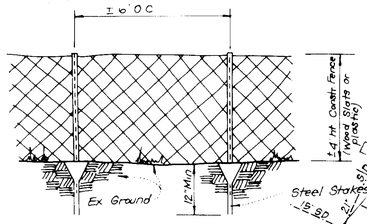


TYPICAL TREE PROTECTION FENCE DETAIL

SPECIAL NOTES:

All road construction, storm drainage facilities and public water & sewer are shown for reference only. Use Approved Howard County Plans for all phases of construction.

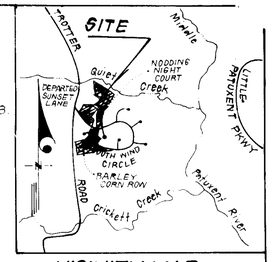
ADDRESS CHART

LOT Nº	STREET ADDRESS	
80	6523	SOUTH WIND CIRCLE
81	6527	
82	6531	SOUTH WIND CIRCLE
83	6503	BARLEY CORN ROW
84	6507	
85	6511	
86	6515	
87	6519	
88	6523	
89	6527	
90	6522	
91	6518	
92	6514	
93	6510	
94	6506	
95	6502	BARLEY CORN ROW
107	6546	SOUTH WIND CIRCLE
108	6542	
109	6538	
110	6534	
158	6422	SOUTH WIND CIRCLE

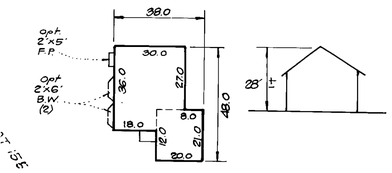
Nº	REVISIONS CONT'D.	Date
9	Rev. hse. & grd. lot 83, Add hse. typical	11-10-94

GENERAL NOTES CONTINUED

12. For driveway entrance details refer to Howard County Design Manual Volume IV Std. details R-6.03 & R-6.05
13. All work shall be performed in accordance with Howard County Standards & Specifications and Details for Construction.
14. Stormwater Management Provided for under F-91-91 & F-91-98
15. No grading, structures or removal of vegetative cover is permitted within the required 25-foot wetlands, 75-foot stream buffers.
16. All building setbacks are in accordance with recorded Final Development Plan, Phase 210.



VICINITY MAP
Scale 1" = 2000'



MANSFIELD
1476 / 0.3 = 4920 ☐ Min. Lot Size

LEGEND

- Contour Interval 2 Ft
- Existing Contour ---400---
- Proposed Contour ---400---
- Spot Elevation +00.0
- Direction of Drainage
- Existing Trees to be saved
- Tree Protection Fence
- Walk-out Basement W.O. B

GENERAL NOTES

1. Subject property zoned NT as per 8.2.85 Comprehensive Zoning Plan.
2. The coordinates shown hereon are based on The Maryland State Grid System and derived from the following Howard County Control Stations 2497002 and 7637004
3. All roadways are public and existing.
4. Total area included in this submission : 0.88 Ac.
5. Total number of lots: 37
6. Any damage to county owned right-of-ways shall be corrected at the Developer's expense.
7. Maximum lot coverage is 30%
8. Reference plans S-90-27, PB Case 263, W.P. 90-139, P. 91-09, F-91-91 & F-91-98
9. The Contractor or Developer shall contact the Construction/Inspection Survey Division, 24 hours in advance of commencement of work at 792-6630
10. The existing topography shown was field run by Clark, Finefrock & Sackett, Inc. June 1991.
11. Improvements to property: Single Family Detached.

CONTINUED ABOVE

Nº	REVISIONS	Date
8	Rev. hse. & grd. lot 94	1-24-93
7	Rev. hse & grd. lot 83	10-6-92
6	Rev. hse & grd. lot 93	5-20-92
5	Rev. hse. and grade lot 89 & 94	2-27-92
4	Rev. hse & grade lot 109	2-3-92
3	Rev. hse & grade lot 110	1-3-92
2	Rev. hse. & grade Lots 87 and 108.	11-25-91
1	Rev. hse and grd. lots 81,85 & 86 As per HRD Comments	9-25-91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 16-DEC-91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR — DATE 10/24/91
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/25/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10-15-91
CHIEF BUREAU OF ENGINEERING — DATE 10-16-91

Owner & Developer
Howard Research and Development Land Co
10275 Little Patuxent Parkway
Columbia, Maryland 21044

Subdivision Name: VILLAGE OF RIVER HILL		Sect/Area 1/3	Lots 1,2,5,11-23, 80-95, 107-110, 158
Plat No. 9990-9994, 9981-9985	Block No. 14	Zone NT-RLD	Tax Map No. 35
Election Distr. 5TH	Census Tr. 6055		
Water Code I 04	Sewer Code 6660000		

