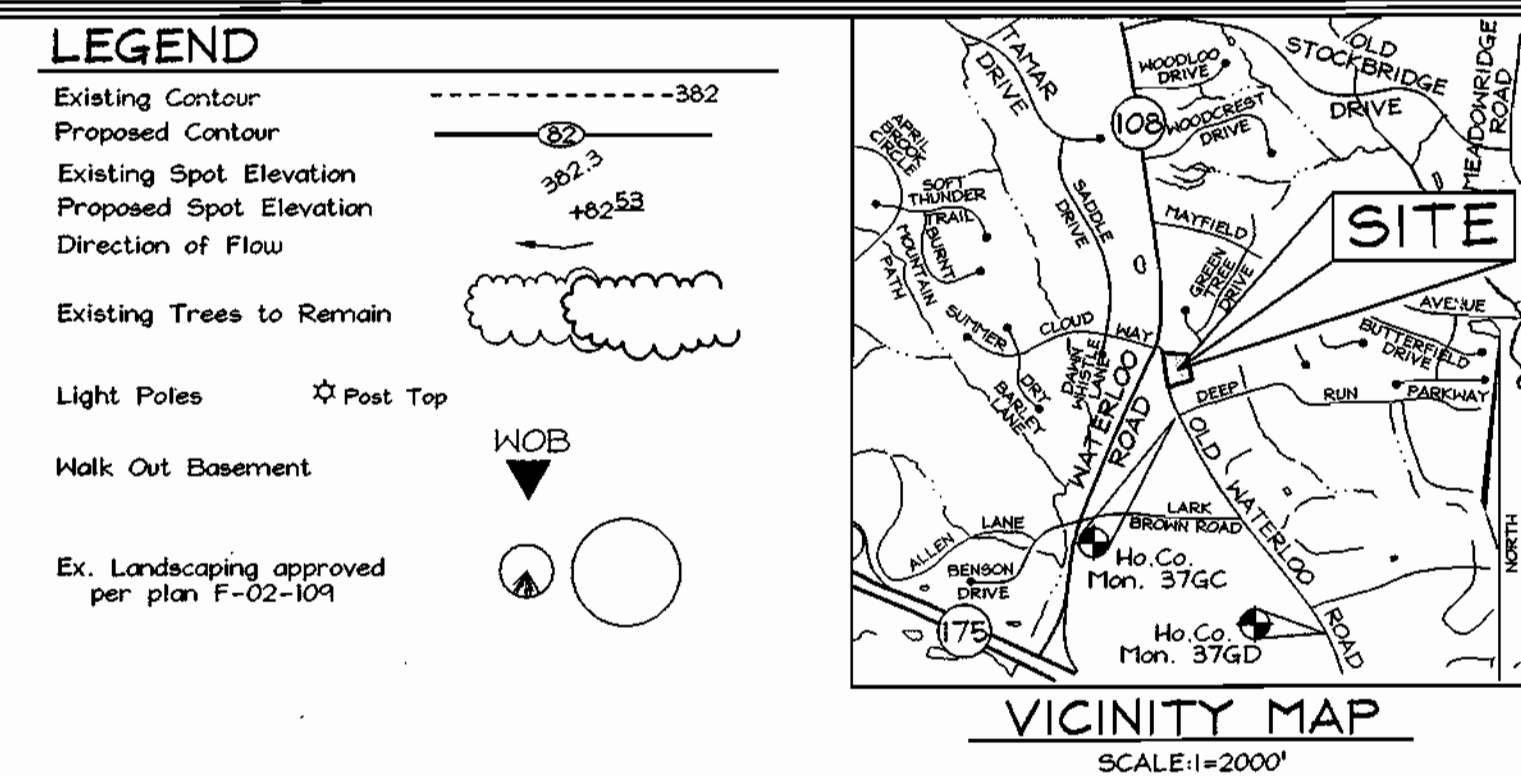
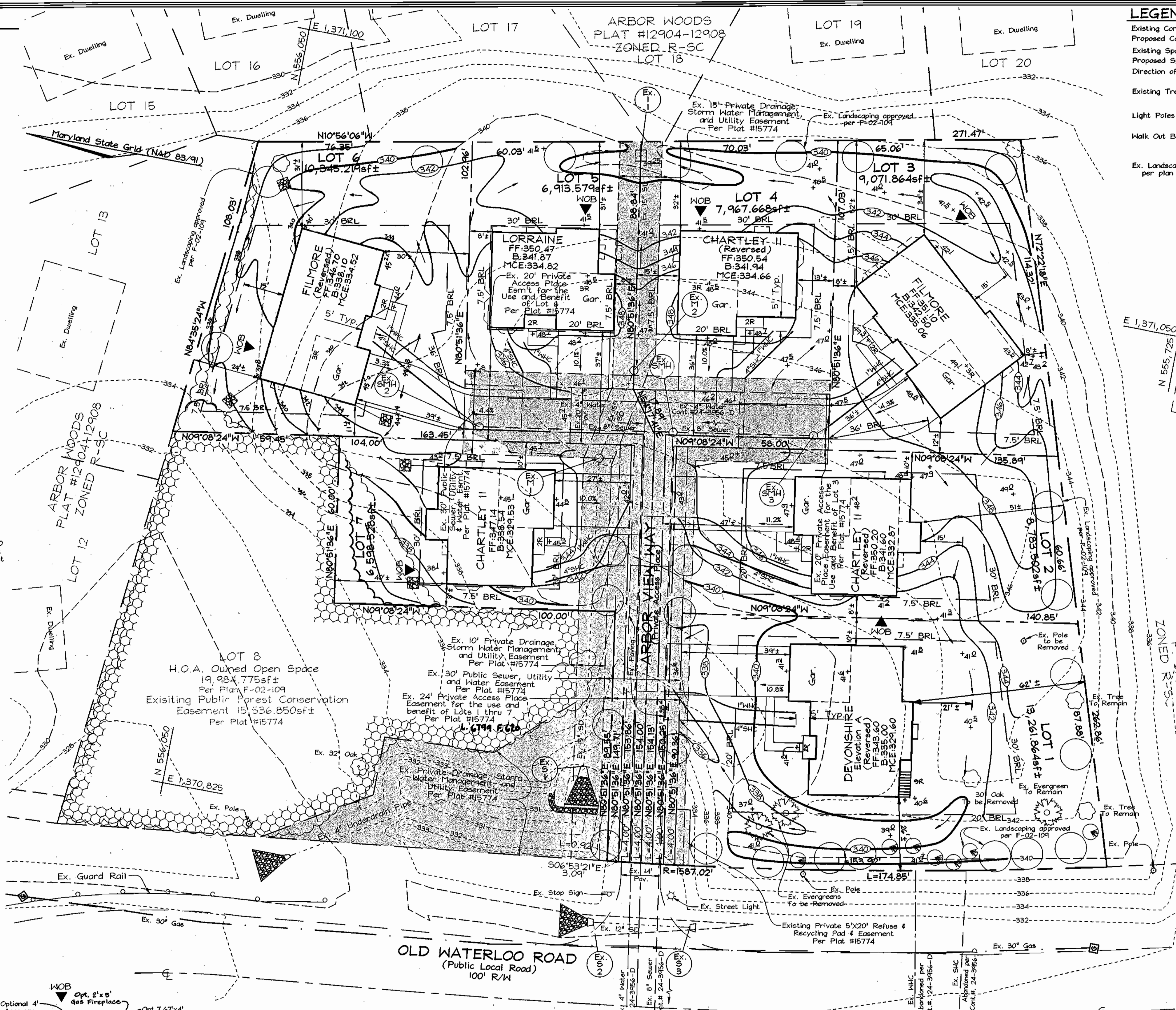
**SEWER HOUSE CONNECTION CHART**

Lot #	Inv. @ Main	Inv. @ edge of Ex. Easement Line	Inv. 5' from House	Min. Cellar El.
1	324.75	324.92	325.64	324.60
2	328.20	329.04	329.84	332.87
3	331.01	331.14	331.80	335.06
4	330.66	331.06	331.53	334.66
5	330.87	331.27	331.51	334.82
6	331.15	331.28	332.13	334.52
7	327.76	328.19	328.65	329.53

NOTE: All SHC at 2.0%  
Invert elevations shown are located at the edge of the Ex. 30' Public Sewer, Utility and Water Easement line.

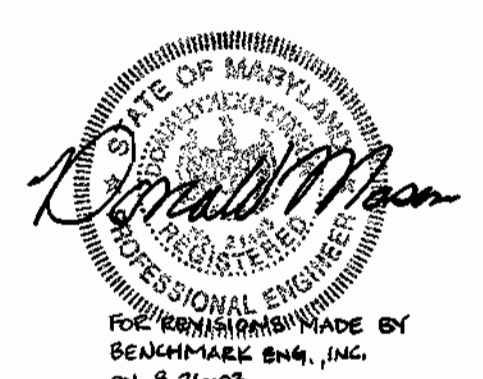
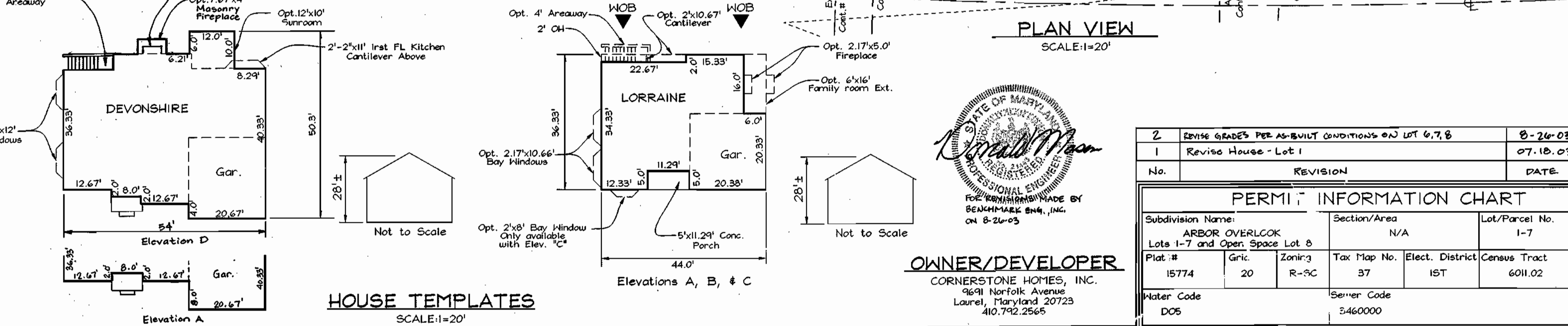
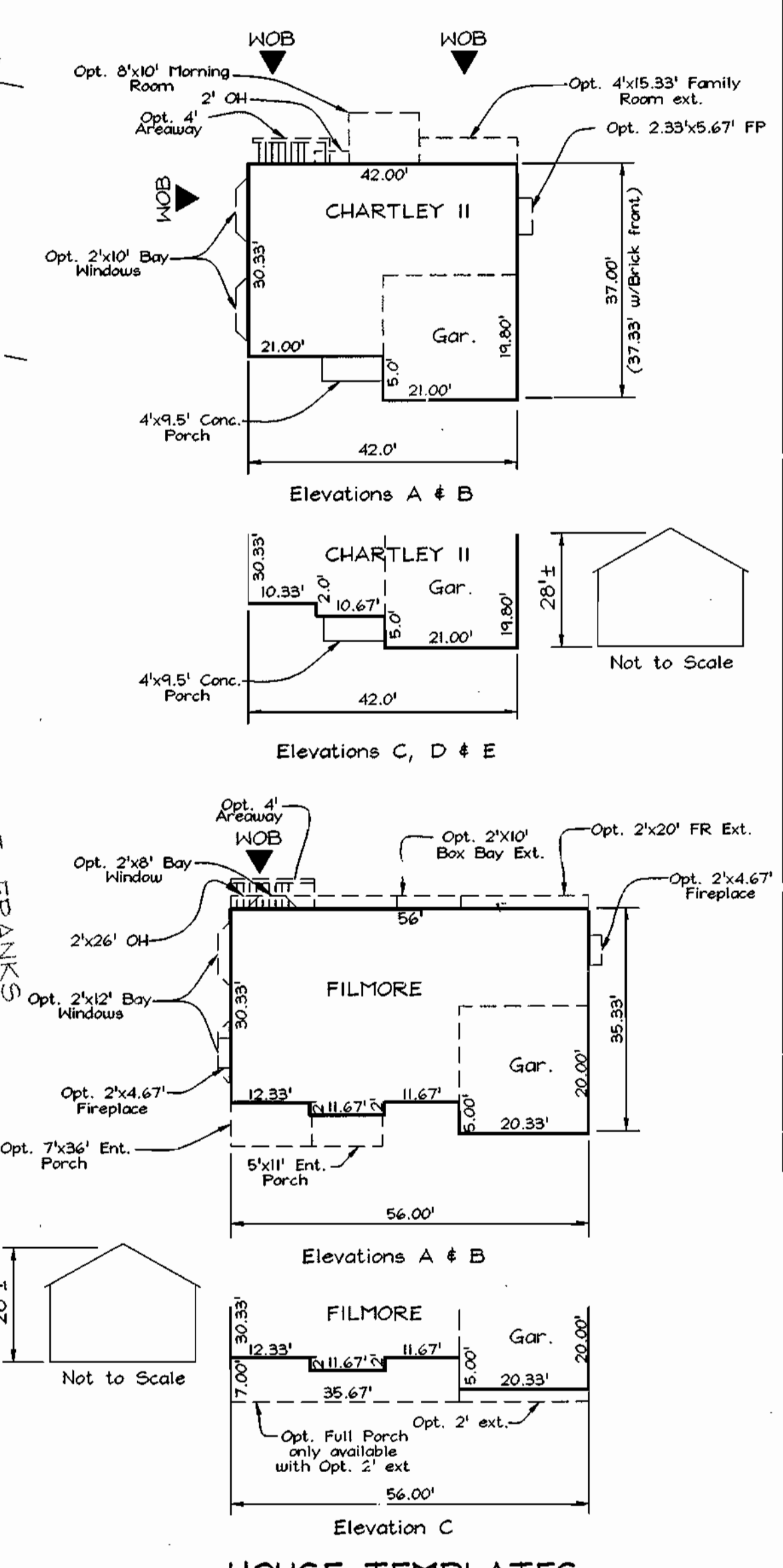
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division MK DATE: 5/15/03  
 Chief, Division of Land Development W DATE: 5/15/03  
 Director DATE: 5/15/03



**BENCHMARKS**

Sta.	(Feet) N	(Feet) E	Elev.
Sta. 37GC	169,240.7777	417,865.2828	101.1425
Sta. 37GD	555,250.791	1,370,446.348	331.832
	168,627.0373	418,294.2157	88.6734
	553,237.204	1,372,353.605	29.923

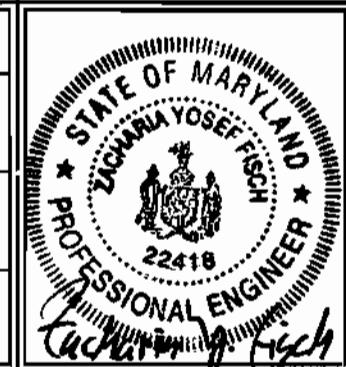


**OWNER/DEVELOPER**  
 CORNERSTONE HOMES, INC.  
 14691 Norfolk Avenue  
 Laurel, Maryland 20723  
 410.792.2565

No.	REVISION	DATE
2	REVISE GRADES PER AS-BUILT CONDITIONS ON LOT 6, 7, 8	8-26-03
1	REVISE HOUSE - LOT 1	07.18.03

**PERMIT INFORMATION CHART**

Subdivision Name	Section/Area	Lot/Parcel No.
ARBOR OVERLOOK	N/A	1-7
Lots 1-7 and Open Space Lot 8		
Plat.#	Zoning	Tax Map No. Elect. District Census Tract
15774	20	37 1ST 6011.02
Water Code	Sever Code	
DC5	3460000	



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

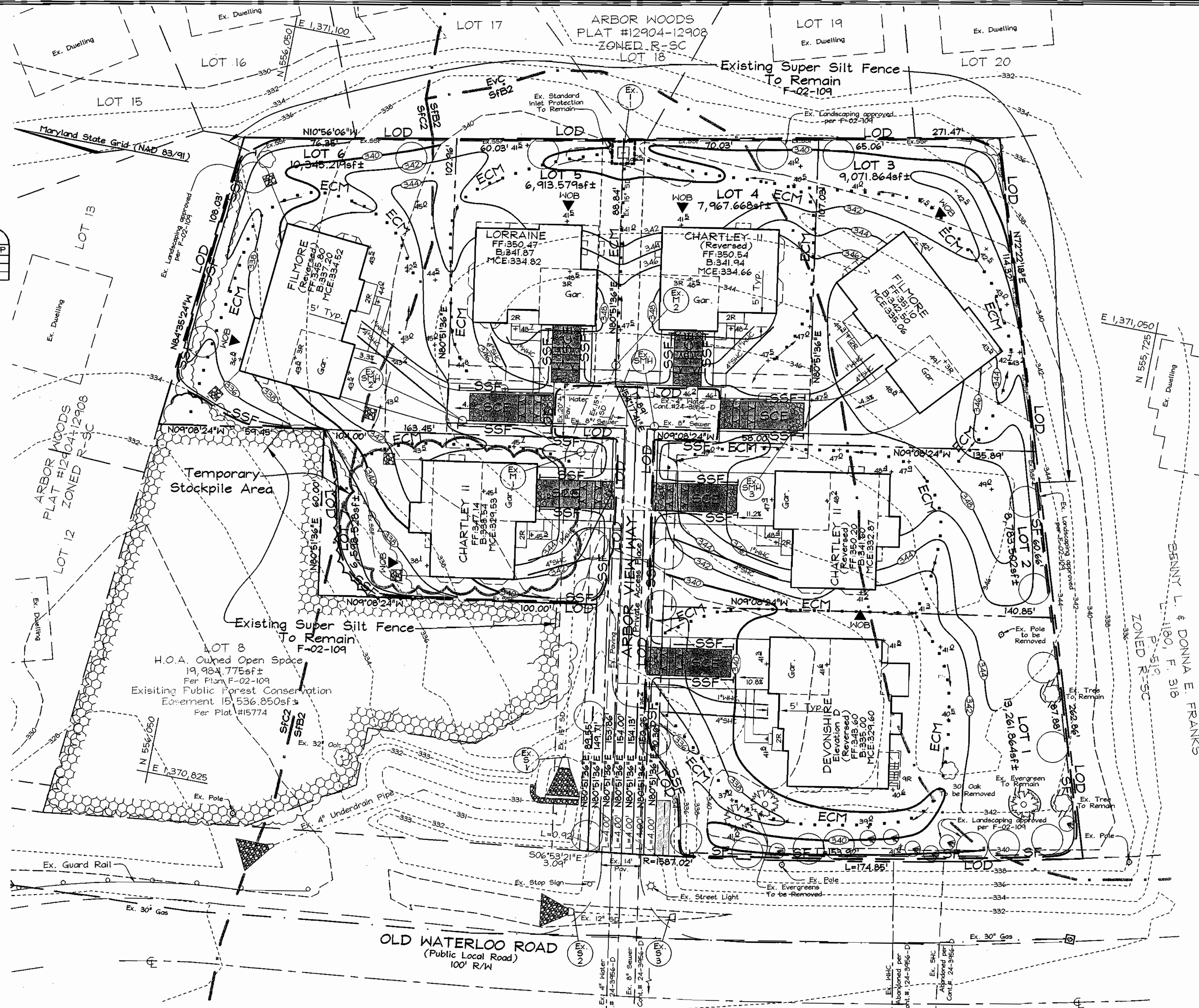
DESIGN BY: PS/Slm  
 DRAWN BY: Slm  
 CHECKED BY: ZVF  
 SCALE: As Shown  
 DATE: April 22, 2003  
 P.O. No.: 3021  
 SHEET No.: 1 OF 3

