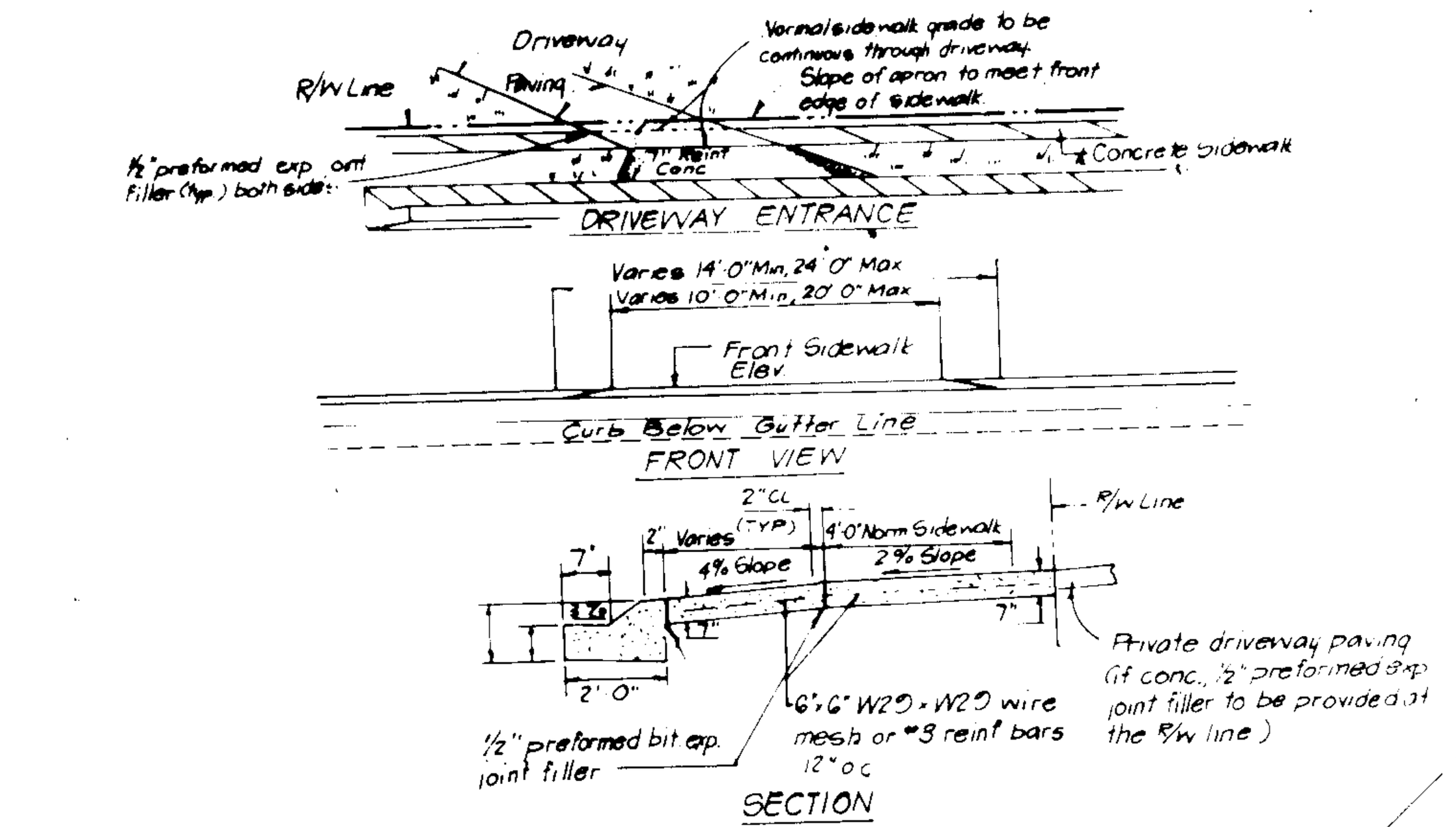
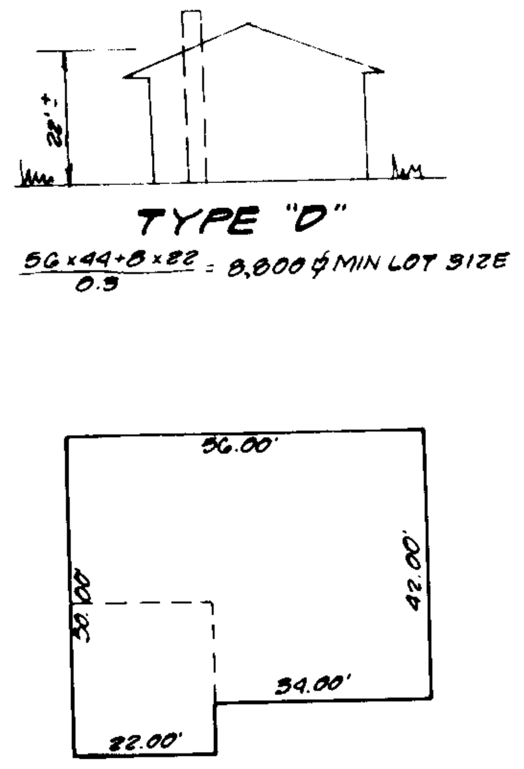
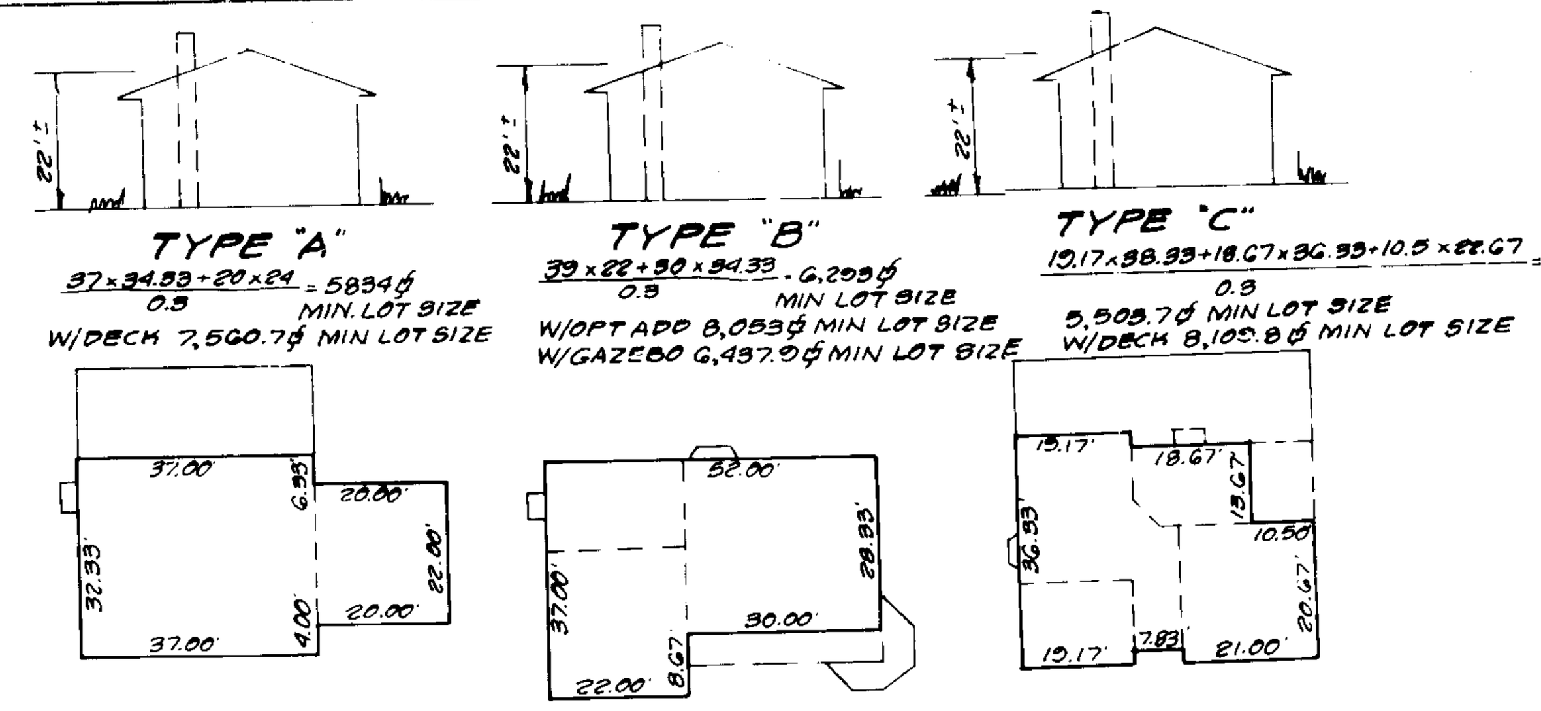


