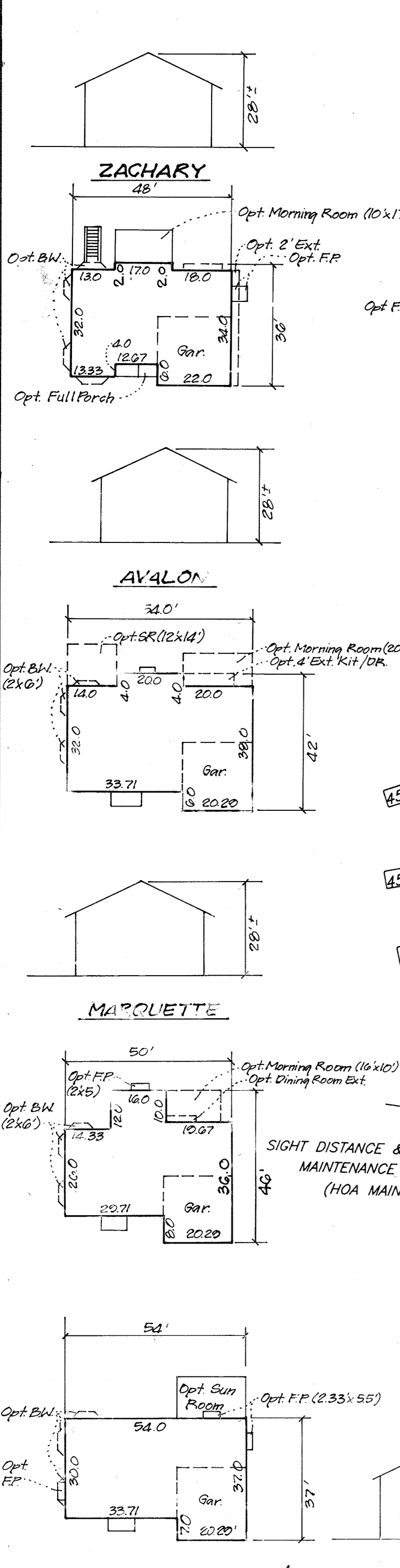
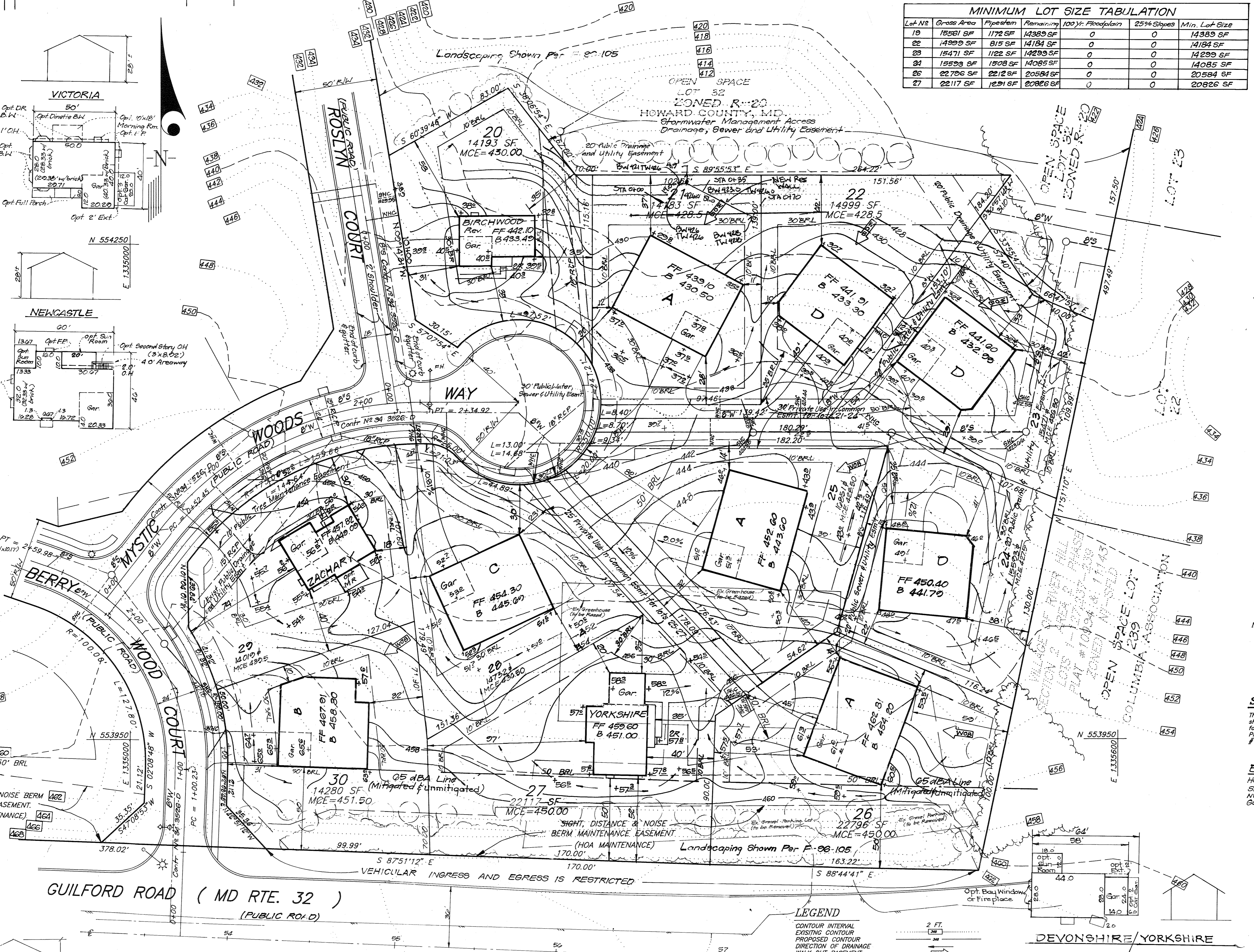
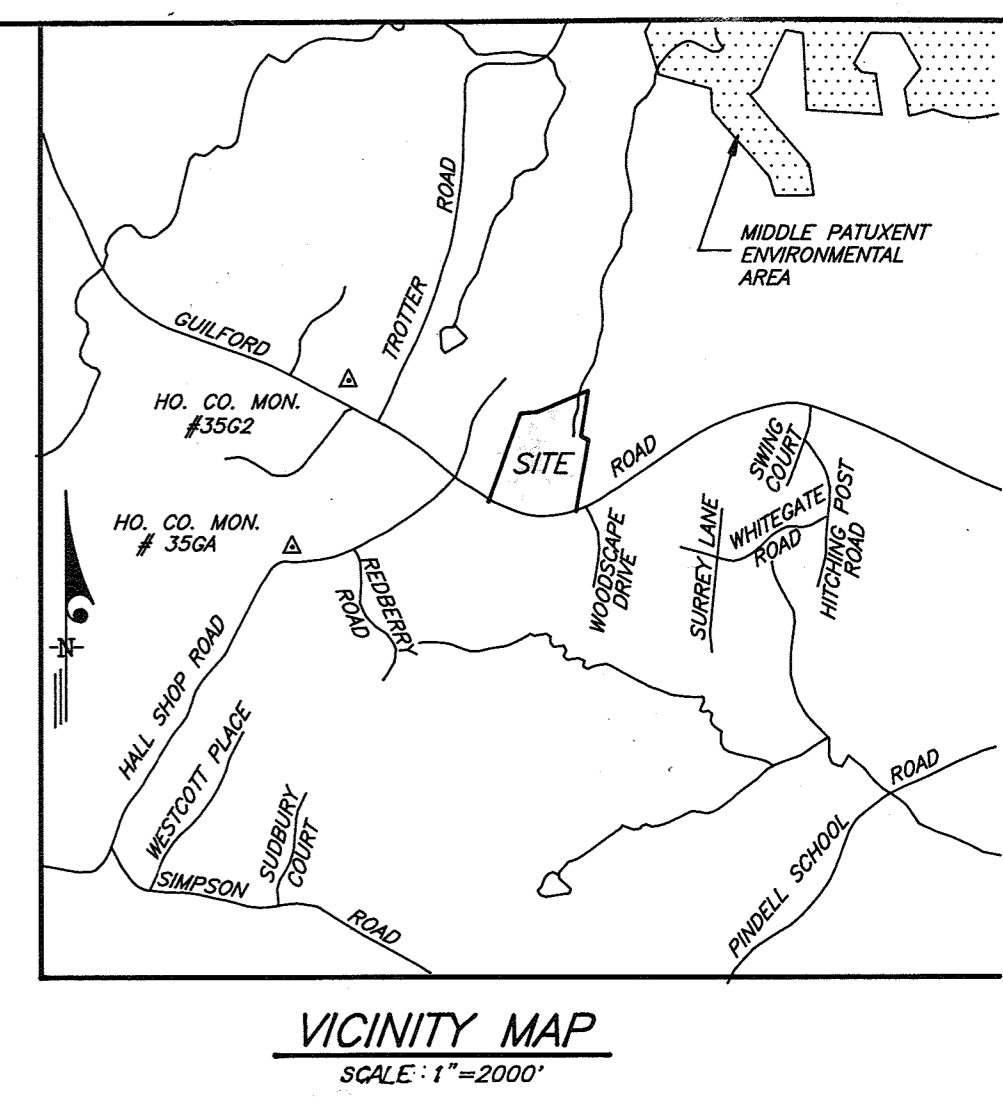


Lot #/3	Street Address
10	G801 Berry Wood Court
11	G803
12	G809
13	G808
14	G809 Mystic Woods Way
15	G807
16	G811 Roslyn Court
17	G814
18	G810
19	G805
20	G800
21	G819 Mystic Woods Way
22	G812
23	G823
24	G827
25	G820
26	G816
27	G812
28	G808
29	G804
30	G800 Berry Wood Court



MINIMUM LOT SIZE TABULATION						
Lot #/2	Gross Area	Pipestem	Remaining	100 Yr Floodplain	25% Slopes	Min. Lot Size
19	15561 SF	1172 SF	14389 SF	0	0	14389 SF
22	14999 SF	815 SF	14184 SF	0	0	14184 SF
23	15471 SF	1122 SF	14349 SF	0	0	14349 SF
24	15598 SF	1908 SF	14085 SF	0	0	14085 SF
26	22796 SF	2212 SF	20584 SF	0	0	20584 SF
27	22117 SF	1291 SF	20826 SF	0	0	20826 SF



- GENERAL NOTES:**
- Subject property is zoned: R-20 per 10-18-93 Comprehensive Zoning Plan.
 - The total area included in this submission is: 7.714 Acres.
 - The total number of lots included in this submission is: 21
 - Improvement to property: Single Family Detached
 - SHC Elevations shown are located at the property line.
 - Department of Planning and Zoning reference file numbers are: F-77-112, 84-08-28, 84-83-112, 8-92-12, F-90-03, W-98-88, F-90-105, F-97-119.
 - Utilities shown as existing are taken from approved Water and Sewer Plans Contract 34-3926-D, approved Road Construction Plans F-96-103, and actual field survey.
 - Any damage to county owned rights-of-way shall be corrected at the developer's expense.
 - All roadways are public and existing.
 - The existing topography was taken from Road Construction plans prepared by LDE, Inc., F-96-103.
 - 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. 356A and 356B.
 - The contractor shall notify the Department of Public Works/Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours prior to the start of work.
 - The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
 - For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details R-6.03 and R-6.05, R-6.0C.
 - In accordance with Sections 128A.1.b and .c of the Zoning Regulations, bay windows or chimneys not more than 4 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 10 feet into the front or rear setbacks.
 - Stormwater Management is provided per: F-96-103. Quality Management is by Definition & Retention. Quality Management is by Erosion/Retention/Retention.
 - No clearing, grading or construction is permitted within the Wetlands and stream buffers, or forest conservation areas. Future exception of areas covered under 401 permit No. 88-100-0100 and 404 Permit No. 88-00137-5.
 - Lots 17, 18 and 19 all require private individual stormwater management systems (drywells) to meet Qualitative Management Requirements.
 - This plan has been prepared in accordance with the provisions of section 16.12a of the Howard County Code and the Landscape Manual. Financial surety for the required 5 trees in the amount of \$500.00 shall be part of the builders grading permit application.

