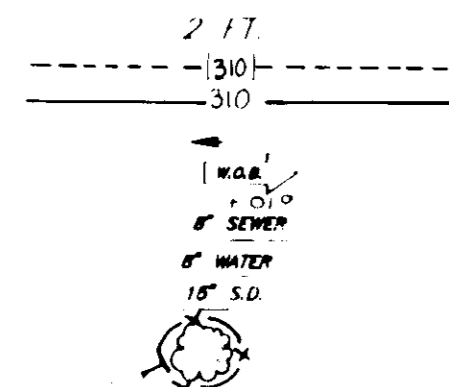


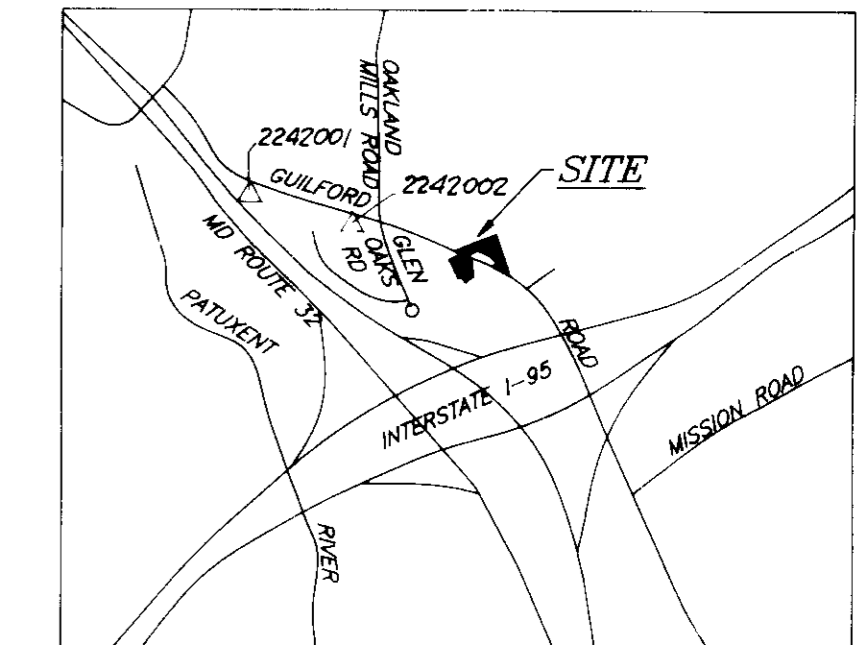
LEGEND

- CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- SPOT ELEVATION
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- EXISTING TREES TO REMAIN
- TRAIL PROTECTION FENCE



NOTE

- Timber shall be either:
 - Cresote treated railroad tie
 - CCA treated landscaping timbers (.40 lb/cf retention)
- Hardware shall be hot dipped galvanized.
- Weepholes with or without gravel drain are minimum measures for groundwater. For any substantial amount of groundwater a drain system should be designed and utilized.
- Design shall be verified for site specific soil condition by a Professional Geotechnical Engineer.



VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES:

- Subject property is zoned: New Town per B-2-85 Comprehensive Zoning Plan.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos.: 2242001 & 2242002.
- Twilight Court is public and existing.
- The total area included in this submission is: 2.586 Ac.
- The total number of lots included in this submission are: 16
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- The maximum lot coverage is: 30%
- Office of Planning and Zoning file reference file numbers are: S-89-79, FDP-208, & P-90-24, & F-01-52.
- The contractor or developer shall contact the Construction/Inspection Survey Division, 24 hours in advance of commencement of work at 301-792-2630.
- The existing topography shown was field run by Clark, Finerock and Sackett, Inc. on 8-6-91
- The minimum setback restrictions from the property lines and the rights-of-way of any public road is in accordance with the Final Development Plan Phase 208 was recorded as plat #s 3054A 1162 through 3054A 1162 on October 30, 1990
- Improvement to property: Single Family Detached.
- For driveway, entrance details, refer to Howard County Design Manual Volume II Standard Details R-G.03 & G.05.
- Stormwater Management Provided under F-01-52

SPECIAL NOTES:

- This plan is for grading of lots 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-91-52 and/or approved Water and Sewer Construction #C-24-3039-D.
- No clearing, grading or construction is permitted within wetland or stream buffers.

