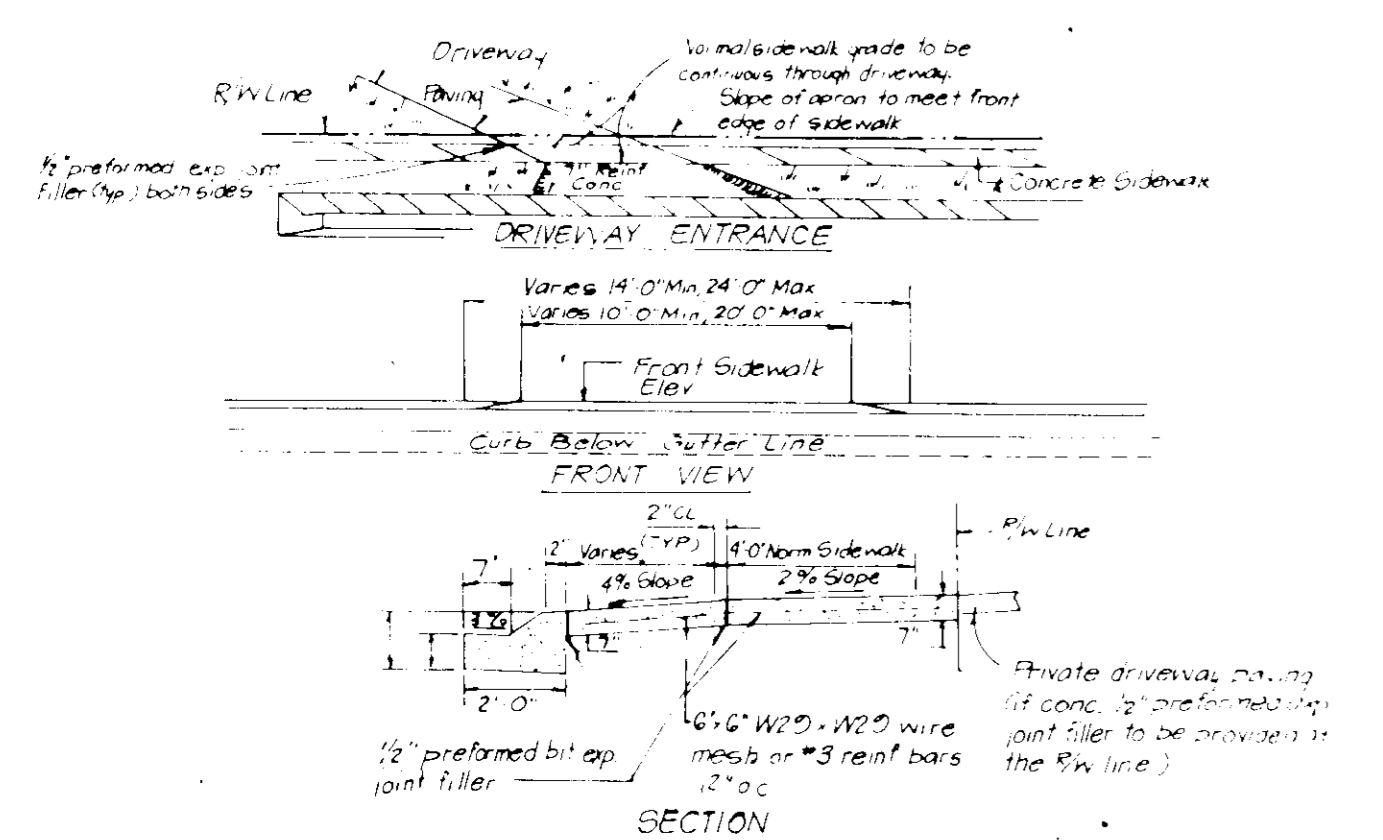
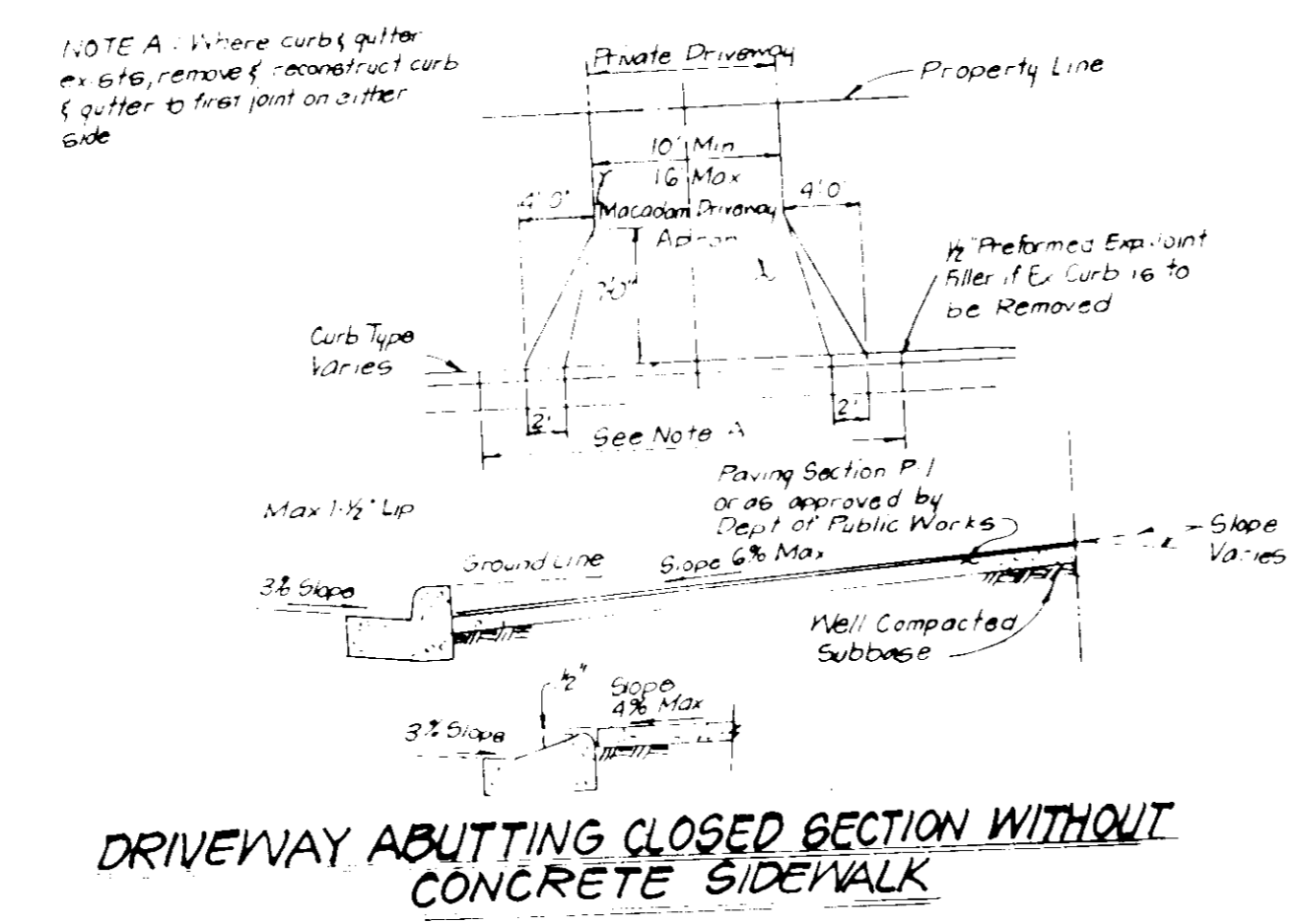


