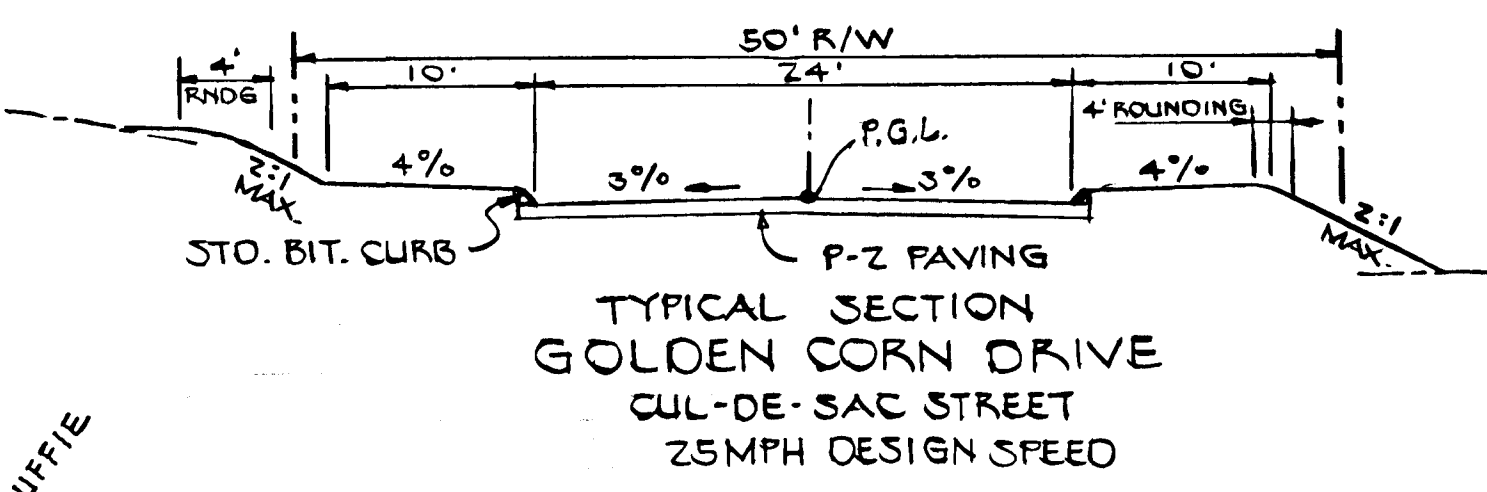
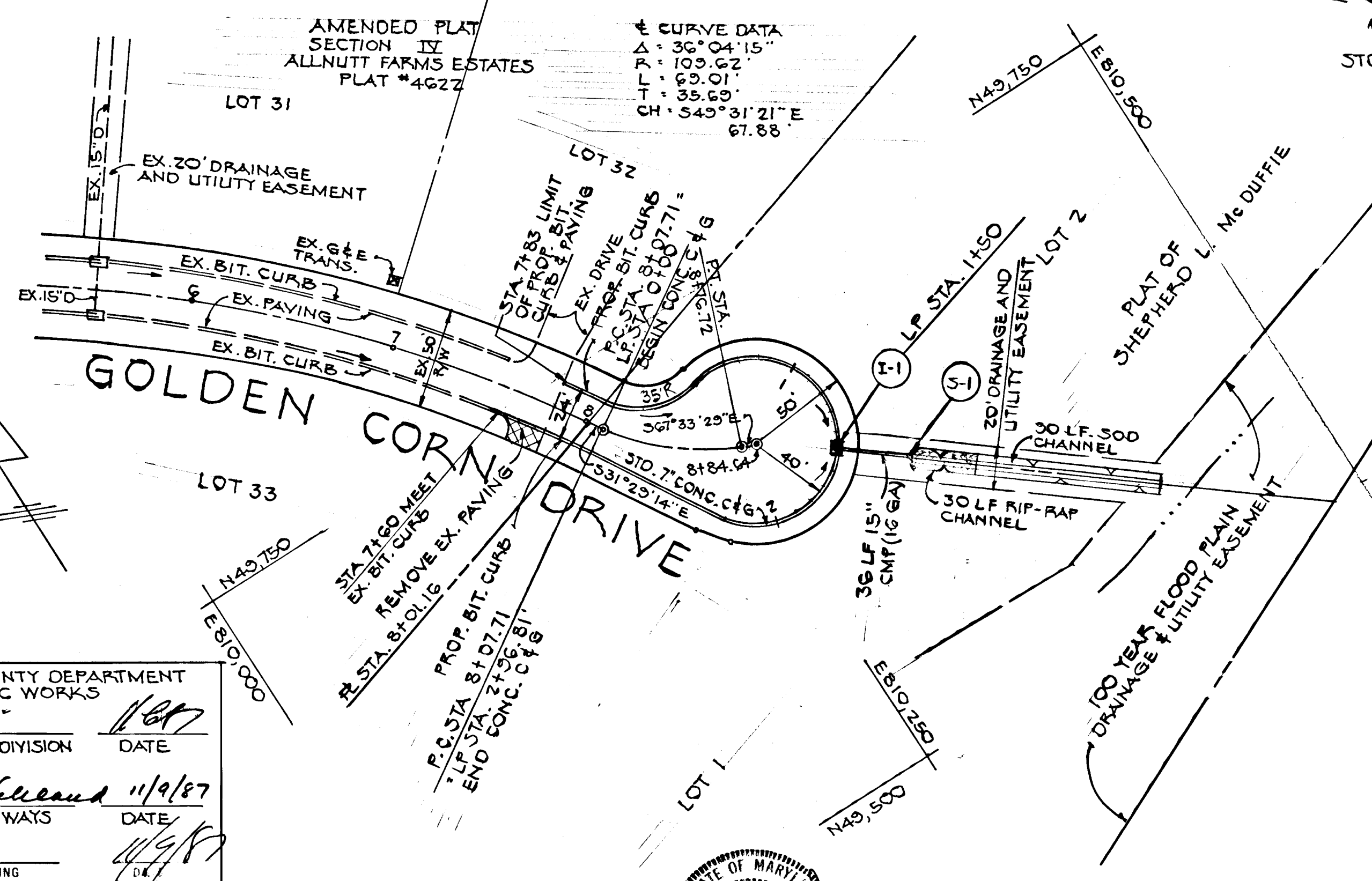


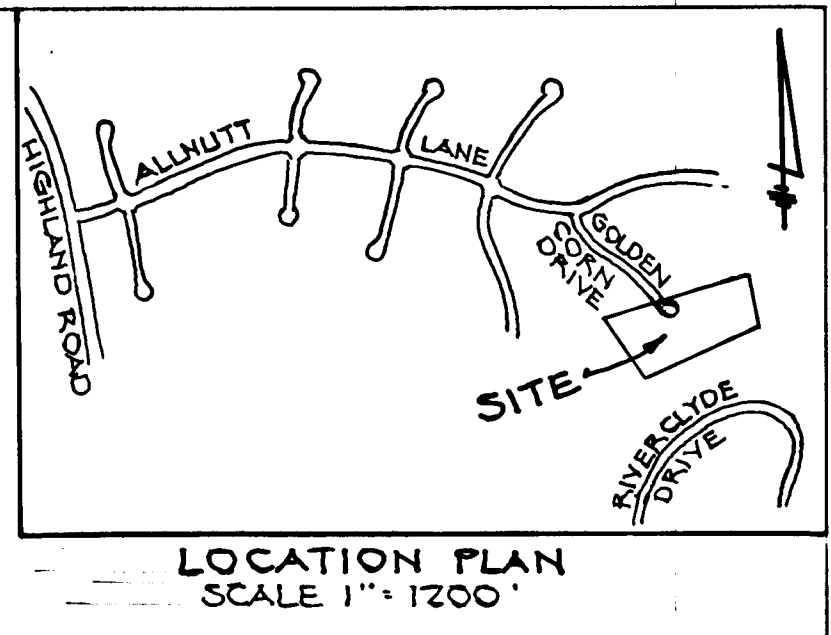
DATE _____ BY _____
 SURVEYED _____
 PLOTTED _____
 CHECKED _____
 NOTE BOOK _____
 NO. _____

DATE _____ BY _____
 SURVEYED _____