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
15	0500 TWILIGHT COURT
16	0504 " " " "
17	0508 " " " "
18	0512 " " " "
19	0516 " " " "
37	0517 " " " "
38	0513 " " " "
39	0509 " " " "
40	0505 TWILIGHT COURT
41	0503 GUILFORD ROAD
42	0507 " " " "
43	0571 " " " "
44	0575 " " " "
45	0579 " " " "
46	0583 " " " "
47	0587 GUILFORD ROAD

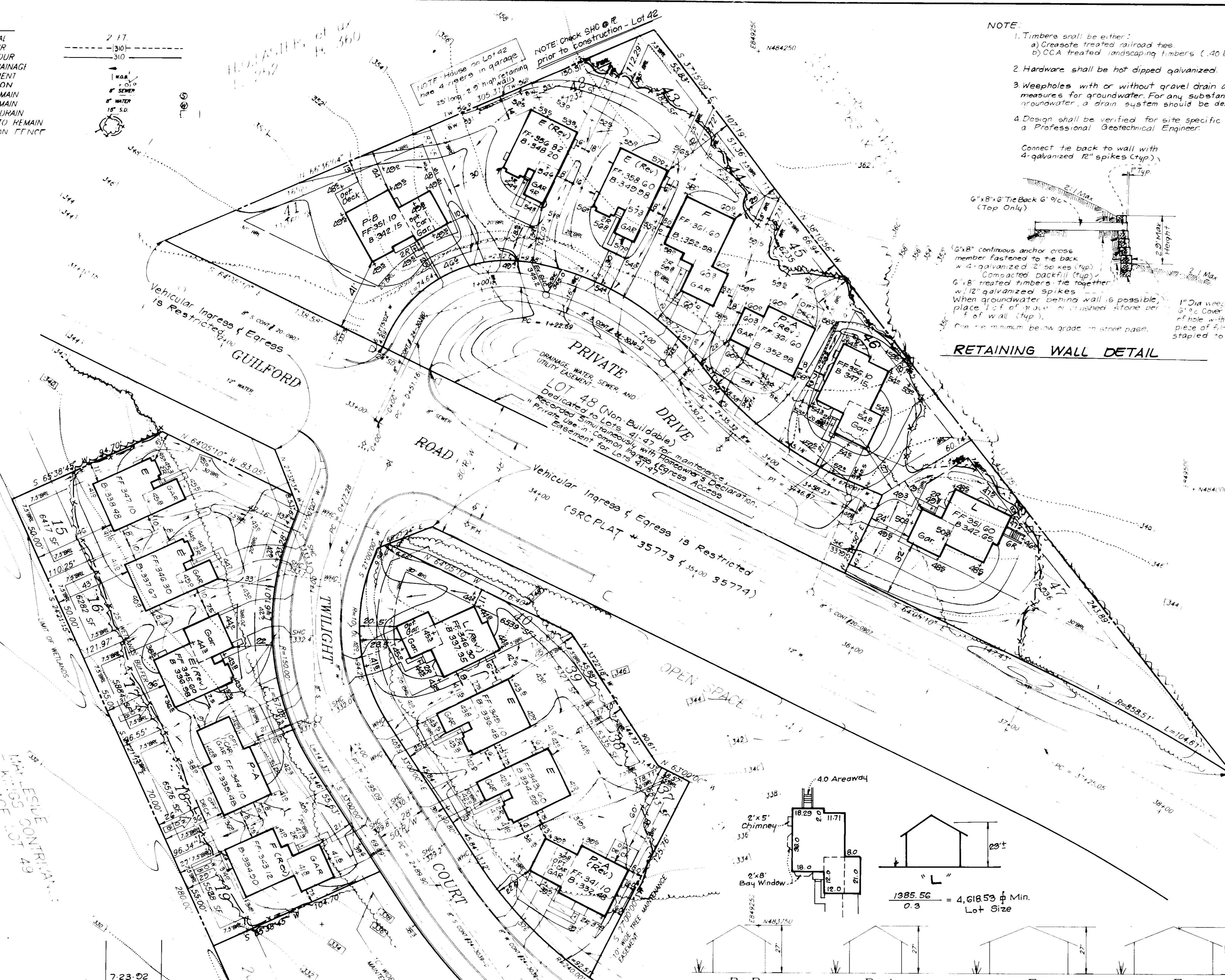
OWNER/DEVELOPER
HOWARD RESEARCH AND LAND DEVELOPMENT CORP
10275 Little Patuxent Pkwy
Columbia, MD. 21044

