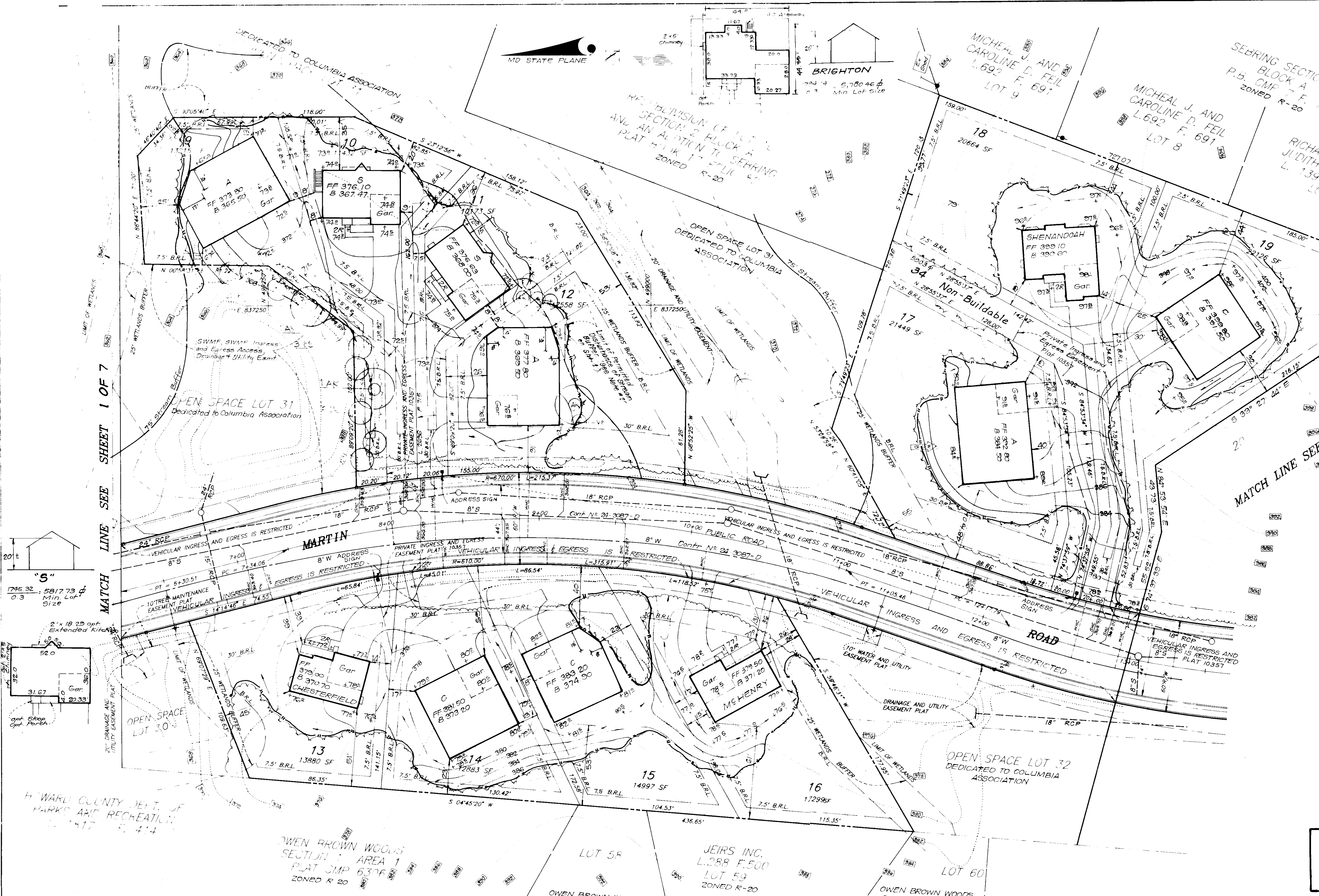


No	REVISION	Date
1	Rotate use lines per HRD comments	6/22/93
2	Add sunroom to house at 7	8/21/92
3	Rev. hse. # grd. lot 11, Add hse. type	11/12/93
4	Rev. hse. # grd. lot 10	10/28/93



PLAN SHEET 3 OF 7
 STEVEN PETER MITCHELL
 LOT 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

AR 7 AFR PPKI
 UP 14 VISUUM STONE
 PD 107 PILLAR
 NOTE: LOTS 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 ARE TO BE REVISIONS TO THE ORIGINAL PLAN SHEET 3 OF 7.

LOT NUMBER	STREET ADDRESS
9	6215 MARTIN ROAD
10	6219 MARTIN ROAD
11	6223 MARTIN ROAD
12	6227 MARTIN ROAD
13	6220 MARTIN ROAD
14	6224 MARTIN ROAD
15	6228 MARTIN ROAD
16	6232 MARTIN ROAD
17	6237 MARTIN ROAD
18	6241 MARTIN ROAD
19	6245 MARTIN ROAD

REVISION NOTE
 This plan supercedes the previously approved plan sheet 2 of 7 SDP 92 112. The grading on this sheet supercedes the grading on sheet 2 of 7. The purpose of this plan is to revise lots 9, 10, 12, 14, 15, 17 & 19 to Generic house types.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 5-26-93

APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING
 COUNTY PLANNING & ZONING OFFICER: *[Signature]* DATE: 6/2/93

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 COUNTY DEPARTMENT OF PUBLIC WORKS OFFICER: *[Signature]* DATE: 5/21/93

LOT NO	Gross Ac	FF 'SS	Net Ac	Pipe Item 1	Created SS	Min Lot Size
1	37,092 #		37,092 #	3,227 2 #		33,864 8 #
2	21,413 #		21,413 #	2,094 4 #		19,318 8 #
7	11,291 #		11,291 #	1,120 0 #		10,171 0 #
8	16,990 #		16,990 #	1,840 0 #		15,150 0 #
9	13,215 #		13,215 #	2,900 0 #		10,315 0 #
10	11,432 #		11,432 #	2,000 0 #		9,432 0 #
11	10,173 #		10,173 #	1,640 0 #		8,533 0 #
18	20,664 #		20,664 #	3,480 0 #		17,184 0 #
19	22,126 #		22,126 #	2,000 0 #		20,126 0 #

SHEET INDEX
 Site Development Plans Sheets 1-3
 Sediment & Erosion Control Plans Sheets 4-6
 Detail Sheet Sheet 7

[Signature]
 3-12-93
 OWNER / DEVELOPER:
 HOWARD RESEARCH AND
 DEVELOPMENT CORPORATION
 10275 Little Patuxent Parkway
 Columbia, MD 21044

