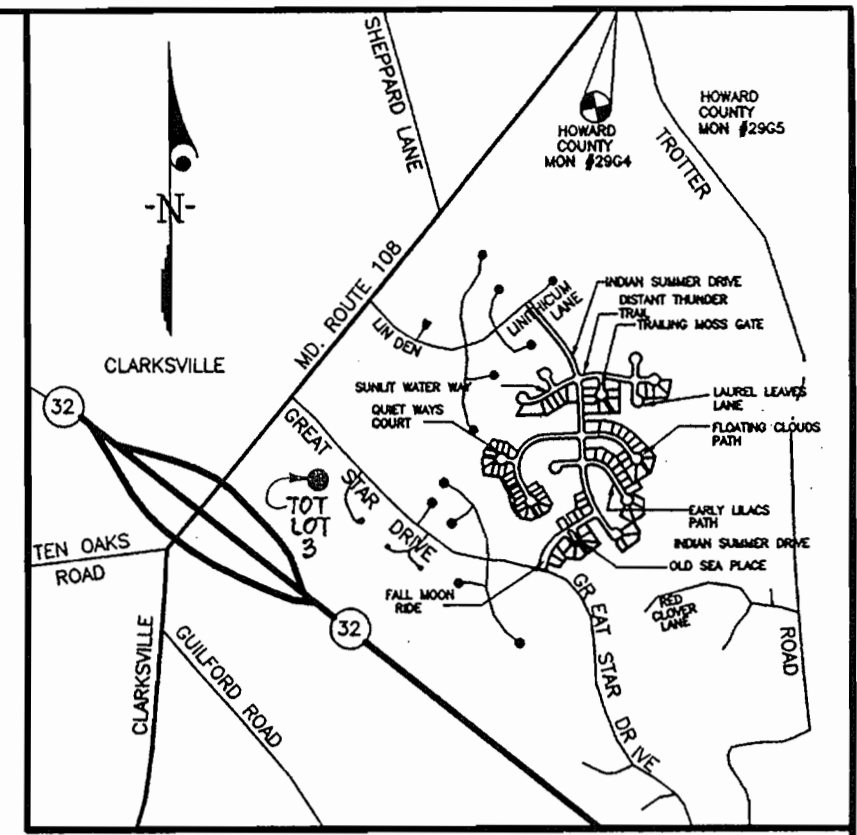


# SITE DEVELOPMENT PLAN FOR VILLAGE OF RIVER HILL PHEASANT RIDGE NEIGHBORHOOD TOT LOT 3



VICINITY MAP  
Scale : 1"=2000'

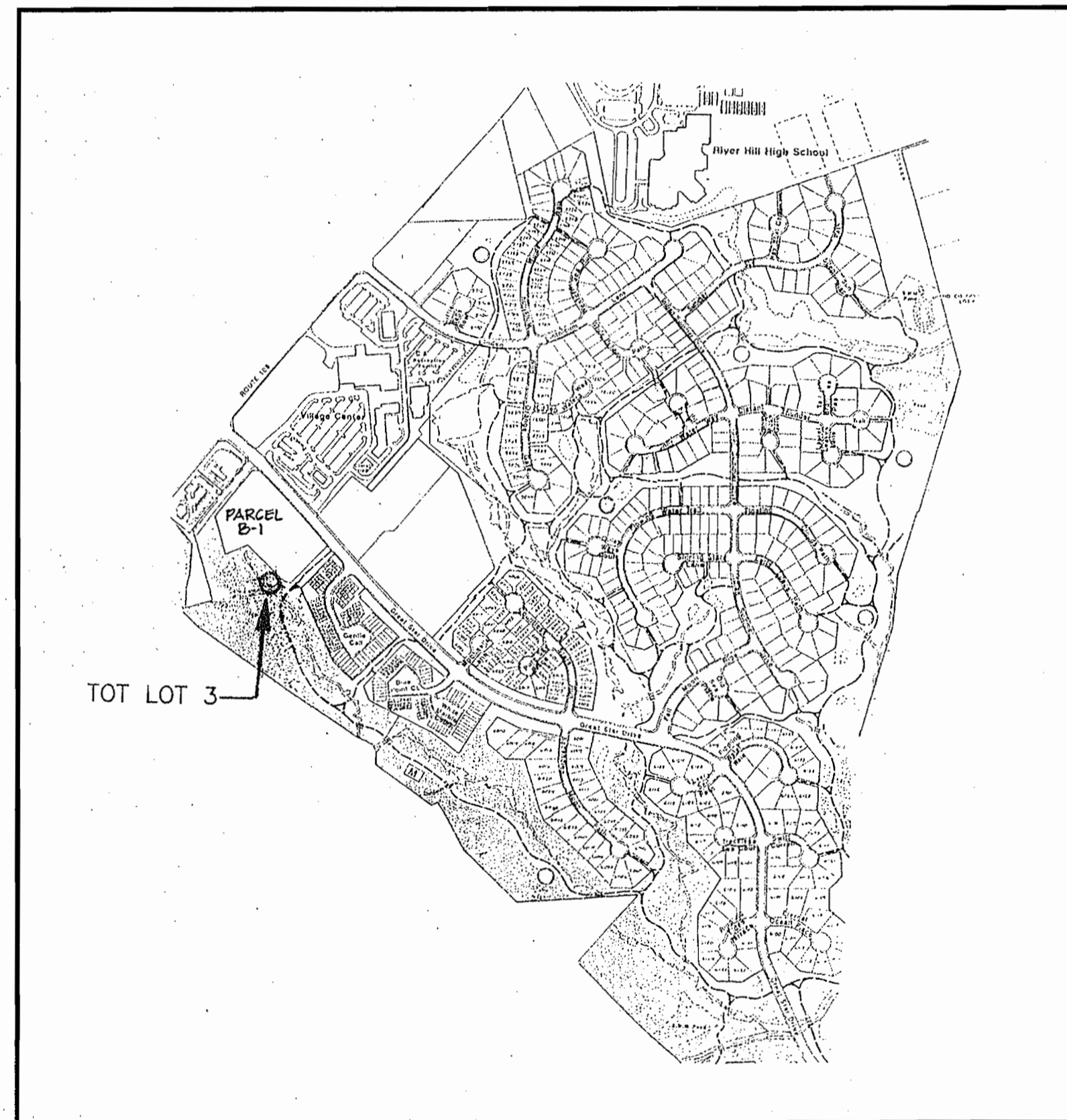
**BENCHMARKS:**  
Howard County Monument 2964  
Intersection of MD. Route 108 and Trotter Road  
Howard County Monument 2965  
an additional 2,544' ± Northeastly along MD. Route 108 away from Site

**LEGEND**

CONTOUR INTERVAL	2 FT.
EXISTING CONTOUR	— (dashed line) —
PROPOSED CONTOUR	— (solid line) —
DIRECTION OF DRAINAGE	→
SPOT ELEVATION	• • • 78.4 • • •
LIMIT OF DISTURBED AREA	— (dotted line) —
TREE PROTECTION FENCE	— (wavy line) —
EXISTING TREES TO REMAIN	— (circle with cross) —
SITE ACCESS / STABILIZED CONSTRUCTION ENTRANCE	— (hexagon) —
SILT FENCE	— (zigzag line) —

