

WATER & PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: 3-5-90
Date

APPROVED: 4-2-90
Date

APPROVED: 3-1-90
Date

APPROVED: 2-28-90
Date

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 County Conservation District."

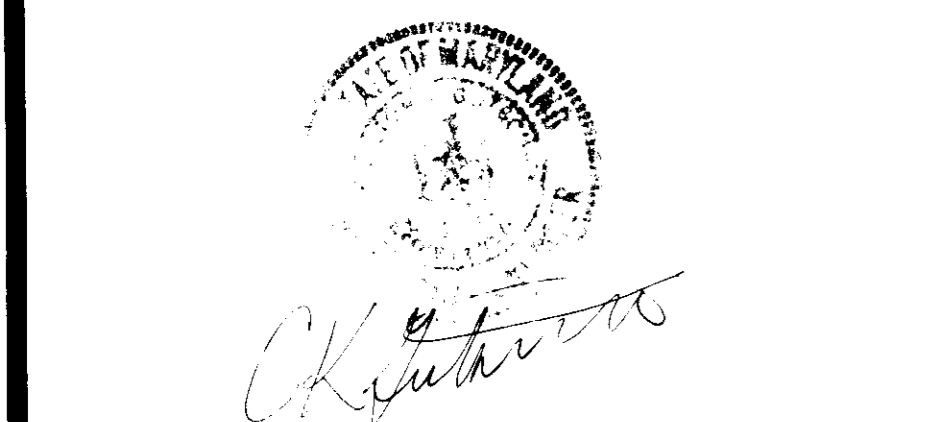
CK Fulton 1-6-89
Date

"I 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." F-430 AUTHORIZED PERSON ON SITE INSPECTION BY H.C.D.

Bernard Klein 1/6/89
Signature of Developer/Builder Date

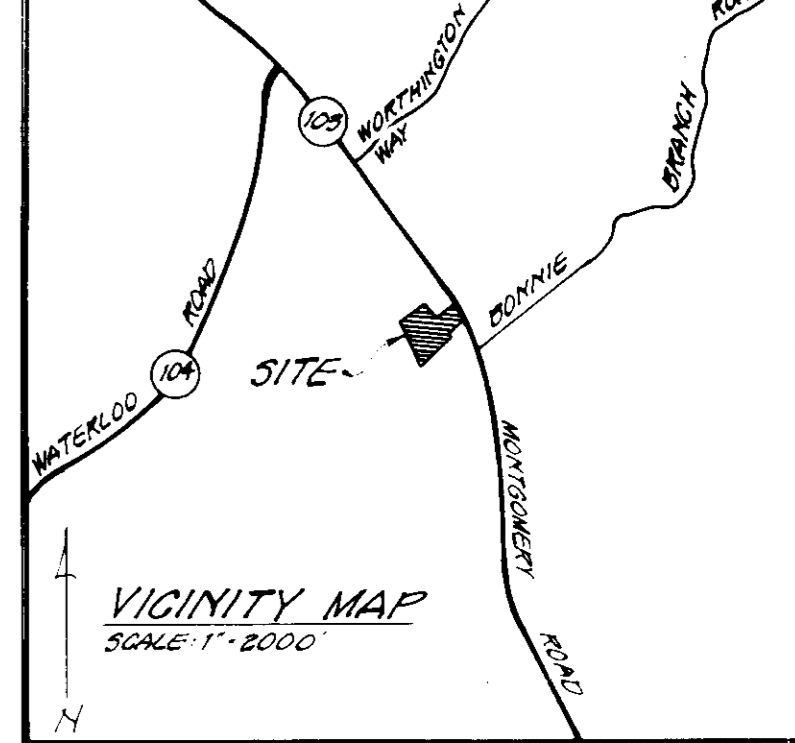
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