 PLOTTED _____
 CHECKED _____
 NOTE BOOK _____
 NO. _____

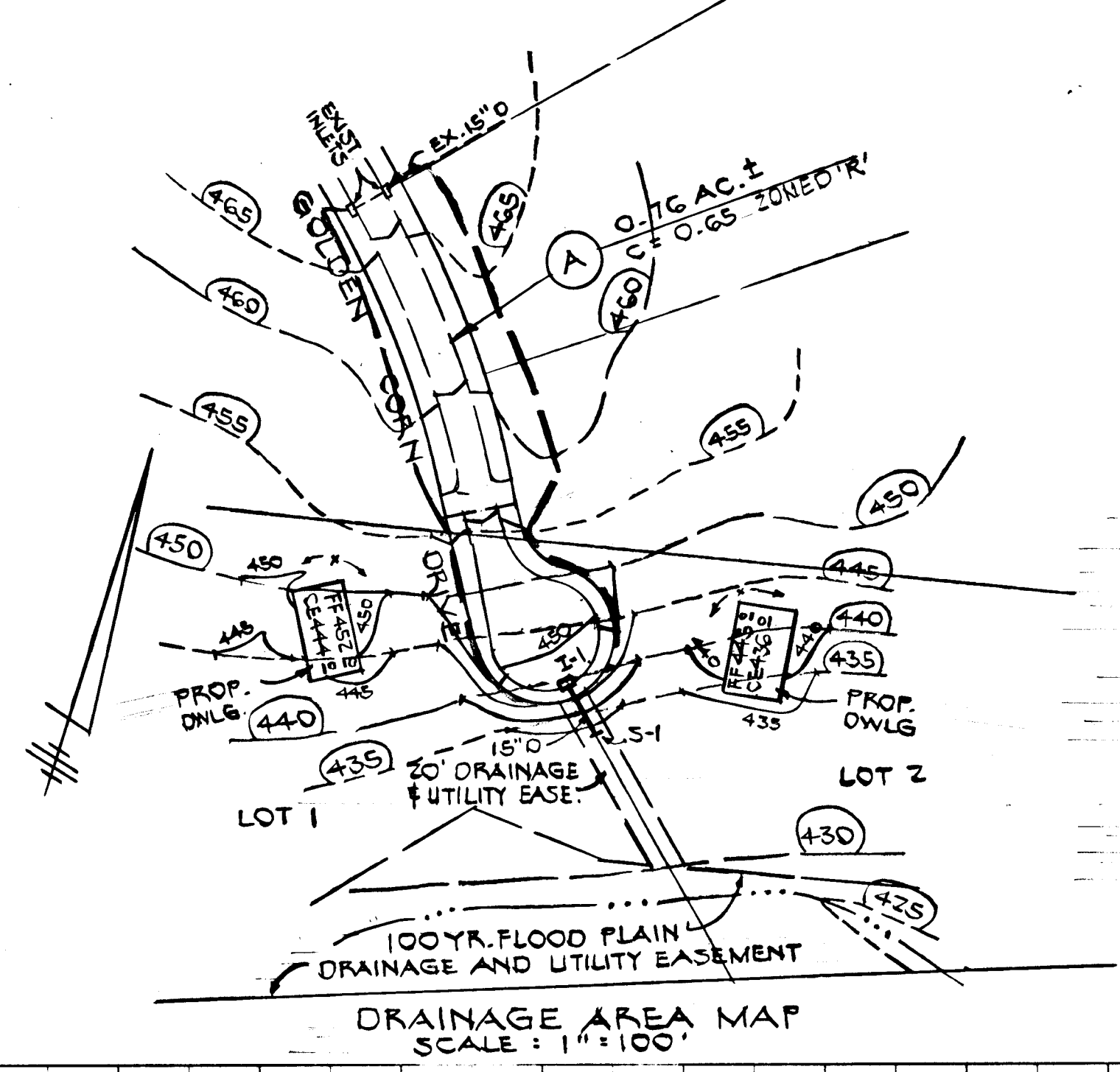
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION DATE 11/87
 APPROVED: *Spencer W. Wallace* 11/9/87
 CHIEF, BUREAU OF HIGHWAYS DATE 11/9/87
 APPROVED: *W. L. ...* 11/9/87
 CHIEF, BUREAU OF ENGINEERING DATE 11/9/87
 APPROVED: _____
 OFFICE OF PLANNING AND ZONING DATE _____
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE _____



- GENERAL NOTES:**
- ALL CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION.
