

- LEGEND:**
- 1. Contour Interval 2 Ft
 - 2. Existing Contour (---)
 - 3. Proposed Contour (— — —)
 - 4. Spot Elevation +80%
 - 5. Direction of Drainage (→)
 - 6. Walk Out Basement (---)
 - 7. Ex. 100 Yr. Flood Plain Elev. (---)

- GENERAL NOTES:**
1. The land included in this plan is zoned R-12
 2. All coordinates are extensions made from Maryland State Plane Coordinate System. Bearing refer to true North and are based upon Howard County Geodetic Control Monuments 2841002 and 2842002.
 3. Tax Map 30
 4. All roadways are public and existing.
 5. Total Area included in this plan: 3.63 Acres.
 6. Any damage to county owned rights of way shall be corrected at the developer's expense.
 7. Total number of lots in this plan: 17
 8. Storm Water Management for this project is provided by F-65-56.
 9. Lot Coverage: 30%

Lot No	STREET	ADDRESS
D-25	4621	Old Dragon Path
D-26	4608	Broken Lute Way
D-27	4612	"
D-28	4616	"
D-29	4620	"
D-30	4624	"
D-31	4628	"
D-32	4632	"
D-33	4636	"
D-34	4640	"
D-35	4644	"
D-36	4648	"
D-37	4652	"
D-38	4656	Broken Lute Way
D-39	4660	Old Dragon Path
D-40	4664	"
D-41	4668	"

SUBDIVISION NAME: DORSEY HALL	SECT./AREA: 2/2	LOT/PARCEL #: D-25THRU D-41
PLAT #: 6805	BLOCK #: 4	ZONE: R-12
WATER CODE: F-10	SEWER CODE: 5750500	TAX/ZONE MAP/ELEC. DIST. CENSUS TR. 30 2ND 6023 01

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* 10-9-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *[Signature]* 10-10-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION: *[Signature]* 7-24-86
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* 10-1-86
 CHIEF BUREAU OF ENGINEERING: *[Signature]* 10-1-86