**GENERAL NOTES**

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
  - The contractor shall notify the Bureau of Engineering / Construction Inspection Division at (410) 313-1880 at least five (5) days prior to the start of work.
  - The contractor shall notify "MISS UTILITY" at 1(800)257-7777 at least 48 hours prior to any excavation work.
  - Project background:  
Location: Village Of River Hill  
Zoning: New Town Open Space  
Election District: 5th
- | TOT LOT NO. | DISTURBED AREA | VORH S/A         | O.S.LOT | LOT AREA | "F" PLAN |
|-------------|----------------|------------------|---------|----------|----------|
| 3           | 0.16 AC        | VORH 4/1 PHASE 1 | 87      | 15.0 AC  | F-96-110 |
- OTHER FILE REFERENCES**  
SDP 00-14 for construction of pathways. FDP 222 A1, Part 1; SDP-01-116 for tot lots 1,2 & 4; SDP-01-144 for Parcel B-1; F-02-87 for subdivision of F-96-110 for SWM easements; SDP-01-117 for SWM planting
- Topography within limits of disturbance was field run at two foot contour intervals by Daft-McCune-Walker, dated February, 2001.
  - Horizontal controls are based on Maryland State Grid System as per the respective record plats.
  - Wetland limits were derived from the retrospective record plats established under subdivision plans F-96-110. There are no floodplains on this site.
  - Stormwater management for these sites was provided under the original subdivision plans F-96-110.
  - The existing utilities were located from existing plans and records. The contractor must dig test pits, by hand, at all utility crossings and connection points to verify exact location
  - Any damage to County rights-of-ways and paving of public roads shall be repaired immediately at the contractors expense in accordance with the Howard County Specifications and Standards.
  - All concrete for the site work shall be Class 2 concrete and shall be in accordance with the Maryland State Highway Administration specifications as amended to date.
  - The limit of disturbance area on the site shall be marked with a construction fence prior to any clearing and grading activity for the tot lot construction.
  - Maintenance of the tot lot will be the responsibility of the owner, The Columbia Association.
  - All trees 12 inches and larger are not to be disturbed unless indicated on plans. All trees within the limit of disturbance are to have tree protection fence installed around them.
  - No disturbance of Wetlands or Stream Buffers is permitted unless specific waiver is approved.
  - The subject property is zoned NT per the 10-18-93 Comprehensive Zoning Plan.
  - This plan is exempt from Forest Conservation obligations per Section 16-1202 (b)(1)(iv) based on approval of Preliminary Development Plan and development of 50% of the land prior to 12-21-92.
  - No traffic study is required for this project.
  - The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 2964 and 2965 were used for this project.



LOCATION MAP  
SCALE: 1"=800'

**SUMMARY SITE ANALYSIS TOT LOT 3**

Zone	NT OPEN SPACE
Disturbed Areas	0.16 AC
Impervious Areas	0
Permeable Areas	0.11 AC
Mulched Areas	0.05 AC
Vegetatively Stabilized Areas	0.11 AC
Total Earth Cut	30 CY
total Earth fill	28 CY
Total Spoil	2 CY

NOTE: Construction of all bituminous pathways is permitted under SDP#00-14  
Construction of pathway link from Parcel B-1 is covered under SDP-01-144.  
Planting along SWM pond remains as required by Planning Board is shown a red line revision to SDP-01-117

**ADDRESS CHART**

TOT LOT	LOT NUMBER	ADDRESS
3	OPEN SPACE LOT 87	GREAT STAR DRIVE

**SHEET INDEX**

DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 3
TOT LOT NO. 3 SITE PLAN AND SEDIMENT CONTROL PLAN	2 OF 3
SITE AND SEDIMENT CONTROL DETAILS	3 OF 3

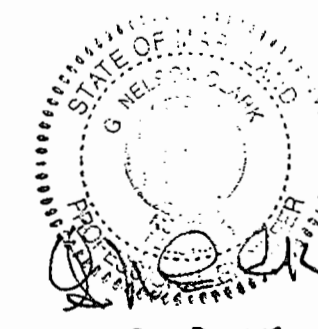
**OWNER / DEVELOPER**  
HOWARD RESEARCH AND DEVELOPMENT, CO.  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044

THE COLUMBIA ASSOCIATION  
10221 WINCOPIN CIRCLE, SUITE 100  
COLUMBIA, MARYLAND 21844-3410

SUBDIVISION NAME VILLAGE OF RIVER HILL		SECTION/AREA 4/1 PHASE 1	LOTS/PARCELS 87		
PLAT NO. 12693	GRID NO. 7	ZONE NT	TAX MAP NO. 35	ELECTION DIST. 5TH	CENSUS TRACT 605501
WATER CODE N/A		SEWER CODE N/A			

**CLARK · FINEFROCK & SACKETT, INC.**  
ENGINEERS · PLANNERS · SURVEYORS  
7135 MINSTREL WAY · COLUMBIA, MD 21045 · (410) 381-7500 BALT. · (301) 621-8100 WASH.

DESIGNED DAR	SITE DEVELOPMENT PLAN FOR TOT LOT 3  <b>VILLAGE OF RIVER HILL</b>  SECTION 4 AREA 1, PHASE 1 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
DRAWN ZAH		DRAWING 1 of 3
CHECKED DAR		JOB NO. 01-083
DATE 5-24-02		FILE NO. 01-083-x
FOR : THE COLUMBIA ASSOCIATION 10221 Wincopin Circle, Suite 100 Columbia, Maryland 21044 Phone: 410-381-0353		