SUBMISSION NAME MAPLESIDE II
VILLAGE OF KINGS CONTRIVANCE

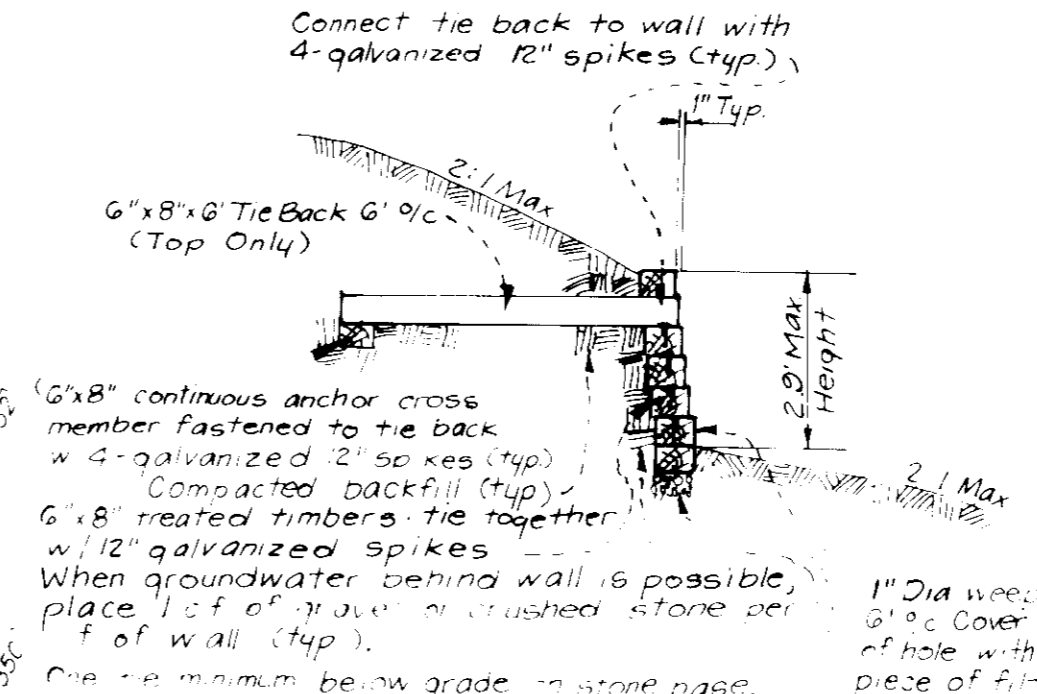
SECTION/AREA 5/4
LOTS/PARCELS 15-19 & 37-47

