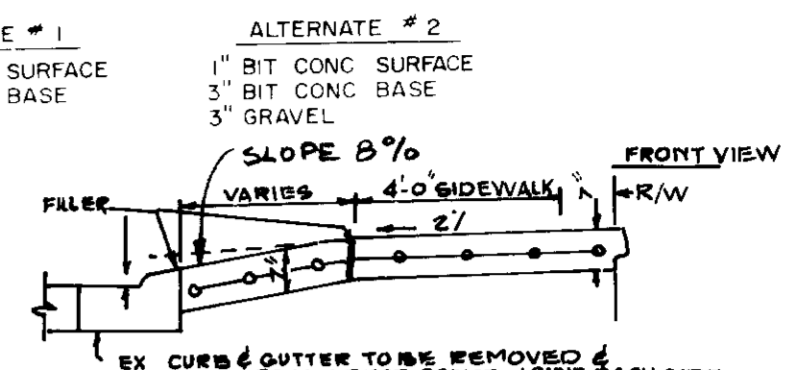


VICINITY MAP  
SCALE 1"=800'



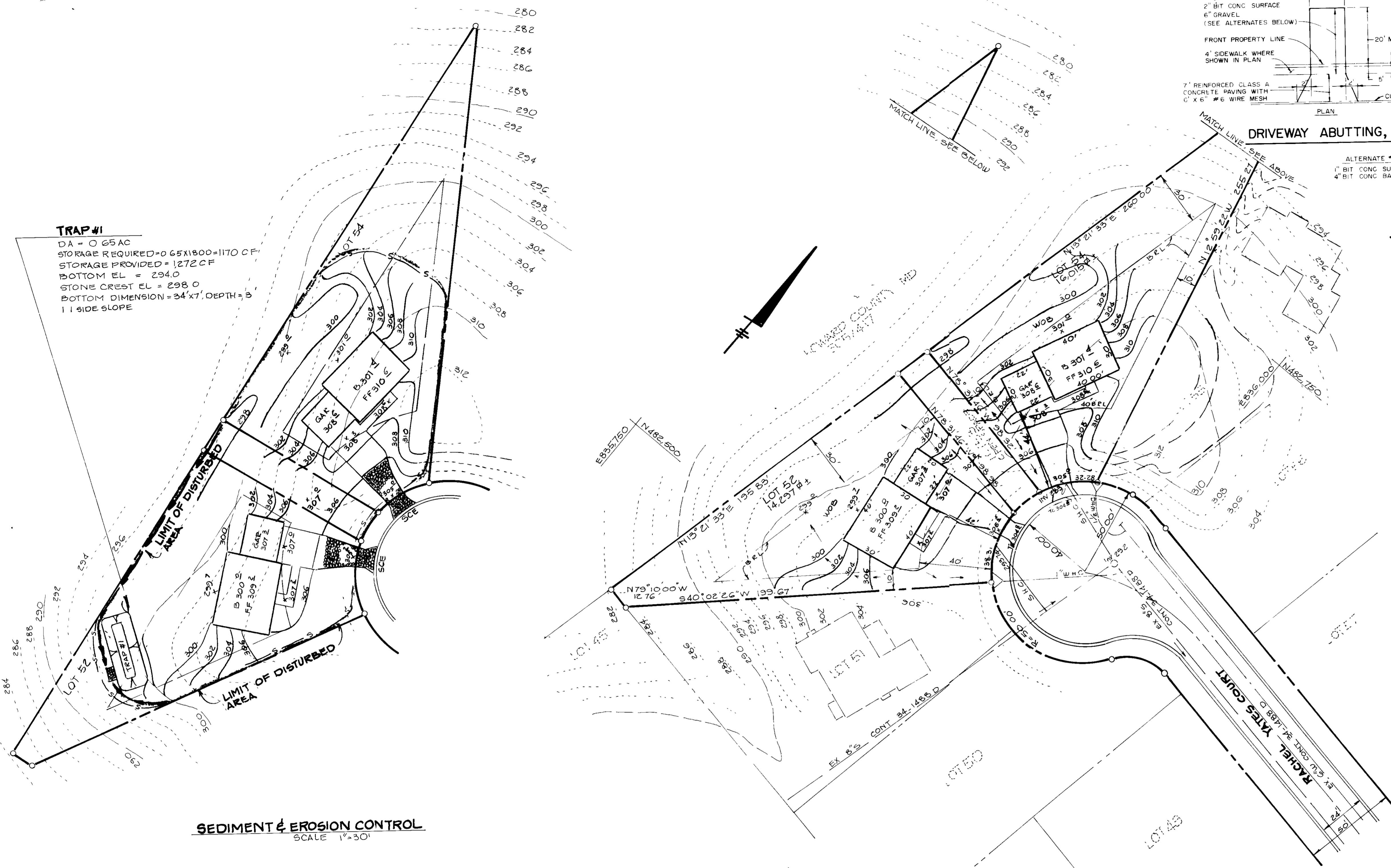
SECTION DRIVEWAY IN EX. CURB (R-601)  
N.T.S.

