

ADDRESS CHART	
LOT NO	STREET ADDRESS
98	10631 HARPOON HILL
99	10627 " "
100	10621 " "
101	10617 " "
102	10613 " "
103	10609 " "
104	10605 " "
105	10601 " "

SPECIAL NOTES

All road construction, storm drainage facilities and public water and sewer are shown for reference only. Use approved Howard County plans for all phases of construction.

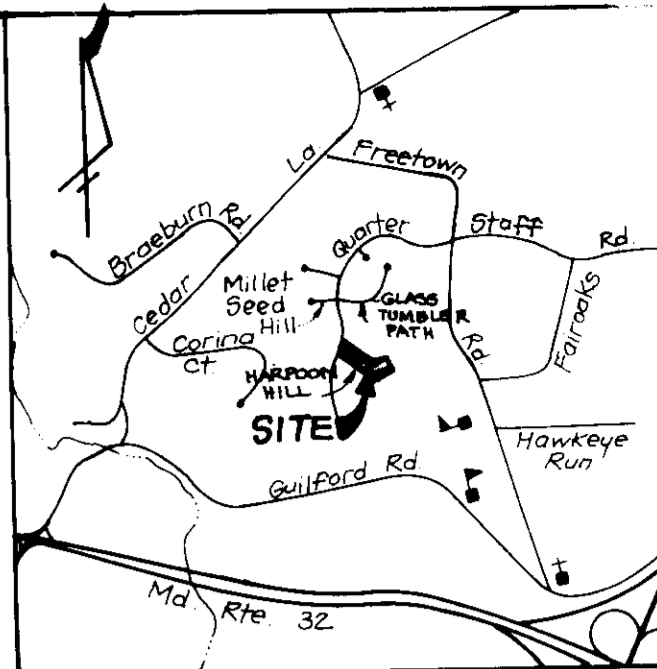