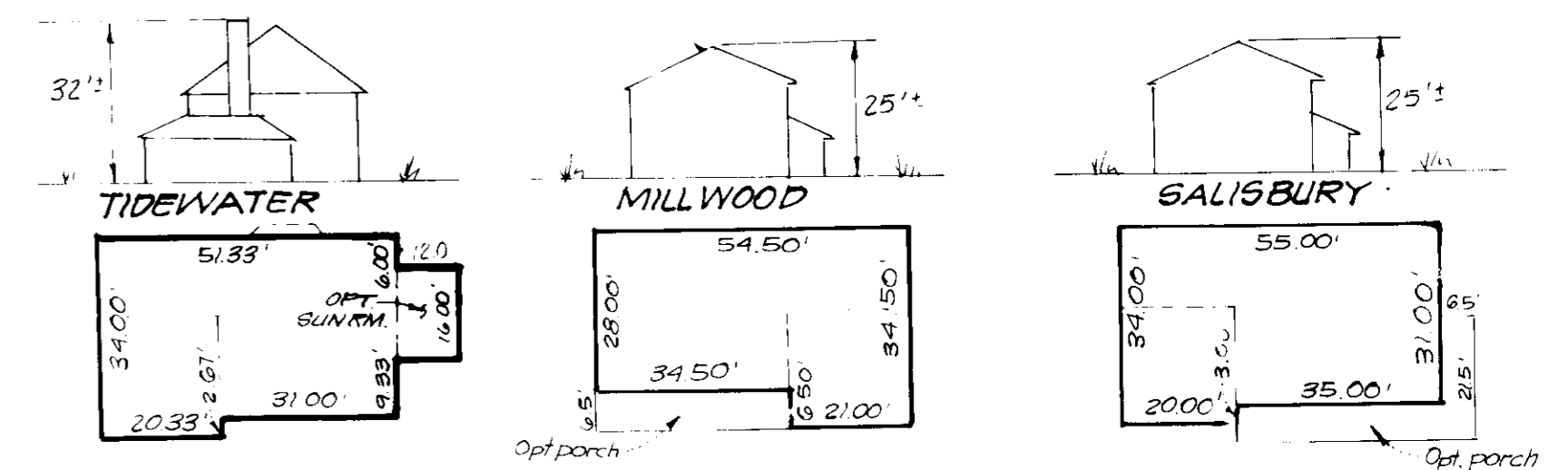
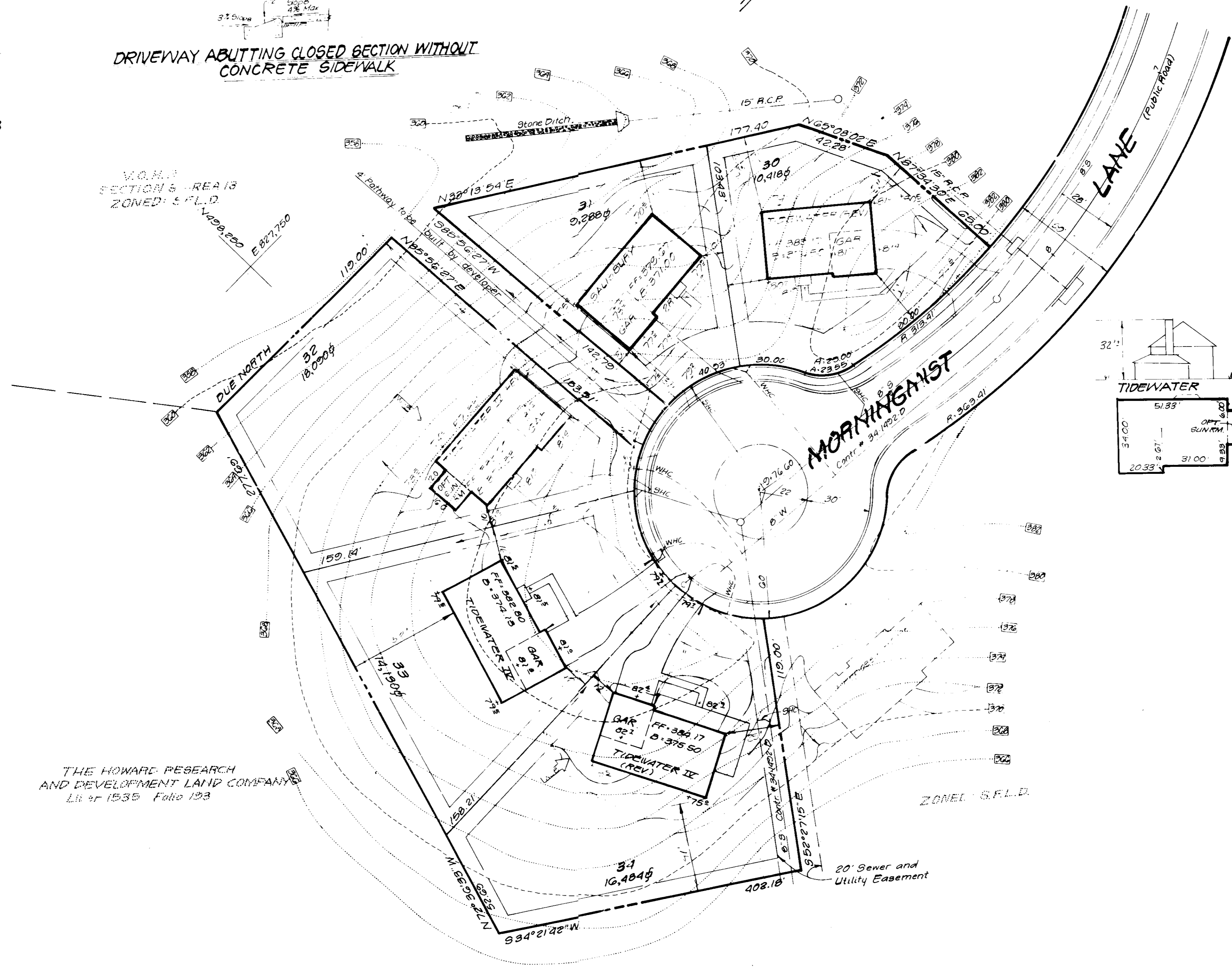
DRIVEWAY ABUTTING CLOSED SECTION WITH STD. 7" COMB. CURB & GUTTER & SIDEWALK SET BACK FROM CURB