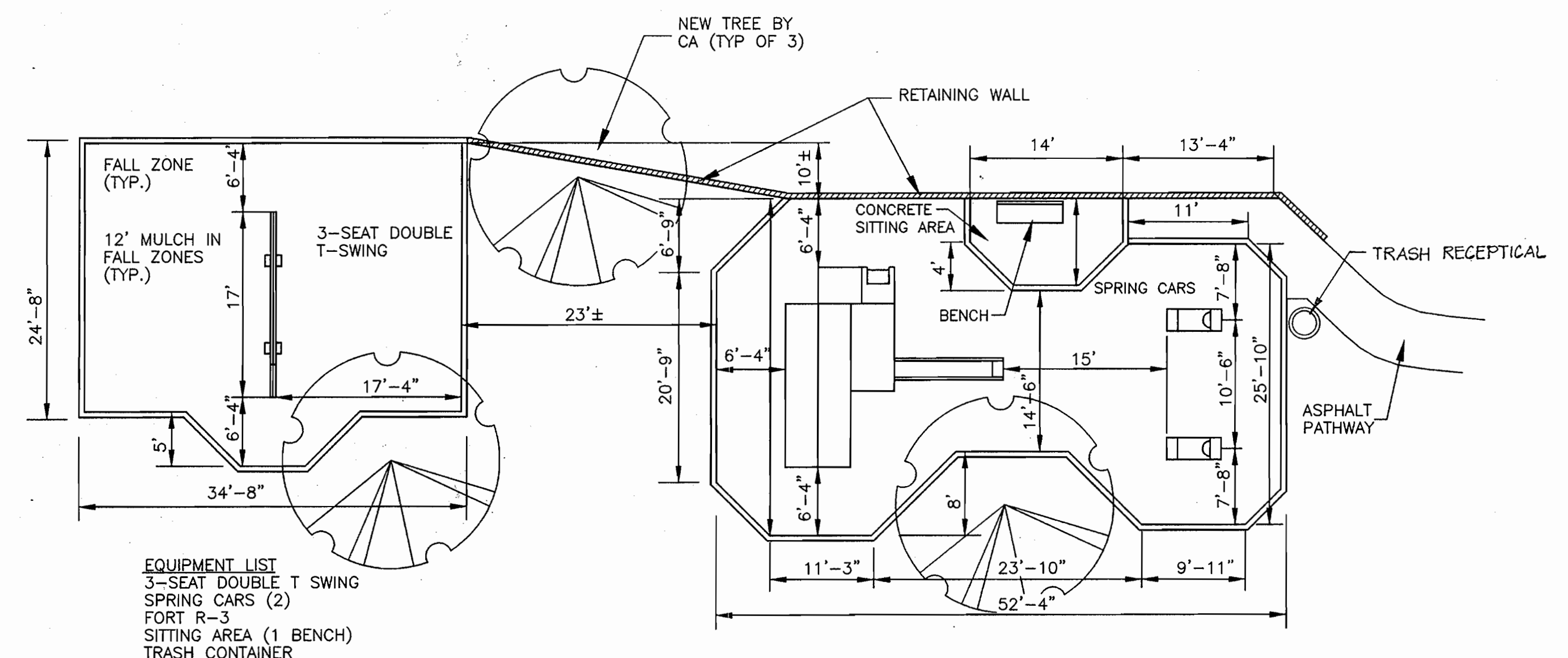
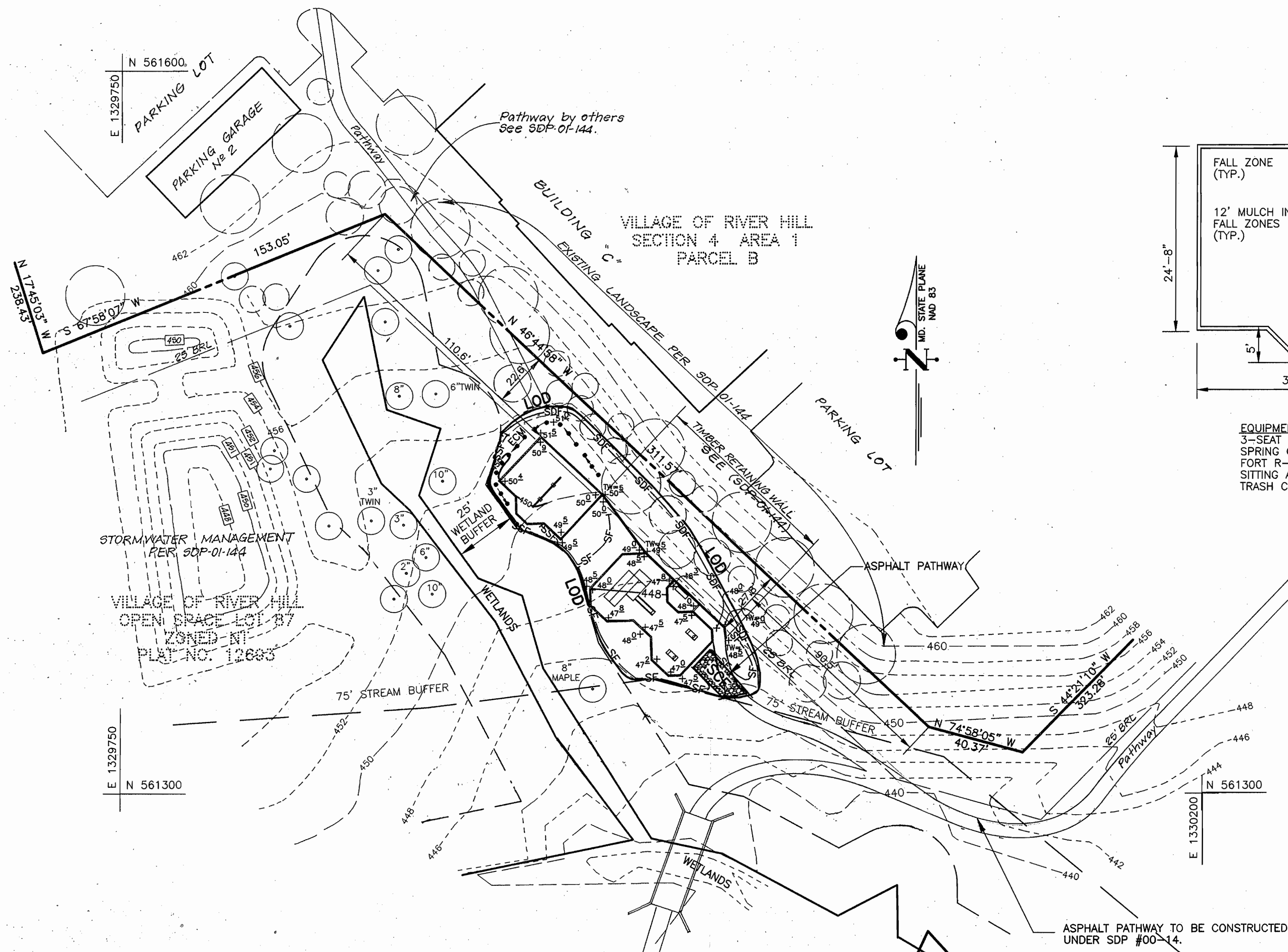


(7)F:/Drawings/vorh/tot-lot3

**APPROVED**  
PLANNING BOARD  
of HOWARD COUNTY  
DATE: 1-22-03  
*Sanders*

APPROVED: DEPARTMENT OF PLANNING & ZONING  
*[Signature]* 12/1/03  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*[Signature]* 12/2/03  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*[Signature]* 12/2/03  
DIRECTOR DATE

SDP.02.107



- EQUIPMENT LIST**  
 3-SEAT DOUBLE T SWING  
 SPRING CARS (2)  
 FORT R-3  
 SITTING AREA (1 BENCH)  
 TRASH CONTAINER

**DETAIL PLAN**  
 SCALE: 1"=10'

SITE ANALYSIS	
ZONE	NT OPEN SPACE
OPEN SPACE LOT #	87
TOTAL LOT AREA	14.97 AC.
DISTURBED AREA	0.16 AC.
IMPERVIOUS AREA	0
PERMEABLE AREA	0.11 AC.
AREA TO BE VEGETATIVELY STABILIZED	0.11 AC.
MULCHED AREA	0.05 AC.
TOTAL CUT	30 CY
TOTAL FILL	28 CY
TOTAL SPOIL/BORROW	2 CY