SPECIAL NOTES:
This plan is for house sitting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-96-103 and/or approved Water and Sewer Plans Contract #34-3926-D.

BENCHMARKS
Ho Co Monument 3562
Stamped Conc. Mon
NW corner of Lot
Guilford and Trotter Rd

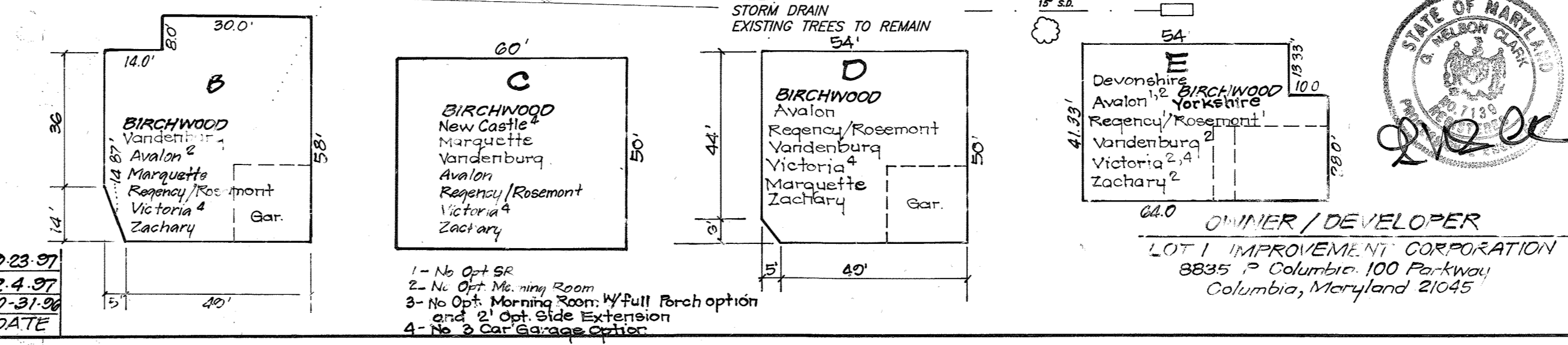
Ho Co Monument 3564
Stamped Conc. Mon
N side of Hall Shop Rd
Post Red Berry Road

SHEET INDEX	
DESCRIPTION	SHEET No.
SITE DEVELOPMENT PLAN	162
Sediment & Erosion Control	3-5
Lot 21 Per Walk Plans	6-7

SUBDIVISION NAME	SECTION	LOT No.
SCOTT ACRES	3	10-30
PLAT No. of P.P.	BLOCK No.	ZONE
12-112-12-114	25	R-20
TAX/ZONE MAP	ELECT. DIST.	CENSUS TR.
55	5TH	G055
WATER CODE	SEWER CODE	
I-13	0652500	

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 12/9/96 DATE
 12/11/96 DATE
 12/13/96 DATE

NO.	REVISION	DATE
3	Rev. hse. of grad. lot 29 to show As-Built Cond.	09-23-97
2	Rev. grad. & lower hse. lots 20, 21, 25-27	2-4-97
1	Added note 10 to General Note	10-31-96



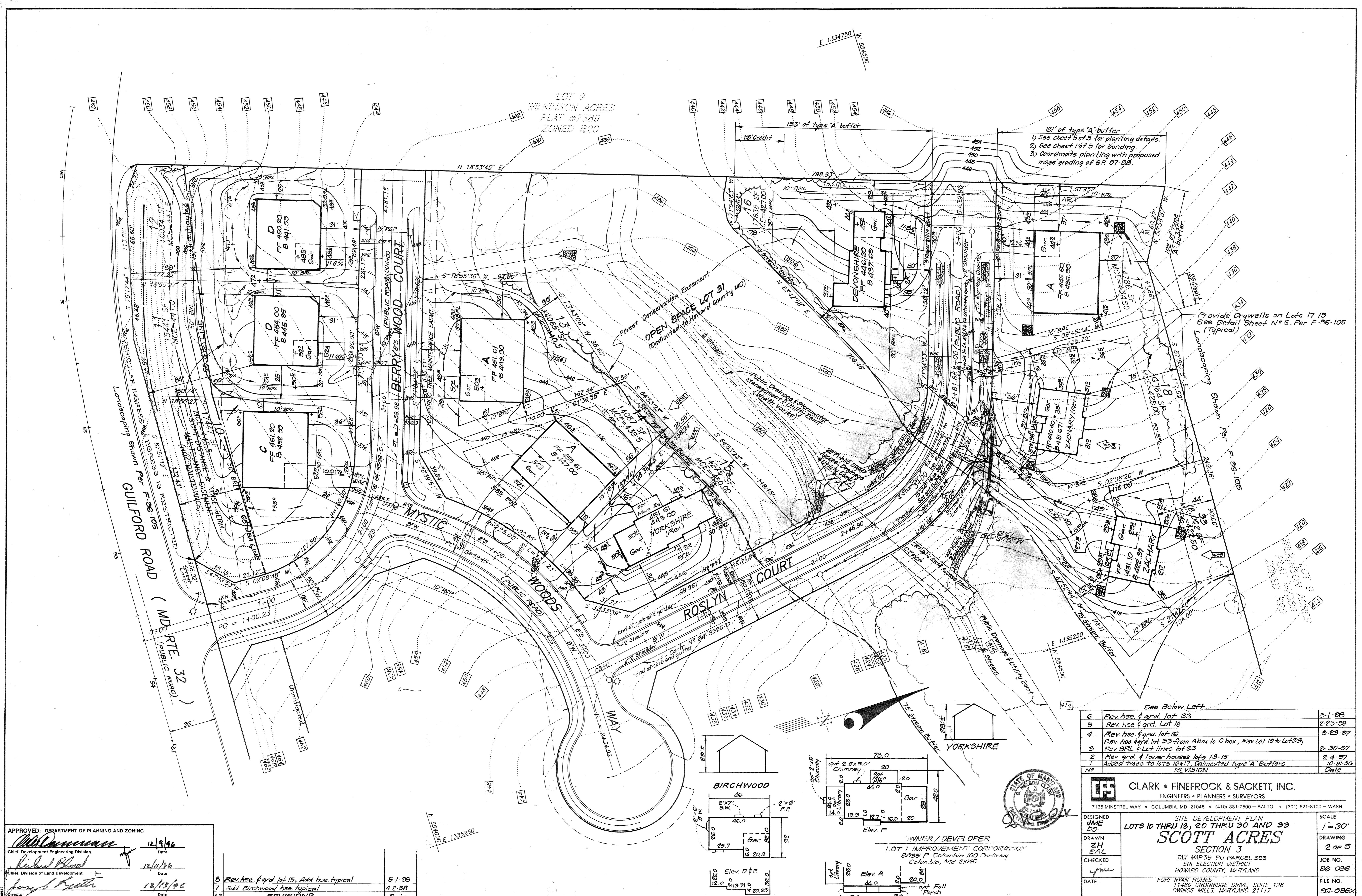
CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.

SITE DEVELOPMENT PLAN
 LOTS 10 THRU 18, 20, 21, 25 AND 33
SCOTT ACRES
 SECTION 3
 TAX MAP 35 P.O. PARCEL 353
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER
 LOT 1 IMPROVEMENT CORPORATION
 8835 P. Columbia 100 Parkway
 Columbia, Maryland 21045

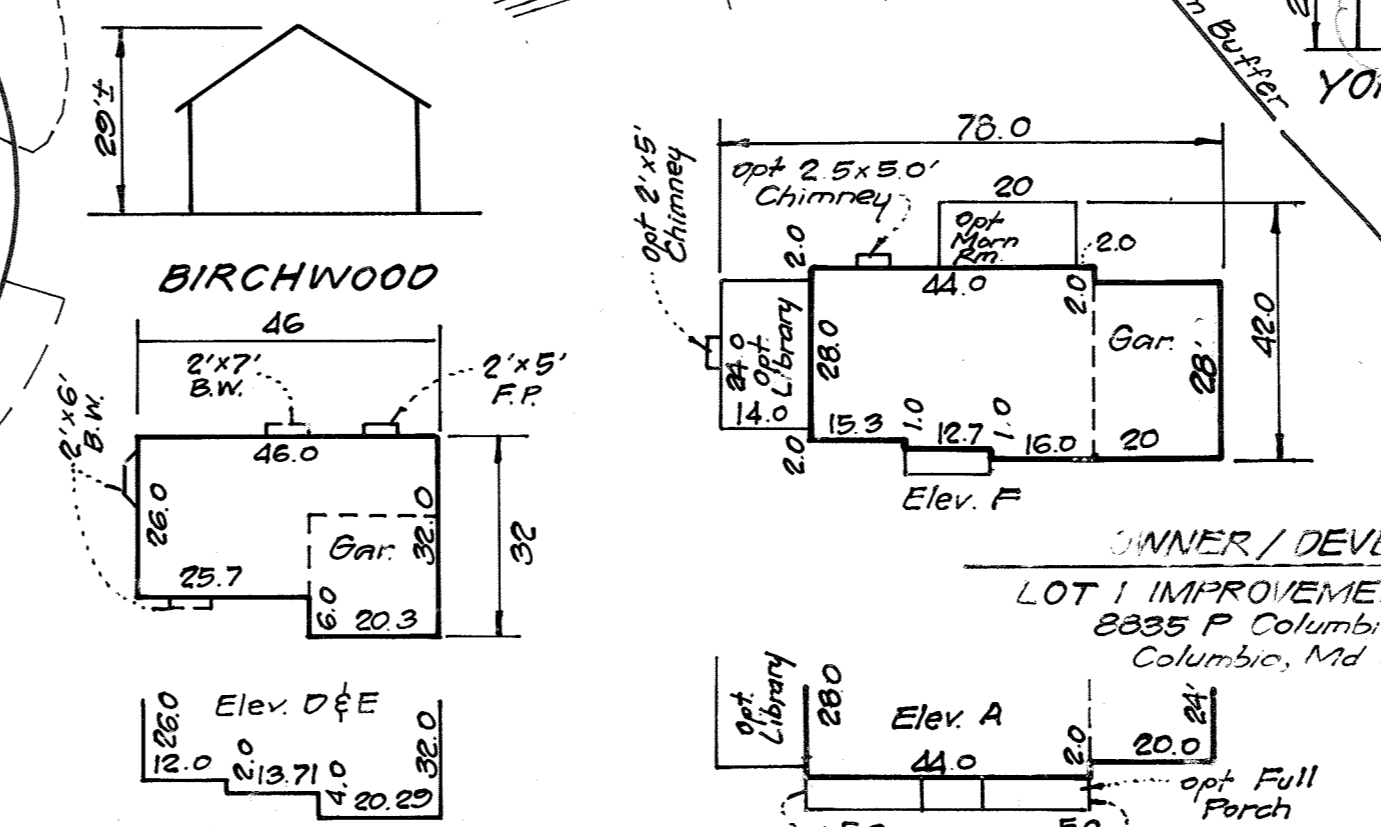
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DRAWN	JOB NO.
ZH / JS	90-280
CHECKED	FILE NO.
JME	90-280
DATE	