Match Lines



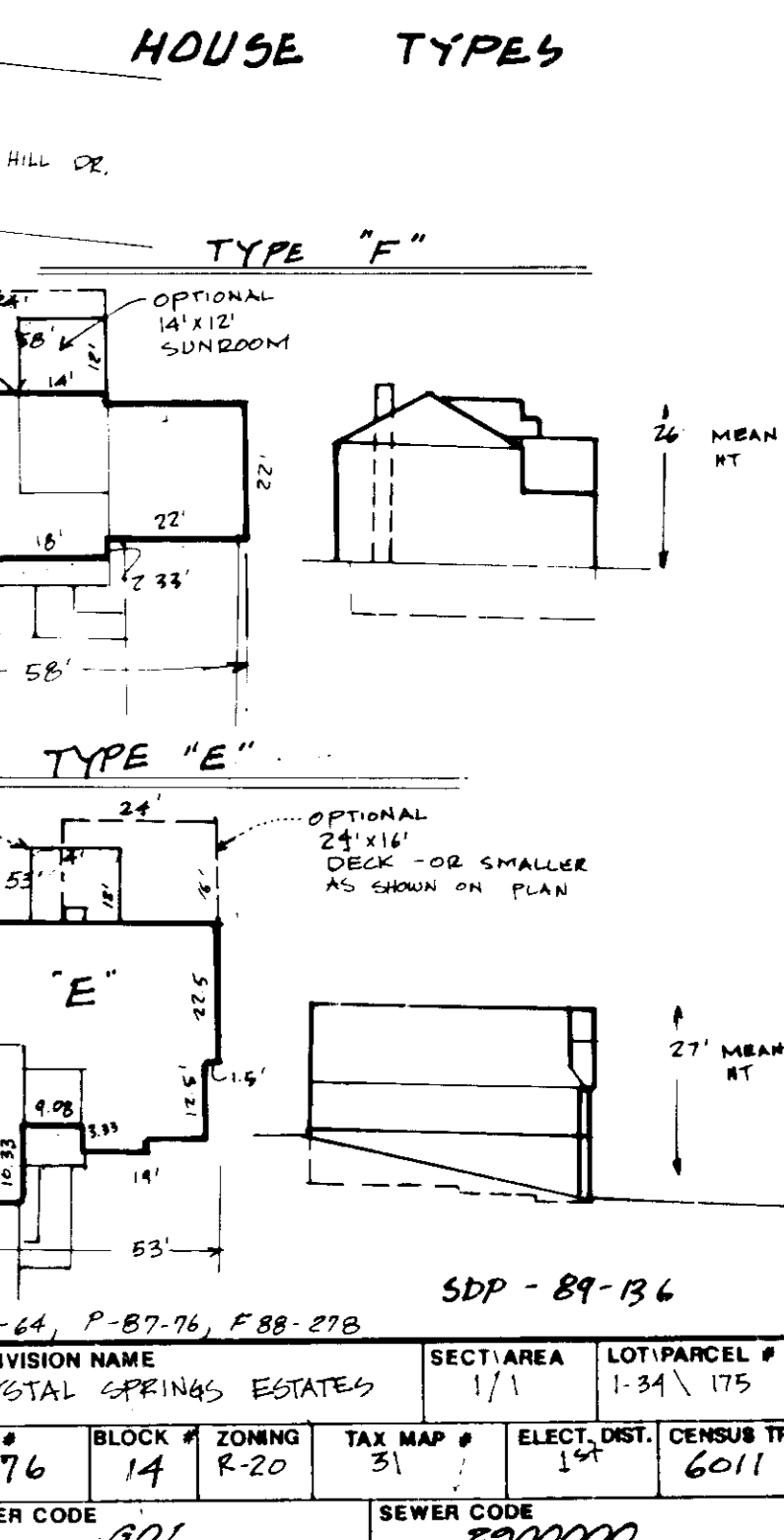
GENERAL NOTES & SITE ANALYSIS

- TOTAL AREA OF SITE (SECTION I) = 15.78 AC.
- LAND USE IS ZONED R-20
- TOTAL NUMBER OF LOTS = 34
- ALL ROADS ARE PUBLIC
- SITE FOUND ON TAX MAP 31, PARCEL #175
- SEE PREVIOUS OP-2 FILE NOS: 50764, 50774 AND F-88-278
- 5' W.M. TO BEING PROVIDED UNDER FINAL PLAN F-88-278
- THE WETLAND AND STREAM BUFFERS INDICATED ON THIS PLAN DO NOT PREVENT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON ANY LOT. THEY DO PROHIBIT SUBSEQUENT CLEARING, GRADING, OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENTIAL LANDSCAPING, & UTILITIES IS PERMITTED.
- MAINTENANCE DELIBERATION FOR USE IN COMMON ACCESS AREAS (LOTS 22 & 23) ARE RECORDED IN LIBER 2072 FOLIO 558



ADDRESS CHART

LOT NO	STREET ADDRESS
1	5102 CRYSTAL VIEW COURT
2	5106 " " " "
3	5110 " " " "
4	5111 " " " "
5	5107 " " " "
6	5103 " " " "
7	5110 CRYSTAL SPRINGS DRIVE
8	5114 " " " "
9	5118 " " " "
10	5122 " " " "
11	5126 " " " "
12	5130 " " " "
13	5134 " " " "
14	5138 " " " "
15	5142 " " " "
16	5155 " " " "
17	5151 " " " "
18	5149 " " " "
19	5143 " " " "
20	5139 " " " "
21	5135 " " " "
22	5131 " " " "
23	5127 " " " "
24	5123 " " " "
25	5100 LITTLE CREEK DRIVE
26	5104 " " " "
27	5108 " " " "
28	5112 " " " "
29	5105 " " " "
30	5115 CRYSTAL SPRINGS DRIVE
31	5109 " " " "
32	5105 " " " "
33	5101 " " " "
34	OPEN SPACE LOT