**PLAN**  
 SCALE: 1"=30'

**OWNER / DEVELOPER**  
 HOWARD RESEARCH AND DEVELOPMENT, CO.  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044

THE COLUMBIA ASSOCIATION  
 10221 WINCOPIN CIRCLE, SUITE 100  
 COLUMBIA, MARYLAND 21844-3410

SUBDIVISION NAME VILLAGE OF RIVER HILL		SECTION/AREA 4/1 PHASE 1		LOTS/PARCELS 87	
PLAT NO. 12693	GRID NO. 7	ZONE NT	TAX MAP NO. 35	ELECTION DIST. 5TH	CENSUS TRACT
WATER CODE N/A			SEWER CODE N/A		

**CLARK · FINEFROCK & SACKETT, INC.**  
 ENGINEERS · PLANNERS · SURVEYORS  
 7135 MINSTREL WAY · COLUMBIA, MD 21045 · (410) 381-7500 BALT. · (301) 621-8100 WASH.

DESIGNED DAR	SITE DEVELOPMENT PLAN FOR TOT LOT 3 <b>VILLAGE OF RIVER HILL</b>	SCALE AS SHOWN
DRAWN ZAH		DRAWING 2 of 3
CHECKED DAR	SECTION 4 AREA 1, PHASE 1 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 01-083
DATE 5-24-02	FOR: THE COLUMBIA ASSOCIATION 10221 Wincopin Circle, Suite 100 Columbia, Maryland 21044 Phone: 410-381-0383	FILE NO. 01-083-x

APPROVED: DEPARTMENT OF PLANNING & ZONING  
 [Signature] 12/1/03  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 12/2/02  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 12/3/02  
 DIRECTOR

**APPROVED**  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE 1/22/03  
 [Signature]

Reviewed for HOWARD S.C.D.  
 and meets Technical Requirements  
 [Signature] 1/24/03  
 U.S. Natural Resources Conservation Service