**SITE DEVELOPMENT PLAN**  
**ARBOR OVERLOOK**  
 LOTS 1 THRU 7

TAX MAP 37 GRID 20  
 1ST ELECTION DISTRICT

PARCEL 148  
 HOWARD COUNTY, MARYLAND

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	SOIL GROUP
ECV	Evesboro loamy sand, 5 to 15 percent slopes	A
SFB2	Sassafras gravelly sandy loam, 1 to 5 percent slopes, moderately eroded	B
SFC2	Sassafras gravelly sandy loam, 5 to 10 percent slopes, moderately eroded	B



LEGEND	
Existing Contour	--- 382
Proposed Contour	--- 382
Existing Spot Elevation	382.3
Proposed Spot Elevation	382.53
Direction of Flow	→
Tree Protection Fence	⊗
Existing Trees to Remain	⊗
Light Poles	⊗ Post Top
Walk Out Basement	⊗
Stabilized Construction Entrance	▨
Silt Fence	— SF — SF
Super Silt Fence	— SSF — SSF
Limit of Disturbance	— LOD —
Erosion Control Matting	ECM
Existing Standard Inlet Protection Per F-02-109	⊗ SIP
Existing Super Silt Fence	— Ex.SSF — Ex.SSF

PLAN VIEW  
SCALE=1"=20'

**SEDIMENT AND EROSION CONTROL PLAN**  
**ARBOR OVERLOOK**  
LOTS 1 THRU 7

TAX MAP 37 GRID 20 1ST ELECTION DISTRICT  
PARCEL 148 HOWARD COUNTY, MARYLAND

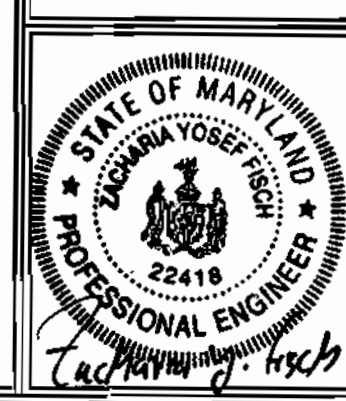
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MKR  
 DATE 5/2/03  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE 5/15/03  
 DIRECTOR

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
 USDA NATURAL RESOURCES CONSERVATION SERVICE  
 DATE 4/25/03  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 JOHN R. HARTMAN  
 HOWARD SCD DATE

ENGINEER'S CERTIFICATE  
 I 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.  
 ZACHARIA Y. FISCH  
 SIGNATURE OF ENGINEER  
 DATE 4/22/03

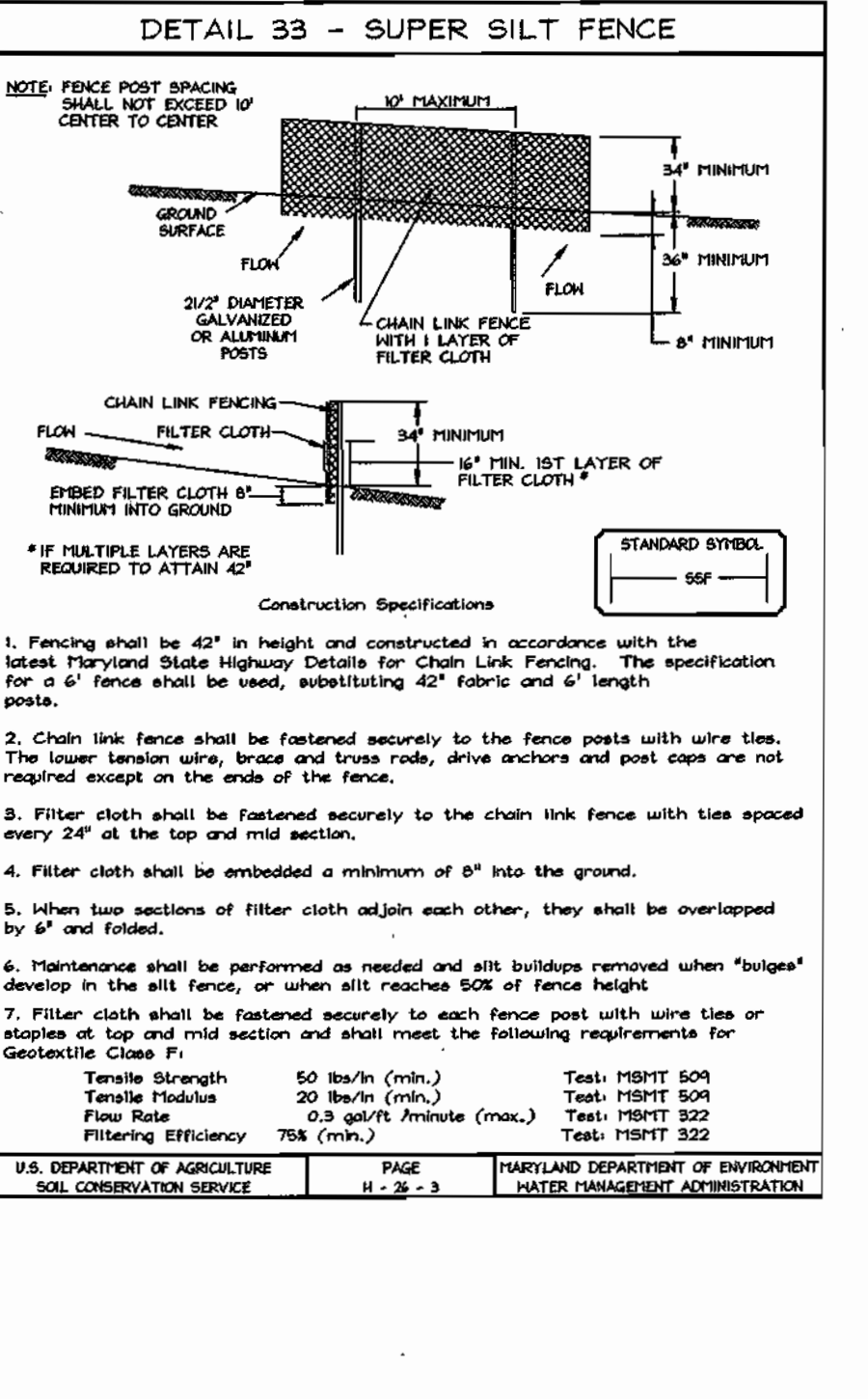
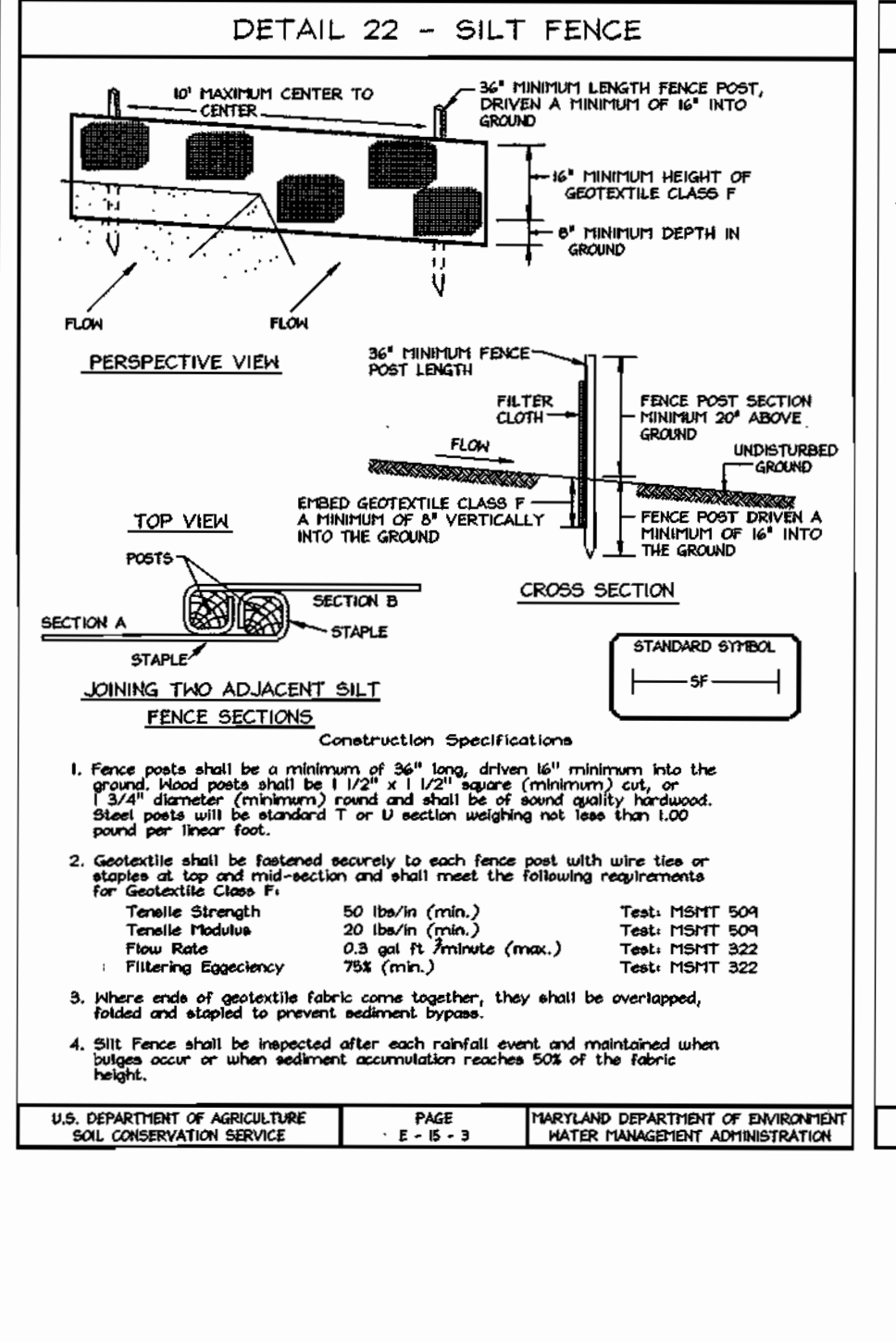
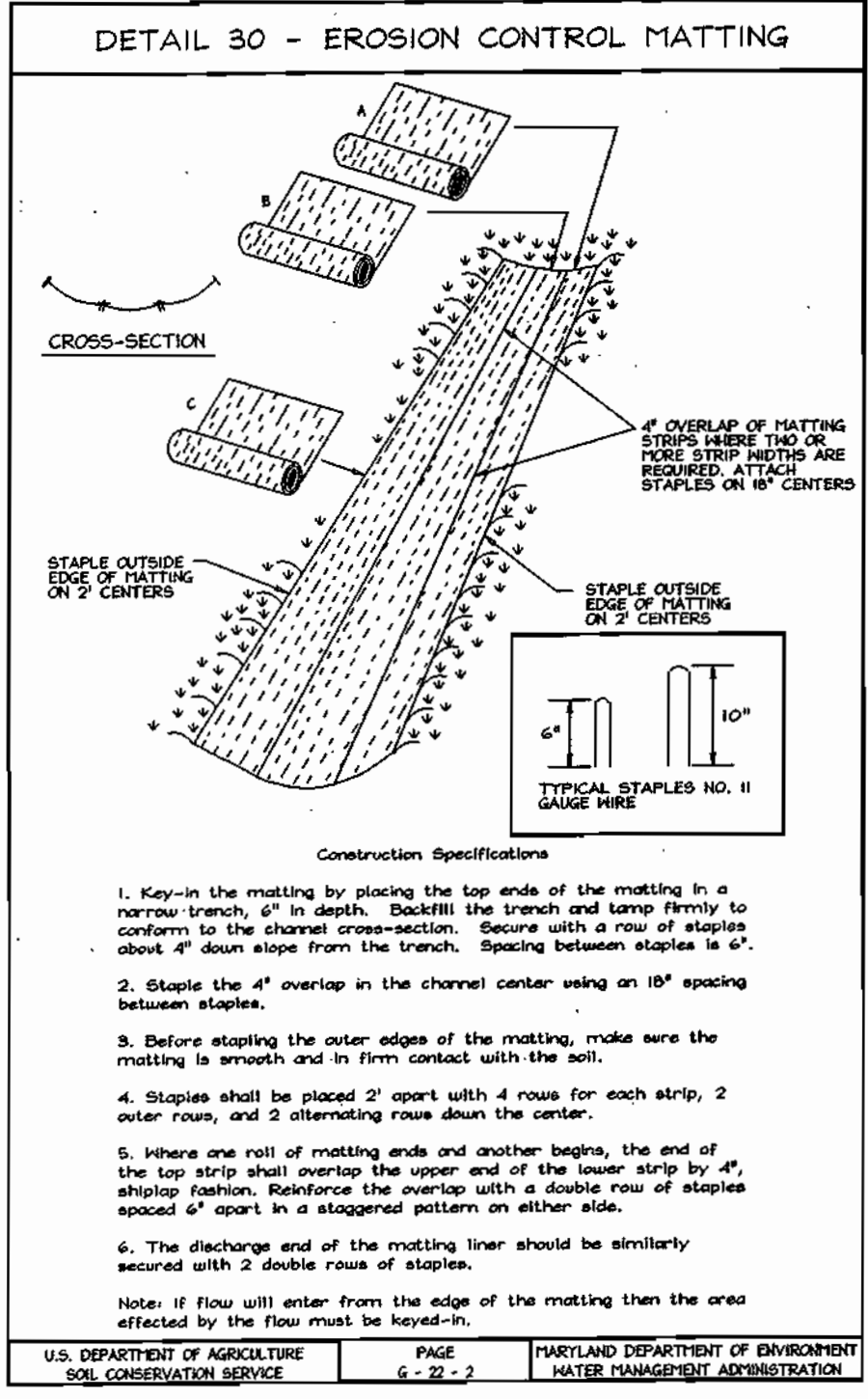
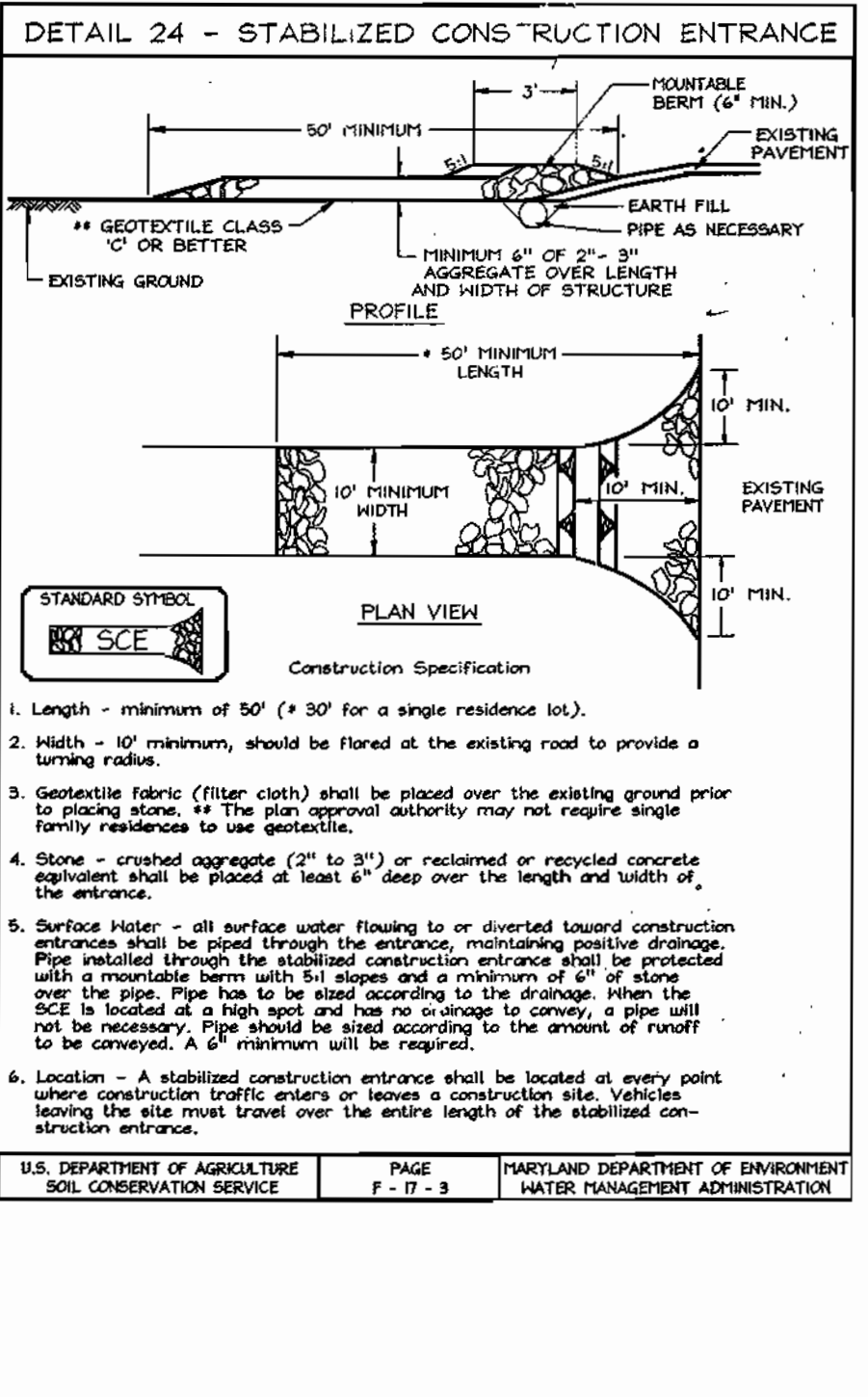
DEVELOPER'S CERTIFICATE  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED 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.  
 BRINN D. BOY  
 SIGNATURE OF DEVELOPER  
 DATE 4/22/03

OWNER/DEVELOPER  
 CORNERSTONE HOMES, INC.  
 9691 Norfolk Avenue  
 Laurel, Maryland 20723  
 410.742.2565



**FSH Associates**  
 Engineers Planners Surveyors  
 8318 Forrest Street Ellicott City, MD 21043  
 Tel: 410-750-2251 Fax: 410-750-7356  
 E-mail: FSHAssociates@cs.com

DESIGN BY: PS/Slim  
 DRAWN BY: Slim  
 CHECKED BY: Z.Y.F.  
 SCALE: As Shown  
 DATE: April 22, 2003  
 H.O. No.: 3021  
 SHEET No.: 2 OF 3



### 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 vegetable growth. Soils of concern have low moisture content, low nutrient levels and are not suitable for plants, and/or unacceptable soil structure.

**Conditions Where Practice Applies:**

- This practice is limited to areas having 21 or flatter slopes.
- The texture of the exposed subsoil/parent material is not adequate to produce vegetable growth.
- The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing 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.

**Construction Specifications:**

- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and frame rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with wire ties every 2' at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildup removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:  
Tensile Strength 50 lbs/in (min.) Test: FHST 504  
Tensile Modulus 20 lbs/in (min.) Test: FHST 504  
Flow Rate 0.3 gal/in (max.) Test: FHST 522  
Filtering Efficiency 75% (min.) Test: FHST 522

**Construction and Material Specifications:**

- Topsoil salvaged from the existing site may be used provided that it meets the specifications set forth in these specifications. Typically the depth of topsoil to be salvaged for use shall be 4" (4" minimum) in the field. Representative soil profile sections in the Soil Survey conducted by the U.S. Department of Agriculture and Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:  
a. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be approved by the appropriate approval authority. Regardless of soil type, topsoil shall be a minimum of 4" deep and shall contain less than 5% by volume of clays, silts, shales, sand, coarse fragments, gravel, siltstone, roots, trash, or other materials larger than 1/2" in diameter.  
b. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, johnsongrass, nutgrass, poison ivy, thistle, or other as specified in the Vegetation Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.  
c. Topsoil shall be free of other highly acidic or composed of heavy clays, ground impurities shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over degraded areas and worked into the soil in conjunction with tillage operations as described in the following paragraphs.  
d. Place topsoil (if required) and apply soil amendments as specified in 21.0 Vegetation Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

**Topsoil Application:**

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization, Silt Fences, Silt Silt Fence and Sediment Traps and Basins.
- Grades on the areas to be topsoiled, which have been previously eroded, shall be maintained, about 4" - 6" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 6" topsoil layer. Topsoil shall be applied in a manner that sodding or sodding on topsoil is not required. Topsoil shall be prepared and applied in a manner that sodding or sodding on topsoil is not required. Topsoil shall be prepared and applied in a manner that sodding or sodding on topsoil is not required.
- 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 growth and seedbed preparation.

### PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS DESIRED.

**SEEDBED PREPARATION:** Loosen upper three inches of soil by raking, slaking 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 (92 lbs/100 sq ft.) and 600 lbs per acre 10-10-10 fertilizer (4 lbs./100 sq ft.) before seeding. Harrow or disc three times before seeding.
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/100 sq ft.) and 1000 lbs per acre 10-10-10 fertilizer (2 lbs./100 sq ft.) before seeding. Harrow or disc three times before seeding.

**SEEDING:** For the period March 1 thru April 30, and August 1 thru October 15, seed with 50 lbs. per acre (1.4 lbs./1000 sq ft.) of Turf Type Tall Fescue. For the period May 1 thru July 31, seed with 40 lbs. Turf Type Tall Fescue per acre and 2 lbs. per acre (0.6 lbs./1000 sq ft.) of seeding mixtures. During the period of October 1 thru February 28, protect site by covering 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) the seed, Option (3) seed with 40 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./1000 sq ft.) of unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 20 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 3 feet or higher, use 340 gallons per acre (9 gal/1000 sq ft.) for anchoring.

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

**TEMPORARY SEEDING NOTES**

**SEEDBED PREPARATION:** Loosen upper three inches of soil by raking, slaking or other acceptable means before seeding, if not previously loosened.

**SOIL AMENDMENTS:** Apply 600 lbs. per acre 10-10-10 fertilizer (4 lbs./1000 sq ft.).

**SEEDING:** For the period March 1 thru April 30, and from August 15 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (3.2 lbs./1000 sq ft.) For the period May 1 thru August 14, seed with 1 lb. per acre of seeding mixtures (0.7 lbs./1000 sq ft.). For the period November 1 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./1000 sq ft.) of unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 20 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 3 feet or higher, use 340 gallons per acre (9 gal/1000 sq ft.) for anchoring.

**REFER TO THE HHS HARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.**

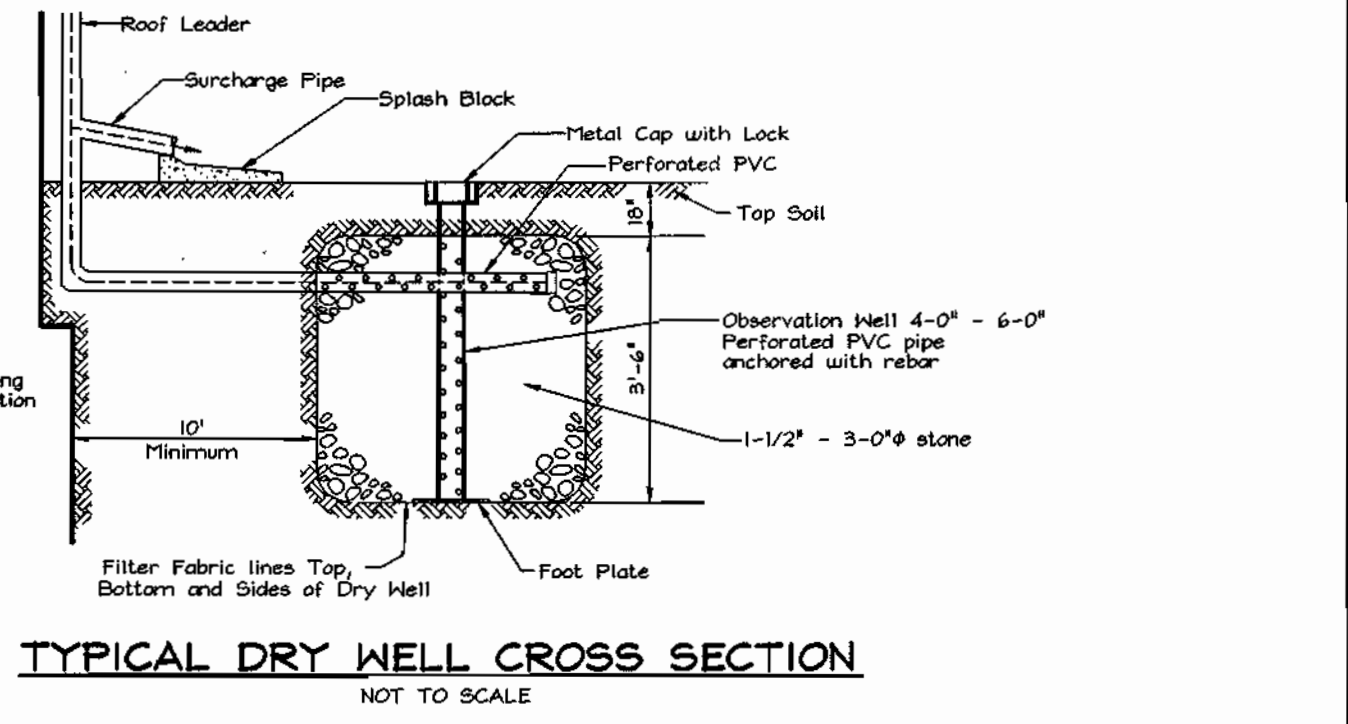
### SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (319-1865).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1984 HARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days for all other disturbed or graded areas on the project.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HHSARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 HARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, rod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dikes do not allow for proper germination and establishment of structures.
- 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.

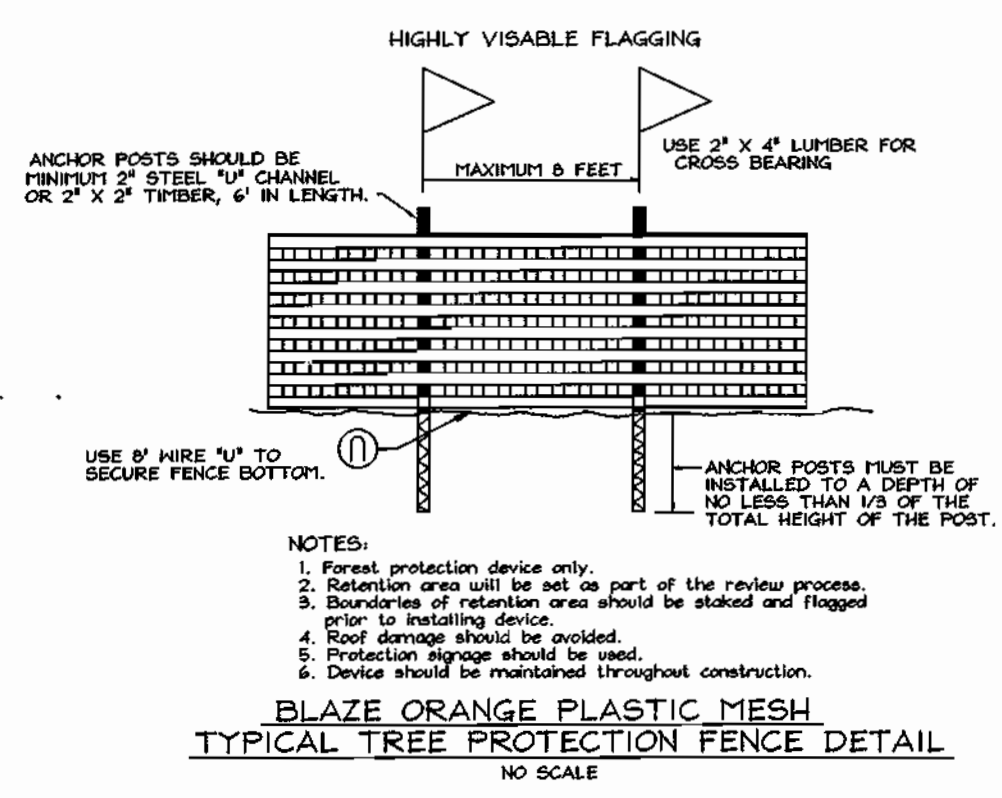
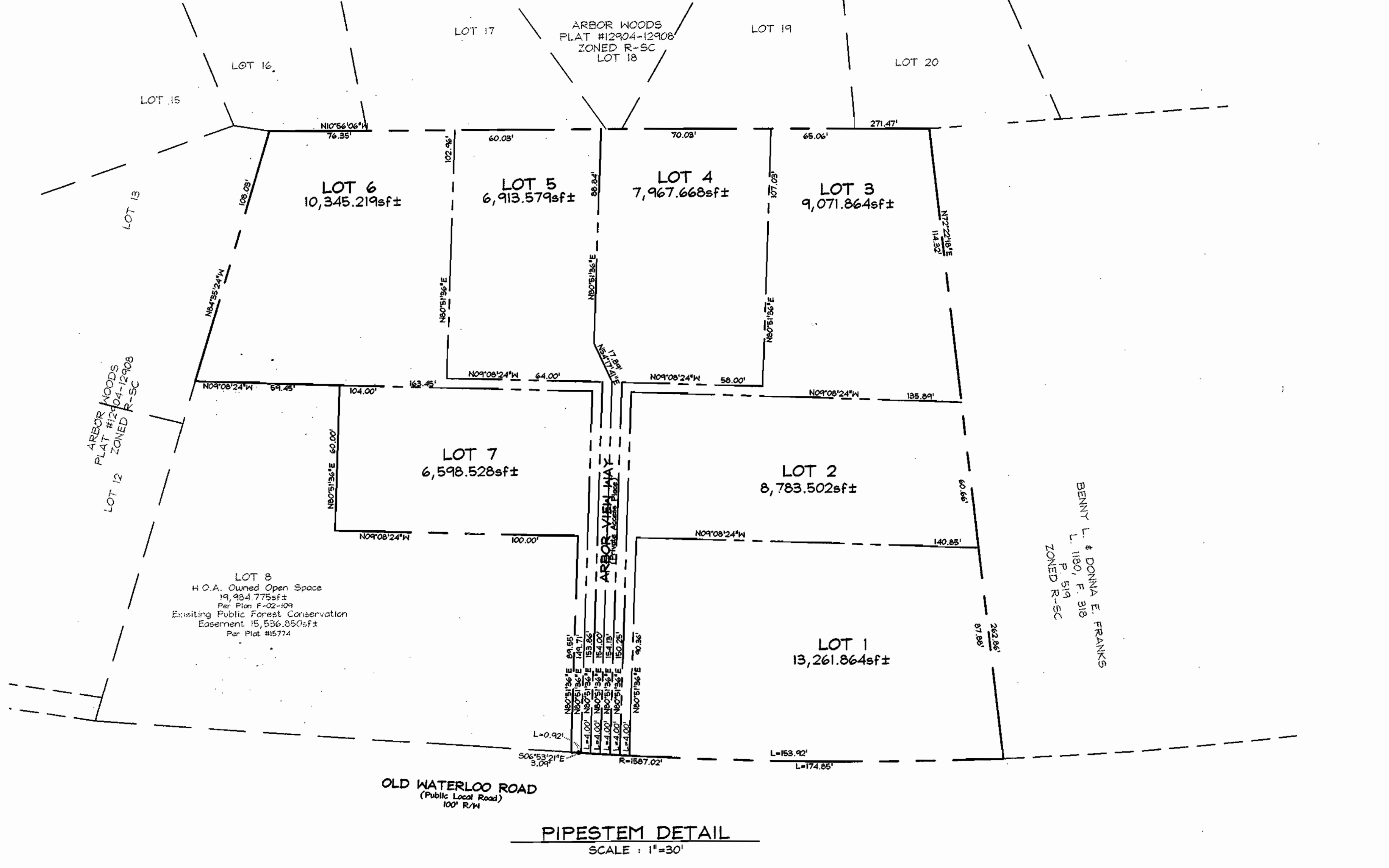
**Site Analysis:**

Total Area	1.445 Acres
Area Disturbed	1.316 Acres
Area to be seeded or paved	0.395 Acres
Area to be vegetatively stabilized	0.946 Acres
Total Cut	42,100 CY
Total Fill	41,044 CY
Offsite waste/borrow area location	xx

- 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 controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- 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 building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.
- To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.



LOT No.	VOLUME REQUIRED	VOLUME PROVIDED	No. WELLS	SIZE WELLS
6	151 cf	168 cf	3	4'x4'x3.5'deep
7	89 cf	112 cf	2	4'x4'x3.5'deep

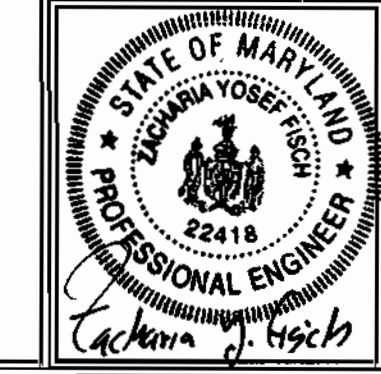


### SEQUENCE OF CONSTRUCTION

- Obtain Grading permit.
- Notify Howard County Department of Inspections, License and Permits at (410) 319-1860 at least 24 hours before starting any work.
- Install Stabilized Construction Entrance, Silt Fence and Super Silt Fence. Repair or replace damaged sections of Super Silt Fence to be utilized from F-02-109. (1 week)
- Construct driveways, and begin house construction. (2 weeks)
- Complete house construction, fine grade site, and install Erosion Control Matting. (3 months)
- Install Perimeter Landscaping per F-02-109. (1 week)
- During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the sediment control measures on this plan.
- Following initial soil disturbance or any redisturbances, permanent or temporary stabilization shall be completed within:
  - 7 calendar days for all perimeter sediment control structures, dikes, siltstone and all slopes greater than 3:1.
  - 14 calendar days for all other disturbed areas.
- Upon stabilization of all disturbed areas and with the permission of the sediment control inspector, remove all sediment control measures and stabilize any remaining disturbed area. (1 week)

### SEDIMENT EROSION CONTROL AND SITE DETAILS

**ARBOR OVERLOOK**  
LOTS 1 THRU 7  
TAX MAP 37 GRID 20 PARCEL 148  
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



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

DESIGN BY: PS/Bim  
DRAWN BY: Bim  
CHECKED BY: Z.Y.F.  
SCALE: As Shown  
DATE: April 22, 2003  
SHEET No. 3 OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE 5/2/03  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/5/03  
DIRECTOR DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE 4/25/03  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
DATE 4/25/03

**ENGINEERS CERTIFICATE**  
"I 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."  
SIGNATURE OF ENGINEER ZACHARIA Y. FISCH DATE 4/22/03

**DEVELOPER'S CERTIFICATE**  
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS 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."  
SIGNATURE OF DEVELOPER DATE 4/22/03

**OWNER/DEVELOPER**  
CORNERSTONE HOMES, INC.  
4691 Norfolk Avenue  
Lanham, Maryland 20773  
410.792.2565

**GENERAL NOTES**

- This plan is subject to compliance with the Fourth Edition of the Howard County subdivision regulations.
- Public water and sewer to be utilized.
- The Contractor shall notify the following utility companies or agencies at least five(5) working days before starting work shown on these plans:
  - Verizon 1.800.743.0033/410.224.9210
  - AT&T 1.800.252.1133
  - State Highway Administration 410.531.5533
  - BGE(Contractor Services) 410.860.4620
  - BGE(Underground Damage Control) 410.787.9268
  - Fliss Utility 1.800.257.7777
  - Colonial Pipeline Company 410.755.1394
  - Howard County, Dept. of Public Works, Bureau of Utilities 410.313.4900
  - Howard County Health Department 410.313.2640
- The contractor shall notify Fliss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- Topography is based on a field run survey prepared by C.B. Miller and Associates in November 2000.
- Soils map no. 25.
- There are no wetlands on site as certified by Exploration Research, Inc., also there are no flood plains, historic structures or cemeteries on-site.
- A.P.F.O. traffic study prepared by Street Traffic Studies L.T.D. and approved under Sketch/Preliminary SP 01-07 on 6/29/01.
- The project is within the metropolitan district.
- Landscaping is provided and approved under the certified landscape plan on file with F-02-109 and will be planted at the completion of site work. See Sequence of Construction, Sheet 3.
- The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Project is subject to a waiver from section 2.3.3.B.2 in Design Manual Volume III to allow a 10% grade within 200' prior to T-turn and from table 2.02 and figure 2.08 to reduce the length of the vertical curve to 60'. Both waivers were approved in a comment approval letter dated 3-29-01.
- 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.
- Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- For flag or pipistem lots, refuse collection, snow removal and road maintenance are provided at the junction of the flag or pipistem and road right-of-way line and not to the pipistem lot driveway.
- All driveway culverts will be 12" circular or equivalent area. Contractor shall determine type of material (HDPE, CMP or Conc.).
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit to ensure safe access for fire and emergency vehicles per the following requirements:
  - A) Width - 12 feet (14 feet serving more than one residence);
  - B) Surface - six (6") inches of compacted crusher run base with tar and chip coating (1-1/2" Minimum);
  - C) Geometry - Maximum 15% grade, Maximum 10% grade change and 45-foot turning radius;
  - D) Structures (culverts/bridges) - capable of supporting 25 gross tons (H25-loading);
  - 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.
- Forest conservation has been addressed under F-02-109. Forest conservation obligations for this site are met by retention of 0.36 Ac. of forest within open space Lot 8 and a Fee-in-lieu-of reforestation of 0.12 Ac. in the amount of \$2,613.60. The forest conservation easement established under F-02-109 to fulfill the requirements of section 16.1200 of the Howard County code. No clearing, grading, or construction is permitted within the forest conservation easements, however, forest management practices as defined in the deed of forest conservation easement are allowed.
- All Sewer House Connections to be a minimum of 2x.
- For Sewer House elevations see Sewer House Connection Chart this sheet.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System, Howard County Monument No. 37GC and 37GD were used for this project.
- Under Final Plan No. F-02-109, 5M11 Water Quality (WQ) is provided within a "Dry Swale" system which will be privately owned and maintained by H.O.A.
- Individual rooftops of lots 3, 6 & 7 are treated for water quality with rooftop dischargers in combination with dry wells on lots 6 and 7.
- Any damage to the County's right-of-way shall be corrected at the developer's expense.
- The geotechnical report for this project was prepared by Herbst, Benson and Associates dated Dec. 12, 2000 and approved under Preliminary equivalent Sketch SP 01-07.

