

DRIVEWAY ABUTTING DETAILS

- LEGEND:**
- 1 Contour Interval 2 FT
 - 2 Existing Contour
 - 3 Proposed Contour
 - 4 Spot Elevation
 - 5 Direction of Drainage
 - 6 Walk Out Basement
 - 7 100 Yr. Flood Plain Elev.
 - 8 Exist. Trees to be Saved

BUILDING RESTRICTION LINES
Front: 20' Min.
Rear: 30' Min.
Side: 7.5' Min.
Unless otherwise noted on plan.

GENERAL NOTES:

1. The land included is zoned: RSC
2. All coordinates are based on the Maryland State Grid System as projected by Hb Co. Geodetic Control Stations 232-43002 R & 232-43012.
3. The area covered is located on Tax Map 25 P 200.
4. All roadways are public and existing.
5. Total area is: 2.634 Acres.
6. Total number of Lots: 10
7. Any damage to county owned rights of way shall be corrected at the developer's expense.
8. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hrs. in advance of commencement of work at 792 2630.
9. For flag or pipestem lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestem and the road R/W only and not onto the flag or pipestem of driveway.
10. Storm Water Management for this project has been waived.
11. Maximum Lot Coverage is 40%

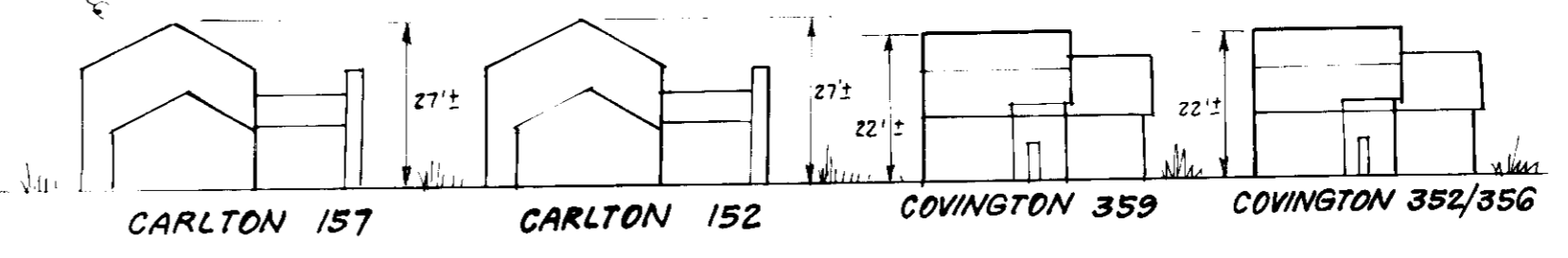
OWNER DEVELOPER
BRITAM
9030 Red Branch Way Suite 250
Columbia, Md. 21045

LOT #	STREET ADDRESS
1	3300 OAK WEST DRIVE
2	3304 " "
3	3308 " "
4	3312 " "
5	3316 " "
6	3320 " "
7	3324 " "
8	3328 " "
9	3332 " "
10	3336 " "
11	3340 " "
12	3344 " "

SUBDIVISION NAME	SECT	AREA	LOTS
OAK WEST	1	1	10

PLAT #	BLOCK #	ZONE	TAX RATE	MAPLED	DIST	SENSUS TR
7508-7509	1	RSC	25	2NP		6025
WATER CODE	F 01					1452200

NOTE: GRADING ON ADJACENT PROPERTIES WAS TAKEN FROM ROAD CONSTRUCTION PLANS GP-86 213.



TYPICAL HOUSES

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
12-16-87

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
12-22-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
12-17-87