LOT NO	Minimum Cellar Elev.
98	405.8
99	405.5
100	407.0
101	408.1
102	410.6
103	410.1
104	409.1
105	408.0

DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB CURB & GUTTER & SIDEWALK

DRIVEWAY ABUTTING CLOSED SECTION WITH STR 7" COMB CURB & GUTTER & SIDEWALK SET BACK FROM CURB

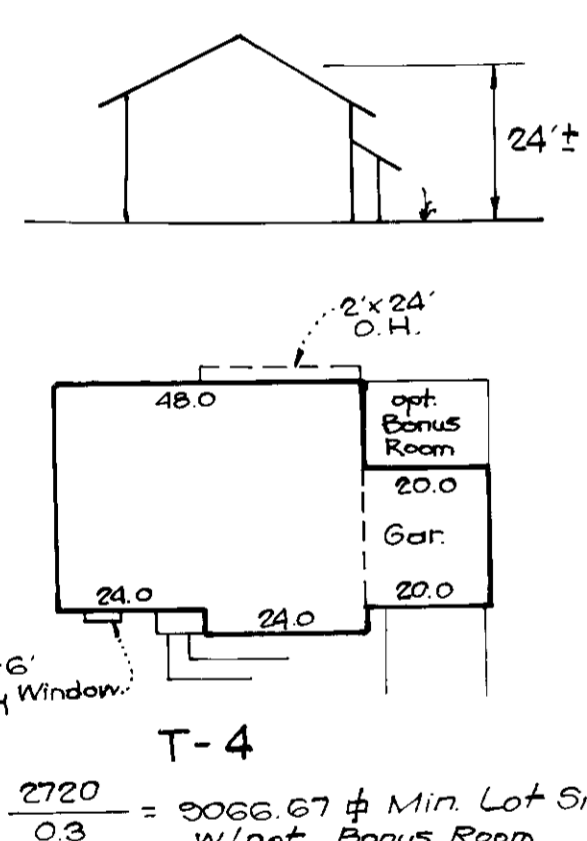
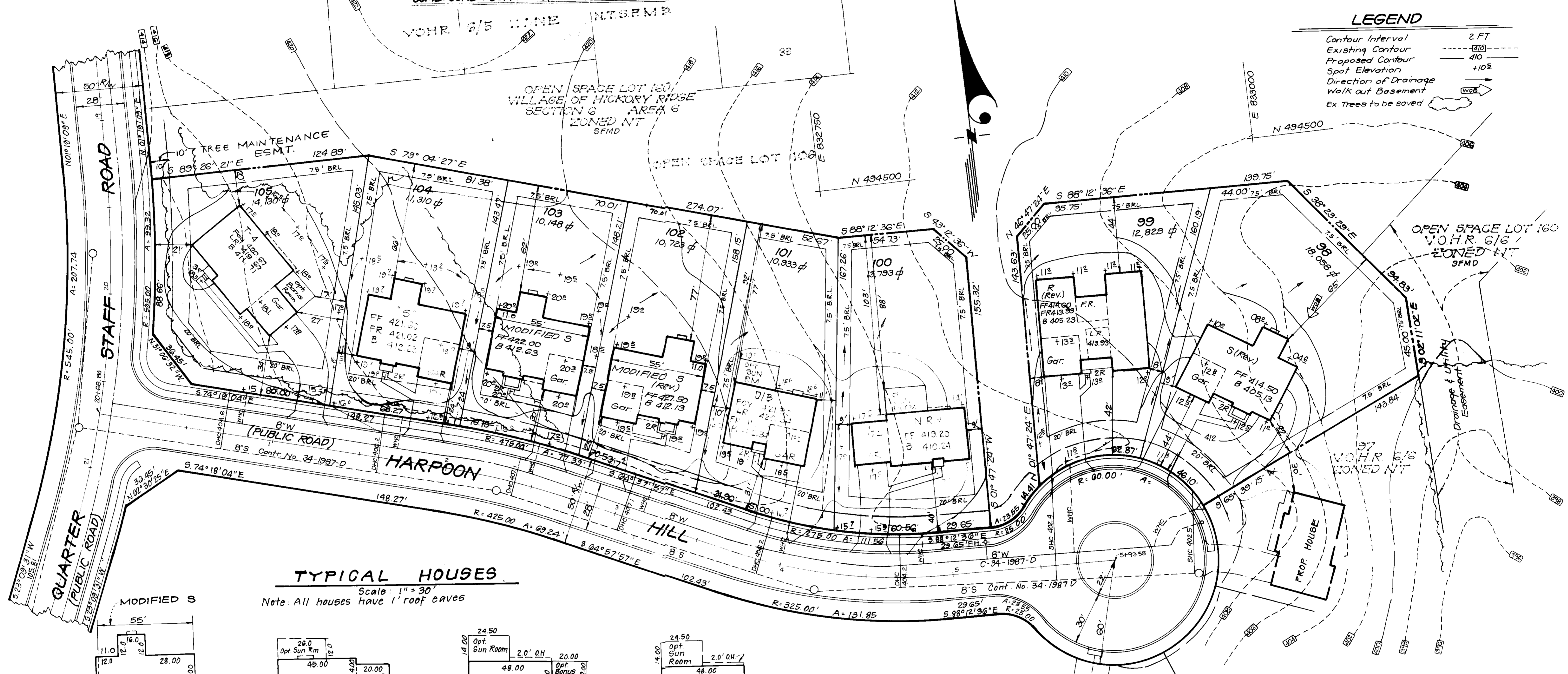
GENERAL NOTES

