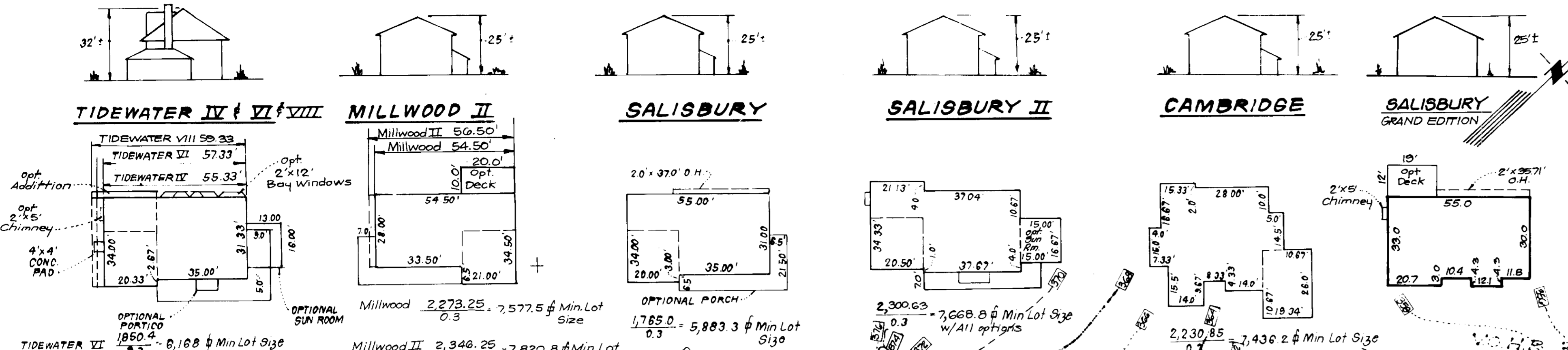


TYPICAL HOUSES

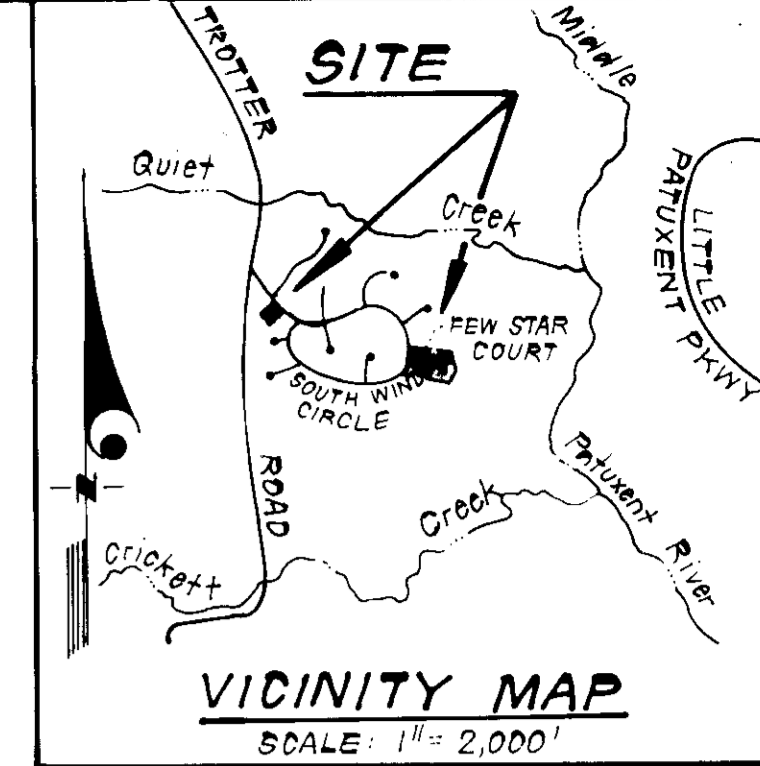
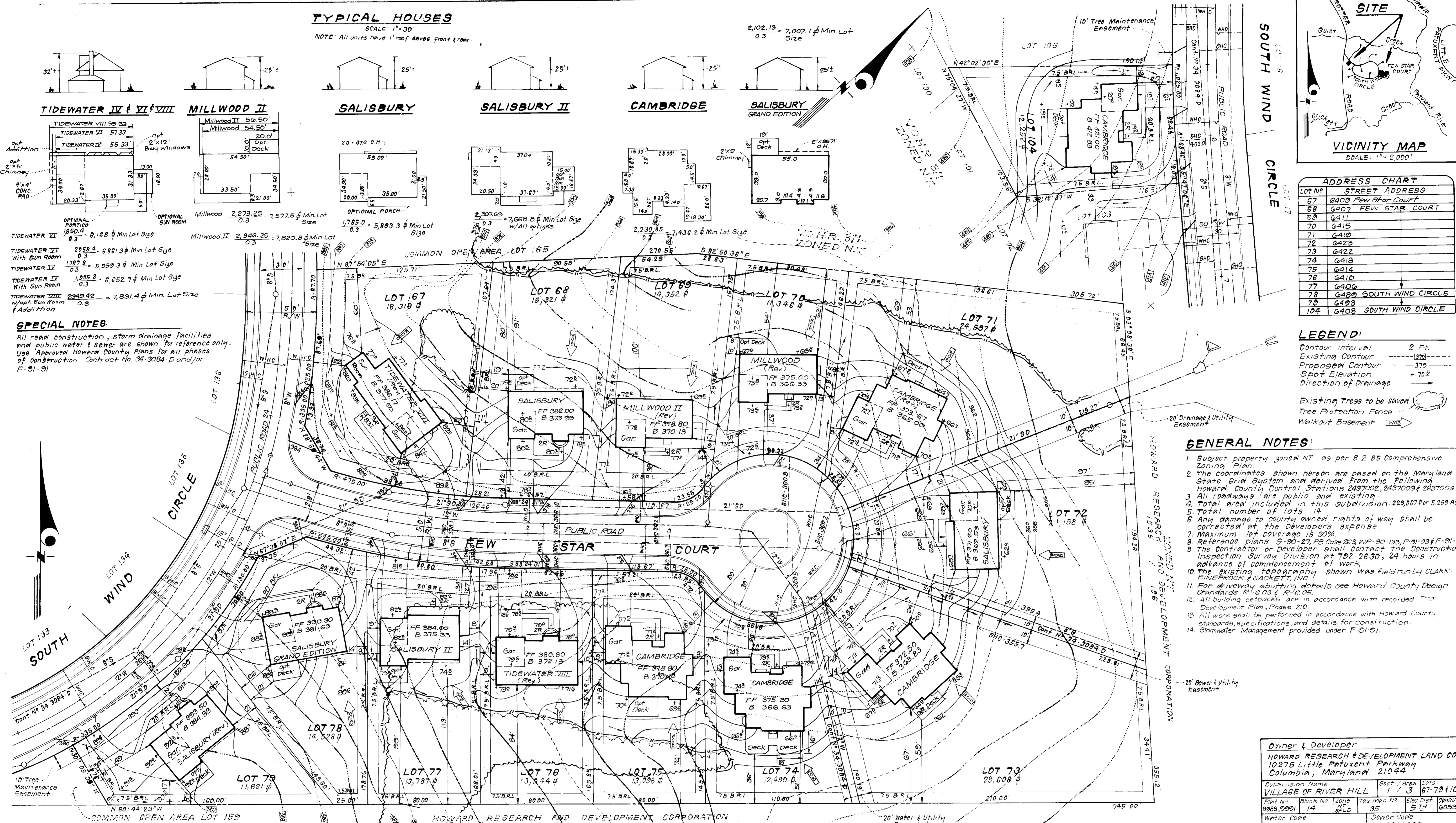
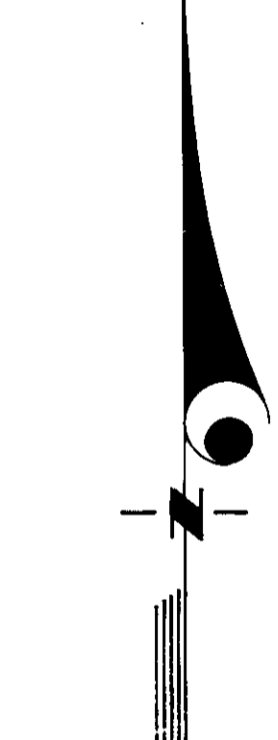
SCALE: 1" = 30'
NOTE: All units have 1" roof slope front & rear.



TIDEWATER VIII	50.33	2,102.13 = 7,007.1 # Min Lot Size
TIDEWATER VI	57.33	
TIDEWATER IV	55.33	
TIDEWATER VII	50.33	2,102.13 = 7,007.1 # Min Lot Size
TIDEWATER II	28.58	6,861.3 # Min Lot Size
TIDEWATER IX	1,787.2	5,959.3 # Min Lot Size
TIDEWATER X	1,995.8	6,652.7 # Min Lot Size
TIDEWATER VIII	2,949.42	7,831.4 # Min Lot Size

SPECIAL NOTES

All road construction, storm drainage facilities and public water & sewer are shown for reference only. Use Approved Howard County Plans for all phases of construction. Contract No. 34-3084-D and/or F-91-91.