GLW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD 20886
TELEPHONE: (301) 421-4024

DATE	REVISION	BY	APP'R.
3-3-84	REVISED GRADING LOTS 2,3,4	JK	MBT
10-25-82	REVISED LOTS 1(A), 2(A) & 3(A)	JK	MBT
7-12-82	REVISED LOT 8(A)	JK	MBT
6-14-82	REVISED LOTS 5(A), 7(A), 13(A)	JK	MBT
	REVISION		

PREPARED FOR:
BERTON CONSTRUCTION CO.
610 EXECUTIVE BLVD. - SUITE 1040
ROCKVILLE, MD 20852
(301) 772-2450
attn: BERNARD KLEIN

SITE DEVELOPMENT PLAN
CRYSTAL SPRINGS ESTATES
SECTION ONE
HOWARD COUNTY, MARYLAND

SCALE: 1"=30'	ZONING: R-20	G.L.W. FILE NO.: 88-008
DATE: MARCH 1984	TAX MAP NO.: 31	SHEET: 1 OF 3

SDP 89-136

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 Date: 3-5-90
 APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Date: 3-1-90

DATE	REVISION
3-3-94	REVISED GRADING LOTS 23 & 24 - HK

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 Conservation District.
 C.K. Garton
 1-6-89
 Date

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

DEVELOPER'S/BUILDER'S CERTIFICATE
 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 site inspection by H.S.C.D.
 Bernard Klein
 1/6/89
 Date

Revised for HOWARD S.C.D. and technical requirements.
 1-19-90
 Date



GLW GUTSCHICK LITTLE & WEBER, P.A.
 ENGINEERS, PLANNERS, SURVEYORS
 3908 NATIONAL DRIVE, SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD 20886
 TELEPHONE: (301) 421-4024

DATE	REVISION	BY	APPR.
10-22-82	RESITE LOTS 23 (A) & 24 (A) - HK	HK	
5-11-82	RESITE LOTS 21 (A), 17 (A), 21 (A) & 25 (A)	HK	
1-8-82	RESITE LOTS 10, 11, 16, 17, 22 AND 23	HK	
5-14-82	RESITE LOTS 15 (B), 18 (B), 18 (A) & 13 (A)	HK	
5-13-82	RESITE LOT 10 TO 'D' TYPE	HK	
4-7-82	RESITE LOT 14 TO 'FIVE' TYPE	HK	
3-24-82	RESITE LOT 27 TO VILLANOVA	HK	
12/20/71	Lot 25 resited to Villanova	MCF	

PREPARED FOR:
BEATON CONSTRUCTION CO.
 610 EXECUTIVE BLDG. - SUITE 1090
 ROCKVILLE, MD 20852
 (301) 770-2450
 att: BERNARD KLEIN