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

DESIGNED VLP	SITE DEVELOPMENT PLAN LOTS 1,2,5,11 thru 23, 80 thru 95, 107 thru 110 and 158		SCALE 1"=30'
DRAWN JTR	COLUMBIA VILLAGE OF RIVER HILL SECTION 1 AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		DRAWING 1 OF 7
CHECKED JME			JOB NO. 91-047
DATE JUNE 1991	PDR: RYLAND GROUP 7130 Minstrel Way Suite 215 Columbia, Maryland, 21045		FILE NO. 91-047-X

SDP-92-14

No	REVISIONS	Date
1	Rev. hse. and grd. lot 18 from Enterprise to Hamilton as per HKD Comments	9.24.91
2	Rev. hse. and grd. lot 18	2.19.91
3	Rev. hse. and grd. lot 11	2.27.92
4	Rev. hse. and grade lot 13	3.19.92
5	Rev. hse. and grade lot 20	3.12.93
6	Rev. hse. and grade lot 1	10.4.93
7	Rev. hse. and grade lot 15	6.20.94
8	Rev. house and grade lot 1; Add house type (c)	6.24.94

ADDRESS CHART	
LOT No.	STREET ADDRESS
1	6301 DEPARTED SUNSET LANE
2	6305 ↓
5	6333
13	6312
14	6308
15	6304 DEPARTED SUNSET LANE
16	6301 SOUTH WIND CIRCLE
17	6305 SOUTH WIND CIRCLE
18	6325 SOUTH WIND CIRCLE
19	6307 NODDING NIGHT COURT
20	6311 NODDING NIGHT COURT
21	6315 NODDING NIGHT COURT
11	6324 DEPARTED SUNSET LA
12	6320 "

NOTE: The proposed grading along the perimeter of lots 2, 5 & 11 ties into adjacent lots as shown on sheets 5 and 6 of 7.

HAMILTON "L"
1662.44 / 0.3 = 5541.46 SF Min. Lot Size

ENTERPRISE
1495.5 / 0.3 = 4,985 ☐' Min. Lot Size

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10/21/91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR — DATE 10/24/91
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/23/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10/15/91
CHIEF BUREAU OF ENGINEERING — DATE 10-15-91

OWNER/DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 Little Patuxent Pkwy
Columbia, MD. 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 981-7500 BALTO • (410) 621-2651 WASH

DESIGNED VLP	SITE DEVELOPMENT PLAN LOTS 1, 2, 5, 11 thru 23, 80 thru 85, 10 thru 10, & 58	SCALE 1"=30'
DRAWN JTR	COLUMBIA VILLAGE OF RIVER HILL SECTION 1 AREA 3	DRAWING 2 OF 7
CHECKED JME	5TH ELECTION DISTRICT HOWARD COUNTY: MARYLAND	JOB NO. 91-047
DATE JUNE 1991	FOR: RYLAND GROUP 7130 Minstrel Way Suite 215 Columbia, Maryland, 21045	FILE NO. 91-047-X

SDP 92-14

NOTE: The proposed grading along the perimeter of lots 2, 5 & 11 ties into adjacent lots as shown on sheets 5 & 6 of 7.

TYPICAL HOUSES

Scale 1"=30'

NOTE All units have 1' roof eaves front & rear

CHESTERFIELD

CALVERT / McLEAN

McHENRY

HAMILTON

HAMILTON "L"

POTOMAC / SHENANDOAH

ENTERPRISE

ADDRESS CHART	
LOT No.	STREET ADDRESS
5	6333 DEPARTED SUNSET LA.
11	6324 DEPARTED SUNSET LA.
12	6320 DEPARTED SUNSET LA.
22	6310 NODDING NIGHT COURT
23	6325 NODDING NIGHT COURT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — 10/21/91 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR — 10/24/91 DATE
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 10/28/91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — 10/15/91 DATE
CHIEF BUREAU OF ENGINEERING — 10-15-91 DATE

OWNER DEVELOPER:
HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 Little Patuxent Pkwy.
Columbia, MD. 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7130 MINISTREL WAY • COLUMBIA MD. 21045 • FREDERICK, MD. • ALEXANDRIA, VA.