ADDRESS CHART

LOT #	STREET ADDRESS
67	6403 Few Star Court
68	6407 FEW STAR COURT
69	6411
70	6415
71	6419
72	6423
73	6427
74	6431
75	6435
76	6439
77	6443
78	6447 SOUTH WIND CIRCLE
79	6451
104	6408 SOUTH WIND CIRCLE

LEGEND:

- Contour Interval: 2 Ft.
- Existing Contour: [Symbol]
- Proposed Contour: [Symbol]
- Spot Elevation: + 70.2
- Direction of Drainage: [Symbol]
- Existing Trees to be saved: [Symbol]
- Tree Protection Fence: [Symbol]
- Walkout Basement: [Symbol]

GENERAL NOTES:

- Subject property zoned NT as per 8-2-85 Comprehensive Zoning Plan.
- The coordinates shown hereon are based on the Maryland State Grid System and derived from the following Howard County Control Stations 2437002, 2437003 & 2437004.
- All roadways are public and existing.
- Total area included in this subdivision: 229,067 sq or 5.259 Ac.
- Total number of lots: 18.
- Any damage to county owned rights of way shall be corrected at the Developer's expense.
- Maximum lot coverage is 30%.
- Reference plans: S-90-27, PB Case 263, WF-90-133, P-91-23 & F-91-91.
- The contractor or developer shall contact the Construction Inspection Survey Division at 702-2630, 24 hours in advance of commencement of work.
- The existing topography shown was fieldrun by CLARK-FINEFROCK & SACKETT, INC.
- For driveway abutting details see Howard County Design Standards R1-603 & R1-605.
- All building setbacks are in accordance with recorded Final Development Plan, Phase 210.
- All work shall be performed in accordance with Howard County standards, specifications, and details for construction.
- Stormwater Management provided under F-91-91.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
10/14/91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
10/16/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
10/19/91



REVISIONS

No.	Description	Date
8	Rev. hse. & grad. lot 77, Rev. hse. typical	10-30-92
7	Rev. hse. & grad. lot 68	8-12-92
6	Rev. hse. & grad. lots 70, 73 & 76	7-23-92
5	Rev. hse. & grad. lots 67 & 72, Add hse. type	6-29-92
4	Revise house and grade lot 78, Add hse. typical	6-9-92
3	Revise house and grade lot 71	5-20-92
2	Revise house and grade lot 79	1-21-92
1	Revise house and grade lot 74	11-14-91

Jeffrey Sackett
9/24/91

Owner & Developer
HOWARD RESEARCH & DEVELOPMENT LAND CO.
10275 Little Patuxent Parkway
Columbia, Maryland 21044

Subdivision Name: VILLAGE OF RIVER HILL
Sect / Area: 1 / 3
Lots: 67-79 & 104

Plot No: 0983, 9991
Block No: 14
Zone: RFLD
Tax Map No: 35
Elev. Dist: 5 TH
Census Tr: 6053.01

Water Code: I 04
Sewer Code: 6660000

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

7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 881-7500 • BALTO. • (410) 671-1100 • WASH.