FOR: RYAN HOMES
 11480 CROWNDRIVE DRIVE, SUITE 128
 OWINGS MILLS, MARYLAND 21117



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

8	Rev. hse. & grad. lot 15, Add tree typical	5-1-98
7	Add Birchwood hse typical	4-2-98
REVISIONS		
NS		Date



See Below Left

6	Rev. hse. & grad. lot 33	5-1-98
5	Rev. hse. & grad. lot 18	2-25-98
4	Rev. hse. & grad. lot 16	9-23-97
3	Rev. hse. & grad. lot 23 from A box to C box, Rev Lot 19 to Lot 33, Rev BRL & Lot lines lot 33	8-30-97
2	Rev. grad. & lower houses lots 13-15	2-4-97
1	Added trees to lots 16 & 17, delineated type 'A' buffers	10-31-96
NS	REVISION	Date

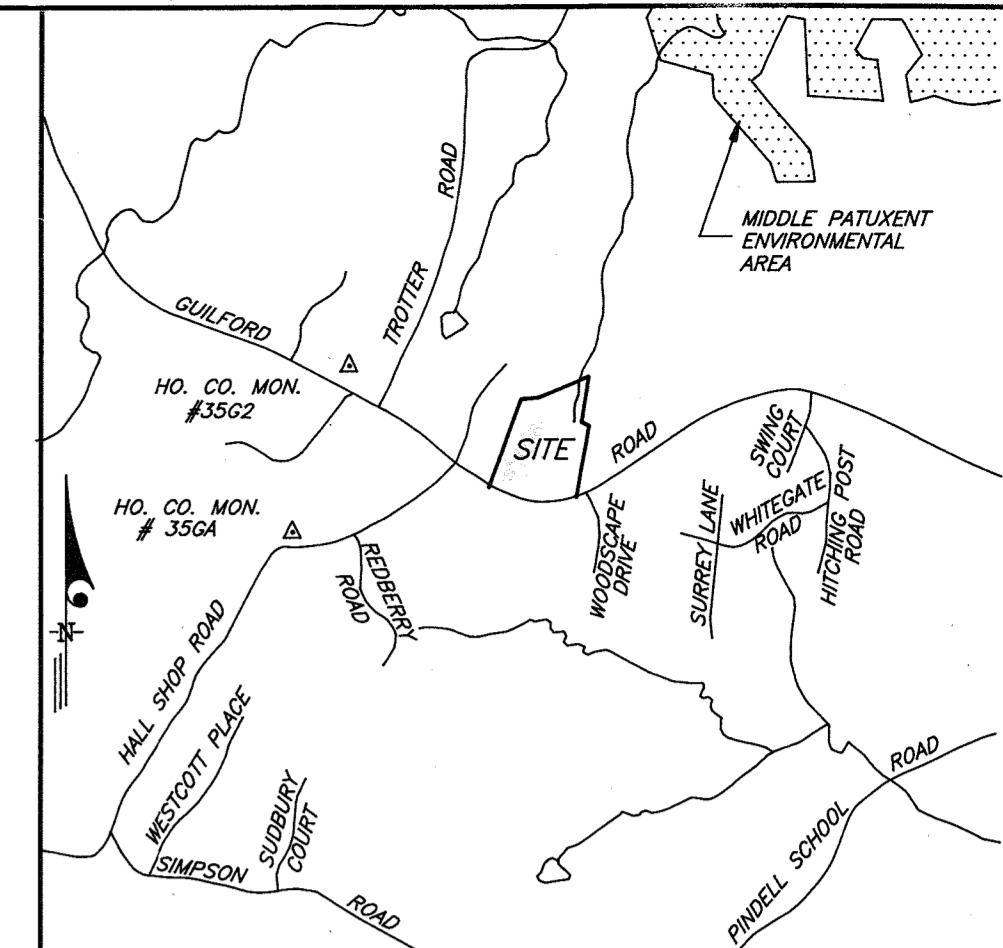
CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MISTREL WAY • COLUMBIA, MD. 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED: JME
 DRAWN: ZH
 CHECKED: EAL
 DATE: jme

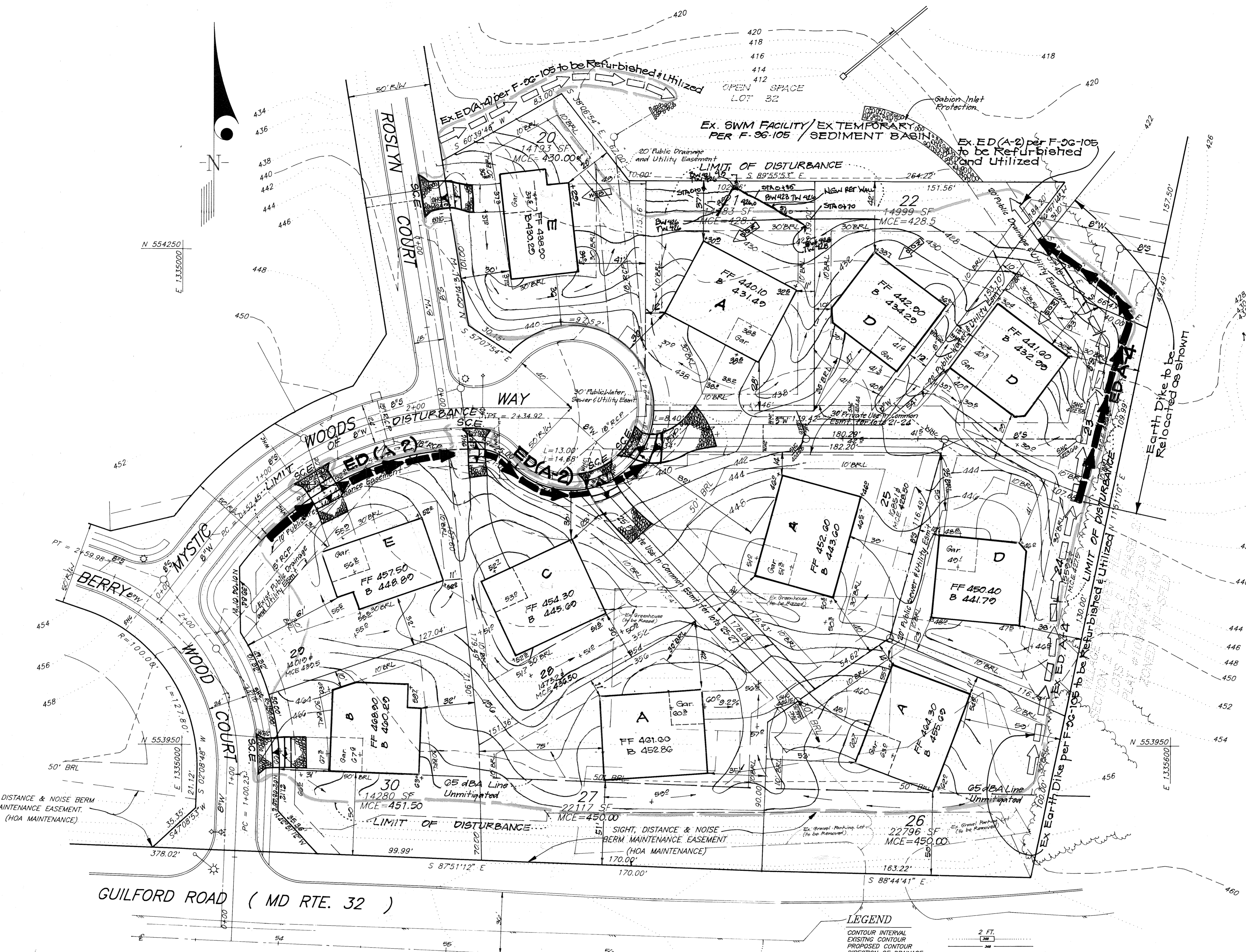
SITE DEVELOPMENT PLAN
LOTS 10 THRU 18, 20 THRU 30 AND 33
SECTION 3
 TAX MAP 355 P.O. PARCEL 353
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: RYAN HOMES
 11450 CROWNDRIVE DRIVE, SUITE 128
 OWINGS MILLS, MARYLAND 21117

SCALE: 1"=30'
 DRAWING: 2 OF 5
 JOB NO: 96-036
 FILE NO: 96-086X



VICINITY MAP
SCALE: 1"=2000'



- NOTES:
1. The existing Temporary Sediment Basin is to be utilized to provide sediment control for lots 20-30.
 2. Sediment Trap to be maintained per construction sequence schedule and details on sheets 10 & 11 of F-96-105
 3. Drainage Area = 4.1 Ac.
 4. The builder is responsible for the expense of cleaning all sediment from the receiving Temporary Sediment Basin generated from implementation of this plan.

EXISTING TEMPORARY SEDIMENT BASIN DATA
(Per F-96-105)

Total Drainage Area : 4.17 Ac.
 Volume Required : 16,092 cf
 Volume Provided : 33,377 cf
 Riser Crest Elevation : 416.0
 Permanent Pool Elevation : 414.6
 Basin Cleanout Elevation : 413.5
 Spillway Barrel Length : 69'
 Barrel Diameter : 24"
 Riser Diameter : 48"
 Trash Rack Diameter : 1'-8"

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

12/9/96
 12/11/96
 12/13/96

Reviewed for HOWARD S.C.D.
 and meets Technical Requirements
 Cheryl Simmons/CS. 12/13/96
 U.S. Natural Resources Conservation Service

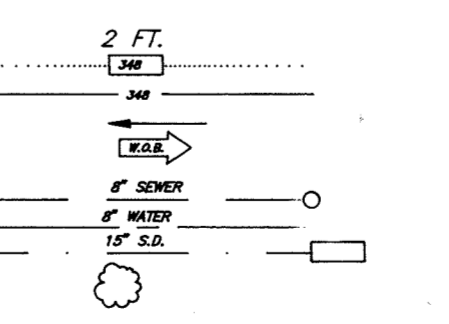
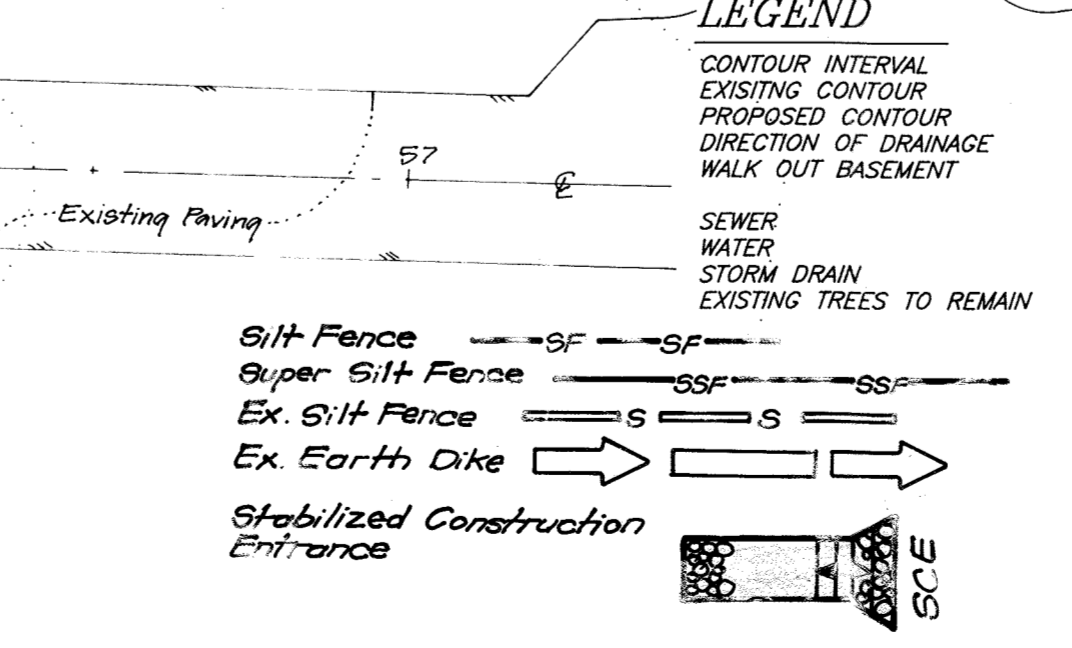
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