GENERAL NOTES:

- 1- The land included is zoned: R-20
- 2- Coordinates are based upon traverse controls established for Howard County, and Fisher, Collins & Carter, Inc. in 1986 which controls were tied to the Maryland State coordinate system.
- 3- All roads are public and existing.
- 4- Any damage to county owned right of way to be corrected at the owners expense.
- 5- Total area included: 0.70 Acres
- 6- Total number of lots: 2
- 7- The contractor or developer shall contact Howard County Construction/ Inspection Division, 24 hours in advance of commencement of work at 792-7272.
- 8- STORMWATER MANAGEMENT HAS BEEN PROVIDED UNDER F-66-168

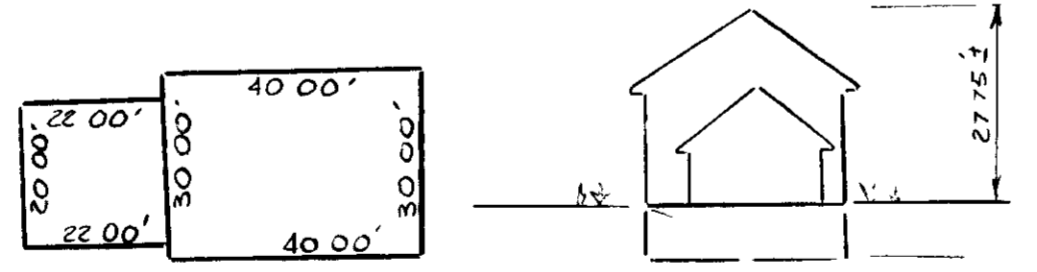
LEGEND

- 1- Contour interval 2 FT
- 2- Existing contour
- 3- Proposed contour
- 4- Spot elevation
- 5- Direction of drainage
- 6- Silt fence
- 7- Stabilized construction entrance
- 8- Dike



SEDIMENT & EROSION CONTROL  
SCALE 1"=30'

PLAN  
SCALE 1"=30'



TYPICAL HOUSE  
NO SCALE

10-15-87  
M

M. Sedghi  
MIKE M. SEDGHI  
PE # 19816

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
52	10613 RACHEL YATES COURT
53	OPEN SPACE
54	10612 RACHEL YATES COURT

APPROVED OFFICE OF PLANNING AND ZONING  
 DATE 11-23-87  
 PLANNING DIRECTOR  
 DATE 20 Nov 1987  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION  
 DATE 11-19-87  
 HEALTH OFFICER