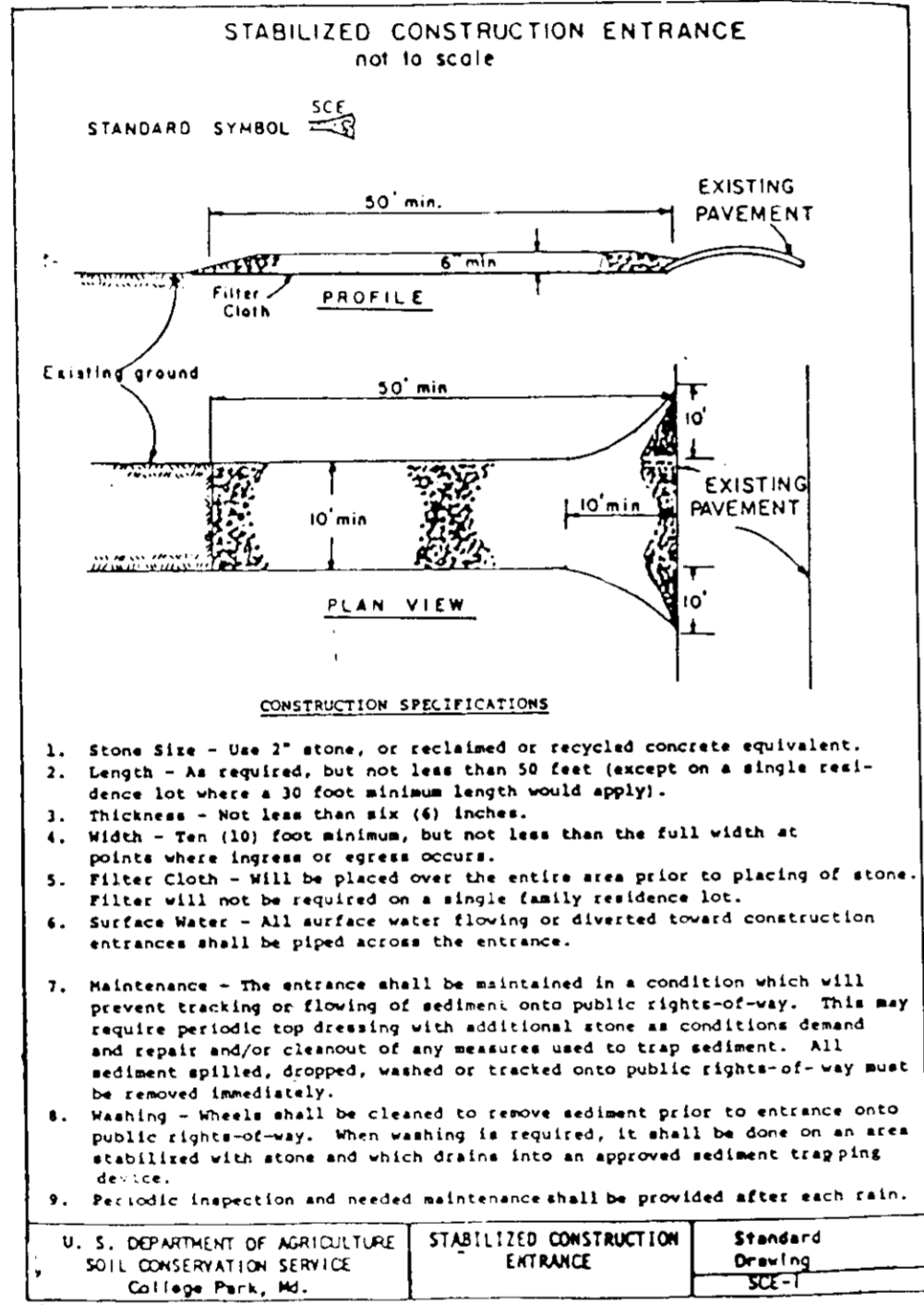
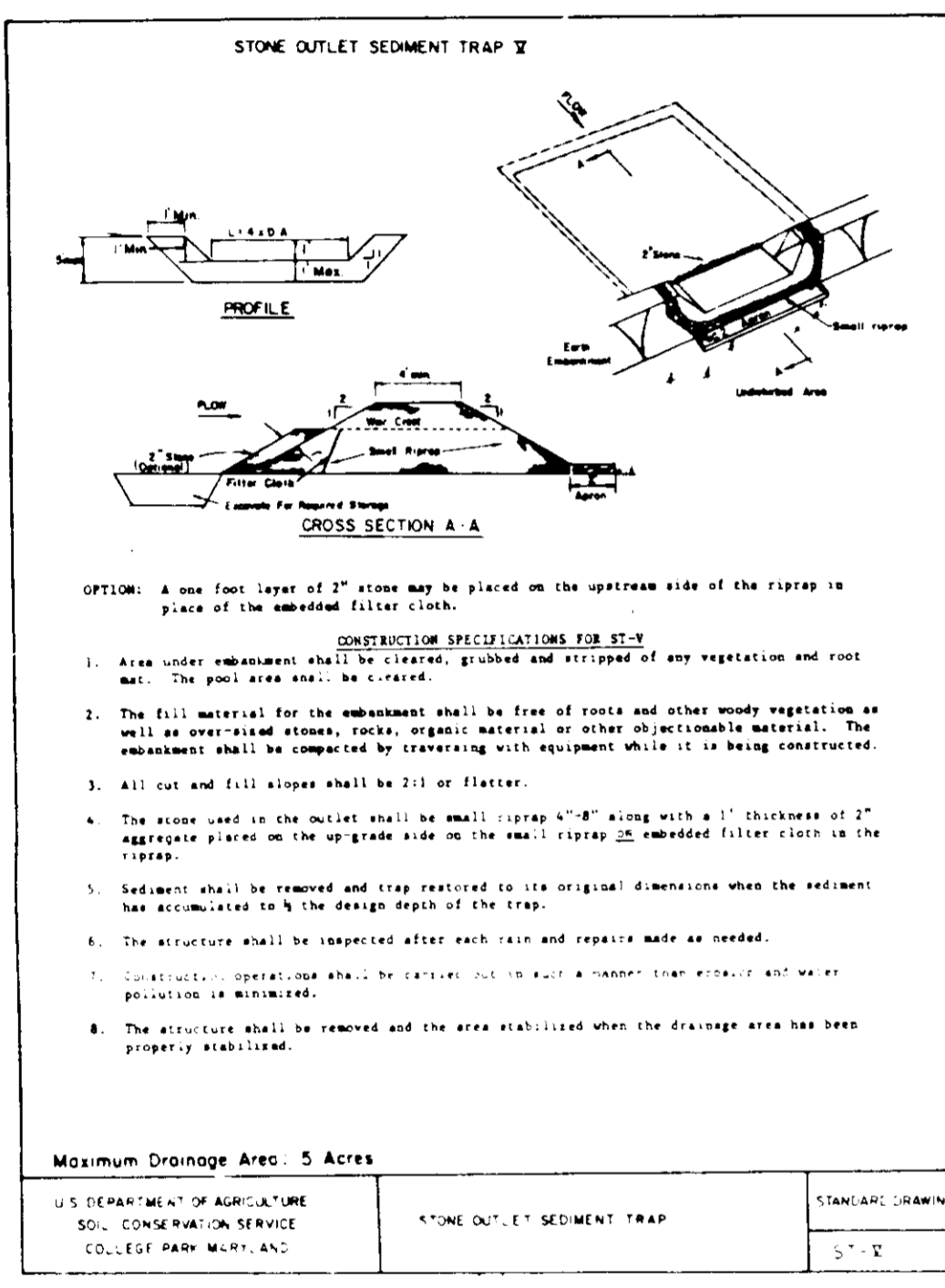
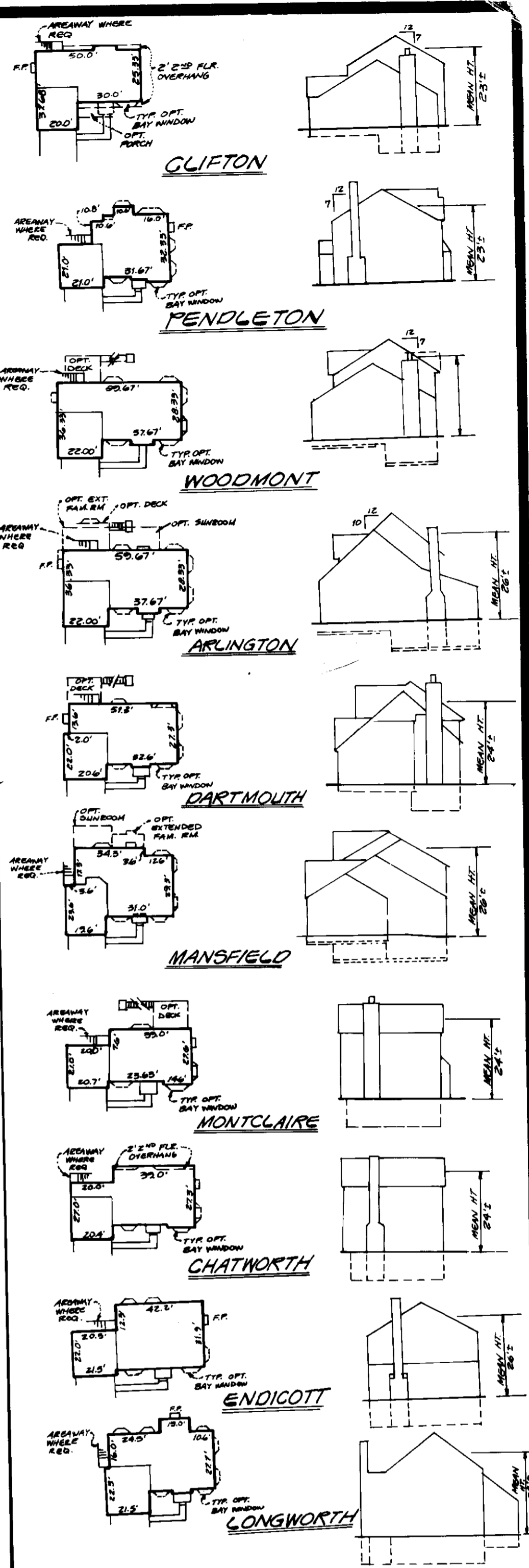