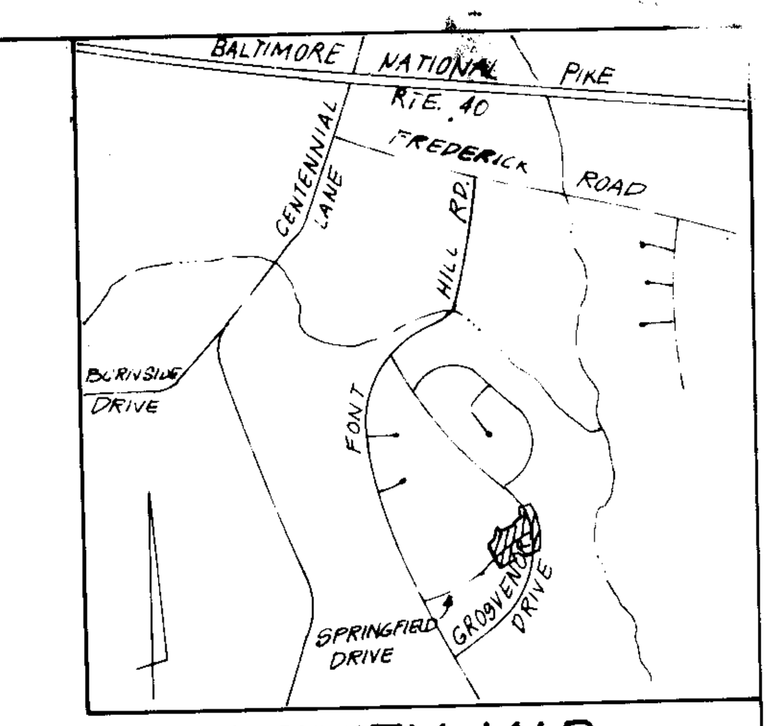
DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB. CURB. & GUTTER & SIDEWALK