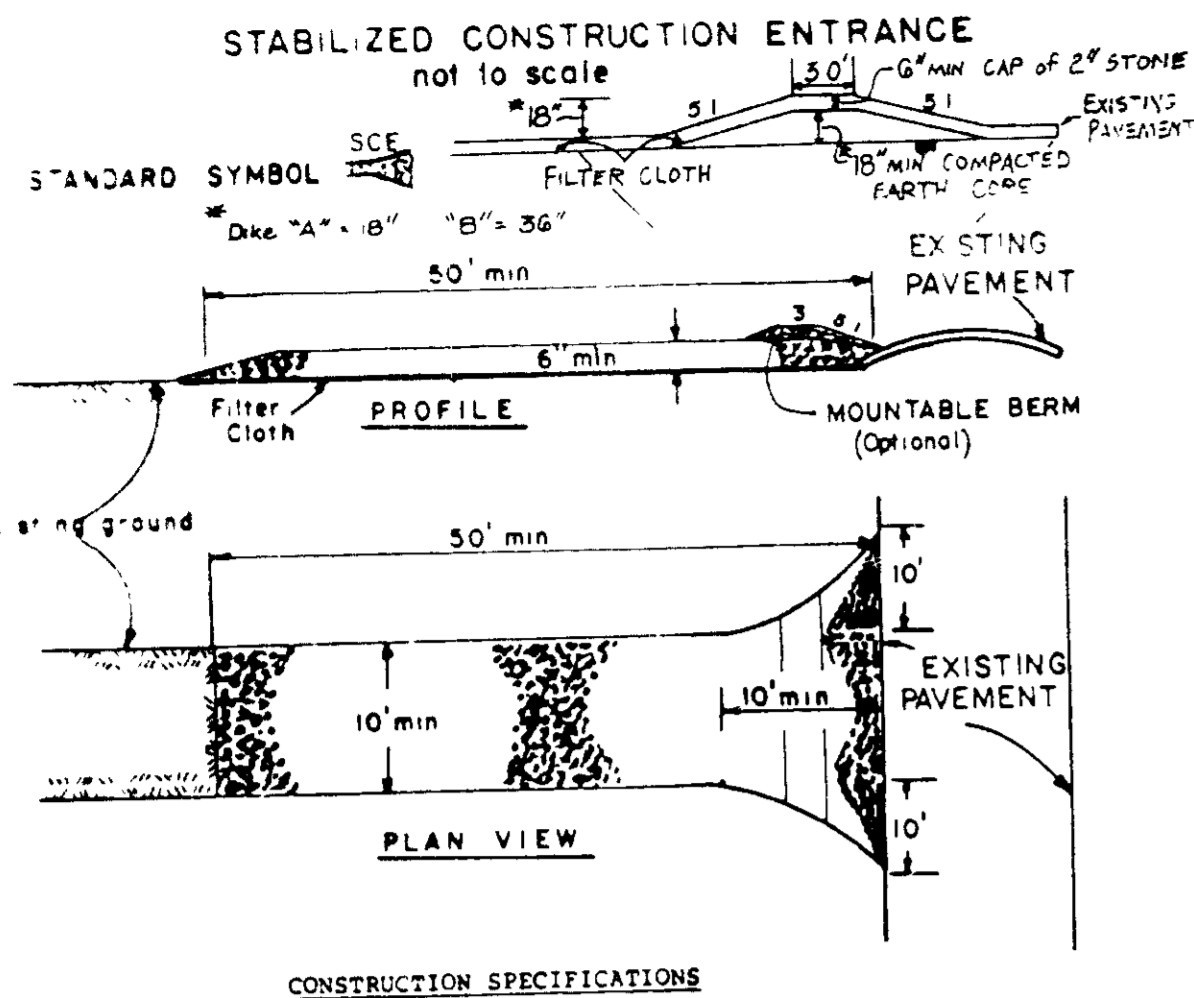
APPROVED DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER AND SEWER AND STORM DRAINAGE SYSTEMS AND ROADS  
 DATE 11-19-87  
 DIRECTOR, PUBLIC WORKS  
 DATE 11-19-87  
 CHIEF, BUREAU OF ENGINEERING  
 SUBDIVISION NAME WARFIELD'S RANGE  
 SECTION/AREA 2/4  
 PARCEL NO 52 TO 54  
 PLAT NO 7005  
 BLOCK NO 19  
 ZONE R-20  
 TAX/ZONE 42  
 ELEC DIST GTH  
 CENSUS TR 6062  
 WATER CODE E-17  
 SEWER CODE 6360000

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
 DATE 11/9/87  
 US SOIL CONSERVATION SERVICE  
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 APPROVED  
 DATE 11/10/87  
 DISTRICT HOWARD SOIL CONSERVATION DISTRICT

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 SOILS CONSERVATION DISTRICT  
 DATE 3-5-87  
 SIGNATURE OF ENGINEER

DEVELOPER'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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT ON THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY  
 DATE 3-5-87  
 SIGNATURE OF DEVELOPER

ENGINEER  
 MIKE SEDGHI  
 7151 BRIGHT SOUL COLUMBIA, MD 21045  
 (301) 381-3258  
 DESIGNED MS  
 DRAWN MS  
 CHECKED MS  
 DATE 3-5-87  
 FOR NEWBURN DEVELOPMENT CORP  
 5670 STARBURY PL COLUMBIA, MD 21044  
 (301) 397-5816  
 SCALE 1"=30'  
 DRAWING 1 OF 2  
 JOB NO  
 FILE NO  
 SDP 88-52



- 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) foot 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 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.
  - 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.