PLAT NO. 10023
BLOCK NO. 17
ZONE SFMD
TAX MAP NO. 42
ELECTION DIST. 6TH
CENSUS TRACT 8067.03

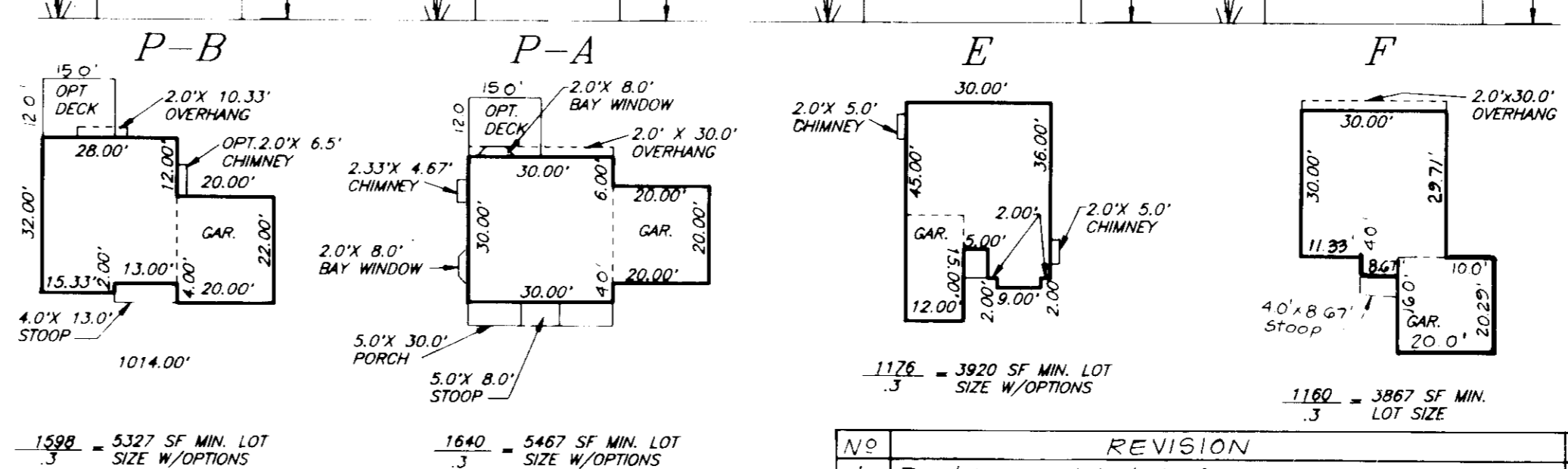
WATER CODE E-14
SEWER CODE 4400900



RETAINING WALL DETAIL



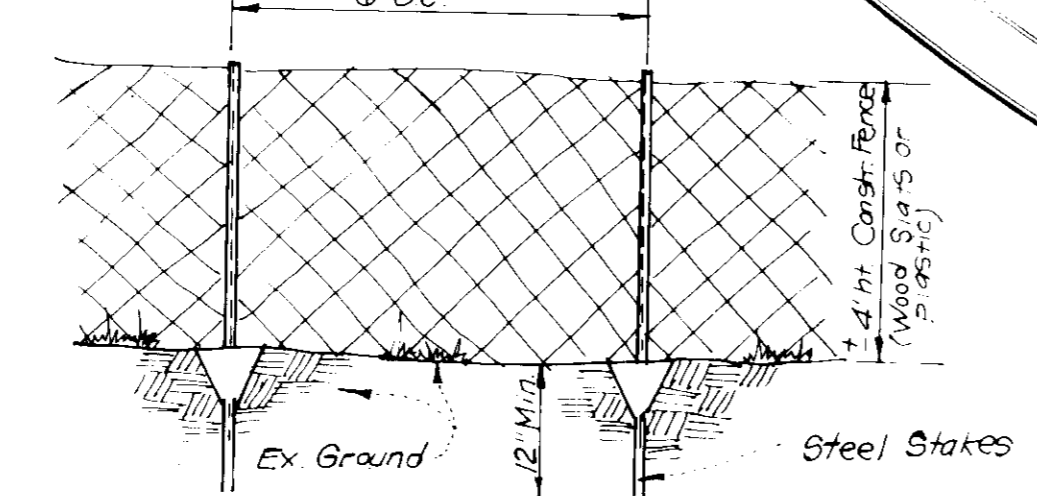
$\frac{1385.56}{0.3} = 4,618.53 \text{ Min. Lot Size}$



TYPICAL HOUSES

SCALE: 1"=30'
NOTE: ALL UNITS HAVE 1" ROOF EAVES FRONT AND REAR.

TYPICAL TREE PROTECTION FENCE DETAIL



REVISIONS

No	REVISIONS	Date
3	Rev hse. of grd lot 47	7-23-92
2	Rev hse. of grd lot 46	6-29-92
1	Rev hse. of grd lots 17, 40 & 41	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
10/22/91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
10/24/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
10/18/91

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 BALTO • (301) 621-8300 WASH

DESIGNED VLP
DRAWN KIWMC
CHECKED JME
DATE Aug 1991

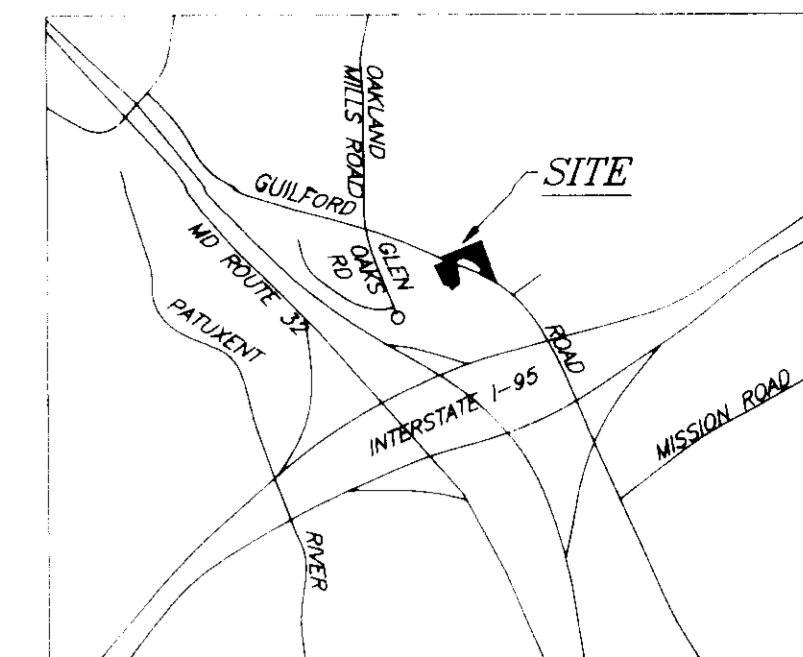
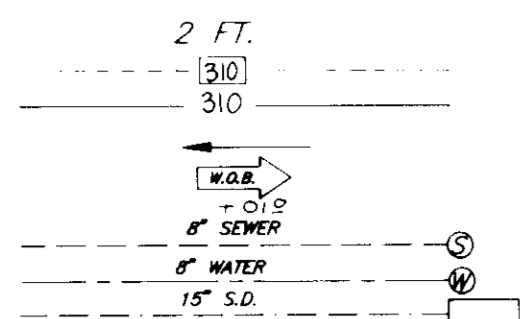
SEDIMENT AND EROSION CONTROL DETAILS
LOTS 15 THRU 19 AND 37 THRU 47
MAPLESIDE II
VILLAGE OF KINGS CONTRIVANCE
SECTION 5 AREA 4
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: PATRIOT HOMES, INC.
P.O. BOX 1018
COLUMBIA, MARYLAND 21044