- Subject property zoned NT as per B 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 2439001 and 244001.
- All roadways are public and existing.
- Total area included in this submission: 101,824 sq ft or 2.3412 Ac.
- Total number of lots: 8
- Any damage to county owned right-of-ways shall be corrected at the Developer's expense.
- This subdivision is subject to Section 18.122 B of the Howard County Code.
- Reference plans S-88-115, P-88-76, PB case 243 and WP 83-71, & F-90-96.
- The Contractor or Developer shall contact the Construction/Inspection Division, 24 hours in advance of commencement of work at 792-2630.
- The existing topography shown was taken from road construction plans dated Nov. 10, 1989 prepared by Whitman, Repardt & Associates, F-90-96.
- Minimum setback restrictions from property lines and the right-of-way of any public road or street to be in accordance with the recorded final development plan criteria Phase 205 recorded in 3054-A, 1091 to 1096.
- Storm water Management Facility provided for under F-90-96.
- 10' Tree Maintenance easement along all road frontages.



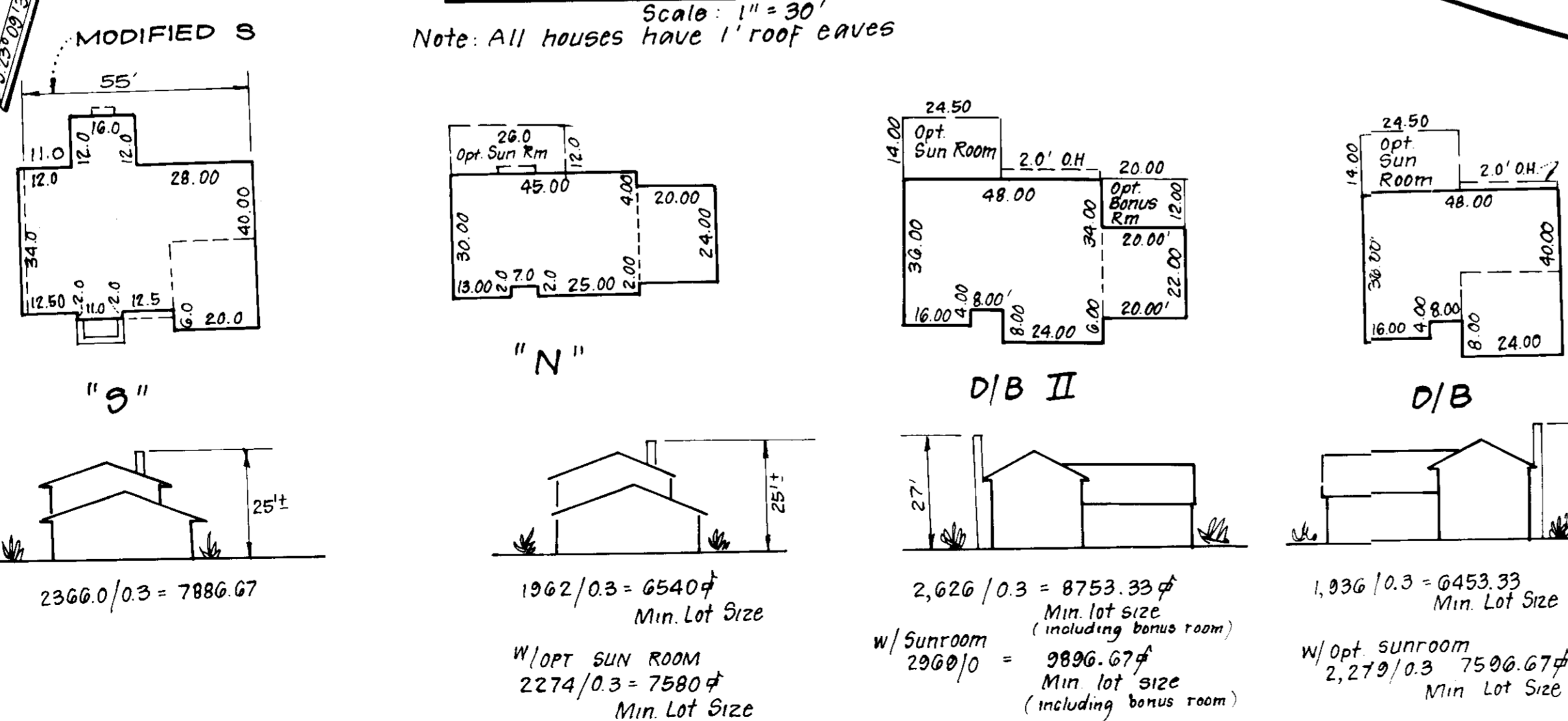
LEGEND

- Contour Interval: 2 FT
- Existing Contour: ---
- Proposed Contour: - - -
- Spot Elevation: +10.5
- Direction of Drainage: --->
- Walk out Basement: ---
- Ex Trees to be saved: [Symbol]



2720 = 2066.67 sq ft Min. Lot Size w/opt. Bonus Room

TYPICAL HOUSES



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 4-25-90

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DIRECTOR: [Signature] DATE: 4/25/90

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 4/20/90

CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 4-20-90

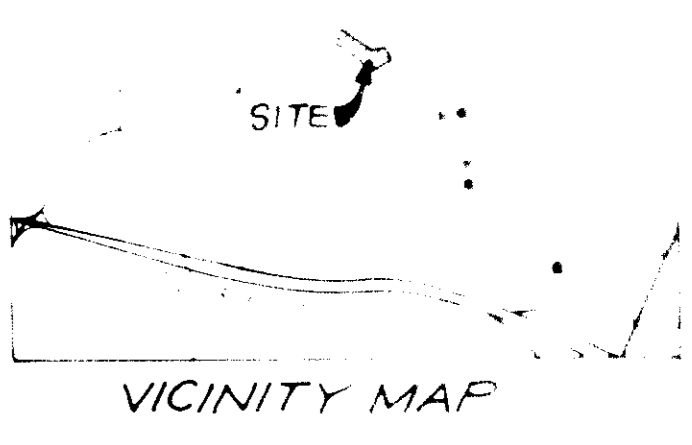
OWNER/DEVELOPER: Howard Research & Development Corp. 10275 Little Patuxent Columbia, Md 21044	Subdivision Name: COLUMBIA Village of Hickory Ridge Block No: 9339-9340 Zone: NT&EMD Water Code: E-29	Section: 6/6 Lots: 98 thru 105 Consensus Tr: 6053.02	Sewer Code: 6580000
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CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINISTREL WAY • COLUMBIA MD 21045 • (410) 381-7500 • BALTO • (410) 381-7500 • WA		
DESIGNED JME	SITE DEVELOPMENT PLAN LOTS 98 thru 105 COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 6 AREA 6 5 TH ELECTION DISTRICT HOWARD COUNTY MARYLAND FOR: COLUMBIA BUILDERS, INC. Box 999 Columbia, Maryland 21044	SCALE 1" = 30'
DRAWN BAL Gg		DRAWING 1 OF 3
CHECKED JME		JOB NO 90-003
DATE 2-23-90		FILE NO 90-003
REVISIONS		