12/13/96

DEVELOPER'S/BUILDER'S CERTIFICATE

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

8-16-96



ENGINEER'S CERTIFICATE

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

G. NELSON CLARK 8-16-96



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

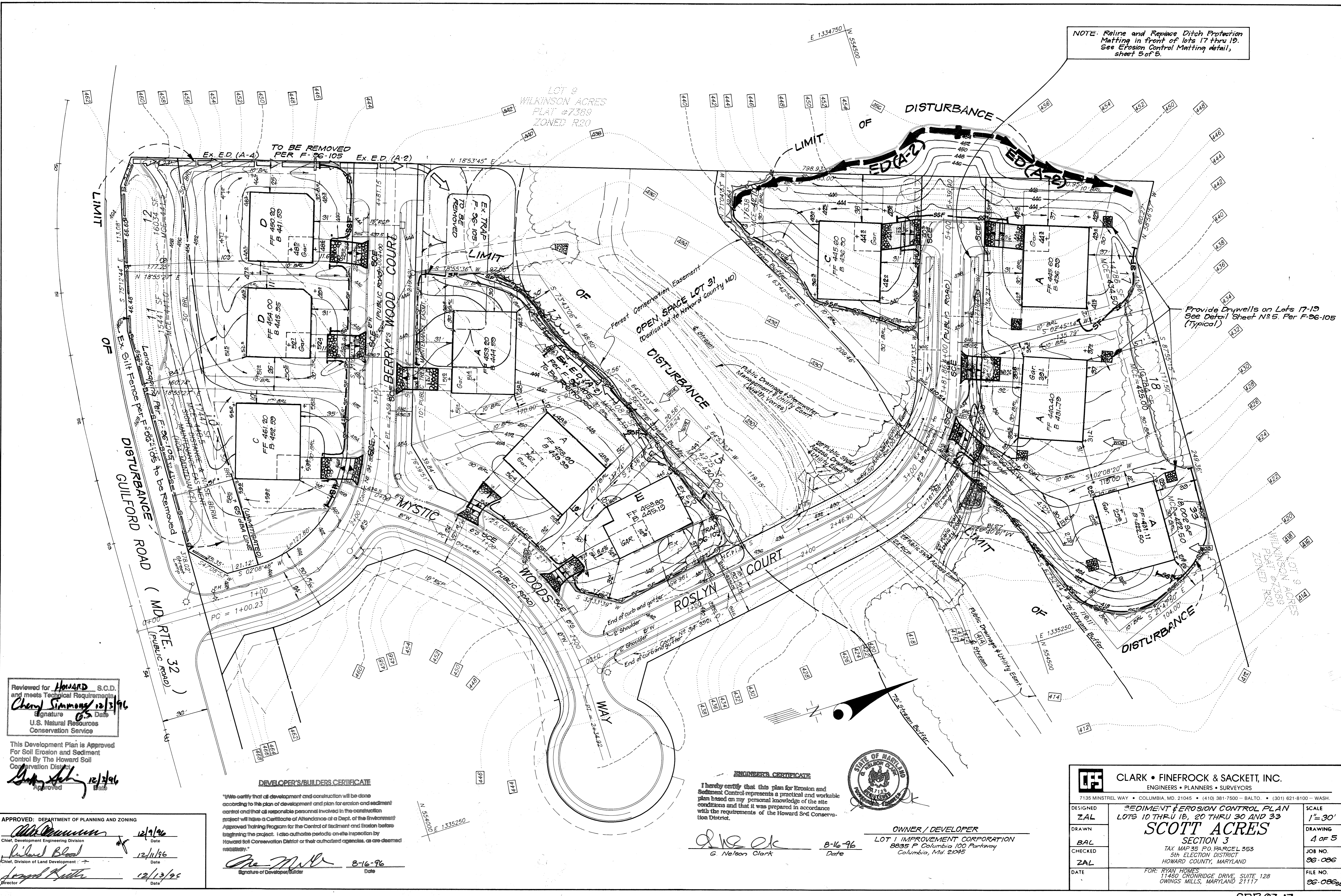
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 DRAWN: ZH / PS
 CHECKED: ZAL
 DATE:

SCALE: 1"=30'
 DRAWING: 3 OF 5
 JOB NO.: 90-080
 FILE NO.: 90-08058

SECTION 3
 SCOTT ACRES
 TAX MAP 35 P.O. PARCEL 353
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: RYAN HOMES
 11460 CROWNDRIVE DRIVE, SUITE 128
 OWINGS MILLS, MARYLAND 21117

NOTE: Reline and Replace Ditch Protection Matting in front of lots 17 thru 19. See Erosion Control Matting detail, sheet 5 of 6.



Reviewed for **HOWARD** S.C.D. and meets Technical Requirements
 Cheryl Simmons 12/3/96
 Signature Date
 U.S. Natural Resources Conservation Service

This Development Plan is Approved For Soil Erosion and Sediment Control By The Howard Soil Conservation District
 Approved 12/3/96
 Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division 12/9/96
 Date
 Chief, Division of Land Development 12/11/96
 Date
 Director 12/13/96
 Date

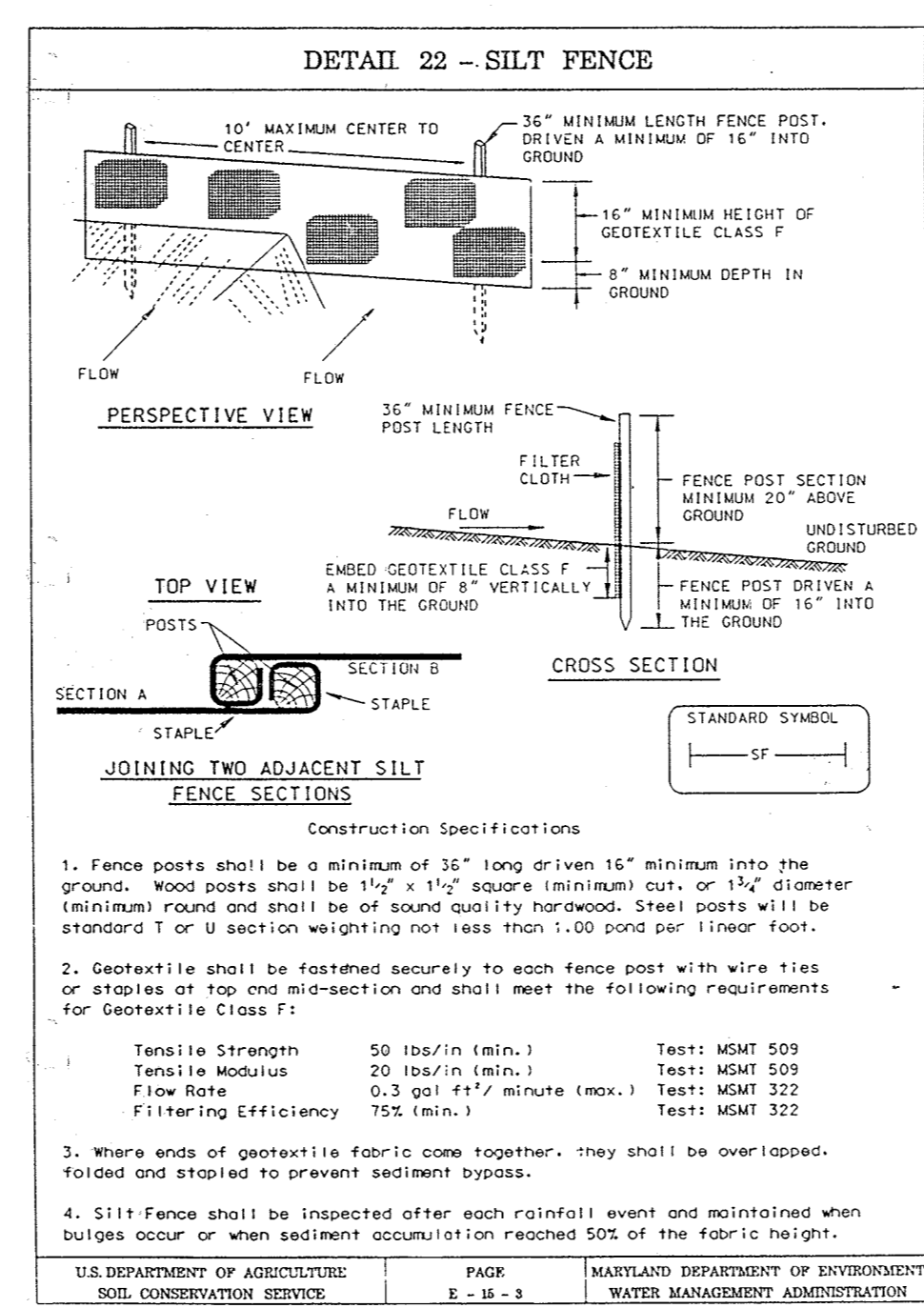
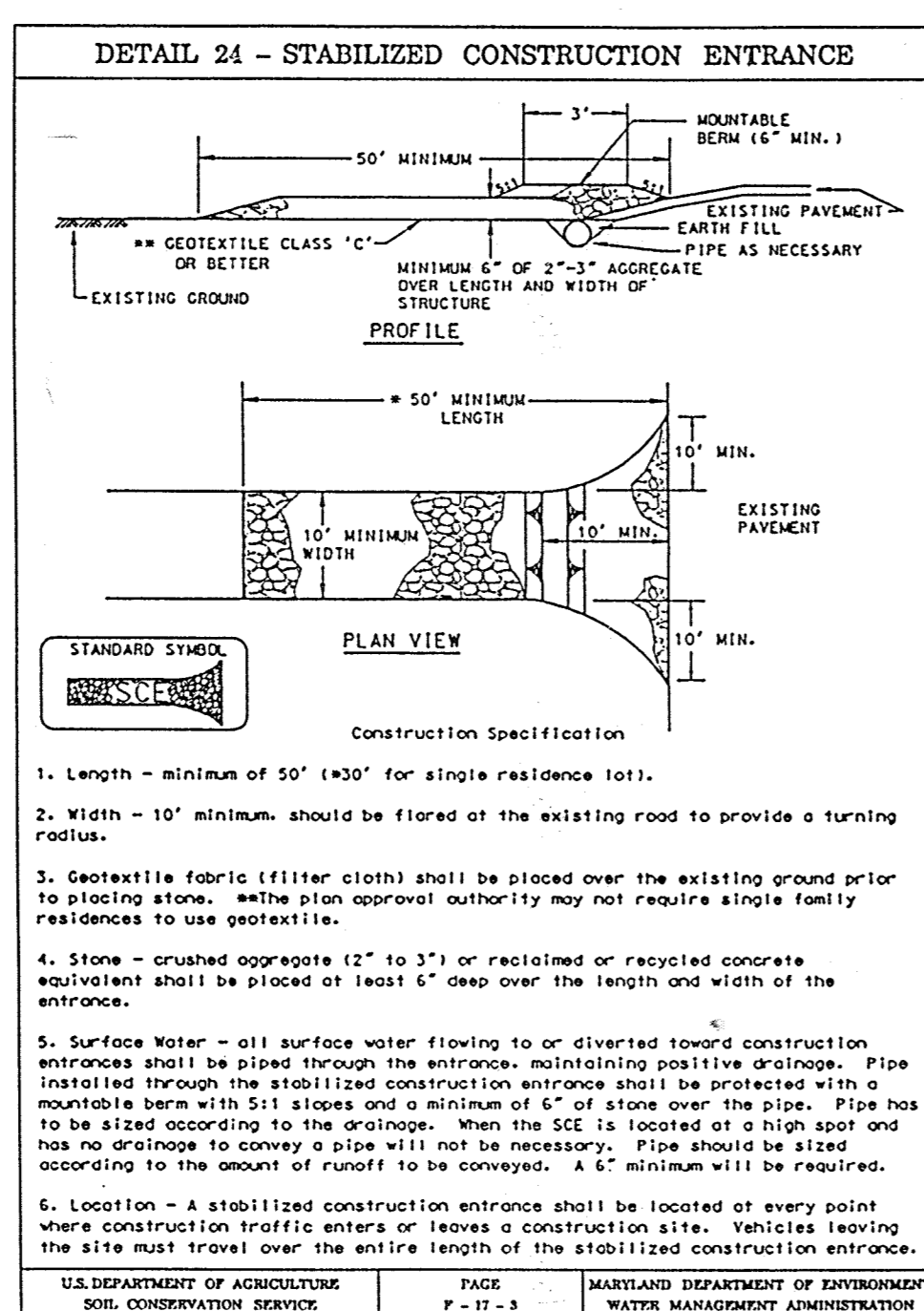
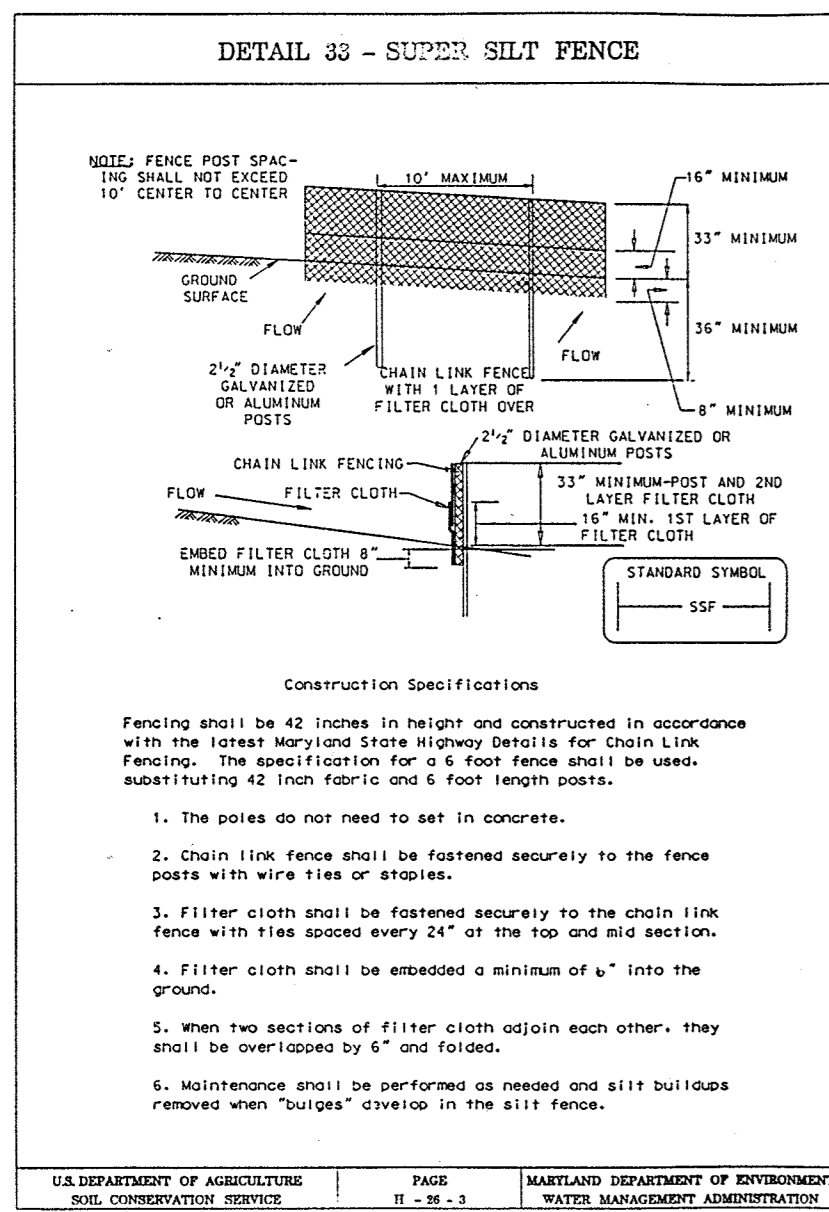
DEVELOPER'S/BUILDERS CERTIFICATE
 "We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by Howard Soil Conservation District or their authorized agencies, as are deemed necessary."
 Signature of Developer/Builder 8-16-96
 Date