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



V.O.M. SECTION 3 - AREA 13 ZONED S.F.L.D.



TYPICAL HOUSES
No Scale

APPROVED:
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY MARYLAND
DATE 6-25-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
DATE 8-4-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 8-5-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 8-3-87

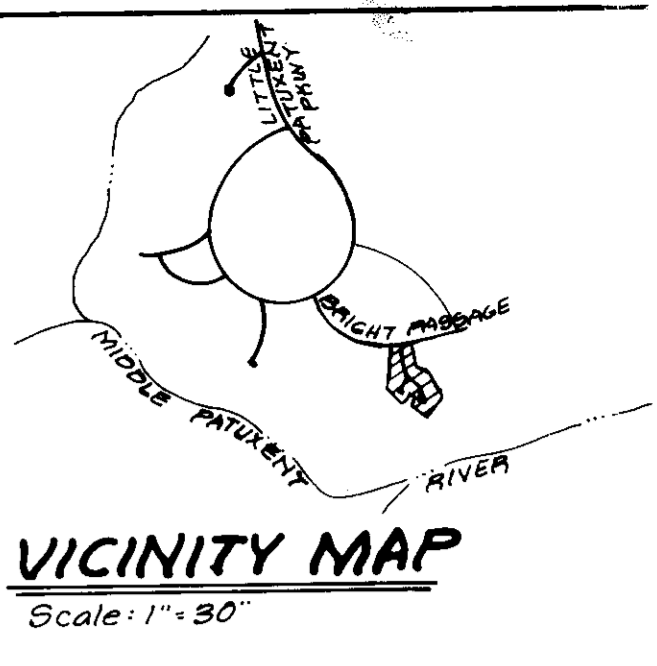
CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