TYPICAL HOUSE
SCALE: 1"=30'



TYPICAL HOUSES
SCALE: 1"=30'



VICINITY MAP
Scale: 1"=2000'

LEGEND

1.	Contour Interval	2ft
2.	Existing Contour	410 (boxed, dashed)
3.	Proposed Contour	410 (solid)
4.	Spot Elevation	+10⁵
5.	Direction of Drainage	→
6.	Walk-out basement	WOB

GENERAL NOTES:

1. The land included is Zoned: R-20.
2. Coordinates are extensions of the Maryland Plane Coordinate System Bearings based on Howard Co. Control Survey Pt. Nos. 3140002 & 3140003.
3. All roadways are public & existing.
4. The total area included is: 5.535 Acres
5. Any damage to county owned rights of way shall be corrected at the developer's expense
6. Total number of lots: 15.
7. Source of Stormwater Management is under: F 87-36

LOT NO	STREET ADDRESS	
14-H	3729	Grosvenor Drive
15-H	3733	↓
16-H	3737	↓
17-H	3741	↓
18-H	3801	Grosvenor Drive
16-E	9900	Springfield Drive
17-E	9904	↓
18-E	9908	↓
19-E	9912	↓
20-E	9916	Springfield Drive
24-J	9917	↓
25-J	9913	↓
26-J	9909	Springfield Drive
27-J	3800	Grosvenor Drive
28-J	3804	Grosvenor Drive