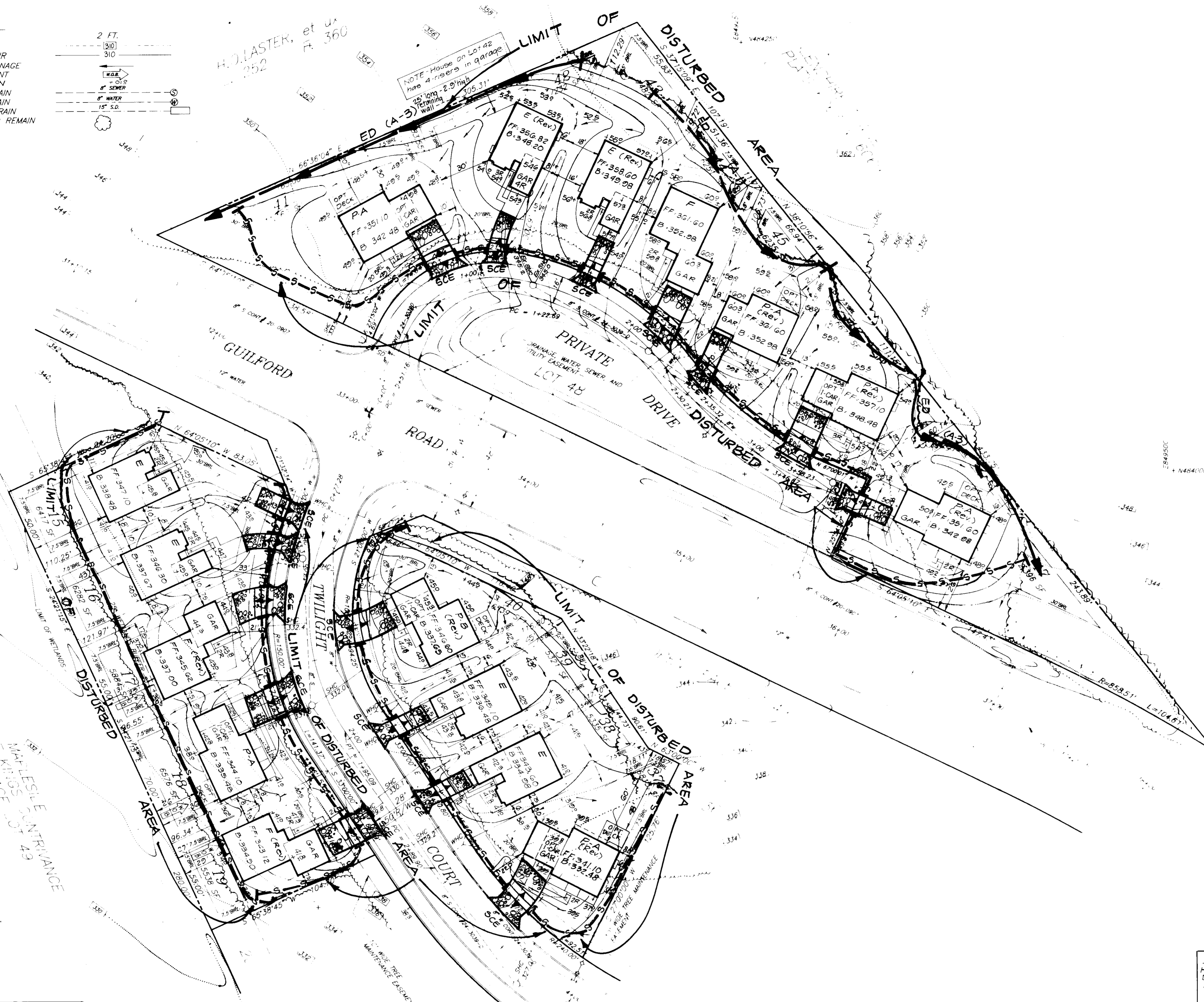
SCALE 1"=30'
DRAWING 1 of 3
JOB NO 91-116
FILE NO 91-116X

LEGEND

- CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- SPOT ELEVATION
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- EXISTING TREES TO REMAIN



VICINITY MAP
SCALE: 1"=2000'



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT

James M. [Signature] 10/22/91
DIRECTOR DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Joseph [Signature] 10/22/91
DIRECTOR DATE

Robert [Signature] 10/22/91
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James [Signature] 10/18/91
DIRECTOR DATE

Michael [Signature] 10-18-91
CHIEF BUREAU OF ENGINEERING DATE

Reviewed for H.C.I.A.R.D. S.C.D. Name
and meets Technical Requirements
James M. [Signature] 10/22/91
Signature Date
US Soil Conservation Service

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

John [Signature] 10/22/91
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."