ENGINEER'S CERTIFICATE
 I hereby 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.
 G. Nelson Clark 8-16-96
 Date



OWNER / DEVELOPER
 LOT 1 IMPROVEMENT CORPORATION
 8035 F Columbia 100 Parkway
 Columbia, Md. 21045

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINTREL WAY • COLUMBIA, MD. 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.		
DESIGNED ZAL	SEDIMENT EROSION CONTROL PLAN LOTS 10 THRU 16, 20 THRU 30 AND 33 SCOTT ACRES SECTION 3 TAX MAP 35 P.O. PARCEL 353 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN BAL		DRAWING 4 OF 5
CHECKED ZAL	JOB NO. 96-086	FILE NO. 96-086
DATE	FOR: RYAN HOMES 11460 CROWNDRIVE DRIVE, SUITE 128 OWINGS MILLS, MARYLAND 21117	



PERMANENT SEEDING NOTES

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

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

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

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (14 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (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 well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed. Option (3) Seed with 80 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 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

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

TEMPORARY SEEDING NOTES

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 periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (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 sod.

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 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

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

SEDIMENT AND EROSION CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
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 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or redistribution, 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 as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol. 1, Chapter 7, 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, sod, temporary seeding and mulching (Sec. C). 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 ANALYSIS:

Total Area of Site:	771 AC.
Area Disturbed:	670 AC.
Area to be vegetatively stabilized:	665 AC.
Total Cut:	804,541 cu. yd.
Offset Waste/Borrow Area Location:	1
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 control must be provided, if deemed necessary by the Howard County DPM 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 back-filled and stabilized within one working day, whichever is shorter.
12. The total amount of silt fence = $\frac{615 LF}{1175 LF}$ Super Silt Fence

CONSTRUCTION SEQUENCE:

NO. OF DAYS	NO. OF DAYS
1. Obtain grading permit.	1
2. Install tree protection fence.	1
3. Install sediment and erosion control devices and stabilize.	1
4. Excavate for foundations, rough grade and temporary stabilize.	1
5. Construct structures, sidewalks and driveways.	1
6. Final grade and stabilize in accordance with Sides and Specs.	1
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	1

NOTE: The builder is responsible for clearing all sediment from the receiving temporary Sediment Basin generated from implementation of this plan.