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

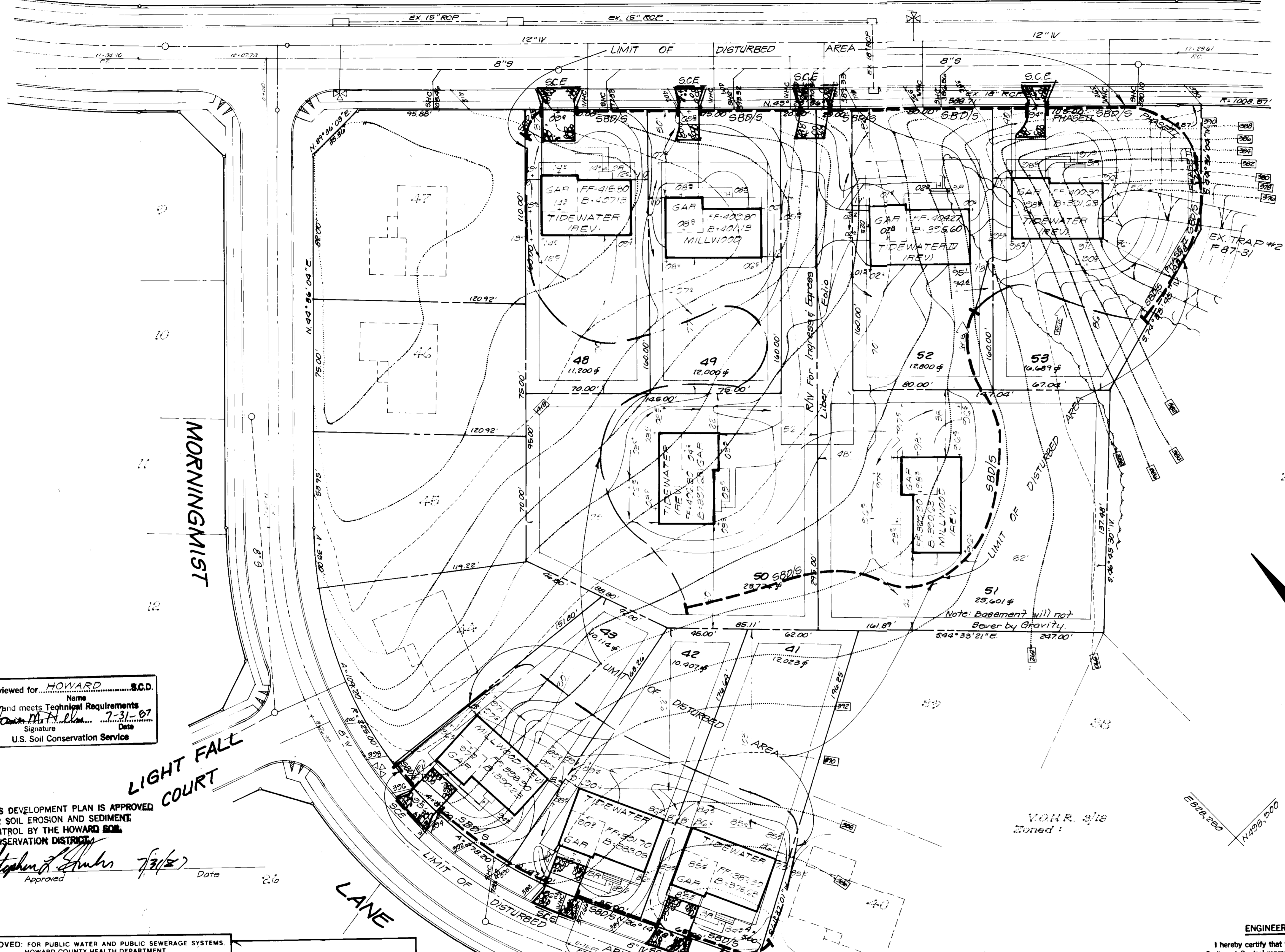
DESIGNED CMS	SITE DEVELOPMENT PLAN LOTS 30-34, 41-43 & 48-53 COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 13 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN PJD		DRAWING 2 of 5
CHECKED JME	FOR NU HOMES, INC 8950 Route #108, Suite 221 Columbia, Maryland 21045	JOB NO 87-021
DATE May, 1987		FILE NO 87-021X



BRIGHT PASSAGE



NOTE: Use Ex. Trap #2 until removed by H.R.D. under F-87-31 whereby silt fence will be installed. Work may not begin on Lot 53 until Trap #2 is removed.



VOHR. 3/18
OPEN SPACE
LOT 150
Zoned:

LEGEND

1. Contour Interval 2 Ft.
2. Existing Contour 2.0'
3. Proposed Contour 2.0'
4. Spot Elevation +10.2'
5. Direction of Drainage
6. Existing Trees to be Saved
7. Walk-out Basement
8. Show Bulk Dike/Silt Fence
9. Stabilized Construction Entrance S.C.E.

VOHR. 3/18
OPEN SPACE
LOT 150
Zoned:

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 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."