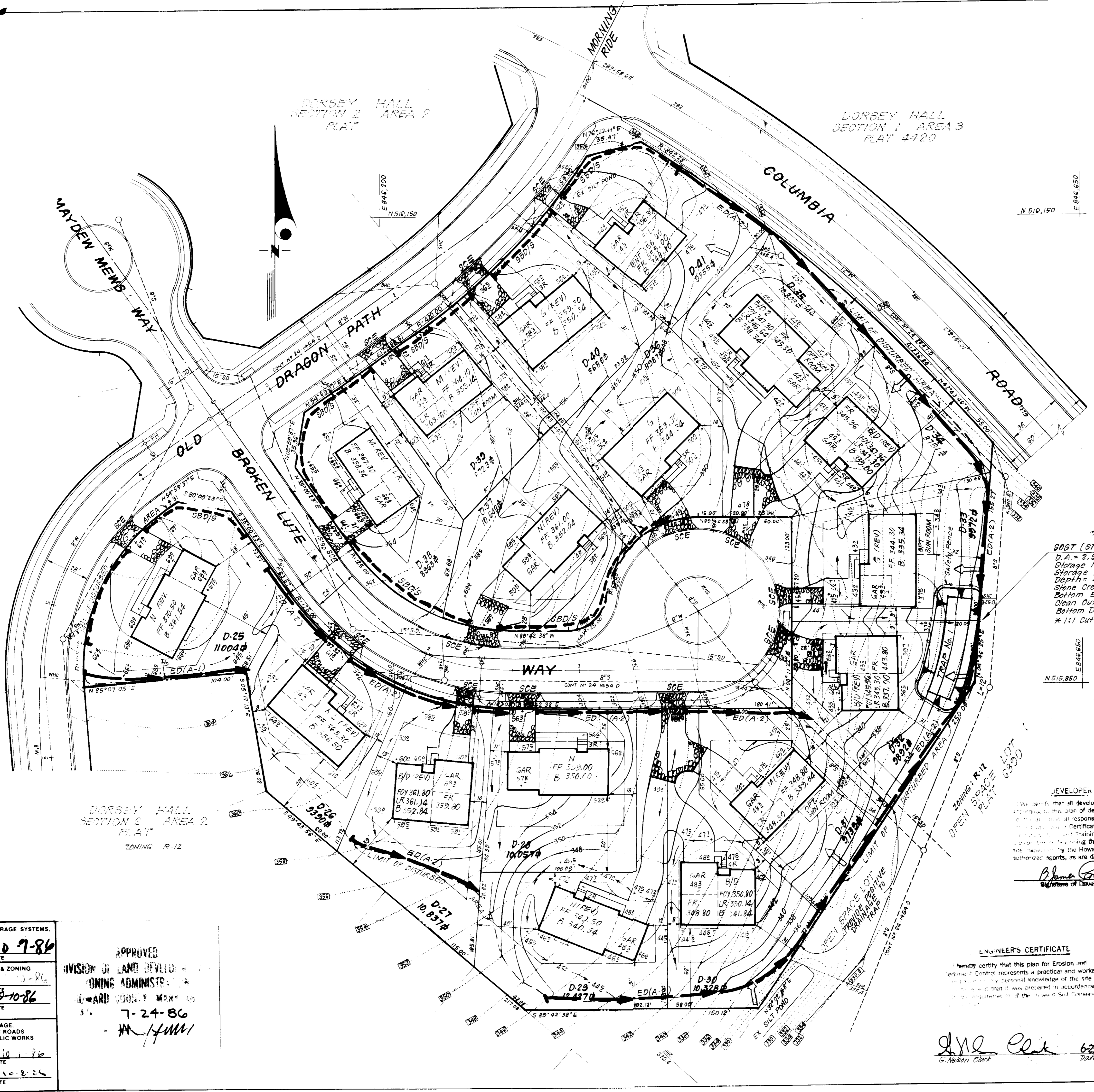
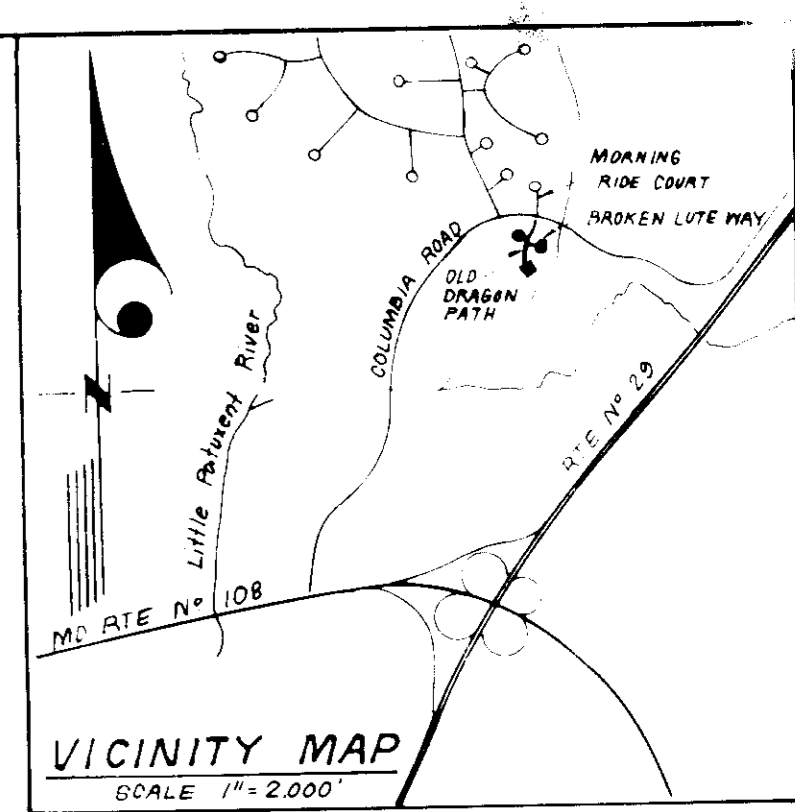
CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 583-3400

DESIGNED: JME
 DRAWN: KIW/JTR
 CHECKED: JME
 DATE: 6-23-86

SCALE: 1" = 30'
 DRAWING: 10F3
 JOB NO.: 86-064
 FILE NO.: 86-064-X

FOR: COLUMBIA BUILDERS, INC.
 3 Lakefront North Suite 200
 Columbia, Maryland 21044