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

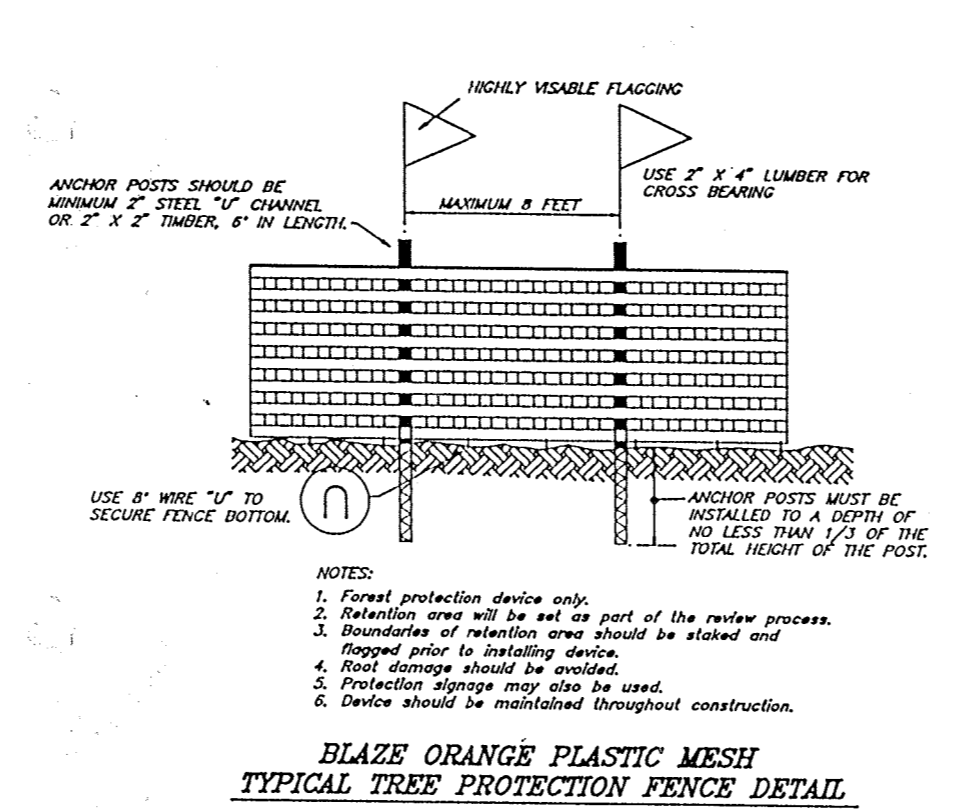
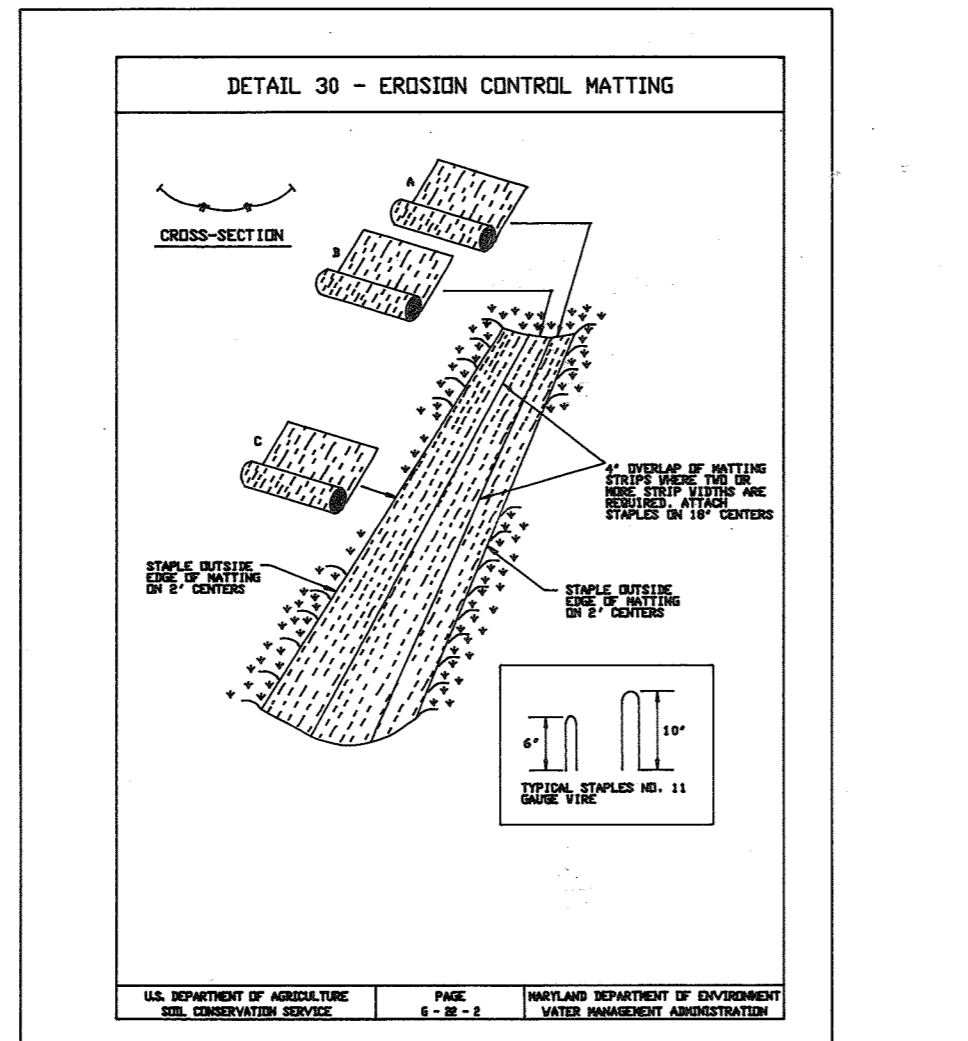
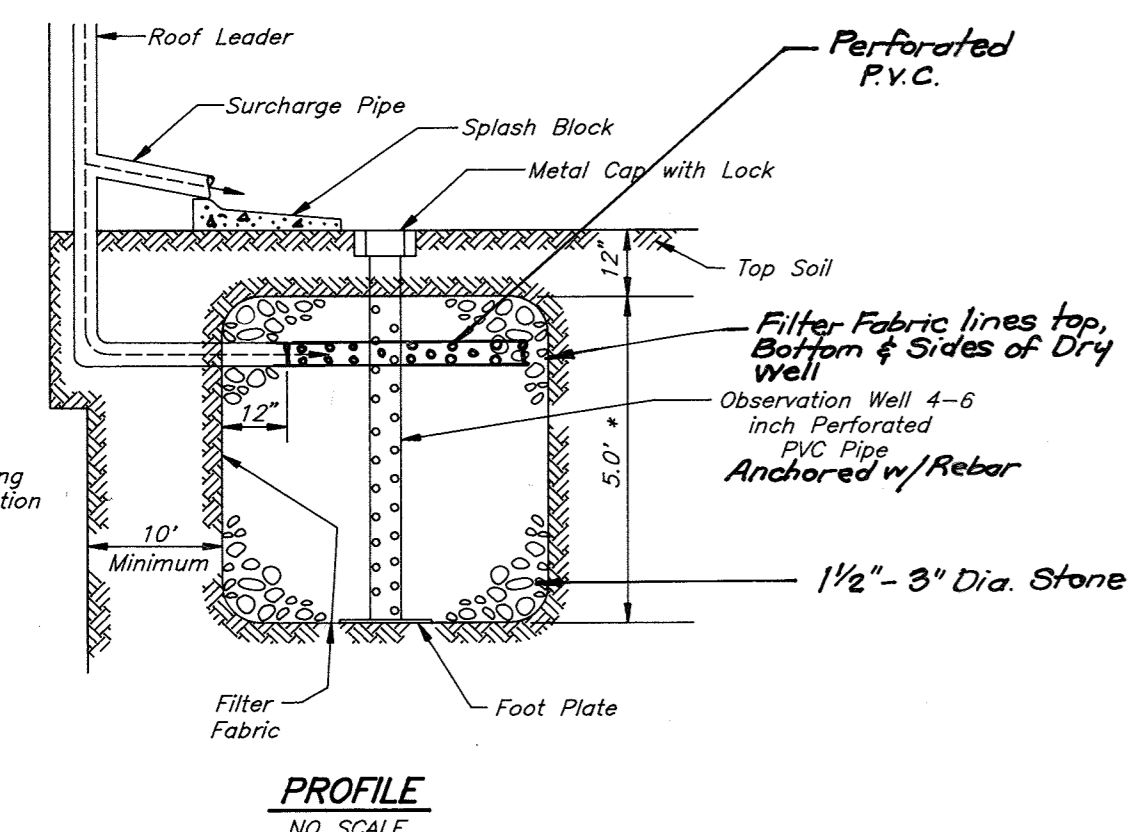
Purpose
To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

- i. This practice is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. 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.
 - c. The original soil to be vegetated contains material toxic to plant growth.
 - d. The soil is so acidic that treatment with limestone is not feasible.
- ii. 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

1. Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SSC in cooperation with Maryland Agricultural Experiment Station.
2. Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by a 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, slip, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1/2" in diameter.
 - ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
 - iii. 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. Limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
3. For sites having disturbed areas under 5 acres:
 - i. Place topsoil (if required) and apply soil amendments as specified in 21.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
4. Topsoil Application
 - i. When topsoiling, maintain needed erosion and sediment control practices such as diversion dikes, Grade Stabilization Structures, Earth Dikes, Silt Sill Fence and Sediment Traps and Basins.
 - ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4" - 8" higher in elevation.
 - iii. 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 seeding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling operations shall be corrected in order to prevent the formation of depressions or water pockets.
 - iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.