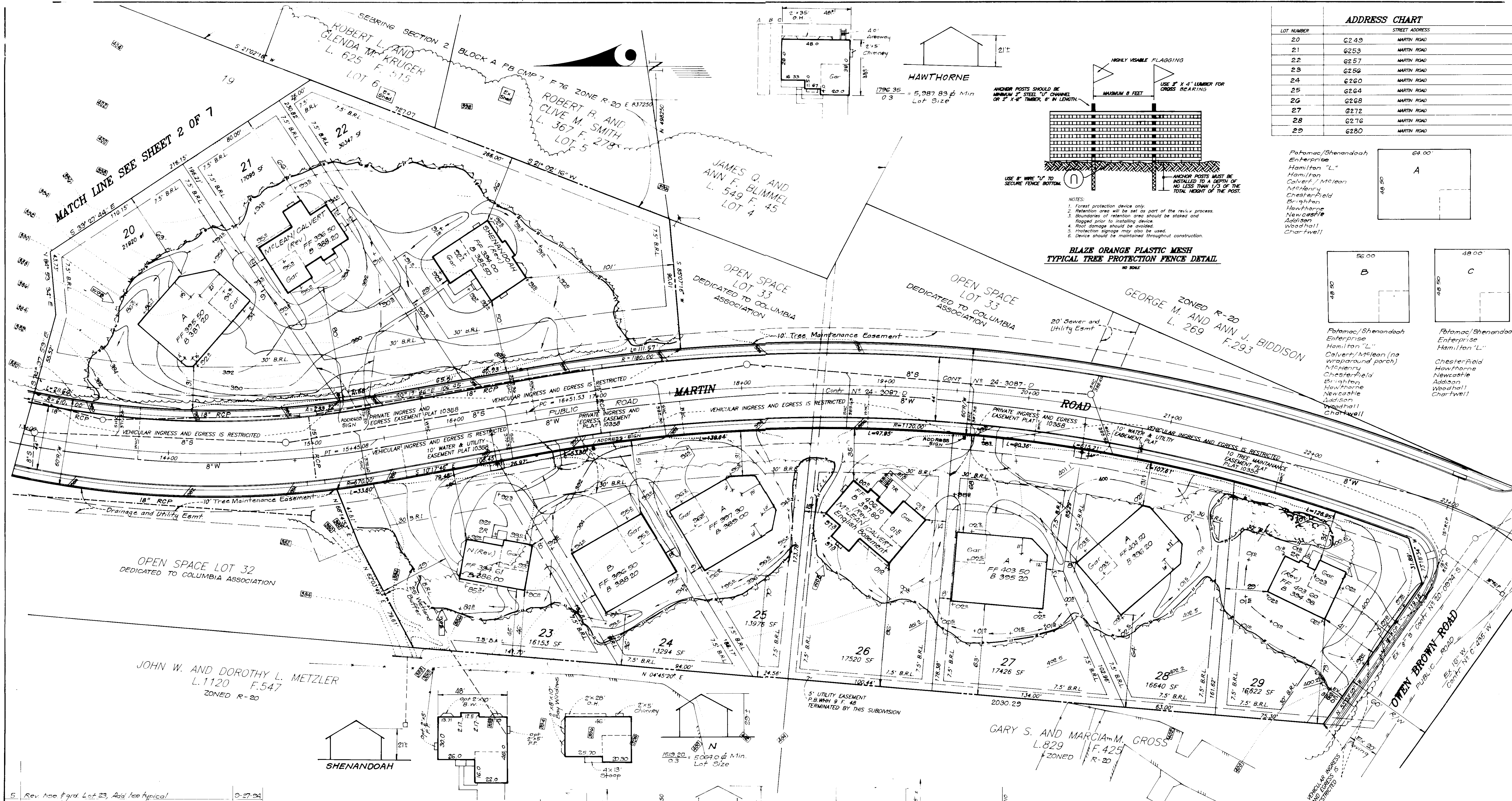
CLARK • FINEROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7130 MINSTREL WAY SUITE 215
 COLUMBIA, MARYLAND, 21044

REVISED SITE DEVELOPMENT PLAN
 LOTS 1 THRU 29
COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 2 AREA 2
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

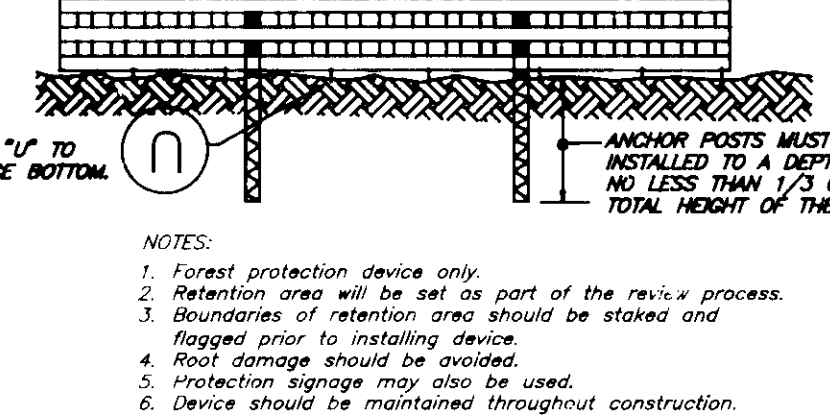
FOR: THE RYLAND GROUP, INC.
 7130 MINSTREL WAY SUITE 215
 COLUMBIA, MARYLAND, 21044

DESIGNED: JME
 DRAWN: BAL, LAI
 CHECKED: JME
 DATE: May, 1992

SCALE: 1" = 30'
 DRAWING: 2 OF 7
 JOB NO: 92-069
 FILE NO: 92-069-X



ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
20	6249 MARTIN ROAD
21	6253 MARTIN ROAD
22	6257 MARTIN ROAD
23	6256 MARTIN ROAD
24	6260 MARTIN ROAD
25	6264 MARTIN ROAD
26	6268 MARTIN ROAD
27	6272 MARTIN ROAD
28	6276 MARTIN ROAD
29	6280 MARTIN ROAD



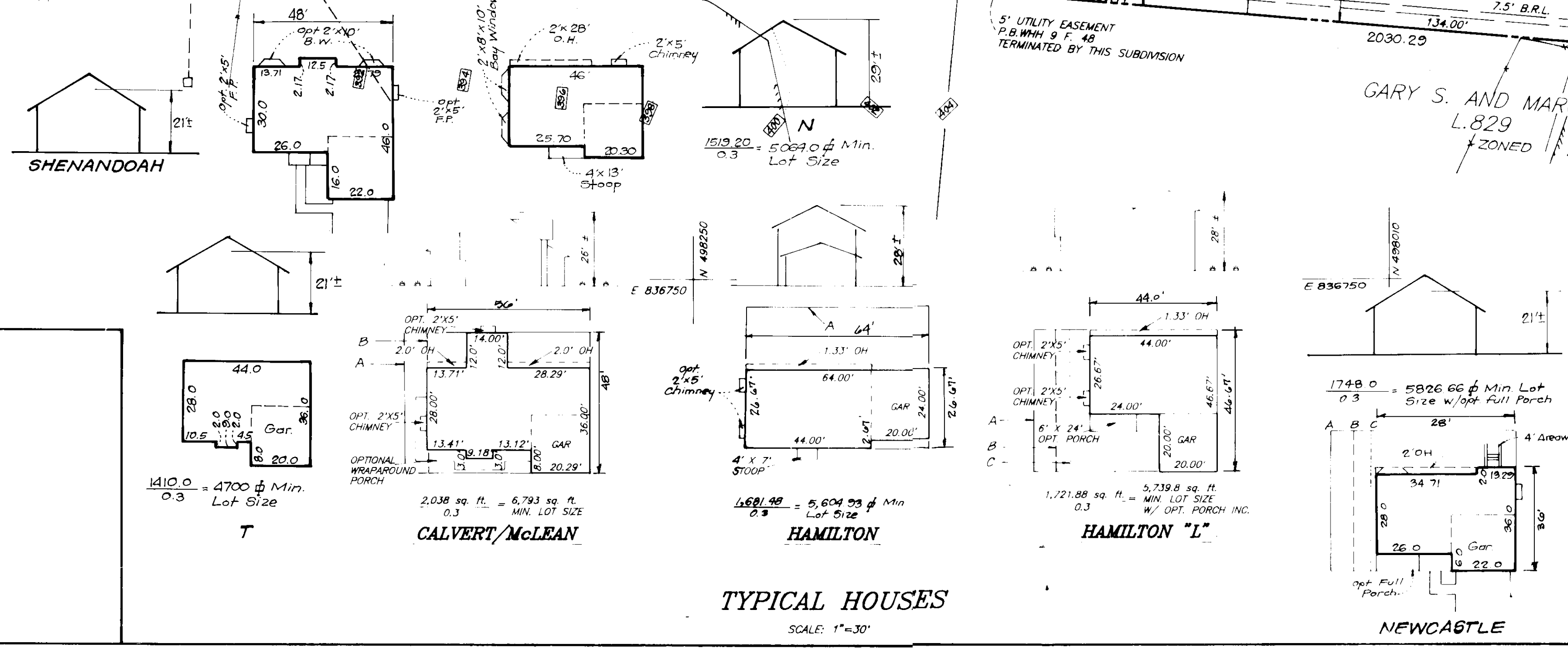
Lot	Dimensions	Notes
A	64.00' x 48.00'	Patamac/Shenandoah Enterprise Hamilton "L" Calvert/McLean (no wraparound porch) McHenry Chesterfield Brighton Hawthorne Newcastle Addison Woodhall Chartwell
B	56.00' x 48.00'	Patamac/Shenandoah Enterprise Hamilton "L" Calvert/McLean (no wraparound porch) McHenry Chesterfield Brighton Hawthorne Newcastle Addison Woodhall Chartwell
C	48.00' x 48.00'	Patamac/Shenandoah Enterprise Hamilton "L" Calvert/McLean (no wraparound porch) McHenry Chesterfield Brighton Hawthorne Newcastle Addison Woodhall Chartwell