SDP-86-282



- LEGEND:**
- 1. Contour Interval 2ft
 - 2. Existing Contour 360
 - 3. Proposed Contour 360
 - 4. Spot Elevation +80'
 - 5. Direction of Drainage
 - 6. Walk Out Basement
 - 7. Ex. 100 Yr. Flood Plain Elev.
 - 8. Straw Bale Dike or Silt Fence
 - 9. Earth Dike
 - 10. Stabilized Construction Entrance

SOST (ST-V) TRAP No. 1*
 D.A. = 2.9 Acres
 Storage Required = 5220 cf
 Storage Provided = 5244 cf
 Depth = 4'
 Stone Crest Elev. = 332.0
 Bottom Elev. = 327.0
 Clean Out Elev. = 329.0
 Bottom Dimensions = 65'x15'
 * 1:1 Cut Slopes

DEVELOPER'S/BUILDER'S CERTIFICATE
 I hereby certify that all development and construction will be done in accordance with the plan of development and plan of erosion control and sediment control and that all responsible personnel involved in the construction of this project have received a Certificate of Attendance from the National Siltation Control Training Program for the purpose of this project and that I am a member of the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

John M. Clark 6-26-86
 Signature of Developer/Builder Title

Reviewed by: *Stephen L. Hahn* SCD Name
 and meets Technical Requirements
 Signature
 (U.S. Soil Conservation Service)
 APPROVED FOR THE DISTRICT PLANNING APPROVEMENT BOARD
 DATE: 10/2/86

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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

John M. Clark 6-23-86
 G. Nelson Clark Title

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
John M. Clark 10-9-86
 COUNTY HEALTH OFFICER DATE

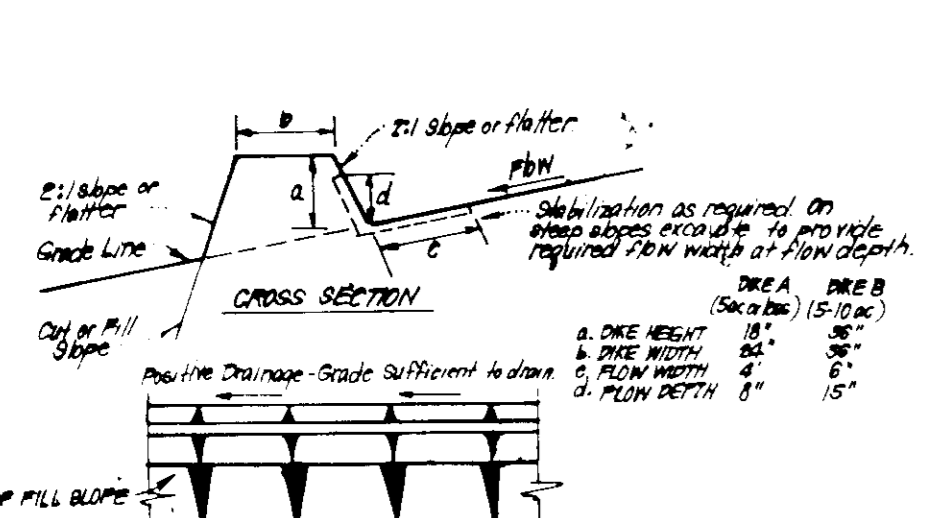
APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
John M. Clark 10-10-86
 PLANNING DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE.
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John M. Clark 10-2-86
 DIRECTOR DATE

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE: 7-24-86
John M. Clark

CLARK · FINEFROCK & SACKETT ENGINEERS · PLANNERS · SURVEYORS 11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 (301) 593-3400		SCALE
		1" = 30'
DESIGNED	SEDIMENT & EROSION CONTROL PLAN LOTS D-25 THRU D-41	
DRAWN	DORSEY HALL	
CHECKED	SECTION 2 AREA 2 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
DATE	FOR:	COLUMBIA BUILDERS, INC. 3 Lakefront North Suite 200 Columbia, Maryland 21044
6-23-86		FILE NO. 86-064E