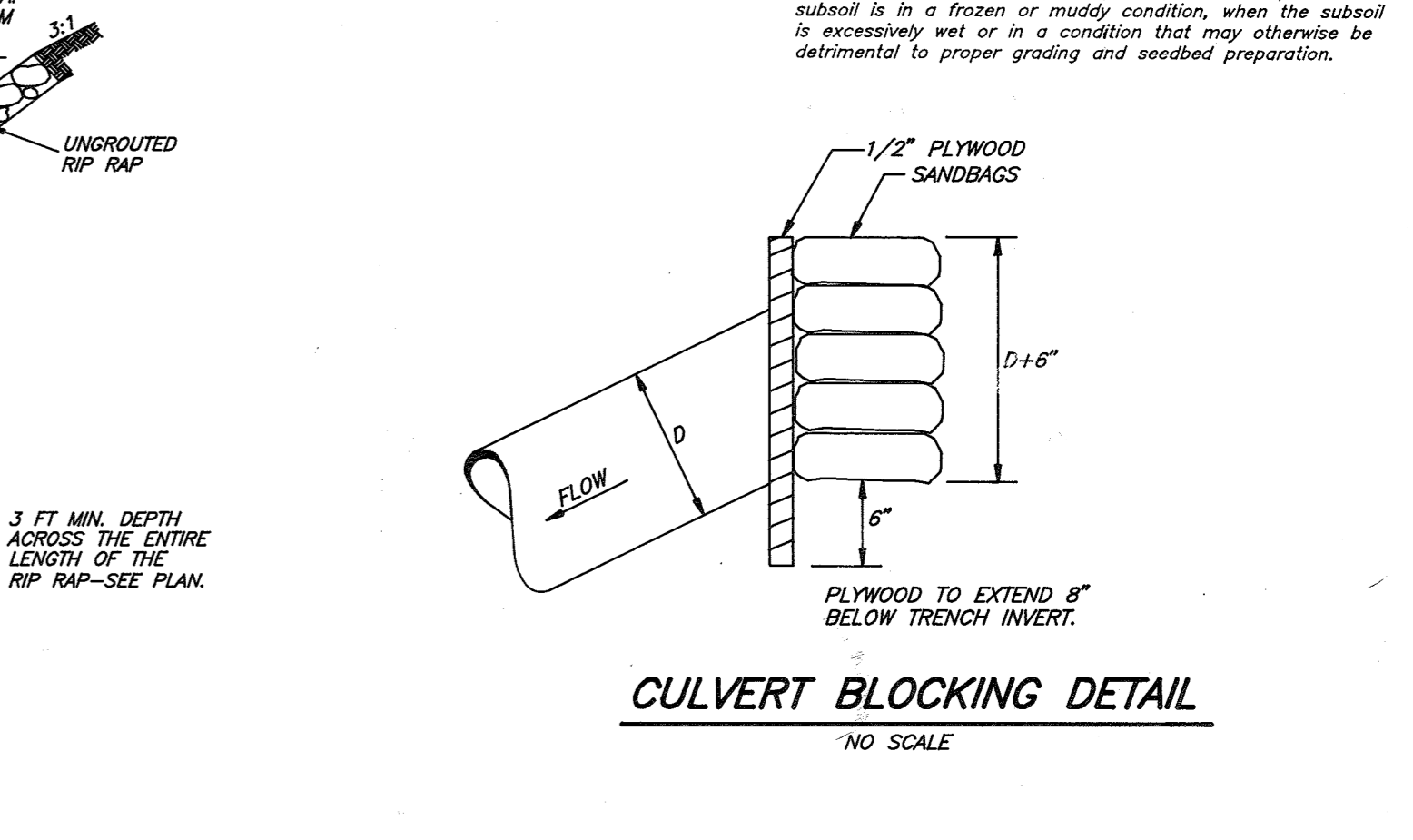
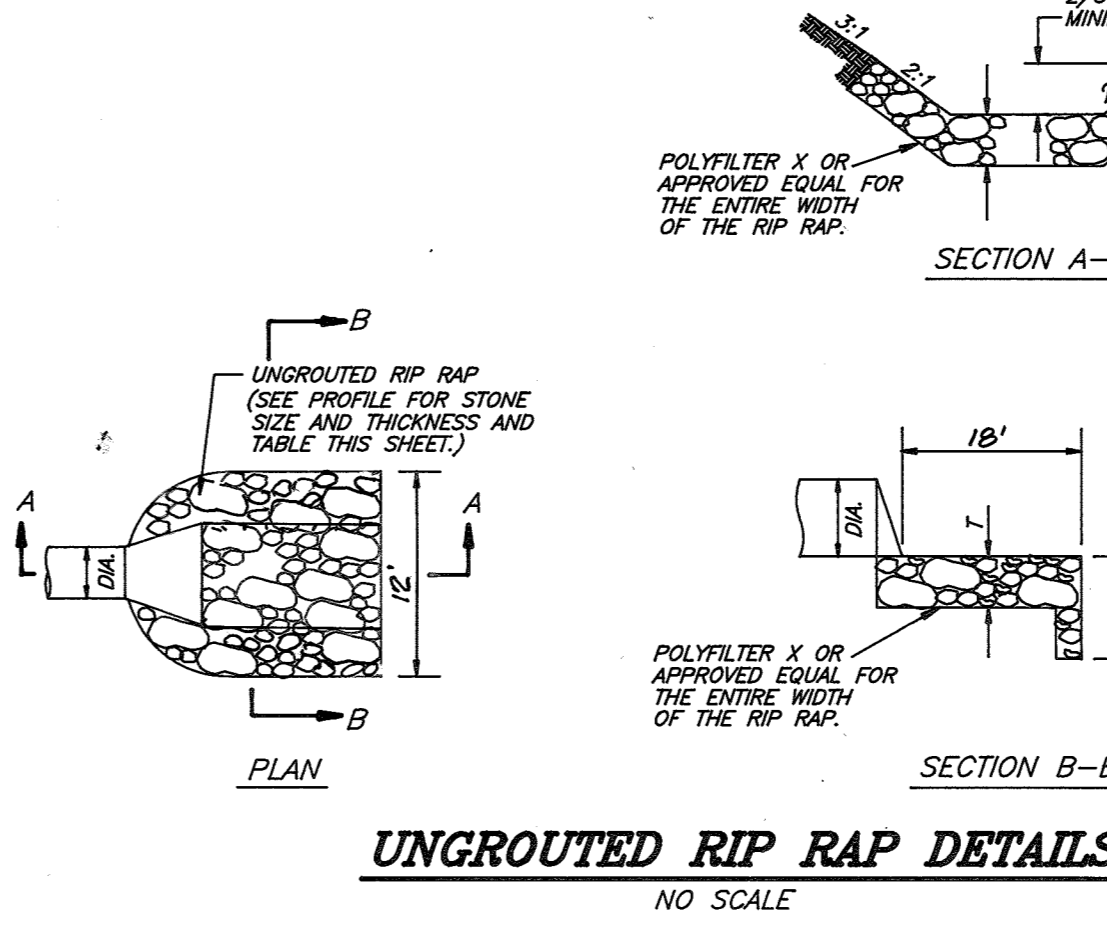
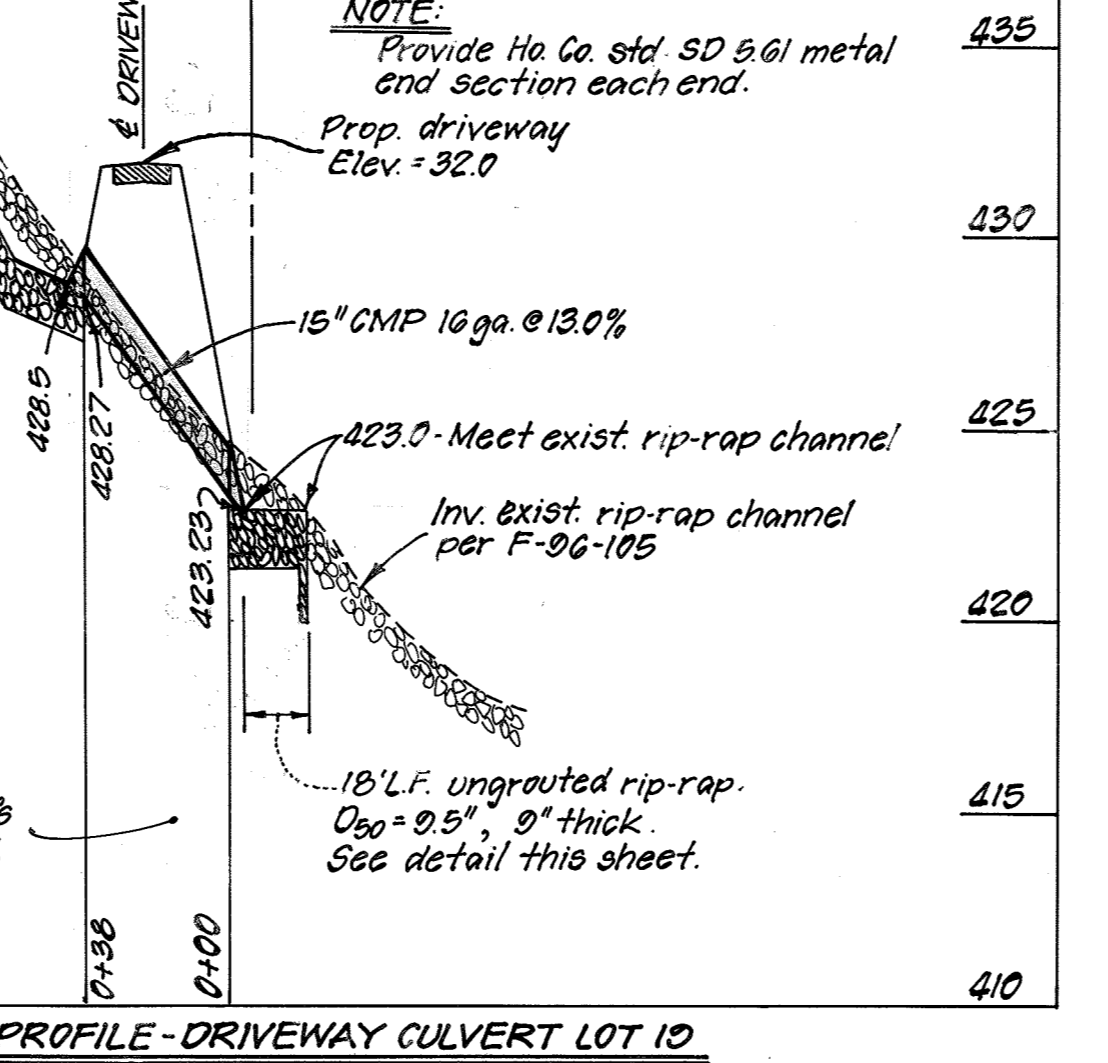
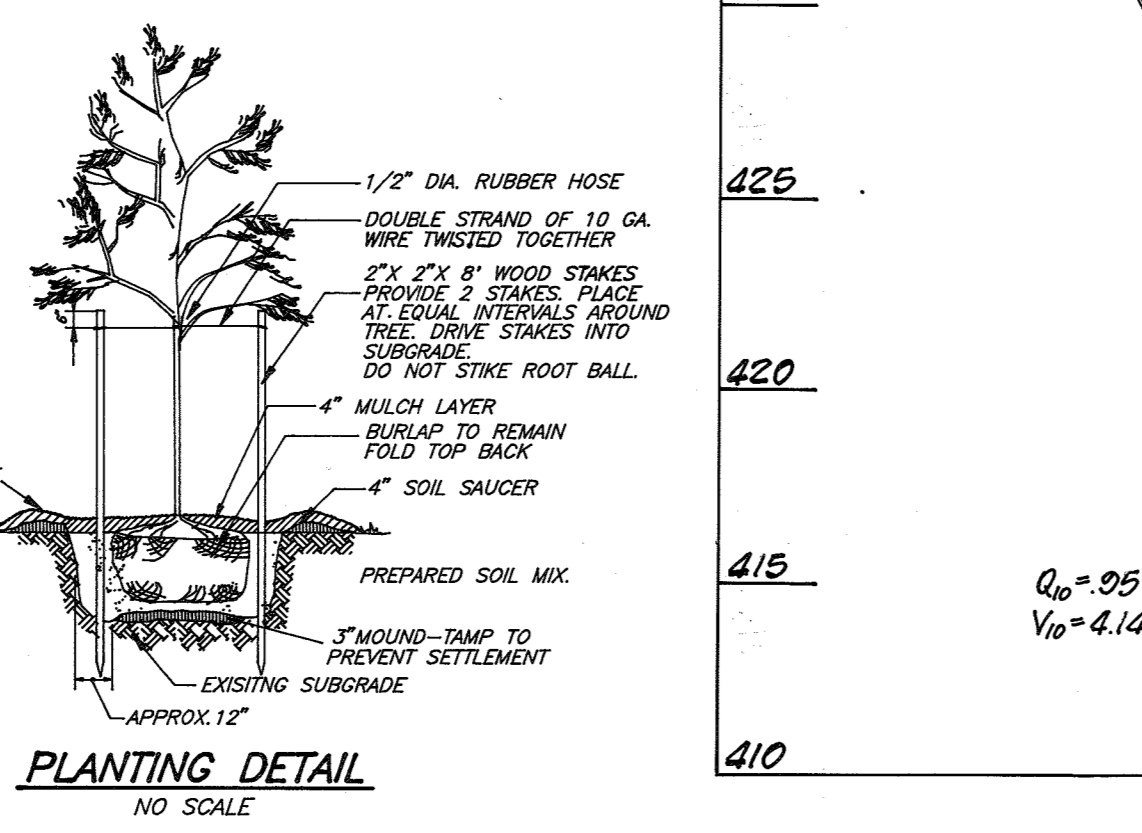
DRY WELL CHART

LOT NO.	AREA REQUIRED	AREA PROVIDED	NO. OF WELLS	SIZE OF WELLS
17	312 SQ. FT.	338 SQ. FT.	2	6.5'x6.5'x4'
18	312 SQ. FT.	338 SQ. FT.	2	6.5'x6.5'x4'
19	312 SQ. FT.	338 SQ. FT.	2	6.5'x6.5'x4'

TYPICAL DRY WELL CROSS SECTION

SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type		A
Linear Feet of Perimeter		386'
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)		63'
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)		-
Number of Plants Required (Shade Trees, Evergreen Trees, Shrubs)		(BASED ON 323) 5
Number of Plants Provided (Shade Trees, Evergreen Trees, Other Trees (2:1 substitution), Shrubs (10:1 substitution) (Describe plant substitution credits below if needed)		5



PLANT LIST

QTY	PLANT NAME	SIZE	REMARKS
(8)	5 ACER RUBRUM	2 1/2\"/>	

Red Maple

Reviewed for HOWARD S.C.D. and meets Technical Requirements
Signature: [Signature] Date: 12/13/96
U.S. Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature: [Signature] Date: 12/13/96
Approved

DEVELOPER'S/BUILDER'S CERTIFICATE

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

Signature: [Signature] Date: 8-16-96

ENGINEER'S CERTIFICATE

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

Signature: [Signature] Date: 8-16-96
G. Nelson Clark

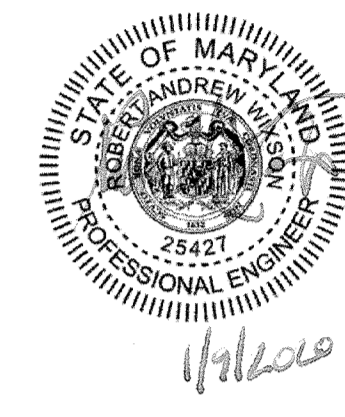
OWNER / DEVELOPER
LOT 1 IMPROVEMENT CORPORATION
8835 P. Columbia 100 Parkway
Columbia, Maryland 21045

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

DESIGNED	JME	SEDIMENT AND EROSION CONTROL PLAN	SCALE
DRAWN	ZH / PS	LOTS 10 THRU 18, 20 THRU 30 AND 33	1"=30'
CHECKED	ZAL	SECTION 3	DRAWING
DATE	10-31-96	TAX MAP 55 P.O. PARCEL 353	5 of 5
REVISION	1	SIX ELECTION DISTRICT	JOB NO.
		HOWARD COUNTY, MARYLAND	06-080
		FOR: RYAN HOMES	FILE NO.
		11460 CROWNBRIDGE DRIVE, SUITE 128	06-0805e
		OWINGS MILLS, MARYLAND 21117	

No.	Revision / Issue	Date
01	**	**

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25427, Expiration Date: 7/1/20.



