

SHEET INDEX

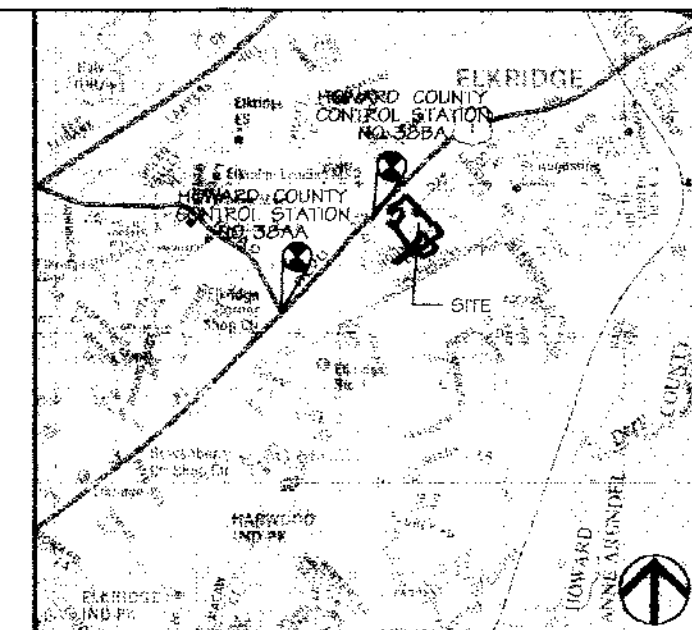
SHEET	DESCRIPTION
1	COVER SHEET
2	HOUSE TYPE PLAN
3	SITE PLAN
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5	SEDIMENT & EROSION CONTROL PLAN
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SITE DEVELOPMENT PLAN

BONNIE RIDGE

LOTS 1 THROUGH 9

HOWARD COUNTY, MARYLAND



VICINITY MAP

SCALE: 1"=2000'
 ADG PERMITTED USE # 210296626
BENCHMARK

DESCRIPTION

COORDINATES IN MARYLAND (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.
 HOWARD COUNTY MONUMENT #38AA
 NORTHING: 56155.817
 EASTING: 1309726.33
 ELEVATION: 220.770
 STANDARD STAMPED BRASS OR ALUMINUM DISC ON CONCRETE MONUMENT 0.2' BELOW SURFACE LOCATED E. CORNER OF INTERSECTION OF BALTIMORE WASHINGTON BLVD. AND MONTGOMERY RD. 5' FROM SIDE POLE #234790
 HOWARD COUNTY MONUMENT #38 BA
 NORTHING: 56253.354
 EASTING: 1309367.86
 ELEVATION: 166.544
 STANDARD STAMPED BRASS OR ALUMINUM DISC ON CONCRETE MONUMENT 0.2' BELOW SURFACE LOCATED 9.5' FROM THE SOUTHWEST CORNERLINE OF BALTIMORE WASHINGTON BLVD. (RTE. 1) 100' NORTH OF BONNIE VIEW LANE.

ADDRESS CHART

LOT NO.	STREET ADDRESS
1	6154 HOOKS LANE
2	6103 CLAIRE DRIVE
3	6099 CLAIRE DRIVE
4	6095 CLAIRE DRIVE
5	6091 CLAIRE DRIVE
6	6087 CLAIRE DRIVE
7	6083 CLAIRE DRIVE
8	6086 CLAIRE DRIVE
9	6090 CLAIRE DRIVE

SITE ANALYSIS DATA CHART

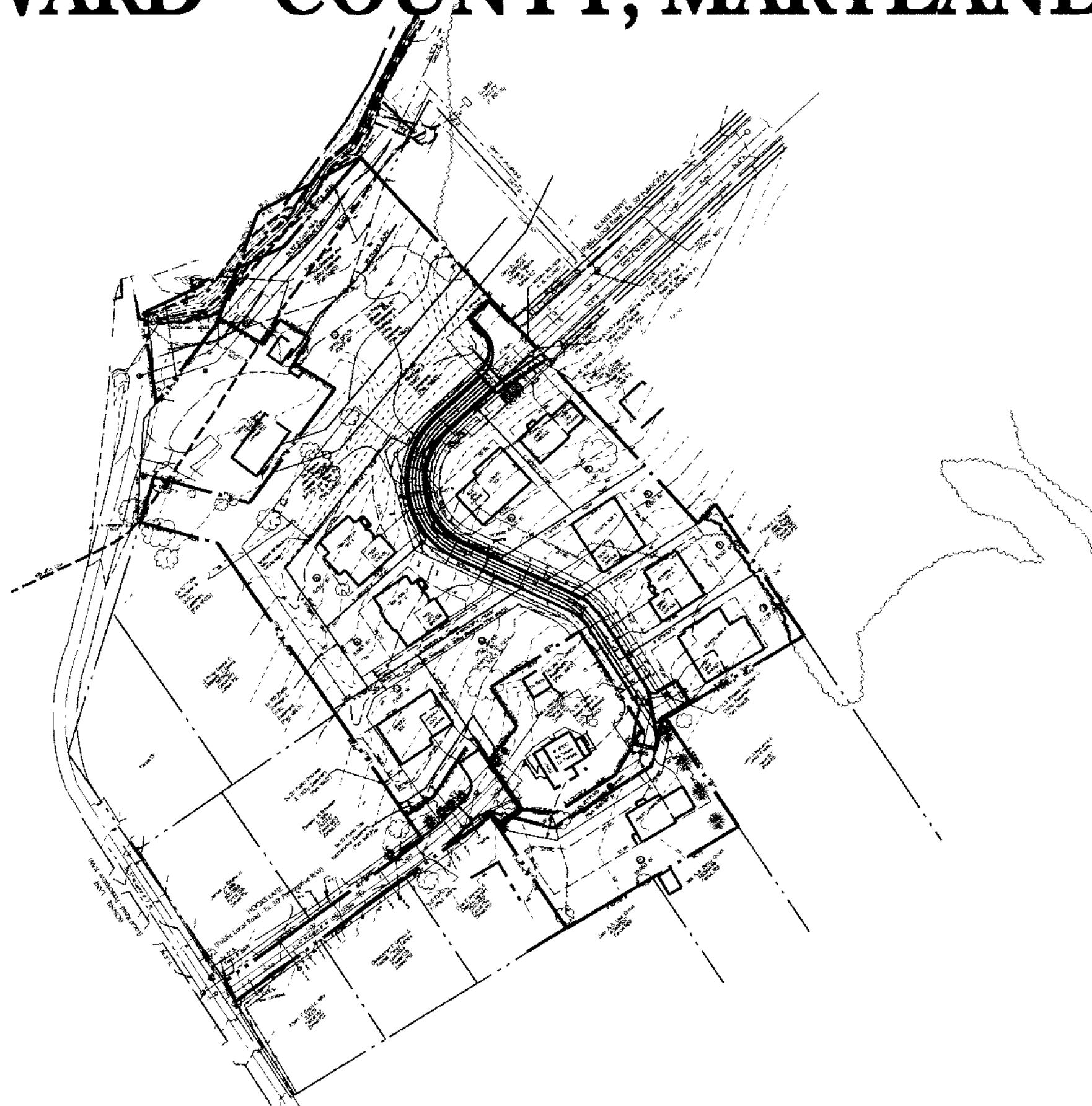
- GENERAL SITE DATA
 - A. PRESENT ZONING: R-12
 - B. APPLICABLE DPZ FILE REFERENCES: S 99-11, P 01-11, F 02-31, WP 03-49, F 04-011, F 03-109, PLAT 16614, WS CONTRACT #14-4008-D
 - C. PROPOSED USE OF SITE OR STRUCTURE(S): 9 SINGLE FAMILY DETACHED RESIDENCES
 - D. PROPOSED WATER AND SEWER SYSTEMS ARE: PUBLIC
 - E. ANY OTHER INFORMATION WHICH MAY BE RELEVANT: N/A
- AREA TABULATION
 - A. TOTAL PROJECT AREA: 3.43 ACRES
 - B. AREA OF THIS PLAN SUBMISSION: 2.12 ACRES
 - C. LIMIT OF DISTURBED AREA: 1.86 ACRES
 - D. BUILDING COVERAGE OF SITE: N/A AC AND N/A % OF GROSS AREA PROPOSED

GENERAL NOTES

- 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.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH 2 FOOT CONTOUR INTERVALS, PREPARED BY LDE, INC. ON AUGUST 2000 AND SUPPLEMENTED WITH GRADING FROM FINAL PLAN, F-03-109. TOPOGRAPHY ADJACENT TO SITE IS TAKEN FROM HOWARD COUNTY GIS DATED 1998.
- 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 38 AA AND 38 BA WERE USED FOR THIS PROJECT.
- THE PROPERTY HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY LDE, INC. DATED JANUARY 1999. BOUNDARY AND PLANIMETRIC INFORMATION ADJACENT TO THE SITE IS TAKEN FROM HOWARD COUNTY GIS DATED 2002.
- STORMWATER MANAGEMENT IS PROVIDED BY PER F-03-109 VIA A SAND FILTER POND WHICH SHALL BE OWNED AND MAINTAINED BY THE HOA.
- EXISTING UTILITIES ARE BASED ON CONTRACT NO. 14-4008-D.
- ALL EASEMENTS SHOWN ARE RECORDED ON PLAT NUMBER 16613.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDER'S EXPENSE.
- SIC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS, REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-606.
- A. THE SUBJECT PROPERTY IS ZONED R-12 PER THE FEB 2, 2004 COMPREHENSIVE ZONING PLAN. B. 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. C. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS. D. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE);
 SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH AR AND CHIP COATING (1-1/2" MIN.);
 GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;
 DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE;
 MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
 E. THE dBA NOISE CONTOUR LINE SHOWN ON THIS PLAN IS TAKEN FROM F 03-109.
- THIS PROJECT COMPLIES WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION UNDER F-03-109. F-04-011, OFF SITE: REFORESTATION OF 1.64 ACRES WAS ESTABLISHED ON LOT 5 OF THE CHASE FARM.
- THIS PROJECT COMPLIES WITH SECTION 16.124 OF THE HOWARD COUNTY CODE FOR LANDSCAPE REQUIREMENTS. THE SURETY FOR THE REQUIRED LANDSCAPING FOR THIS PROJECT OF \$10,990.00 WAS POSTED WITH THE DPW DEVELOPERS AGREEMENT PER F-03-190.
- THERE ARE NO KNOWN CEMETERIES ON SITE.
- THERE ARE NO EXISTING CONTIGUOUS SLOPES 15% OR GREATER WHICH ARE GREATER THAN 20,000 SQUARE FEET WITHIN THE BOUNDARIES OF THIS SITE.
- BUILDING PERMITS ARE SUBJECT TO AN AIRPORT ZONING PERMIT FROM THE MD AVIATION ADMINISTRATION.
- THIS PLAN IS SUBJECT TO WAIVER PETITION WP-03-49, OF DEC. 17, 2002 WHICH WAIVES THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, TO WAIVE SECTION 16.144(A) TO NOT BE REQUIRED TO SUBMIT A SKETCH PLAN OR A PRELIMINARY EQUIVALENT SKETCH PLAN FOR A MAJOR SUBDIVISION AND SECTION 16.121(E)(1) TO PERMIT THE REQUIRED OPEN SPACE LOT PUBLIC ROAD FRONTAGE OF 40 FEET TO BE REDUCED BY APPROXIMATELY 23 FEET ON HOOKS LANE AND 3 FEET ON CLAIRE DRIVE FOR PROPOSED OPEN SPACE LOT 10.

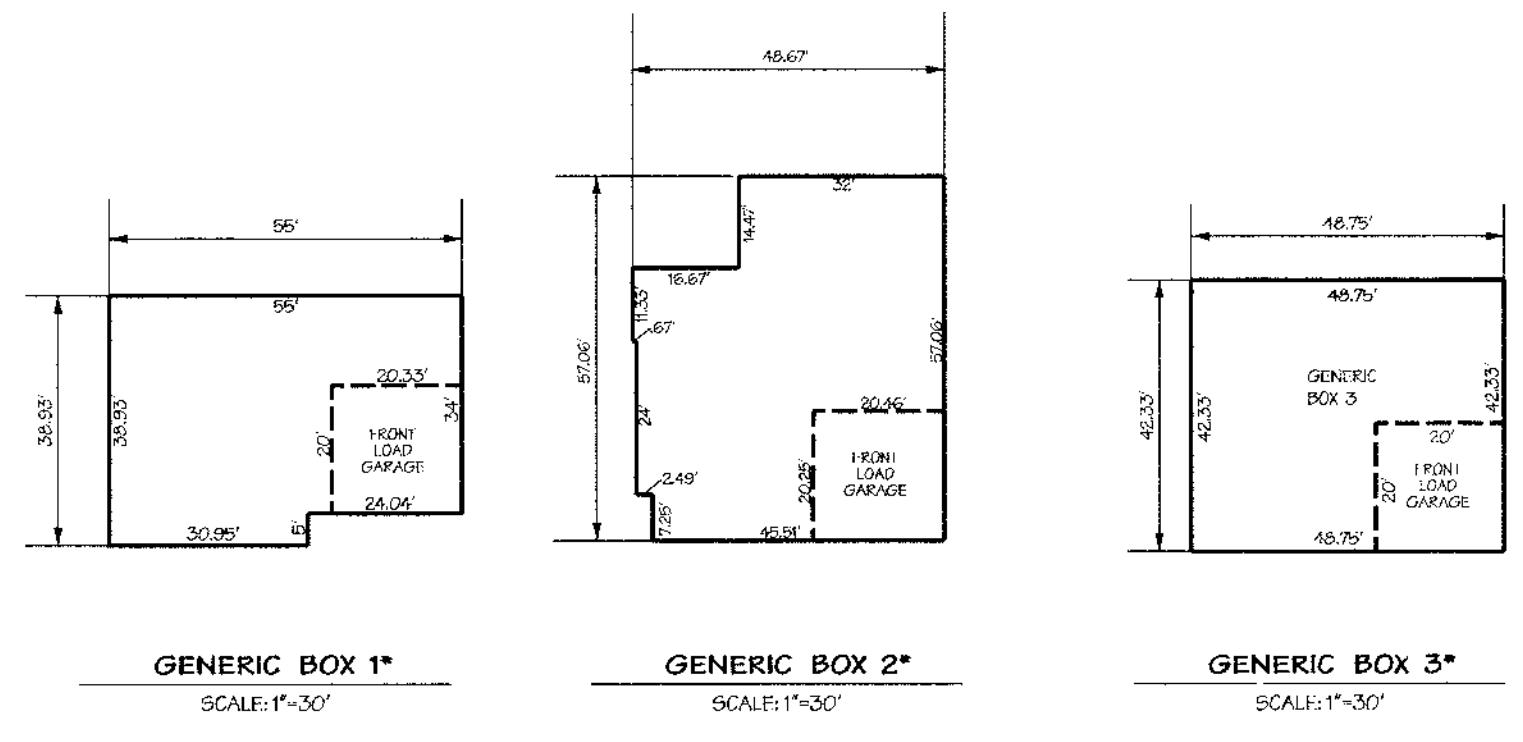
19. A 4'X10' CONCRETE PAD (4" IN DEPTH) WITHIN THE PUBLIC RIGHT OF WAY WILL BE MAINTAINED BY THE OWNERS OF LOTS 2-9 PURSUANT TO THE DECLARATION OF RIGHTS OF ACCESS & MAINTENANCE OBLIGATIONS RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MD.