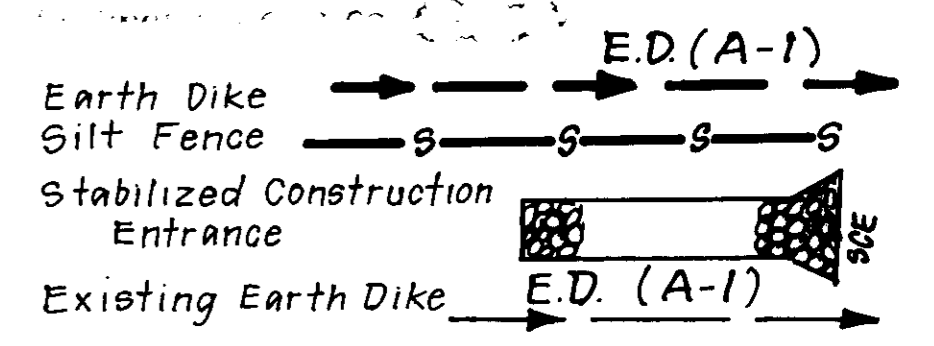
DEVELOPERS/BUILDERS CERTIFICATE

We certify that all the measures of erosion control will be done according to this plan. If any changes are made for erosion and sediment control and that the existing measures will be done in the construction project will have a Certificate of Approval from the Dept. of Natural Resources that will be done in accordance with the Dept. of Natural Resources. This plan is approved by the Dept. of Natural Resources and the Department of Soil Conservation. It is authorized to be used by the Department of Soil Conservation District or their authorized agents as may be deemed necessary.

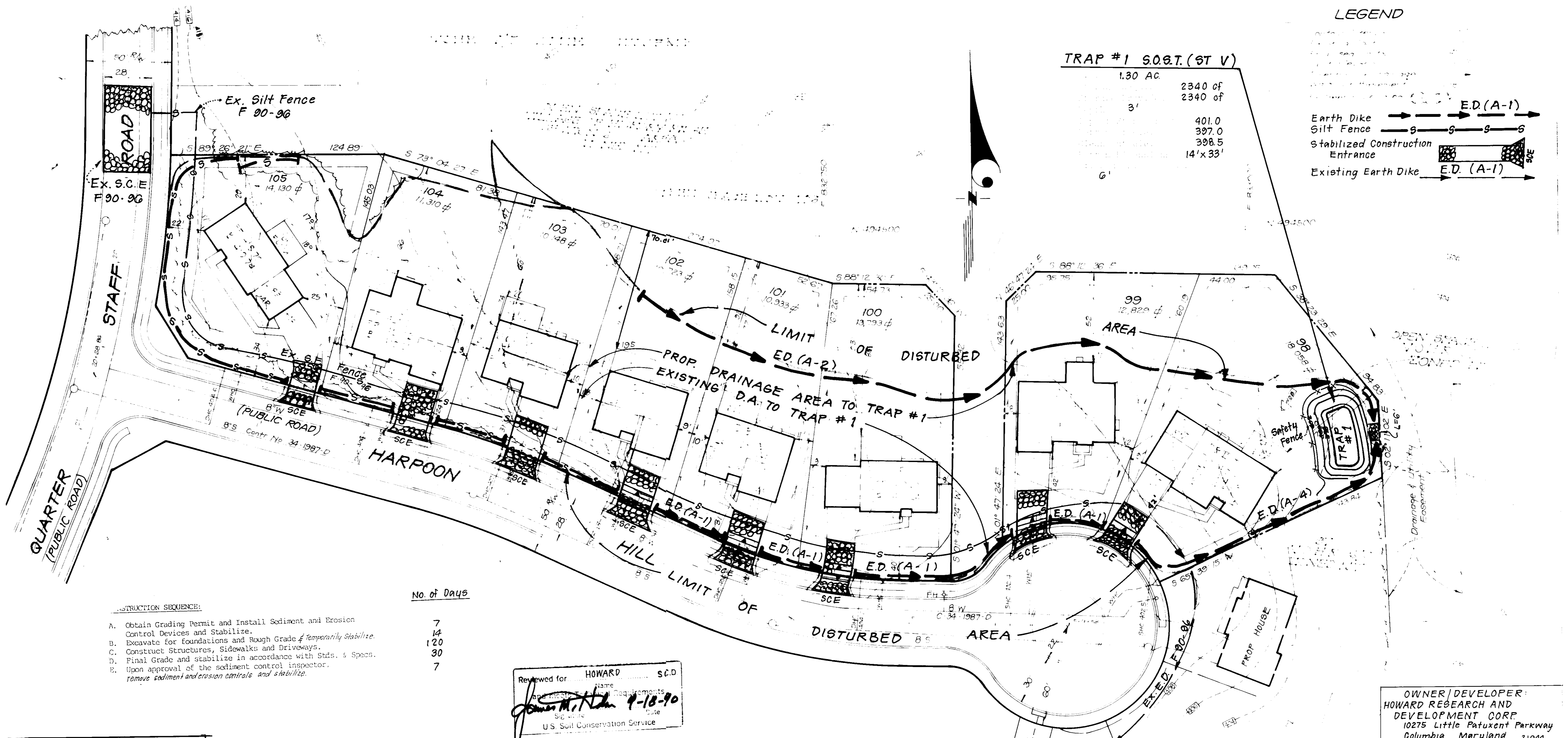
B. Jones 2-23-90
 Name of Developer/Builder Date



LEGEND



TRAP #1 S.O.B.T. (ST V)
 1.30 AC
 2340 of
 2340 of
 3'
 401.0
 397.0
 398.5
 14'x33'



- CONSTRUCTION SEQUENCE:**
- Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.
 - Excavate for Foundations and Rough Grade & Temporarily Stabilize.
 - Construct Structures, Sidewalks and Driveways.
 - Final Grade and stabilize in accordance with Stds. & Specs.
 - Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize.

