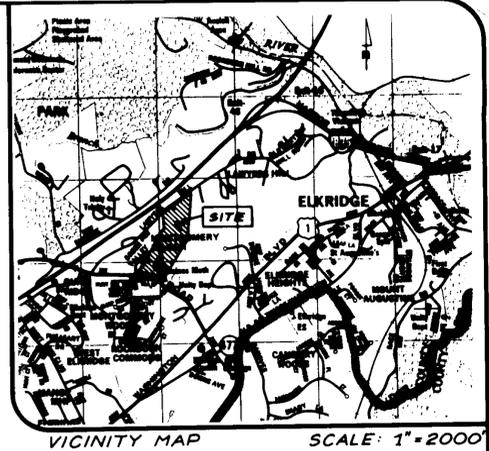


**SEQUENCE OF CONSTRUCTION**

1. PROVIDE SILT FENCE AND GRADE SWALE AS PER THE PLAN - 1 DAY
2. LAY SOIL STABILIZATION MATTING - 1 DAY
3. SEED AND MULCH GRADED AREA IN ACCORDANCE WITH THE HSCD "PERMANENT SEEDING NOTES" JUTE MATTING TO BE USED - 1 DAY



VICINITY MAP SCALE: 1" = 2000'

**GENERAL NOTES:**

1. All construction shall be in accordance with the latest standards and specifications of Howard County, Design Manual, Volume IV.
2. The Contractor shall notify the Department of Public Works/ Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
3. The Contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
4. Project Background:  
Location: Tax Map 38 Parcel 20  
Zoning: R-20  
Previous DP2 file: SDP-91-27
5. Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
6. All plan dimensions are to the face of curb unless otherwise noted.
7. Field surveys indicating contour intervals of two (2) feet were completed by Mildenberg Associates, Inc. in September 1994.
8. Horizontal and vertical datum are based on project datum.
9. No light poles and/or fixtures are required.
10. Water and sewer extensions are not required for this project.
11. No Stormwater Management is required for this site.
12. No floodplain or wetlands exist within the project limits.
13. No traffic studies, noise studies or geotechnical reports are required.
14. Location of existing utilities were determined from field surveys and available records.
15. The purpose of this plan is to provide a drainage swale at the northeast corner of the site.
16. Area to be disturbed = 0.2 Ac. no waste or borrow is proposed.  
C.Y. CUT = 90  
C.Y. FILL = 90

**NOTE:**  
ALL GRADED AREAS ARE TO BE PERMANENTLY SEEDED AND MULCHED WITHIN 2 WORKING DAYS OF THEIR DISTURBANCE

D.A.  
A = 2.37 AC.  
R<sub>10</sub> = 0.9  
T<sub>e</sub> = 0.1 Hr.  
C<sub>10</sub> = 3 CFS  
Q<sub>10</sub> = 8 CFS  
Q<sub>50</sub> = 14 CFS  
S<sub>max</sub> = 50%  
S<sub>min</sub> = 15%  
S<sub>max</sub> = 0.33' (10 YEAR)  
V<sub>max</sub> = 4 G.F.F.S.

**SECTION B**  
SCALE 1" = 3'  
STA 0+00 TO 2+30

**SECTION A**  
SCALE 1" = 3'  
STA 2+30 TO 3+25

**SECTION C**  
SCALE 1" = 3'  
LEVEL CONTROL SECTION

*Ref. [Signature]*  
Professional Engineer  
No. 4

APPROVED:  
FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
Director: [Signature] DATE: 11/7/94  
Chief, Bureau of Engineering: [Signature] DATE: 11/6/94  
APPROVED:  
HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
Director: [Signature] DATE: 11/10/94  
Chief, Division of Land Development and Research: [Signature] DATE: 11/9/94  
APPROVED:  
FOR PUBLIC WATER AND SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
County Health Officer: [Signature] DATE: [ ]  
OWNER AND DEVELOPER:  
BOARD OF EDUCATION OF HOWARD COUNTY  
10910 ROUTE 108  
ELLCOTT CITY, MD 21043

Project	94018	date	11-30
Illustration	M.P.	engineering	J.H.
scale	1" = 30'	approval	

no.	0	description	REVISIONS	date
1		REVISED PER DPW COMMENTS OF OCT 19, 1994		10-19-94
		SUBMITTED		