2	Rev. hse. & grd. lots 5 and 11	2.27.92
1	Rev. hse. and grd. lots 22 & 23 As per Ho. Co. Comments	7.21.91
No.	REVISIONS	Date

DESIGNED VLP	SITE DEVELOPMENT PLAN
DRAWN JTR	LOTS 1,2,5,11 thru 23, 80 thru 85, 107 thru 110 & 158
CHECKED JME	COLUMBIA
DATE JUNE 1991	VILLAGE OF RIVER HILL
	SECTION 1 AREA 3
	5TH ELECTION DISTRICT
	HOWARD COUNTY, MARYLAND
	FOR: RYLAND BRDUP
	7130 Ministrel Way Suite 215
	Columbia, Maryland, 21045
SCALE	1"=30'
DRAWING	3 OF 7
JOB NO.	91-027
FILE NO.	91-047.X

SDP 92-14

No	REVISIONS	Date
1	Rev. hse. & grd. lots 81, 85 & 86 as per HRD Comments	9.25.91

TRAP Nº 5 SOST (ST V)
D.A. 1.1 Ac.
Storage Required = 1,980 cu.ft.
Storage Provided = 1,989 cu.ft.
Depth = 3'
Top of Stone Weir = 403.0
Bottom Elev. = 399.0
Clean Out Elev. = 400.5
Bottom Dimension = 45'x7'
2:1 Side Slopes in Cut
L = 5'

TRAP Nº 4 SOST (ST V)
D.A. 1.1 Ac.
Storage Required = 1980 cu.ft.
Storage Provided = 2,106 cu.ft
Depth 3'
Top of Stone Weir = 422.00
Bottom Elev. = 418.00
Clean Out Elev. = 419.50
Bottom Dimensions = 20'x21'
2:1 Side Slopes in Cut
L = 5'

TRAP Nº 6 SOST (ST V)
D.A. = Ex.=1.4 Ac. Prop= 0.90 Ac
Storage Required = 2520 cu.ft.
Storage Provided = 2520 cu.ft.
Depth = 3'
Top of Stone Weir = 402.0
Bottom Elev = 398.0
Clean Out Elev = 399.5
Bottom Dimensions = 36'x14'
2:1 Side Slopes in Cut
L = 6'

1" = 500,750'

DELAY CONSTRUCTION ON LOT 158 UNTIL TRAP Nº 5 IS REMOVED

SITE

VICINITY MAP
Scale 1" = 2000'

LEGEND
Contour Interval 2 FT.
Existing Contour
Proposed Contour
Direction of Drainage
Walk Out Basement
Existing Trees to Remain
Stabilized Construction Entrance
Silt Fence
Limits of Disturbance
Earth Dike
Drainage Divide
Temporary Contour

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 10/21/91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR — DATE 10/24/91
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/23/91

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 10/15/91
CHIEF BUREAU OF ENGINEERING — DATE 10-15-91

Reviewed for HOWARD S.C.D. Name and meets Technical Requirements
Signature — Date 10/7/91
US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 10/6/91
Approved

HOWARD RESEARCH AND DEVELOPMENT CORP.
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 sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment 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".

Maurice M. Dunkins 7/22/91
Signature — Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and Erosion 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.

Richard J.H. Stepp 7.22.91
Signature Richard J.H. Stepp Date

STATE OF MARYLAND — RICHARD JAMES HOWARD STEPP — REGISTERED PROFESSIONAL ENGINEER

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7500 BALTO • (410) 997-8555 WASH

DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 1, 2, 5, 11 thru 23, 80 thru 95, 107 thru 110 & 158
DRAWN JTR	COLUMBIA VILLAGE OF RIVER HILL SECTION 1 AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
CHECKED KIWM	FOR: RYLAND GROUP 7130 Minstrel Way Suite 215 Columbia, Maryland, 21045
DATE JUNE 1991	SCALE 1"=30' · DRAWING 4 OF 7 · JOB NO. 91-047 · FILE NO 21-047SIE

SDP- 92-14

No	REVISIONS	Date
1	Revise and grd lot 18 From Enterprise to Hamilton, as per HRD Comments	9.24.91

TRAP No 2 SOST (ST-V)
D.A.= 1.5 Acres
Storage Required = 2700 cu.ft.
Storage Provided = 2760 cu.ft.
Depth = 3'
Top of Stone Weir = 382.0
Bottom Elev.= 378.0
Clean Out Elev.= 379.5
Bottom Dimensions = 34'x17'
2:1 Side Slopes in Cut
L = 6'