Jeffrey [Signature] 8/27/91
signature Date

ENGINEER'S CERTIFICATE

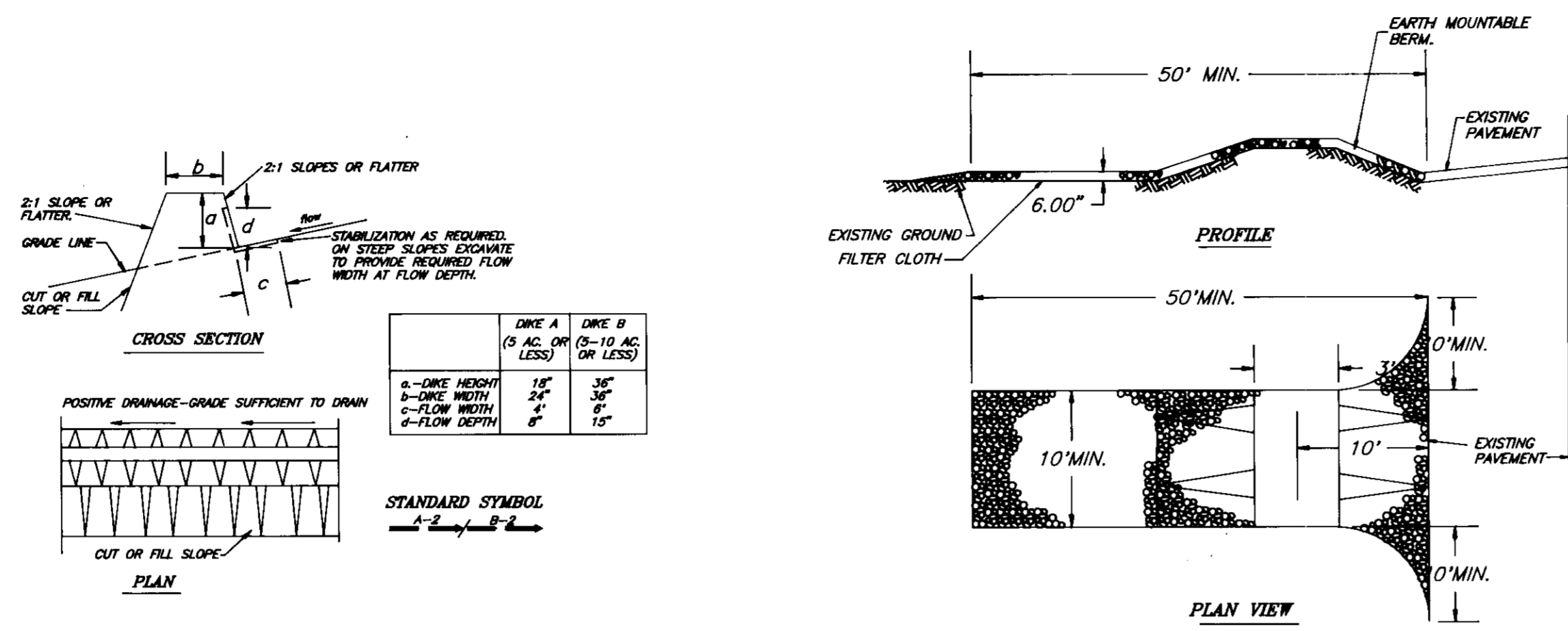
I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Jeffrey [Signature] 8/24/91
Signature Date

OWNER/DEVELOPER HOWARD RESEARCH AND LAND DEVELOPMENT CORP. 10275 Little Patuxent Pkwy. Columbia, MD. 21044		SUBMISSION NAME MAPLESIDE II VILLAGE OF KINGS CONTRIVANCE		SECTION/AREA 5/4	LOTS/PARCELS 15-19 & 37-47
PLAT NO.	BLOCK NO.	ZONE	TAX MAP NO.	ELECTION DIST.	CENSUS TRACT
		N.T.	42	6TH	
WATER CODE E-14			SEWER CODE 4400900		

CF CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 981-7500 BALTO • (410) 621-8300 WASH

DESIGNED K/IWM	SEDIMENT AND EROSION CONTROL PLAN LOTS 15 THRU 19 AND 37 THRU 47 MAPLESIDE II VILLAGE OF KINGS CONTRIVANCE SECTION 5 AREA 4 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN K/IWMC VLP		DRAWING 2 of 3
CHECKED K/IWM		JOB NO 01-116
DATE Aug. 1991	FOR: PATRIOT HOMES, INC. P.O. BOX 1018 COLUMBIA, MARYLAND 21044	FILE NO 01-116 SE



