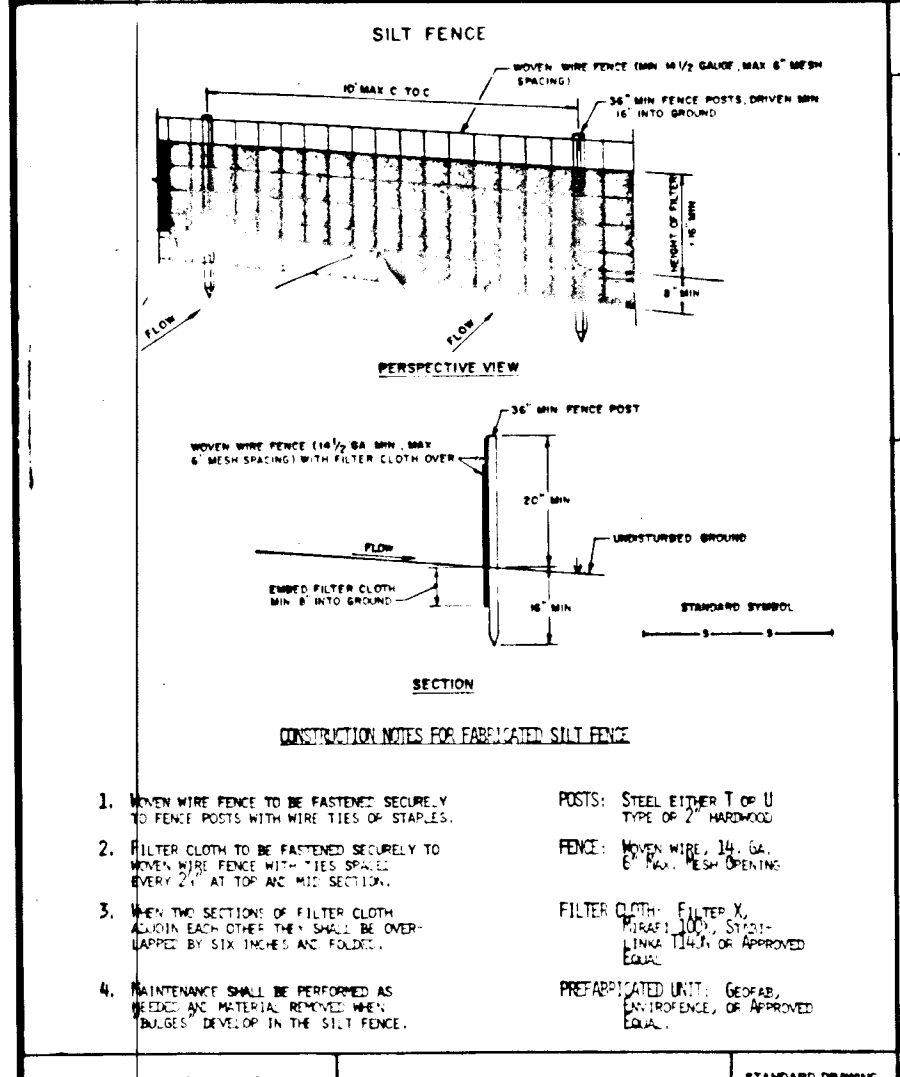


HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
Approved: *[Signature]* DATE: 8/28/87  
Chief, Bureau of Eng.