SUBDIVISION NAME: FONT HILL VILLAGE			SECT/AREA 4/2		LOTS: 14-16 (H) 16-20 (E), 24-28 (J)
PLAT # 7282 & 7284	BLOCK # 14	ZONE R-20	TAX/ZONE MAP 24	ELEC. DIST. 2ND	CENSUS TR. 6023.01
WATER CODE: F-12			SEWER CODE: 5880000, 5870000		

STATE OF MARYLAND — REGISTERED LAND SURVEYOR No. 6059

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-24-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 7-28-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 8-3-87
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-30-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE
CHIEF BUREAU OF ENGINEERING — DATE 7-28-87

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

DESIGNED J.M.E. P.J.D.	SITE DEVELOPMENT PLAN LOTS 14 THRU 18 BLOCK H LOTS 16 THRU 20 BLOCK E LOTS 24 THRU 28 BLOCK J	SCALE 1"=30'
DRAWN PJD	**FONT HILL VILLAGE**	DRAWING 1 of 3
CHECKED J.M.E.	SECTION 4, AREA 2, 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 87-048
DATE May, 1987	FOR: RANDALL CONSTRUCTION CO., INC 5501 Twin Knolls Rd # 102 Columbia, Maryland 21045	FILE NO. 87-048X

SDP-87-234

Reviewed for Howard S.C.D.
and meets Technical Requirements
Signature 7-22-87 Date
U.S. Soil Conservation Service

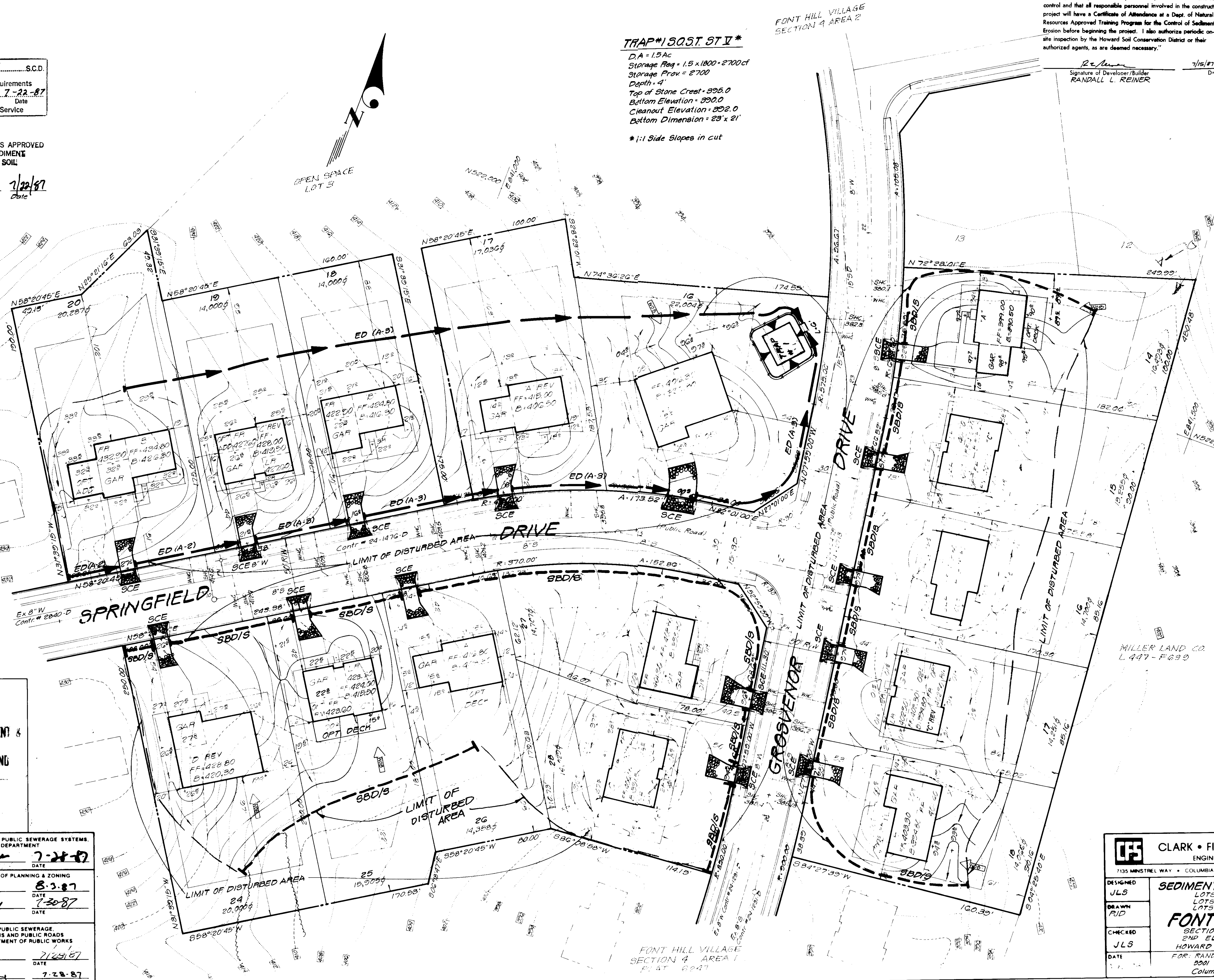
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved 7/22/87 Date