No. of Days
7
14
120
30
7

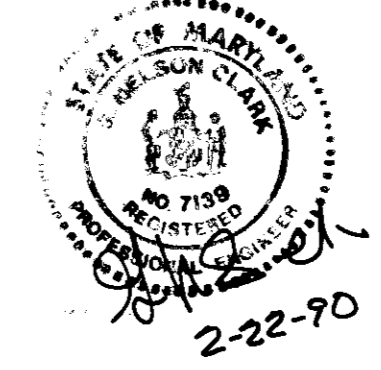
Reviewed for HOWARD S.C.D.
James M. Allen 4-18-90
 U.S. Soil Conservation Service

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

APPROVED FOR PUBLIC WATER AND SEWERAGE SYSTEMS
[Signature] 4-25-90
 DEPT. OF PUBLIC WORKS
 APPROVED HOWARD COUNTY DEPT. OF PUBLIC WORKS
[Signature] 4/25/90
 APPROVED COMMUNITY PLANNING AND LAND DEVELOPMENT
[Signature] 4/25/90
 APPROVED STORM DRAINAGE SYSTEMS AND PUBLIC UTILITIES
[Signature] 4/20/90
 APPROVED
[Signature] 4-20-90
 CHIEF BUREAU OF ENGINEERING

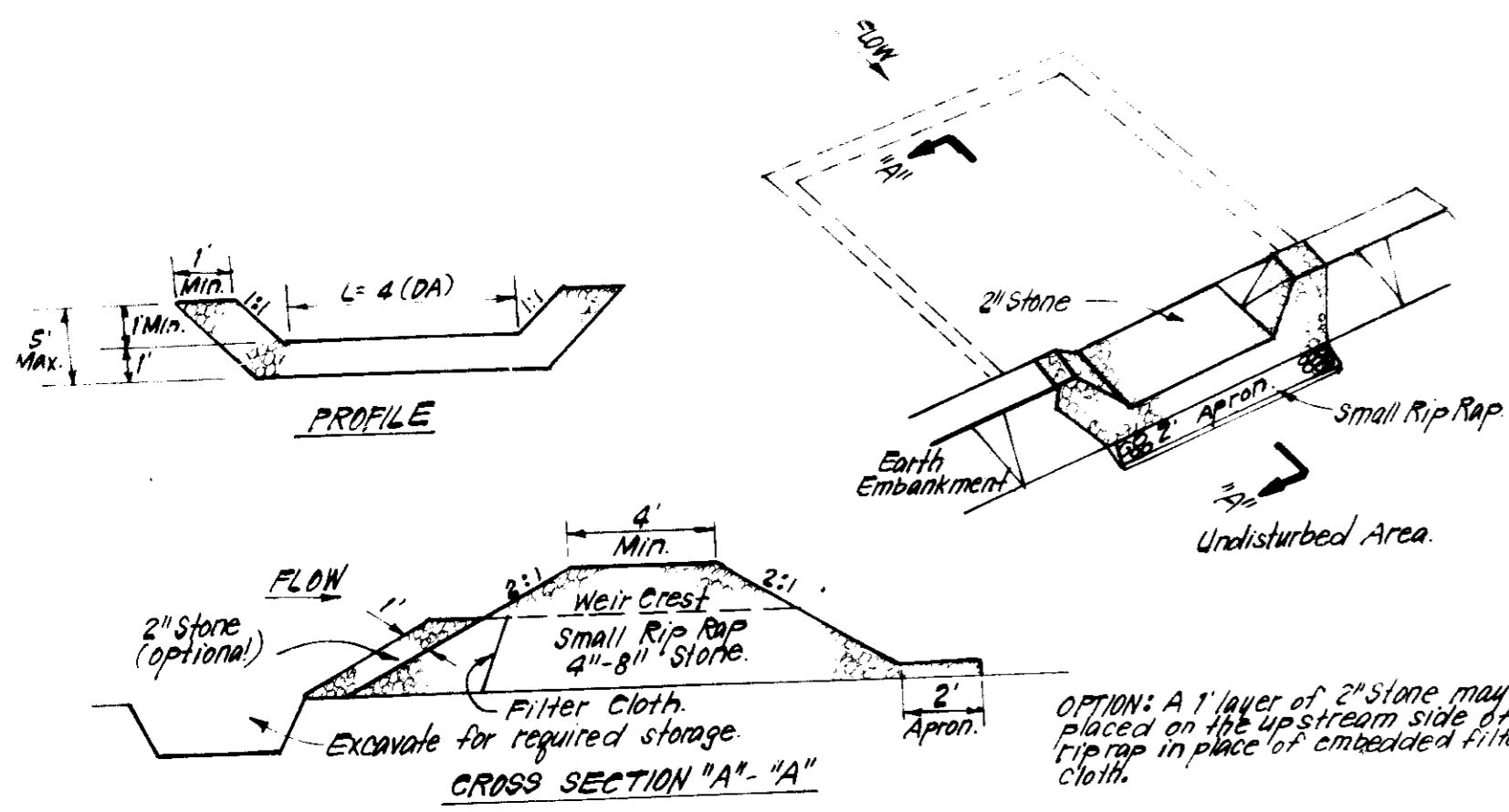
APPROVED
[Signature] 4/18/90
 Date

ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control meets all the requirements and is a suitable plan for the site. It was prepared in accordance with the requirements of the Howard Soil Conservation District.
[Signature] 2-22-90
 Nelson Clark Date