SEE MATCH LINE 'B-B' SHEET 6

SEE MATCH LINE 'C-C' SHEET 6

COMMON OPEN AREA LOT 163

COMMON OPEN AREA LOT 164

COMMON OPEN AREA LOT 162

COMMON OPEN AREA LOT 154

TRAP No. 5 F-91-98

SEDIMENT BASIN No. 5 PER F-91-98

LIMITS OF WETLANDS

LIMIT OF DISTURBED AREA

SCE

EARTH DIKE PER F-91-98

Ex. E.D PER F-91-98

E.D PER F-91-98

20' Sewer and Utility Ensement

10' Tree Maintenance Easement

NODDINE NIGHT COURT

SILVERY STAR PATH

SOUTH WIND CIRCLE

LOT 1 11,704 ±

LOT 2 11,900 ±

LOT 3

LOT 13

LOT 14 13,995 ±

LOT 15

LOT 16 17,516 ±

LOT 17 13,995 ±

LOT 18 13,725 ±

LOT 19

LOT 20 10,184 ±

LOT 28

LOT 29

LOT 30

LOT 157

LOT 158

LOT 107

CHARLES T. RHODES & WIFE 424/102

FF 410.10 B 395.80 SHENANDOAH/POTOMAC

FF 404.10 B 395.80 Mc HENRY

FF 415.80 B 407.50 CALVERT / McLEAN (REV)

FF 382.80 B 380.50 McHENRY (REV)

FF 404.30 B 396.00 HAMILTON (REV)

FF 415.00 B 407.50 HAMILTON 'L'

FF 410.10 B 395.80 SHENANDOAH/POTOMAC (REV)

FF 382.80 B 380.50 McHENRY (REV)

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

COUNTY HEALTH OFFICER — DATE 10/21/91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DIRECTOR — DATE 10/22/91

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/23/91

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

DIRECTOR — DATE 10.15.91

CHIEF BUREAU OF ENGINEERING — DATE 10-15-91

Reviewed for HOWARD S.C.D. and meets Minimum Requirements

Signature — Name — Date 10/6/91

US Soil Conservation Service

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

John R. Robertson 10/6/91
Approved

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 sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment 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".

Maurice W. Simpkins 7/22/91
Signature — Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and Erosion 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.

Richard J.H. Stepp 7-22-91
Signature Richard J.H. Stepp — Date

STATE OF MARYLAND — RICHARD J. H. STEPP

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 621-7500 BALTO • (301) 621-8884 WASH

DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 1,2,5, 11 thru 23, 80 thru 95, 107 thru 110 & 158	SCALE 1"=30
DRAWN JTR	COLUMBIA VILLAGE OF RIVER HILL SECTION 1 AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 5 OF 7
CHECKED KIWM		JOB NO 91-047
DATE JUNE 1991	FOR: RYLAND GROUP 7130 Minstrel Way Suite 215 Columbia, Maryland, 21045	FILE NO 91-047SHE

SDP- 92-14

Nº	REVISION	
1	Rev. hse & grd. lots 23 & 22 as per Ho. Co. Comments	9.24.91

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
[signature] 10/07/91
Signature Date
US Soil Conservation Service

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

John R. Robertson 10/6/91
Approved

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 sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment 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] 7/22/91
signature Date

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

[signature] 10/21/91
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[signature] 10/24/91
DIRECTOR DATE