**Seedbed Preparation** - Loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding.

**Soil Amendments** - Use 1 of the following schedules:

- Preferred - Apply 2 tons per acre (14 lbs/1000 sq ft) of limestone (92 lbs/1000 sq ft) and 600 lbs per acre (4 lbs/1000 sq ft) of 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. After seeding, apply 400 lbs per acre (3 lbs/1000 sq ft) of urea fertilizer (9 lbs/1000 sq ft).
- Acceptable - Apply 2 tons per acre (14 lbs/1000 sq ft) of limestone (92 lbs/1000 sq ft) and 1000 lbs per acre (7 lbs/1000 sq ft) of 10-10-10 fertilizer (14 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 from August 15 thru October 15, seed with 60 lbs per acre (1/2 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.015 lbs/1000 sq ft) of creeping 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 per 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 100 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 21# gal. per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 6 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.

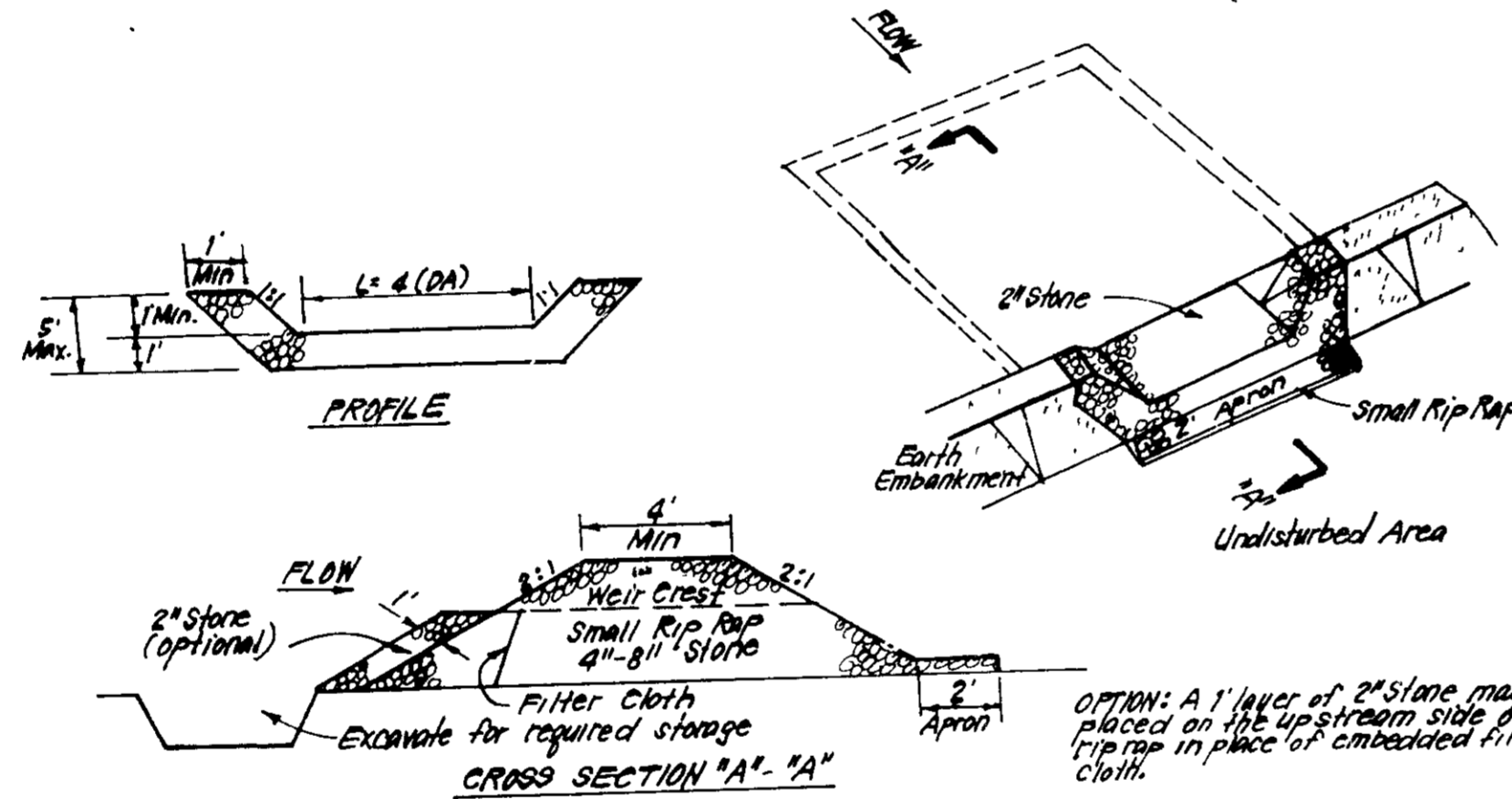
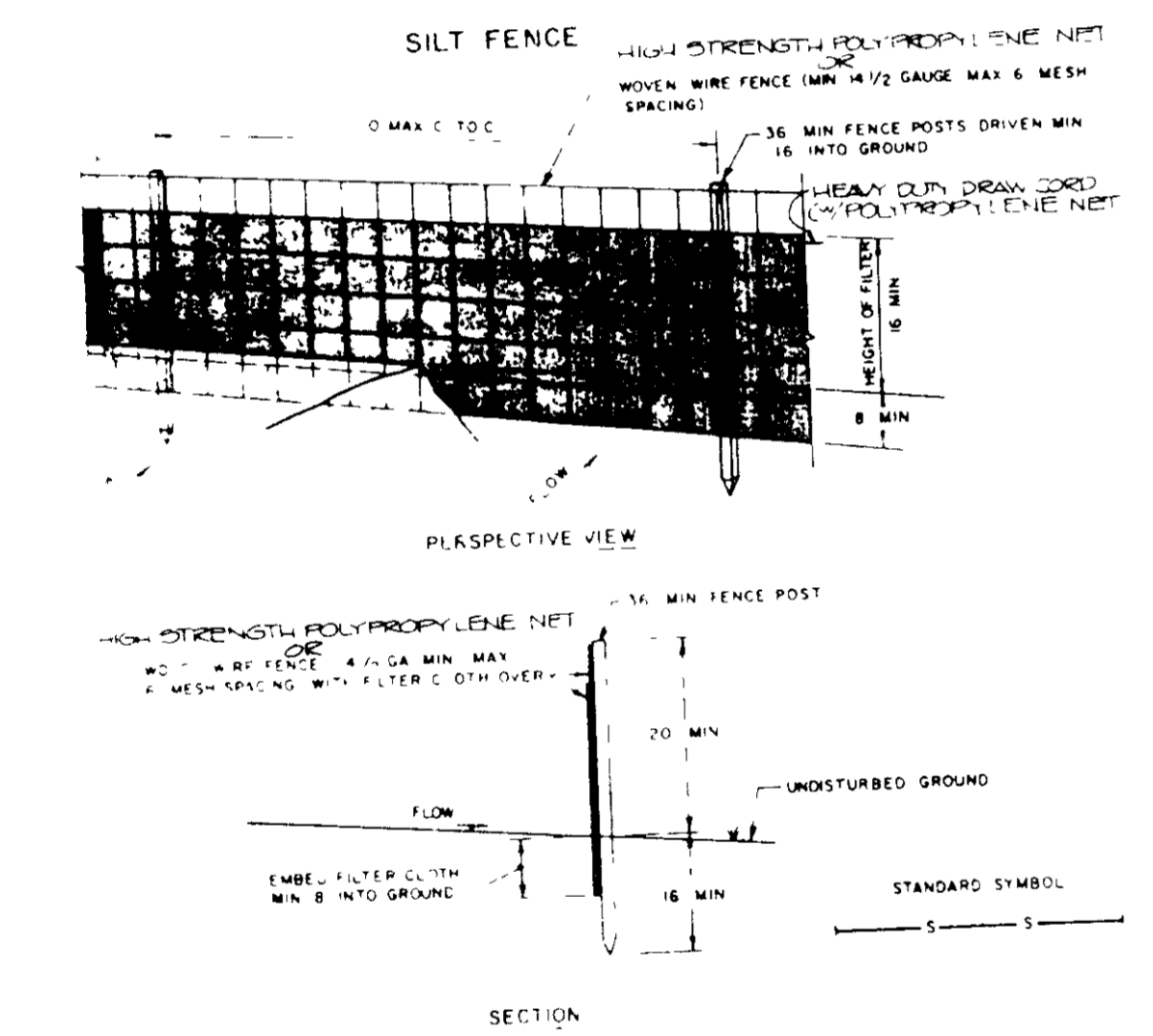
**TEMPORARY SEEDING NOTES**

**Seedbed Preparation** - Loosen upper 3 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 lbs per acre (1/4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.015 lbs/1000 sq ft) of creeping lovegrass (0.7 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 100 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 21# gal. per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gal. per acre (8 gal/1000 sq ft) for anchoring.