20. A SIGHT DISTANCE WAIVER TO THE HOWARD COUNTY DESIGN MANUAL VOL. III (2.3.1B.1- STOPPING SIGHT DISTANCE) WAS APPROVED BY THE DEVELOPMENT ENGINEERING DIVISION ON 7/21/99.



LOCATION MAP

SCALE: 1"=100'



GENERIC BOX 1*
SCALE: 1"=30'

GENERIC BOX 2*
SCALE: 1"=30'

GENERIC BOX 3*
SCALE: 1"=30'

HOUSE TYPES (SEE SHEET 2)
 DELAWARE (REVERSE-NO SUNROOMS)
 CHARLES WILLIAMS (NO SUNROOMS)
 OR 3 CAR SIDE ENTRY GARAGE
 ABBOTT LAWRENCE

HOUSE TYPES (SEE SHEET 2)
 OXFORD
 CAMBRIDGE
 JEFFERSON II
 JEFFERSON II OPT A

HOUSE TYPES (SEE SHEET 2)
 OXFORD (NO REAR ROOMS)
 CAMBRIDGE
 JEFFERSON II (NO REAR ROOMS)
 JEFFERSON II OPT A

* NO 3 CAR SIDE ENTRY GARAGES FOR ANY HOUSE TYPES UNDER THESE GENERIC BOXES

SEWER HOUSE CONNECTION TABLE

LOT	INV. AT MAIN	INV. AT #	MIN. C*
1	191.60	192.01	195.5
2	191.17	192.17	196.0
3	190.41	190.85	194.0
4	185.57	186.01	190.0
5	179.99	180.45	184.0
6	167.29	167.82	172.0
7	166.59	167.09	171.0
8	166.05	166.29	173.0
9	172.75	172.91	177.0

NOTE: Lot 1 comes off existing main in Hooks Lane.
 * MIN. C is minimum floor elevation of unit that can be served by proposed sanitary connection.

DATA SOURCES:

- EXISTING TOPO INFORMATION SHOWN IS FROM FIELD RUN BY LDE INC. DATED AUGUST 2000.
- SURROUNDING SITE TOPOGRAPHIC INFORMATION TAKEN FROM HOWARD COUNTY GIS (NAD 83) DATED MARCH 1998.
- BOUNDARY LIMITS SHOWN FROM LOT SURVEY DATED JANUARY 1999.
- SURROUNDING SITE BOUNDARY AND PLANIMETRIC INFORMATION DATED 2002.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 3/15/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION jmo DATE
[Signature] 3/15/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 3/15/05
 DIRECTOR DATE

Revision Description
 Date No.
BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38, PARCEL 881
 HOWARD COUNTY, MARYLAND
 OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9017 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21046
 410-715-4500

DMW
 Dan McCune-Walker, Inc.
 300 East Pennsylvania Avenue
 Potosi, Maryland 21086
 (410) 296-3333
 Fax 296-4705
 A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

SUBDIVISION NAME	BONNIE RIDGE	SECTION AREA	0.881
PLAT # OR LOT #	16613	BLK #	3
LOT #	3	ZONE	R-12
WATER CODE	A 01	SEWER CODE	2022416
TITLE	COVER SHEET GENERIC SITE DEVELOPMENT PLAN		

Des. By CRH Scale 1"=100' Proj. No. 04033
 Dim. By CRH Date 01-18-05
 Chk. By MJP Approved
 1 of 7

2-21-05
 Date
 Professional Engr. No. 14557

MATERIALS SPECIFICATIONS

TABLE 26 STONE SIZE

Number	Size Range	D ₅₀	D ₁₀₀	AASHTO	Weight
Number 57 *	3/8" - 1 1/2"	1/2"	1 1/2"	M-43	N/A
Number 1	2" - 3"	2 1/2"	3"	M-43	N/A
Rip-Rap **	4" - 7"	5 1/2"	7"	N/A	N/A
Class I	N/A	9.5"	15"	N/A	150 Lb. max.
Class II	N/A	16"	24"	N/A	700 Lb. max.
Class III	N/A	23"	34"	N/A	2000 Lb. max.

* This classification is to be used on the inside face of stone outlets and check dams.
 ** This classification is to be used when ever small rip-rap is required. The State Highway Administration designation for this stone is stone for gabions (905.01.04).

STONE FOR GABION BASKETS

Basket Thickness	Size of Individual Stones		
inches	MM	inches	MM
6	150	3 - 5	75 - 125
9	225	4 - 7	100 - 175
12	300	4 - 7	100 - 175
18	460	4 - 7	100 - 175
36	910	4 - 12	100 - 300

Note: Recycled concrete equivalent may be substituted for all stone classifications. Recycled concrete equivalent shall be concrete broken into the sizes meeting the appropriate classification, shall contain no steel reinforcement, and shall have a density of 150 pounds per cubic foot.

TABLE 27 GEOTEXTILE FABRICS

Class	Apparent Opening Size MM. Max.	Grab Tensile Strength Lb. Min.	Burst Strength PSL Min.
A	0.30 **	250	500
B	0.60	200	320
C	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F (silt fence)	0.40-0.80 *	90	190

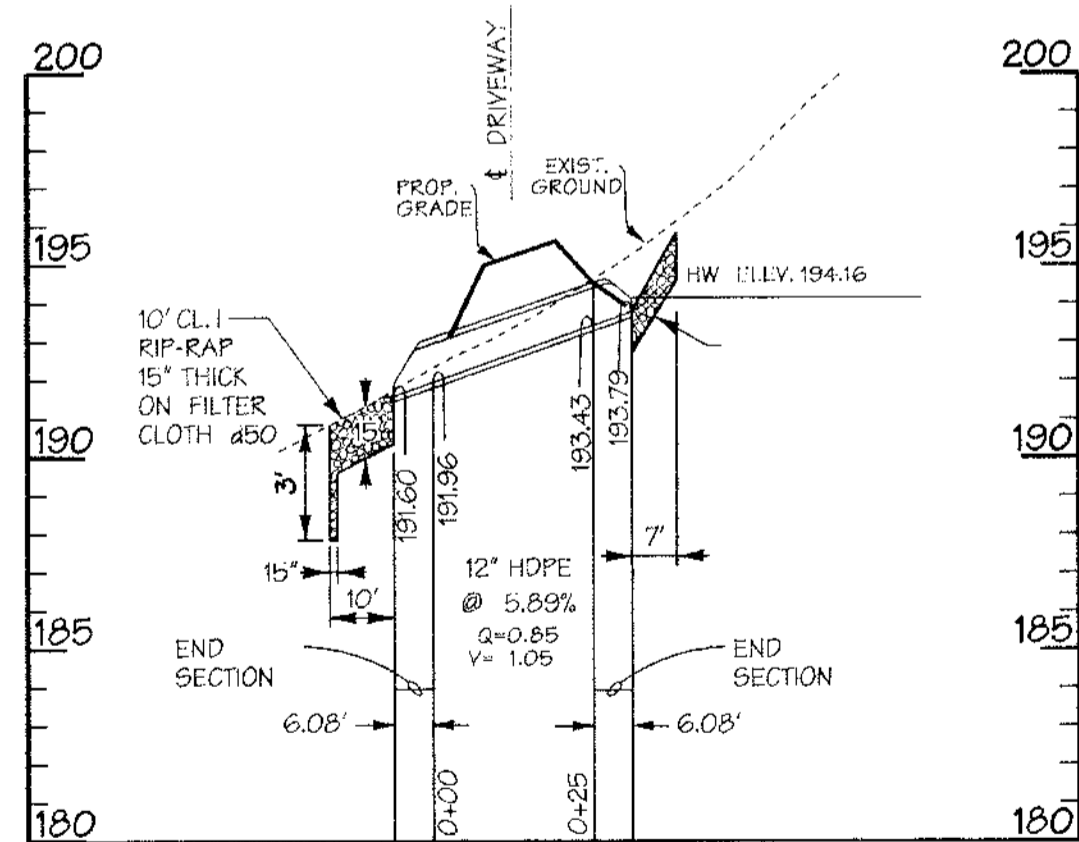
* US Standard sieve CW-02215 ** .50 MM max. for super silt fence

The properties shall be determined in accordance with the following procedures:
 Apparent opening size mms 323
 - Grab tensile strength ASTM D 1682: 4 x 8" specimen, 1 x 2" clamps, 12" min. strain rate in both principal directions of geotextile fabric.
 - Burst strength: ASTM D 3786.

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of polyolefins, polyesters, or polyamides. The geotextile fabric shall resist deterioration from ultraviolet exposure.

In addition, classes A through E shall have a 0.01 cm/sec. minimum permeability when tested in accordance with mms 507, and an apparent minimum elongation of 20 percent (20%) when tested in accordance with the grab tensile strength requirements listed above.

Silt fence
 Class F geotextile fabric for silt fence shall have a 50 lb./in. minimum tensile strength and a 20 lb./in. minimum tensile modulus when tested in accordance with mms 509. The material shall also have a 0.3 gal./ft./min. flow rate and seventy-five percent (75%) minimum filtering efficiency when tested in accordance with mms 322. Geotextile fabrics used in the construction of silt fence shall resist deterioration from ultraviolet exposure. The fabric shall contain sufficient amount of ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable construction life at a temperature range of 0 to 120 degrees Fahrenheit.



LOT 4
 SCALE: HORIZ. 1" = 30'
 VERT. 1" = 5'

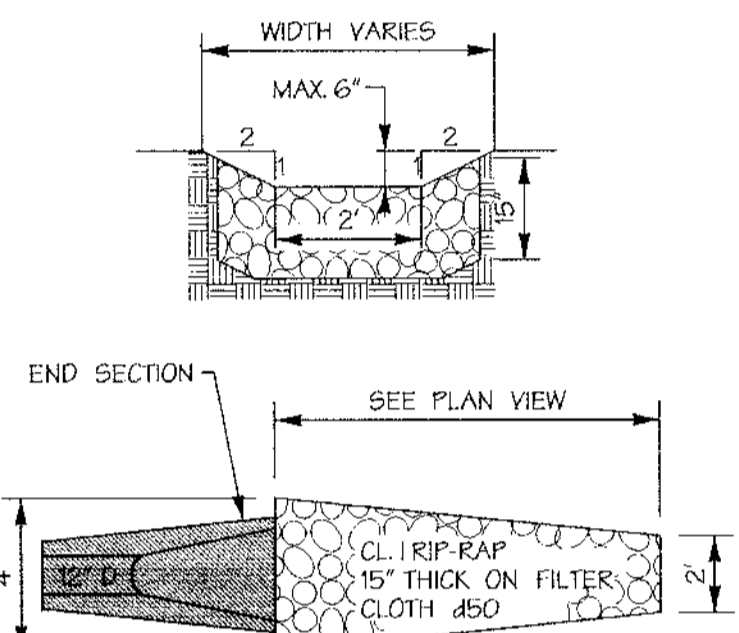
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 APPROVED: *Jan Meyer* 3/13/05
 U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *John R. Roberts* 3/13/05
 HOWARD SOIL CONSERVATION DISTRICT DATE
 PLAN NUMBER

DUST CONTROL SPECIFICATIONS

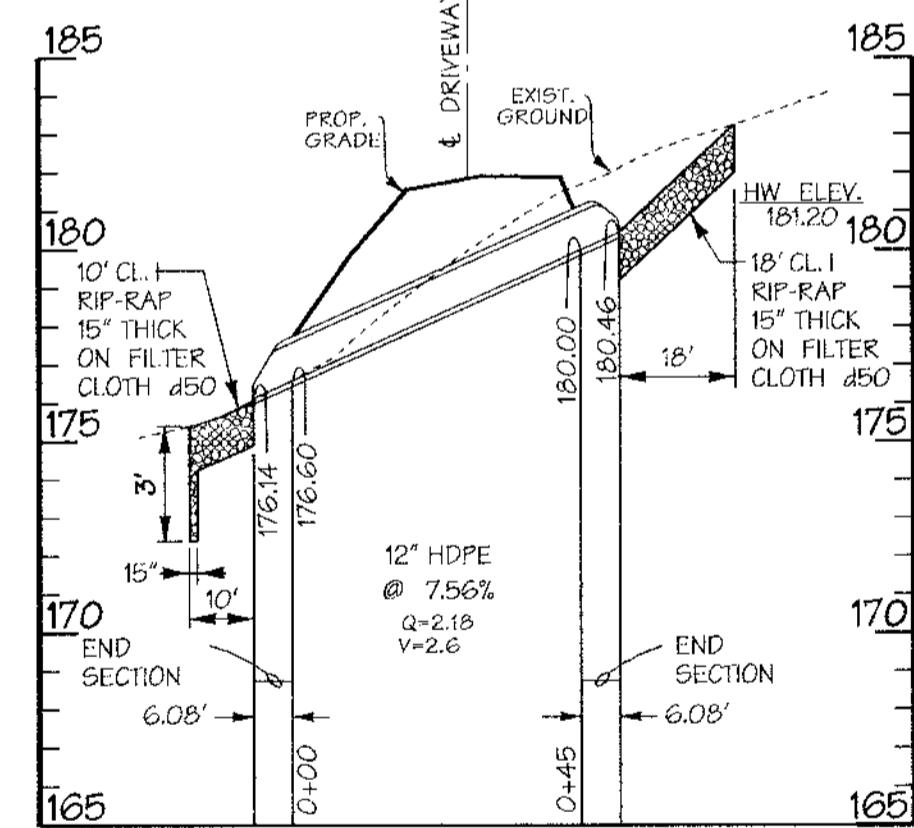
- Temporary methods:
- Mulches - see standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing.
 - Vegetative cover - see standards for temporary vegetative cover.
 - Tillage - to roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
 - Irrigation - this is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist, repeat as needed. At no time should the site be irrigated to the point the runoff begins to flow.
 - Barriers - solid board fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
 - Calcium chloride - apply at a rate that will keep surface moist. May need retreatment.

- Permanent methods:
- Permanent vegetation - see standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
 - Topsoiling - covering with less erosive soil materials. See standards for topsoiling.
 - Stone - cover surface with crushed stone or coarse gravel.