[signature] 10/23/91
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

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

[signature] [illegible]
DIRECTOR DATE

[signature] 10-15-91
CHIEF BUREAU OF ENGINEERING DATE

ENGINEER'S CERTIFICATE

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

Richard J.H. Stepp 7.22.91
Signature Richard J.H. Stepp Date

STATE OF MARYLAND
RICHARD J. H. STEPP
NO. 10562
REGISTERED PROFESSIONAL ENGINEER

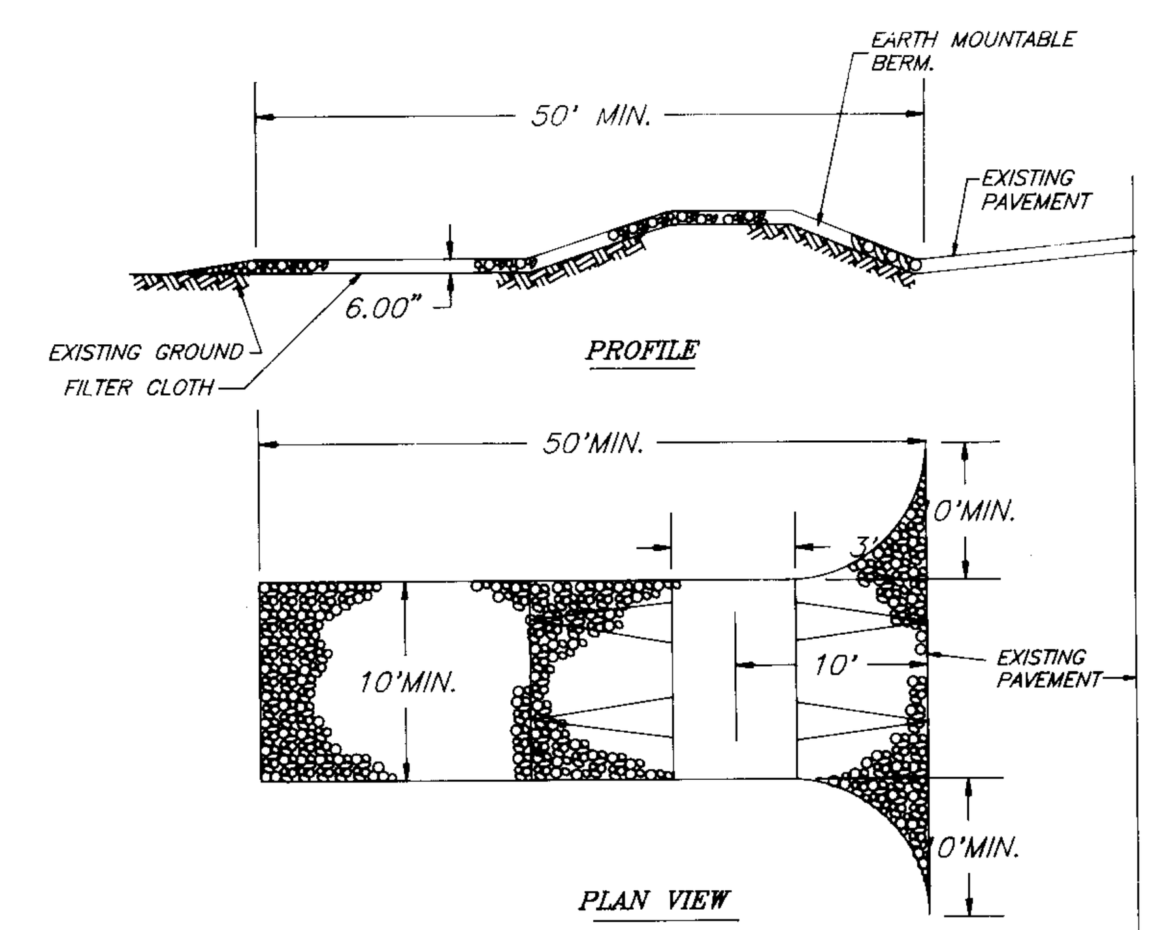
Richard J.H. Stepp

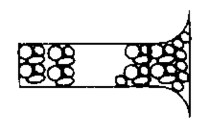
OWNER/DEVELOPER:
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 Little Patuxent Pkwy
Columbia MD 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • [illegible] BALTO • [illegible] WASH

DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 1, 2, 5, 11 thru 23, 80 thru 95, 107 thru 110 & 158	SCALE 1" = 30'
DRAWN JTR	COLUMBIA VILLAGE OF RIVER HILL	DRAWING 6 OF 7
CHECKED KIWM	SECTION 1 AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 91-047
DATE JUNE 1991	FOR: RYLAND GROUP 7130 Minstrel Way Suite 215 Columbia, Maryland, 21045	FILE NO. 91-047SE