NO	REVISION	DATE
5	Rev. hse. f'grad Lot 23, Add hse. typical	0-27-94
4	Rev. hse. f'grad Lot 22, Add hse. typical	8-24-94
3	Rev. hse. f'grad Lot 29, Add hse. typical	6-6-94
2	Rev. hse. f'grad Lot 26 from McLean to McLean Eng. Bant	11-19-92
1	Add Opt Sun Room to Hamilton, Lot 20	7-20-92

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 5-26-93

APPROVED FOR PLANNING & ZONING
HOWARD COUNTY DEPT. OF PLANNING & ZONING
DATE: 6/2/93

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 5/2/93



REVISION NOTE
This plan supersedes previously approved plan sheet 3 of 7 SDP 92-112. The grading on this sheet supersedes the grading on sheet 6 of 7. The purpose of this plan is to revise lots 20, 23, 25 and 27-29 to Generic house types.

CLARK • FINEPROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7130 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7500 • BALTO • (301) 621-8100 • WASH

REVISED SITE DEVELOPMENT PLAN
LOTS 1 THRU 29
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 2 AREA 2
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: THE RYLAND GROUP, INC.
7130 MINSTREL WAY SUITE 215
COLUMBIA, MARYLAND, 21044

DESIGNED: JME
DRAWN: BAL, LAI
CHECKED: JME
DATE: May, 1992

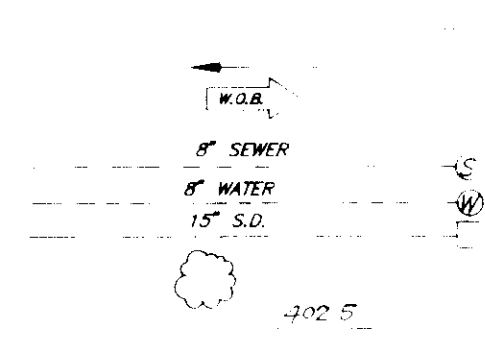
SCALE: 1"=30'
DRAWING: 3 OF 7
JOB NO: 92-069
FILE NO: 92-069-X



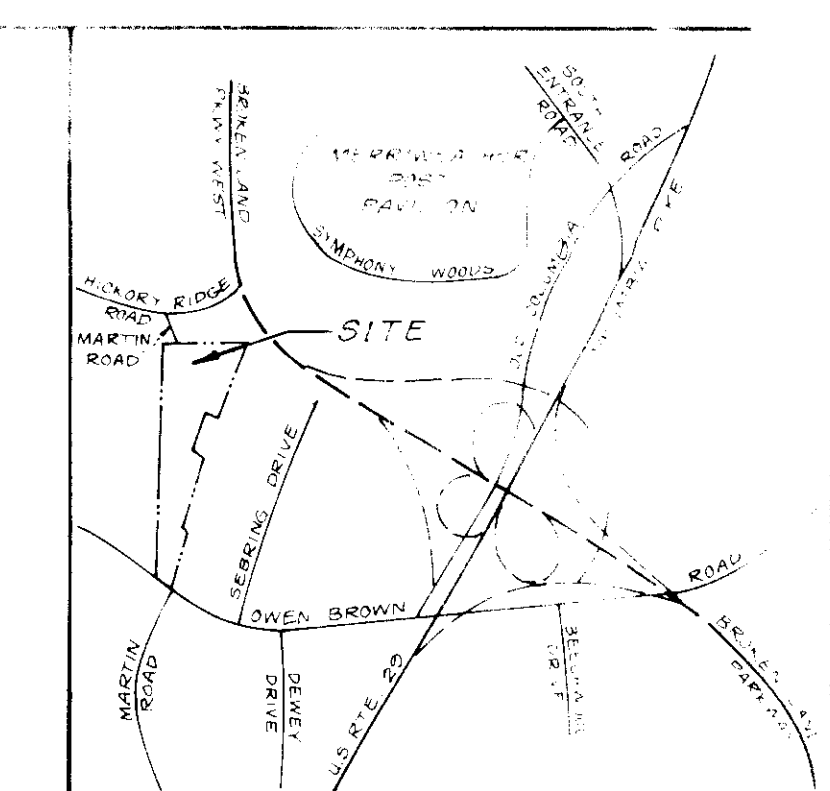
LEGEND

- CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM URIN
- EXISTING TREES TO REMAIN
- Existing Spot Elev