**SITE ANALYSIS DATA CHART**

- Total project area: 1.445 Acres
- Area of plan submission: 1.445 Acres
- Limit of disturbed area: 1.315 Acres
- Subject property zoned "R-SC" per 10/18/93 Comprehensive Zoning Plan.
- Proposed uses for site & structures: single family detached
- Floor space on each level of building(s) per use: see house templates this sheet
- Total number of units allowed: 7
- Total number of units proposed: 7
- Building coverage of site: 0.265 acre(s); 5.45% of gross lot area
- Howard County file references: SP-01-07; F-02-109; Cont.# 24-3956-D; Plat# 15774;

**SHEET INDEX**

DESCRIPTION	SHEET No.
Site Development Plan	1 of 3
Sediment and Erosion Control Plan	2 of 3
Sediment Erosion Control and Site Details	3 of 3

**ADDRESS CHART**



LOTS	STREET
1	8100 Arbor View Way
2	8104 Arbor View Way
3	8108 Arbor View Way
4	8112 Arbor View Way
5	8116 Arbor View Way
6	8107 Arbor View Way
7	8103 Arbor View Way

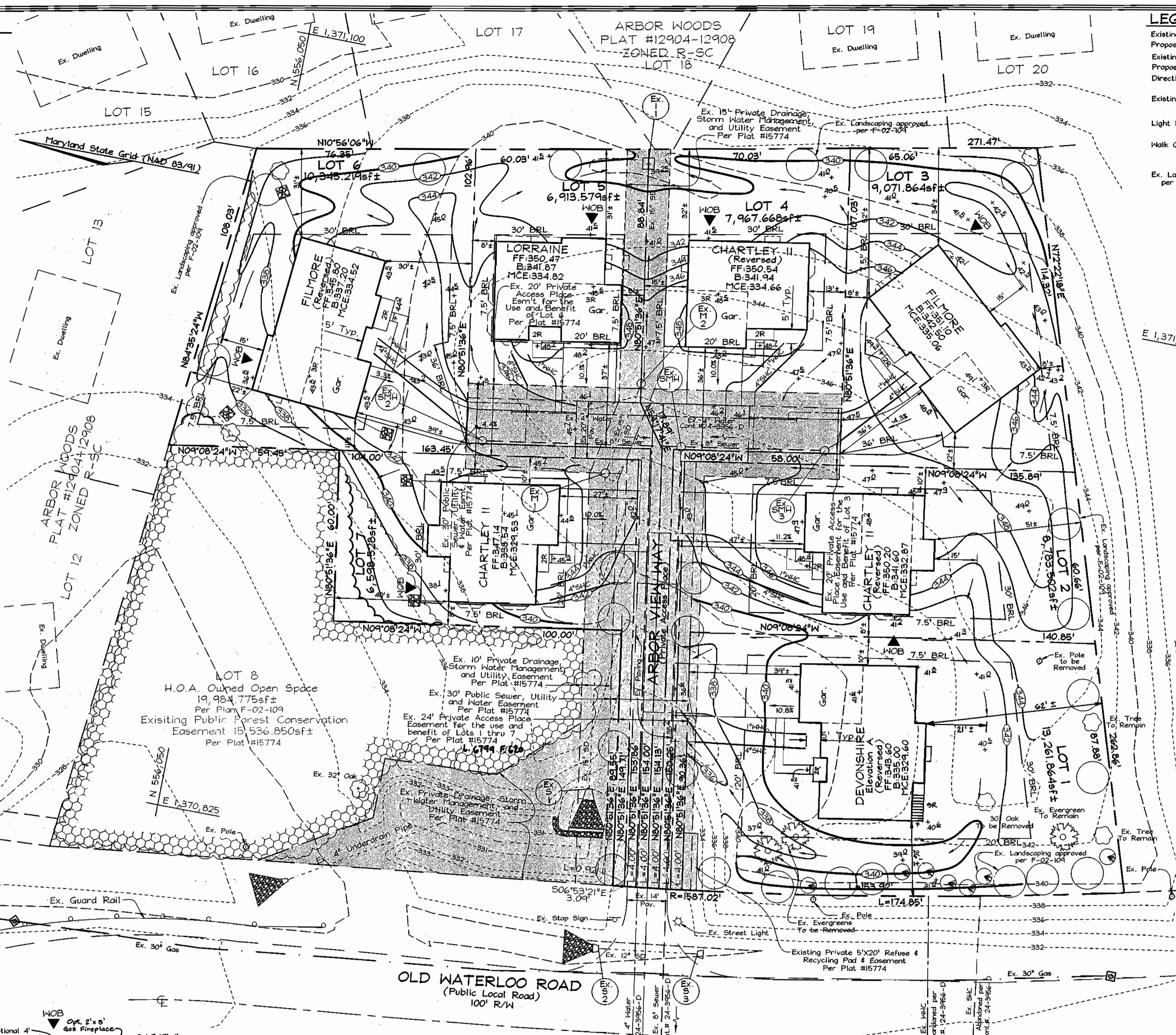
**SEWER HOUSE CONNECTION CHART**

Lot #	Inv. @ Main Easement Line	Inv. @ Edge of House	Inv. @ From House	Min. Cellar El.
1	324.75	324.92	325.64	329.60
2	328.20	329.04	329.84	332.87
3	331.01	331.14	331.80	335.06
4	330.66	331.06	331.53	334.66
5	330.87	331.27	331.51	334.82
6	331.15	331.28	332.13	334.52
7	327.76	328.14	328.65	329.53

NOTE: All SHC at 2.0%  
Invert elevations shown are located at the edge of the Ex. 30" Public Sewer, Utility and Water Easement line.

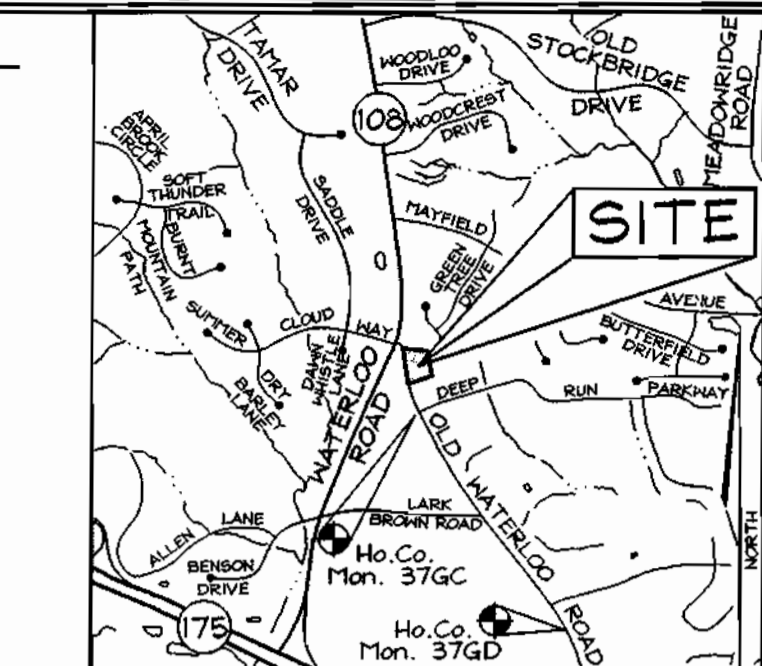
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING


  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE: 5/2/03  

  
 CHIEF, DIVISION OF LAND DEVELOPMENT M DATE: 5/5/03  
 DIRECTOR



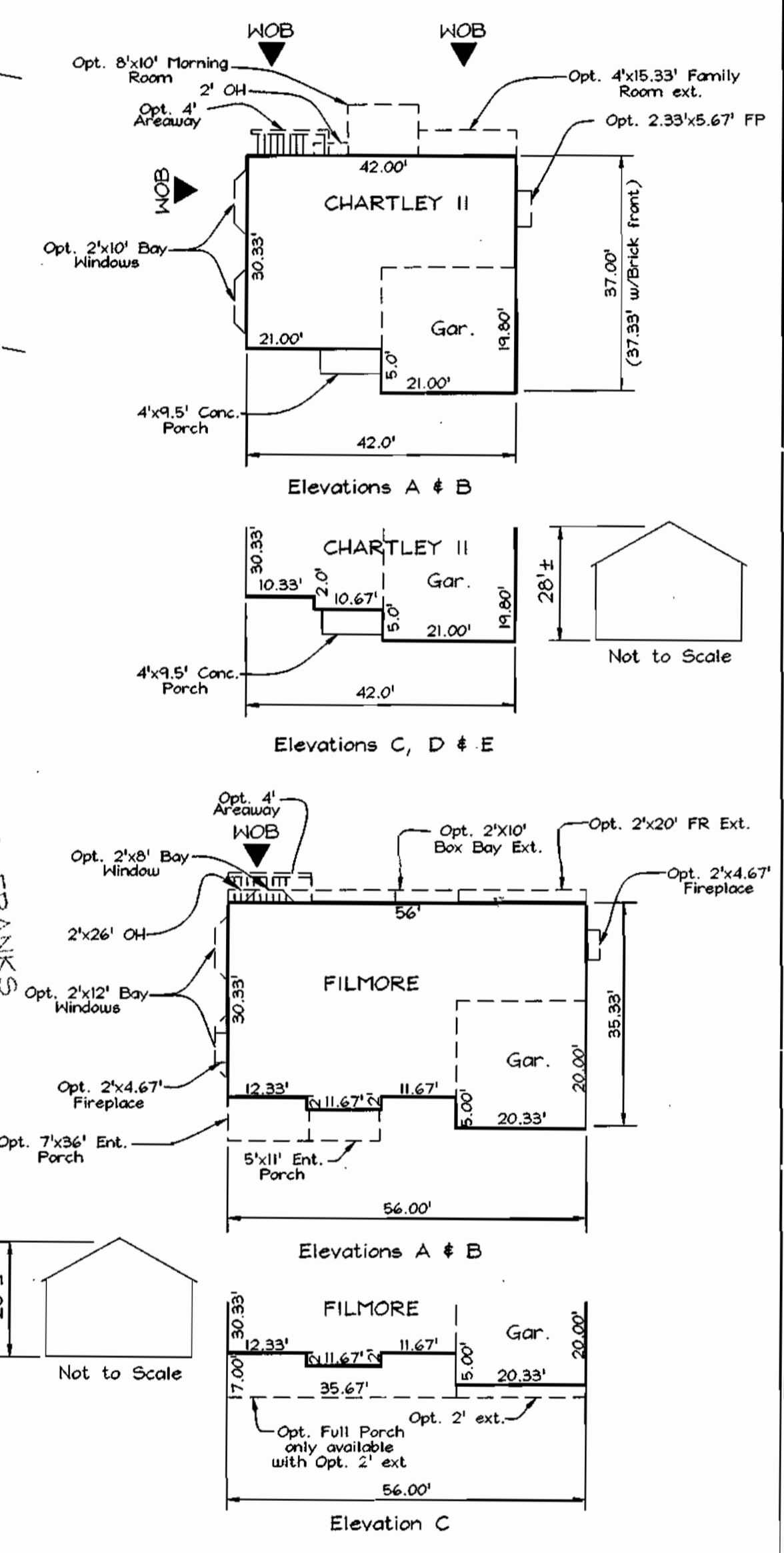
**LEGEND**

- Existing Contour
- Proposed Contour
- Existing Spot Elevation
- Proposed Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Light Poles
- Walk Out Basement
- Ex. Landscaping approved per plan F-02-109



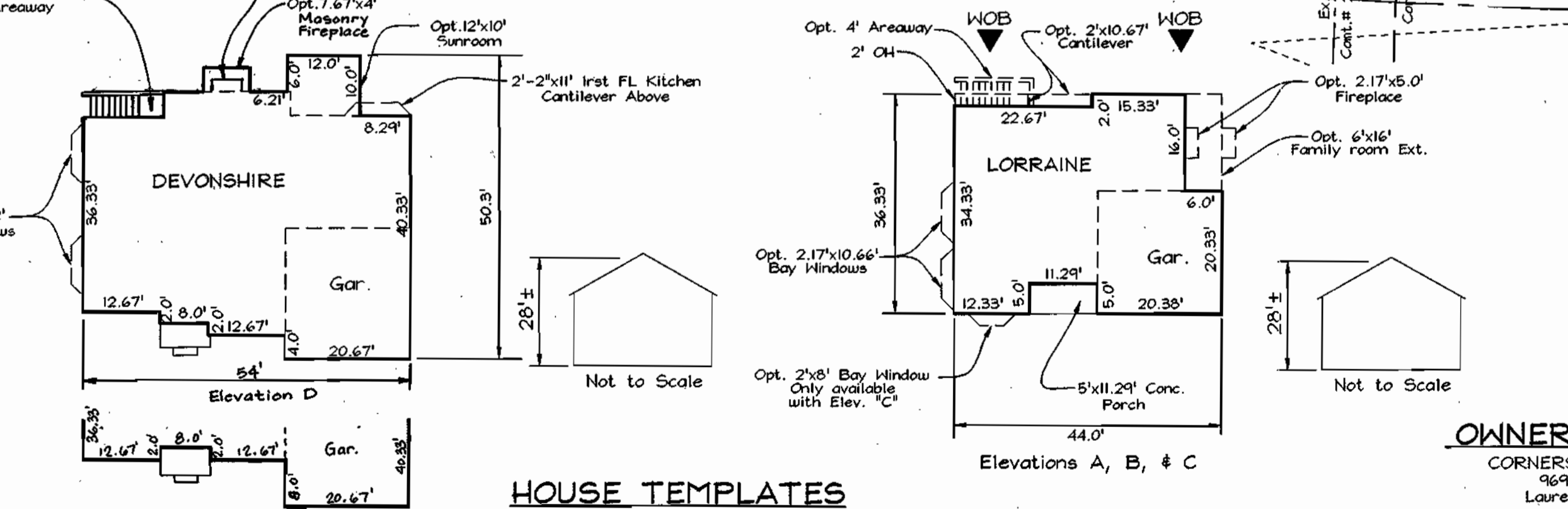
**BENCHMARKS**

Sta.	(Meters) N	(Meters) E	Elev. (Feet)
Sta. 37GC	163,240.7747	417,865.2828	101.1425
	(Feet) N 555,250.701	E 1,370,946.348	Elev.: 331.832
Sta. 37GD	168,627.0373	E 418,294.2157	Elev.: 38.6734
	(Feet) N 553,237.204	E 1,372,363.605	Elev.: 29.923



**PLAN VIEW**

SCALE: 1/20'

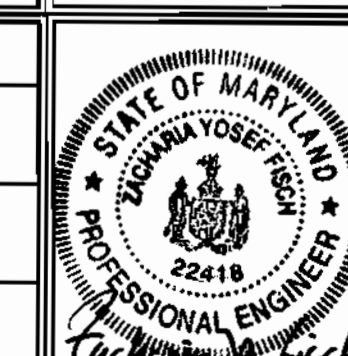


**OWNER/DEVELOPER**  
CORNERSTONE HOMES, INC.  
1691 Norfolk Avenue  
Laurel, Maryland 20723  
410.792.2565

No.	REVISION	DATE
1	Revise House - Lot 1	07.18.03

**PERMIT INFORMATION CHART**

Subdivision Name:	Section/Area:	Lot/Parcel No.
ARBOR OVERLOOK	N/A	1-7
Plat # 15774	Lot 20	1-7
Water Code DOS	Sewer Code 5460000	



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

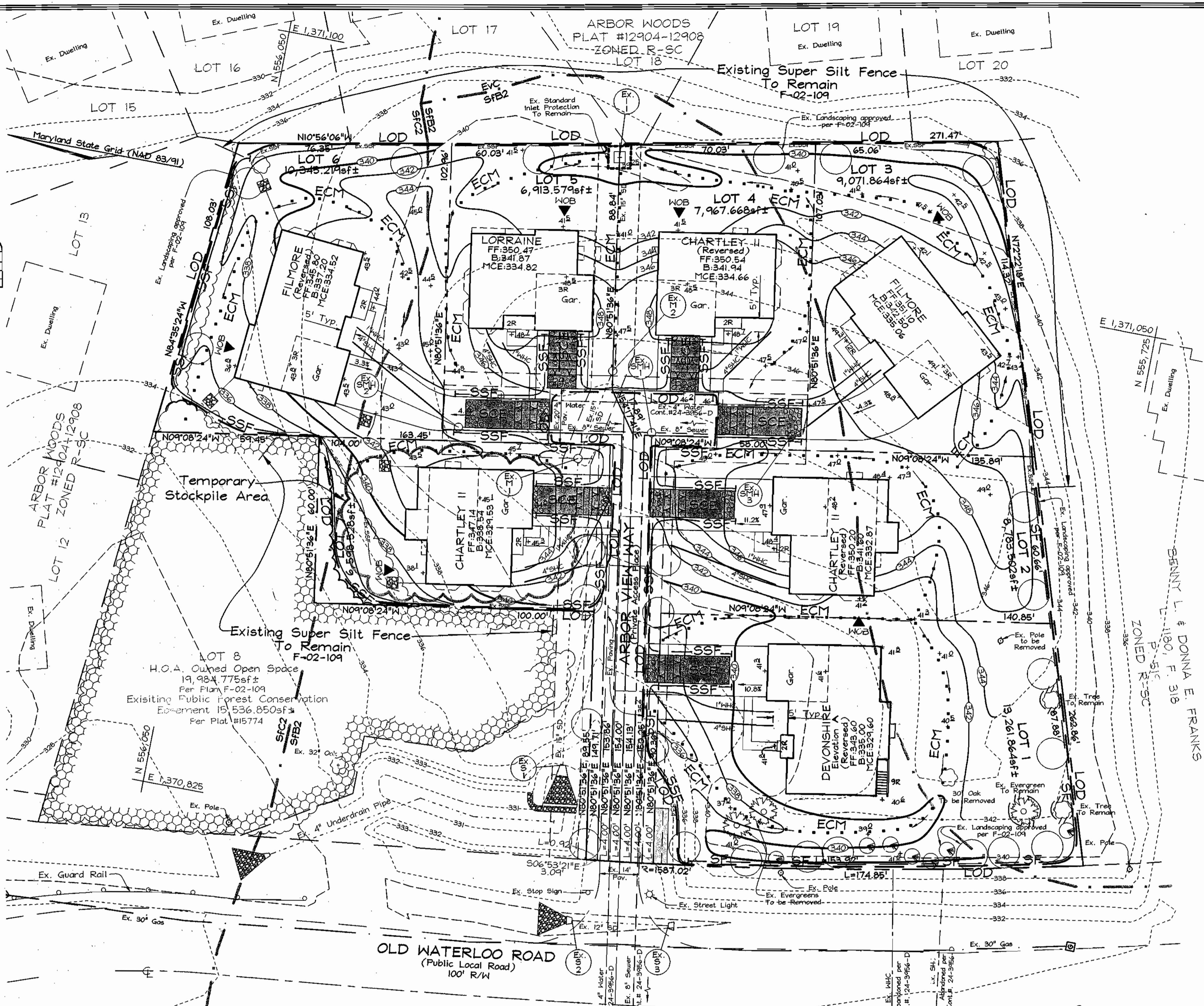
DESIGN BY: PS/Slim  
DRAWN BY: Slim  
CHECKED BY: J.Y.F.  
SCALE: As Shown  
DATE: April 22, 2003  
P.O. No.: 3021  
SHEET No.: 1 OF 3

**LEGEND**

Existing Contour	---
Proposed Contour	---
Existing Spot Elevation	382.3
Proposed Spot Elevation	+82.53
Direction of Flow	→
Tree Protection Fence	⊕
Existing Trees to Remain	⊕
Light Poles	⊕ Post Top
Walk Out Basement	⊕
Stabilized Construction Entrance	⊕
Silt Fence	SF
Super Silt Fence	SSF
Limit of Disturbance	LCD
Erosion Control Matting	ECM
Existing Standard Inlet Protection Per F-02-109	SIP
Existing Super Silt Fence	Ex.SSF

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
Evc	Evesboro loamy sand, 5 to 15 percent slopes	A
SFB2	Sassafras gravelly sandy loam, 1 to 5 percent slopes, moderately eroded	B
SFC2	Sassafras gravelly sandy loam, 5 to 10 percent slopes, moderately eroded	B

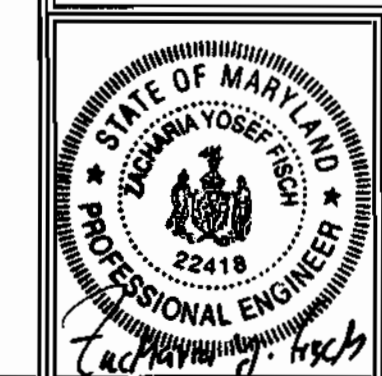


PLAN VIEW  
SCALE: 1"=20'

1	Revise House - Lot 1	07.16.03
No.	REVISION	DATE

**SEDIMENT AND EROSION CONTROL PLAN**  
**ARBOR OVERLOOK**  
LOTS THRU 7

TAX MAP 37 GRID 20 PARCEL 148  
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



**FSH Associates**  
Engineers Planners Surveyors  
8318 Forest Street, Ellicott City, MD 21115  
Tel: 410-750-2251 Fax: 410-750-7352  
E-mail: FSHAssociates@cs.com