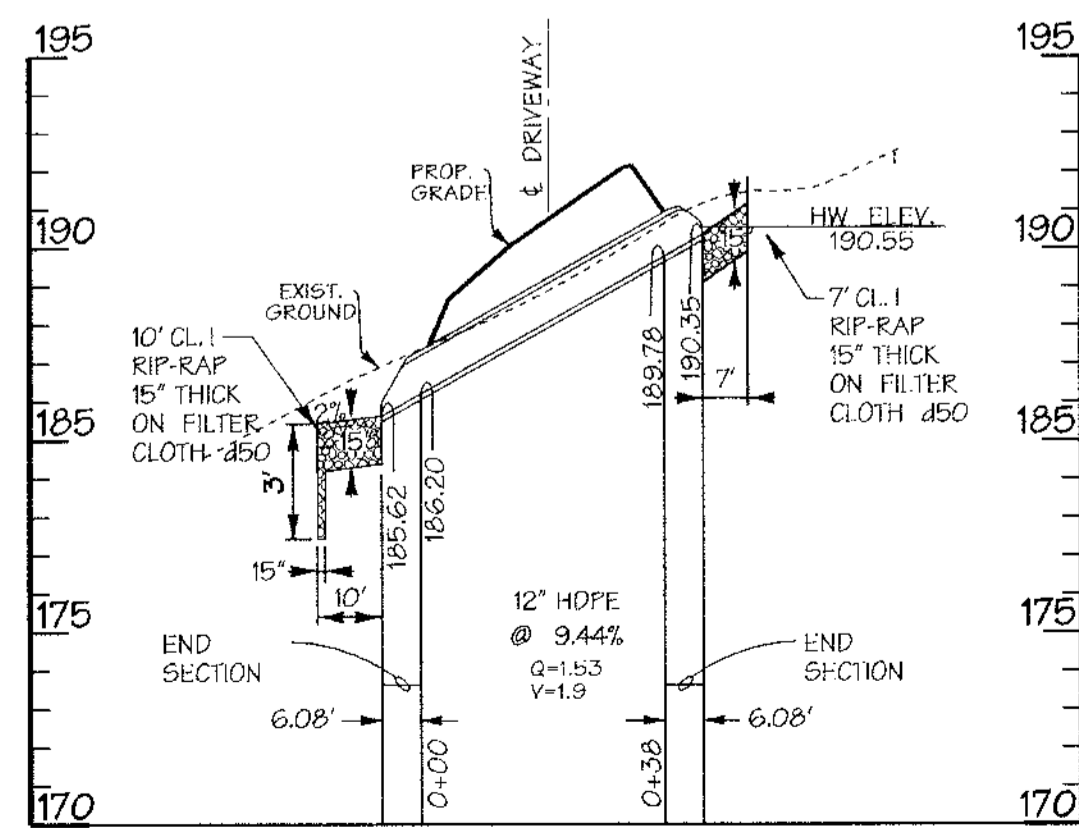
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H-30-1 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
 Dust Control Specifications Not To Scale



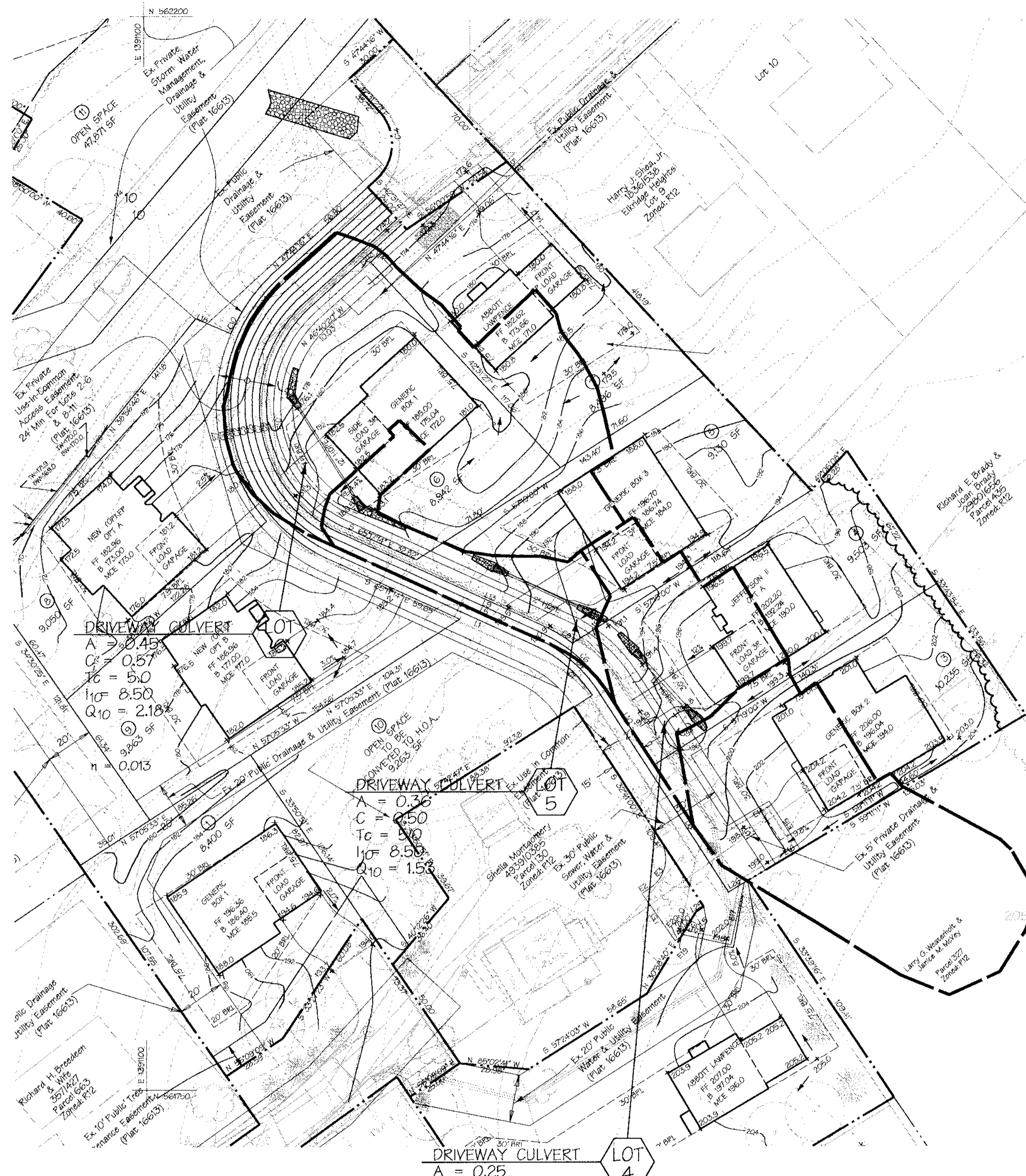
INLET & OUTLET CHANNEL PROTECTION DETAIL
 NOT TO SCALE



LOT 6
 SCALE: HORIZ. 1" = 30'
 VERT. 1" = 5'



LOT 5
 SCALE: HORIZ. 1" = 30'
 VERT. 1" = 5'



PIPE SCHEDULE

SIZE	LENGTH	TYPE
12"	108'	HPDE

DRAINAGE AREA MAP
 SCALE: 1" = 30'

OWNER'S CERTIFICATION:

"I, THE UNDERSIGNED, CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER: *John W. Ramech, Jr.*
 PRINT NAME BELOW SIGNATURE: John W. Ramech, Jr.
 DATE: 2-21-05

ENGINEER'S CERTIFICATION:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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: *John W. Ramech, Jr.*
 PRINT NAME BELOW SIGNATURE: John W. Ramech, Jr.
 DATE: 2-21-05

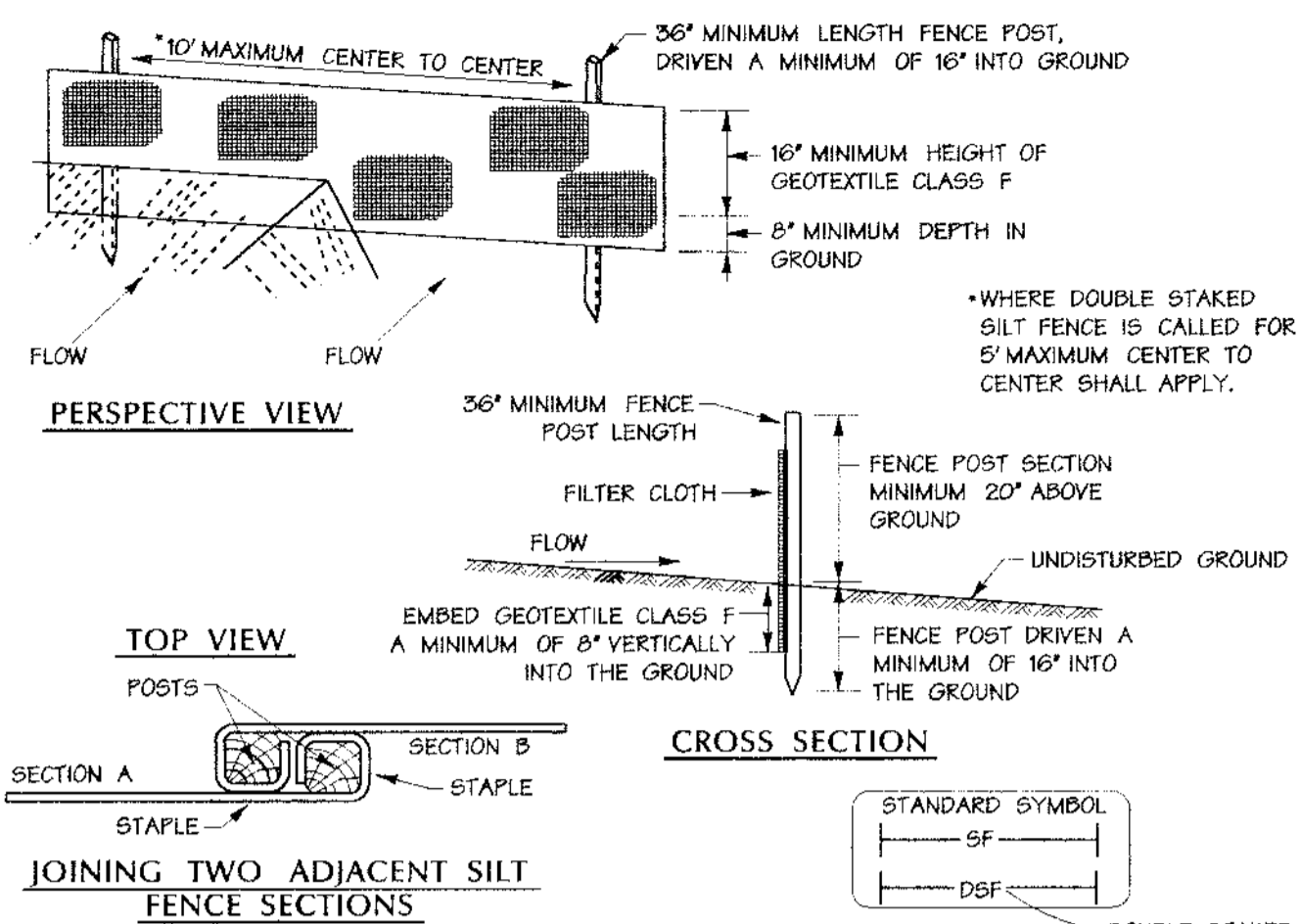
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: *Chris Hanat* 3/15/05
 CHIEF, DIVISION OF LAND DEVELOPMENT: *Chris Hanat* 3/15/05
 DIRECTOR: *Marvin K. Hinkle* 3/21/05

Revision Description
 Date No. Description
 2-21-05
BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND
 OWNER/DEVELOPER:
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SUBAREA NAME	SECTION/AREA	LOT/PARCEL #
BONNIE RIDGE		881
PLAT NO. 16613	3 K-12	151
WATER CODE: A, C1	SWMR CODE: 2022446	60120

TITLE: **SEDIMENT & EROSION CONTROL PLAN & DRAINAGE AREA MAP**
 Des. By: CRW Scale: 1"=30' Proj. No.: 04033
 Dm. By: REW Date: 01-18-05
 Chk. By: Approved 7 of 7



CONSTRUCTION SPECIFICATIONS

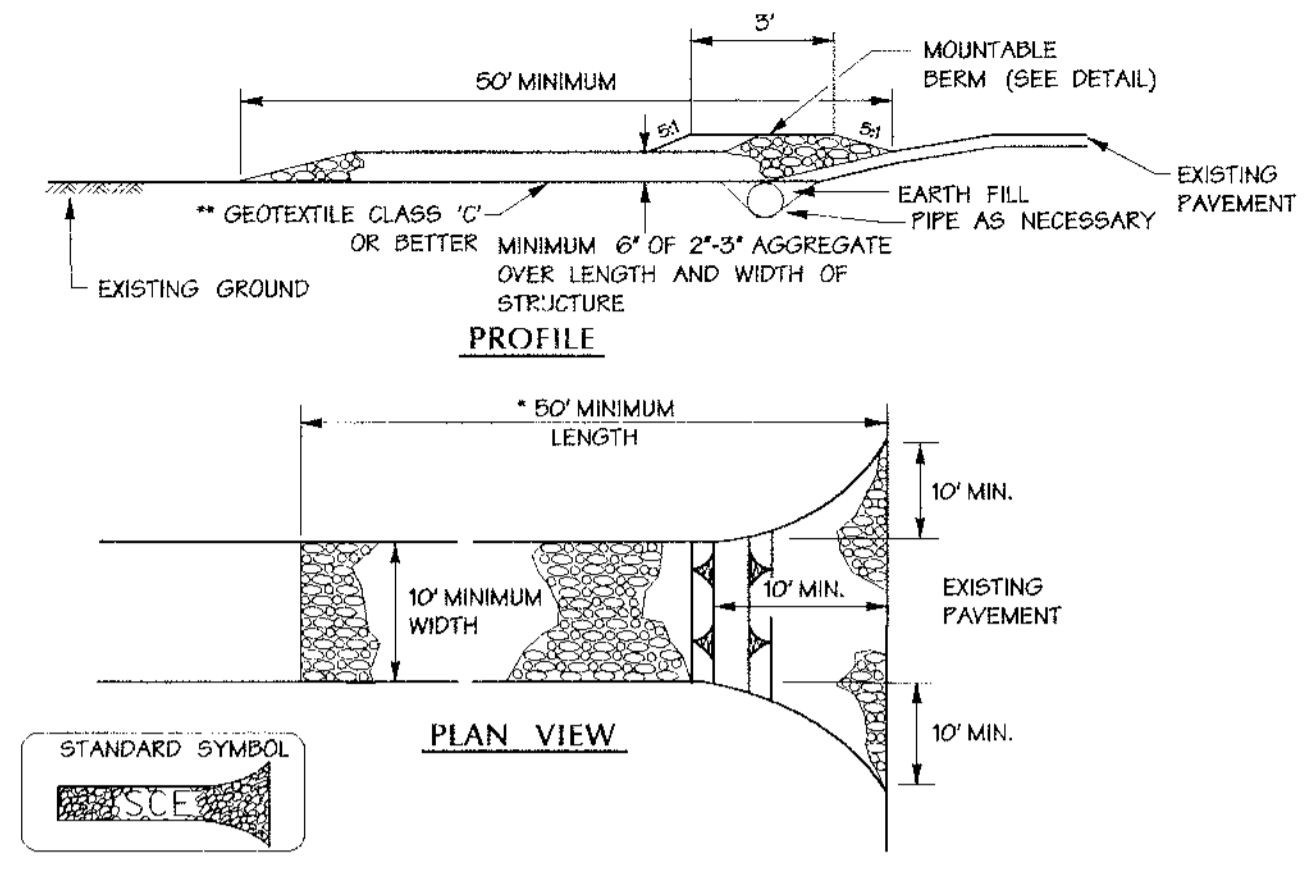
- FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" x 1 1/2" SQUARE (MINIMUM CUT, OR 1 1/2" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 100 POUND PER LINEAR FOOT.
- GEOTEXTILE 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: MSMT 509
TENSILE MODULUS	20 LBS/IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.25 GAL PER MIN (MAX)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN)	TEST: MSMT 322
- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
- SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN "BULGES" OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-15-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Silt Fence

Not To Scale



CONSTRUCTION SPECIFICATIONS

- LENGTH - MINIMUM OF 50' (20' FOR SINGLE RESIDENCE LOT).
- WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- GEOTEXTILE FABRIC CLASS C (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. **THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
- STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
- SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5% SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE WHEN THE SOE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
- LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Stabilized Construction Entrance

Not To Scale

21.0 STANDARD 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 texture 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 continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- Topsoil salvages from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental 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 soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutedge, 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 4-8 tons/acre (200-400 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:
 - On soil meeting Topsoil specifications, obtain test results dictating 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 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod 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.
 - Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

VI. 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, albeit 4" - 8" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding 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, where the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.

- Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
- Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
- Composted sludge shall be amended with a potassium fertilizer applied at a rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guidelines Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

Permanent/Temporary Seeding Notes

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

SEEDBED 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 (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ. FT.)
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK 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 (14 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31 SEED WITH 60 LBS. PER ACRE OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.5 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE 500 (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 - 90 LBS./1000 SQ. FT.) OF UNKOTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 3 1/2 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

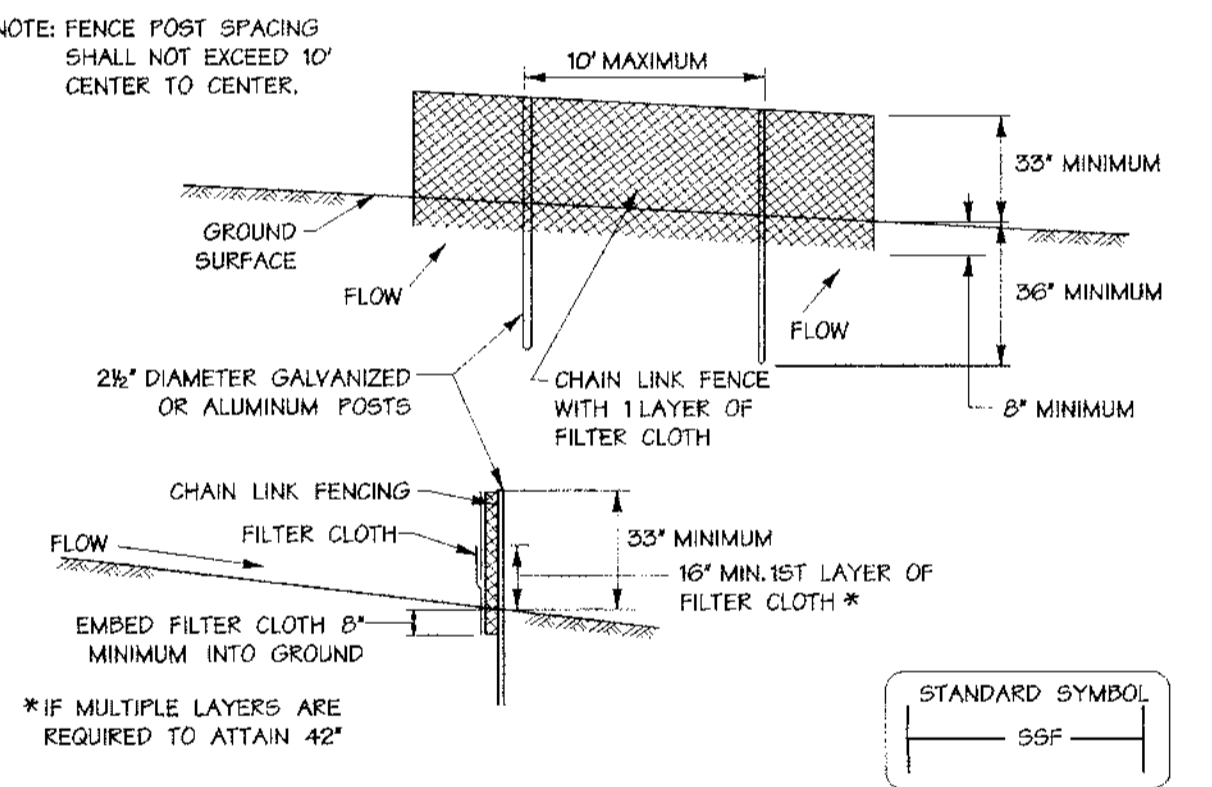
SEEDBED PREPARATION - LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.)

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 2% BUSHIEI PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 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 500.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 - 90 LBS./1000 SQ. FT.) OF UNKOTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 3 1/2 GAL. PER ACRE (5 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.



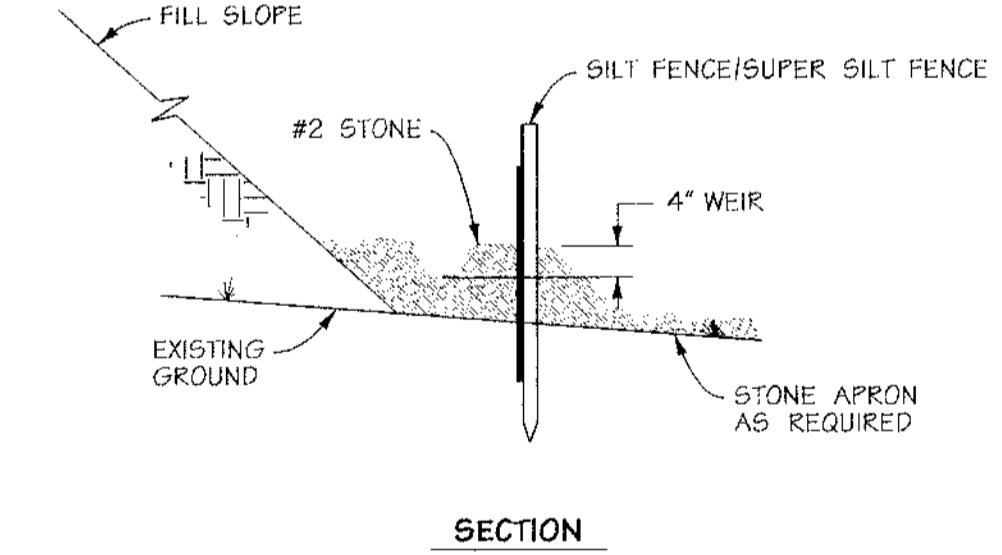
CONSTRUCTION SPECIFICATIONS

- FENCING SHALL BE 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6" FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6" LENGTH POSTS.
- THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE. THE CHAIN LINK FENCING SHALL BE SIX (6) GAUGE OR HEAVIER.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
- FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" 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 BULGES REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHED 50% OF FENCE HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H-26-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Super Silt Fence

Not To Scale



LIMITED USE WHERE SILT FENCE DOESN'T FOLLOW CONTOURS

#2 Stone Check Dam

See ctrl.cel AL25CD

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. Meyer 3/13/05
U.S.D. NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *John R. Robertson* 3/13/05
HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN NUMBER

OWNER'S CERTIFICATION:

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

John A. ...
SIGNATURE OF OWNER/CLIENT DATE: 3/13/05

ENGINEER'S CERTIFICATION:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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.

John W. Ranocchia, Sr.
SIGNATURE OF ENGINEER DATE: 2-21-05

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris ... 3/15/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

John ... 3/15/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Frank ... 3/15/05
DIRECTOR DATE

Revision Description

Date	No.	Description
------	-----	-------------

BONNIE RIDGE
LOTS 1 THRU 9
TAX MAP 38 PARCEL 881
HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
BONNIE RIDE ESTATES, LLC
9017 RLD BRANCH ROAD
SUITE 201
COLUMBIA, MD 21046
410-715-4500

DMW
Dan McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 396-4706

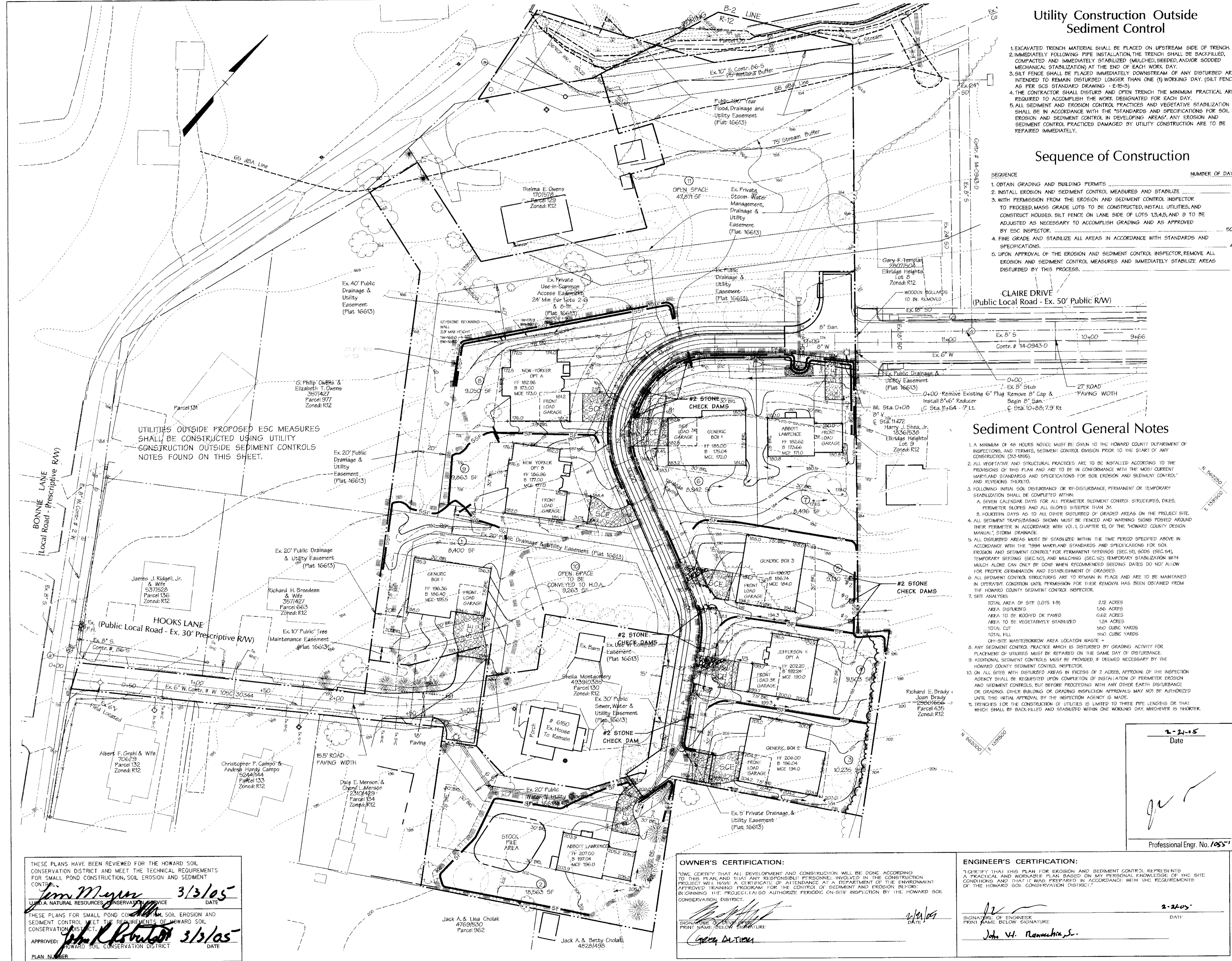
A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals

PROFESSIONAL ENGR. NO. 10557

DATE: 2-21-05

Des. By: CRW Scale: 1"=30' Proj. No.: 04033
Dwn. By: REW Date: 01-18-05
Chk. By: Approved

6 of 7



Utility Construction Outside Sediment Control

1. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
2. IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (MULCHED, SEEDDED, AND/OR SODDED MECHANICAL STABILIZATION) AT THE END OF EACH WORK DAY.
3. SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN UNDISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-1513)
4. THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
5. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS. ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

Sequence of Construction

SEQUENCE	NUMBER OF DAYS
1. OBTAIN GRADING AND BUILDING PERMITS	7
2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AND STABILIZE	5
3. WITH PERMISSION FROM THE EROSION AND SEDIMENT CONTROL INSPECTOR TO PROCEED, MASS GRADE LOTS TO BE CONSTRUCTED, INSTALL UTILITIES, AND CONSTRUCT HOUSES. SILT FENCE ON LANE SIDE OF LOTS 13, 14, 15, AND 9 TO BE ADJUSTED AS NECESSARY TO ACCOMPLISH GRADING AND AS APPROVED BY ESC INSPECTOR	500
4. FINE GRADE AND STABILIZE ALL AREAS IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS	45
5. UPON APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES AND IMMEDIATELY STABILIZE AREAS DISTURBED BY THIS PROCESS.	7

CLAIRE DRIVE
(Public Local Road - Ex. 50' Public RW)

Sediment Control General Notes

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (303-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1.
 - B. FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPPING AREAS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I CHAPTER 12, OF THE "HOWARD COUNTY DESIGN MANUAL", STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC-31), SODS (SEC-34), TEMPORARY SEEDINGS (SEC-50), AND MULCHING (SEC-52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. 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.
7. SITE ANALYSES:

TOTAL AREA OF SITE (LOTS 1-9)	212 ACRES
AREA DISTURBED	126 ACRES
AREA TO BE ROUGH OR PAVED	0.62 ACRES
AREA TO BE VEGETATIVELY STABILIZED	124 ACRES
TOTAL CUT	1540 CUBIC YARDS
TOTAL FILL	1540 CUBIC YARDS

 OFF-SITE WASTE/STORAGE AREA LOCATION WASTE =

AREA TO BE ROUGH OR PAVED	0.62 ACRES
AREA TO BE VEGETATIVELY STABILIZED	124 ACRES
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. 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 BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

LEGEND

- Existing Contours
- Proposed Contours
- Existing Storm Drain
- Existing Storm Drain
- Existing Sanitary Sewer
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Existing Property Line
- Proposed Tree Line
- Existing Trees per FO4-011
- Limit of Disturbance
- Silt Fence
- Super Silt Fence
- Stabilized Construction Entrance
- #2 Stone Check Dam

UTILITIES OUTSIDE PROPOSED ESC MEASURES SHALL BE CONSTRUCTED USING UTILITY CONSTRUCTION OUTSIDE SEDIMENT CONTROLS NOTES FOUND ON THIS SHEET.

BONNIE LANE
Local Road - Prescriptive R/W

HOOKS LANE
(Public Local Road - Ex. 30' Prescriptive R/W)

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 Meyer 3/3/05
LAND & NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *John K. Roberts* 3/3/05
HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN NUMBER

OWNER'S CERTIFICATION:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

John Meyer 3/3/05
SIGNATURE OF DEVELOPER DATE

John Meyer
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATION:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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.