Harry C. Bowie
Signature of Developer/Builder
5-27-87
Date

ENGINEER'S CERTIFICATE

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

G. Nelson Clark
G. Nelson Clark
5-27-87
Date



Reviewed for HOWARD S.C.D.
and meets Technical Requirements
John M. H. Khan 7-31-87
Signature Date
U.S. Soil Conservation Service

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

Stephen J. Stuber 7/31/87
Approved Date

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

James M. Smith 8-4-87
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

John P. Hines 8-5-87
PLANNING DIRECTOR DATE

John P. Hines 8-4-87
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

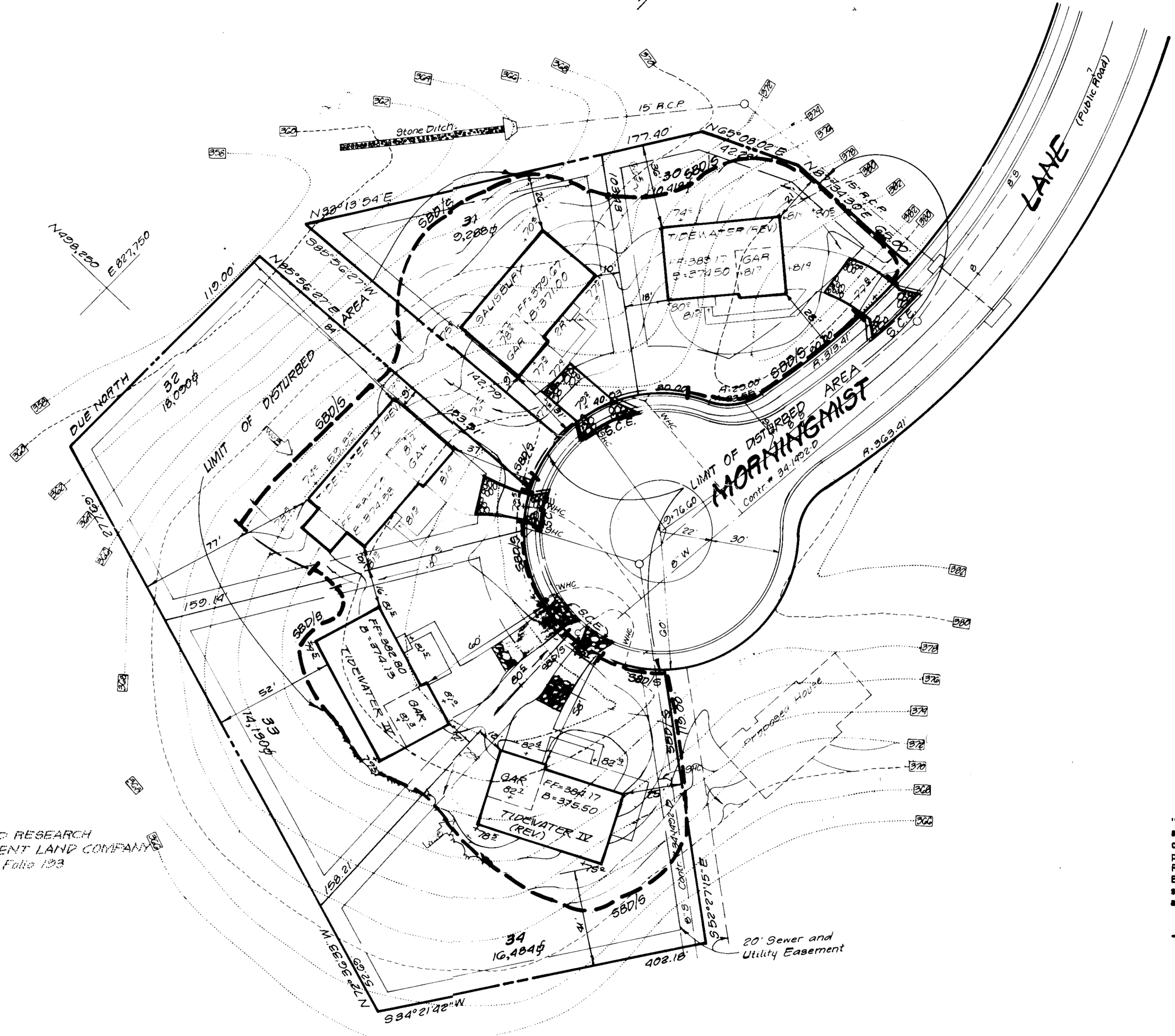
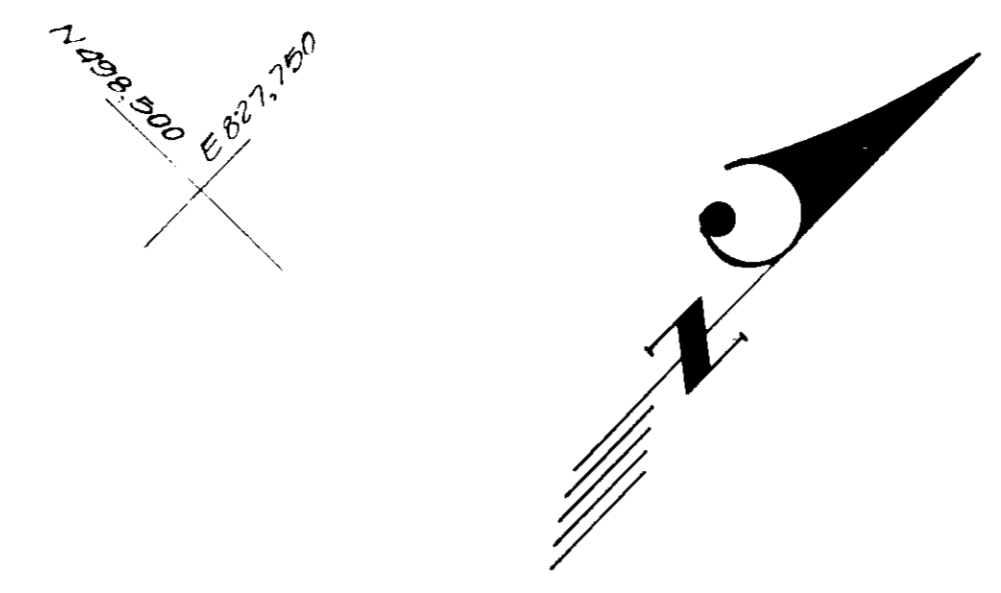
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John P. Hines 8/3/87
DIRECTOR DATE