DESIGN BY: PS/Slm  
DRAWN BY: Slm  
CHECKED BY: Z.Y.F.  
SCALE: As Shown  
DATE: April 22, 2003  
W.O. No.: 3021  
SHEET No.: 2 OF 3

**OWNER/DEVELOPER**  
CORNERSTONE HOMES, INC.  
4609 Norfolk Avenue  
Laurel, Maryland 20723  
410.792.2565

**DEVELOPER'S CERTIFICATE**  
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS 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."  
Signature of Developer: Brian D. Bay  
Date: 4/22/03

**ENGINEER'S CERTIFICATE**  
"I 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."  
Signature of Engineer: Zacharia Y. Fisch  
Date: 4/22/03

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
USDA NATURAL RESOURCES CONSERVATION SERVICE  
Signature: Jim Meyer  
Date: 4/25/03  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
Signature: John R. Whitson  
Date: [blank]

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
Signature: [blank]  
Date: 5/2/03  
Signature: [blank]  
Date: 5/5/03

**GENERAL NOTES**

- This plan is subject to compliance with the Fourth Edition of the Howard County subdivision regulations.
- Public water and sewer to be utilized.
- The contractor shall notify utility companies or agencies at least five(5) working days before starting work shown on these plans:  
 Verizon 1.800.743.0033/410.224.9210  
 AT&T 1.800.252.1133  
 BGE(Contractor Services) 410.531.5533  
 BGE(Underground Damage Control) 410.850.4620  
 Miss Utility 1.800.252.7777  
 Colonial Pipeline Company 410.745.1900  
 Howard County Dept. of Public Works, Bureau of Utilities 410.313.4900  
 Howard County Health Department 410.313.2640  
 The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- Topography is based on a field run survey prepared by C.B. Miller and Associates in November 2000.
- Soils map no. 25.
- There are no wetlands on site as certified by Exploration Research Inc., also there are no flood plains, historic structures or cemeteries on-site.
- A.P.O. traffic study prepared by Street Traffic Studies L.T.D. and approved under Sketch Preliminary SP 01-07 on 6/29/01.
- The project is within the metropolitan district.
- Landscape is provided and approved under the certified landscape plan on file with F-02-109 and will be planted at the completion of site work. See Sequence of Construction, Sheet 3.
- The site shown herein complies with the minimum easement, width and lot area as required by the Maryland State Department of the Environment.
- Project is subject to a waiver from section 2.3.3.B.2 in Design Manual Volume III to allow a 10% grade within 200' prior to T-turnaround and from table 2.02 and figure 2.08 to reduce the length of the vertical curve to 160'. Both waivers were approved in a comment approval letter dated 3-29-01.
- 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 setback, arches, or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
- Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- For flag or pipeline lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipeline and road right-of-way.
- Driveway culverts will be 12" circular or equivalent area. Contractor shall determine type of material (HDPE, CHP or Conc.).
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit to ensure safe access for fire and emergency vehicles per the following requirements:  
 A) Width - 12 feet (14 feet serving more than one residence);  
 B) Surface - six (6") inches of compacted crusher run base with tar and chip coating (1-1/2" Minimum);  
 C) Geometry - Maximum 15% grade, Maximum 10% grade change and 45-foot turning radius;  
 D) Structures (culverts/bridges) - capable of supporting 25 gross tons (H25-loading);  
 E) Drainage elements - capable of safely passing 100 year flood with no more than 1 foot depth over surface;  
 F) Structure clearance - minimum 12 feet;  
 G) Maintenance - sufficient to ensure all weather use.
- Forest conservation obligations have been addressed under F-02-109. Forest conservation obligations for this site are met by retention of 0.36 Ac. of forest within open space Lot 8 and a Fee-in-lieu of restoration of 0.12 Ac. in the amount of \$2,618.60. The forest conservation easements established under F-02-109 to fulfill the requirements of section 16.1200 of the Howard County code. No clearing, grading, or construction is permitted within the forest conservation easements, however, forest management practices as defined in the deed of forest conservation easement are allowed.
- All Sewer House Connections to be a minimum of 2%.
- For Sewer House Connection elevations see Sewer House Connection Chart this sheet.
- The coordinates shown herein are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument No. 37GC and 37GD were used for this project.
- Under Final Plan No. F-02-109, SMH Note, Quality (HQ) is provided within a "Dry Swale" system which will be privately owned with maintenance by H.O.A. Individual rooftops of lots 3, 6 & 7 are treated for water quality with rooftop discharges, in combination with dry wells on lots 6 and 7.
- Any damage to the County's right-of-way shall be corrected at the developer's expense.
- The technical report for this project was prepared by Herbat, Benson and Associates dated Dec. 12, 2000 and approved under Preliminary equivalent Sketch SP 01-07.

**SITE ANALYSIS DATA CHART**

- Total project area: 1.445 Acres
- Area of plan submission: 1.445 Acres
- Limit of disturbed area: 1.315 Acres
- Subject property zoned "R-SC" per 10/18/93 Comprehensive Zoning Plan.
- Proposed uses for site: structures: single family detached
- Floor space on each level of building(s) per use: see house templates this sheet
- Total number of units allowed: 7
- Total number of units proposed: 7
- Building coverage of site: 0.265 acres; 5.45% of gross lot area
- Howard County file references: SP-01-C-7; F-02-109; Cont.# 24-3956-D; Plat# 15774;

**SHEET INDEX**

DESCRIPTION	SHEET No.
Site Development Plan	1 of 3
Sediment and Erosion Control Plan	2 of 3
Sediment, Erosion Control and Site Details	3 of 3

**ADDRESS CHART**

LOTS	STREET
1	8100 Arbor View Way
2	8104 Arbor View Way
3	8108 Arbor View Way
4	8112 Arbor View Way
5	8116 Arbor View Way
6	8107 Arbor View Way
7	8103 Arbor View Way

**SEWER HOUSE CONNECTION CHART**

Lot #	Inv. @ Main	Inv. @ edge of Ex. Easement Line	Inv. 12' from House	Min. Cellar El.
1	324.75	324.92	325.64	324.60
2	328.20	329.04	329.84	332.87
3	331.01	331.14	331.80	335.06
4	330.62	331.06	331.53	334.66
5	330.87	331.27	331.51	334.82
6	331.15	331.28	332.13	334.52
7	327.76	328.14	328.65	329.53

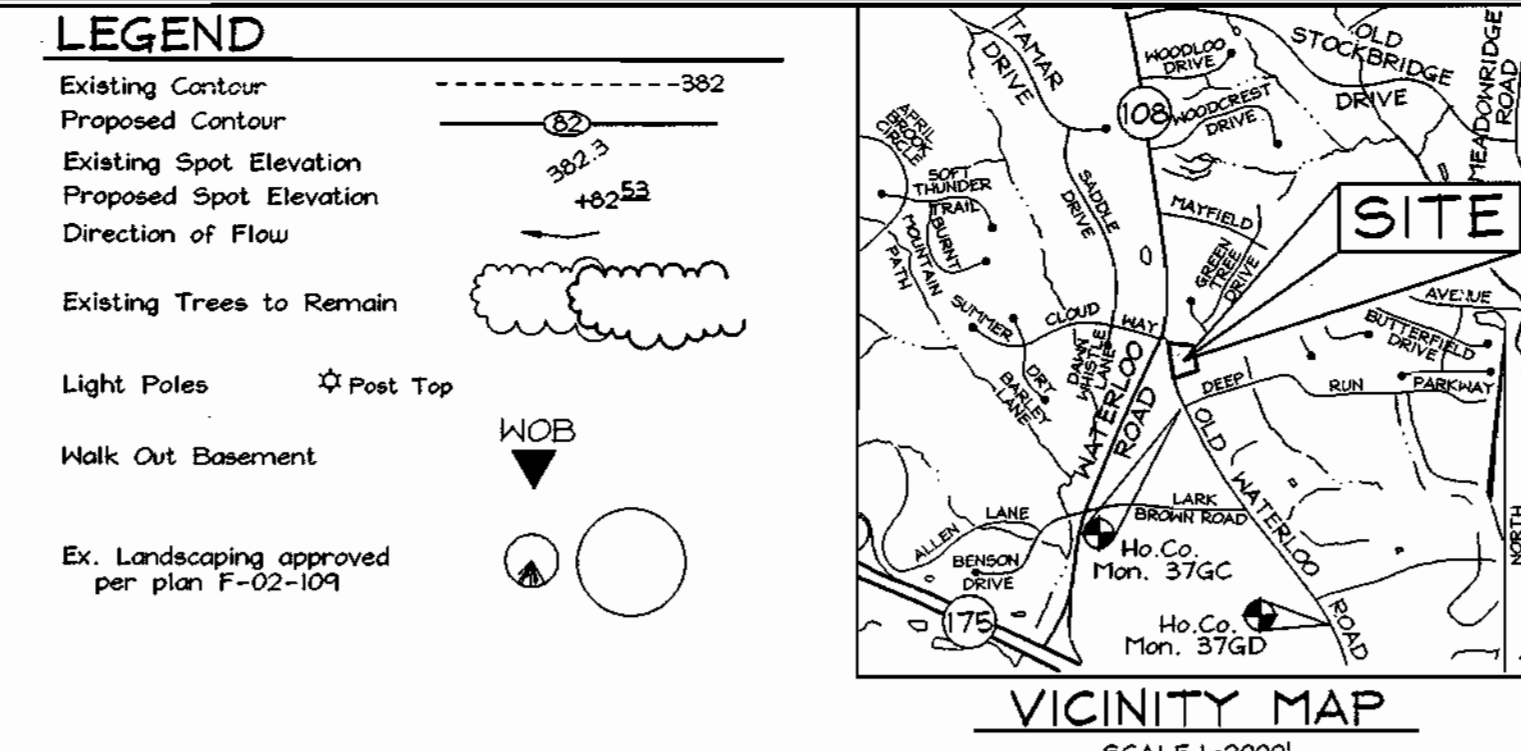
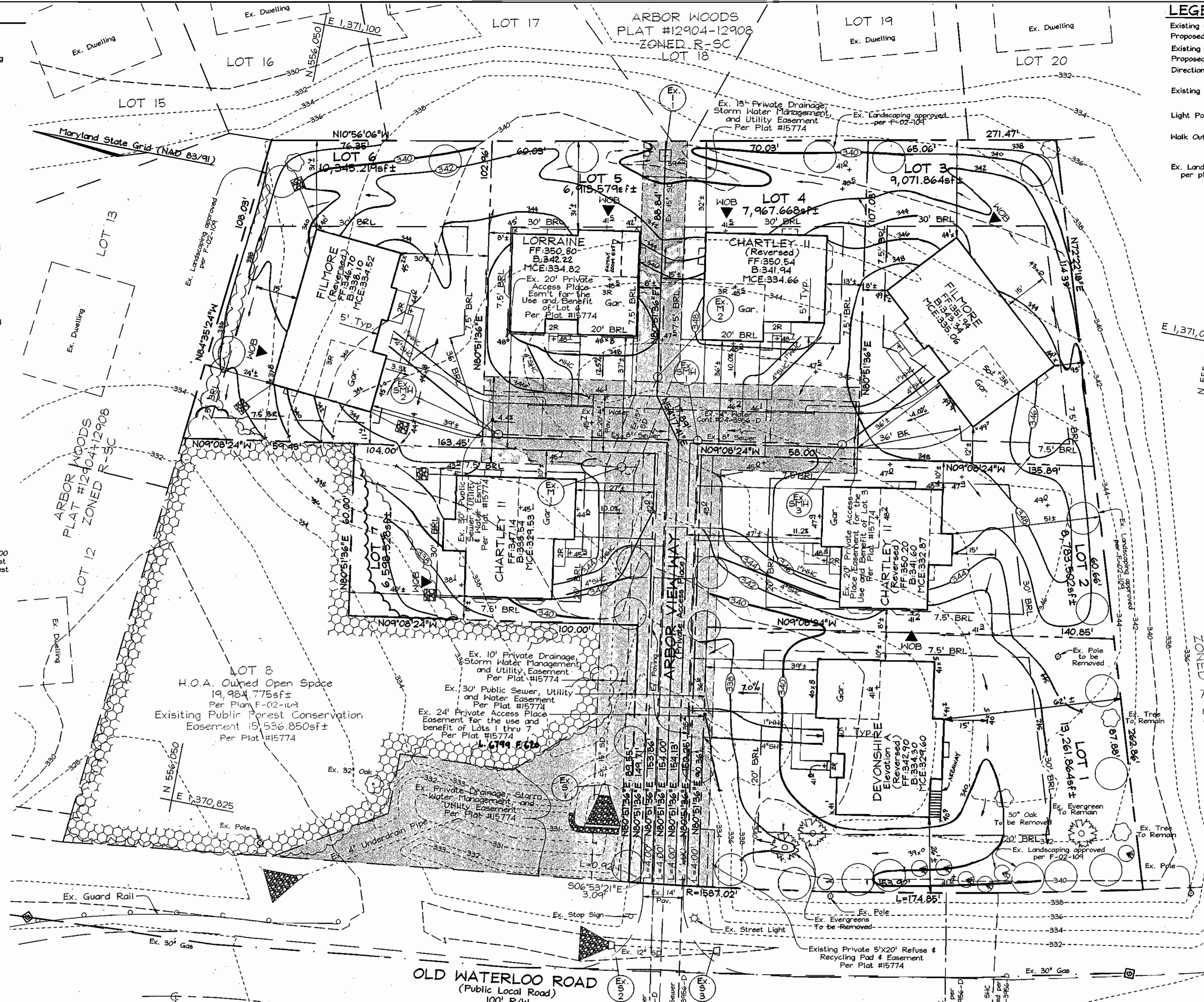
NOTE: All SHC at 2.0%  
 Invert elevations shown @ located at the edge of the Ex. 30' Public Sewer, Utility and Water Easement line.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION *MK* DATE: *4/26/03*

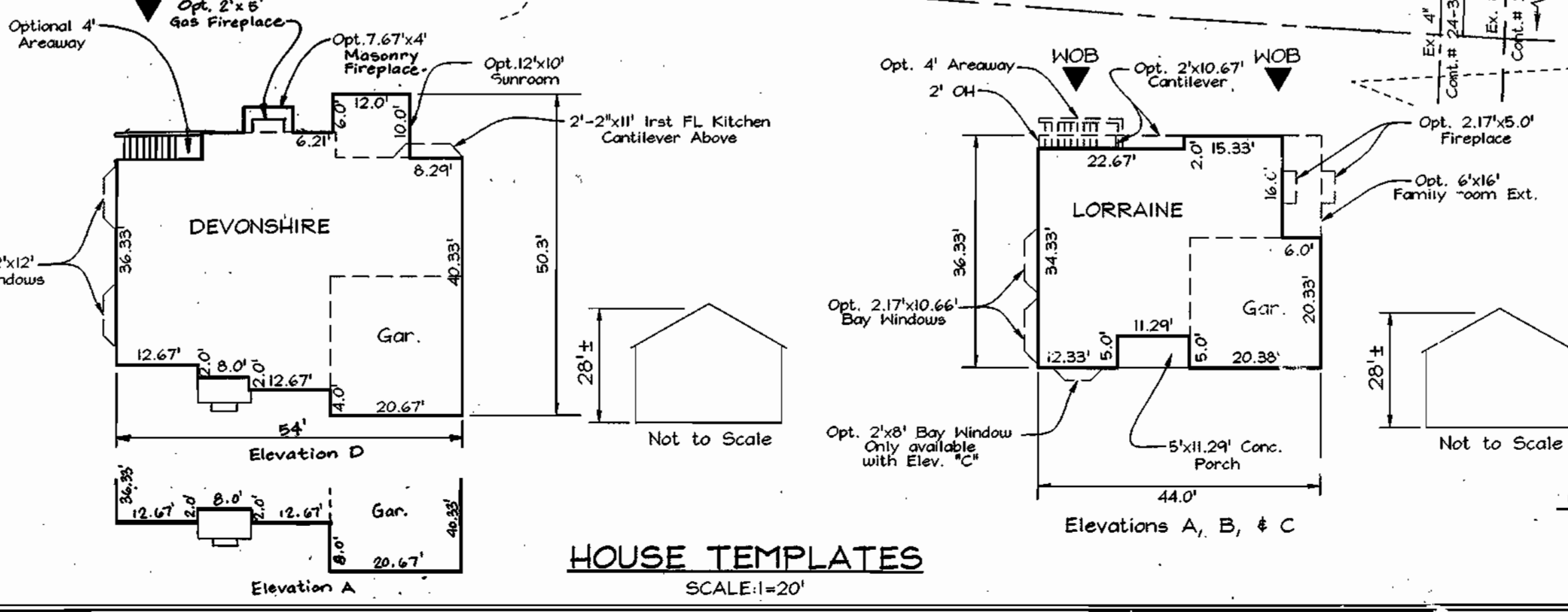
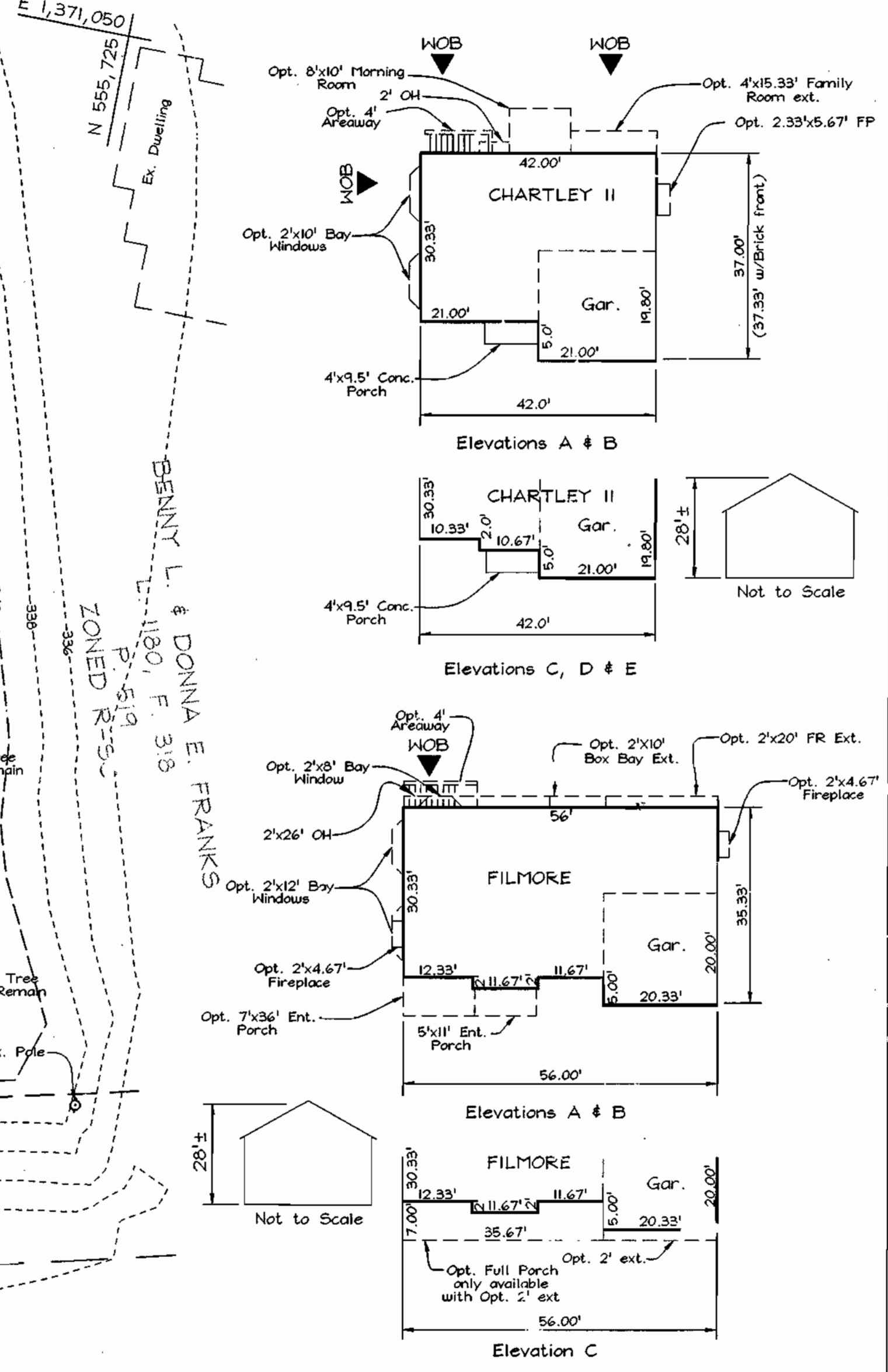
CHIEF, DIVISION OF LAND DEVELOPMENT *JK* DATE: *4/26/03*