John H. Rasmussen, Jr. 2-24-05
SIGNATURE OF ENGINEER DATE

John H. Rasmussen, Jr.
PRINT NAME BELOW SIGNATURE

Professional Engr. No. 10551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John Meyer 3/3/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Linda Hamer 3/16/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

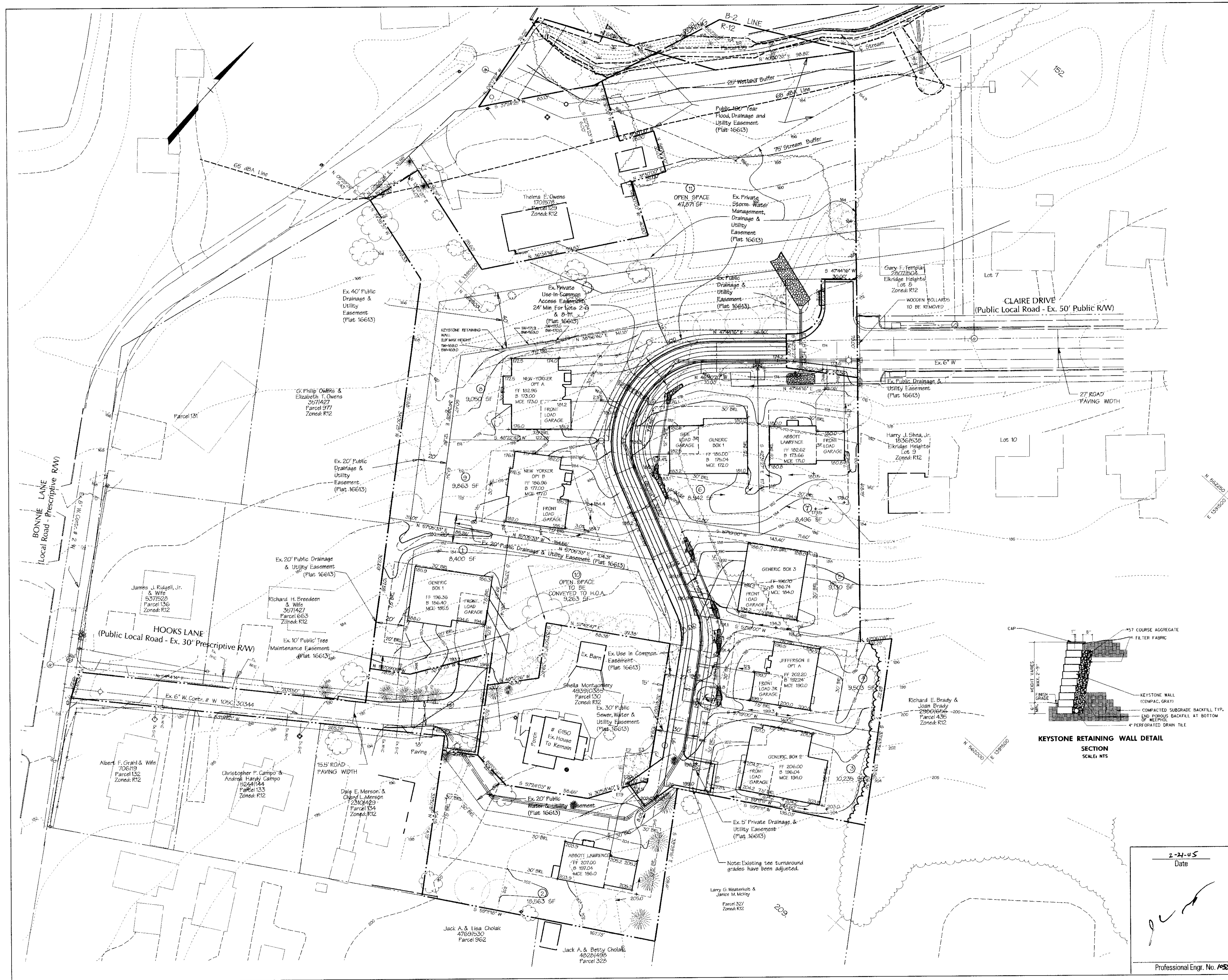
John Meyer 3/24/05
DIRECTOR DATE

Revision Description

BONNIE RIDGE
LOTS 1 THRU 9
TAX MAP 38 PARCEL 881
HOWARD COUNTY, MARYLAND

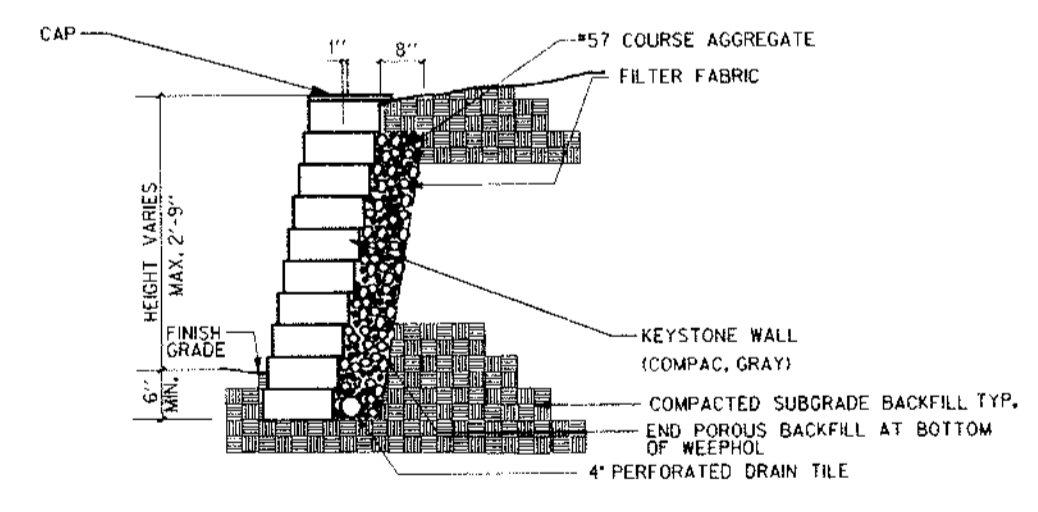
OWNER/DEVELOPER:
BONNIE RIDGE ESTATES, LLC
9017 RED BRANCH ROAD
SUITE 201
COLUMBIA, MD 21045
410-775-4500

DMW Darr McCune Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 410-286-3333 Fax 286-4705		A Team of Land Planners, Landscape Architects, Civil Engineers, Surveyors & Environmental Professionals	
SHARDON NAME BONNIE RIDGE	SECTION AREA R-12	DATE 01-18-05	DATE 01-18-05
PLAN NUMBER 16613	SCALE 1"=30'	DATE 01-18-05	DATE 01-18-05
PROJECT NUMBER A 01	SEWER CODE 2022416	TITLE SEDIMENT & EROSION CONTROL PLAN	
Des. By CRW	Scale 1"=30'	Proj. No. 04033	
Drn. By REW	Date 01-18-05	5 of 7	
Chk. By	Approved		



LEGEND

- Existing Contours
- Proposed Contours
-
-
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Proposed Tree Line
- Existing Property Line
- Limit of Disturbance
- Proposed Easements
- Existing Trees per FO4-011
- Specimen Tree
- Channel Protection (SEE SHEET 7 FOR DETAIL)



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris D. ... CHIEF, DEVELOPMENT ENGINEERING DIVISION 9/25/05 DATE

Andy Hunt CHIEF, DIVISION OF LAND DEVELOPMENT 3/15/05 DATE

David ... DIRECTOR 3/15/05 DATE

Date	No.	Revision Description
		BONNIE RIDGE
		LOTS 1 THRU 9
		TAX MAP 38 PARCEL 881
		HOWARD COUNTY, MARYLAND
		OWNER/DEVELOPER:
		BONNIE RIDGE ESTATES, LLC
		9017 RED BRANCH ROAD
		SUITE 201
		COLUMBIA, MD 21046
		410-715-4600

DMW

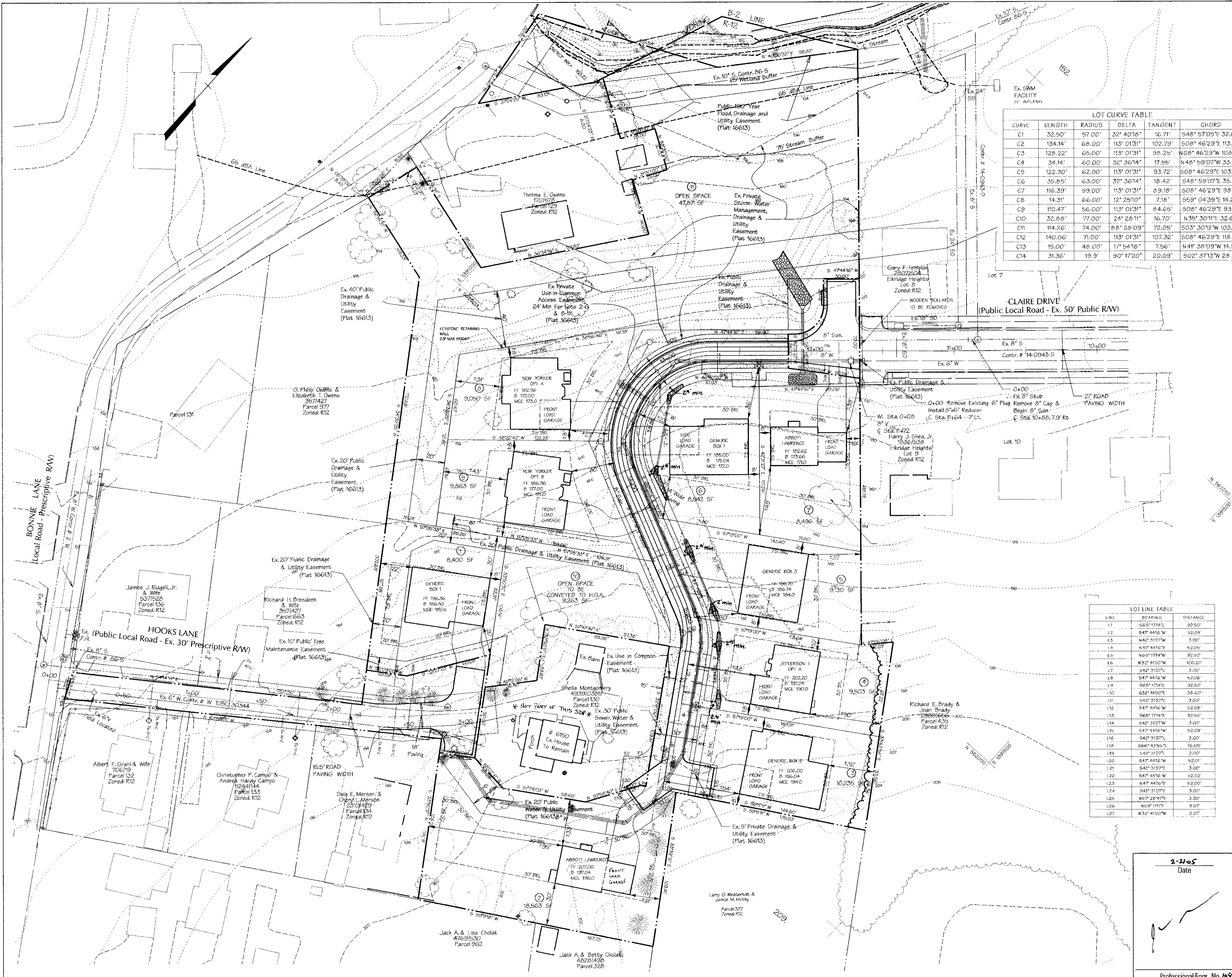
Dick McCune Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals

2-21-05
Date

Professional Engr. No. 15571

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #			
BONNIE RIDGE		881			
PLAT NO.	BLOCK #	LOT #			
16613	3	12			
WATER CODE	SEWER CODE	CREATED DATE			
A 01	2022416	01/201			
TITLE					
GRADING PLAN					
Des. By	CRH	Scale	1"=30'	Proj. No.	04033
Dim. By	CRH	Date	01-18-05		
Chk. By	MJF	Approved			4 of 7



LEGEND

- - - 110 Existing Contours
- - - 108 Proposed Contours
- - - 108 Proposed Contours
- - - EX 15" D. Existing Utilities
- - - 15" D. Proposed Utilities
- [] Existing Building
- [] Proposed Building
- [] Existing Curb
- [] Proposed Curb
- - - Existing Tree Line
- - - Proposed Tree Line
- [] Proposed Easements
- [] Existing Trees per FO4-011
- [] Specimen Tree

LOT CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	32.50'	57.00'	32° 40'18"	16.71'	548° 57'05"E 32.06'
C2	134.14'	68.00'	113° 01'31"	102.79'	508° 46'29"E 113.42'
C3	128.22'	65.00'	113° 01'31"	98.25'	N08° 46'29"W 108.42'
C4	34.14'	60.00'	32° 36'14"	17.55'	N48° 59'07"W 33.68'
C5	122.30'	62.00'	113° 01'31"	93.72'	S08° 46'29"E 103.42'
C6	35.85'	63.00'	32° 36'14"	18.42'	S48° 59'07"E 35.37'
C7	116.39'	59.00'	113° 01'31"	89.18'	S08° 46'29"E 98.41'
C8	14.31'	66.00'	12° 25'10"	7.16'	S59° 04'39"E 14.28'
C9	110.47'	56.00'	113° 01'31"	84.65'	S08° 46'29"E 93.41'
C10	32.88'	77.00'	24° 28'11"	16.70'	N35° 30'11"E 32.64'
C11	114.26'	74.00'	113° 01'31"	72.05'	S03° 30'12"W 103.24'
C12	140.06'	71.00'	113° 01'31"	107.32'	S08° 46'29"E 118.43'
C13	15.00'	48.00'	17° 54'18"	7.56'	N41° 38'09"W 14.94'
C14	31.36'	19.9'	90° 17'20"	20.09'	S02° 37'13"W 28.21'

LOT LINE TABLE

LINE	BEARING	DISTANCE
1.1	S65° 17'14"E	32.50'
1.2	S47° 44'16"W	32.04'
1.3	N42° 31'27"W	3.00'
1.4	S47° 44'16"E	32.09'
1.5	N63° 19'14"W	92.00'
1.6	N32° 41'02"W	100.20'
1.7	S42° 31'27"E	3.00'
1.8	S47° 44'16"W	32.50'
1.9	S65° 17'14"E	32.50'
1.10	S32° 41'02"E	38.60'
1.11	S42° 31'27"E	3.00'
1.12	S47° 44'16"W	52.08'
1.13	S65° 17'14"E	32.50'
1.14	S47° 44'16"W	3.00'
1.15	S47° 44'16"W	32.09'
1.16	S42° 31'27"E	3.00'
1.18	S66° 43'55"E	16.09'
1.19	S42° 31'27"E	3.00'
1.20	S47° 44'16"W	32.01'
1.21	S42° 31'27"E	3.00'
1.22	S47° 44'16"W	32.02'
1.23	N47° 44'16"E	32.00'
1.24	S42° 31'27"E	3.00'
1.25	N57° 22'47"E	2.30'
1.26	N59° 11'11"E	9.57'
1.27	N32° 41'02"W	0.97'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chad D. ... 3/1/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Andy ... 2/1/05
 CHIEF, DIVISION OF LAND DEVELOPMENT

... 2/21/05
 DIRECTOR

Date No. Revision Description

BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38, PARCEL 381
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9011 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Daft McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3353
 Fax 296-1705

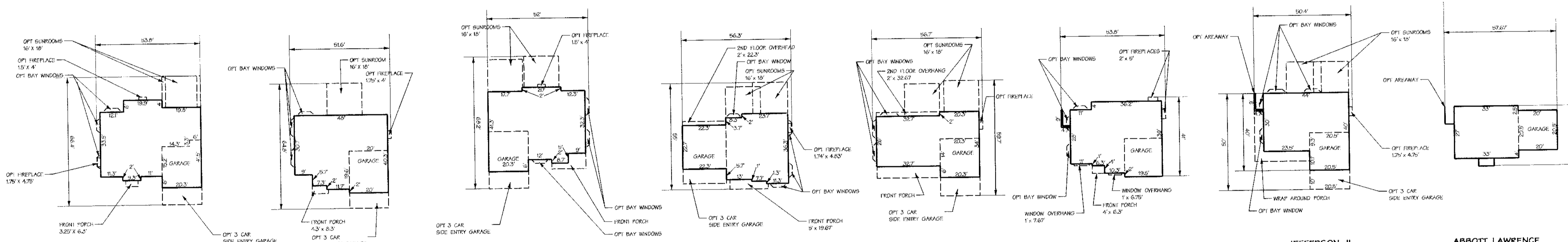
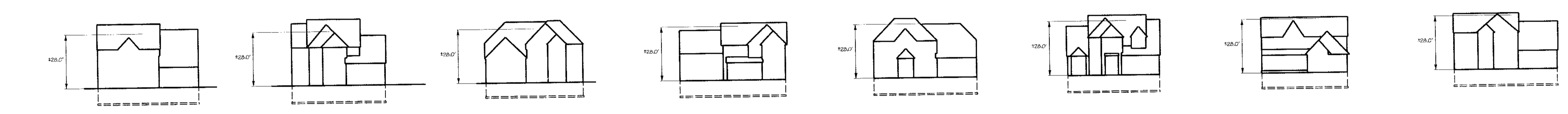
A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