CLOSED SECTION ROADWAY WITHOUT CONCRETE SIDEWALK

RIPRAP & OUTFALL DETAILS FOR S-1

NOT TO SCALE

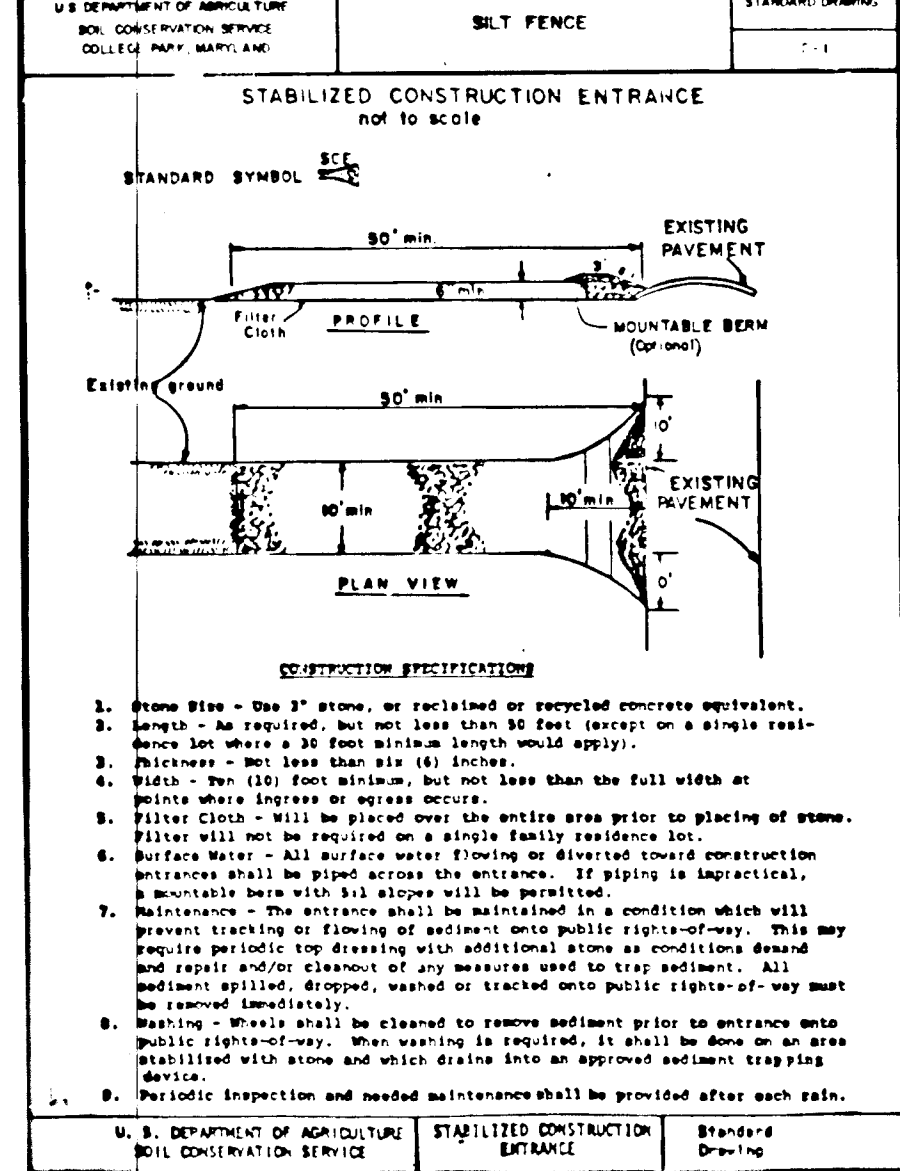


STRUCTURE SCHEDULE

NO.	TYPE	INVERT IN	INVERT OUT	TOP ELEVATION	REMARKS
S-1	Ho. Co. STD Metal End Section	362.85	362.40	366.90'	See Ho. Co. STD. Detail SD-5.61
S-2	Ho. Co. STD. Metal End Section	366.35	365.90	370.85	See Ho. Co. STD. Detail SD-5.61

Sequence of Construction

1. Obtain Grading Permit
2. Install SCE. One Day
3. Install silt fence. One Day
4. Clear & grub and grade for road. Stabilize areas not to be paved. One Week
5. Install paving. Two Days
6. Stabilize any remaining disturbed areas. One Day
7. With approval of sediment control inspector remove all sediment control devices. One Day



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*James M. Helman* 9/4/87 DATE

U.S. SOIL CONSERVATION SERVICE

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

*Stephen L. Huber* 9/4/87

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Michael H. [Signature]* 9-2-87 DATE