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

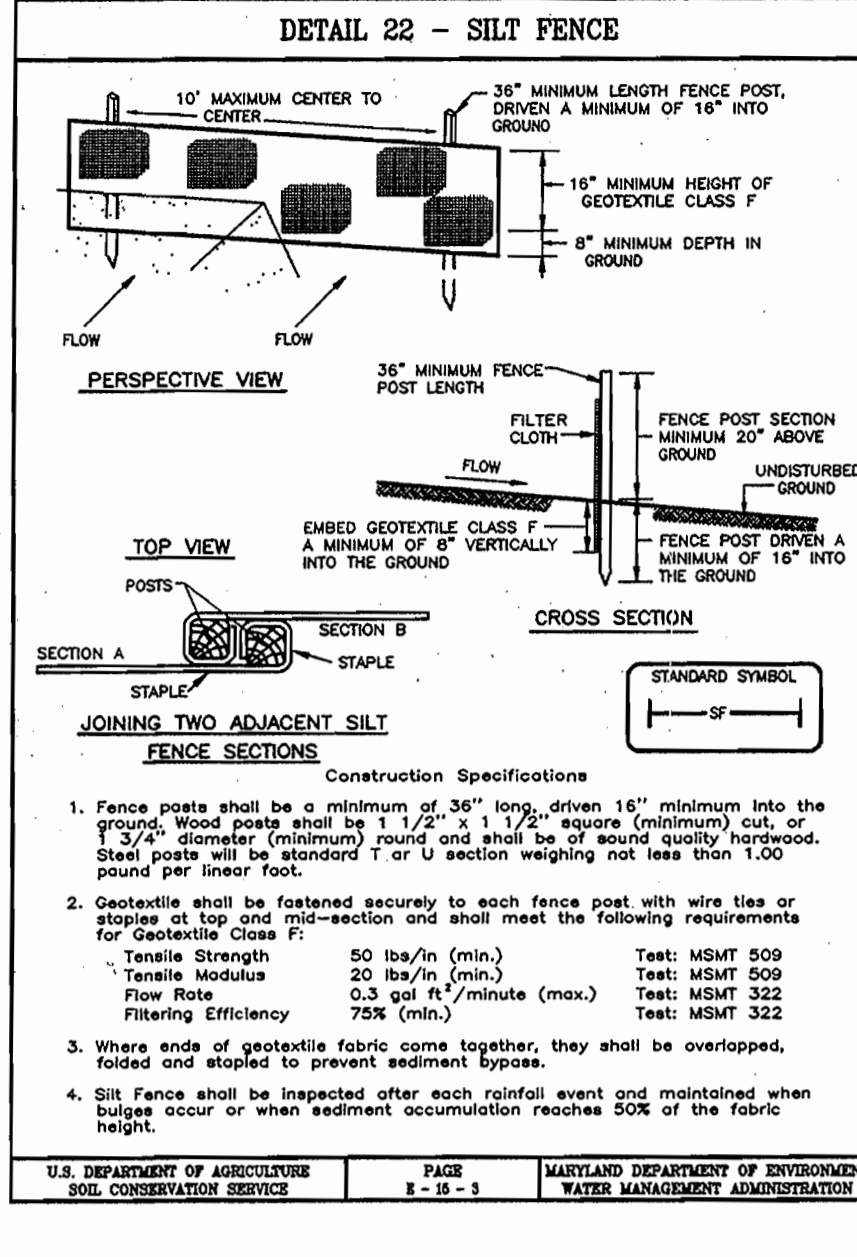
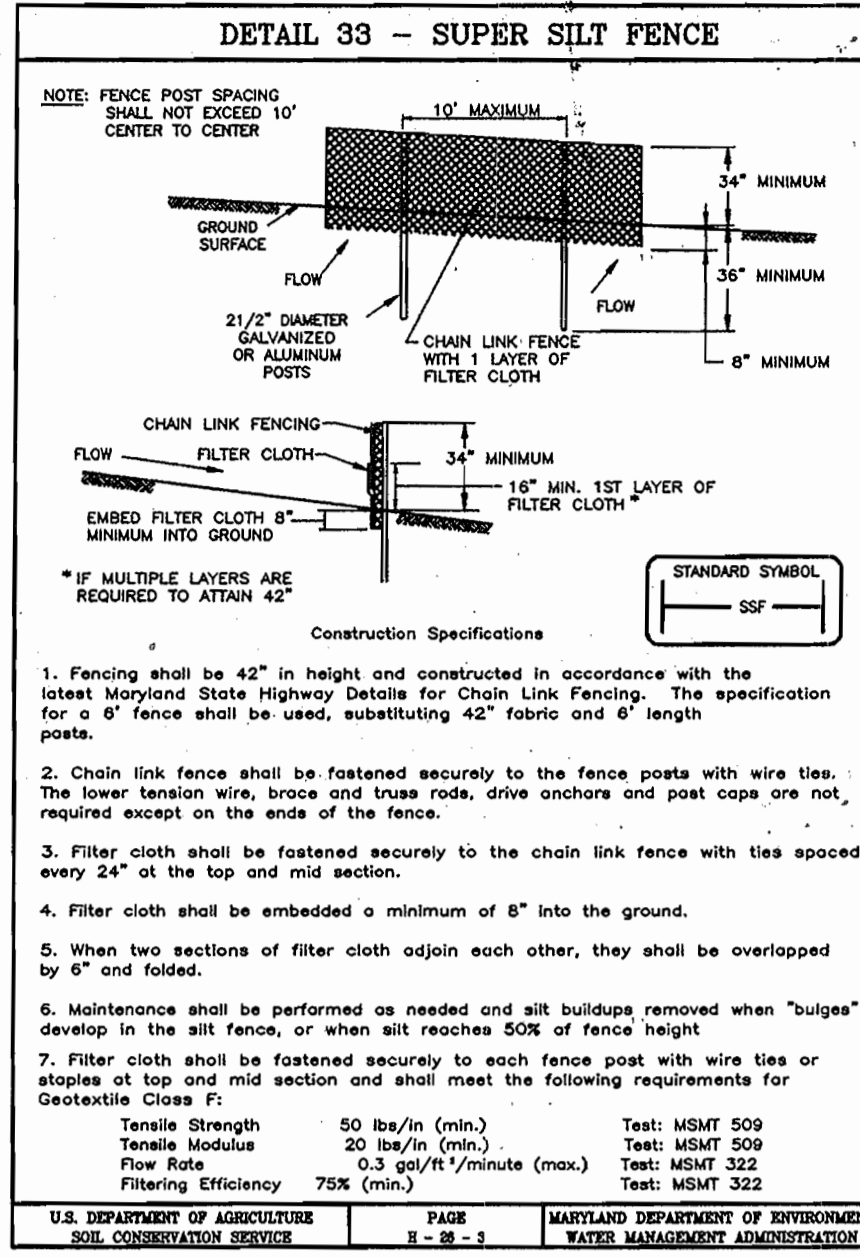
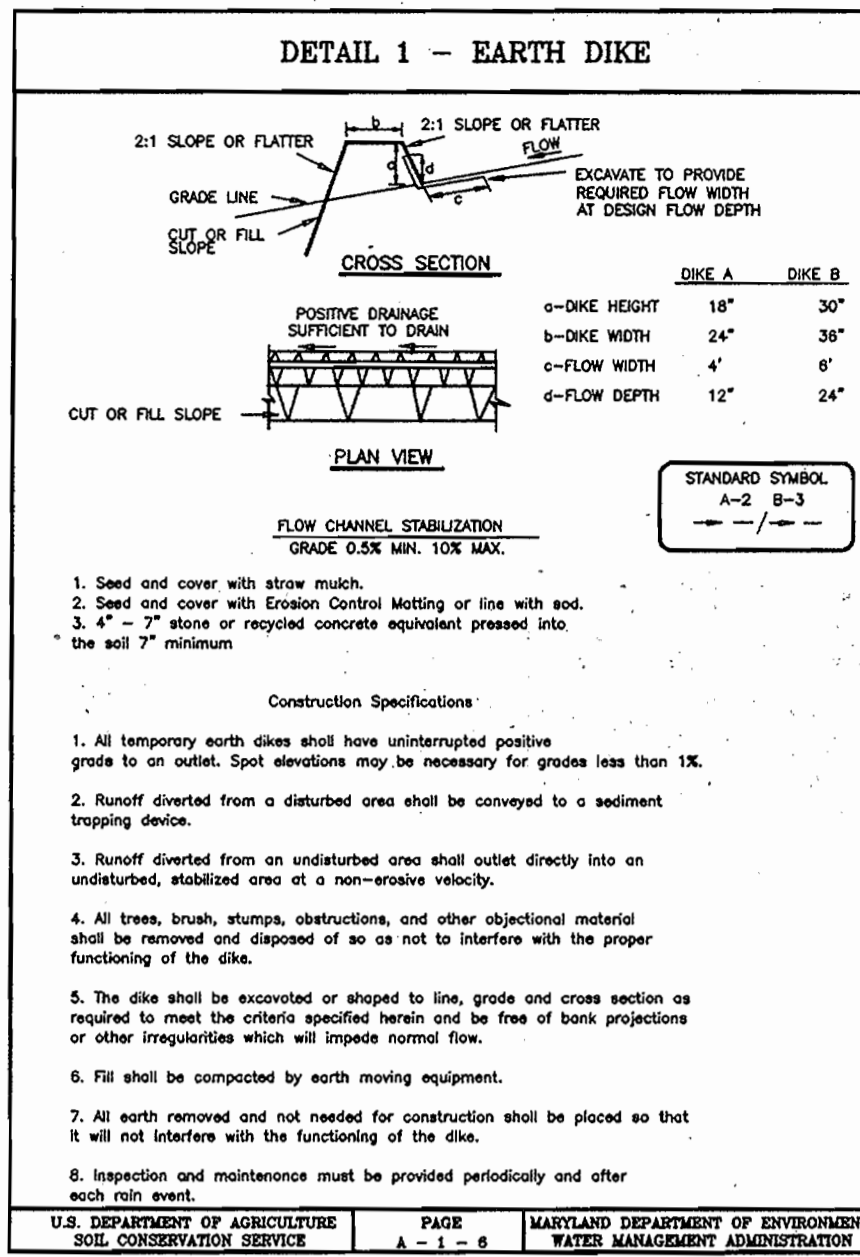
**DEVELOPER'S/BUILDER'S CERTIFICATE**  
 "I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a 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 or deemed necessary."  
 [Signature]  
 NAME

DATE 3/8/02

**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.  
 [Signature]  
 G. NELSON CLARK  
 DATE 3-8-02



(7)F:/Drawings/vorh/tot-lot3



21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

**Definition:** Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

**Purpose:** To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

**Conditions Where Practice Applies:**

- This practice is limited to areas having 2:1 or flatter slopes where:
  - The texture of the exposed subsoil/parent material is not adequate to produce vegetable growth.
  - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
  - The original soil to be vegetated contains material toxic to plant growth.
  - The soil is so acidic that treatment with limestone is not feasible.

**Construction and Material Specifications:**

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
  - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand, or other soil as recommended by an agronomist or a soil scientist and approved by the appropriate approval authority.
  - Topsoil shall be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
  - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (2000-4000 pounds per 1,000 square feet) prior to the placement of topsoil.

PERMANENT SEEDING NOTES

**APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER CONSTRUCTION WHEN A PERMANENT LOG-LIKE VEGETATIVE COVER IS NEEDED.**

**SEEDING PREPARATION:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**SOIL AMENDMENTS:** In lieu of soil test recommendations, use one of the following schedules:

- Preferential - 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 the time of seeding, apply 400 lbs. per acre 30-0-0 urea-form fertilizer (9 lbs./1000 sq.ft.).
- Acceptable - 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.