CONSTRUCTION SPECIFICATIONS

- All dikes shall be compacted by earth moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
- Final location should be adjusted as needed to utilize a stabilized safe outlet.
- Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
- Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per the chart below.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-1.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	1.1-3.0%	SEED AND STRAW MULCH	SEED WITH JUTE, OR EXCELSDOR, SOG, 2" STONE
3	3.1-8.0%	SEED WITH JUTE, OR SOG	LINED RIP-RAP 4"-8" STONE
4	8.1-20%	LINED RIP-RAP 4"-8" STONE	ENGINEERING DESIGN

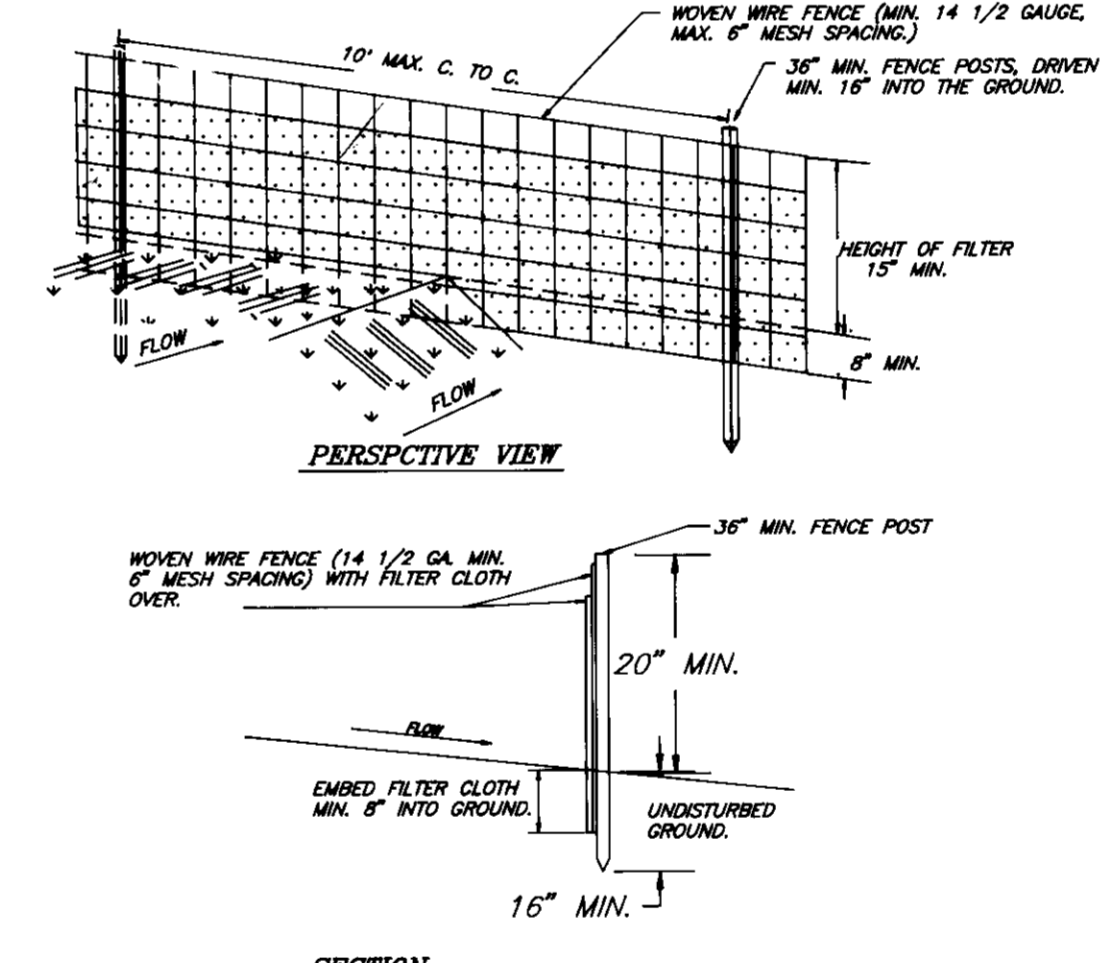
Flow channel stabilization details: Stone to be 2 inch stone, or recycled concrete equivalent, in a layer of least 3 inches in thickness and be pressed into the soil with construction equipment. Rip rap to be 4-8 inches in a layer of least 8 inches thick and pressed into the soil. Approved equivalents can be substituted for any of the above materials. Periodic inspection and required maintenance must be provided after each rain event.

EARTH DIKE (SD)
NO SCALE

CONSTRUCTION SPECIFICATIONS

- STONE SIZE: USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH: AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
- THICKNESS: NOT LESS THAN SIX (6) INCHES.
- WIDTH: TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH: WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE.
- SURFACE WATER: ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT, SOILED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING: WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND MULCH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD.
FENCE: WOVEN WIRE, 14 GA., 6" MAX. MESH OPENING.
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA 1140N, OR APPROVED EQUAL.
PREFABRICATED UNIT: GEOPAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE (S)
NO SCALE

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, discing 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./100 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 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 80 lbs per acre (1.4 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 (.05 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 sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq ft.) of unrotted 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, discing 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 (.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 sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq ft.) of unrotted 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.