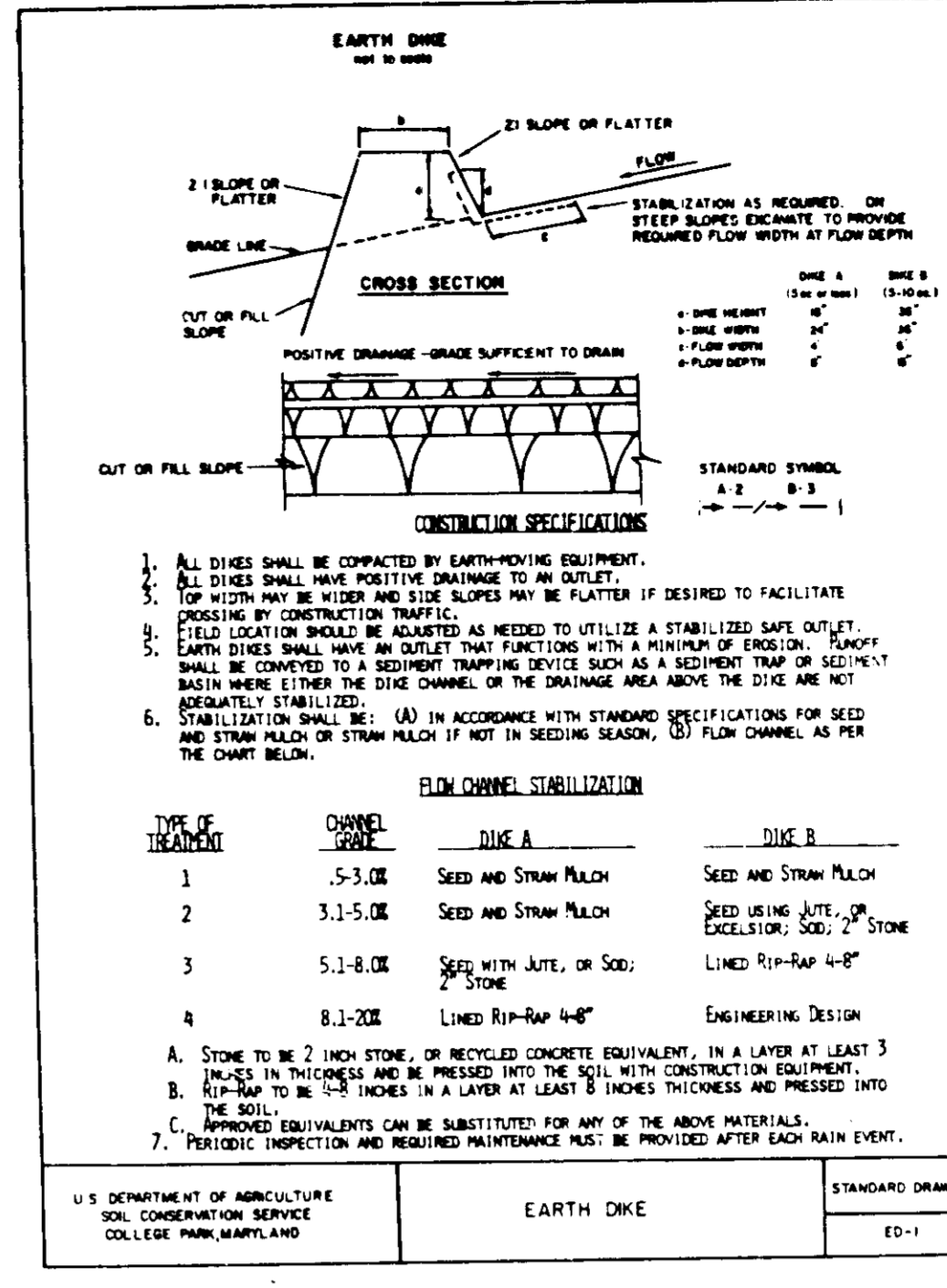
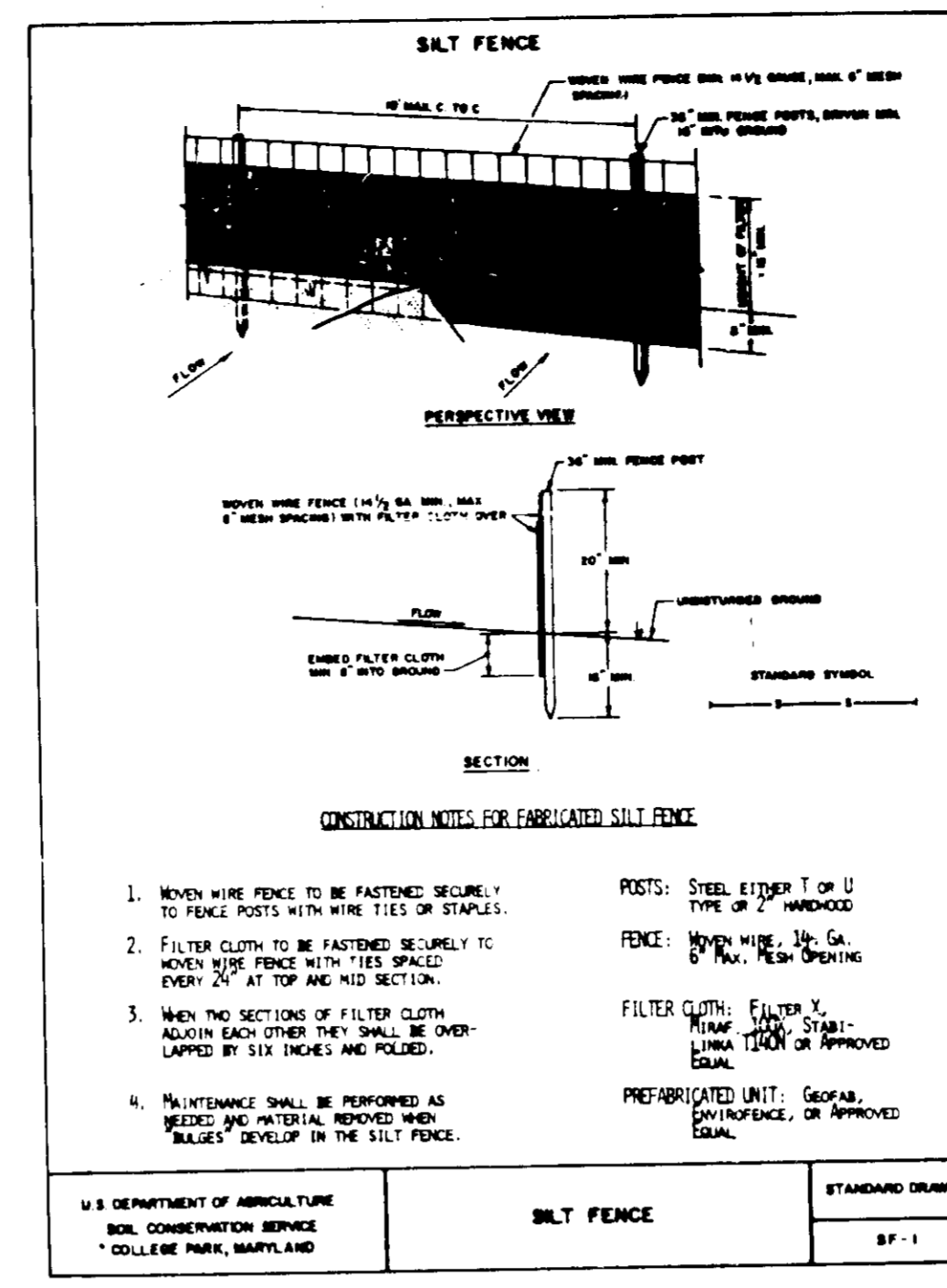
SITE DEVELOPMENT PLAN
CRYSTAL SPRINGS ESTATES
 SECTION ONE
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