SHOW/NO. NAME	BONNIE RIDGE	SECTION/TAXA	LOT/PARCEL #	381
PLAT #	16613	PROJ. #	3	DATE
WATER CODE	A 01	SEMP CODE	2022416	

TITLE			
SITE PLAN			
Des. By	CRH	Scale	1"=30'
Drn. By	CRH	Date	01-18-05
Chk. By	MJP	Approved	
Proj. No.		04033	
3 of 7			

2-21-05
 Date

Professional Engr. No. 14587



YORK
SCALE: 1"=30'

OXFORD
SCALE: 1"=30'

NEW YORKER
SCALE: 1"=30'

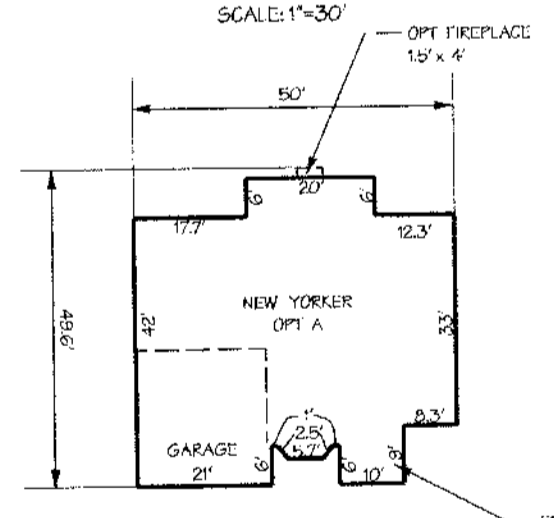
THE DELAWARE
SCALE: 1"=30'

CHARLES WILLIAM
SCALE: 1"=30'

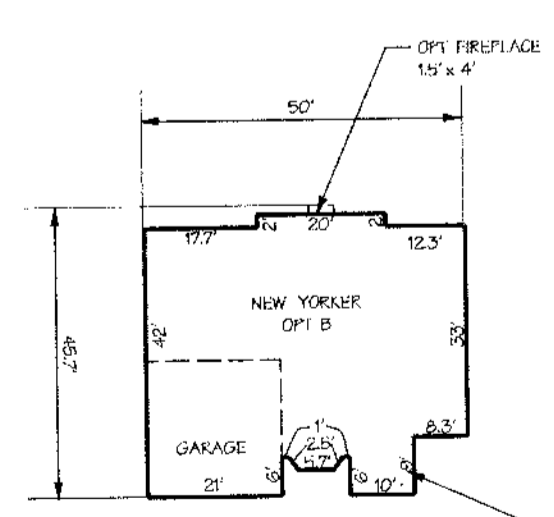
CAMBRIDGE
SCALE: 1"=30'

JEFFERSON II
SCALE: 1"=30'

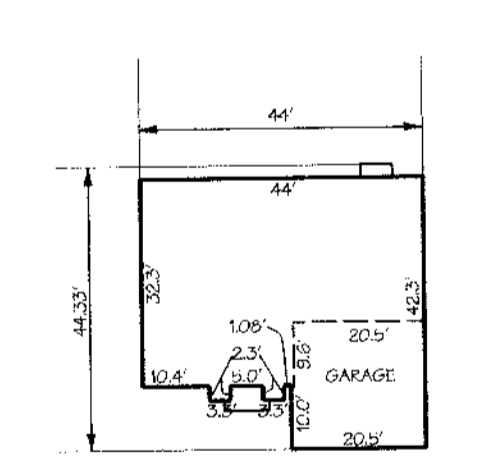
ABBOTT LAWRENCE
SCALE: 1"=30'



NEW YORKER OPT A
SCALE: 1"=30'



NEW YORKER OPT B
SCALE: 1"=30'



JEFFERSON II OPT A
SCALE: 1"=30'

APPROVED: *[Signature]* 3/18/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 90 DATE
[Signature] 3/18/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 3/18/05
 DIRECTOR DATE

Revision Description
 Date No.
BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND
 OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9017 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Draft-McCune-Walker, Inc. A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3533
 Fax 296-4705

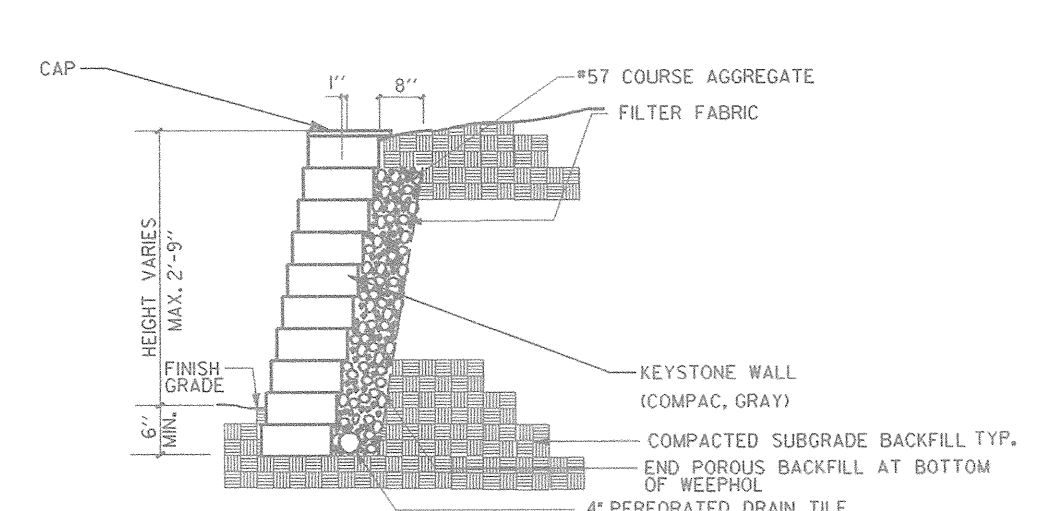
2-21-05
 Date
[Signature]

SUBDIVISION NAME	BONNIE RIDGE	SECTION/AREA		LOT/PARCEL #	B-81
PLAT NO.	16613	TRACES #	3	RECORD #	601201
WATER CODE	A 01	SEWER CODE	20222416		
TITLE	HOUSE TEMPLATES				
Des. By	CRH	Scale	1"=30'	Proj. No.	04033
Drn. By	CRH	Date	01-18-05		
Chk. By	MJP	Approved			



LEGEND

- 110
100 Existing Contours
- 110
100 Proposed Contours
-
-
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Existing Property Line
- L.O.D. Limit of Disturbance
- Proposed Tree Line
- Proposed Easements
- Existing Trees per FO4-011
- Specimen Tree
- Channel Protection (SEE SHEET 7 FOR DETAIL)



KEYSTONE RETAINING WALL DETAIL
SECTION
SCALE: NTS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

<i>Howard County</i>	<i>Chilos</i>
CHIEF, DEVELOPMENT DIVISION	DATE
<i>Chris Hand</i>	2/15/05
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Sharon K. Taylor</i>	2/15/05
DIRECTOR	DATE

9/2/05	1	REVISE GRADING ON LOT 8
Date	No.	Revision Description

BONNIE RIDGE
LOTS 1 THRU 9
TAX MAP 38 PARCEL 881
HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
BONNIE RIDGE ESTATES, LLC
9017 RED BRANCH ROAD
SUITE 201
COLUMBIA, MD 21045
410-715-4500

DMW
Dart-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Fusion, Maryland 21088
Fax 296-4705

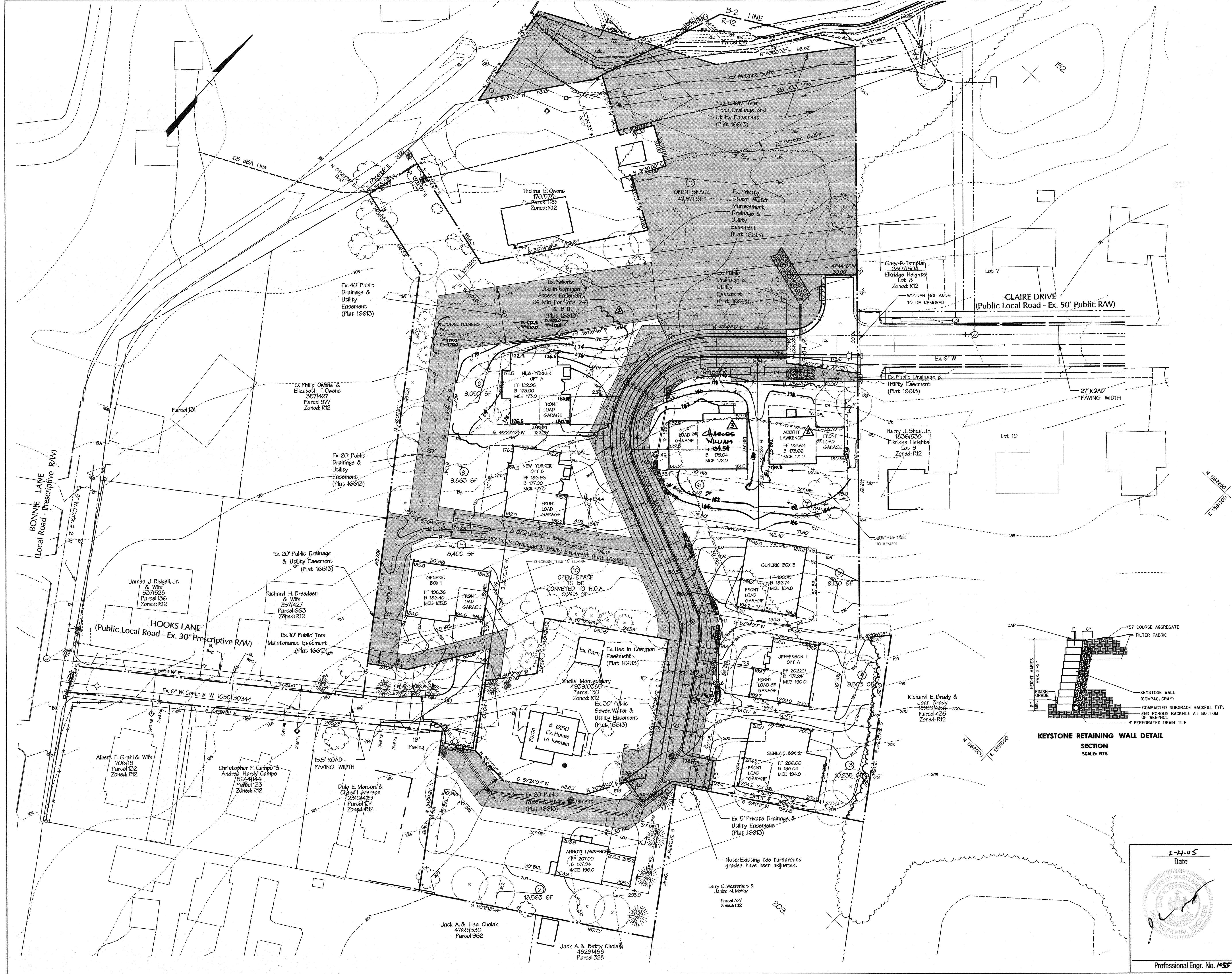
A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

2-21-05
Date

SUBDIVISION NAME: BONNIE RIDGE	SECTION/AREA: 3B	LOT/FACET #: 8B1
PLAT # OF LOT: 16613	BLK # ZONE: R-12	NAV/ZONE MAP: 3B
TRACT CODE: A 01	BLK DISTRICT: 151	ORDIN # DATE: 601201
OWNER CODE: 2022416		

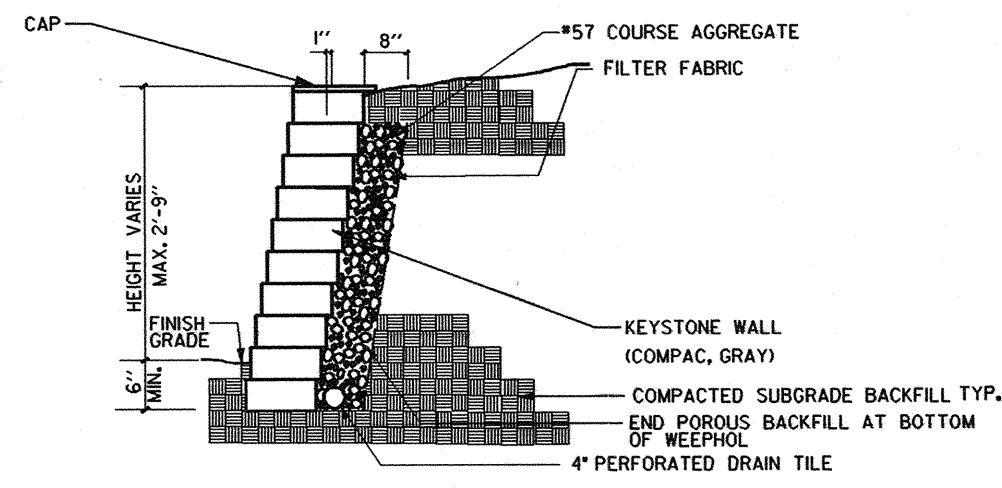
GRADING PLAN

Des. By: CRH	Scale: 1"=30'	Proj. No.: 04033
Drn. By: CRH	Date: 01-18-05	
Chk. By: MJP	Approved:	4 of 7



LEGEND

- Existing Contours
- Proposed Contours
- Existing Utilities
- Proposed Utilities
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Existing Property Line
- Limit of Disturbance
- Proposed Tree Line
- Proposed Easements
- Existing Trees per F04-011
- Specimen Tree
- Channel Protection (SEE SHEET 7 FOR DETAIL)



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John D. ... 3/1/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 90 DATE

... 3/1/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

... 3/1/05
 DIRECTOR DATE

Date	No.	Revision Description
3/1/05	3	REVISE GRADING HOUSE FOOTPRINT - LOT 6
7/2/05	2	REVISE GRADING HOUSE FOOTPRINT - LOT 7
7/2/05	1	REVISE GRADING ON LOTS

BONNIE RIDGE

LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 3017 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Daft-MoCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

2-24-05
 Date

Professional Engr. No. 10557

Professional Engineer

SUBDIVISION NAME	BLOCK #	SECTION/AREA	LOT/PARCEL #
BONNIE RIDGE	3	R-12	881

DATE OF MAP	BLDG. #	DATE	TAX/ZONE MAP	BLDG. DISTRICT	OTHER TRACT
16613	3	3/1	38	151	601201

TITLE	DATE
GRADING PLAN	2022416

Des. By	Scale	Proj. No.
CRH	1"=30'	04033

Dwn. By	Date	4 of 7
CRH	01-18-05	

Chk. By	Approved
MJP	



LEGEND

- Existing Contours
- Proposed Contours
- Existing Utilities
- Proposed Utilities
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Proposed Tree Line
- Existing Property Line
- Proposed Property Line
- Existing Tree Line
- Proposed Tree Line
- Existing Easements
- Proposed Easements
- Existing Trees per FO4-011
- Specimen Tree