DIVISION OF LAND ZONING ADMINISTRATION
HOWARD COUNTY
7-22-87

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

7111 MINISTREY WAY • COLUMBIA, MD. 21045 • (410) 381-7250

SITE DEVELOPMENT PLAN
LOTS 1 THRU 10

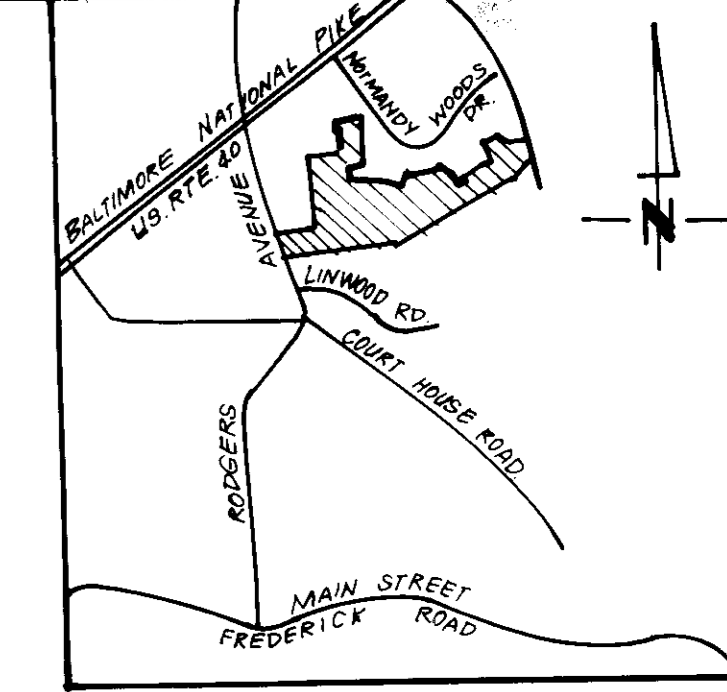
OAK WEST
SECTION 1 AREA 1
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR Diversified Homes M.L.P. of Md.
10705 Charter Dr. #420
Columbia Md. 21046

SCALE: 1"=30'
DRAWING: 10F3
JOB NO: 87-040
FILE NO: 87-040-X

DATE: 6-3-87

SDP-87-251



- LEGEND:**
- 1. Contour Interval 2 FT
 - 2. Existing Contour
 - 3. Proposed Contour
 - 4. Spot Elevation
 - 5. Direction of Drainage
 - 6. Walk out Basement
 - 7. 100 Yr. Flood Plain Elev.
 - 8. Exist. Trees to be Saved
 - 9. Existing Earth Dike
 - 10. Straw Bale Dike or Silt Fence
 - 11. Stabilized Construction Entrance

Britam hereby authorizes Diversified Homes MLP of Md to utilize existing sediment and erosion control measures shown on this plan from GP-86-213. It will be Diversified's responsibility to maintain those controls and remove them upon completion of house construction activities. If Britam removes the existing sediment and erosion control measures prior to completion of SDP-87-251, a revised sediment and erosion control plan will be necessary.

M. V. Division III 12-3-87
Date

NOTE: GRADING ON ADJACENT PROPERTIES WAS TAKEN FROM ROAD CONSTRUCTION PLANS GP-86-213.

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.
Paul Montague 6-15-87
 Signature of Developer/Builder Date

Note: Existing Sediment Controls shown on this plan from GP-86-213 are to be utilized.
OWNER DEVELOPER
BRITAM
 3030 Red Branch Way Suite 250
 Columbia, Md. 21045

Reviewed for Name S.C.D.
 and meets Technical Requirements
James M. Miller 12-11-87
 Signature Date
 J.S. Soil Conservation Service

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.
Neil Clark 6-11-87
 Signature Date
 NEIL CLARK
 ENGINEER

James M. Miller 12-11-87
 Approved Date

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
James M. Miller 12-8-87
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
James M. Miller 12-22-87
 PLANNING DIRECTOR DATE

APPROVED: DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
James M. Miller 12/17/87
 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James M. Miller 12/15/87
 DIRECTOR DATE