SDP-92-14



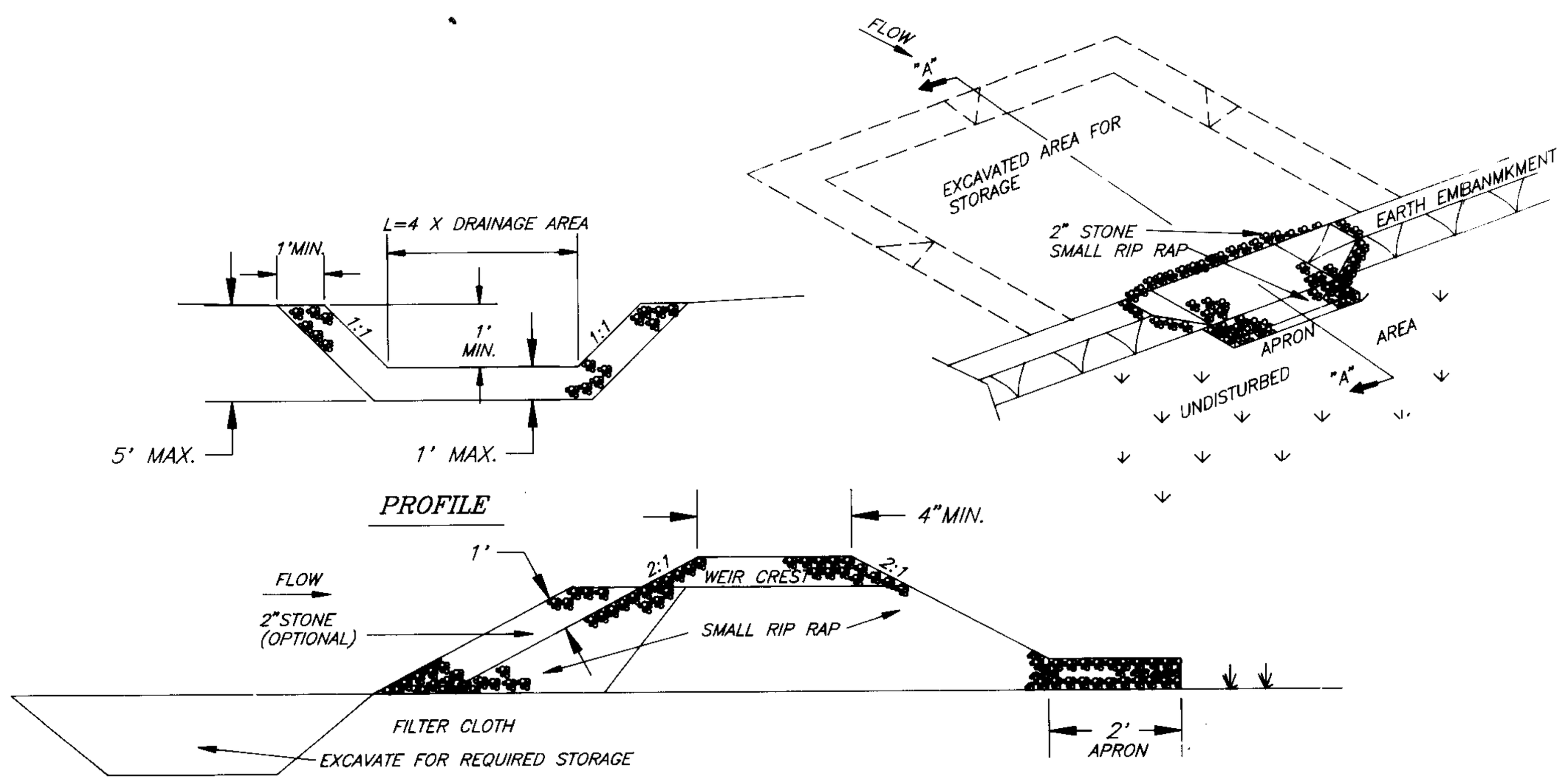
STANDARD SYMBOL: 

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE: USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH: AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A 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 CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE.
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 RAINFALL.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

NO SCALE



CROSS-SECTION "A"-"A"

OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation an d 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 embankement shall be compacted by traversing with equipment while it is being constructed.
3. Al cut and fill slopes shell be 2:1 or flatter.
4. The stone used in the outlet shall be riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap or embedded filter cloth in the riprap.
5. Sediment shall be removed and the trap restored to it's 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 (ST-V)

NO SCALE

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, if not previously loosened.

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/100 sgft.) 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 the 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 dolomatic limestone (92 lbs/1000 sg ft.) and 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sg 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 60lbs 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 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, repalcements and reseedings.

TEMPORARY SEEDING NOTES

SEEDBED PREPARARTION: Loosen upper three inches of soil by raking, discing,or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs per acre 10-10-10 fertilizer (14lbs/1000 sq ft).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 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.

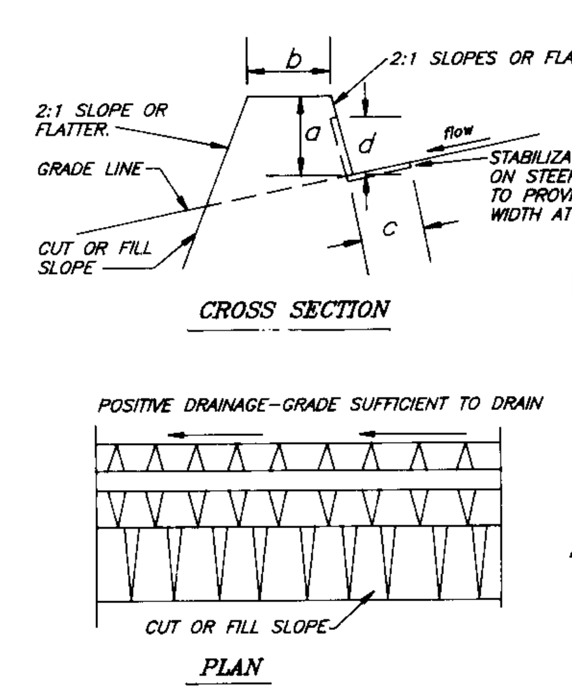
MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION 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 SPECS. 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 stuctures, 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 perimeters 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 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: 9.88 Ac.
   - Area Disturbed: 8.89 Ac.
   - Area to be roofed or paved: 2.63 Ac.
   - Area to be vegetatively stabilized.: 6.26 Ac.
   - Total Cut: 12315 Cu Yds
   - Total Fill : 22839 Cu Yds
   - Offsite Waste/Borrow Area Location: *
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 Family Sediment Control, as shown below shall be implemented.
12. All pipes to be blocked at the end of each day (see detail this sheet).
13. The total amount of silt fence= 2,625 L.F.