DIRECTOR *JK* DATE: *5/10/03*



**BENCHMARKS**

Sta.	(Meters)	(Feet)	Easting	Northing	Elevation
Sta. 37GC	N 169,240.777	N 555,250.791	E 417,865.2828	E 1,370,946.348	Elev.: 101.1425
Sta. 37GD	N 168,627.0973	N 553,237.204	E 418,294.2157	E 1,372,353.605	Elev.: 38.832



*Donna M. Franks*

FOR REVISIONS MADE BY BEAUMAIS INC. ON 8-20-03, 9-2-03

**OWNER/DEVELOPER**  
CORNERSTONE HOMES, INC.  
9691 Norfolk Avenue  
Laurel, Maryland 20723  
410.792.2565

**REVISION INFORMATION CHART**

No.	REVISION	DATE
5	REVISE GRADES PER AS-BUILT CONDITIONS ON LOT 3	9-18-03
4	REVISE GRADES PER AS-BUILT CONDITIONS ON LOT 1	9-2-03
3	REVISE GRADES PER AS-BUILT CONDITIONS ON LOT 5	9-2-03
2	REVISE GRADES PER AS-BUILT CONDITIONS ON LOT 6, 7, 8	8-24-03
1	REVISE HOUSE - LOT 1	07-18-03

**PERMIT INFORMATION CHART**

Subdivision Name:	Section/Area	Lot/Parcel No.
ARBOR OVERLOOK	N/A	1-7
Plat #	Grid	Zoning
15774	20	R-SC
Tax Map No.	Elect. District	Census Tract
37	1ST	6011.02
Water Code	Sewer Code	
DOS	5460000	

**SITE DEVELOPMENT PLAN**  
**ARBOR OVERLOOK**  
LOTS 1 THRU 7

TAX MAP 37 GRID 20  
1ST ELECTION DISTRICT

PARCEL 148  
HOWARD COUNTY, MARYLAND

**FSH Associates**  
Engineers Planners Surveyors  
8316 Forest Street, Ellicott City, MD 21043  
Tel: 410-750-2251 Fax: 410-750-2119  
E-mail: FSHAssociates@cs.com

DESIGN BY: *PS/Strm*  
DRAIN BY: *Slim*  
CHECKED BY: *J.F.*  
SCALE: *As Shown*  
DATE: *April 22, 2003*  
P.L.O. No.: 3021  
SHEET 1 OF 3

**GENERAL NOTES**

- This plan is subject to compliance with the Fourth Edition of the Howard County subdivision regulations.
- Public water and sewer to be utilized.
- The Contractor shall notify the following utility companies or agencies at least five (5) working days before starting work shown on these plans:  
 Verizon 1.800.743.0033/410.224.9210  
 AT&T 1.800.252.1133  
 State Highway Administration 410.531.5533  
 BGE/Contractor 410.365.4629  
 BGE/Underground Damage Control 410.787.4068  
 Miss Utility 410.267.7777  
 Colonial Pipeline Company 410.746.1540  
 Howard County, Dept. of Public Works, Bureau of Utilities 410.313.4300  
 Howard County Health Department 410.313.2640
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1800 at least five (5) working days prior to the start of work.
- Topography is based on a field run survey prepared by C.B. Miller and Associates in November 2000.
- Soils map no. 25.
- There are no wetlands on site as certified by Exploration Research Inc., also there are no flood plains, historic structures or cemeteries on-site.
- A.P.F.O. traffic study prepared by Street Traffic Studies L.T.D. and approved under Sketch/Preliminary SP-01-07 on 6/29/01.
- The project is within the metropolitan district.
- Landscape is provided and approved under the certified landscape plan on file with F-02-109 and to be planted at the completion of site work. See Sequence of Construction, Sheet 3.
- The lots shown herein comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Project is subject to a waiver from section 2.3.3.B.2 in Design Manual Volume III to allow a 10% grade within 200' prior to T-turnaround and from table 2.02 and Figure 2.08 to reduce the length of the vertical curve to 60'. Both waivers are prepared in a comment approval letter dated 3-29-01.
- In accordance with section 128 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 setbacks.
- Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- 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 and not to the pipestem lot driveway.
- All driveway culverts will be 12" circular or equivalent area. Contractor shall determine type of material (HDPE, CIP or Conc.).
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit to ensure safe access for fire and emergency vehicles per the following requirements:  
 A) Width - 12 feet (14 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 - Maximum 15% grade, Maximum 10% grade change and 45-foot turning radius;  
 D) Structures (culverts/bridges) - capable of supporting 25 gross tons (H25-loading);  
 E) Drainage elements - capable of passing 100 year flood with no more than 1 foot depth over surface;  
 F) Structure clearance - minimum 12 Feet;  
 G) Maintenance - sufficient to ensure all weather use.
- Forest conservation obligations have been addressed under F-02-109. Forest conservation obligations for this site are met by retention of 0.36 Ac. of forest within open space Lot 8 and a Fee-in-lieu of reforestation of 0.12 Ac. in the amount of \$2,618.60. The forest conservation easements established under F-02-109 to fulfill the requirements of section 16.1200 of the Howard County code. No clearing, grading, or construction is permitted within the forest conservation easements, however, forest management practices as defined in the deed of forest conservation easement are allowed.
- All Sewer House Connections to be a minimum of 25.
- For Sewer House Connection elevations see Sewer House Connection Chart this sheet.
- The coordinates shown herein are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 37GC and 37GD were used for this project.
- Under Final Plan No. F-02-109, SWMT Water Quality (WQ) is provided within a "Dry Swale" system which will be privately owned with maintenance by H.O.A.
- Individual rooftops of lots 3, 4 & 7 are treated for water quality with rooftop disconnec., in combination with dry wells on lots 6 and 7.
- Any damage to the County's right-of-way shall be corrected at the developer's expense.
- The technical report for this project was prepared by Herbst, Benson and Associates dated Dec. 12, 2000 and approved under Preliminary equivalent Sketch SP-01-07.

**SITE ANALYSIS DATA CHART**

- Total project area: 1.445 Acres
- Area of plan submission: 1.445 Acres
- Limit of disturbed area: 1.315 Acres
- Subject property zoned "R-5C" per 10/15/93 Comprehensive Zoning Plan.
- Proposed uses for site: 4 structures, single family detached.
- Floor space on each level of building(s) per use: one house templates this sheet.
- Total number of units allowed: 7
- Total number of units proposed: 7
- Building coverage of site: 0.265 acres; 5.45% of gross lot area
- Howard County file references: SP-01-07, F-02-109, Cont.# 24-3956-D, Plat# 15774

**SHEET INDEX**

DESCRIPTION	SHEET No.
Site Development Plan	1 of 3
Sediment and Erosion Control Plan	2 of 3
Sediment, Erosion Control and Site Details	3 of 3

**ADDRESS CHART**

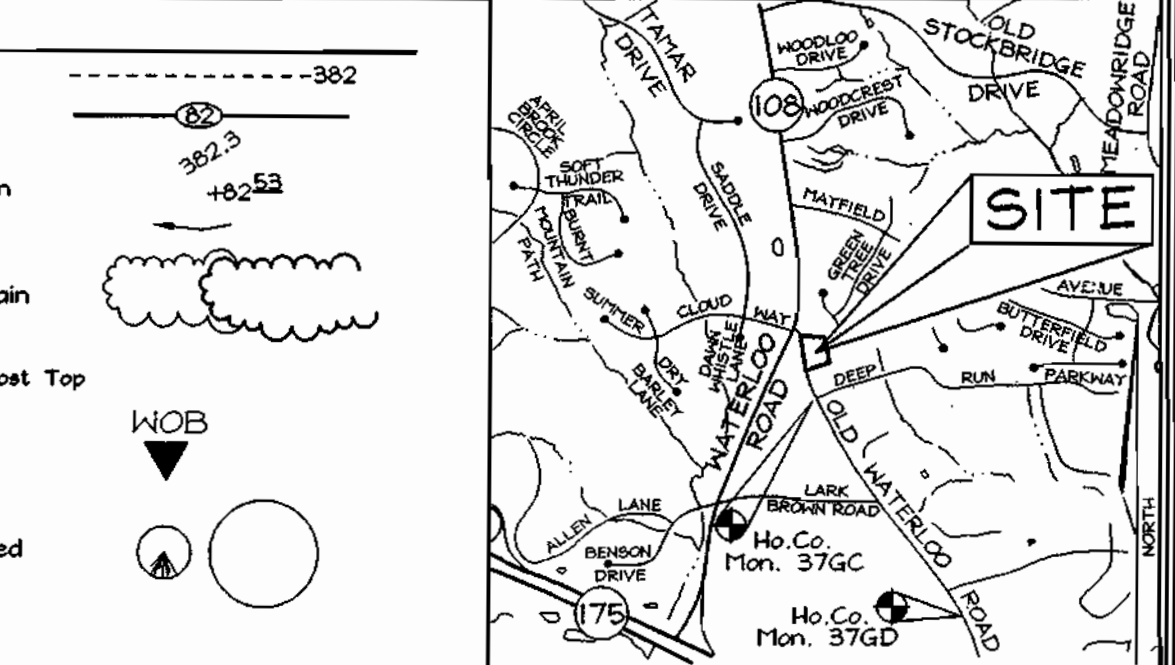
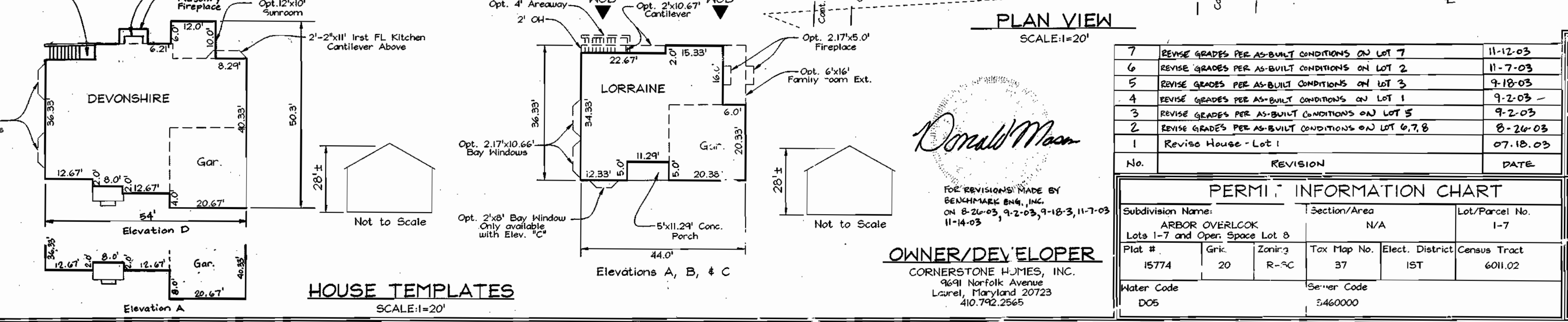
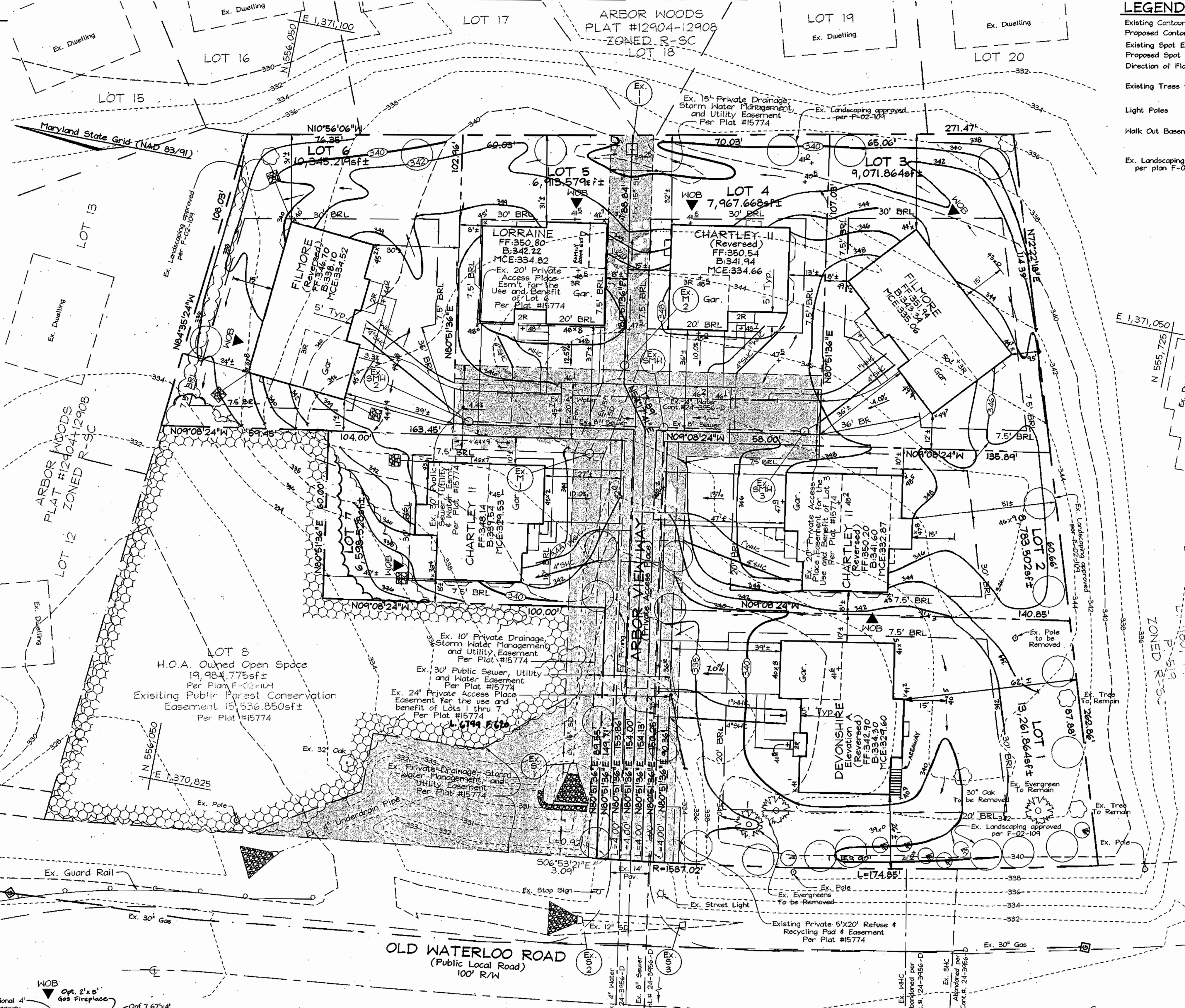
LOTS	STREET
1	8100 Arbor View Way
2	8104 Arbor View Way
3	8106 Arbor View Way
4	8112 Arbor View Way
5	8111 Arbor View Way
6	8107 Arbor View Way
7	8103 Arbor View Way

**SEWER HOUSE CONNECTION CHART**

Lot #	Inv. @ Main	Inv. @ edge of Ex. Easement Line	Inv. 5' from House	Min. Cellar El.
1	324.75	324.92	325.64	329.60
2	328.20	329.04	329.84	332.87
3	331.01	331.14	331.80	335.06
4	330.60	331.06	331.53	334.66
5	330.87	331.29	331.51	334.82
6	331.15	331.29	332.13	334.52
7	327.76	328.14	328.65	329.53

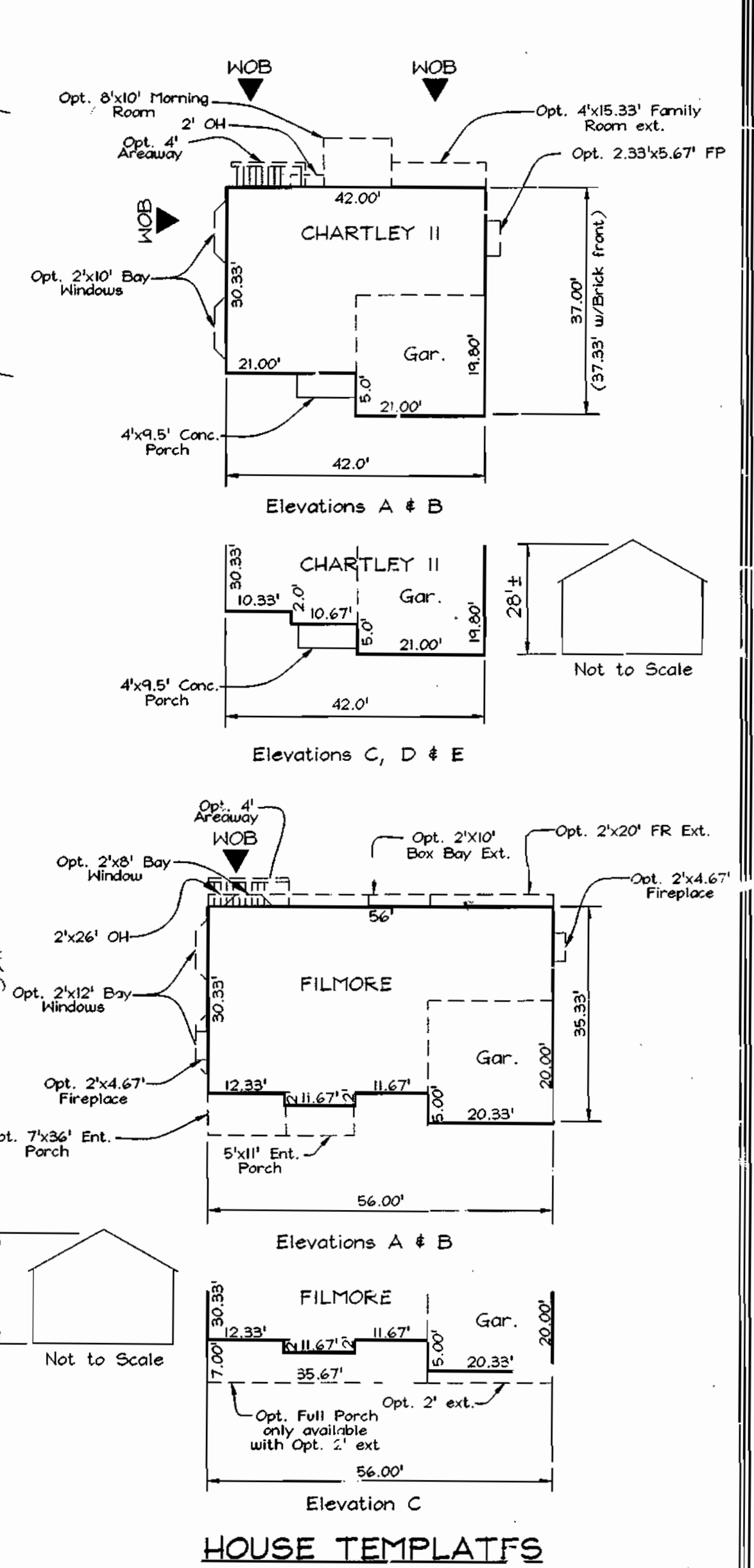
NOTE: All SHC at 2.0%  
 Invert elevations shown are located at the edge of the Ex. 30' Public Sewer, Utility and Water Easement line.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE: 5/2/03  
 CHIEF, DIVISION OF LAND DEVELOPMENT W DATE: 5/5/03  
 DIRECTOR DATE: 5/5/03