John P. Hines 8-3-87
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY
DATE 6-25-87
John P. Hines

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS		SCALE 1" = 30'
DESIGNED DT	SEDIMENT & EROSION CONTROL PLAN LOTS 30-34, 41-43 & 48-53	DRAWING 3 of 5
DRAWN VHL PJD	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 13	JOB NO 87-021
CHECKED DT	5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO 87-021 SE
DATE May 26, 1987	FOR: NU-HOMES, INC. 8950 Route #108, Suite 221 Columbia, Maryland 21045	
SDP-87-235.		



THE HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
Liber 1535 Folio 123

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-25-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER DATE 8-4-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR DATE 8-5-87

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
DATE 8-4-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR DATE 8-3-87

CHIEF BUREAU OF ENGINEERING DATE 8-3-87

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature Date 7-31-87
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.
Approved Date 7/31/87

ENGINEER'S CERTIFICATE

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

G. Nelson Clark Date 5-27-87



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 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 Date 5-27-87

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

DESIGNED DT	SEDIMENT & EROSION CONTROL PLAN LOTS 30-34, 41-43 & 48-53	SCALE 1"=30'
DRAWN RJD	COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 13	DRAWING 4015
CHECKED DT	5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO 87-021
DATE May, 1987	FOR: NU-HOMES, INC. 8990 Route #108, Suite 221 Columbia, Maryland 21045	FILE NO 87-021SE

SDP-87-235

SEDIMENT 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 SPECIFICATIONS 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 perimeter 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) and temporary stabilization (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	460 Acres
Area Disturbed	20 Acres
Area to be roofed or paved	0.9 Acres
Area to be vegetatively stabilized	20 Acres
Total Cut	Cu. yds
Total Fill	Cu. yds
Offsite waste/borrow area location	N/A
- 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 DEW 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-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail below). N/A
- The total amount of straw bale dikes/silt fence equals 1860 L.F.

CONSTRUCTION SEQUENCE:

	No. of Days
A. Delay construction on lot 53 and associated grading until Trap #2 installed under #87-91 has been removed by direction of the No. Co. Sediment Control Inspector. Install Phase II silt fence as shown upon removal of Trap #2.	10
B. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.	10
C. Excavate for foundations and Rough Grade & temporarily stabilize.	15
D. Construct Structures, Sidewalks and Driveways.	30
E. Final Grade and stabilize in accordance with Stds. & Specs.	50
F. Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize.	10

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.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) before seeding, 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).
- 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 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 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

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

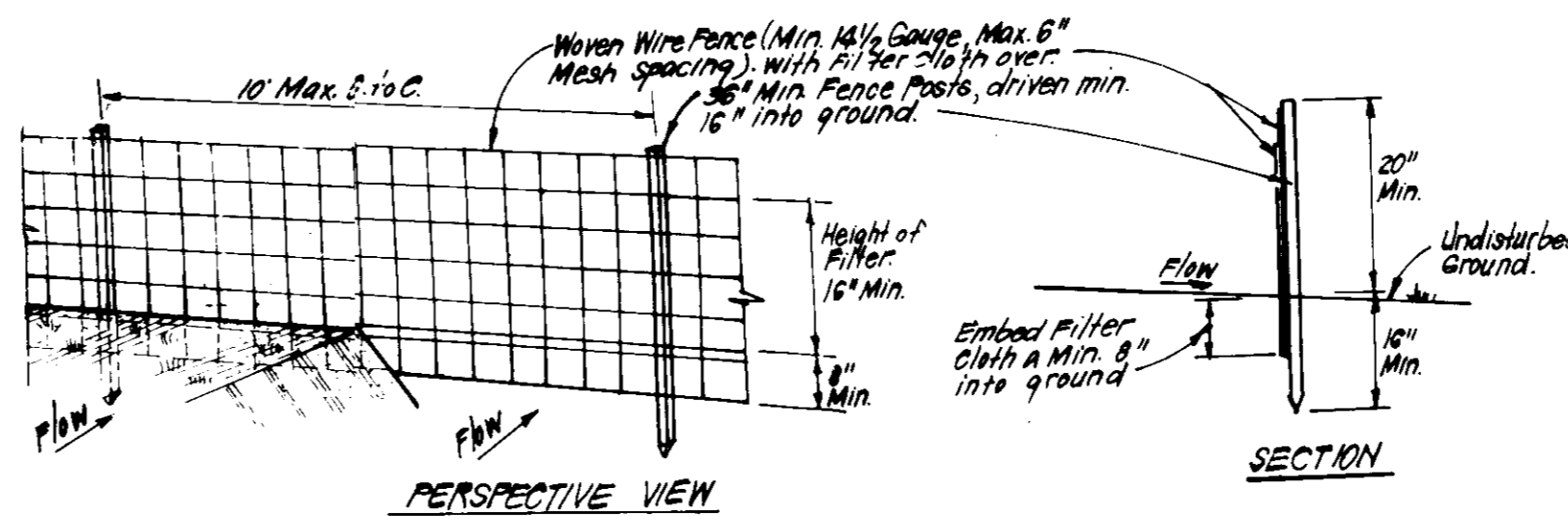
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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 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.