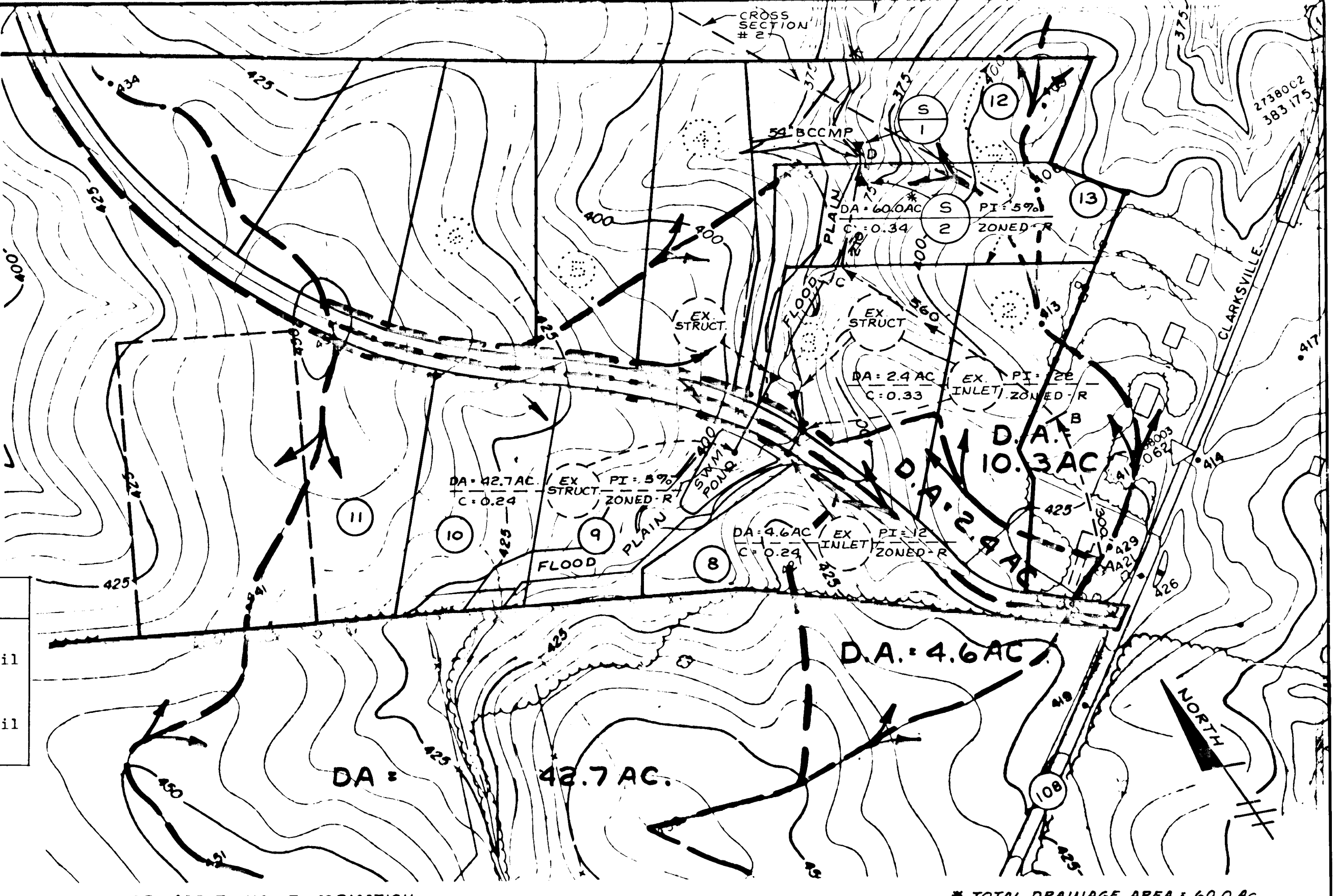
CHIEF, LAND DEVELOPMENT DIVISION

*Charles W. Weiland* 9/18/87 DATE

CHIEF, BUREAU OF HIGHWAYS

*Kevin E. [Signature]* 9-16-87 DATE

CHIEF, BUREAU OF ENGINEERING

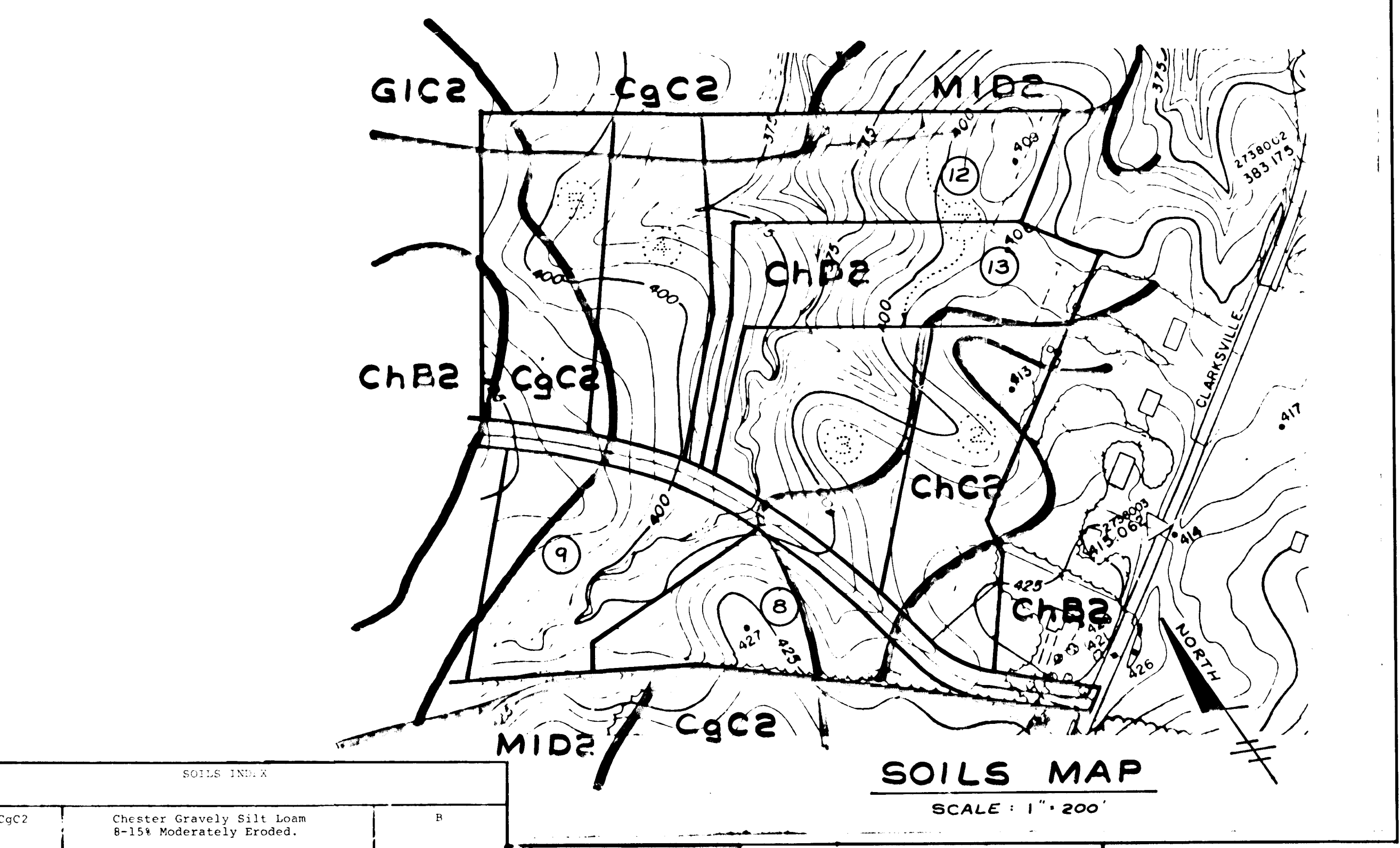


FOR ADDITIONAL INFORMATION REFER TO DRAINAGE AREA MAP Tc-86-137.

DRAINAGE AREA MAP

SCALE: 1" = 200'

\* TOTAL DRAINAGE AREA = 60.0 AC  
DRAINAGE AREA TO SWAMP POND = 42.7 AC  
DRAINAGE SUBAREA TO CULVERT = 17.3 AC  
60.0 AC



SOILS INDEX

CgC2	Chester Gravely Silt Loam 8-15% Moderately Eroded.	B
ChB2	Chester Silt Loam, 3-8% Moderately Eroded.	B
ChC2	Chester Silt Loam, 8-15% Moderately Eroded.	B
ChD2	Chester Silt Loam, 15-25% Moderately Eroded.	B
GIC2	Glenelg Loam, 8-15% Severely Eroded.	B
MID2	Manor Loam, 15-25% Severely Eroded.	B

OWNER/DEVELOPER

Newburn Development Corporation  
5570 Sterrett Place, Suite 201  
Columbia, Maryland 21044  
Phone: 997-3815  
Wash: 596-3877

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:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 400 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Narrow 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).
- 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. Narrow 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 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 and. 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 (30 to 90 lbs/1000 sq ft) of untreated 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 ft 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 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 (30 to 90 lbs/1000 sq ft) of untreated 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT 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 SPECIFICATIONS 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 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (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: 6.47 Acres  