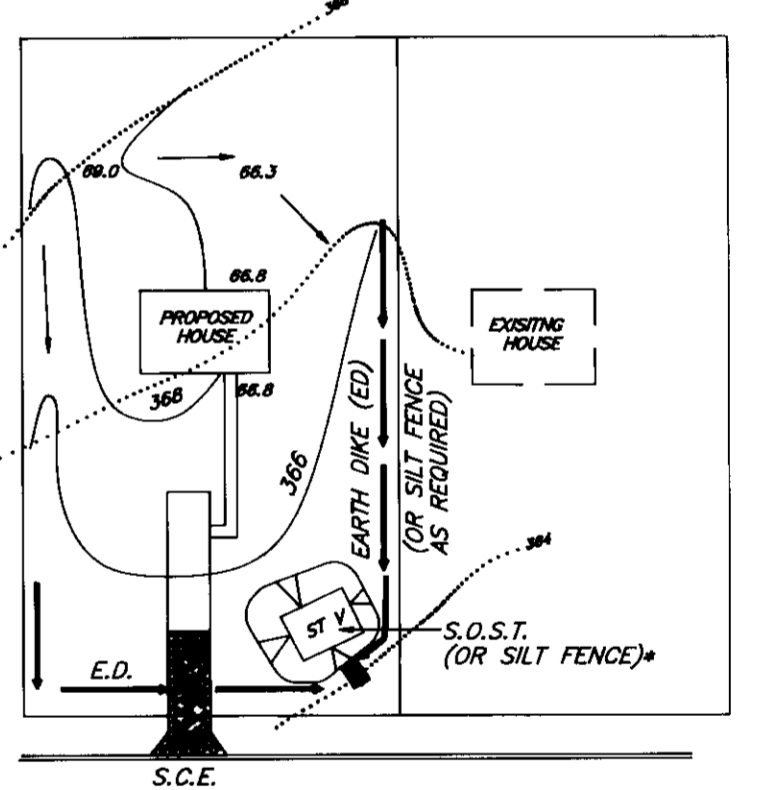
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (802-2437).
- All vegetative and structural practices are to be installed according to this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 5.1) and (Sec. 5.4), temporary seeding (Sec. 5.0) and mulching (Sec. 5.2). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- SITE ANALYSIS:**

Total Area of Site:	2.586 acres
Area to be roofed or paved:	0.8 acres
Area to be vegetatively stabilized:	1.58 acres
Total Cut:	6271 cu
Total Fill:	1273 cu
- Offsite Waste/Borrow Area Location: _____
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail).
- The total amount of silt fence= 1515 lf

* it is the responsibility of the contractor to identify the spoil/borrow site and notify HCSCD of the site and its grading permit number at the time of construction.



* S.O.S.T. (S.T.V) PG. 16.12

LOT SIZE	1/4 ACRE	1/2 ACRE	1 ACRE
DEPTH	2'	3'	4'
BOTTOM WIDTH	11'	26'	26'
BOT. AREA	121SF	286SF	676SF

+ Can be adjusted in the field, but the bottom area must be as given or greater.

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

CONSTRUCTION SEQUENCE:

	NO. OF DAYS
A. Obtain grading permit and install sediment and erosion control devices, tree protection fence, and stabilize.	30
B. Excavate for foundations, rough grade and temporarily stabilize.	120
C. Construct structures, sidewalks and driveways.	14
D. Final grade and stabilize in accordance with Stds. and Specs.	7
E. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 James M. Boydland per J. G. 10/22/91
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Richard Blount 10/22/91
 DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 James J. ... 10/18/91
 DIRECTOR DATE

Reviewed for HOWARD S.C.D. Name _____ and meets Technical Requirements Signature _____ Date _____ US Soil Conservation Service

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 _____ Date 8/27/91

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 _____ Date 8/24/91

OWNER/DEVELOPER
 HOWARD RESEARCH AND LAND DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PKWY.
 Columbia, MD. 21044

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

DESIGNED: K11WM
 DRAWN: K11WM
 CHECKED: K11WM
 DATE: Aug. 1991

SEDIMENT AND EROSION CONTROL PLAN
 LOTS 15 THRU 19 AND 37 THRU 47
MAPLESIDE II
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 5 AREA 4
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 30'
 DRAWING: 3 of 3
 JOB NO.: 01-116
 FILE NO.: 01-116 SE

FOR: PATRIOT HOMES, INC.
 COLUMBIA, MARYLAND 21044
 FREDERICK, MARYLAND 21701