**CONSTRUCTION SPECIFICATIONS:**

- 4' high stone outlet sediment trap shall be cleared, grubbed and stripped of any vegetation and root mat. The 4' area under embankment shall be cleared.
- The 4' 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.
- Traversing with equipment while it is being constructed.
- Apron and 2' slope 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 on the up-grade side on the small rip rap or embedded filter cloth in the rip rap.
- Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/4 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.

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 10-15-87

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) S.T.V.  
NO SCALE

**SPECIFICATIONS**

- Class of turfgrass sod shall be Maryland or Virginia State Certified, or Maryland or Virginia State approved sod.
- Sod shall be machine cut to a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness shall exclude top growth and thatch.
- Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
- Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- Sod shall be harvested, delivered and installed within a period of 36 hours. Sod not transplanted within this period shall be inspected and approved prior to its installation.

**Site Preparation**

Fertilizer and lime application rates shall be determined by soil tests. Under unusual circumstances where there is insufficient time for a complete soil test, fertilizer and lime materials may be applied in amounts shown under B, below.

**A** Prior to sodding, the surface shall be cleared of all trash, debris, and of all roots, brush, wire, grade stakes and other objects that would interfere with planting, fertilizing or maintenance operations.

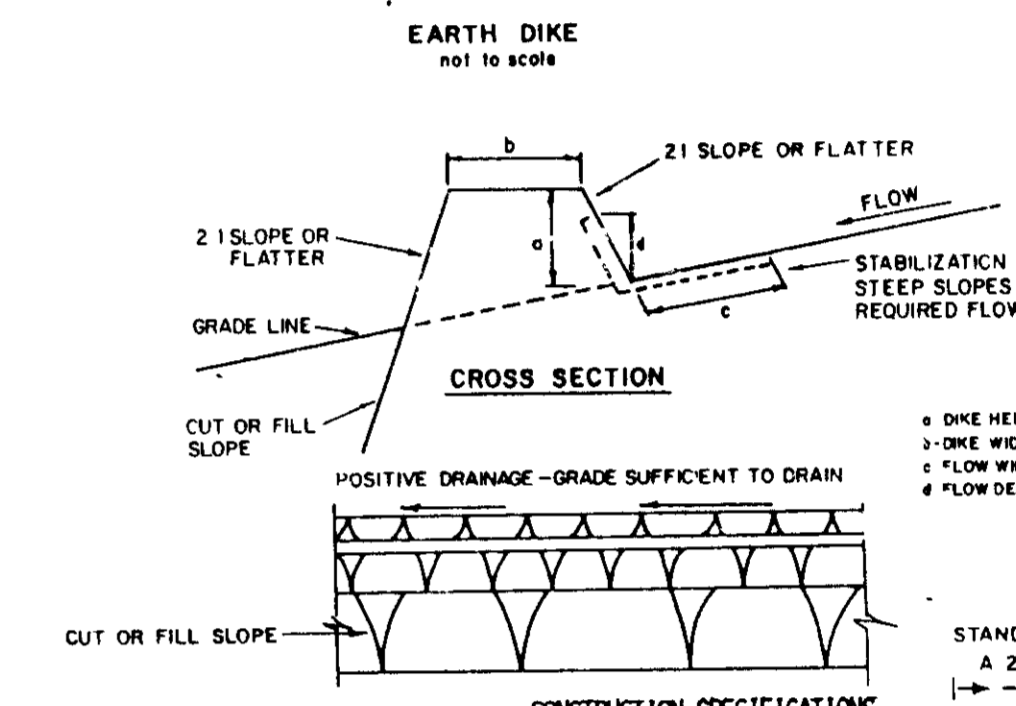
**B** Where the soil is acid or composed of heavy clays, ground limestone shall be spread at the rate of 2 tons/acre or 100 pounds per 1,000 square feet. In all soils 1,000 pounds per acre or 25 pounds per 1,000 square feet of 10-10-10 fertilizer or equivalent shall be uniformly applied and mixed into the top 3 inches of soil with the required lime.