2 FT.



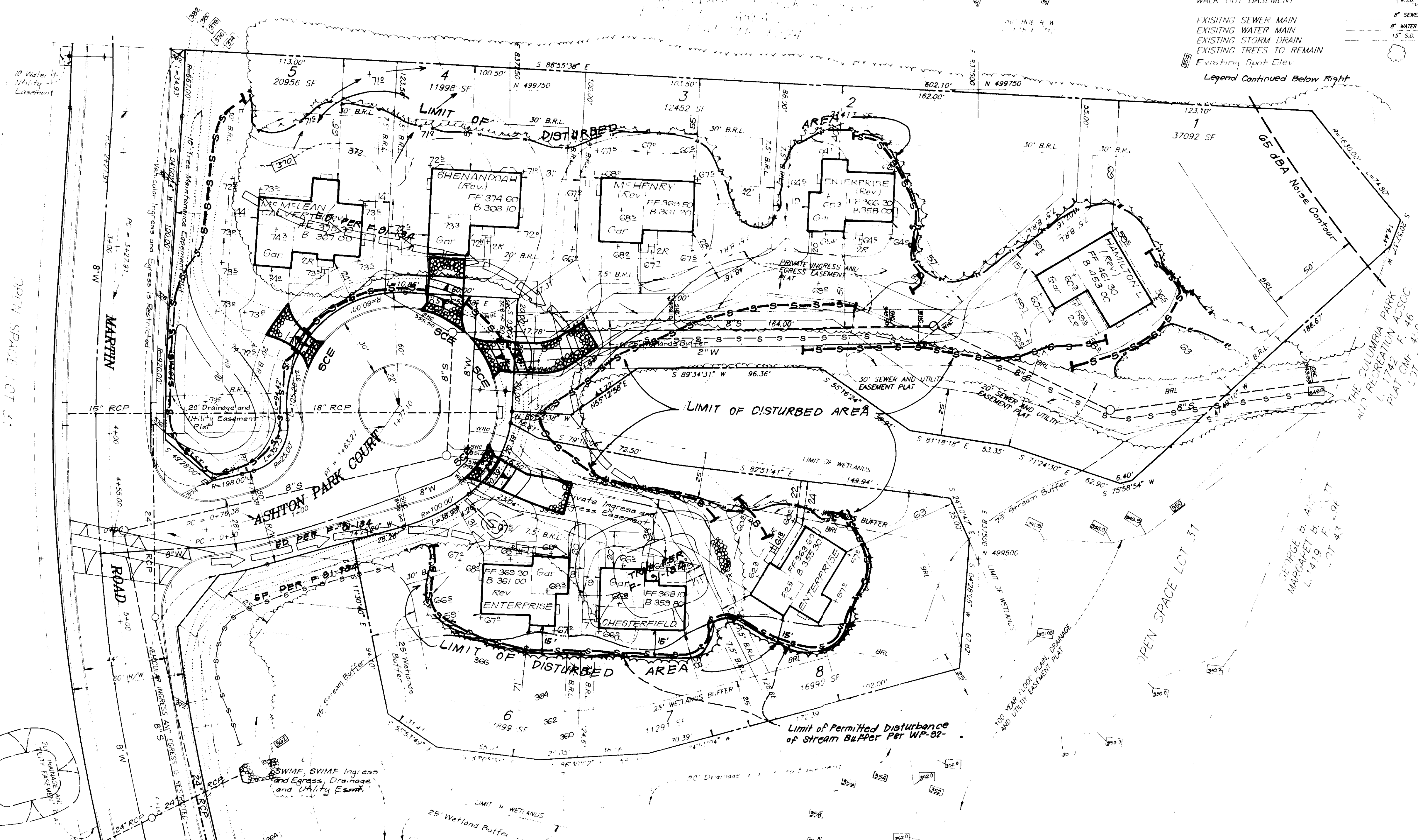
Legend Continued Below Right



VICINITY MAP
Scale 1" = 500'

LEGEND CONTINUED

- Existing Silt Fence
- Proposed Silt Fence
- Existing Earth Dike
- Proposed Earth Dike
- Stabilized Construction Entrance w/ Mountable Berm
- Tree Protection Fence



MATCH LINE SEE SHEET 5 OF 7

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

James Boyd 9-14-92
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING

James Boyd 10/14/92
DATE

James Boyd 10/14/92
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

James Boyd 9-9-92
DIRECTOR DATE

James Boyd 9-9-92
CHIEF BUREAU OF ENGINEERING DATE

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
James Boyd 7/13/92
Signature Date
US Soil Conservation Service

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

James Boyd 7/13/92
Approved

DEVELOPER'S/BUILDER'S CERTIFICATE

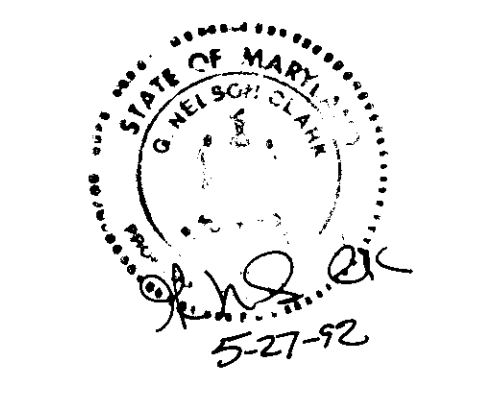
"I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training 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.

Maurice M. Simpkins 5-27-92
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.

James Boyd 5-27-92
Signature Date



OWNER / DEVELOPER:
HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 Little Patuxent Parkway
Columbia, MD. 21044

CLARK • FINEROCK & SACKETT, INC.
ENGINEER • PLANNER • ARCHITECT

DISIGNED BY **KIWM**

DRAWN BY **BAL**

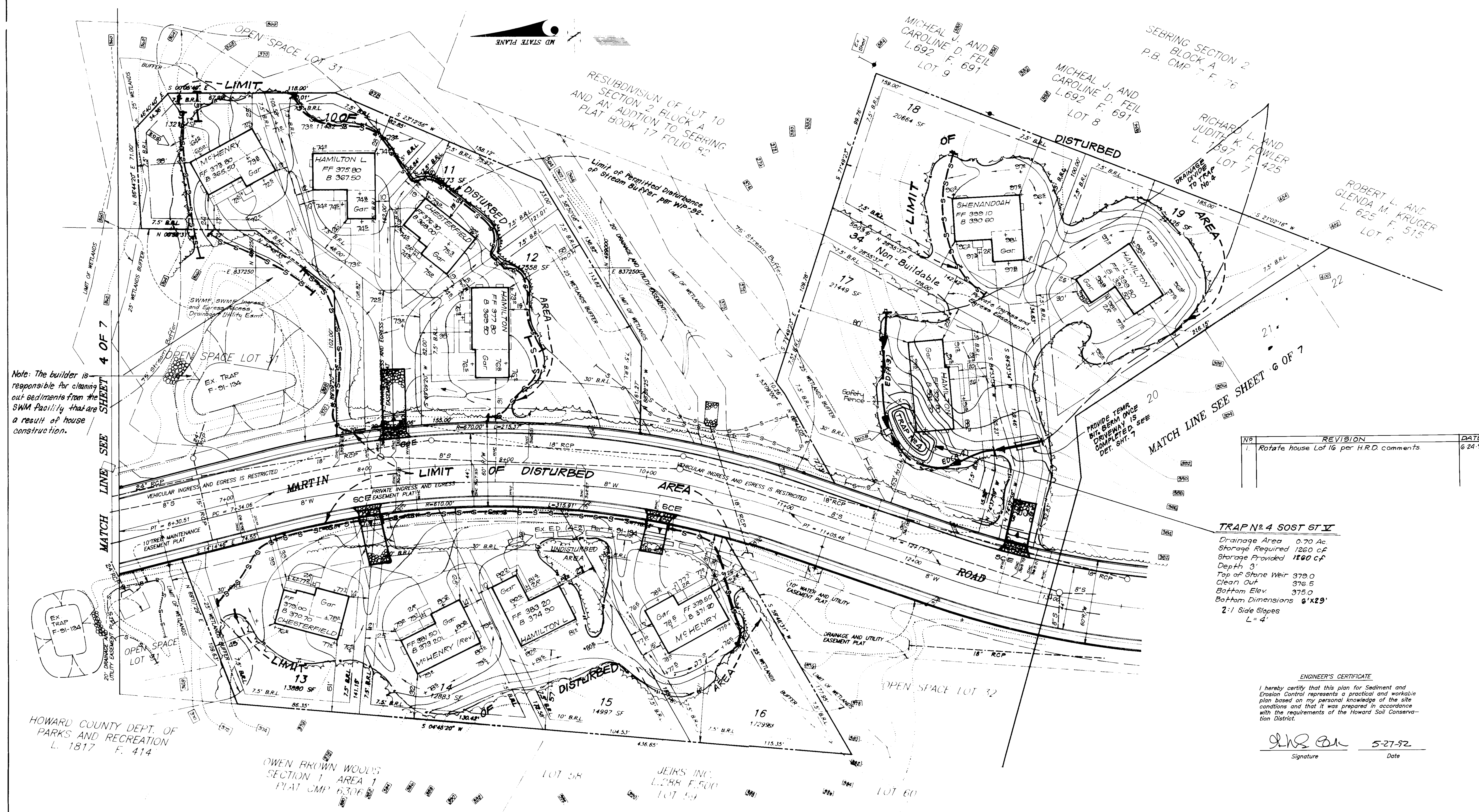
CHECKED BY **KIWM**

DATE **May, 1992**

SEDIMENT & EROSION CONTROL PLAN
LOTS 1 THRU 29
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 22 AREA 2
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: THE KYLAND GROUP, INC.
130 MINISTRELL WAY SUITE 210
COLUMBIA, MARYLAND, 21044