**SEEDING:** For periods March 1 thru April 30, or 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 creeping lovegrass. During the period of October 16 thru February 28, protect site by applying 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) use seed. 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 seedings.

**TEMPORARY SEEDING NOTES**

**SEEDING PREPARATION:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**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 1 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (3.2 lbs./1000 sq.ft.) and the period May 1 thru August 14, seed with 5 lbs. per acre of creeping lovegrass (07 lbs./1000 sq.ft.). For the period November 1 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 seed.

**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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.**

SEDIMENT AND EROSION CONTROL NOTES

**A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (3-1-1987).**

- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance, permanent or temporary stabilization shall be completed within:
  - 7 calendar days for perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1
  - 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 7. of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above, in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Temporary stabilization with, such temporary seeding and mulching (See 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.

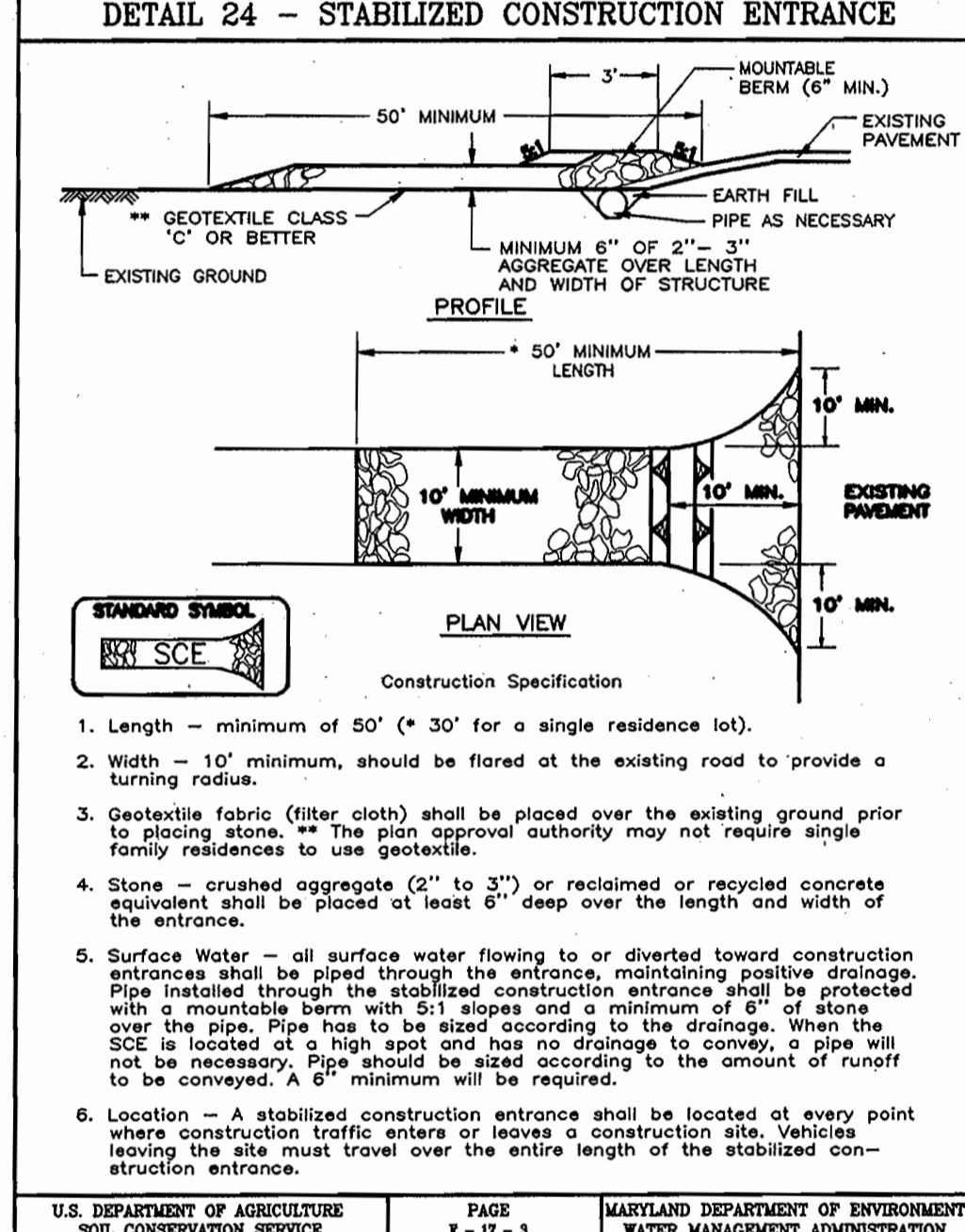
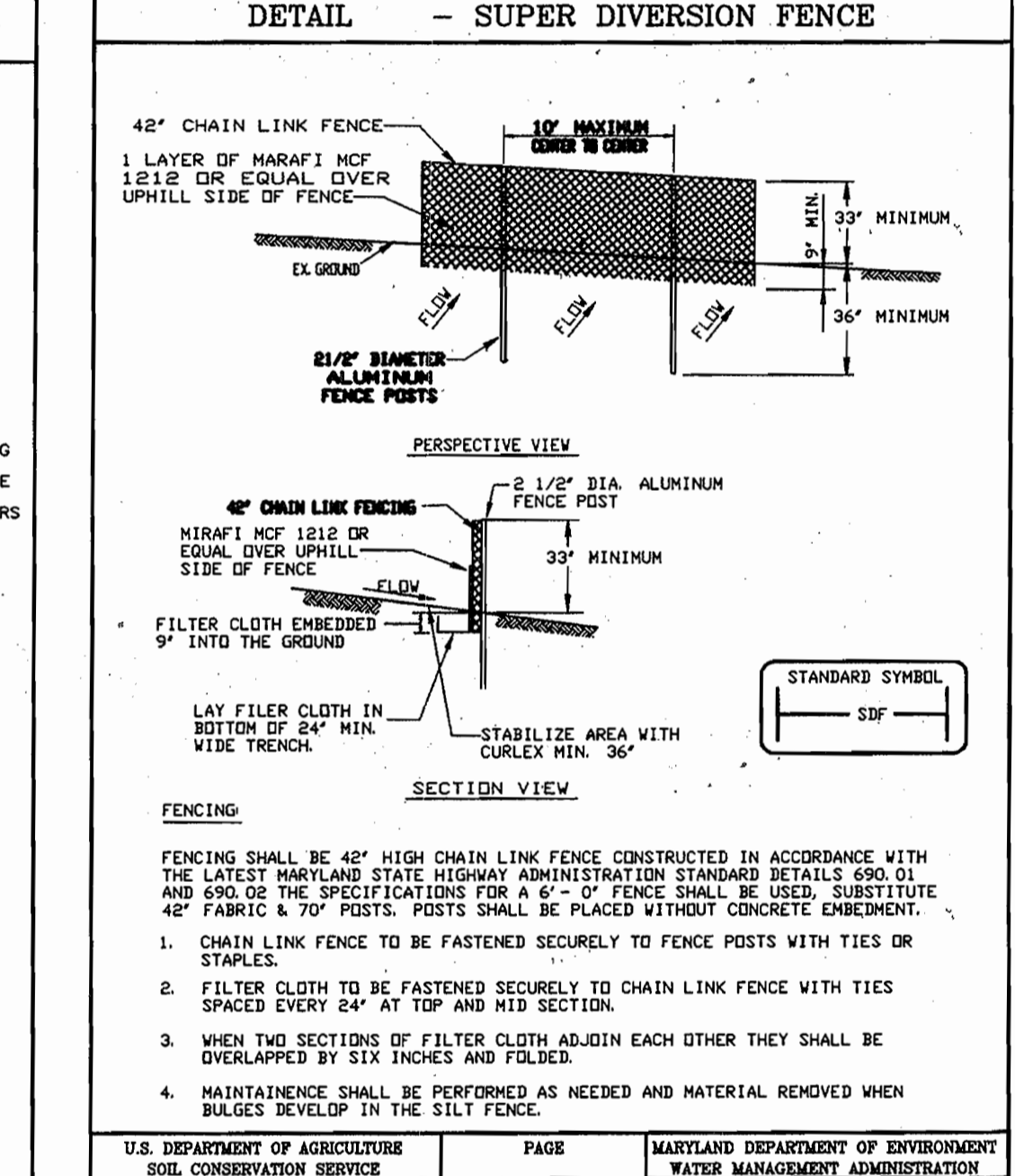
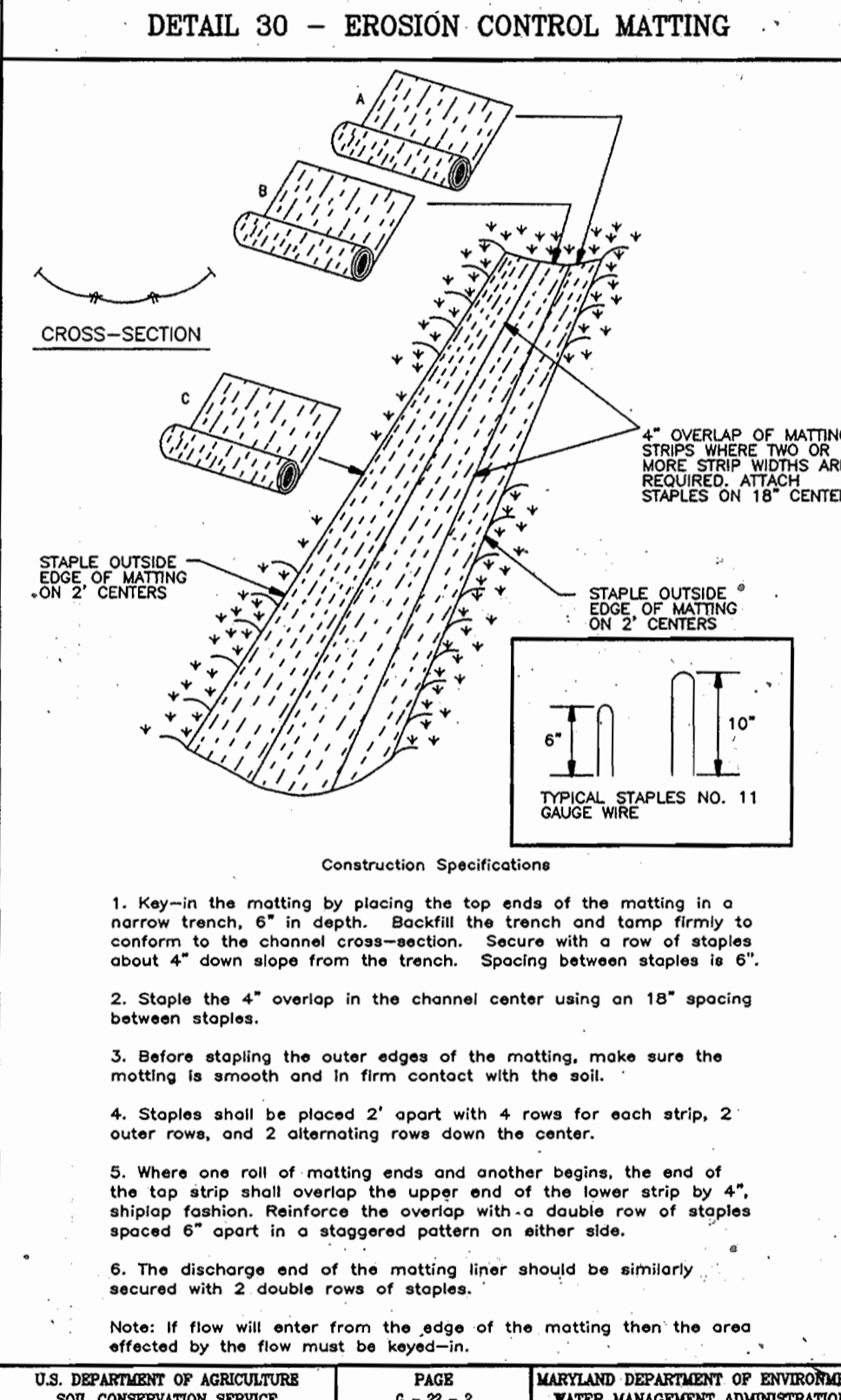
**SITE ANALYSIS:**