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 2" and stapled.
- Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.

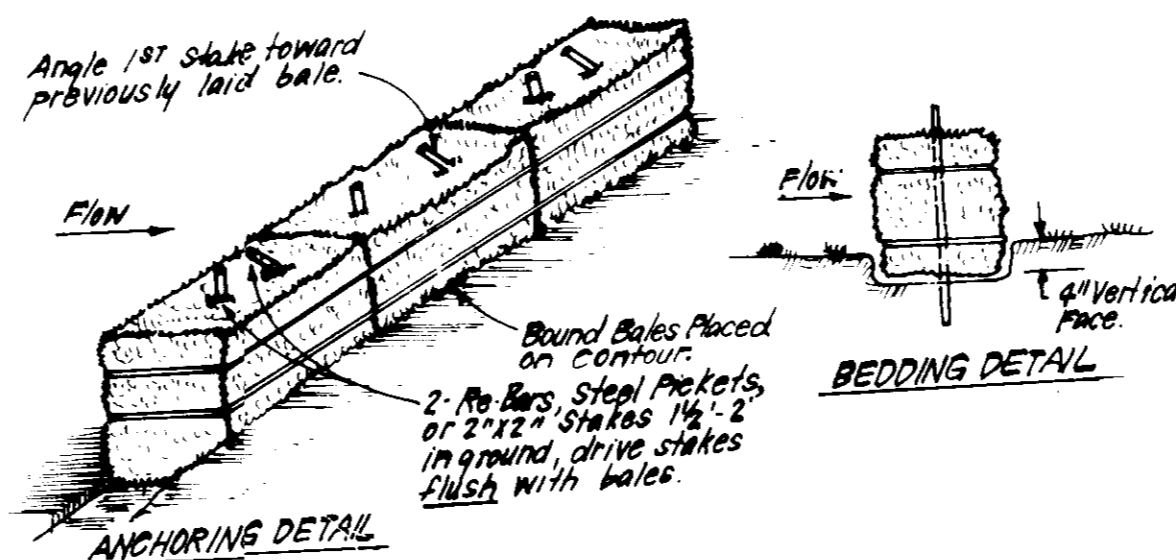
POSTS: Steel, either T or U Type or 2" Hardwood.

FENCE: Woven Wire, 1/4" Gauge, 6" Max. Mesh Opening.

FILTER CLOTH: Filter Cloth, Min. 1/4" Thick, 16" Wide, 2" Overlap, 1" Seam, or Approved Equivalent.

PREFABRICATED UNIT: See Sub-Envelope, or Approved Equal.

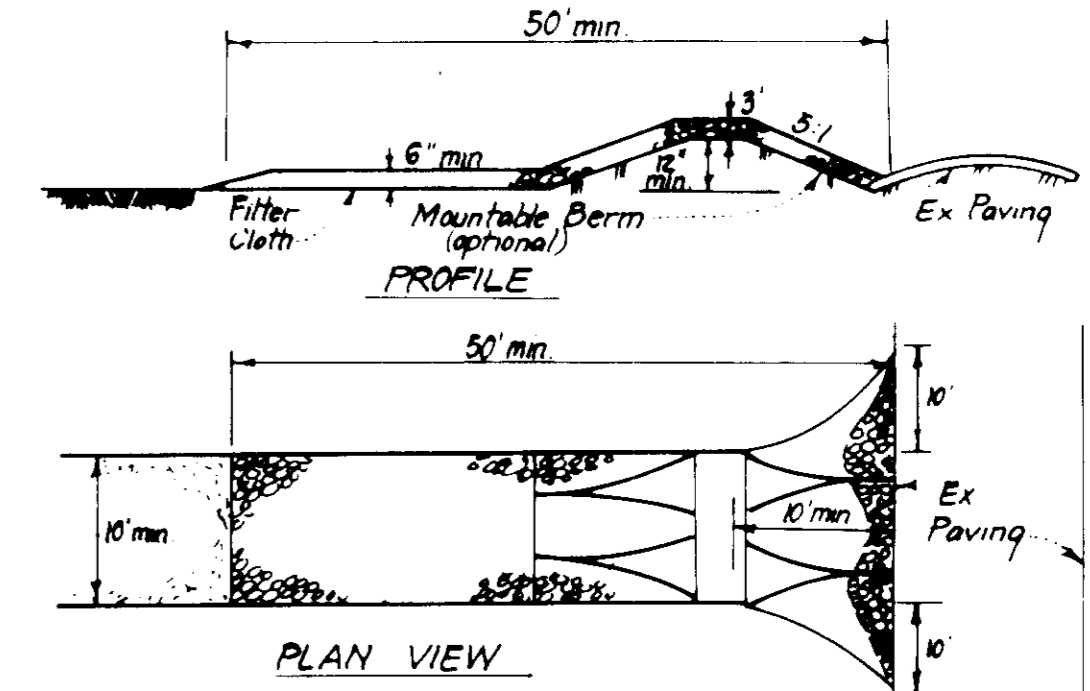
SILT FENCE DETAIL (S)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
- Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
- Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The 1st stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bales.
- Inspection shall be frequent and repair replacement shall be made promptly as needed.
- Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