SCALE
1" = 30'
DRAWING
4 OF 7
JOB NO.
92-069
FILE NO.
92-069



Note: The builder is responsible for cleaning out sediments from the SWM facility that are a result of house construction.

NO	REVISION	DATE
1	Rotate house Lot 16 per H.R.D. comments	6-24-92

TRAP No 4 SOST ST V
 Drainage Area 0.70 Ac
 Storage Required 1260 c.f.
 Storage Provided 1260 c.f.
 Depth 3'
 Top of Stone Weir 379.0
 Clean Out 376.5
 Bottom Elev. 375.0
 Bottom Dimensions 6'x29'
 2:1 Side Slopes
 L = 4'

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: 5-27-92

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 9-14-92
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] DATE: 10/14/92
[Signature] DATE: 10/9/92
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 9-9-92
[Signature] DATE: 9-9-92
 CHIEF BUREAU OF ENGINEERING DATE: *[Signature]*

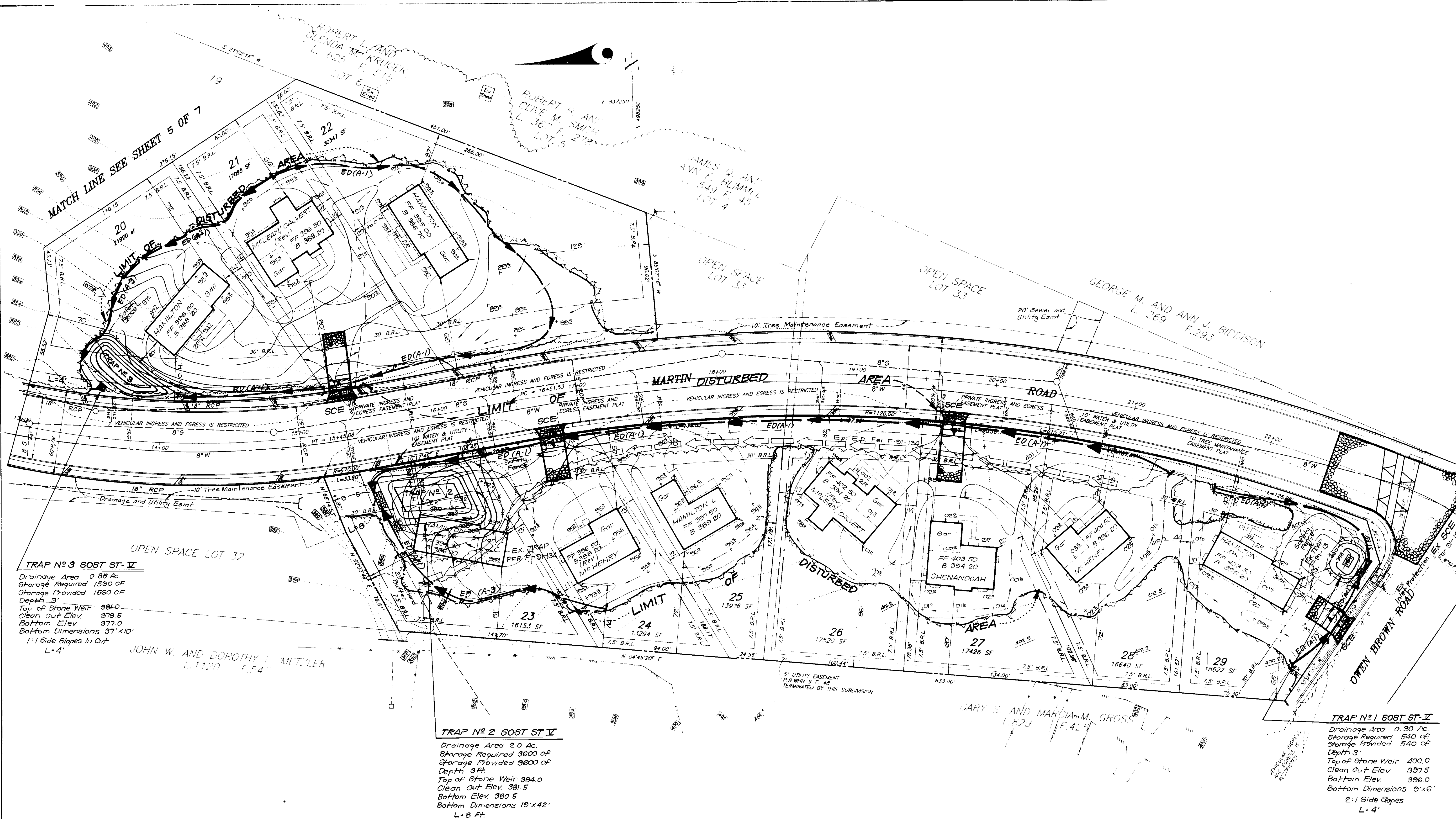
Reviewed for HOWARD S.C.D. Name and meets Technical Requirements
[Signature] DATE: 7/31/92
 US Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] DATE: 7/31/92
 Approved

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: 5-27-92

OWNER / DEVELOPER:
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 Little Patuxent Parkway
 Columbia, MD. 21044

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

DESIGNED	SIEMENS	SCALE	1" = 30'
DRAWN			



TRAP NO. 3 SOST ST. IV
 Drainage Area 0.85 Ac.
 Storage Required 1530 CF
 Storage Provided 1560 CF
 Depth 3'
 Top of Stone Weir 381.0
 Clean Out Elev. 378.5
 Bottom Elev. 377.0
 Bottom Dimensions 37' x 10'
 1:1 Side Slopes In Cut
 L=4'

JOHN W. AND DOROTHY L. METZLER
 L.1120 F.44

TRAP NO. 2 SOST ST. IV
 Drainage Area 2.0 Ac.
 Storage Required 3600 CF
 Storage Provided 3600 CF
 Depth 3 FT
 Top of Stone Weir 384.0
 Clean Out Elev. 381.5
 Bottom Elev. 380.5
 Bottom Dimensions 19' x 42'
 L=8 FT
 2:1 Side Slopes

TRAP NO. 1 SOST ST. IV
 Drainage Area 0.30 Ac.
 Storage Required 540 CF
 Storage Provided 540 CF
 Depth 3'
 Top of Stone Weir 400.0
 Clean Out Elev. 397.5
 Bottom Elev. 396.0
 Bottom Dimensions 8' x 6'
 2:1 Side Slopes
 L=4'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* 9-14-92
 DATE: 9-14-92
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DIRECTOR: *[Signature]* 10/14/92
 DATE: 10/14/92
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* 9/14/92
 DATE: 9/14/92
 CHIEF BUREAU OF ENGINEERING