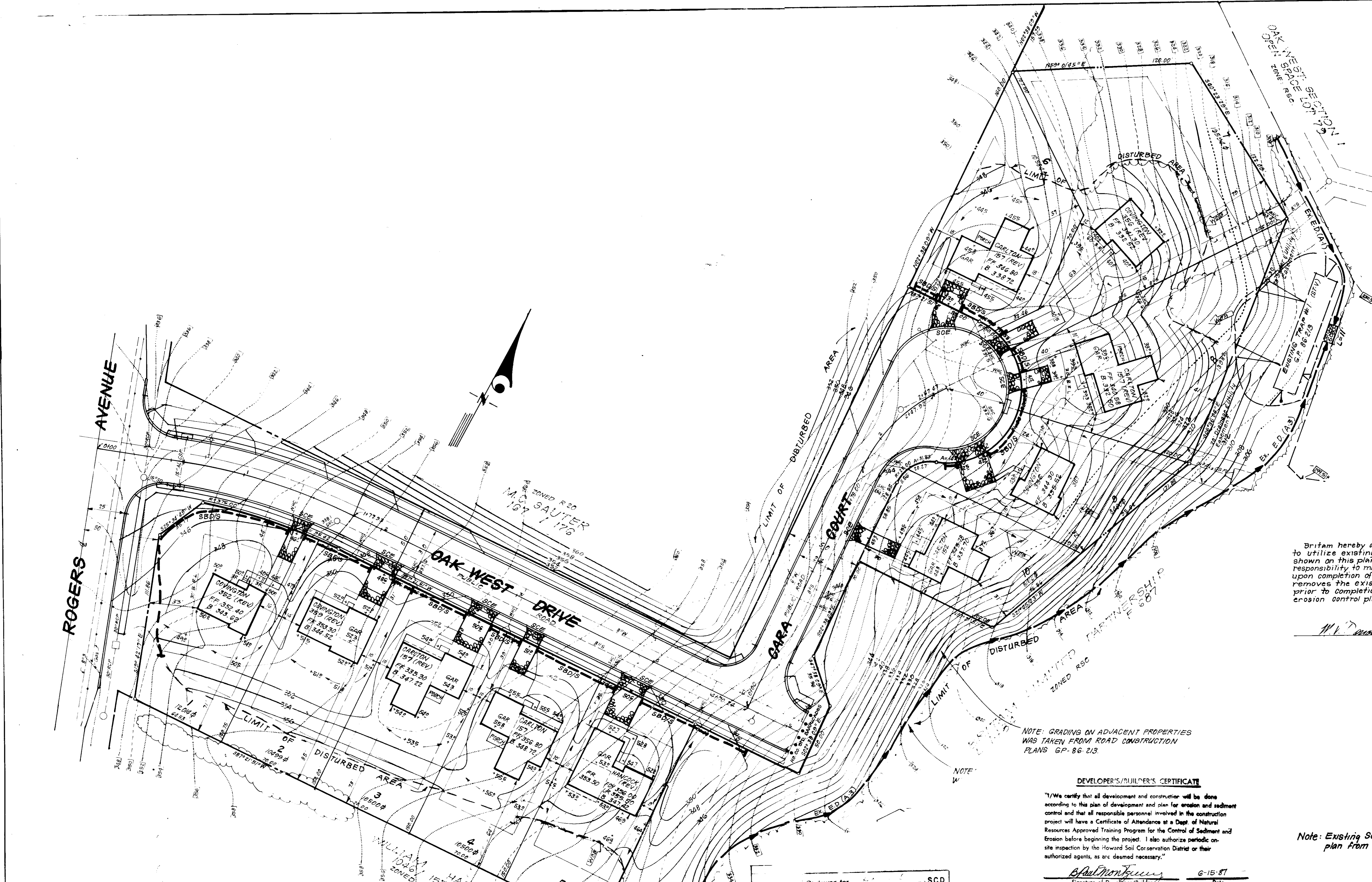
James M. Miller 12-14-87
 CHIEF BUREAU OF ENGINEERING DATE

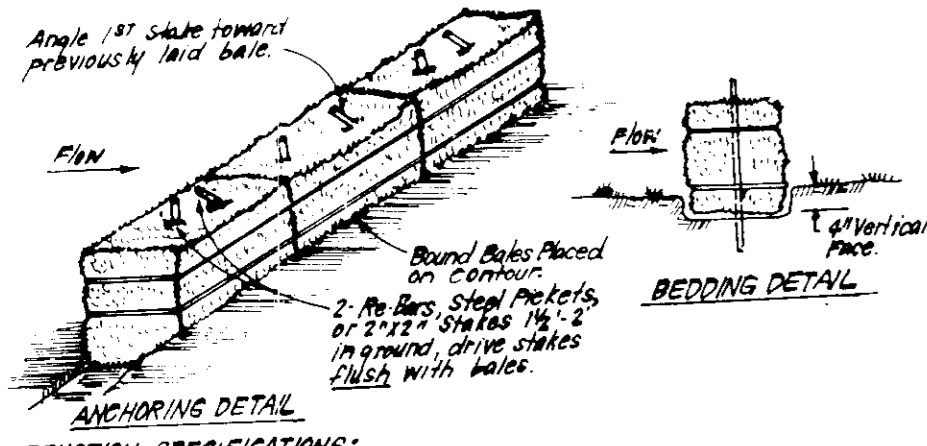
APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 7-22-87