SCALE	ZONING	G.L.W. FILE NO.
1"=30'	R-20	88-008
DATE	TAX MAP No.	SHEET
MARCH, 1989	31	2 OF 3

SDP 89-136

HOWARD COUNTY HEALTH DEPARTMENT
 3-5-90
 4-2-90
 3/1/90
 2-28-90

- SEDIMENT CONTROL NOTES**
- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permit 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 and perimeter slopes and all slopes greater than 1:1. 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 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 EROSIONS AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seedings (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: 13.78 Acres
 Area Disturbed: 11.07 Acres
 Area to be roofed or paved: 202 Acres
 Area to be vegetatively stabilized: 9.05 Acres
 Total Cut: 6 Cu. Yds.
 BALANCED
 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 DPM 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 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 an "As-Soil" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
 - All sites to be checked at the end of each day (see detail 470)
 - The total amount of soil water taken up to a depth of 470



- CONSTRUCTION SEQUENCE**
- Update Grading Permit.
 - Perform any necessary maintenance/repairs to the existing sediment control devices.
 - Install any additional sediment control devices required by this plan.
 - Begin construction of houses and fine grading.
 - Stabilize all disturbed areas.
 - Upon approval by Sediment Control Inspector remove all sediment control devices.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded Preparation: Loosen upper three inches of soil by raking, discing 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 2-1/2 bushels per acre of annual ryegrass (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.