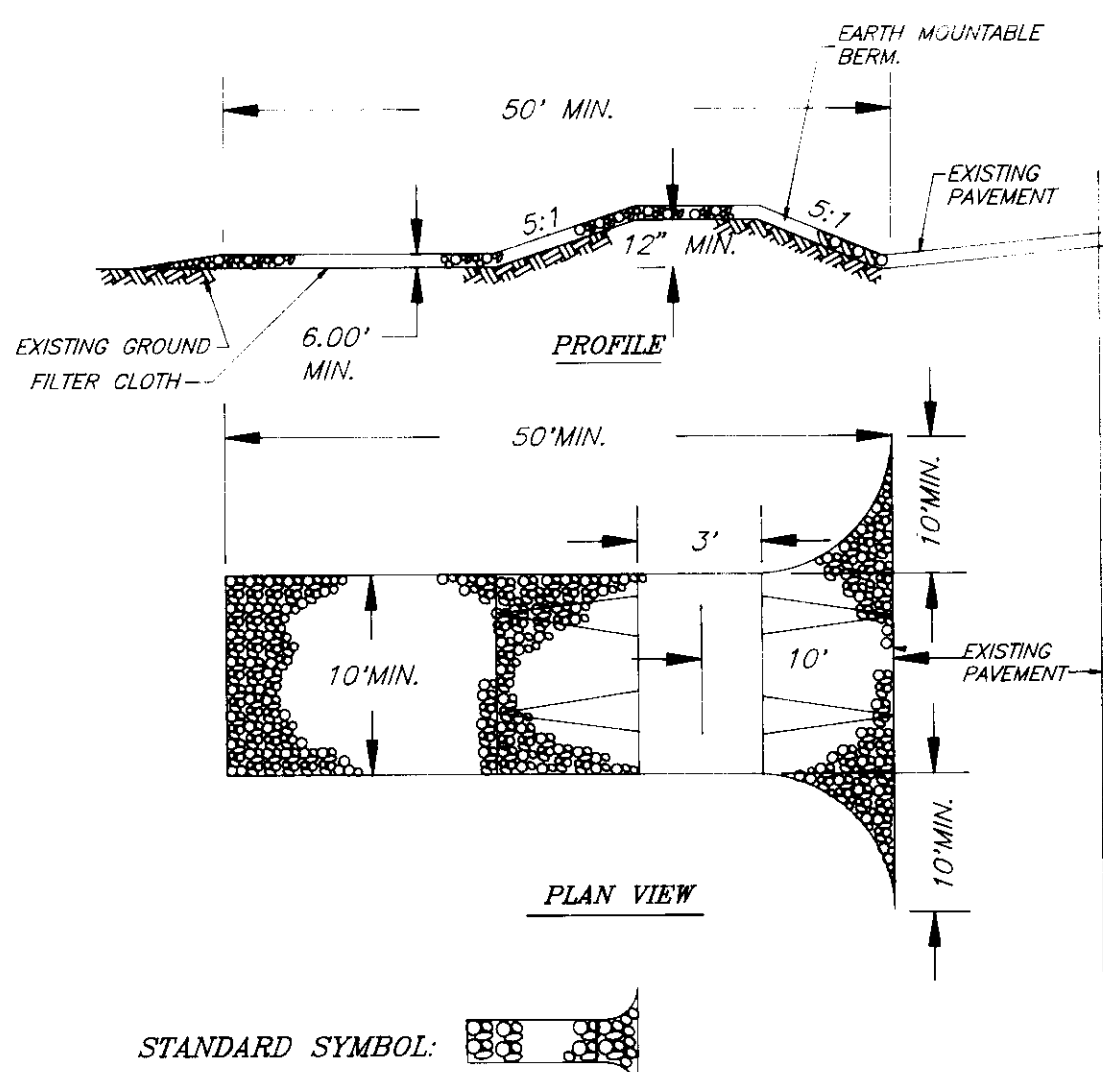
Reviewed for HOWARD S.C.D. and meets technical requirements
[Signature] 7/31/92
 US Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 7/31/92
 Approved

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] 5-27-92
 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.
[Signature] 5-27-92
 Date

STATE OF MARYLAND
 ENGINEER
 CLARK • FINEFROCK & SACKETT, INC.
 10275 Little Patuxent Parkway
 Columbia, MD. 21044

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS		SCALE 1" = 30'
DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 1 THRU 29 COLUMBIA	DRAWING G OF 7
DRAWN BAL	VILLAGE OF HICKORY RIDGE SECTION 2 AREA 2 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 92-069
CHECKED KIWM	FOR THE RYLAND GROUP, INC. 1150 WINSTREL WAY SUITE 215 COLUMBIA, MARYLAND, 21044	FILE NO. 92-069
DATE May, 1992		

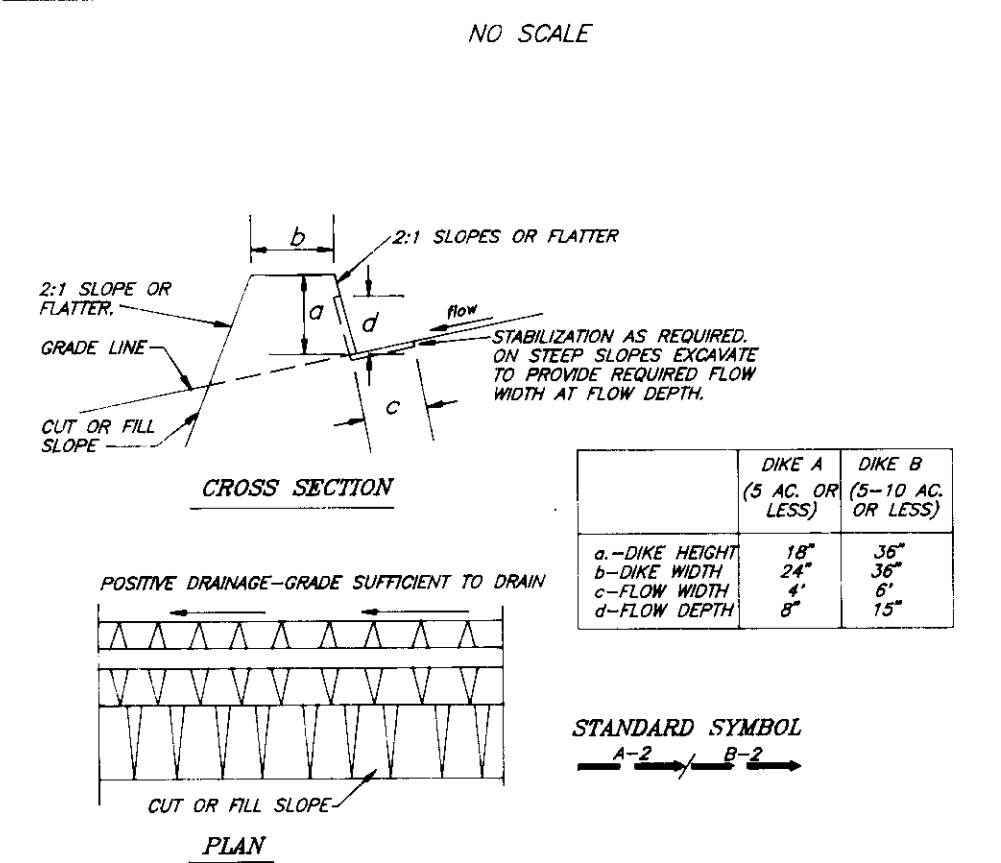


STANDARD SYMBOL: [Symbol]