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7115 MINISTRELL WAY • COLUMBIA, MD. 21045 • (301) 726-8410

DESIGNED JME DGT	SEDIMENT & EROSION CONTROL PLAN LOTS 1 THRU 10	SCALE 1"=30'
DRAWN KIW CHECKED D.G.T.		DRAWING 2 OF 3
DATE 6-3-87	FOR Diversified Homes MLP of Md 10705 Charter Dr. #420 Columbia Md. 21044	JOB NO 87-040 FILE NO 87-040-SE

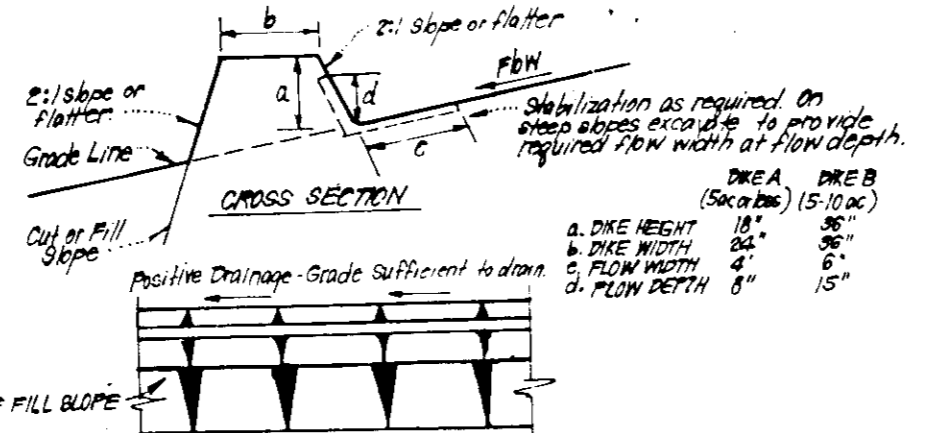
OAK WEST SECTION 1 AREA 1 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND





ANCHORING DETAIL
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 secured in place by either 2 stakes or 16 bars driven thru the bale. The 16 bars in each bale shall be 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



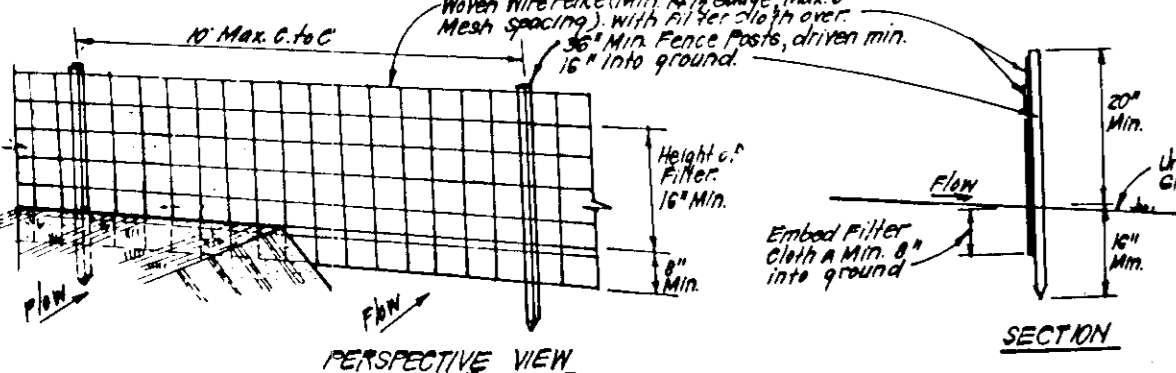
CONSTRUCTION SPECIFICATIONS:
 1. All dikes shall be constructed by earth-moving equipment.
 2. All dikes shall have positive drainage to an outlet.
 3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
 4. Outlet location should be adjusted as needed to utilize a stabilized soil outlet.
 5. Earth dikes shall have an outlet that functions with a minimum of silt or sediment.
 6. Sediment shall be conveyed to a sediment-trapping device such as a sediment trap or sediment basin where either the site channel or the drainage area above the dike are not adequately stabilized.
 7. 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

CHANNEL TYPE	DIKE A	DIKE B
1. 1-2% Slope	Seed or Straw Mulch	Seed or Straw Mulch
2. 2-4% Slope	Seed with or without Straw	Seed with or without Straw
3. 4-6% Slope	Seed with or without Straw	Seed with or without Straw
4. 6-8% Slope	Seed with or without Straw	Seed with or without Straw
5. 8-10% Slope	Seed with or without Straw	Seed with or without Straw
6. 10-12% Slope	Seed with or without Straw	Seed with or without Straw
7. 12-15% Slope	Seed with or without Straw	Seed with or without Straw