**BENCHMARKS**

Sta.	(Feet) N	(Feet) E	(Feet) Elev.
37GC	169,240.77	417,865.28	101.125
37GD	555,250.791	1,370,946.348	33.832
	168,627.0373	418,294.2157	38.6734
	553,237.204	1,372,353.605	29.923



**SITE DEVELOPMENT PLAN**  
**ARBOR OVERLOOK**  
 LOTS 1 THRU 7  
 TAX MAP 37 GRID 20  
 1ST ELECTION DISTRICT  
 PARCEL 148  
 HOWARD COUNTY, MARYLAND

**PERMIT INFORMATION CHART**

Subdivision Name	Section/Area	Lot/Parcel No.
ARBOR OVERLOOK	N/A	1-7
Plat #	Grid	Zoning
15774	20	R-5C
Tax Map No.	Elect. District	Census Tract
37	1ST	6011.02
Water Code	Sewer Code	
D05	5460000	

DESIGN BY: PS/Slm  
 DRAWN BY: Slm  
 CHECKED BY: Z.F.  
 SCALE: As Shown  
 DATE: April 22, 2003  
 H.O. No.: 3021  
 SHEET 1 OF 3

SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN
4	GRADING, SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP
5	GRADING, SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP
6	EXISTING SWM DRAINAGE AREA MAP
7	PROPOSED SWM DRAINAGE AREA MAP
8	PROFILES
9	STORMWATER MANAGEMENT DETAILS
10	STORMWATER MANAGEMENT DETAILS & PROFILES
11	SEDIMENT CONTROL NOTES
12	SEDIMENT CONTROL DETAILS
13	LANDSCAPE PLAN
14	LANDSCAPE PLAN
15	LANDSCAPE NOTES AND DETAILS
16	FOREST CONSERVATION PLAN
17	FOREST CONSERVATION PLAN
18	OFF-SITE FOREST MITIGATION PLAN

# SITE DEVELOPMENT PLAN

# BRENTWOOD MANOR EXPANSION

## SITES 1 - 43

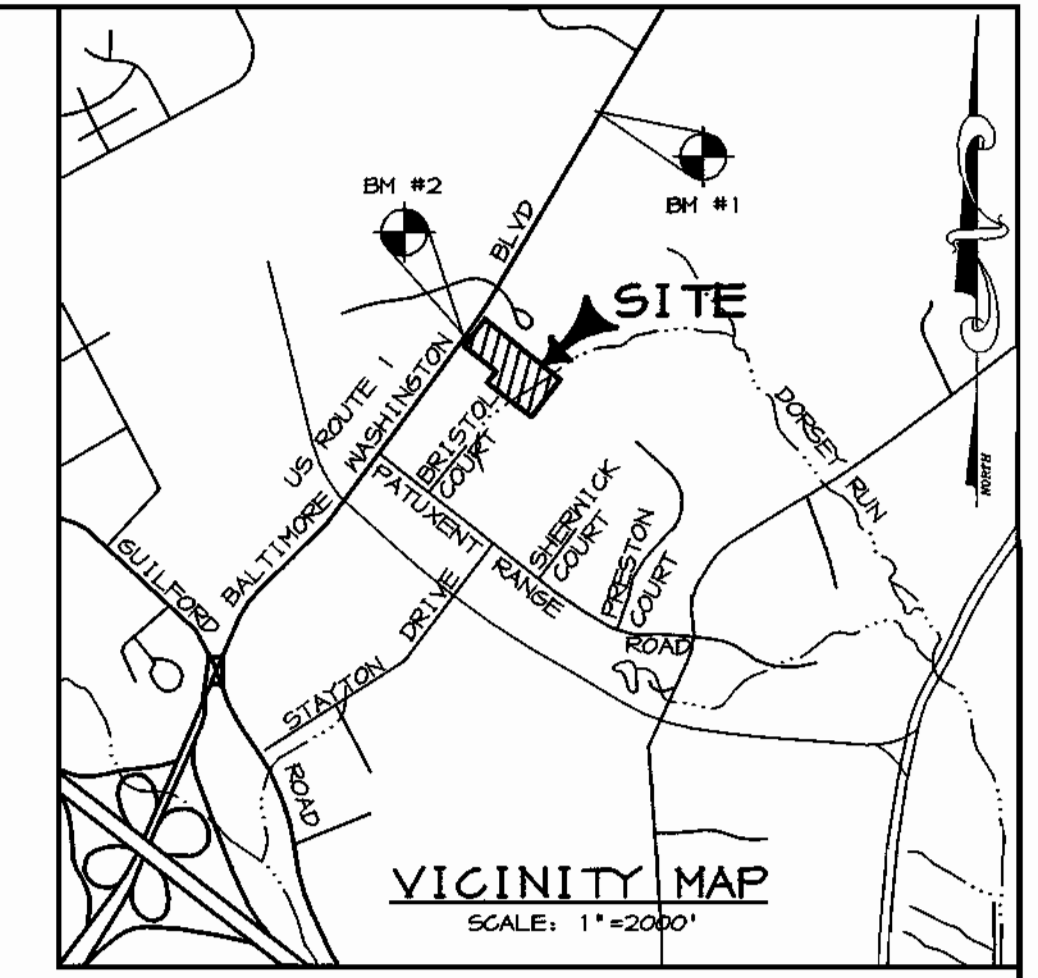
## 6TH ELECTION DISTRICT

## HOWARD COUNTY, MARYLAND

**BENCHMARKS**

**BENCHMARK #1**  
 HOWARD COUNTY SURVEY CONTROL STATION: 4866  
 N 541,117.545 E 1,370,550.825  
 ELEVATION: 220.116'  
 CONCRETE MONUMENT ON S.E. SIDE OF ROUTE 1, S.N. OF ROUTE 175.

**BENCHMARK #2**  
 HOWARD COUNTY SURVEY CONTROL STATION: 4864A  
 N 541,797.080 E 1,369,194.491  
 ELEVATION: 241.692'  
 CONCRETE MONUMENT ON N.E. SIDE OF ROUTE 1, NORTH OF BRIDGE ON ROUTE 1 OVER R.R. SPUR.



**SITE TABULATION**

**BRENTWOOD MANOR EXPANSION- PARCEL 233**

1. GROSS AREA OF TRACT	9.95
2. ZONING OF TRACT	R-MH
3. AREA OF STEEP SLOPES	0 AC
4. AREA OF FLOODPLAIN	1.16 AC
5. NET AREA	8.79 AC
6. NUMBER OF D.U. PERMITTED @ 8 D.U./NET AREA	70
7. NUMBER OF D.U. PROPOSED	43
8. DENSITY PROPOSED PER NET ACRE	4.89 D.U./NET ACRE
9. OPEN SPACE REQUIRED (25% GROSS ACRE)	2.49 AC
10. OPEN SPACE PROVIDED	53% = 5.28 AC
11. AREA OF RECREATION OPEN SPACE REQUIRED	175 SF/UNIT = 7525 SF
12. AREA OF RECREATION OPEN SPACE PROVIDED	7676 SF
13. PARKING REQUIRED	2 SP/UNIT = 86
14. PARKING PROVIDED	2 SP/UNIT = 86

**EXISTING BRENTWOOD MANOR- PARCEL A (SDP-88-195)**

1. GROSS AREA OF TRACT	43.318 AC
2. AREA OF M-2 ZONING	2.55 AC
3. AREA OF R-MH ZONING	40.77 AC
4. AREA OF FLOOD PLAIN & STEEP SLOPES	7.78 AC
5. NET AREA	32.98 AC
6. NUMBER OF D.U. PERMITTED @ 8 D.U./NET AREA	264
7. NUMBER OF D.U. PROPOSED	182
8. DENSITY PROPOSED PER NET ACRE	5.5 D.U./NET ACRE
9. OPEN SPACE REQUIRED (20% GROSS ACRE)	8.14 AC
10. OPEN SPACE PROVIDED	33.8% = 13.78 AC
11. AREA OF RECREATION OPEN SPACE REQUIRED	4.07 AC
12. AREA OF RECREATION OPEN SPACE PROVIDED	6.00 AC
13. PARKING REQUIRED	380 SP
14. PARKING PROVIDED	405 SP

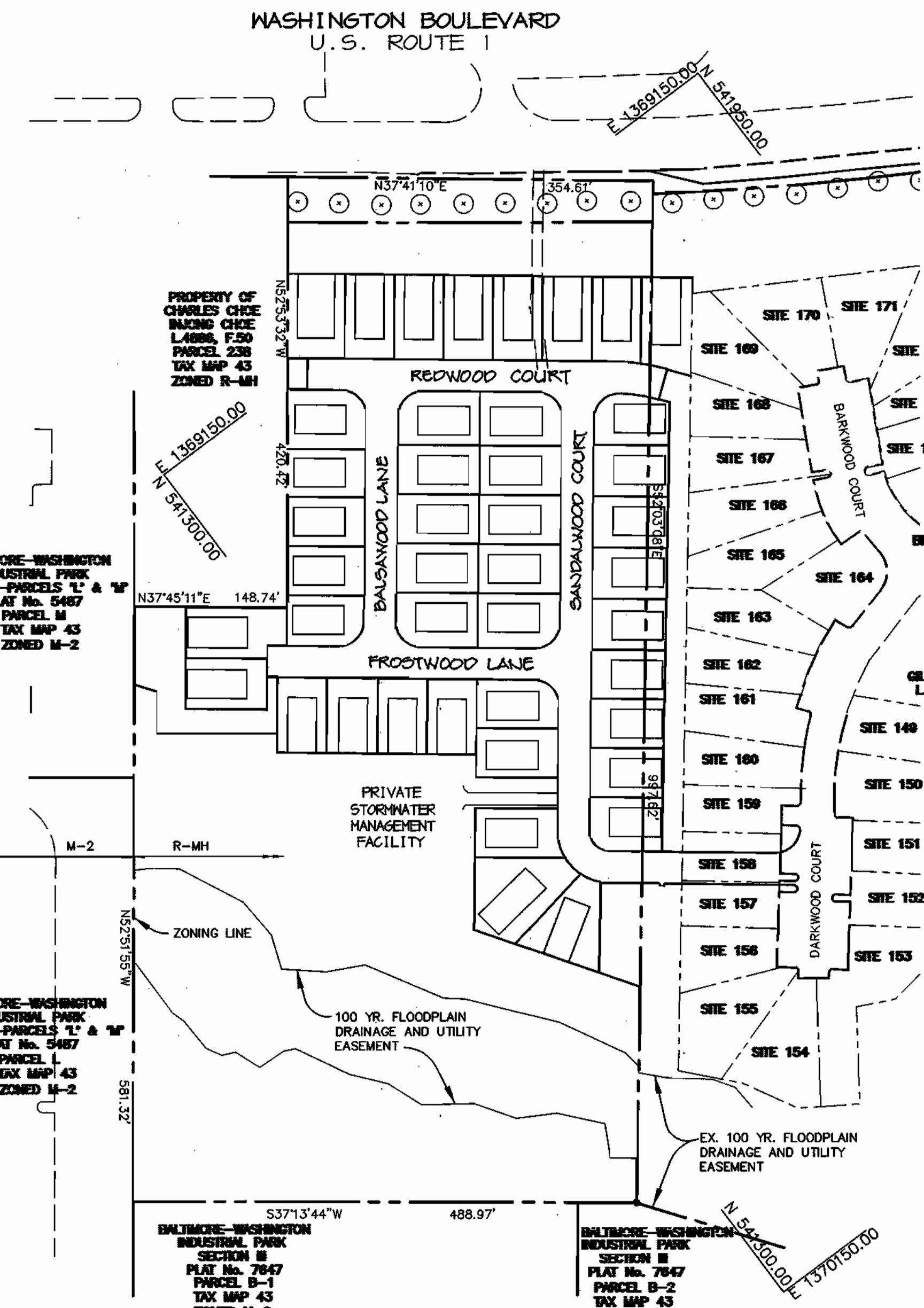
\* INCLUDES 174 MOBILE HOMES, (2) ONE BEDROOM APARTMENTS & 6 EFFICIENCIES.

**TOTALS FOR BRENTWOOD MANOR- PARCELS A & 233**

1. GROSS AREA OF TRACT (R-MH)	50.72 AC
2. AREA OF FLOOD PLAIN & STEEP SLOPES	8.94 AC
3. NET AREA	41.78 AC
4. NUMBER OF D.U. PERMITTED @ 8 D.U./NET AREA	334
5. NUMBER OF D.U. PROPOSED	225
6. DENSITY PROPOSED PER NET ACRE	5.24 D.U./NET ACRE
7. OPEN SPACE REQUIRED	10.63 AC
8. OPEN SPACE PROVIDED	19.06 AC
9. AREA OF RECREATION OPEN SPACE REQUIRED	4.24 AC
10. AREA OF RECREATION OPEN SPACE PROVIDED	6.10 AC
11. PARKING REQUIRED	456 SP
12. TOTAL PARKING PROVIDED (AFTER REMOVAL OF 9 EXISTING SPACES ON PARCEL A PER THIS PLAN)	482 SP

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS 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 BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOC., INC. DATED MARCH, 2000.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 48DB AND 43GA WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 24-3967-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: DORSEY CONTRACT NO. 24-3967-D
- THE STORMWATER MANAGEMENT QUANTITY AND WATER QUALITY PROPOSED FOR THIS SITE IS PROVIDED VIA A MICROPOOL EXTENDED DETENTION FACILITY AND A BIORETENTION AREA, RESPECTIVELY. THE FACILITIES WILL BE PRIVATELY OWNED & MAINTAINED.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- A 100-YEAR FLOODPLAIN STUDY HAS BEEN APPROVED BY HOWARD COUNTY DEVELOPMENT ENGINEERING DIVISION ON AUG. 9, 2001.
- A TRAFFIC STUDY HAS BEEN PREPARED BY THE TRAFFIC GROUP INC DATED SEPT 2000
- A NOISE STUDY HAS BEEN PREPARED BY RM A DIV. OF PHR&A DATED FEB. 2000
- A GEOTECHNICAL STUDY HAS BEEN PREPARED BY H.C.E., DATED SEPT. 29, 2000.
- THE BOUNDARY SURVEY FOR THIS PROJECT HAS BEEN PREPARED BY RIEMER MUEGGE & ASSOC., APRIL, 2000.
- SUBJECT PROPERTY ZONED R-MH PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS: SDP-88-195,F-88-242,WP-88-99, S-86-69,VP-86-126,WP-91-15,VP-87-48.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
- THE PAVEMENT DETAILS SHOWN FOR THIS SITE REFLECT THE HOWARD COUNTY STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE.
- ALL LIGHTING IS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION THRU PLACEMENT OF FOREST RETENTION EASEMENTS (1.88 AC.) LOCATED WITHIN THE PROPERTY OF GIBERT A. MOXLEY, TAX MAP 43, GRID 20, PARCEL 233, AS SHOWN ON THESE PLANS, AND VIA OFF-SITE REFORESTATION PLANTING OF 1.45 AC. LOCATED ON THE LISTON FARM PROPERTY, TAX MAP 2, GRIDS 15 AND 21, PARCEL 17, L. 5672, F. 0492 (SEE SHEET 18).
- FOR FOREST CONSERVATION EASEMENT METES & BOUNDS, SEE GRANT OF EASEMENT PLAT RECORDED IN THE LAND RECORDS OF HOWARD COUNTY AS PLAT NO. 16200-16207 FOR ON-SITE AND PLAT NO. 16200-16207 FOR OFF-SITE.
- ALLOCATIONS FOR THE 43 UNITS IN THIS DEVELOPMENT WERE REPLACEMENT MOBILE UNIT ALLOCATIONS MADE AVAILABLE IN ACCORDANCE WITH COUNCIL BILL 51-2002.



**ADDRESS CHART**

SITE NUMBER	STREET ADDRESS
1	8002 REDWOOD COURT
2	8008 REDWOOD COURT
3	8014 REDWOOD COURT
4	8020 REDWOOD COURT
5	8026 REDWOOD COURT
6	8032 REDWOOD COURT
7	8038 REDWOOD COURT
8	8044 REDWOOD COURT
9	8050 REDWOOD COURT
10	8056 REDWOOD COURT
11	8062 REDWOOD COURT
12	8068 REDWOOD COURT
13	8074 REDWOOD COURT
14	8080 REDWOOD COURT
15	8086 REDWOOD COURT
16	8092 REDWOOD COURT
17	8098 REDWOOD COURT
18	8104 REDWOOD COURT
19	8110 REDWOOD COURT
20	8116 REDWOOD COURT
21	8122 REDWOOD COURT
22	8128 REDWOOD COURT
23	8134 REDWOOD COURT
24	8140 SANDALWOOD COURT
25	8146 SANDALWOOD COURT
26	8152 SANDALWOOD COURT
27	8158 SANDALWOOD COURT
28	8164 SANDALWOOD COURT
29	8170 SANDALWOOD COURT
30	8176 SANDALWOOD COURT
31	8182 SANDALWOOD COURT
32	8188 SANDALWOOD COURT
33	8194 SANDALWOOD COURT
34	8200 SANDALWOOD COURT
35	8206 SANDALWOOD COURT
36	8212 SANDALWOOD COURT
37	8218 SANDALWOOD COURT
38	8224 SANDALWOOD COURT
39	8230 SANDALWOOD COURT
40	8236 SANDALWOOD COURT
41	8242 SANDALWOOD COURT
42	8248 SANDALWOOD COURT
43	8254 SANDALWOOD COURT

**ADDRESS CHART**

SITE NUMBER	STREET ADDRESS
24	8442 SANDALWOOD COURT
25	8408 SANDALWOOD COURT
26	8434 SANDALWOOD COURT
27	8450 SANDALWOOD COURT
28	8426 SANDALWOOD COURT
29	8432 SANDALWOOD COURT
30	8418 SANDALWOOD COURT
31	8414 SANDALWOOD COURT
32	8410 SANDALWOOD COURT
33	8406 SANDALWOOD COURT
34	8402 SANDALWOOD COURT
35	8411 SANDALWOOD COURT
36	8419 SANDALWOOD COURT
37	8410 SANDALWOOD COURT
38	8207 FORESTWOOD LANE
39	8211 FORESTWOOD LANE
40	8215 FORESTWOOD LANE
41	8219 FORESTWOOD LANE
42	8223 FORESTWOOD LANE
43	8227 FORESTWOOD LANE

**PROJECT NAME:** BRENTWOOD MANOR EXPANSION

**SECT./AREA:** -

**PARCEL:** 233

**L. 487, F. 556**    **ZONE:** R-MH    **TAX MAP NO.:** 43    **ELECT. DIST.:** 6 TH    **CENSUS TRACT:** 6069.01

**WATER CODE:** B-02    **SEWER CODE:** 3170000

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Frank M. Layton*    1/11/03  
 DIRECTOR    DATE

*Chris Hamstra*    1/16/03  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION    DATE

*Chris Hamstra*    1/16/03  
 CHIEF, DIVISION OF LAND DEVELOPMENT    DATE

DATE	NO.	REVISION

**OWNER/DEVELOPER**

BRENTWOOD MANOR MOBILE HOME PARK  
 8241 WASHINGTON BOULEVARD  
 JESSUP, MARYLAND 20794  
 301-953-2344

**PROJECT**

**BRENTWOOD MANOR EXPANSION**

**AREA**

6th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PARCEL 233, TAX MAP 43, GRID 20  
 ZONED R-MH

**TITLE**

**TITLE SHEET**

**Patton Harris Rust & Associates, pc**  
 Engineers, Surveyors, Planners, Landscape Architects.  
 8818 Centre Park Drive  
 Columbia, MD 21045  
 T 410.997.8900  
 F 410.997.9282