CLARK • FINEROCK • SACKETT INC.
SEDIMENT & EROSION CONTROL PLAN
 COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 6 AREA 6
 5 TH ELECTION DISTRICT HOWARD COUNTY MARYLAND
 FOR COLUMBIA BUILDERS INC. Box 999
 S.D.P. 90-167

Scale: 1"=30'
 2 of 3
 90-003
 90-003SE

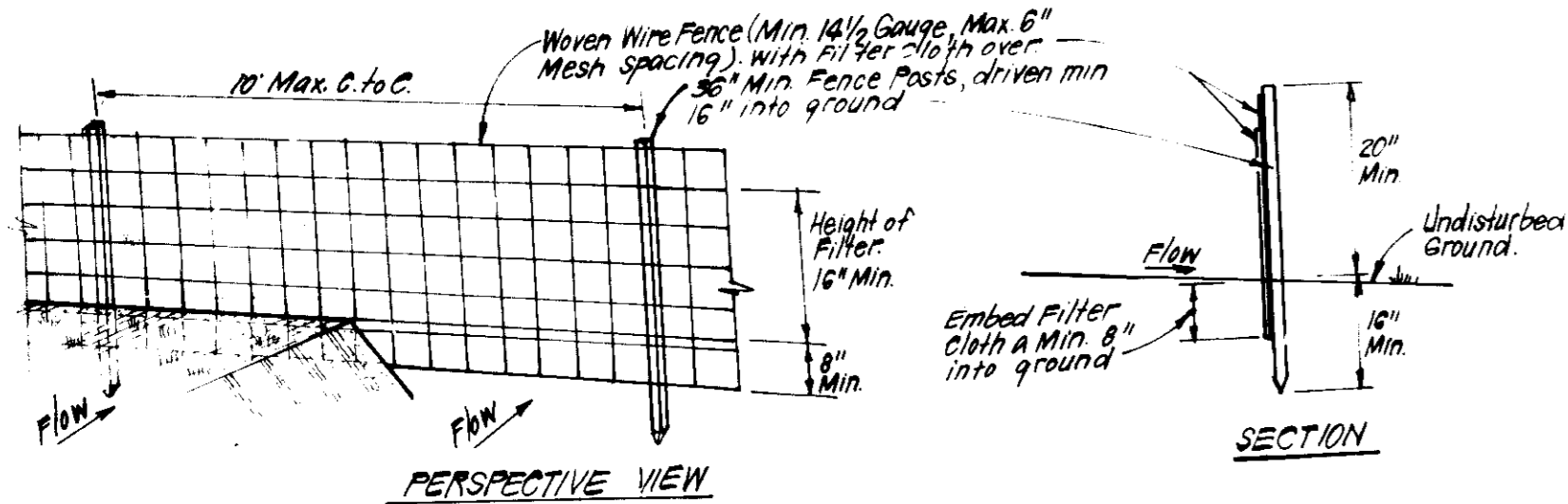


CONSTRUCTION SPECIFICATIONS:

- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top 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 sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted sized stones, rocks, organic material or other objectionable material.
- All cut and fill slopes shall be 2:1 or flatter.
- The stone used in the outlet shall be small rip rap 4"-8" along with 1" thickness of 2" aggregate placed by traversing with equipment while it is being constructed.
- 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.
- 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 (S.O.S.T.) S.T.V.

NO SCALE



CONSTRUCTION SPECIFICATIONS:

- 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 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and soldered.
- Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.

SILT FENCE DETAIL (S)

NO SCALE

DEVELOPERS/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of final construction for erosion and sediment control and that all erosion control measures indicated in the construction permit will have a Certificate of Acceptance 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 are deemed necessary."

Signature of Developer/Builder: *James P. Smith* Date: 2-25-90

POSTS: Steel either T or U Type or 2" Hardwood
 FENCE: Woven Wire, 14 1/2 Gauge, 6" Max. Mesh Opening
 FILTER CLOTH: Filter Cloth, 100% Stable Link, 7140N or Approx. equal
 PREFABRICATED UNIT: Georgia Envirofence or Approx. equal

- 1) Erosion control structures shall be constructed in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 2) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, protected slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) Site Analysis:
 Total Area of Site: 2.34 Acres
 Area Disturbed: 1.84 Acres
 Area to be roofed or paved: 0.60 Acres
 Area to be vegetatively stabilized: 1.24 Acres
 Total Cut: 2977 Cu. yds
 Total Fill: 2586 Cu. yds
 Offsite waste/borrow area location: Undetermined
- 7) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 8) Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- 9) 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.
- 10) If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- 11) All pipes to be blocked at the end of each day (see detail below). N/A
- 12) The total amount of straw bale dikes/silt fence equals 300 L.F.