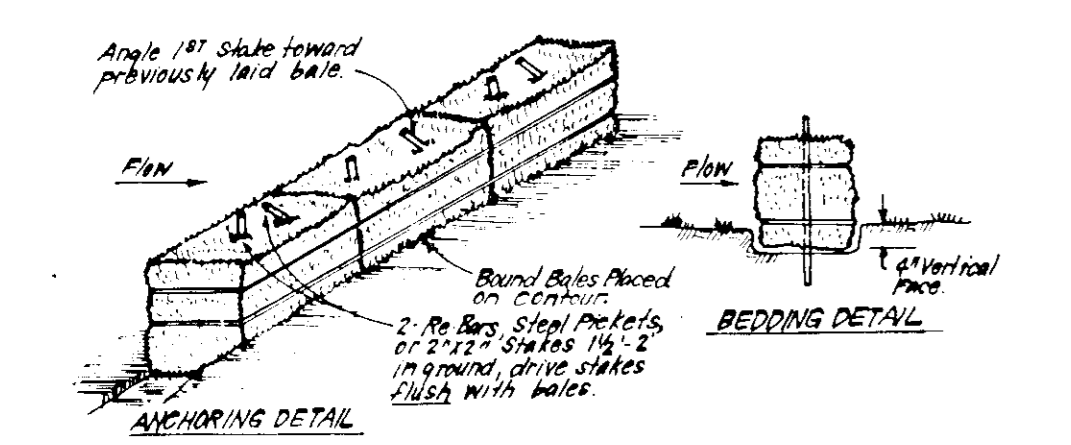
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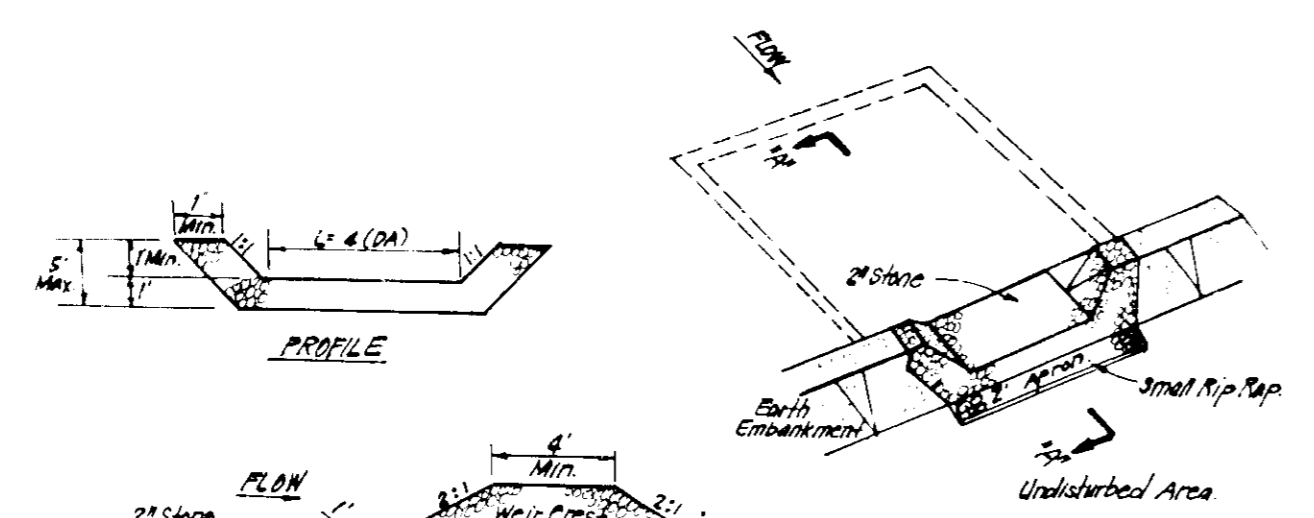
CONSTRUCTION SPECIFICATIONS:
1. All dikes shall be constructed by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired to facilitate construction.
4. Dike location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be contained in 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. Outlet shall be: (A) in accordance with standard specifications for sand and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

Table with 3 columns: TYPE OF TREATMENT, CHANNEL, DIKE B. Rows 1-4 detailing different dike treatments and their specifications.