LOT CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	32.50'	57.00'	32° 40' 18"	16.71'	548° 57' 05" E 32.06'
C2	134.14'	68.00'	113° 01' 31"	102.79'	508° 46' 29" E 113.42'
C3	128.22'	65.00'	113° 01' 31"	98.25'	N08° 46' 29" W 108.42'
C4	34.14'	60.00'	32° 36' 14"	17.55'	N48° 59' 07" W 33.68'
C5	122.30'	62.00'	113° 01' 31"	93.72'	508° 46' 29" E 103.42'
C6	35.85'	63.00'	32° 36' 14"	18.42'	548° 59' 07" E 35.37'
C7	116.39'	59.00'	113° 01' 31"	89.18'	508° 46' 29" E 98.41'
C8	14.31'	66.00'	12° 25' 10"	7.18'	S59° 04' 39" E 14.28'
C9	110.47'	56.00'	113° 01' 31"	84.65'	508° 46' 29" E 93.41'
C10	32.88'	77.00'	24° 28' 11"	16.70'	N35° 30' 11" E 32.64'
C11	114.26'	74.00'	88° 28' 09"	72.05'	S03° 30' 12" W 103.24'
C12	140.06'	71.00'	113° 01' 31"	107.32'	508° 46' 29" E 118.43'
C13	15.00'	48.00'	17° 54' 18"	7.56'	N41° 38' 09" W 14.94'
C14	31.36'	19.9'	90° 17' 20"	20.09'	S02° 37' 13" W 28.21'

LOT LINE TABLE

LINE	BEARING	DISTANCE
L1	S65° 17' 14" W	92.50'
L2	S47° 44' 16" W	52.04'
L3	N42° 31' 27" W	3.00'
L4	N47° 44' 16" E	52.05'
L5	N65° 17' 14" W	92.50'
L6	N32° 41' 00" W	100.20'
L7	S42° 31' 27" E	3.00'
L8	S47° 44' 16" W	52.06'
L9	S65° 17' 14" E	92.50'
L10	S32° 41' 00" E	38.60'
L11	S42° 31' 27" E	3.00'
L12	S47° 44' 16" W	52.08'
L13	S65° 17' 14" E	92.50'
L14	S42° 31' 27" W	3.00'
L15	S47° 44' 16" W	52.09'
L16	S42° 31' 27" E	3.00'
L18	S66° 43' 55" E	16.09'
L19	S42° 31' 27" E	3.00'
L20	S47° 44' 16" W	52.01'
L21	S42° 31' 27" E	3.00'
L22	S47° 44' 16" W	52.02'
L23	N47° 44' 16" E	52.00'
L24	S42° 31' 27" E	3.00'
L25	N57° 28' 47" E	3.90'
L26	N59° 11' 11" E	9.57'
L27	N32° 41' 00" W	0.07'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John P. ... 3/16/05
 CHIEF, ENGINEERING DIVISION DATE

Kevin ... 3/16/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Kevin ... 3/21/05
 DIRECTOR DATE

7/25/03 3 REVISION: CLEARING HOUSE FOOTPRINT - LOT 6
 7/27/03 2 REVISION: CLEARING HOUSE FOOTPRINT - LOT 7

BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9077 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Daft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4706

A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

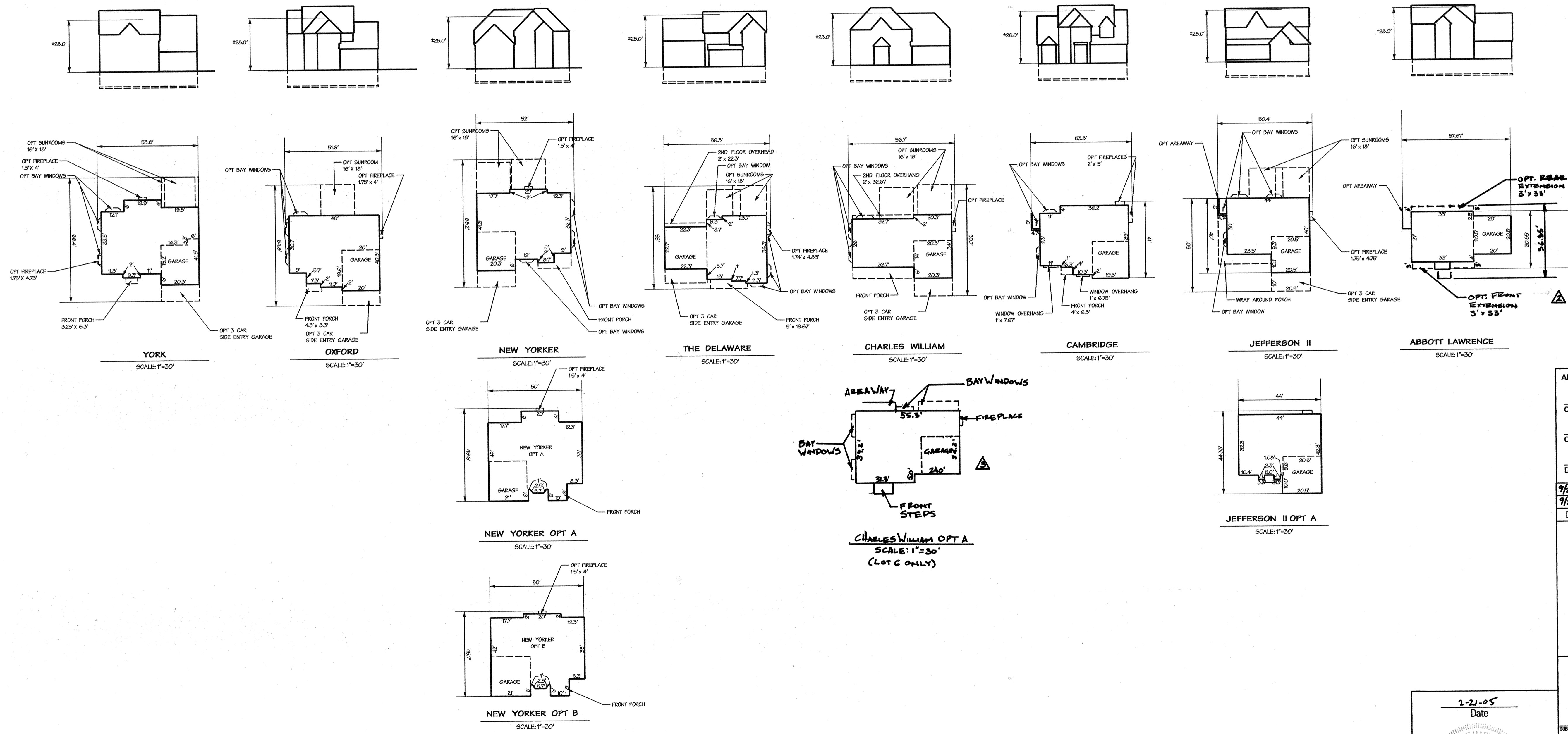
2-21-05
 Date

Professional Engr. No. 14551

SUBMISSION NAME	BONNIE RIDGE	SECTION/AREA	LOT/PARCEL #	881
PLAT OR LOT	16613	BOOK #	38	151
WATER CODE	A 01	SEWER CODE	2022416	

SITE PLAN

Des. By	CRH	Scale	1"=30'	Proj. No.	04033
Dwn. By	CRH	Date	01-18-05		
Chk. By	MJP	Approved			



APPROVED:

[Signature] 3/15/05 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 90

[Signature] 3/15/05 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 3/15/05 DATE
 DIRECTOR

Date	No.	Revision Description
9/23/05	3	ADD LOT G CHARLES WILLIAM FOOTPRINT
7/23/05	2	REMOVE ABBOTT LAWRENCE FOOTPRINT

BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9017 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Deft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

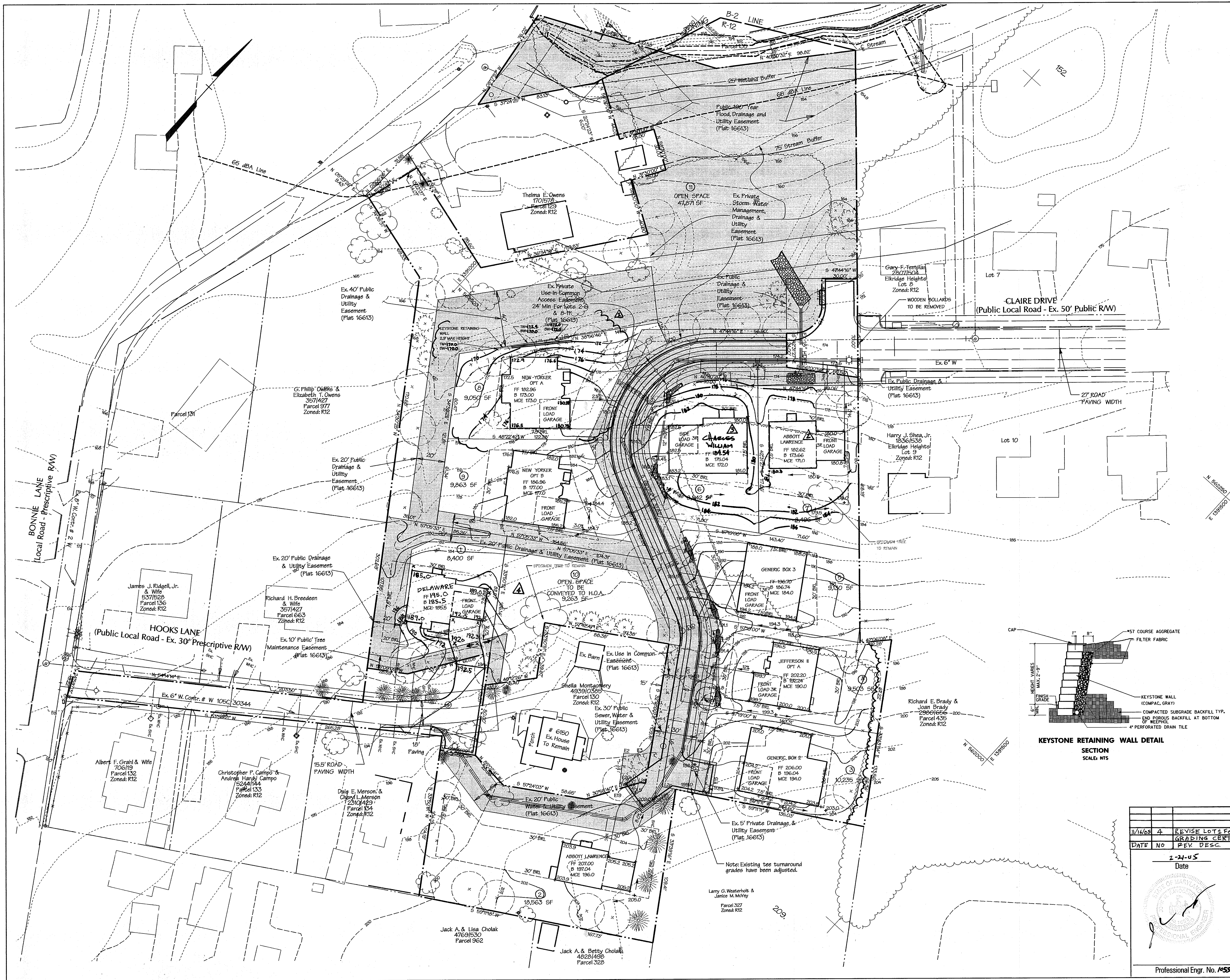
A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

2-21-05
 Date

[Professional Seal]

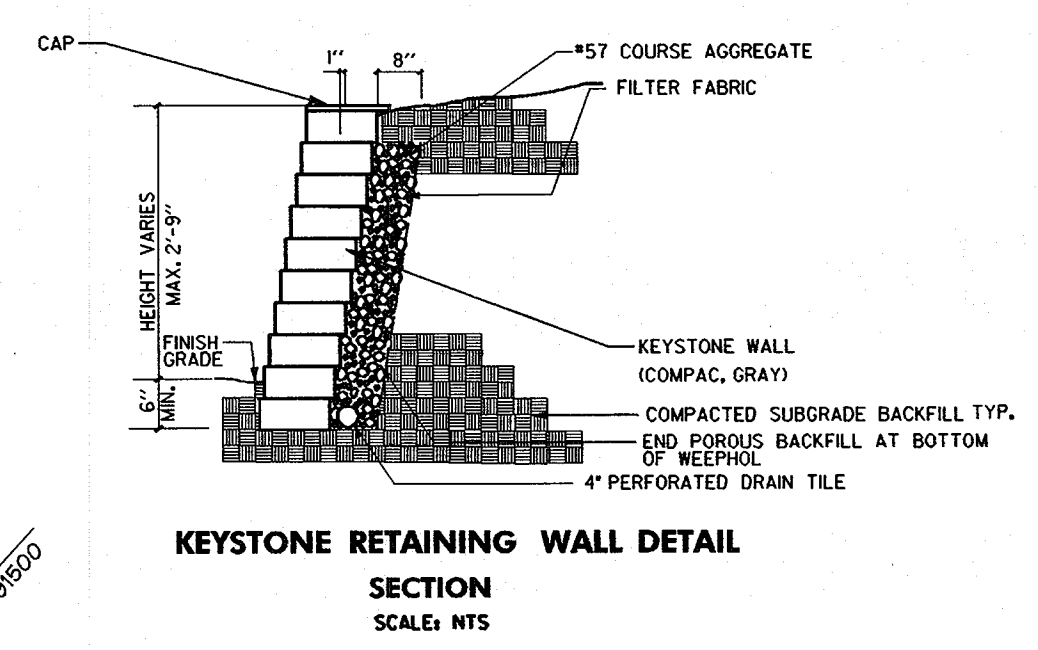
Professional Engr. No. J0551

SUBDIVISION NAME BONNIE RIDGE	SECTION/AREA 3B	LOT/PARCEL # 881
PLAT NO. 16613	BLDG # 3	DATE 01-18-05
WORTH CODE A 01	SEWER CODE 2022416	OWNER TRACT 60120
TITLE HOUSE TEMPLATES		
Des. By CRH	Scale 1"=30'	Proj. No. 04033
Dm. By CRH	Date 01-18-05	2 of 7
Chk. By MJP	Approved	



LEGEND

- 110 Existing Contours
- 108 Proposed Contours
- EX. 15" D. Existing Utilities
- 15" D. Proposed Utilities
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Existing Property Line
- L.O.D. Limit of Disturbance
- Proposed Tree Line
- Proposed Easements
- Existing Trees per FO4-011
- Specimen Tree
- Channel Protection (SEE SHEET 7 FOR DETAIL)



KEYSTONE RETAINING WALL DETAIL
SECTION
SCALE: NTS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Howard County 3/15/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Andy Hand 3/15/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David K. Cagle 3/14/05
DIRECTOR DATE

9/23/05	3	REVISE GRADING HOUSE FOOTPRINT - LOT 6
9/23/05	2	REVISE GRADING HOUSE FOOTPRINT - LOT 7
9/23/05	1	REVISE GRADING ON LOT 8