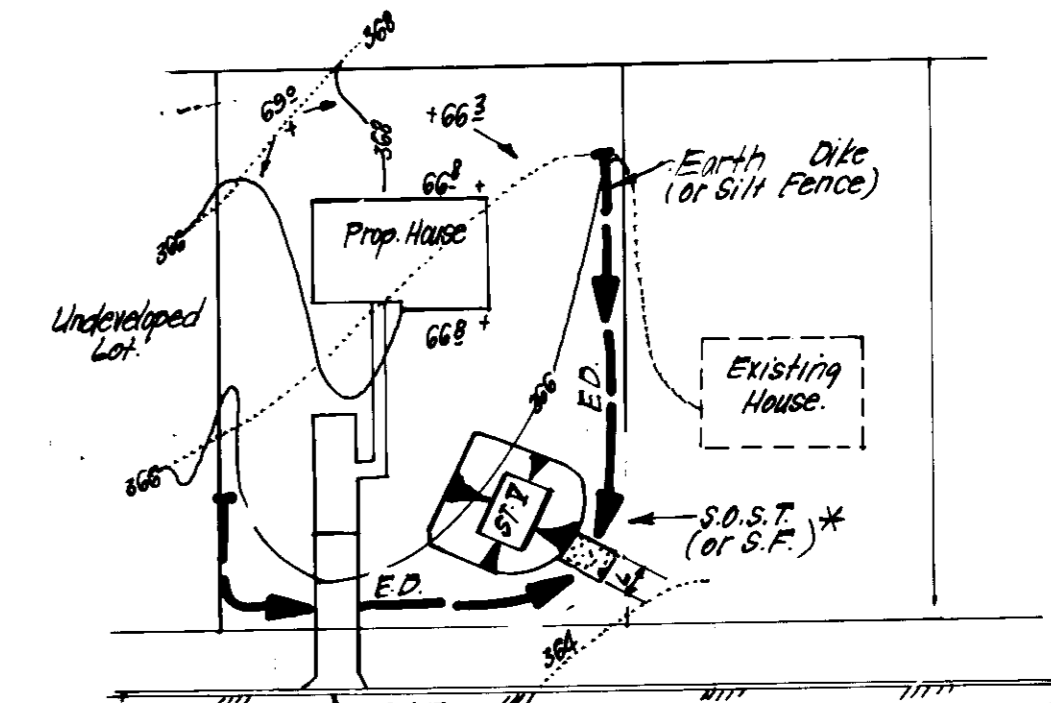
STRAW BALE DIKE DETAIL (SBD)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet 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 will not be required on a single family residence lot.
- 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 condition demand and repair and/or cleanout of any measures used to trap sediment. All sediment applied, cleaned, 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 rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



* 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	NO. S.O.S.T. PER 1/2 AC.
1/2 AC.	1
3/4 AC.	2
1 AC.	3
1 1/4 AC.	4
1 1/2 AC.	5
2 AC.	6
2 1/2 AC.	7
3 AC.	8
3 1/2 AC.	9
4 AC.	10
4 1/2 AC.	11
5 AC.	12
5 1/2 AC.	13
6 AC.	14
6 1/2 AC.	15
7 AC.	16
7 1/2 AC.	17
8 AC.	18
8 1/2 AC.	19
9 AC.	20
9 1/2 AC.	21
10 AC.	22
10 1/2 AC.	23
11 AC.	24
11 1/2 AC.	25
12 AC.	26
12 1/2 AC.	27
13 AC.	28
13 1/2 AC.	29
14 AC.	30
14 1/2 AC.	31
15 AC.	32
15 1/2 AC.	33
16 AC.	34
16 1/2 AC.	35
17 AC.	36
17 1/2 AC.	37
18 AC.	38
18 1/2 AC.	39
19 AC.	40
19 1/2 AC.	41
20 AC.	42
20 1/2 AC.	43
21 AC.	44
21 1/2 AC.	45
22 AC.	46
22 1/2 AC.	47
23 AC.	48
23 1/2 AC.	49
24 AC.	50

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

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

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

Jesse M. Boyd, M.D. / *J.E.* 8-4-87
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Chris A. ... 8-5-87
PLANNING DIRECTOR DATE

... 8-4-87
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

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

... 8-3-87
DIRECTOR DATE

... 8-3-87
CHIEF BUREAU OF ENGINEERING DATE

APPROVED

DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

HOWARD COUNTY, MARYLAND

DATE: **6-25-87**

M. J. ...

Reviewed for **HOWARD** S.C.D.

Name: *...*

And meets Technical Requirements

... 7-31-87
Signature Date

U.S. Soil Conservation Service

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

Stephen L. ... 7/31/87
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 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."

... 5-27-87
Signature Date

ENGINEER'S CERTIFICATE

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

G. Nelson Clark 5-27-87
Signature Date

CLARK • FINEFROCK & SACKETT, INC.

ENGINEERS • PLANNERS • SURVEYORS

7135 MINISTREL WAY • COLUMBIA MD 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED	DT	SCALE	As Built
DRAWN	PJD	DRAWING	5 of 5
CHECKED	DT	JOB NO.	87-021
DATE	May, 1987	FILE NO.	87-0215E

SEDIMENT & EROSION CONTROL PLAN

LOTS 30-34, 41-43 & 48-53

COLUMBIA

VILLAGE OF HICHORY RIDGE

SECTION 3 AREA 13

5TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

FOR: NU-HOMES, INC.

8900 Route 108, Suite 221

Columbia, Maryland 21045

SDP-87-235c