DESIGNED: VLP
DRAWN: BAL
CHECKED: JTR
DATE: JUNE, 1991

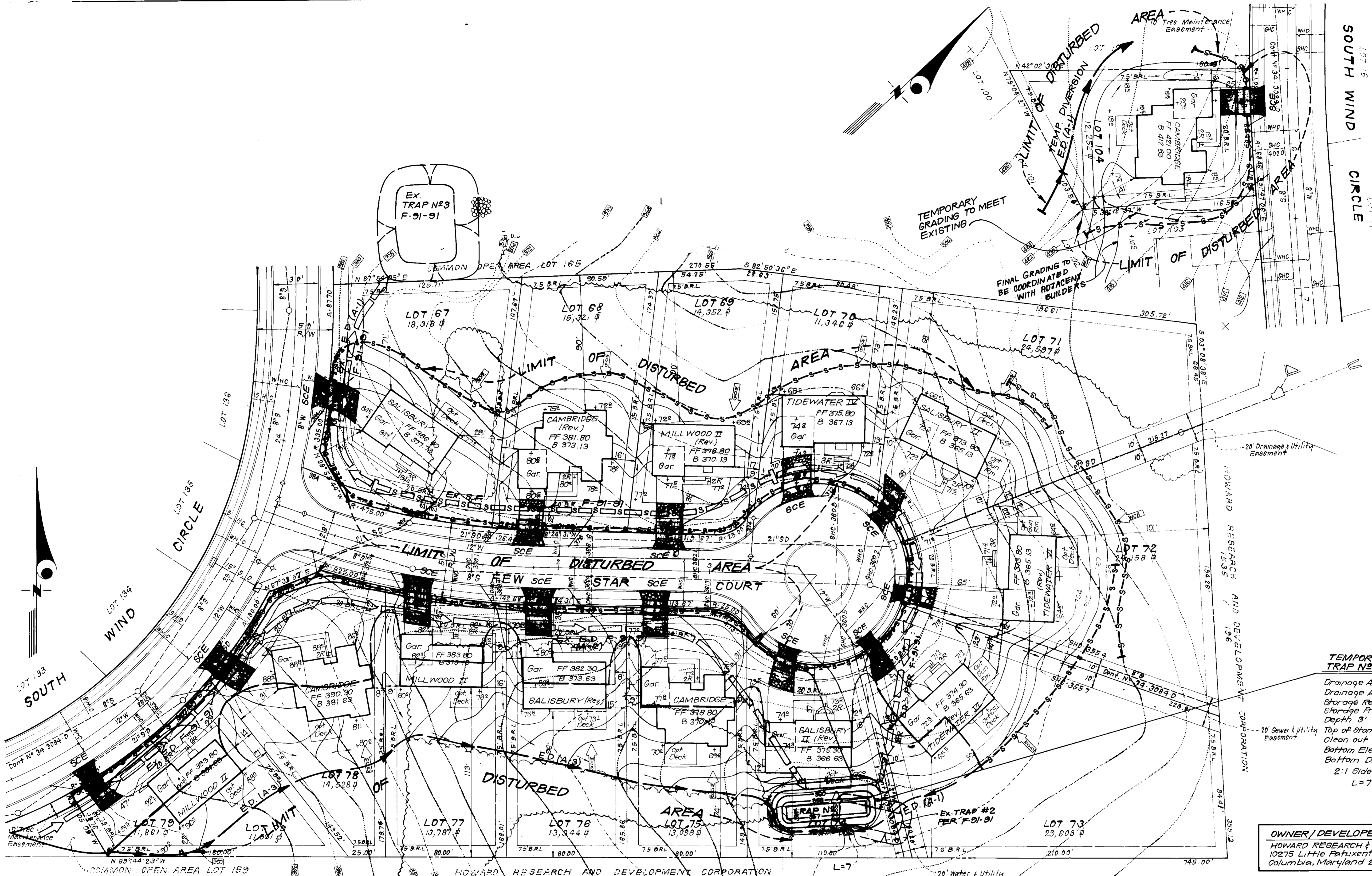
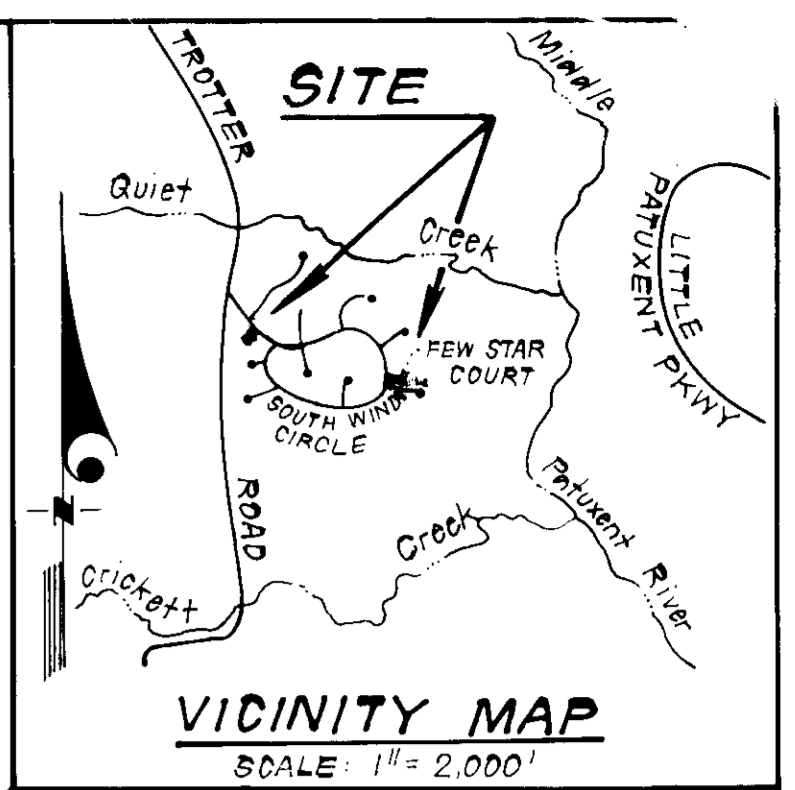
SITE DEVELOPMENT PLAN
LOTS 67 THRU 79 & 104
SCALE: 1" = 30'

COLUMBIA
VILLAGE OF RIVER HILL
SECTION I AREA 3 PHASE II
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: NuHome, Inc.
10435 Little Patuxent Parkway
Columbia, Maryland 21044