Date No. Revision Description

BONNIE RIDGE
LOTS 1 THRU 9
TAX MAP 38 PARCEL 881
HOWARD COUNTY, MARYLAND

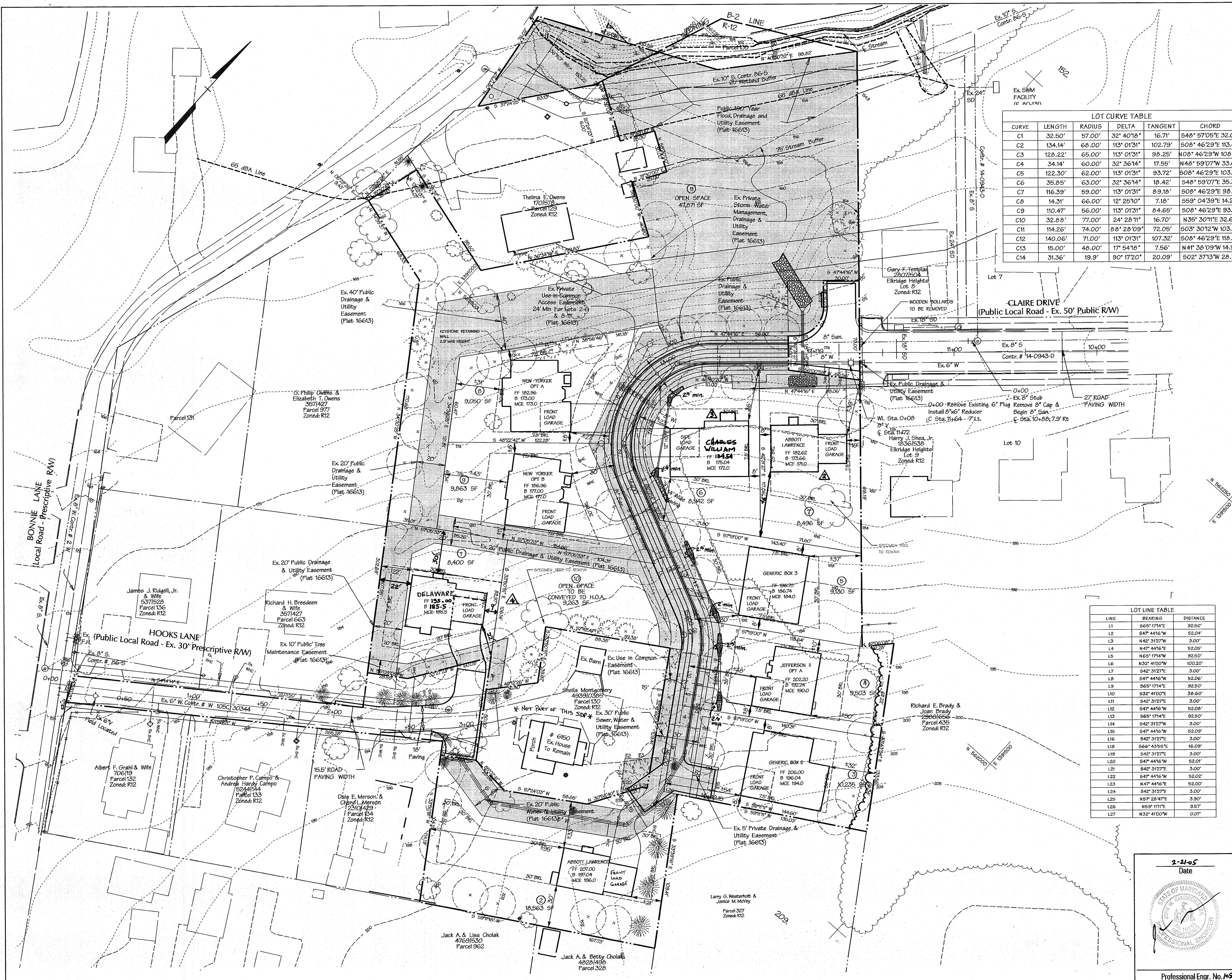
OWNER/DEVELOPER:
BONNIE RIDGE ESTATES, LLC
9017 RED BRANCH ROAD
SUITE 201
COLUMBIA, MD 21045
410-715-4500

DMW
Dale McCune-Walker, Inc.
300 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax: 296-4705

A Team of Land Planners,
Landscape Architects,
Golf Course Architects,
Engineers, Surveyors &
Environmental Professionals

11/16/05	4	REVISE LOTS FOR GRADING CERT.
DATE	NO.	REV. DESC.
2-21-05 Date		
Professional Engr. No. 10551		

SUBDIVISION NAME	BONNIE RIDGE	SECTION/AREA	LOT/AREA	OFF/PANEL #	881
PLAT OR REF	16615	BLOCK #	3	ZONE	R-12
WATER CODE	A 01	LAZARENE MAP	30	GRID NORTH	157
		SEWER CODE		CHARGE TRACT	601201
TITLE GRADING PLAN					
Des. By	CRH	Scale	1"=30'	Proj. No.	040333
Drn. By	CRH	Date	01-18-05	4 of 7	
Chk. By	MJP	Approved			



LEGEND

- Existing Contours
- Proposed Contours
- Existing Utilities
- Proposed Utilities
- Existing Building
- Proposed Building
- Existing Curb
- Proposed Curb
- Existing Tree Line
- Existing Property Line
- L.O.D. Limit of Disturbance
- Proposed Tree Line
- Proposed Easements
- Existing Trees per FO4-011
- Specimen Tree

LOT CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	32.50'	57.00'	32° 40'18"	16.71'	548° 57'05"E 32.06'
C2	134.14'	68.00'	113° 01'31"	102.79'	508° 46'29"E 113.42'
C3	128.22'	65.00'	113° 01'31"	98.25'	508° 46'29"E 108.42'
C4	34.14'	60.00'	32° 36'14"	17.55'	N48° 59'07"W 33.68'
C5	122.30'	62.00'	113° 01'31"	93.72'	508° 46'29"E 103.42'
C6	35.85'	63.00'	32° 36'14"	18.42'	548° 59'07"E 35.37'
C7	116.39'	59.00'	113° 01'31"	89.18'	508° 46'29"E 98.41'
C8	14.31'	66.00'	12° 25'10"	7.16'	S59° 04'39"E 14.28'
C9	110.47'	56.00'	113° 01'31"	84.65'	508° 46'29"E 93.41'
C10	32.88'	77.00'	24° 28'11"	16.70'	N35° 30'11"E 32.64'
C11	114.26'	74.00'	88° 28'09"	72.05'	S03° 30'12"W 103.24'
C12	140.06'	71.00'	113° 01'31"	107.32'	508° 46'29"E 118.43'
C13	15.00'	48.00'	17° 54'18"	7.56'	N41° 38'09"W 14.94'
C14	31.36'	19.9'	90° 17'20"	20.09'	S02° 37'13"W 28.21'

LOT LINE TABLE

LINE	BEARING	DISTANCE
L1	S65° 17'14"E	92.50'
L2	S47° 44'16"W	92.04'
L3	N42° 31'27"W	3.00'
L4	N47° 44'16"E	92.05'
L5	N65° 17'14"W	92.50'
L6	N32° 41'00"W	100.20'
L7	S42° 31'27"E	3.00'
L8	S47° 44'16"W	92.06'
L9	S65° 17'14"E	92.50'
L10	S32° 41'00"E	38.60'
L11	S42° 31'27"E	3.00'
L12	S47° 44'16"W	92.08'
L13	S65° 17'14"E	92.50'
L14	S42° 31'27"W	3.00'
L15	S47° 44'16"W	92.09'
L16	S42° 31'27"E	3.00'
L17	S66° 43'55"E	16.09'
L18	S42° 31'27"E	3.00'
L19	S47° 44'16"W	92.01'
L20	S47° 44'16"W	92.01'
L21	S42° 31'27"E	3.00'
L22	S47° 44'16"W	92.02'
L23	N47° 44'16"E	92.00'
L24	S42° 31'27"E	3.00'
L25	N57° 28'47"E	3.90'
L26	N59° 11'11"E	9.57'
L27	N32° 41'00"W	0.07'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Howard County
 CHIEF DEVELOPMENT ENGINEERING DIVISION 9/20/05 DATE

Carole Hanan
 CHIEF, DIVISION OF LAND DEVELOPMENT 3/1/05 DATE

Frank A. Wajner
 DIRECTOR 3/2/05 DATE

11/16/05 4 REVISE LOT 1 FOR GRADING CERT.

9/20/05 3 REVISE GRADING & HOUSE FOOTPRINT - LOT 6

9/23/05 2 REVISE GRADING & HOUSE FOOTPRINT - LOT 7

Date No. Revision Description

BONNIE RIDGE

LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9017 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Day, McCune-Walkers, Inc.
 300 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 298-3333
 Fax: 298-4705

A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals

2-21-05
 Date

Professional Engr. No. 1555

Professional Engineer

STATE OF MARYLAND
 PROFESSIONAL ENGINEER

SUBDIVISION NAME: BONNIE RIDGE SECTION/AREA: LOT 6 UTIL/PANEL # 881

PLAT OR LOT: 16615 BLOCK # 3 ZONE: R-12 LOT/AREA MAP: 151 CURB/STREET: 601201

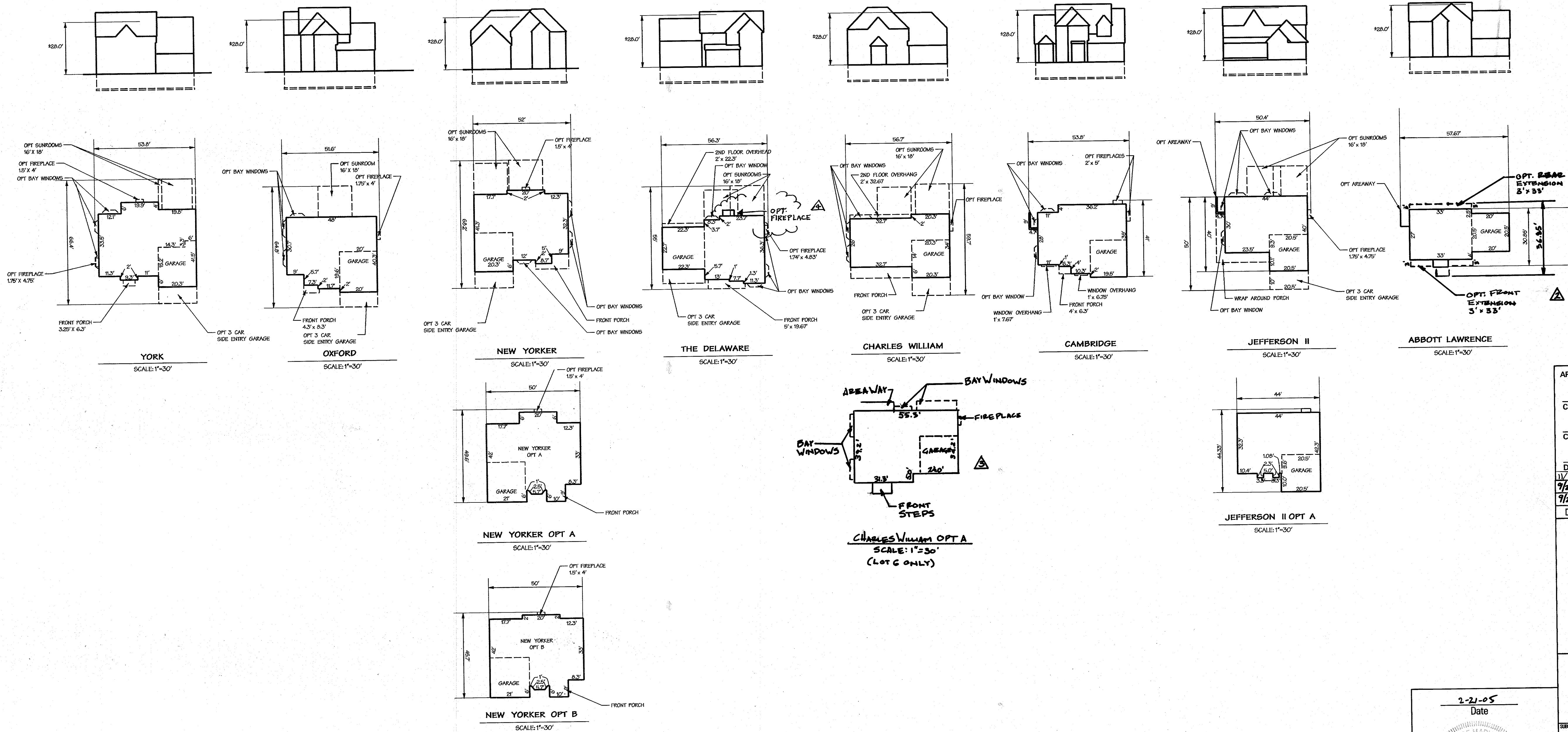
WORK SHEET: A 01 SHEET CODE: 2022416

TITLE: SITE PLAN

Des. By: CRH Scale: 1"=30' Proj. No.: 04033

Drn. By: CRH Date: 01-18-05

Chk. By: MJP Approved: 3 of 7



APPROVED:

[Signature] 3/18/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 90 DATE

[Signature] 3/18/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3/18/05
 DIRECTOR DATE

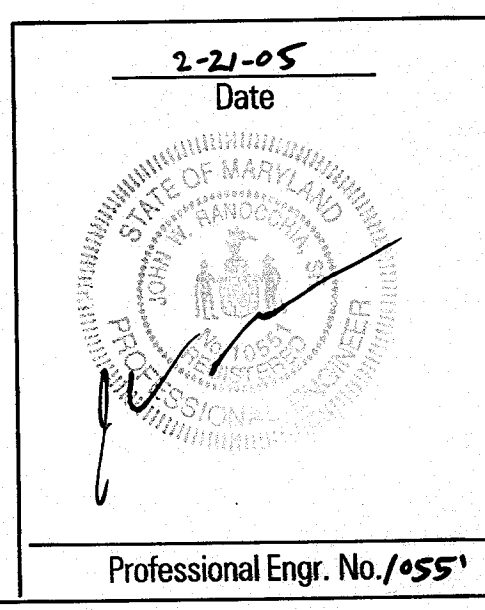
Date	No.	Revision Description
11/18/04	4	ADD FIREPLACE TO DELAWARE
9/29/05	3	ADD LOT 6 CHARLES WILLIAM FOOTPRINT
7/29/05	2	REVISE ABBOTT LAWRENCE FOOTPRINT

BONNIE RIDGE
 LOTS 1 THRU 9
 TAX MAP 38 PARCEL 881
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER:
 BONNIE RIDGE ESTATES, LLC
 9017 RED BRANCH ROAD
 SUITE 201
 COLUMBIA, MD 21045
 410-715-4500

DMW
 Draft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3033
 Fax: 296-4705

A Team of Land Planners,
 Landscape Architects,
 Golf Course Architects,
 Engineers, Surveyors &
 Environmental Professionals



SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
BONNIE RIDGE		881
PLAT OR REFERENCE	TRACES #	ZONE
16613	3	R-12
WARRANT CODE	BLK DISTRICT	GENSIS TRACT
A 01	151	601201
SWMR CODE	20222416	
TITLE		
HOUSE TEMPLATES		
Des. By	CRH	Scale 1"=30'
Proj. No.	04033	
Dm. By	CRH	Date 01-18-05
2 of 7		
Chk. By	MJP	Approved