**NEW ELKRIDGE ELEMENTARY SCHOOL**  
FIRST ELECTION DISTRICT  
CENSUS TRACT 6012, TAX MAP 38, PARCEL 20  
HOWARD COUNTY, MARYLAND  
**SITE DEVELOPMENT PLAN (DRAINAGE SWALE)**

**MILDENBERG ASSOCIATES, INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 987-0286 Ext. (301) 621-5521 Wash. (410) 397-0286 Fax

SDP-98-30

HOWARD SOIL CONSERVATION DISTRICT  
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, 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./1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disk 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 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

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

Maintenance - Inspect all seeding areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed 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, for 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 15 thru October 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 16 thru November 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 weed free 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 feet or higher, use 348 gal per acre (8 gal./1000 sq.ft.) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

STANDARD SEDIMENT CONTROL NOTES

- 1) 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, (313-1855).
- 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 most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
- 3) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (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:	50.0± Acres
Area Disturbed:	0.20 Acres
Area to be roofed or paved:	0 Acres
Area to be vegetatively stabilized:	0.20 Acres
Total Cut:	90 Cu. Yds.
Total Fill:	90 Cu. Yds.
Total waste/borrow area location:	NA
- 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 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) Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

DEVELOPER & ENGINEER CERTIFICATES

( ) By The Developer:

"I/We certify that all development and/or construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by The Howard Soil Conservation District."

*Cathleen Conley Young* Date 10/20/94  
Signature of Developer  
**CATHLEEN CONLEY YOUNG**  
Printed Name of Developer

( ) By The Engineer:

"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

*Bill Hunt* Date 10-20-94  
Signature of Engineer  
**R. JACOB HIKMAT**  
Printed Name of Engineer

( ) Reviewed for HOWARD S.C.D. and meets Technical Requirements

*Patricia Engle* Date 10/20/94  
U.S. Soil Conservation Service

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

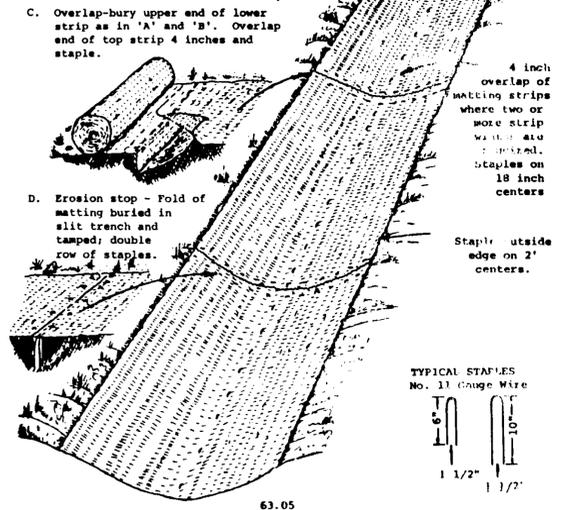
*Howard S.C.D.* Date 10/20/94

Maryland SCS/WRA

April 1983

DETAIL FOR STABILIZING WATERWAYS WITH JUTE OR EXCELSION MATTINGS

- Bury the top end of the matting strips in a trench 6 inches or more in depth.
- Tamp the trench full of soil. Secure with row of staples, 6 inch spacing, 4 inches down from the trench.



APPROVED:  
FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*James J. Lew* 11/6/94  
DIRECTOR DATE  
*William J. ...* 11/6/94  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED:  
HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
*James J. Lew* 11/10/94  
DIRECTOR DATE  
*Anna ...* 11/9/94  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED:  
FOR PUBLIC WATER AND SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT.  
\_\_\_\_\_  
COUNTY HEALTH OFFICER DATE

OWNER AND DEVELOPER:  
BOARD OF EDUCATION OF HOWARD COUNTY  
10910 ROUTE 108  
ELLICOTT CITY, MD 21043

date	SEPT. 1984
project	94018
illustration	MP
scale	JH
approval	JH

date	
description	
revisions	
no.	
0	SUBMITTED

NEW ELKRIDGE ELEMENTARY SCHOOL  
FIRST ELECTION DISTRICT  
CENSUS TRACT 6012, TAX MAP - 38, PARCEL 20  
HOWARD COUNTY, MARYLAND  
SEDIMENT CONTROL NOTES

MILDENBERG ASSOCIATES, INC.  
Planners Surveyors Engineers  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0286 Ext. (301) 621-5327 Wash. (410) 997-0288 Fax.