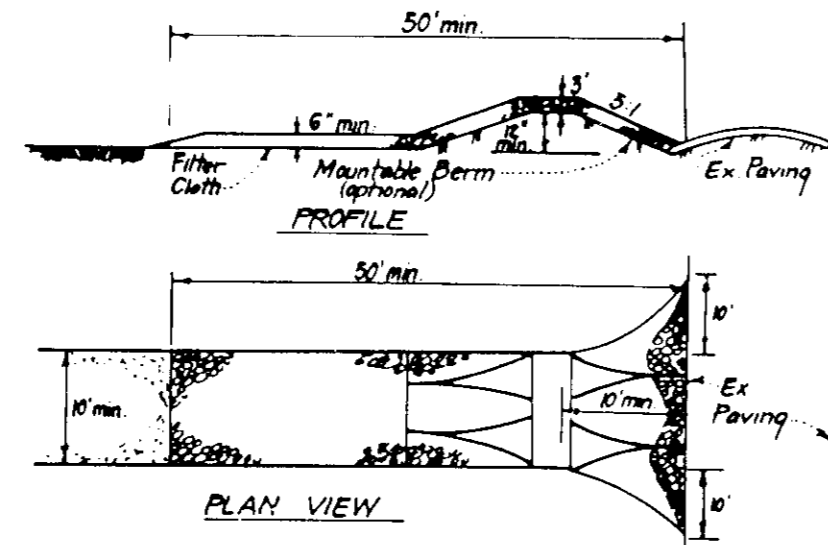
A dike to be 2' high or required concrete equivalent, in a layer of at least 3" thick and be pressed into soil with construction equipment.
 B Rip Rap to be 4" x 4" in a layer of 12" thick, pressed into soil.
 C Approved equivalent can be substituted for any of the above materials.
 7. Periodic inspection and required maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)
NO SCALE



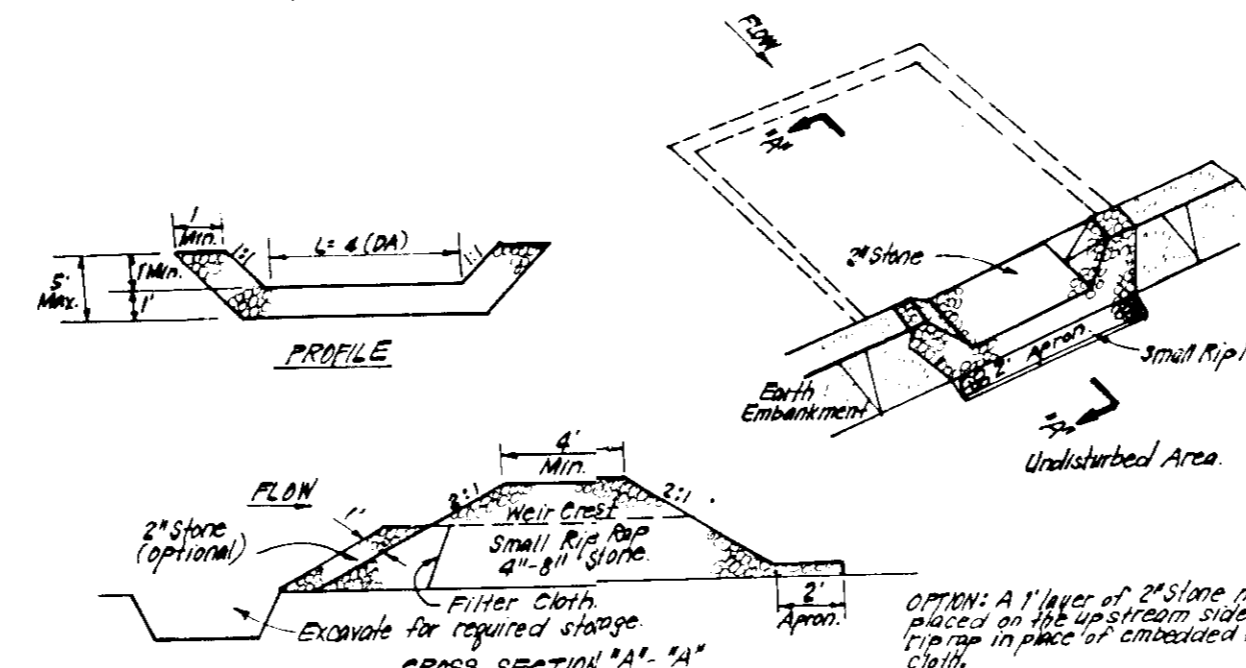
CONSTRUCTION SPECIFICATIONS:
 1. Heavy wire fence to be installed securely to fence posts with wire ties or staples.
 2. Filter cloth to be installed securely to heavy wire fence with ties spaced every 30" at top and mid section.
 3. When 2 sections of filter cloth are joined each other they shall be overlapped by 6" and stapled.
 4. Maintenance shall be performed as needed and material removed when it begins to develop in silt fence.