* It is the responsibility of the contractor to identify the spoil/borrow site and notify HCSCD of the site and it's grading permit number at the time of construction.



	DIKE A (5 AC. OR LESS)	DIKE B (5-10 AC. OR LESS)
a-DIKE HEIGHT	18"	36"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	8"	15"

STANDARD SYMBOL A-2 / B-2

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 adquately 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 the chart below.

FLOW CHANNEL STABILIZATION

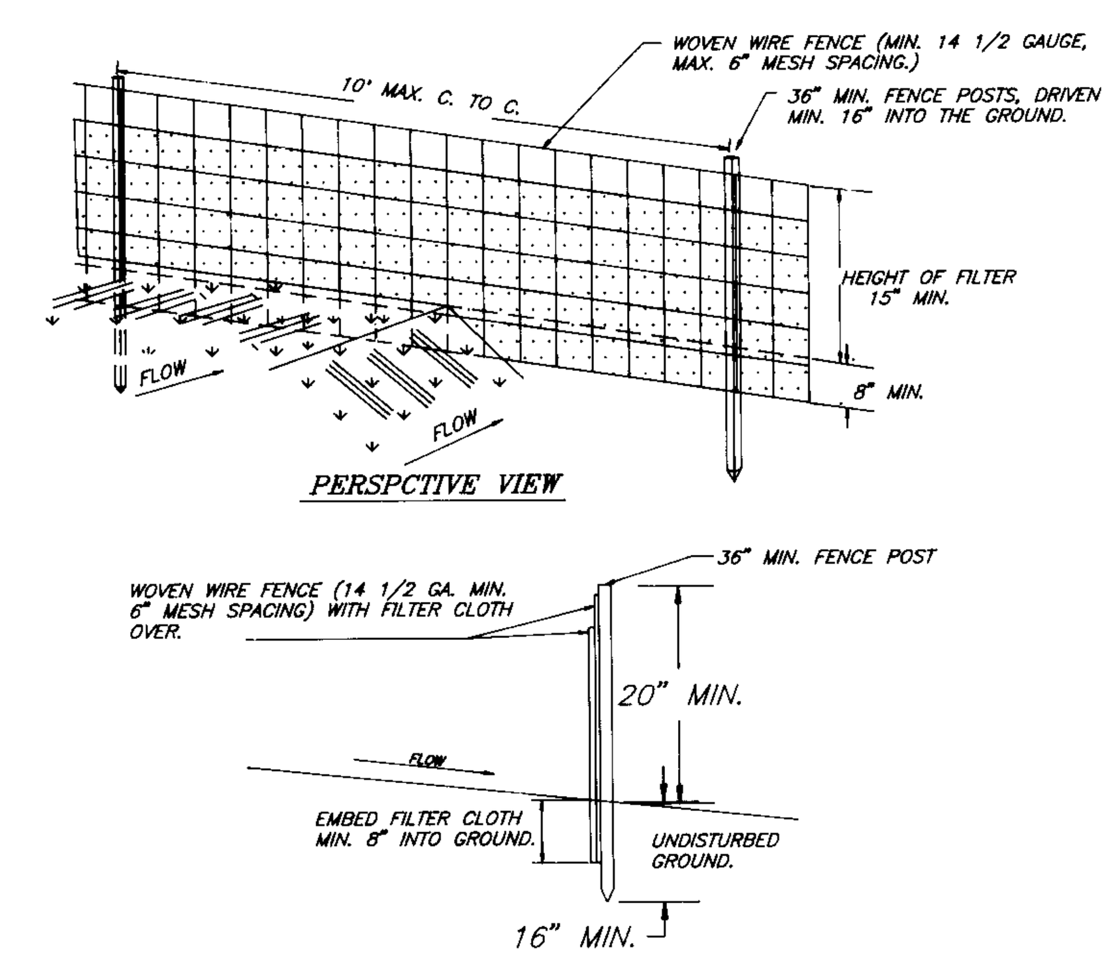
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE.	LINED RIP-RAP 4"-8"
4	8.1-20%	LINED RIP-RAP 4"-8"	ENGINEERING DESIGN

A. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
B. Rip Rap to be 4-8 inches in a layer at least 8 inches thick and pressed into the 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 event.