**C** All areas receiving sod shall be uniformly fine graded. Hard-packed earth shall be scarified prior to placement of sod.

**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. (892-2437)
- 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) 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.
- 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 0.70 Acres  
Area Disturbed 0.65 Acres  
Area to be roofed or paved 0.10 Acres  
Area to be vegetatively stabilized 0.55 Acres  
Total Cut 300 Cu. yds  
Total Fill 100 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 DWM 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 "a-sold" basis, at maximum, Single Lot Sediment Control as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail below).
- The total amount of straw bale dikes/silt fence equals 310 L.F.

- Refer to "1983 Maryland Standard and Specifications for Soil Erosion and Sediment Control" for standard details and detailed specifications of each practice specified herein.
  - With the approval of the sediment control inspector, minor field adjustments can and will be made to ensure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the County Soil Conservation District.
  - At the end of each working day, all sediment control practices will be inspected and left in operational condition.
  - Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within a seven calendar days as to the surface of all perimeter controls, dikes, basins, catches, perimeter slopes, and all slopes greater than 3:1 horizontal to 1 vertical (3:1) and b.1 fourteen days as to all other disturbed or graded areas on the project site.
  - Any change to the grading proposed on this plan requires re-submission to County Soil Conservation District for approval.
  - Dust control will be provided for all disturbed areas. Refer to 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control, pp 881 and 882 for acceptable methods and specifications for dust control.
  - Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the County Soil Conservation District prior to the initiation of the change.
  - Excess cut or borrow material shall go to or come from, respectively, a site with an approved sediment control plan.
- The following item may be used as applicable:
- Refer to "Maryland's Guidelines to Waterway Construction" by the Water Resources Administration (WRA), dated January, 1986 for standard details and detailed specifications of each practice specified herein for waterway construction.



- CONSTRUCTION SPECIFICATIONS**
- All dikes shall be compacted by earth-moving equipment.
  - All dikes shall have positive drainage to an outlet.
  - Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
  - Field location should be adjusted as needed to utilize a stabilized safe outlet.
  - 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.
  - 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 THE CHART BELOW.
- | TYPE OF TREATMENT | CHANNEL GRADE | DIKE A                        | DIKE B                                     |
|-------------------|---------------|-------------------------------|--------------------------------------------|
| 1                 | 5-3.0%        | SEED AND STRAW MULCH          | SEED AND STRAW MULCH                       |
| 2                 | 3.1-5.0%      | SEED AND STRAW MULCH          | SEED USING JUTE, OR SCISSOR, SOD, 2" STONE |
| 3                 | 5.1-8.0%      | SEED WITH JUTE, OR SOD; STONE | LINED RIP-RAP 4-8"                         |
| 4                 | 8.1-20%       | LINED RIP-RAP 4-8"            | ENGINEER'S DESIGN                          |
- EARTH DIKE**  
NO SCALE

**CONSTRUCTION SEQUENCE**

- Obtain grading permit.
- Install sediment & erosion control measures.
- Clear and rough grade site.
- Construct houses and driveways.
- Fine grade and stabilize all disturbed areas in accordance with standards & specs.
- Remove sediment & erosion control measures once all areas draining to them are stabilized.

RECEIVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
DATE 11-23-87  
DATE 20 Nov 1987

Reviewed for HOWARD SCD and meet technical requirements  
Signature  
U.S. SOIL CONSERVATION SERVICE  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
Signature  
DATE 11/3/87

DEVELOPER'S/BUILDER'S CERTIFICATE  
I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION HAS BEEN 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 COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.  
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 SOIL CONSERVATION DISTRICT.  
Signature  
DATE 9-5-87

ENGINEER  
MIKE SEDGHI  
7151 BRIGHT SOUL  
COLUMBIA, MD 21045  
(801) 961-5258

DESIGNED MS  
DRAWN MS  
CHECKED MS  
DATE 9-5-87

FOR: NEWBURN DEVELOPMENT CORP  
5570 STERETT PL  
COLUMBIA, MD 21044  
(801) 957-5858

SEDIMENT + EROSION CONTROL DETAILS  
LOTS 52 & 54  
WARFIELD'S RANGE  
SECTION TWO, AREA FOUR  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

AS SHOWN  
2 OF 2

SDP-88-52