Total Area of Site:	0.16 Acres
Area Disturbed:	0.16 Acres
Area to be seeded:	0.11 Acres
Total Cost:	\$0
Total Fertilizer:	\$8
Off-site Wash/Borrow Area Location:	

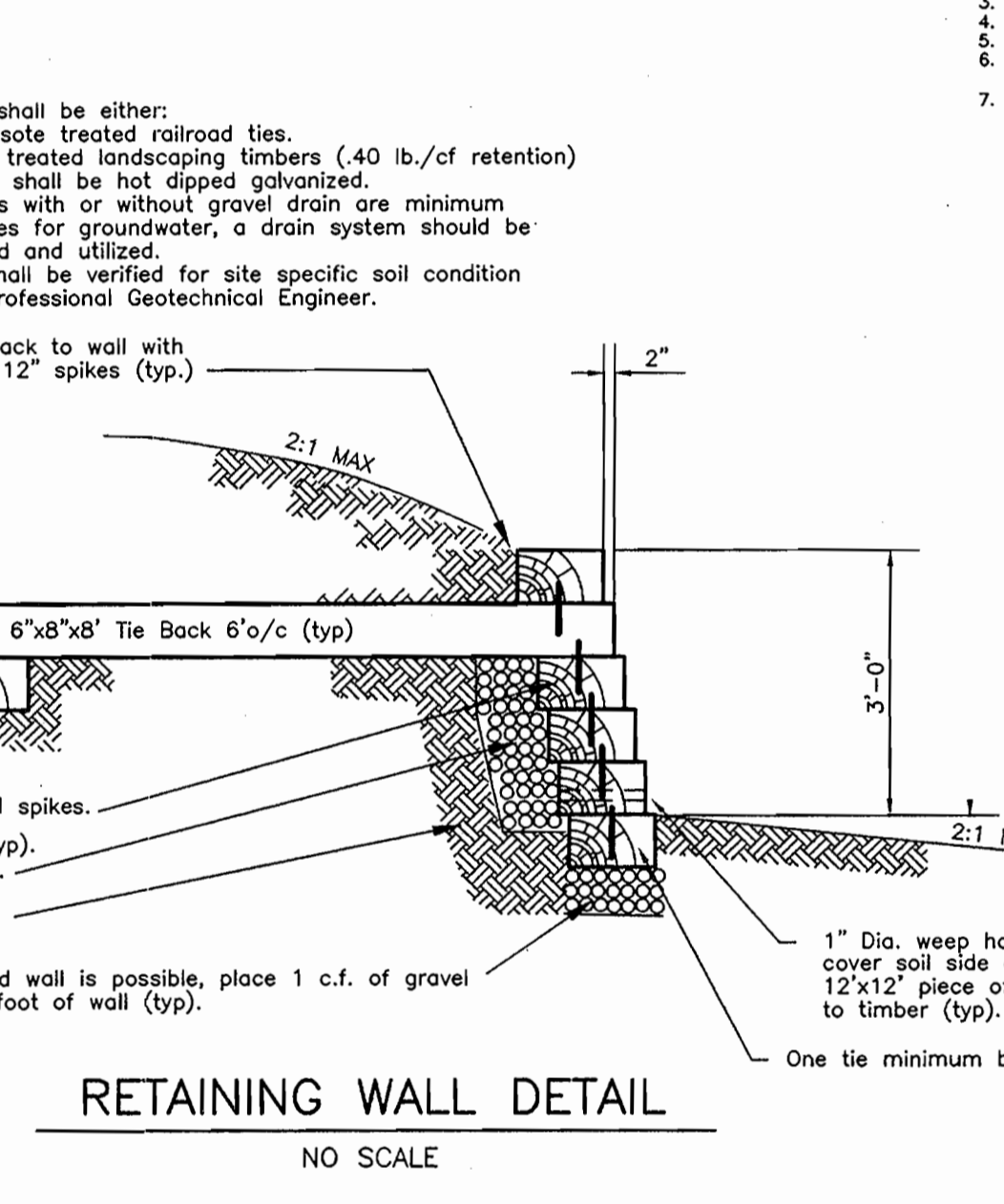
**Additional sediment control must be provided, if deemed necessary by the Howard County DPM Sediment Control Inspector.**

- On 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.
- Trenches for the construction of utilities shall be backfilled and stabilized within one working day, or is limited to three pipe lengths.
- The total amount of earth dike = 157 LF
- The total amount of super silt fence = 82 LF
- The total amount of super diversion fence = 172 LF

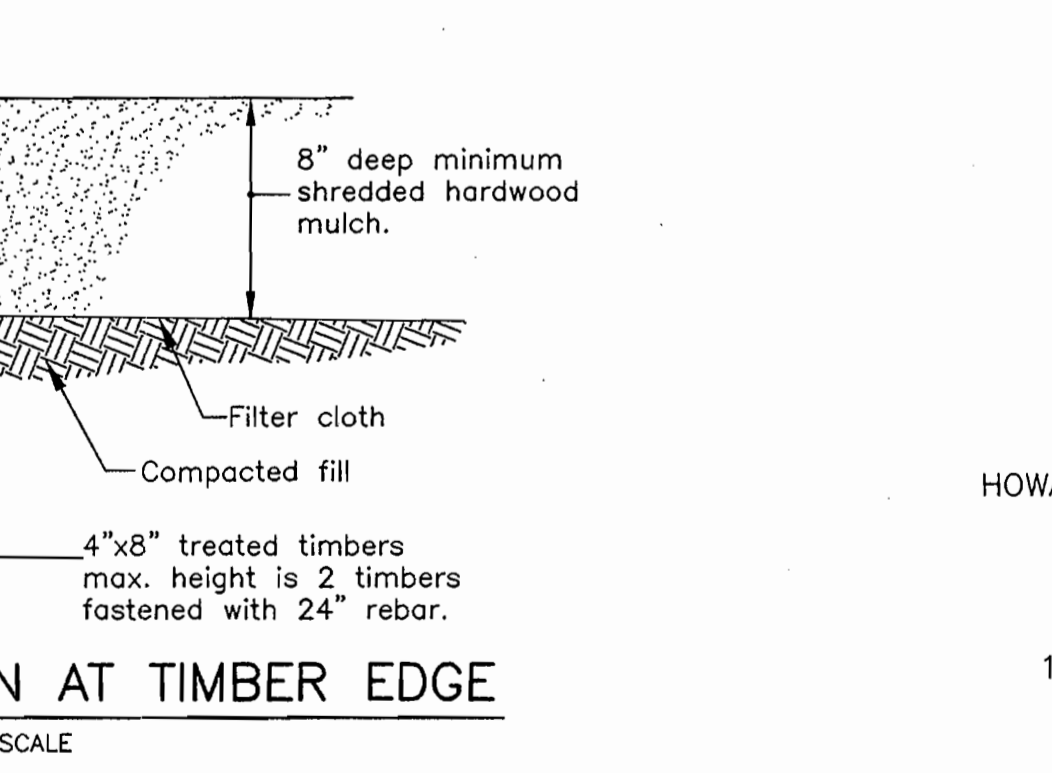
**It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.**



RETAINING WALL DETAIL



TYPICAL SECTION AT TIMBER EDGE



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 2-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 8-31-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 7-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**APPROVED DEPARTMENT OF PLANNING & ZONING**

CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 12/1/03 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 12/2/02 DATE

DIRECTOR *[Signature]* 12/2/02 DATE

**APPROVED PLANNING BOARD OF HOWARD COUNTY**

DATE 1-22-03 *[Signature]*

Reviewed for HOWARD S.C.D. and meets Technical Requirements *[Signature]* 1/24/03

**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]* 3/5/02 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.

*[Signature]* 3-8-02 DATE

G. NELSON OLK

**OWNER / DEVELOPER**  
HOWARD RESEARCH AND DEVELOPMENT, CO.  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044

**THE COLUMBIA ASSOCIATION**  
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DESIGNED PAC	SCALE 1" = 30'
DRAWN ZAH	DRAWING 3 of 3
CHECKED PGC	JOB NO. 00-083
DATE 5-24-02	FILE NO. 01-083-X

SEDIMENT CONTROL DETAILS  
TOT LOT 3  
**VILLAGE OF RIVER HILL**  
SECTION 4, AREA 1, AREA 4 AND AREA 5  
FIFTH (5th) ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

FOR: THE COLUMBIA ASSOCIATION  
10221 Wincopin Circle, Suite 100  
Columbia, Maryland 21044  
Phone: 410-381-0383

(#7)F:/drawings/vorh/lot-103

DP.02.107