JOB NO: 91-097
FILE NO: 91-097-X

SDP-92-20



- LEGEND:**
- Contour Interval 2 Ft.
 - Existing Contour - - - - - 370
 - Proposed Contour - - - - - 370
 - Spot Elevation + 70.5
 - Direction of Drainage →
 - Existing Trees to be saved (tree symbol)
 - Tree Protection Fence (dashed line)
 - Walkout Basement (W.B.)
 - Existing Drainage Divide (dashed line)
 - Proposed Drainage Divide (solid line)
 - Silt Fence (S-S-S-S)
 - Earth Dike (E.D. (A-1))
 - Stabilized Construction Entrance (arrow with 'SCE')

TEMPORARY STORM WATER MANAGEMENT TRAP #1 SOUTH ST. I

Drainage Area 13 Ac. (Existing)
 Drainage Area 0.85 (Proposed)
 Storage Required 13(1800) = 2340 of
 Storage Provided 2340 of
 Depth 3'
 Top of Stone Weir 361.0
 Clean out Elev. 358.5
 Bottom Elev. 357.0
 Bottom Dimensions 54'x7'
 2:1 Side Slope
 L=7'

OWNER / DEVELOPER
 HOWARD RESEARCH & DEVELOPMENT LAND CO.
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 [Signature] DATE 10/11/91
 COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] DATE 10/11/91
 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
 [Signature] DATE 10/8/91
 CHIEF BUREAU OF ENGINEERING

Reviewed for HOWARD S.C.D.
 [Signature] DATE 10/11/91
 U.S. Soil Conservation Service

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

[Signature] DATE 10/11/91
 Approved

DEVELOPER'S SIGNATURE CERTIFICATE

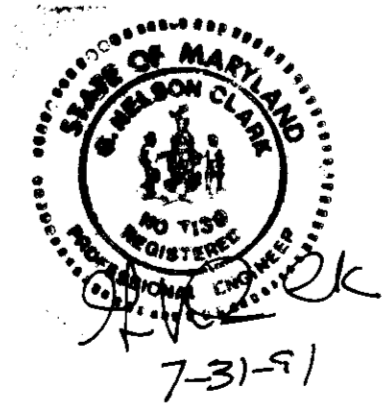
I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training 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 we deemed necessary.

[Signature] DATE 7-31-91
 Signature of Developer/Builder

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.

[Signature] DATE 7-31-91
 G. Nelson Clark



CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7115 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 881-7500 • BALTO. • (410) 481-8800 • WASH.		
DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 67 THRU 73 & 104 COLUMBIA VILLAGE OF RIVER HILL SECTION 1, AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN BAL		DRAWING 2 OF 3
CHECKED KIWM-1	JOB NO. 91-097	FILE NO. 91-097SE
DATE JULY, 1991	FOR: NuHomes, Inc. 10480 Little Patuxent Parkway Columbia, Maryland 21044	

SEDIMENT CONTROL NOTES

- 1) 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)
- 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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 perimeter in accordance with Vol. 1, 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 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.
- 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	5,298 Acres
Area Disturbed	327 Acres
Area to be roofed or paved	128 Acres
Area to be vegetatively stabilized	199 Acres
Total Cut	1545 Cu. yds
Total Fill	1405 Cu. yds
Offsite waste/borrow area location	* See Below
- 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 DFW 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) If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- 12) All pipes to be blocked at the end of each day (see detail below). N/A
- 13) The total amount of straw bale dikes/silt fence equals 1890 L.F.

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

CONSTRUCTION SEQUENCE

	No. of Days
1. Obtain grading permit and install sediment & erosion control devices and stabilize.	7
2. Delay construction on lot 74 until Trap #2 is removed and area draining to it has been stabilized.	
3. Excavate for foundations, rough grade and temporarily stabilize.	30
4. Construct structures, sidewalks and driveways.	90
5. Final grade and stabilize in accordance with standards and specifications.	14
6. Upon approval of the sediment control inspector remove sediment and erosion control devices and devices.	7
+ Install 1/2 tree protection fence.	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
James M. Bond... 10/11/91
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
10/16/91
10/16/91
DIRECTOR DATE
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 P. ... 10/9/91
DIRECTOR DATE
CHIEF BUREAU OF ENGINEERING 10-8-91
TH DATE

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded 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. Narrow or disc 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).
- 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. Narrow or disc into upper three inches of soil.