7.28.03  
 DATE

DESIGNED BY : CJR

DRAWN BY: DAM

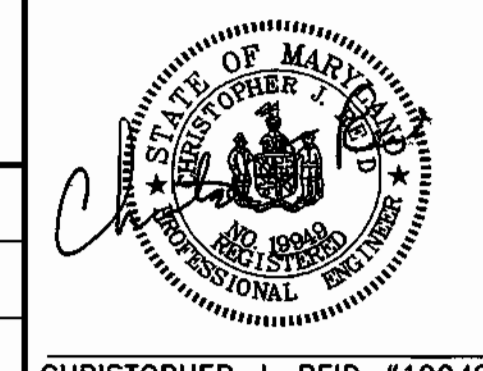
PROJECT NO : 00082/  
 SDP1.DWG

DATE : JULY 23, 2003

SCALE : AS SHOWN






DRAWING NO. 1 OF 18

CHRISTOPHER J. REID #19948



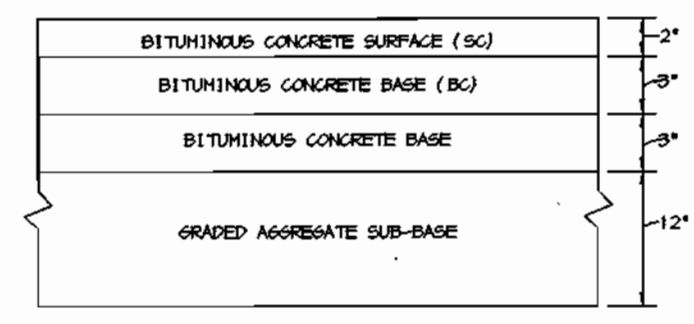
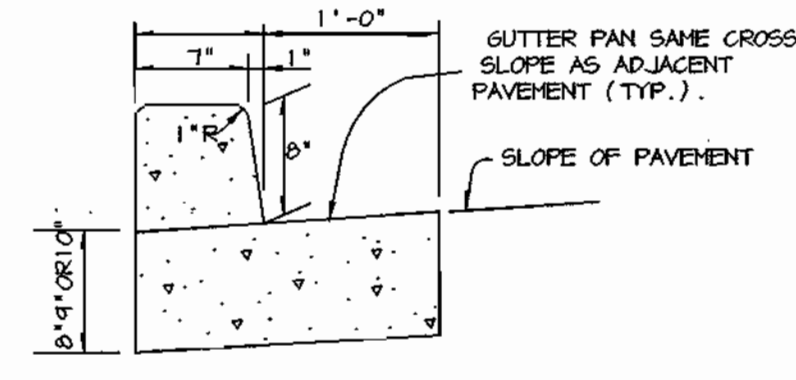


**NOTES:**

1. ALL RADII ARE 5' UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE NOTED.
3. ALL LIGHTS TO BE DIRECTED/ REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIAL PROPERTIES.
4. ALL ON-SITE ROADS ARE PRIVATE.
5. STD\*REV - STANDARD TO REVERSE CURB TRANSITION.
6.  S.C.E.
7.  M.S.H.A. PAVING
8.  P-2 PAVING (HO.CO. DETAIL R-2.01)
9.  CONCRETE SIDEWALK (HO.CO. DETAIL R-3.05)
10.  LIGHTS

**LEGEND**

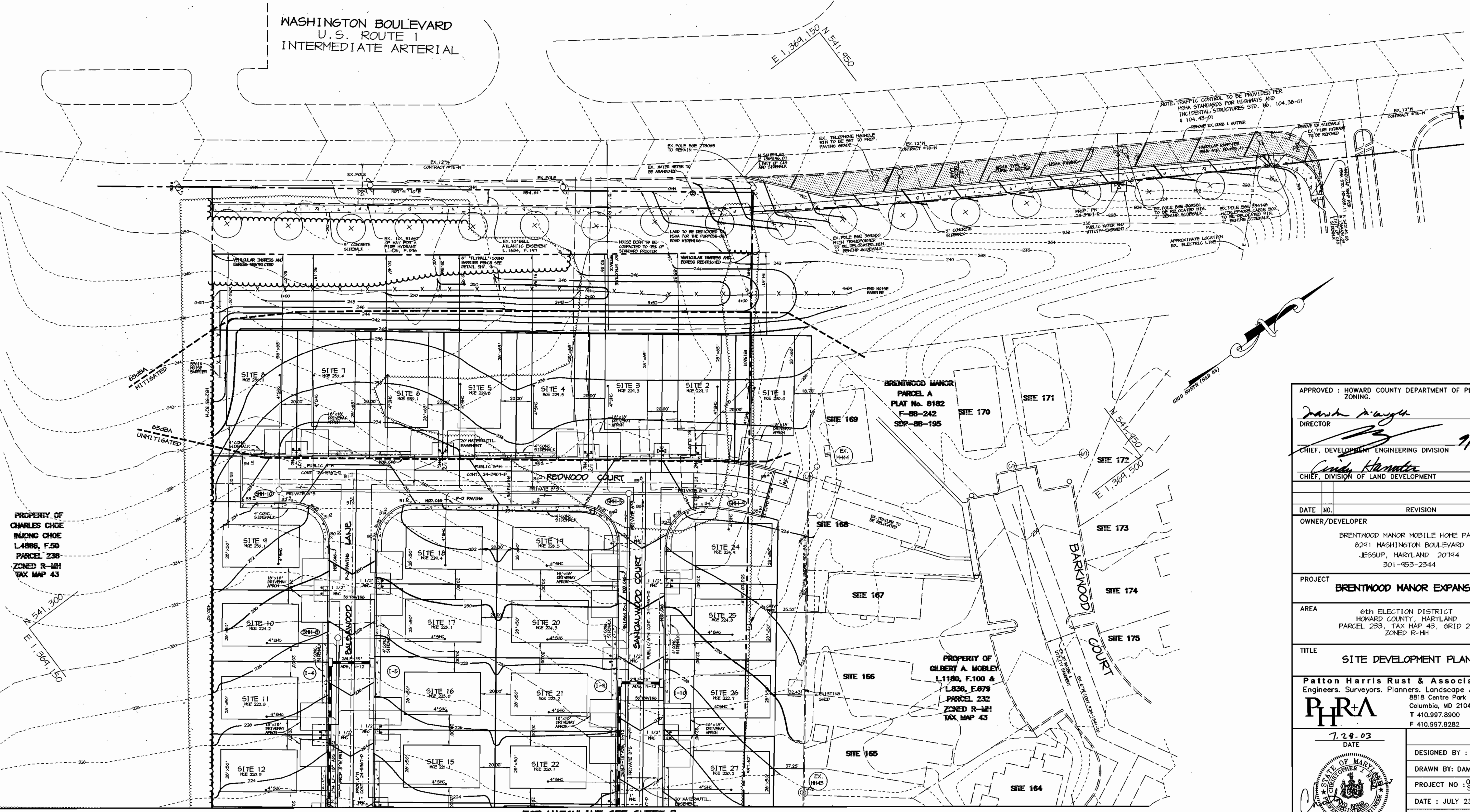
- 450 — EXISTING 10' CONTOURS
- 448 — EXISTING 2' CONTOURS
- 450 — PROPOSED 10' CONTOURS
- 448 — PROPOSED 2' CONTOURS
- — PROPOSED CURB & GUTTER
- — PROPOSED STORM DRAIN
- — EXISTING TREELINE
- — PROPOSED TREELINE



**STREET TREES**

SYMBOL	QTY	NAME	SIZE
	18	Platanus x acerfolia London Planetree	2.5 - 3" cal.

WASHINGTON BOULEVARD  
U.S. ROUTE 1  
INTERMEDIATE ARTERIAL



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Dan A. Wright* 11/11/03  
DIRECTOR DATE

*[Signature]* 1/27/03  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Cindy Hammett* 11/6/03  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO.	REVISION

OWNER/DEVELOPER  
BRETHOOD MANOR MOBILE HOME PARK  
8241 WASHINGTON BOULEVARD  
JESSUP, MARYLAND 20794  
301-453-2344

PROJECT  
**BRETHOOD MANOR EXPANSION**

AREA  
6th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
PARCEL 233, TAX MAP 43, GRID 20  
ZONED R-MH

TITLE  
**SITE DEVELOPMENT PLAN**

Patton Harris Rust & Associates, pc  
Engineers, Surveyors, Planners, Landscape Architects.  
8818 Centre Park Drive  
Columbia, MD 21045  
T 410.997.8900  
F 410.997.9282

**PHRA**

7.23.03  
DATE

DESIGNED BY: CJR  
DRAWN BY: DAM A.L.B.  
PROJECT NO: 00082/  
SDP2.DWG  
DATE: JULY 23, 2003  
SCALE: 1" = 30'  
DRAWING NO. 2 OF 18

CHRISTOPHER J. REID #19949

FOR MATCHLINE SEE SHEET 2



**NOTES:**

- ALL RADI ARE 5' UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE NOTED.
- ALL LIGHTS TO BE DIRECTED/ REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIAL PROPERTIES.
- ALL ON-SITE ROADS ARE PRIVATE.
- \* STD/REV - STANDARD TO REVERSE CURB TRANSITION.
- P-2 PAVING (HO.CO. DETAIL R-2.01)
- CONCRETE SIDEWALK (HO.CO. DETAIL R-3.05)
- NATURAL CREDIT AREA
- LIGHTS

**LEGEND**

- 450 --- EXISTING 10' CONTOURS
- 448 --- EXISTING 2' CONTOURS
- 450 --- PROPOSED 10' CONTOURS
- 448 --- PROPOSED 2' CONTOURS
- --- PROPOSED CURB & GUTTER
- --- PROPOSED STORM DRAIN
- --- EXISTING TREELINE
- --- PROPOSED TREELINE

SNMF #1			
SUMMARY CHART DA TO DESIGN POINT			
STORM	1 YR.	10 YR.	100 YR.
EXISTING DISCHARGE (CF)	3	12	24
PROPOSED DISCHARGE (CF)	0.33	31.07	46.20
ELEVATION (FEET)	213.92	214.43*	214.66*
STORAGE (ACRE-Feet)	0.62	0.75	0.81

SNMF #1 SUMMARY CHART	
DRAINAGE AREA	7.6 AC.
REV. REQUIRED	4816 CF
REV. PROVIDED	4460 CF
MG. REQUIRED	16593 CF
MG. PROVIDED	16593 CF
CPV. REQUIRED	26572 CF
CPV. PROVIDED	27004 CF

\* CLOSED CONDITIONS  
 FACILITY CONSISTS OF A BIORETENTION AREA TO PROVIDE REV. THE BIORETENTION AREA OVERFLOW IS DIRECTLY INTO MAIN MICROPOOL EXTENDED DETENTION POND. HWY AND CRV ARE PROVIDED VIA SEPARATE EXTENDED DETENTION ORIFICES.  $Q_p$  AND  $Q_c$  ARE NOT REQUIRED IN THIS FACILITY. THE NATURAL AREA CREDIT WAS TAKEN TO REDUCE HWY. THE TOTAL CREDIT ACREAGE IS 2.9 AC.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
 Director: *David A. ...* DATE: 7/23/03  
 Chief, Development Engineering Division: *...* DATE: 7/23/03  
 Chief, Division of Land Development: *...* DATE: 7/23/03

DATE NO.	REVISION

OWNER/DEVELOPER  
 BRENTWOOD MANOR MOBILE HOME PARK  
 8241 WASHINGTON BOULEVARD  
 JESSUP, MARYLAND 20794  
 301-453-2344

PROJECT  
 BRENTWOOD MANOR EXPANSION

AREA  
 6th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 PARCEL 233, TAX MAP 43, GRID 20  
 ZONED R-MH

TITLE  
 SITE DEVELOPMENT PLAN

Patton Harris Rust & Associates, pc  
 Engineers, Surveyors, Planners, Landscape Architects.  
 8818 Centre Park Drive  
 Columbia, MD 21045  
 T 410.997.8900  
 F 410.997.9282

7.23.03  
 DATE

DESIGNED BY: CJR  
 DRAWN BY: DAM  
 PROJECT NO: 00082/  
 SDP3.DWG  
 DATE: JULY 23, 2003  
 SCALE: 1" = 30'  
 DRAWING NO. 3 OF 18

CHRISTOPHER J. REID #19949

BALTIMORE-WASHINGTON INDUSTRIAL PARK BLOCK 5 PARCELS 1' & 2' PLAT No. 5487 ZONED M-2 TAX MAP 43

BALTIMORE-WASHINGTON INDUSTRIAL PARK BLOCK 5 PARCELS 1' & 2' PLAT No. 5487 ZONED M-2 TAX MAP 43

BALTIMORE-WASHINGTON INDUSTRIAL PARK SECTION III PLAT No. 7647 PARCEL B-1 ZONED M-2 TAX MAP 43

BALTIMORE-WASHINGTON INDUSTRIAL PARK SECTION III PLAT No. 7647 PARCEL B-2 ZONED M-2 TAX MAP 43

**LEGEND**

- LIMIT OF DISTURBANCE
- EARTH DIKE
- SUPER SILT FENCE
- SILT FENCE
- SOILS DIVIDE
- INLET DRAINAGE AREA DIVIDE
- STABILIZED CONSTRUCTION ENTRANCE
- RIPRAP INFLOW PROTECTION
- REMOVABLE PUMPING STATION
- SPOT ELEVATIONS ALONG EARTH DIKES

**SOIL CHART**

SYMBOL	DESCRIPTION
CIC3	CHILLUM GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, SEVERELY ERODED
EXC	EVESBORO LOAMY SAND, 5 TO 15 PERCENT SLOPES
Fa	FALLSINGTON LOAM
IuB	IUKA LOAM, LOCAL ALLUVIUM, 1 TO 5 PERCENT SLOPES
SB2	SASSAFRAS GRAVELLY SANDY LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
SIC2	SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
SD2	SASSAFRAS GRAVELLY SANDY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED
WOB2	WOODSTOWN SANDY LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED

**DRAINAGE DATA**

INLET NOS.	AREA IN ACRES	C FACTOR	PERCENT IMPERVIOUS
*2	0	N/A	N/A
3	1.27	0.50	47
4	0.82	0.41	32
5	0.50	0.59	56
6	0.57	0.61	63
7	0.53	0.57	57
8	0.66	0.43	30
9	0.67	0.57	54
10	0.20	0.66	70
EX IT-4	0.63	0.51	48

\*DRAINAGE AREA TO 1-2 IS INSIGNIFICANT (INCLUDED IN 1-3)

BY THE ENGINEER :  
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*Christopher J. Reid*  
ENGINEER

7-28-03  
DATE

BY THE DEVELOPER :  
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

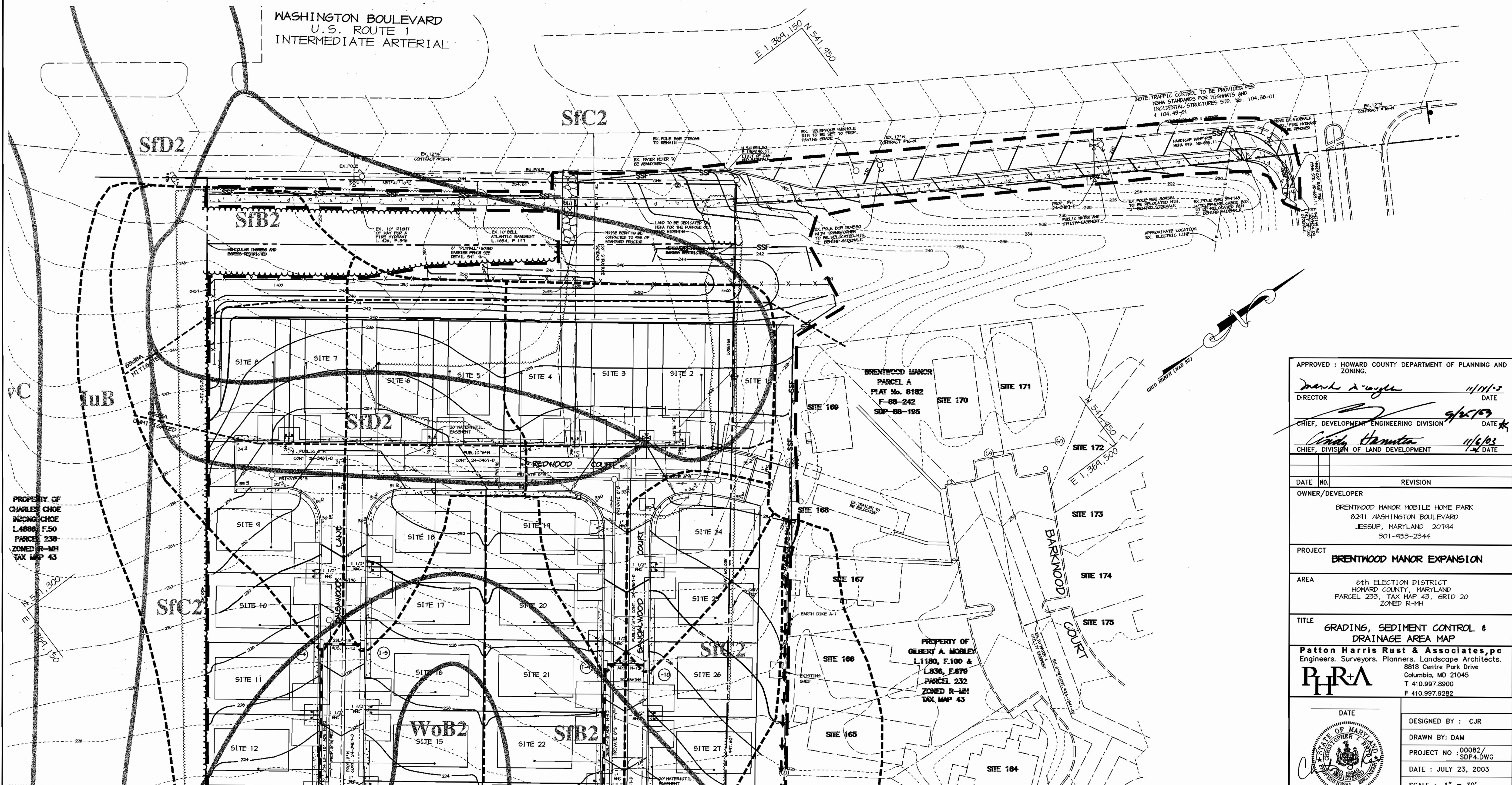
*John M. [Signature]*  
DEVELOPER

7-28-03  
DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*John M. [Signature]* 11/3/03  
NATURAL RESOURCES/CONSERVATION SERVICE DATE

*Christopher J. Reid* 11/3/03  
HOWARD SOIL CONSERVATION DISTRICT DATE



PROPERTY OF CHARLES CHOE INJONG CHOE L4006 F.50 PARCEL 238 ZONED R-MH TAX MAP 43

BRENTWOOD MANOR PARCEL A PLAT No. 8182 F-88-242 SDP-88-195

PROPERTY OF GILBERT A. MOBLEY L1180, F.100 & L836, F.679 PARCEL 232 ZONED R-MH TAX MAP 43

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Mark A. [Signature]* 11/11/03  
DIRECTOR DATE  
*Chris [Signature]* 9/25/03  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Chris [Signature]* 11/6/03  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO. REVISION  
OWNER/DEVELOPER  
BRENTWOOD MANOR MOBILE HOME PARK  
8291 WASHINGTON BOULEVARD  
JESSUP, MARYLAND 20714  
301-453-2344

PROJECT  
BRENTWOOD MANOR EXPANSION  
AREA  
6th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
PARCEL 233, TAX MAP 43, GRID 20  
ZONED R-MH

TITLE  
GRADING, SEDIMENT CONTROL & DRAINAGE AREA MAP  
Patton Harris Rust & Associates, pc  
Engineers, Surveyors, Planners, Landscape Architects.  
8818 Centre Park Drive  
Columbia, MD 21045  
T 410.997.8900  
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DESIGNED BY : CJR  
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PROJECT NO : 00082/SDP4.DWG  
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DRAWING NO. 4 OF 18

FOR MATCHLINE SEE SHEET 5