TRAP #1 S.O.S.T. ST V *

D.A. = 1.5 Ac
Storage Req. = 1.5 x 1800 = 2700 cf
Storage Prov. = 2700
Depth = 4'
Top of Stone Crest = 395.0
Bottom Elevation = 390.0
Cleanout Elevation = 392.0
Bottom Dimension = 23' x 21'

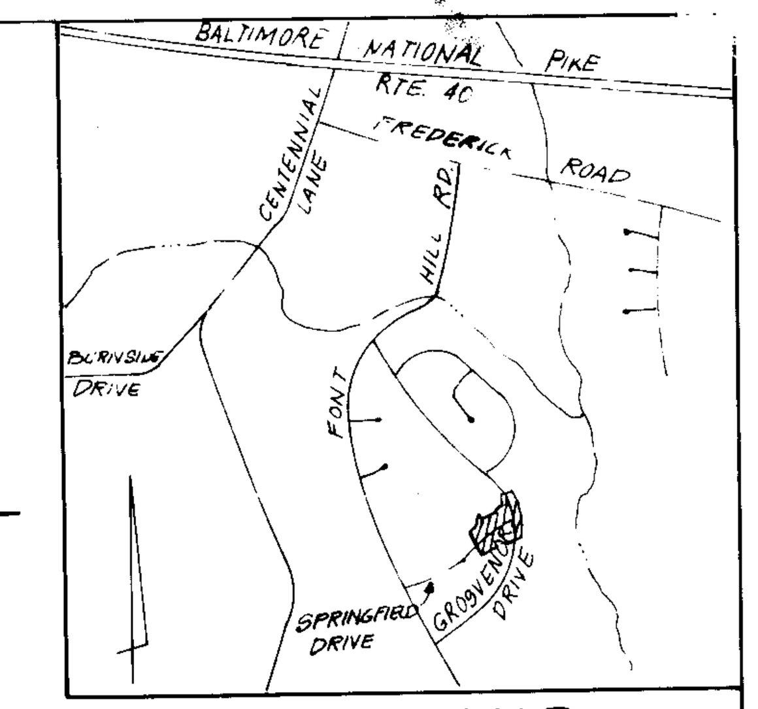
* 1:1 Side Slopes in cut



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 RANDALL L. REINER — Date 7/15/87



VICINITY MAP
Scale: 1" = 2000'