The Suh Residence
6915 Mystic Woods Way
Columbia, MD

Revised Site Development Plan
Scotts Acres
Lots 10-32 (SDP 97-17) Lot 21
Resubdivision of 5, 6, and 7
5th Election District
Tax Map 25 po parcel 353
Howard County, MD

Retaining Wall Plan

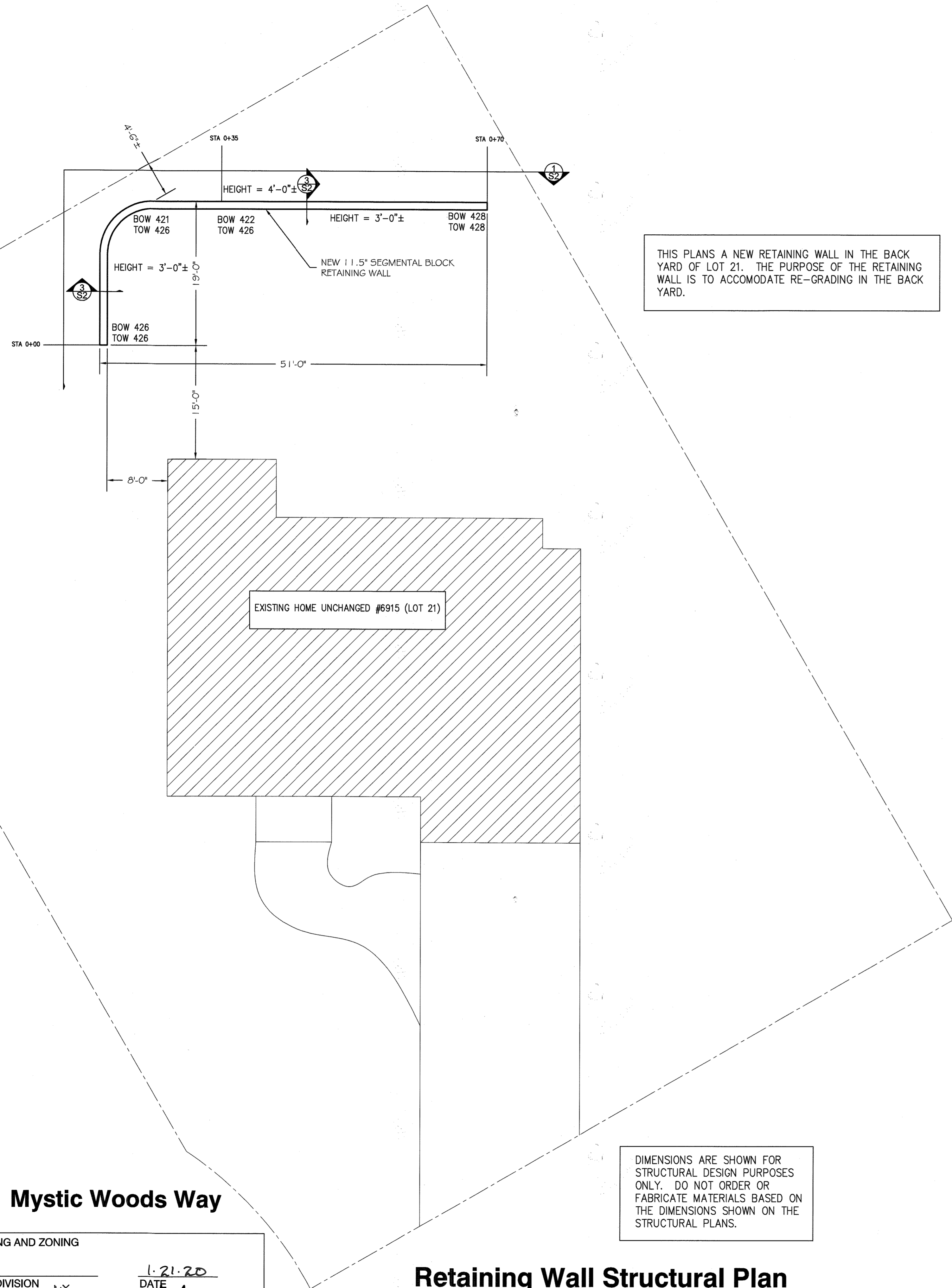
Drawn By: RAW
Date: 8-1-19
Scale: As Noted

6 of 7
SDP-97-017

Structural Notes

- LOADS:**
LIVE LOADS
DECK: 60 PSF
ATTIC: 20 PSF
FLOOR: 40 PSF
BEDROOM: 30 PSF
ROOF: 30 PSF
- WIND LOADS:**
WIND SPEED: Vult = 115mph; Vasd = 89mph
WIND LOAD IMPORTANCE FACTOR: 1.0
WIND EXPOSURE FACTOR: B
WIND DESIGN PRESSURE: 11PSF
- SNOW LOADS:**
GROUND SNOW LOAD (PG): 30 PSF
FLAT ROOF SNOW LOAD (PF): 20 PSF
SNOW EXPOSURE FACTOR (CE): 0.9
SNOW IMPORTANCE FACTOR (I): 1.0
- SEISMIC DESIGN DATA:**
SEISMIC IMPORTANCE FACTOR (Ie): 1.0
SPECTRAL RESPONSE ACCELERATIONS:
(Ss): 20.0%
(S1): 8.0%
SPECTRAL RESPONSE COEFFICIENTS:
(Sds): 33%
(Sd1): 18.7%
SEISMIC DESIGN CATEGORY: B
SEISMIC SITE CLASSIFICATION: E
SEISMIC COEFFICIENT (Cs): 0.22
SEISMIC MODIFICATION FACTOR (R): 1.5
BASE SHEAR: 11.1k
ANALYSIS PROCEDURE: EQUIV. LATERAL FORCE
BASIC SFRS: ORDINARY MASONRY WALLS.

- All work and materials to comply with the requirements of the 2015, of IBC and IRC as revised by Howard County
- Codes: the following design standards are applicable by reference:
ACI 530-13/ASCE 5-13 Building Code Requirements for Masonry Structures.
AISC - Timber Construction Manual - fifth Ed.
ACI 318-14 Building Code Requirements for Reinforced Concrete
AISC - 360-10 Specifications for Steel Buildings.
- Foundations: footings, underpinning and slab on grades are designed to bear on native soil with an allowable bearing pressure of 2000 psf. A qualified soil-bearing inspector prior to placement of concrete shall verify all bearing values.
- Structural steel:
A. All structural steel, including detail material shall conform to ASTM A572 Fy = 50 ksi, U.N.O.
B. All structural tubing shall conform to ASTM A500, gr6, B
C. All steel pipe shall be ASTM A53, type E or S, grade B
D. All welders shop and field, shall be certified. Use E70xx electrodes only.
E. All steel exposed to weather and exterior masonry support shall receive one shop coat of corrosion-inhibiting primer.
F. Detailing, fabrication and erection shall be in accordance with AISC. Adequately brace all steel against lateral loads during erection.
G. All exterior structural steel shall receive rust preventative paint.
H. Connections:
I. All beam connections shall be simple shear connections, U.N.O. Where no reaction is provided, the beam shall be assumed to carry 120 % of the allowable uniform load in Kips for beams laterally supported, as given in the AISC steel construction manual.
II. Except as noted, all fasteners shall be 3/4" diameter ASTM A325 bolts, designed to act in bearing type connections with threads included.
- Steel Deck:
A. Steel deck shall be 20ga steel unless noted otherwise.
B. Steel deck shall be continuous over supports with no end laps.
C. Provide 3" min. bearing at each steel support.
D. Weld deck to steel supports with 5/8" Diameter puddle welds @ 12" O.C.
E. Side laps shall be a min. of 3". Weld side laps together with 5/8" Diameter puddle welds @ 36" O.C.
- Lumber:
A. Lumber shall be SPF #2 with a min. Fb = 875 psi Min. Fv = 135 psi and min. E = 1,400,000 psi.
B. LVL and PCL shall have a min. Fb = 2850 psi; Fv = 285 psi; E = 2,000,000 psi.
C. Nail all multiple members together per the manufacturers recommendations and at a minimum use 2-10d nails at 6" O.C. staggered. Glue multiple studs together and stagger the sides that nails are driven from.
D. Provide bridging at center of all joist spans Exceeding 8'-0" and at 1/3 points of all joist spans exceeding 16'-0". Provide solid blocking at all bearing points on top of walls or beams. Provide squash blocking below all posts and multiple studs.
E. Exterior load bearing walls shall be 2x6 studs at 16" O.C. and interior load bearing walls shall be 2x4 studs @ 16" O.C. with a double top plate and a single bottom plate of the same size. Provide solid blocking @ 4'-0" with a min. of solid blocking at the midpoint of the wall.
F. Floor decking shall be 3/4" APA rated decking and roof decking shall be 1/2" APA rated decking. Wall sheathing shall be 3/4" APA rated sheathing. Glue and screw the decking to floor joists.
G. All posts shall have Simpson Cap and Base Plates typ.
H. All joists shall have Simpson Hangers where applicable.
I. Glue and nail all multiple studs together with 2-10d nails at 6" O.C. stagger sides that nails are driven from.
J. Place a double stud below all beams, headers, and double joists.
K. Provide double joists below all walls that span parallel to floor framing.
L. All lumber in contact with masonry or concrete shall be pressure treated. All lumber placed within 8" of soil shall be pressure treated. All lumber shall be protected against decay and termites per IRC Chapter R3.
M. See IRC table R602.3(1) for nailing not shown on the plans.
N. Wood Headers shall be as follows:
Opening < 3'-0" - 2-2x6
3'-0" < Opening < 4'-6" - 2-2x8
4'-6" < Opening < 6'-0" - 2-2x10
6'-0" < Opening < 8'-0" - 2-1 1/2"x8 LVL
8'-0" < Opening < 12'-0" - 2-1 1/2"x12 LVL
- Fasteners:
A. All prefabricated angles, bearing plates, and joist hangers shall be installed per the manufacturer recommendations.
B. Follow the manufacturer recommendations for setting epoxy bolts.
C. Expansion bolts shall be RAWL Power Stud.
- Masonry:
A. Masonry construction shall be in conformance with the applicable sections of ACI 530-13/ASCE-13, "Specifications for Masonry Structures."
B. Concrete masonry units shall be hollow load bearing units (ASTM C90) grade n-1 with a net strength of 2000 psi and Fm = 1500 psi.
C. All joints to be filled solid with mortar.
D. Mortar to comply with ASTM C270 (type M or S).
E. Place weep holes and expansion joints per the IRC Code.
F. Place horizontal truss style reinforcement at 16" O.C. vertically.
- Cast in place concrete:
A. Concrete construction shall be in conformance with the applicable sections of ACI 318-14, "Part 3 - Construction Requirements."
B. Footing concrete shall have a minimum compressive strength at 28 days of 3000 psi; Slab and Wall concrete shall have a minimum 28 day compressive strength of 4500psi, UNO (unless noted otherwise).
C. All concrete shall be placed with a slump of 4" (± 1/2")
D. All concrete shall be normal weight, UNO.
E. All concrete shall have 6% ± 1% entrained air.
F. Concrete cover for reinforcement shall be:
Columns and beams 1 1/2"
Slabs 1/2"
Footings 3"
- Reinforcement:
A. Reinforcing bars shall be deformed bars conforming to ASTM A615, grade 60 (Fy = 60 ksi)
B. Welded wire fabric (w/w) shall conform to ASTM A185. Lap edges of wire fabric at least 6" in each direction.
- Dimensions: the contractor shall verify all dimensions prior to fabrication of structural components.
- Coordination: the contractor shall coordinate all sleeves, duct openings and holes between trades.



THIS PLANS A NEW RETAINING WALL IN THE BACK YARD OF LOT 21. THE PURPOSE OF THE RETAINING WALL IS TO ACCOMMODATE RE-GRADING IN THE BACK YARD.

DIMENSIONS ARE SHOWN FOR STRUCTURAL DESIGN PURPOSES ONLY. DO NOT ORDER OR FABRICATE MATERIALS BASED ON THE DIMENSIONS SHOWN ON THE STRUCTURAL PLANS.

Retaining Wall Structural Plan

Scale: 1/8" = 1'-0"

Mystic Woods Way

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] NY
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature]

DATE: 1-21-20
DATE: 2/6/20
DATE: 2-11-20
DATE:

DIRECTOR