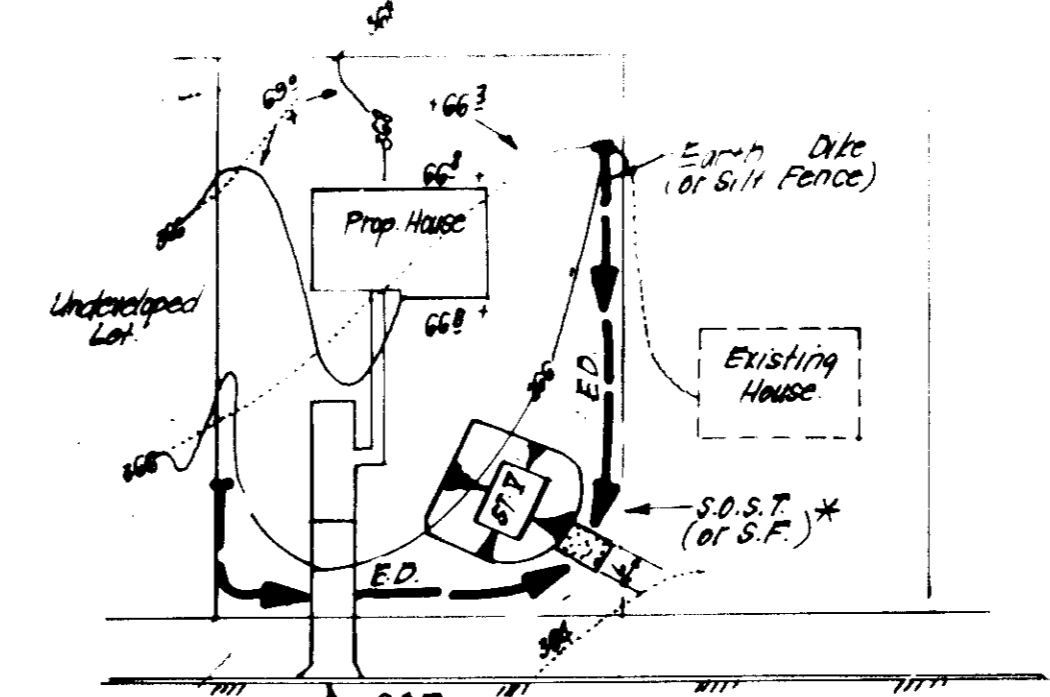
PERMANENT SEEDING NOTES

- Soil 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 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 1700 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 (1.7 lbs/1000 sq ft) of Kentucky 31 Fall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Fall 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 Fall 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.
- Inspection - 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.
- 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 24 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 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 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.



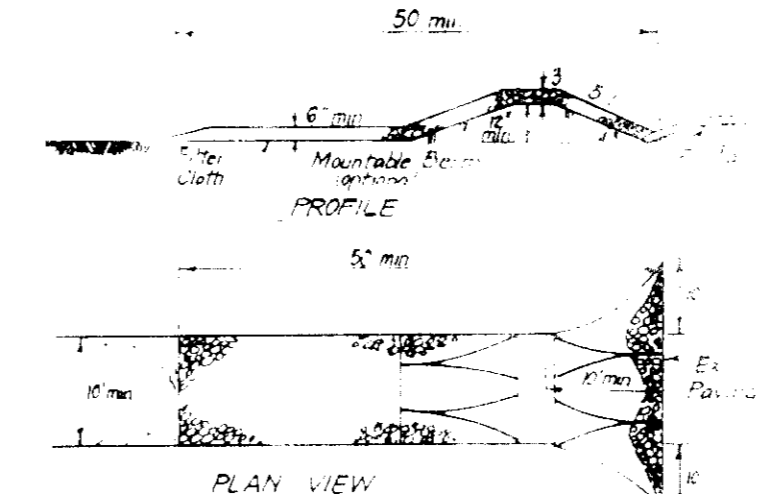
* NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap

LOT SIZE	WALK	AREA	1 AC.
Depth	3'	3'	9'
Lot Length	11'	36'	36'
Lot Width	11'	36'	36'
Lot Area	121	1296	1296