CONSTRUCTION SPECIFICATIONS

- STONE SIZE: USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT. LENGTH, AS REQUIRED, BUT NOT LESS THAN 80 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 SPILLED, 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 WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

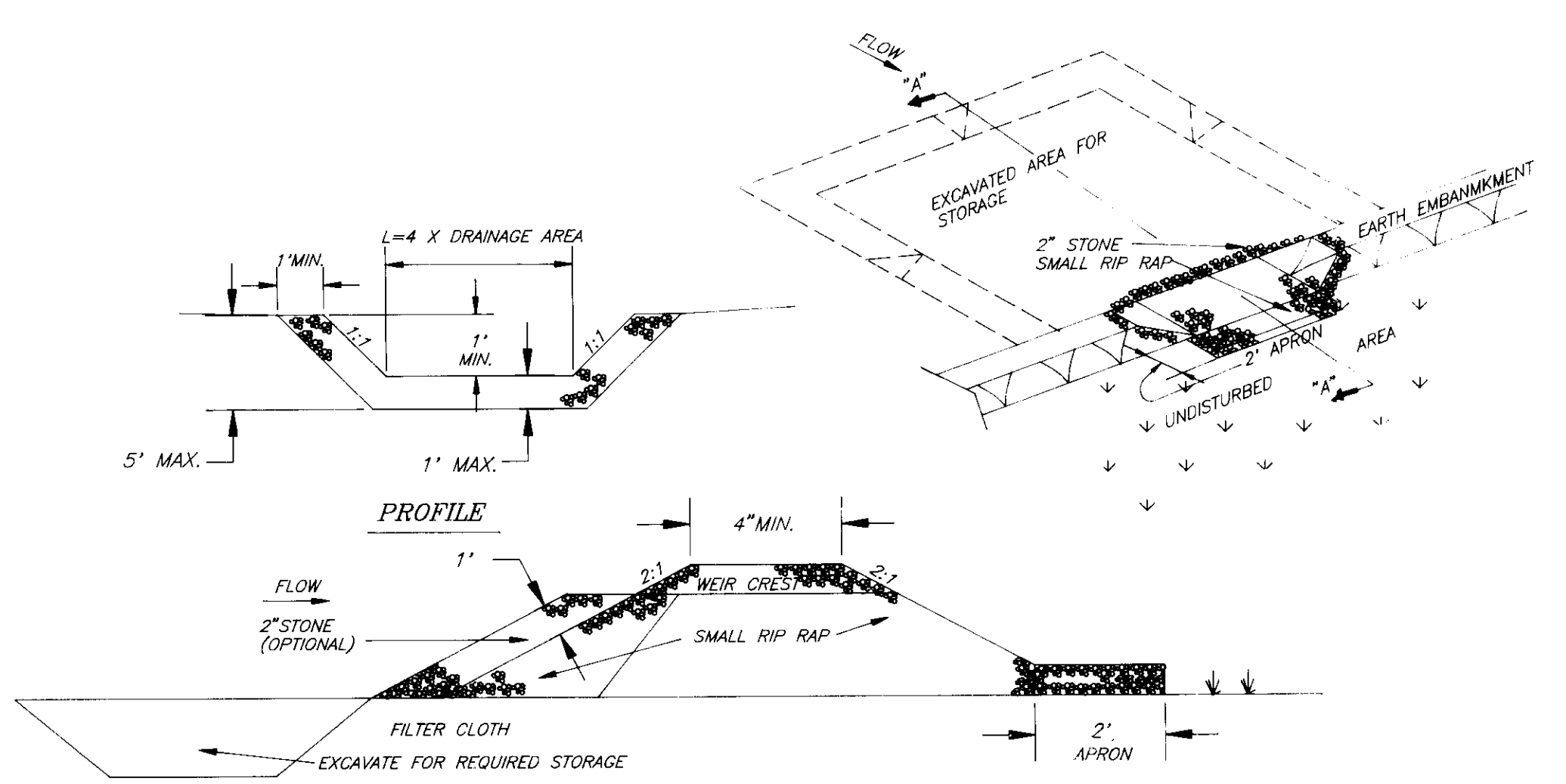


CONSTRUCTION SPECIFICATIONS

- 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 indicated 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 (5 AC. OR LESS)	DIKE B (5-10 AC. OR LESS)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCESS SOIL; SOG, 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOG; 2" STONE	LINED RIP-RAP 4"-6"
4	8.1-20%	LINED RIP-RAP 4"-6"	ENGINEERING DESIGN

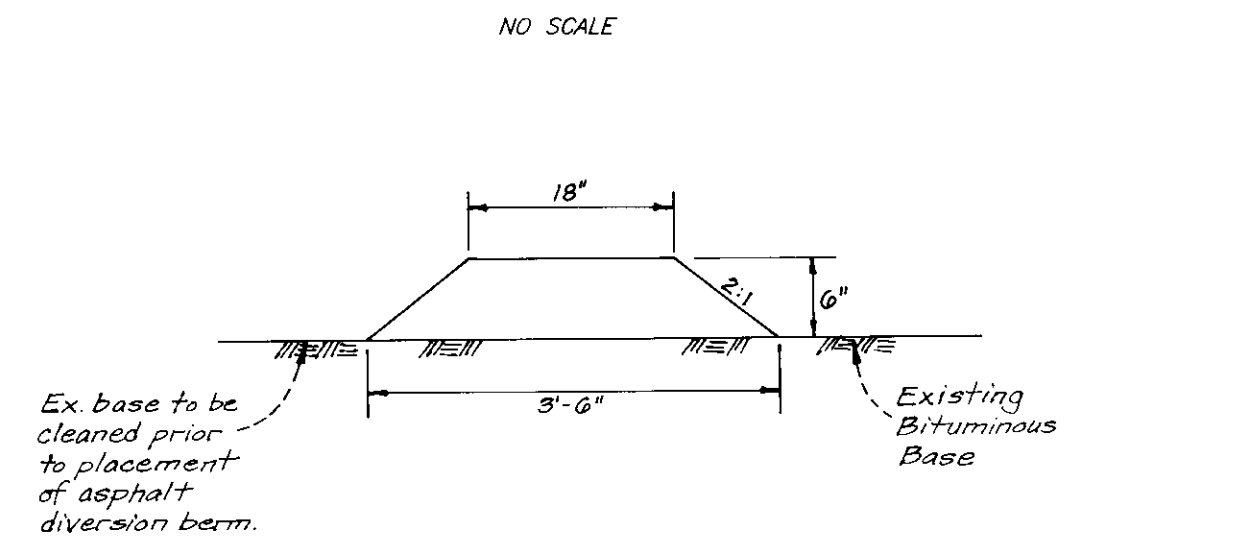
EARTH DIKE (ED)



CONSTRUCTION SPECIFICATIONS FOR ST-V

- OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.
- Area under embankment shall be cleared, grubbed and stripped of any vegetation on a root mat. The pool area shall be cleared.
 - The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 - All cut and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be riprap 4"-6" along with a 1" thickness of 2" aggregate placed on the up-grade side on the small riprap or embedded filter cloth in the riprap.
 - Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
 - The structure shall be inspected after each rain and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 - The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (ST-V)



ASPHALT DIVERSION BERM DETAIL

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/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 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 (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 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 unratted 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 reseeds.