Area Disturbed: 0.35 Acres  
Area to be roofed or paved: N/A Acres  
Area to be vegetatively stabilized: 0.35 Acres  
Total Cut: N/A Cu. yds  
Total Fill: 1944.46 Cu. yds  
Offsite waste/borrow area location: N/A
- 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 controls must be provided, if deemed necessary by the Howard County DPW 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.

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING ADMINISTRATION

*Louis F. [Signature]* 9-22-87 DATE

OWNER'S/DEVELOPER'S CERTIFICATION

"I/we certify that all development and construction will be done according to this plan, and that any 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 on-site inspection by the Howard Soil Conservation District."

Signature: *John C. [Signature]* Date: 9-2-87  
Name: JOHN C. PALMORA Title: PRESIDENT Phone No. 596-3877  
Firm: NEWBURN DEV. CORP. Complete Address: 5570 STERRETT PLACE COLUMBIA, MD 21044

ENGINEER'S CERTIFICATE

"I 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 Conservat on District."

*John C. [Signature]* 3/3/87 DATE  
JOHN C. PALMORA  
Registered Professional Engineer # 8978

KIDDE CONSULTANTS, INC.  
ENGINEERS • PLANNERS • SURVEYORS

1100 WEST STREET / SUITE 100 / LAUREL, MD 20707  
(Wash) (301) 953-1821 / 792-8086 (Balt)

CHAPEL WOODS  
LOTS 12 & 13  
SECTION 2 AREA 1  
TAX MAP 29 PART OF PARCEL 41  
5TH ELECTION DISTRICT HOWARD CO. MD

MWG	2	FEB. 1987	NUMBER
MSS	2	AS SHOWN	1685028
MSS			
DCW			