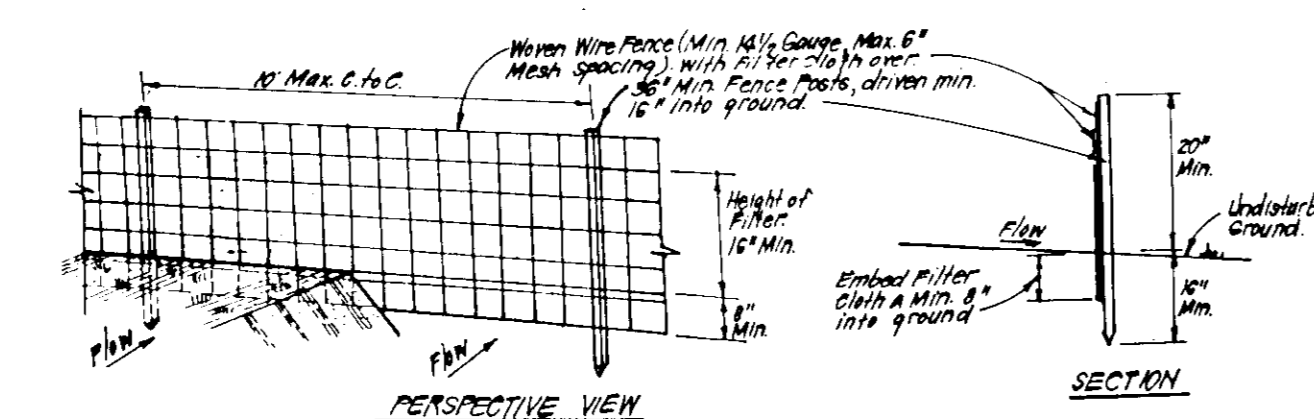
A Stone to be 2" Stone or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
B Rip Rap to be 4" in a layer at least 3" thick of the above materials.
C Approved equivalent to be substituted for any of the above materials.
7. Periodic inspection and required maintenance must be provided after each rain.
EARTH DIKE DETAIL (E.D.)
NO SCALE



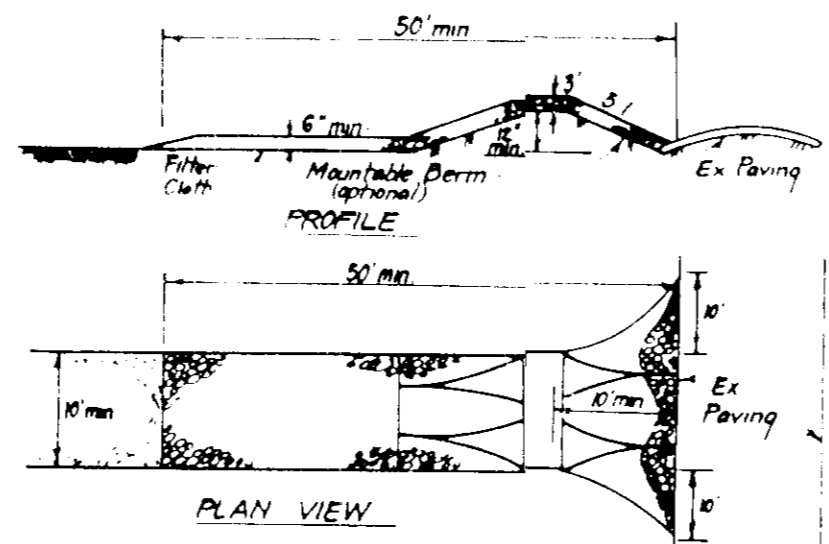
CONSTRUCTION SPECIFICATIONS:
1. Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly meeting the adjacent bales.
2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either 2 stakes or 10 bars driven thru 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