Mulchings: 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 reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

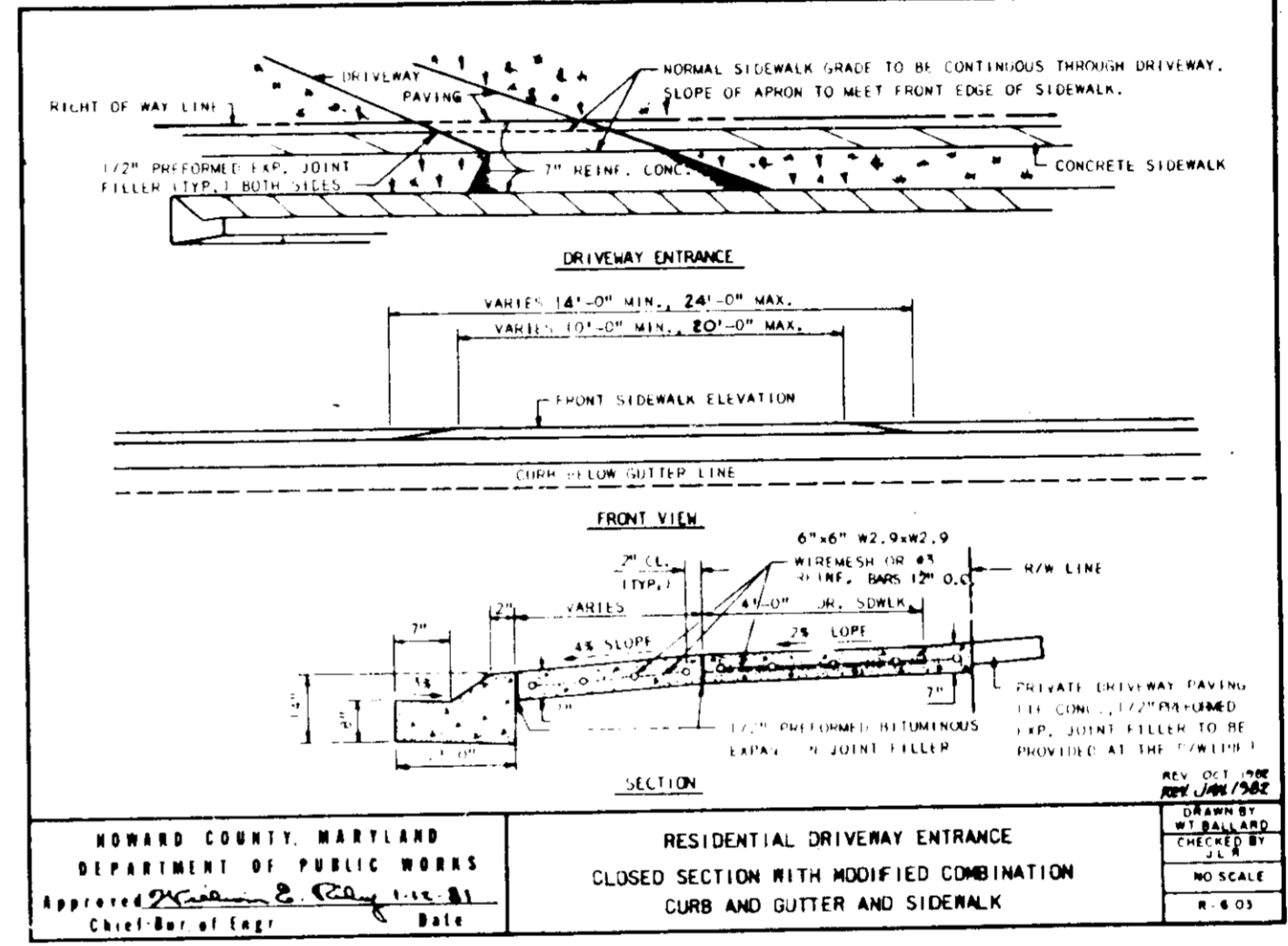
Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless previously loosened).

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 November 15, seed with 2-1/2 bushels per acre of annual ryegrass (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.

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Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.



HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 1/19/90
 Chief/Bar at Large

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 Conservation District."

C.K. Suter
 1-6-89
 Date

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

John B. Suter 1/19/90
 John B. Suter
 1-19-90
 DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
 ENGINEERS, PLANNERS, SURVEYORS
 3909 NATIONAL DRIVE, SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD. 20866
 TELEPHONE: (301) 421-4024

DATE	REVISION	BY	APP'R.
7-8-92	ADDED NEW HOUSE TYPES		

PREPARED FOR:
BERTON CONSTRUCTION CO.
 610 EXECUTIVE BLVD. - SUITE 100
 ROCKVILLE, MD. 20852
 (301) 770-2850
 ATTN: BERNARD KLEIN

DETAILS AND NOTES
CRYSTAL SPRINGS ESTATES
 SECTION ONE
 ELECTION DISTRICT No. 1
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G.L.W. FILE No.
1"=30'	R-20	88-008
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JAN. 1989	31	3 OF 3

SDP-87-136