LEGEND

1. Contour Interval — 2 ft
2. Existing Contour — - - - 410 - - -
3. Proposed Contour — ——410——
4. Spot Elevation — +105
5. Direction of Drainage — ——→
6. Walk-out basement — WOB
7. Straw Bale Dike — SBD/S
8. Earth Dike
9. Stabilized Construction Entrance

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 5-20-87

State of Maryland — G. Nelson Clark — No. 7139 — Registered Professional Engineer

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-24-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 7-28-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 8.3.87
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-30-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 7/28/87
CHIEF BUREAU OF ENGINEERING — DATE 7-28-87

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

DESIGNED JLS	SEDIMENT & EROSION CONTROL PLAN LOTS 14 THRU 18 BLOCK H LOTS 16 THRU 20 BLOCK E LOTS 24 THRU 28 BLOCK J	SCALE 1" = 30'
DRAWN PJD	FONT HILL VILLAGE	DRAWING 2 of 3
CHECKED JLS	SECTION 4, AREA 2 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO 87-048
DATE	FOR: RANDALL CONSTRUCTION CO., INC. 5501 Twin Knolls Road Suite 102 Columbia, Maryland 21045	FILE NO [illegible]9E

SDP-87-234

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 redisturbance, 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, Chaper 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	5.535	Acres
Area Disturbed	4.063	Acres
Area to be roofed or paved	0.973	Acres
Area to be vegetatively stabilized	3.090	Acres
Total Cut	7712.1	Cu. yds
Total Fill	7984.4	Cu. yds
Offsite waste/borrow area location	N/A	

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 DPW 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-Sold" 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 1350 L.F.

CONSTRUCTION SEQUENCE:

	NUMBER OF DAYS
A. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.	5
B. Excavate for foundations and Rough Grade & Temporarily Stabilize.	45
C. Construct Structures, Sidewalks and Driveways.	300
D. Final Grade and stabilize in accordance with Stds. & Specs.	20
E. Upon approval of the sediment control inspector. remove sediment and erosion controls and stabilize.	5

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 6-24-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 7-28-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 8-3-87
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-30-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE
CHIEF BUREAU OF ENGINEERING — DATE 7-28-87

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

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square 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 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 1½ 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 flac areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

_____ - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

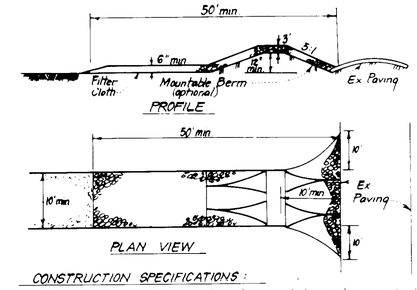
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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 2½ 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 1½ 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.

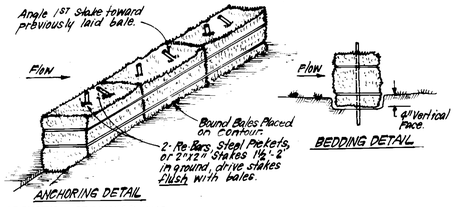


CONSTRUCTION SPECIFICATIONS:

1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply.
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot 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 stone. Filter will not be required on a single family residence lot.
6. 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.
7. 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.
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 and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

NO SCALE

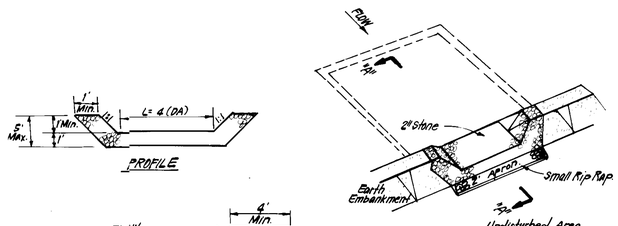


CONSTRUCTION SPECIFICATIONS:

1. 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.
2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
3. 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 bale.
4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
5. 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



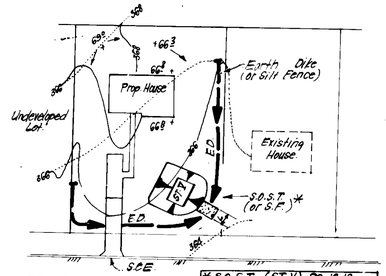
OPTION: A 3' layer of 2" Stone may be placed on the upstream side of the rip rap in place of embedded filter cloth.

CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. 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.
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"-8" along with 1' thickness of 2" aggregate placed on the up-grade side on the small rip rap, or embedded filter cloth in the rip rap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner than 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.) ST-V.

NO SCALE



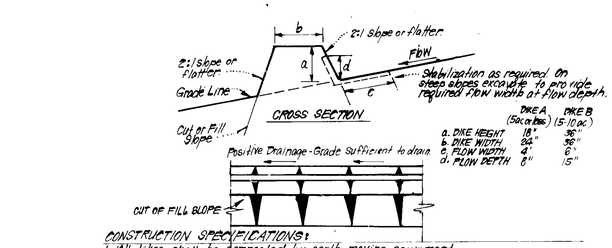
* NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap.

*S.O.S.T. (ST-V) Pg. 16.12			
LOT SIZE	½ Ac	½ Ac	1 Ac
b	2'	3'	3'
Depth	2'	2'	2'
Bot. Length	11'	26'	26'
Bot. Width	11'	11'	26'
Bot. Area	121 ft²	286 ft²	676 ft²

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

SINGLE LOT SEDIMENT CONTROL PLAN

NO SCALE



CONSTRUCTION SPECIFICATIONS:

1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. 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.
6. 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 chart below.

FLOW CHANNEL STABILIZATION

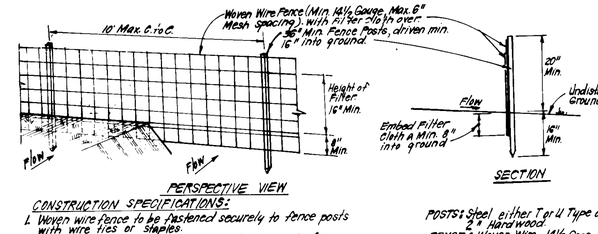
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1.	0.5-3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	3.1-5.0%	Seed & Straw Mulch	Seed w/Jute, or Excelsior; Sod, 2"Stone
3	5.1-8.0%	Seed w/Jute or Sod; 2"Stone	Lined Rip Rap 2"-8"Stone
4	8.1-20.0%	Lined Rip Rap 4"-8"Stone	Engineering Design

A. Stone to be 2" Stone, or recycled concrete equivilent, in a layer at least 3" thick and be pressed into soil with construction equipment.
B. Rip Rap to be 4"-8" in a layer at least 8" thick, pressed into soil.
C. Approved equivalents can be substituted for any of the above materials.

7. Periodic Inspection and Required Maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)

NO SCALE



CONSTRUCTION SPECIFICATIONS:

1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter Cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
4. 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, 14½ Gage 6" Max. Mesh Opening.
FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka, T140N or Approv. equ.
PREFABRICATED UNIT: Geofab, Envirofence, or Approv. equal

SILT FENCE DETAIL (S)

NO SCALE

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 — 7/16/87
RANDALL L. REINER

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. Nelford Leatherman — 5-20-87 Date

Reviewed for ..... Howard ..... S.C.D.
Name
and meets Technical Requirements
Signature — 7-22-87 Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved — 7/22/87 Date

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7200 – BALTO • [illegible] WASH

DESIGNED JLS	SEDIMENT & EROSION CONTROL PLAN LOTS 14 THRU 18 BLOCK H, LOTS 19 THRU 20 BLOCK E, LOTS 24 THRU 28 BLOCK J
DRAWN PJD	FONT HILL VILLAGE
CHECKED JLS	SECTION 4, AREA 2, 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
DATE May, 1987	FOR: RANDALL CONSTRUCTION CO., INC. 5501 Twin Knolls Road Suite 102 Columbia, Maryland 21045
SCALE 1"=30'	
DRAWING 3 of 8	
JOB NO 87-048	
FILE NO 87-048SE	

SDP-87-234