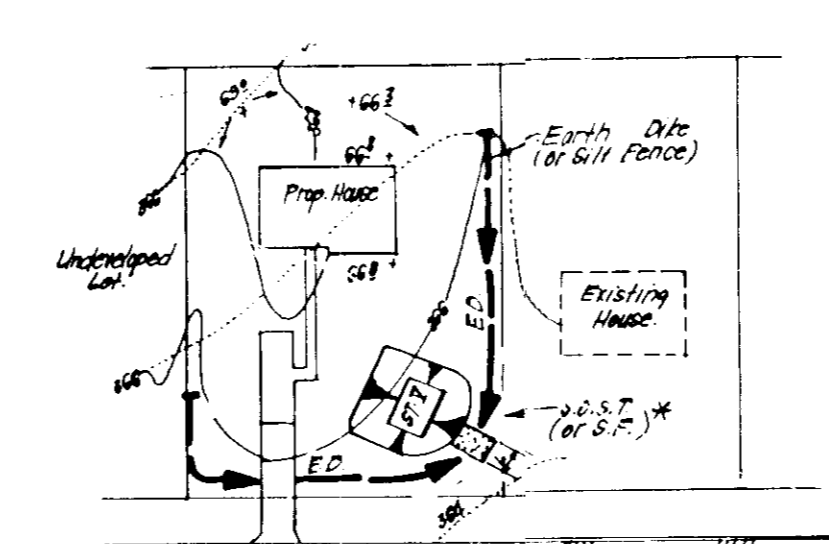
CONSTRUCTION SPECIFICATIONS:
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The area shall then be compacted.
2. The fill material for the embankment shall be free of rocks and other woody vegetation as well as over-size stones, rocks, organic material or other objectionable material. The embankment shall be compacted.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in this outlet shall be small rip rap 4" x 8" with 1" thickness of aggregate placed on the up-slope side on the small rip rap of embankment filter cloth to the rip rap.
5. Soil mat 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. The 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.) STY.
NO SCALE



CONSTRUCTION SPECIFICATIONS:
1. Heavy wire fence to be fastened securely to fence posts with wire ties.
2. Filter cloth to be fastened securely to heavy wire fence with ties spaced every 10' at top and mid section.
3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and staples be installed.
4. Maintenance shall be performed as needed and material removed when "bunches" develop in Silty Fence.
SILTY FENCE DETAIL (S)
NO SCALE



CONSTRUCTION SPECIFICATIONS:
1. Stone Size - Use 2" stone or recycled or recycled concrete equivalent.
2. Length - As long as practical but not less than 50 feet (except on a single residence lot where a 30 foot minimum length is acceptable).
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 occur.
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 directed toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 2" stone will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or blowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone to compensate for erosion and repair and/or cleanup of any material used to trap sediment. All sediment accumulated, 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 required 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 sharing a sediment trap. A dike shall be placed between lots and shall be as given or greater.
SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

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, tilling 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 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 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 50 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.

Inspect all seeded areas and make needed repairs, replacements and reseeding.

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 Amendment: 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 bushels 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.

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. 53). 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 3,649 Acres
Area Disturbed 3,640 Acres
Area to be roofed or paved 1,180 Acres
Area to be vegetatively stabilized 2,460 Acres
Total Cut _____ Cu. yds
Total Fill _____ 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-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).

13) The total amount of straw bale dikes/silt fence equals 705 L.F.

Table with 2 columns: CONSTRUCTION SEQUENCE, NO. OF DAYS. Rows A-E detailing construction steps and their durations.

APPROVED FOR PUBLIC WATER AND SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. Signature of [Name], DATE 10-9-86. APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING. Signature of [Name], DATE 10-10-86. APPROVED FOR PUBLIC WATER AND SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. Signature of [Name], DATE 10-8-86.

APPROVED BY THE DEVELOPER. Signature of [Name], DATE 7-24-86. COUNTY, MARYLAND.

DEVELOPER'S CERTIFICATE. Signature of [Name], DATE 10/3/86.

INSPECTOR'S CERTIFICATE. Signature of [Name], DATE 6-26-86.

ENGINEER'S CERTIFICATE. Signature of [Name], DATE 6-23-86.

CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS. 11315 LOCKWOOD DRIVE, SILVER SPRING, MARYLAND 20904. (301) 593-3400. SEDIMENT & EROSION CONTROL DETAILS. LOTS D-25 THRU D-41. DORSEY HALL SECTION 2 AREA 2 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND. SCALE 1"=30'. DRAWING 30F3. JOB NO. 86-064. DATE 6-23-86. FILE NO. 86-064 SE. 5DP-86-282.