EARTH DIKE (ED)

NO SCALE



STANDARD SYMBOL: — S — S — S —

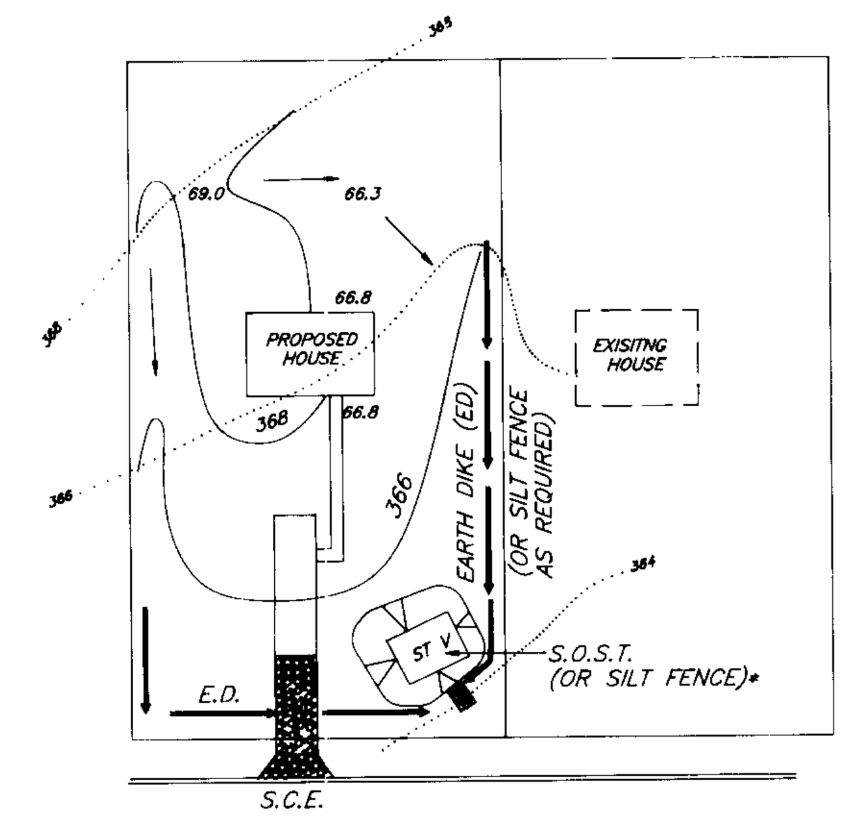
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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 TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD.
FENCE: WOVEN WIRE, 14 GA., 6" MAX. MESH OPENING.
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL.
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE (S)

NO SCALE



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

* S.O.S.T. (ST V) PG.16.12

LOT SIZE	1/4 ACRE	1/2 ACRE	1 ACRE
L	2'	3'	6'
DEPTH	2'	2'	2'
+ BOT.LENGTH	11'	26'	26'
+ BOT.WIDTH	11'	11'	26'
+ BOT. AREA	121SF	286SF	676SF

\+ Can be adjusted in the field, but the bottom area must be as given or greater.

SINGLE LOT SEDIMENT CONTROL PLAN

NO SCALE

CONSTRUCTION SEQUENCE:

		NO. OF DAYS
A.	OBTAIN GRADING PERMIT AND INSTALL SEDIMENT AND EROSION CONTROL DEVICES AND STABILIZE.	7
* B.	EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE AND TEMPORARILY STABILIZE.	30
C.	CONSTRUCT STRUCTURES, SIDEWALS AND DRIVEWAYS.	180
D.	FINAL GRADE AND STABILIZE IN ACCORDANCE WITH STDS. AND SPECS.	30
E.	UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES AND STABILIZE.	7

* DELAY CONSTRUCTION ON LOTS 7,13,80,95 AND 158 UNTIL EXISTING TRAPS HAVE BEEN REMOVED. SEE SINGLE LOT SEDIMENT CONTROL DETAIL. THIS SHEET

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

COUNTY HEALTH OFFICER — DATE 10/21/91

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DIRECTOR — DATE 10/24/91

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT. — DATE 10/23/91

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

DIRECTOR — DATE 10.15.91

CHIEF BUREAU OF ENGINEERING — DATE 10-15-91

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature Date
US Soil Conservation Service

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

10/6/91
Approved

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 sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment 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 — Date 7/22/91

ENGINEER'S CERTIFICATE

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

Signature Richard J.H.Stepp Date 7.22.91

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER

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

DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS: 1, 2, 5, 11 thru 23, 80 thru 95, 107 thru 110 & 158	SCALE AS SHOWN
DRAWN KIWM	COLUMBIA VILLAGE OF RIVER HILL	DRAWING 7 OF 7
CHECKED KIWM	SECTION 1 AREA 3 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 91-047
DATE JUNE 1991	FOR: RYLAND GROUP 7130 Minstrel Way Suite 215 Columbia, Maryland, 21045	FILE NO. 91-047 S&E

SDP-92-14