* Can be adjusted in field, but option area must be as given or greater

SINGLE LOT SEDIMENT CONTROL PLAN

NO SCALE

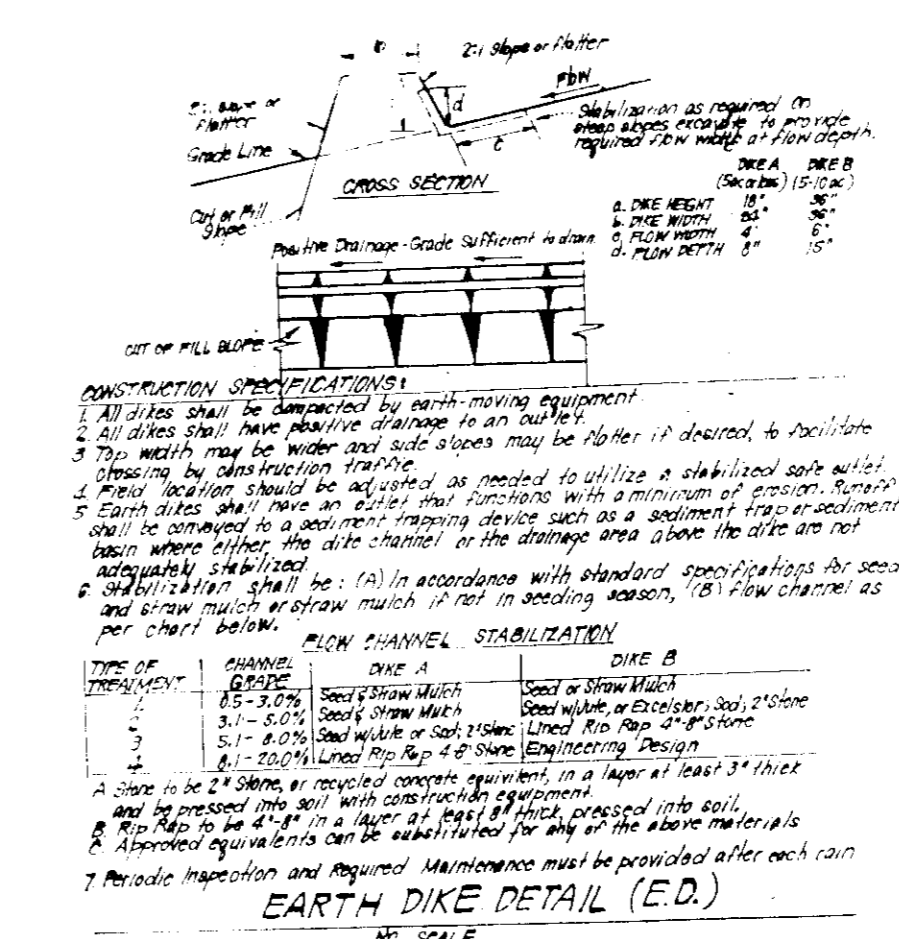


CONSTRUCTION SPECIFICATIONS

- 1) Stones to be used in stone curb shall be of uniform size and shape.
- 2) Curb shall be constructed in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) Thickness shall be 12" to 18" unless otherwise specified.
- 4) Width shall be 5' to 6' unless otherwise specified.
- 5) Filter cloth to be placed over the top of the curb and secured with staples.
- 6) Surface water shall be directed through the curb into the drainage ditch.
- 7) Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.
- 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 stone curb which drains into approved storm drainage system.
- 9) Periodic inspection and needed maintenance shall be performed after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

NO SCALE



EARTH DIKE DETAIL (E.D.)

NO SCALE

Reviewed for: **HOWARD** S.C.D.
 Name: *James P. Smith*
 Signature: *James P. Smith* Date: 4-18-90
 U.S. Soil Conservation Service

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

Approved: *James P. Smith* Date: 4/18/90

OWNER/DEVELOPER:
 HOWARD RESEARCH AND DEV. CORP.
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

CLARK • FINEROCK & SACKETT, INC.
 ENGINEER • PLANNERS • SURVEYORS
 7155 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7500 BALTO (301) 621-8100 WASH.

PROJECT NO.	68	DATE	4-25-90
CLIENT	HOWARD RESEARCH AND DEV. CORP.	PROJECT	4-25-90
DATE	2-23-90	PROJECT	4-25-90

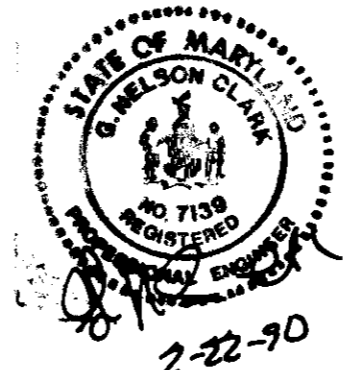
SEDIMENT & EROSION CONTROL DETAILS
 1983-98 thru 1990
COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 6 AREA 6
 5TH ELECTION DISTRICT
 HOWARD COUNTY MARYLAND
 FOR COLUMBIA BUILDERS, INC.
 Box 999
 Columbia, Maryland 21044

DATE: 2-23-90
 PROJECT: 90-003 SE

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: *G. Nelson Clark* Date: 2-22-90



DEVELOPERS/BUILDERS CERTIFICATE

Signature of Developer/Builder: *James P. Smith* Date: 4-25-90

Signature of Developer/Builder: *James P. Smith* Date: 4-25-90

Signature of Developer/Builder: *James P. Smith* Date: 4-25-90

Signature of Developer/Builder: *James P. Smith* Date: 4-25-90