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 rye (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 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 unratted 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.

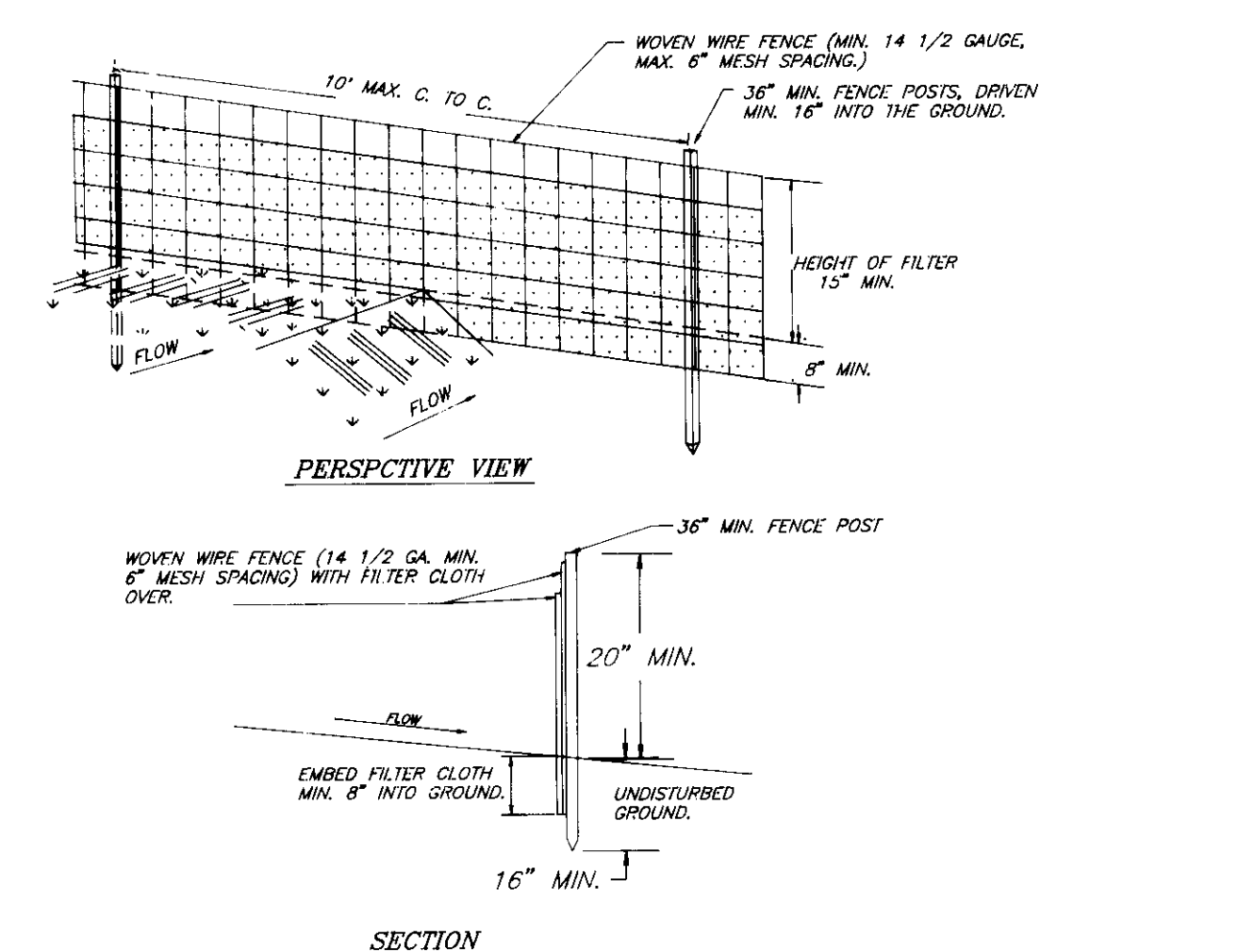
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

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. (992-2437).
- All vegetative and structural practices are to be installed according to the provisions of 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 5:1, 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. 51) sod (Sec. 54), temporary seeding (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.
- 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:	11.587 AC
Area Disturbed:	6.88 AC
Area to be roofed or paved:	2.16 AC
Area to be vegetatively stabilized:	4.72 AC
Total Cut:	8762 CY
Total Fill:	4358 CY
- Off-site 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 existing 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 this sheet).
- The total amount of silt fence= 2460 LF

*It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.



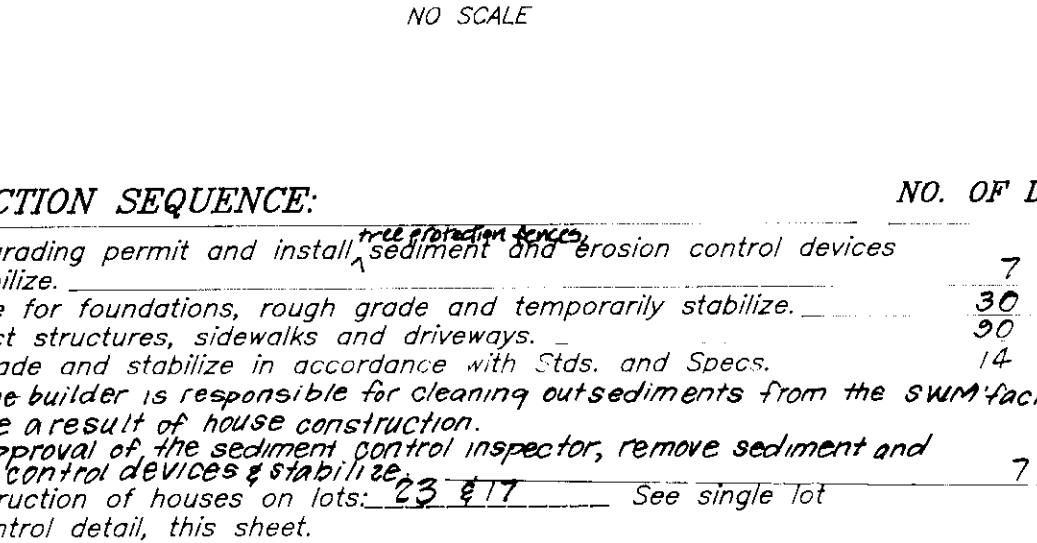
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 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.

SILT FENCE (S)

NO SCALE

SINGLE LOT SEDIMENT CONTROL PLAN



NOTE: Single lot detail cannot be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing an existing sediment trap.

CONSTRUCTION SEQUENCE

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

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICIAL: [Signature] DATE: 9-14-92

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 10/18/92
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION: [Signature] DATE: 10/9/92

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 9-23-92
 CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 9-29-92

Reviewed for HOWARD COUNTY S.C.D. Name: [Signature] and meets Technical Requirements [Signature] 7/31/92
 Signature: [Signature] Date: [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: [Signature] Date: 5-27-92

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: 5-27-92

OWNER/DEVELOPER:
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

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

DESIGNED	SCALE
KIWM	As Shown
DRAWN	DRAWING
CADD	7067
CHECKED	JOB NO.
KIWM	92-069
DATE	FILE NO.
May, 1992	92-069 SE

FOR: THE RYLAND GROUP, INC.
 7130 MINNISTREL WAY, SUITE 215
 COLUMBIA, MARYLAND 21044

S.D.P. 92-112