SILT FENCE DETAIL (S)
NO SCALE



CONSTRUCTION SPECIFICATIONS:
 1. Stone size - Use 2" stone or rounded or recycled concrete equipment.
 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) 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 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' 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 to condition demand and repair and/or cleanout of any equipment used to trap sediment. All sediment trapped, trapped, or tracked onto public rights-of-way must be removed immediately.
 8. Warning - 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. Any under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The trap area shall be cleared.
 2. The fill material for the embankment shall be free of rocks and other woody vegetation as well as other sized stones, rocks, organic material or other polymeric material. The embankment shall be compacted by tamping with equipment which is to be used for the construction.
 3. All cut and fill slopes shall be 1:1 or flatter.
 4. The stone placed in the outlet shall be small rip rap 1/2" to 1" thick with 1" thickness of 2" aggregate placed on the upstream side on the small rip rap. An embedded filter cloth in the rip rap accumulated to 1/2" the design depth of the trap.
 5. The structure shall be inspected after each rain and repairs made as needed.
 6. The structure operations shall be carried out in such a manner that erosion and water pollution is minimized.
 7. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (SOST) STV
NO SCALE

SEDI-MENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permit prior to the start of any construction. (1992-2437)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or radioradance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all permanent 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 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings mulching (Sec. 51.3) temporary seeding (Sec. 50) and (Sec. 51) sod (Sec. 54), 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: 20.66 Acres
 Area Disturbed: 3.92 Acres
 Area to be roofed or paved: 0.55 Acres
 Area to be vegetatively stabilized: 3.33 Acres
 Total Cut: 4851 Cu. Yds.
 Total Fill: 2578 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 permanent 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 a "fill" basin, at random, Single Lot Sediment Control as shown below shall be implemented.
- The total amount of straw bale dikes/silt fence equals 540 L.F.

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, disking 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) 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 15 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 redisturbed where a short-term vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, disking 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 24 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 15 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 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

CONSTRUCTION SEQUENCE

CONSTRUCTION SEQUENCE	NO. 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.	160
C. Construct Structures, Sidewalks and Driveways.	160
D. Final Grade and stabilize in accordance with Stds. & Specs.	30
E. Upon approval of the sediment control inspector remove sediment and erosion controls and stabilize.	10

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 12-16-87
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 12-22-87
 APPROVED: DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 DIRECTOR: [Signature] DATE: 12/15/87
 CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 12-14-87

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 7-22-87

Reviewed for: [Signature] S.C.D.
 And meets Technical Requirements
 [Signature] 12-11-87
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 [Signature] Approved DATE

ENGINEER'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 to periodic on-site inspection by the Howard County Conservation District or their authorized agents as are deemed necessary.
 [Signature] 6-15-87
 Signature of Developer/Builder 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 County Conservation District.
 [Signature] 6-11-87
 G. Nelson Clark

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINTREL WAY • COLUMBIA, MD 21045 • (301) 381-7200 • BALTO • (301) 621-8100 • WASH

DESIGNED: JME. DGT.
 DRAWN: KIW.
 CHECKED: DGT.
 DATE: 6-8-87

SEDIMENT & EROSION CONTROL PLAN
 LOTS 1 THRU 10
OAK WEST
 SECTION 1 AREA 1
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: Divers/Fred Homes M.L.P. of Md.
 10705 Charter Dr. #420
 Columbia, Md. 21044

SCALE: 1"=30'
 DRAWING: 30-3
 JOB NO: 87-040
 FILE NO: 87-040 SE

SDP-87-251