Seeding: For 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 of 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 358 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

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

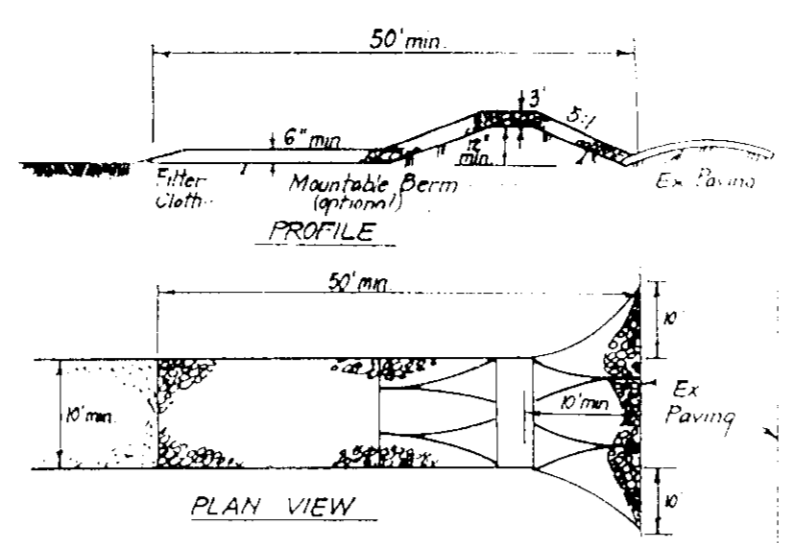
Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

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 25 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 15, 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 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 358 gal per acre (8 gal/1000 sq ft) for anchoring.

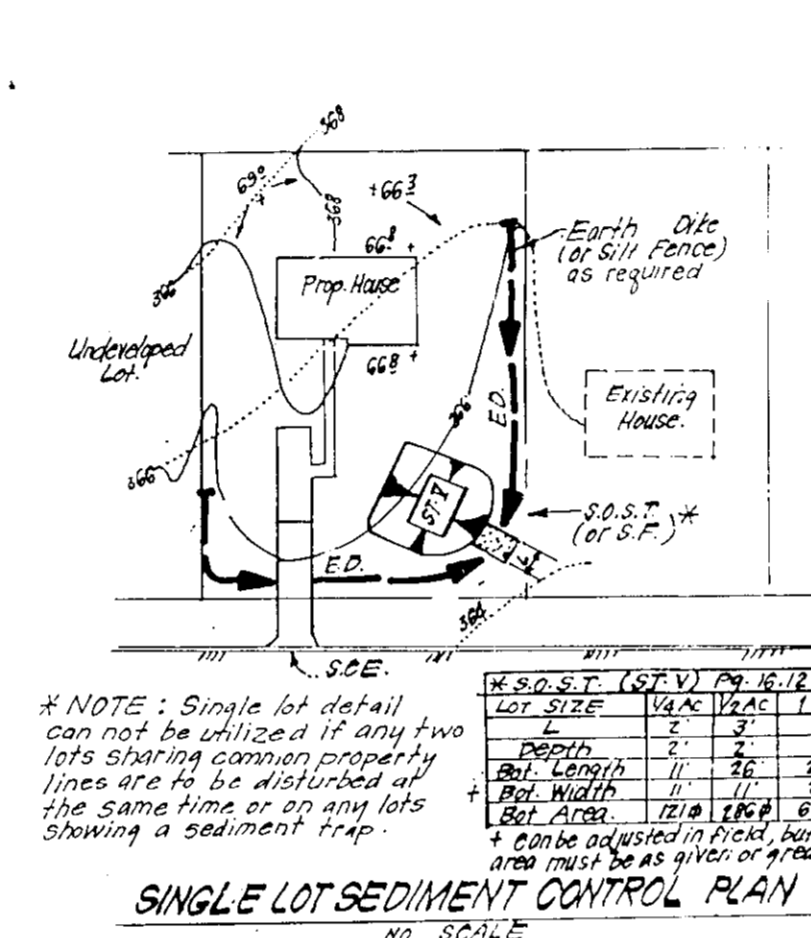
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



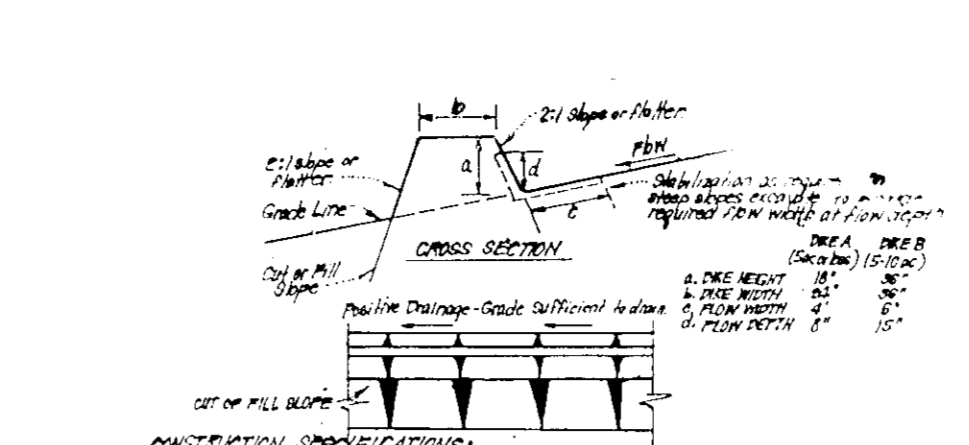
CONSTRUCTION SPECIFICATIONS:

1. Slope size - Use 2" straw or equivalent in required concrete equipment
2. Length - As required, but not less than 50' length, except on slopes greater than 1:1 where a 30' minimum length would apply
3. Thickness - Not less than six (6) inches
4. Width - Ten (10) feet minimum, but not less than the full width at points where ingress or egress occurs
5. Filter Cloth - Will be placed over the entire area prior to placing of straw. Filter will not be required over a single family residence lot.
6. Surface Water - All surface water flowing in or over the construction entrance shall be piped across the entrance. If piping is impractical, a mound will be built with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition when will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional straw as construction demands and repair work or cleaning of any structures used to trap sediment. Sediment baled, grappled, washed or tracked onto public rights-of-way must be removed immediately.
8. 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 straw and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be performed after each rain.

STABILIZED CONSTRUCTION ENTRANCE SCE



SINGLE LOT SEDIMENT CONTROL PLAN

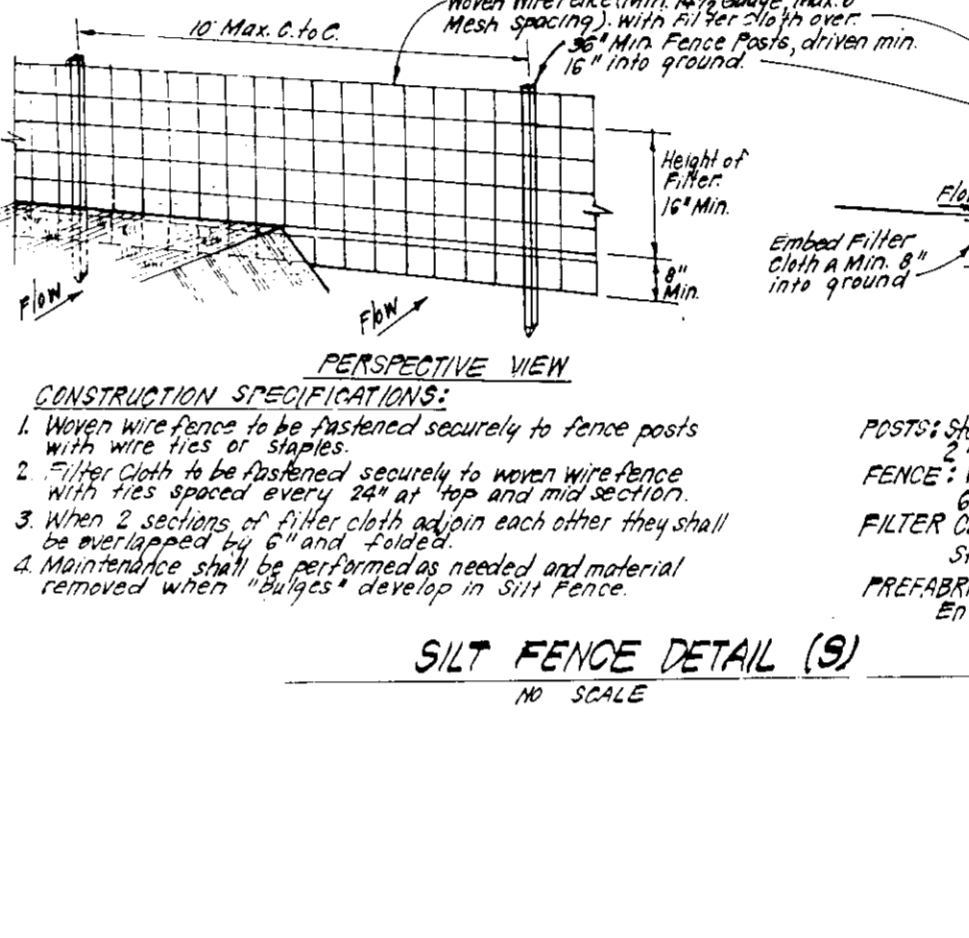


CONSTRUCTION SPECIFICATIONS:

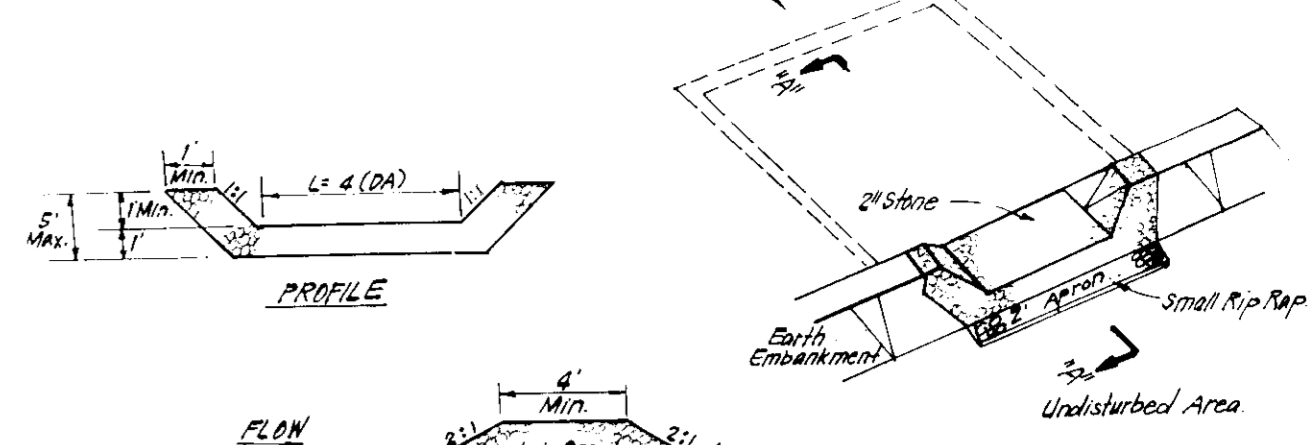
1. All dikes shall be constructed by earth-moving equipment
2. All dikes shall have positive drainage to an outlet
3. The width may be wider and soil slopes may be steeper if observed to facilitate access by construction equipment
4. Filter cloth should be installed as provided to utilize a stabilized earth wall
5. Earth slopes shall have a safety factor consistent with a minimum of erosion control. Erosion control may be provided by a sediment trapping device such as a sediment trap or sediment basin where filter cloth is installed in the drainage system above the dike
6. Sediment traps shall be 10' in accordance with standard specifications for design and shall have a minimum length of 10' in the direction of flow
7. Periodic inspection and needed maintenance shall be performed after each rain

EARTH DIKE DETAIL (E.D.)

STABILIZED CONSTRUCTION ENTRANCE SCE



SILT FENCE DETAIL (S)



CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be compacted
2. The fill material for the embankment shall be free of rocks and other woody vegetation as well as over sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed
3. All cut and fill slopes shall be 2:1 or flatter
4. The stone used in the outlet shall be small rip rap 4" to 8" along with 1" thickness of 2" aggregate placed on the up-slope side on the small rip rap. Embed filter cloth in the rip rap
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap
6. Structure shall be inspected after each rain and repairs made as needed
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STV

NO SCALE

Reviewed for HOWARD COUNTY S.C.D.
Signature: [Signature] 10/11/91
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
Signature: [Signature] 10/11/91
Approved Date

DEVELOPER'S/BUILDER'S CERTIFICATE

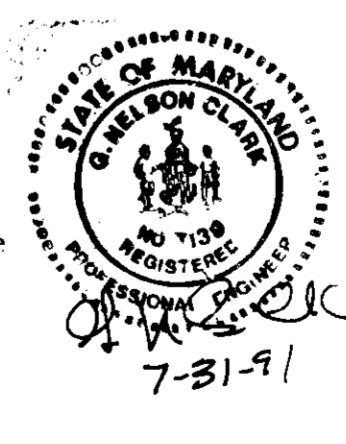
"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training 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] 7-31-91
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.

Signature: [Signature] 7-31-91
Date



OWNER / DEVELOPER
HOWARD RESEARCH & DEVELOPMENT LAND CO.
10275 Little Patuxent Parkway
Columbia, Maryland 21044

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

DESIGNED	DETAIL SHEET	SCALE
KIWM	LOTS 67 thru 79 and 104	As Shown
DRAWN	COLUMBIA	
BAL	VILLAGE OF RIVER HILL	DRAWING
CHECKED	SECTION 1 AREA 3	3 OF 3
KIWM	5TH ELECTION DISTRICT	JOB NO
	HOWARD COUNTY, MARYLAND	91-097
DATE	FOR: NU-HOMES, INC	FILE NO
Aug 1991	10480 Little Patuxent Parkway	91-097SE
	Columbia, Maryland 21044	