 - ANY DAMAGES INCURRED WITHIN THE PUBLIC RIGHT OF WAY SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - ALUMINUM PIPE MAY BE USED IN LIEU OF BITUMINOUS COATED STEEL.
 - CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE - 752-7272



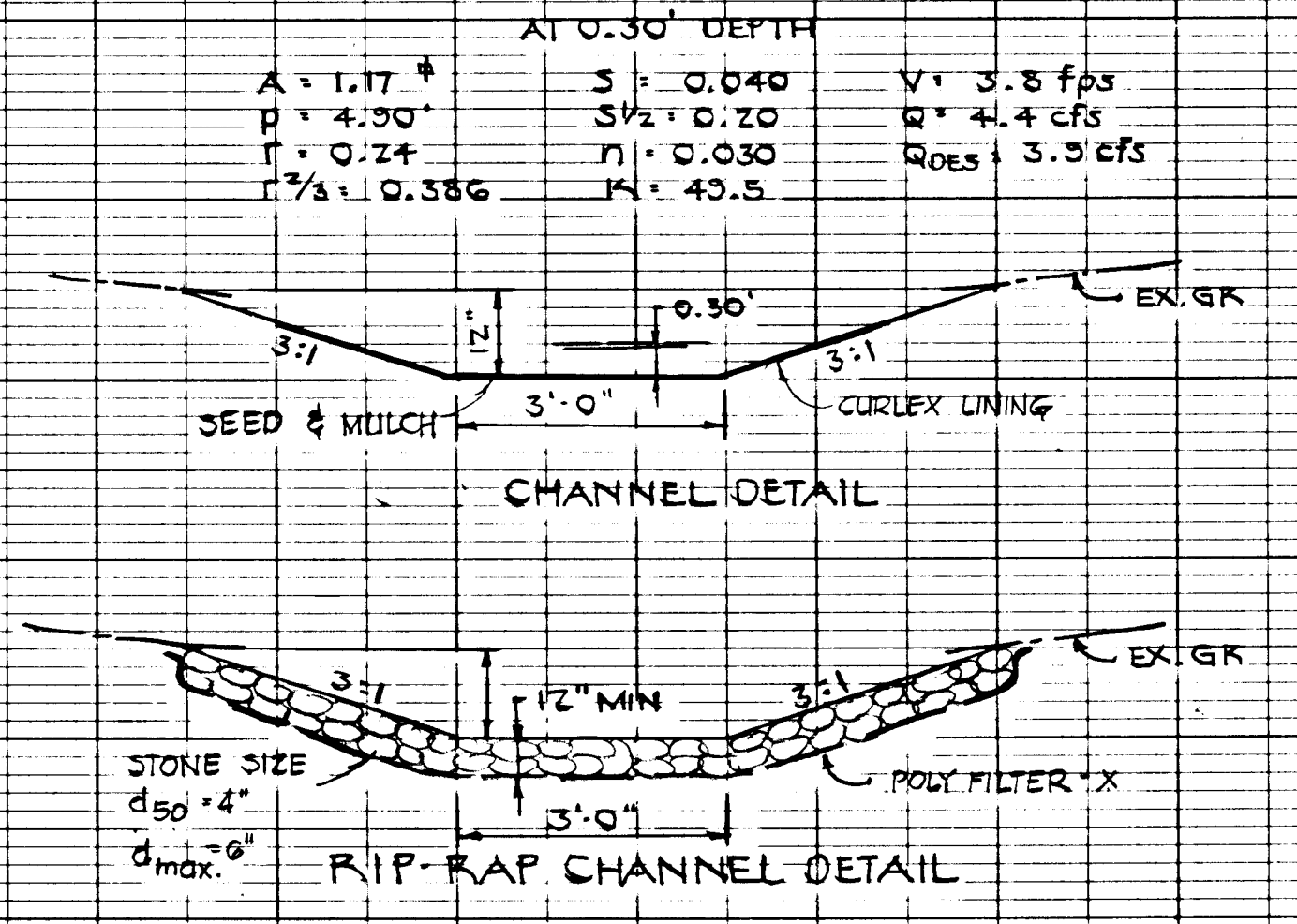
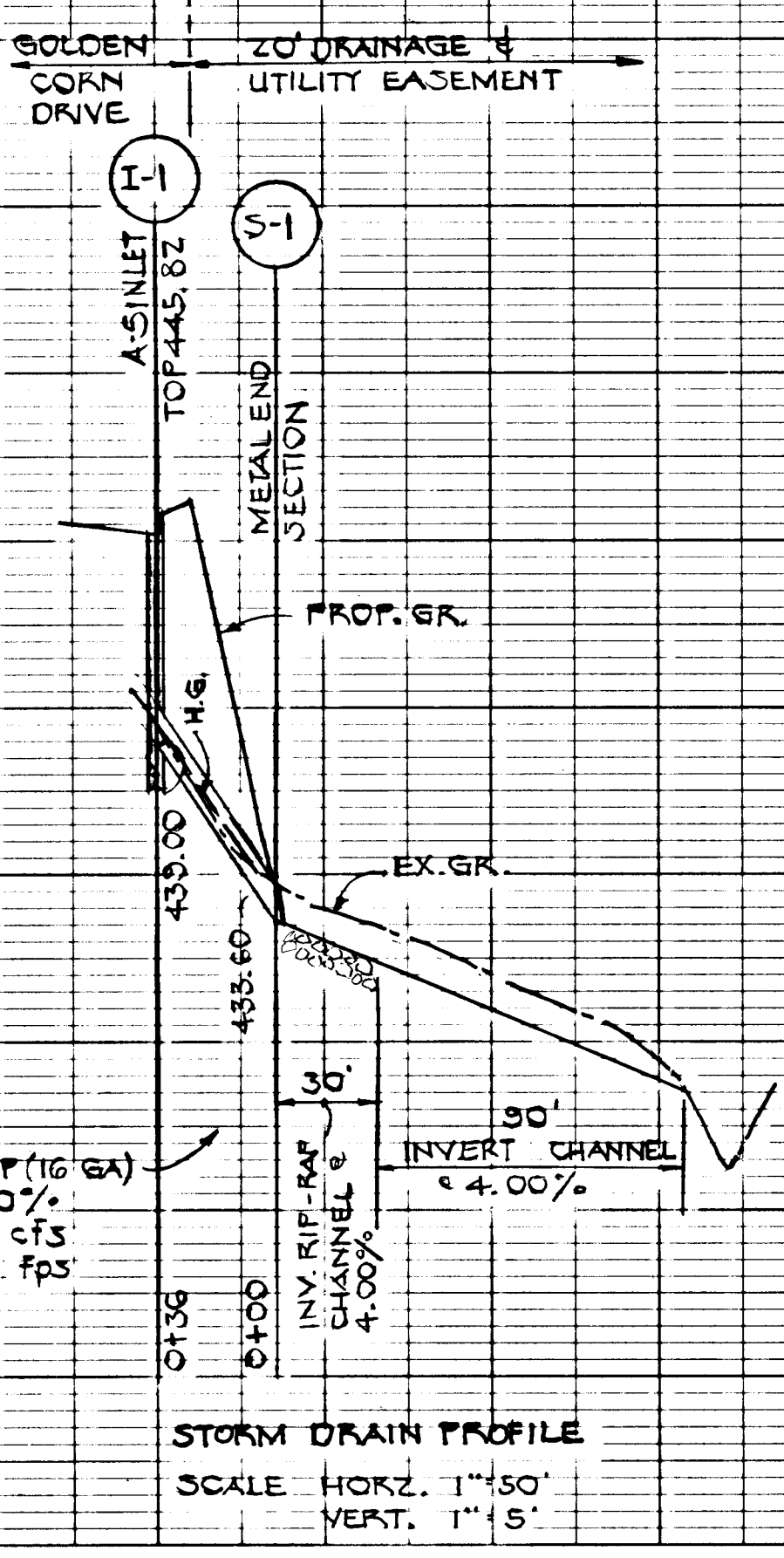
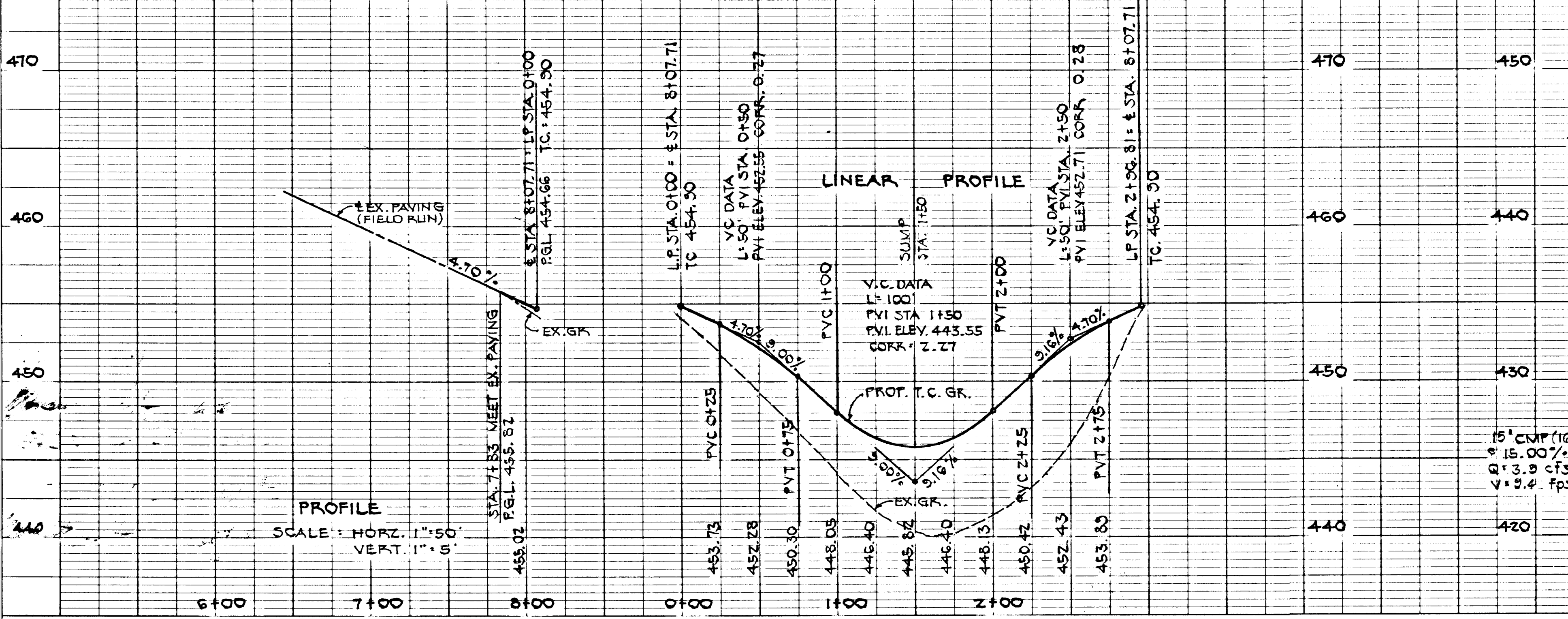
BENCH MARK #1 - ELEV. 436.68
 HOWARD COUNTY CONTROL STA. 2555008-R



SHEPHERO L. McDUFFIE
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
GOLDEN CORN DRIVE
 PLAN AND PROFILE
 OWNER AND DEVELOPER
SHEPHERO L. McDUFFIE
 8624 SAXON CIRCLE
 WHITEMARSH MARYLAND 21122
 SCALE AS SHOWN | DATE SEPT. 12, 1987 | DWG. NO. 1 OF 2
 DES. D.W.B. | DRN. D.W.B. | CHK. R.B.C.
FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. | ELLICOTT CITY, MARYLAND 21043

STRUCTURE SCHEDULE					
NO	TYPE	INV. IN	INV. OUT	TOP	REMARKS
I-1	A-5	-	439.00	445.82	S.D. 4.01
S-1	METAL END SECT.	433.60	-	-	S.D. 5.61

GOLDEN CORN DRIVE



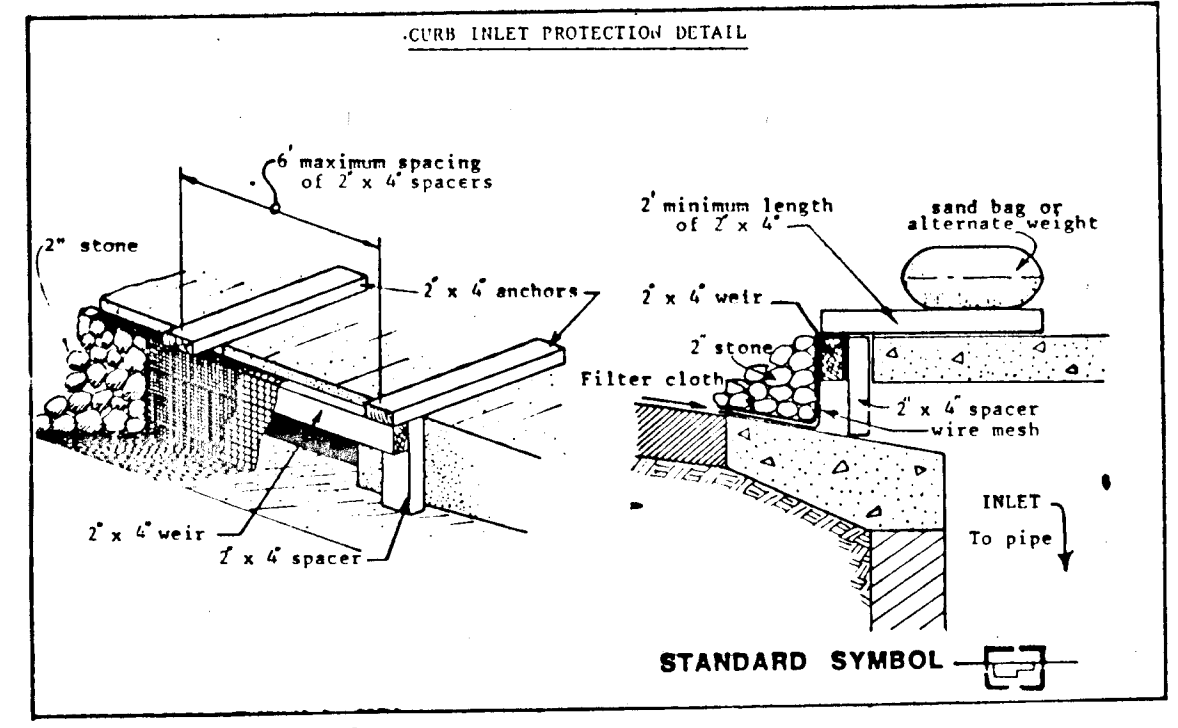
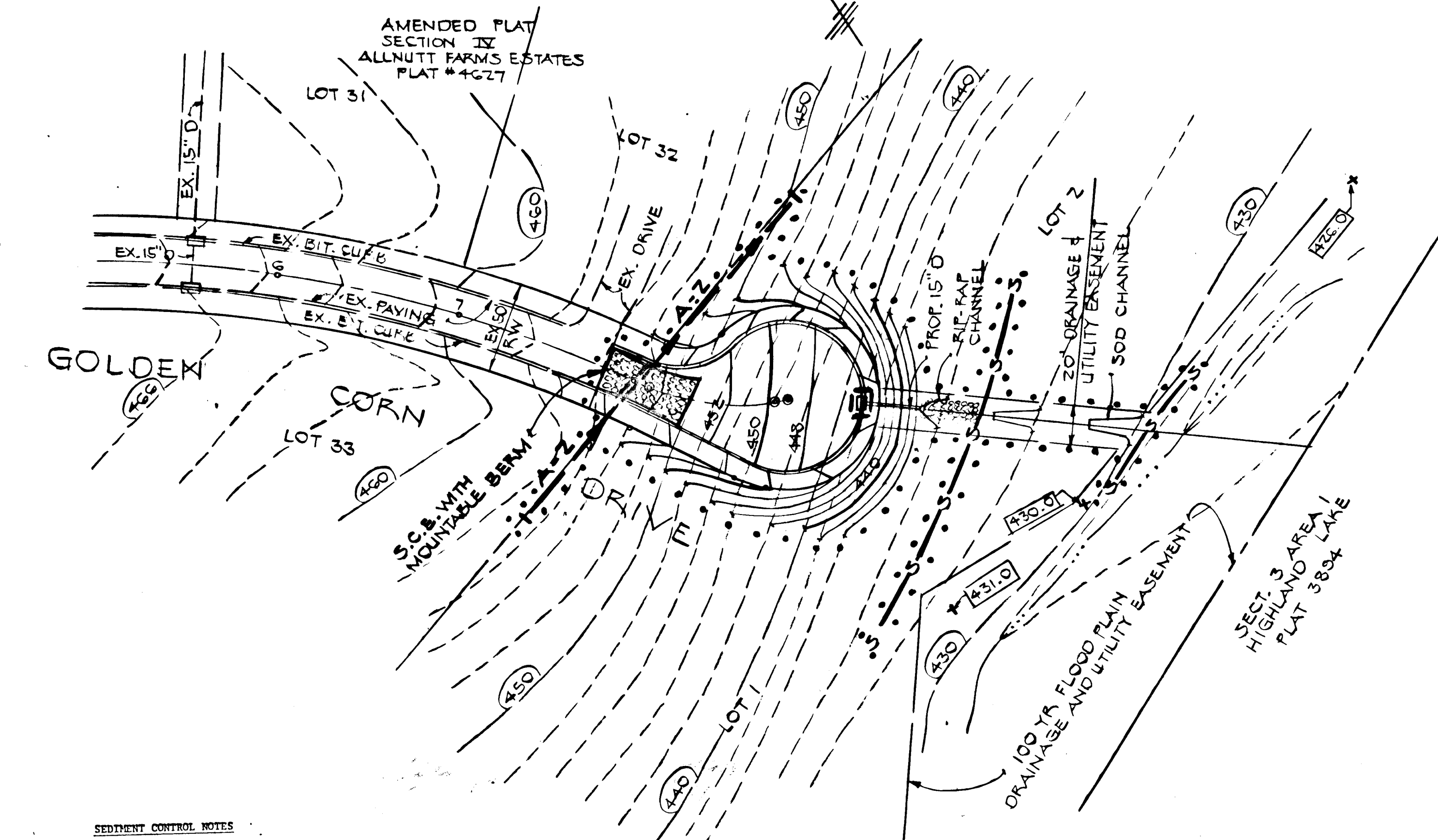
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LEGEND

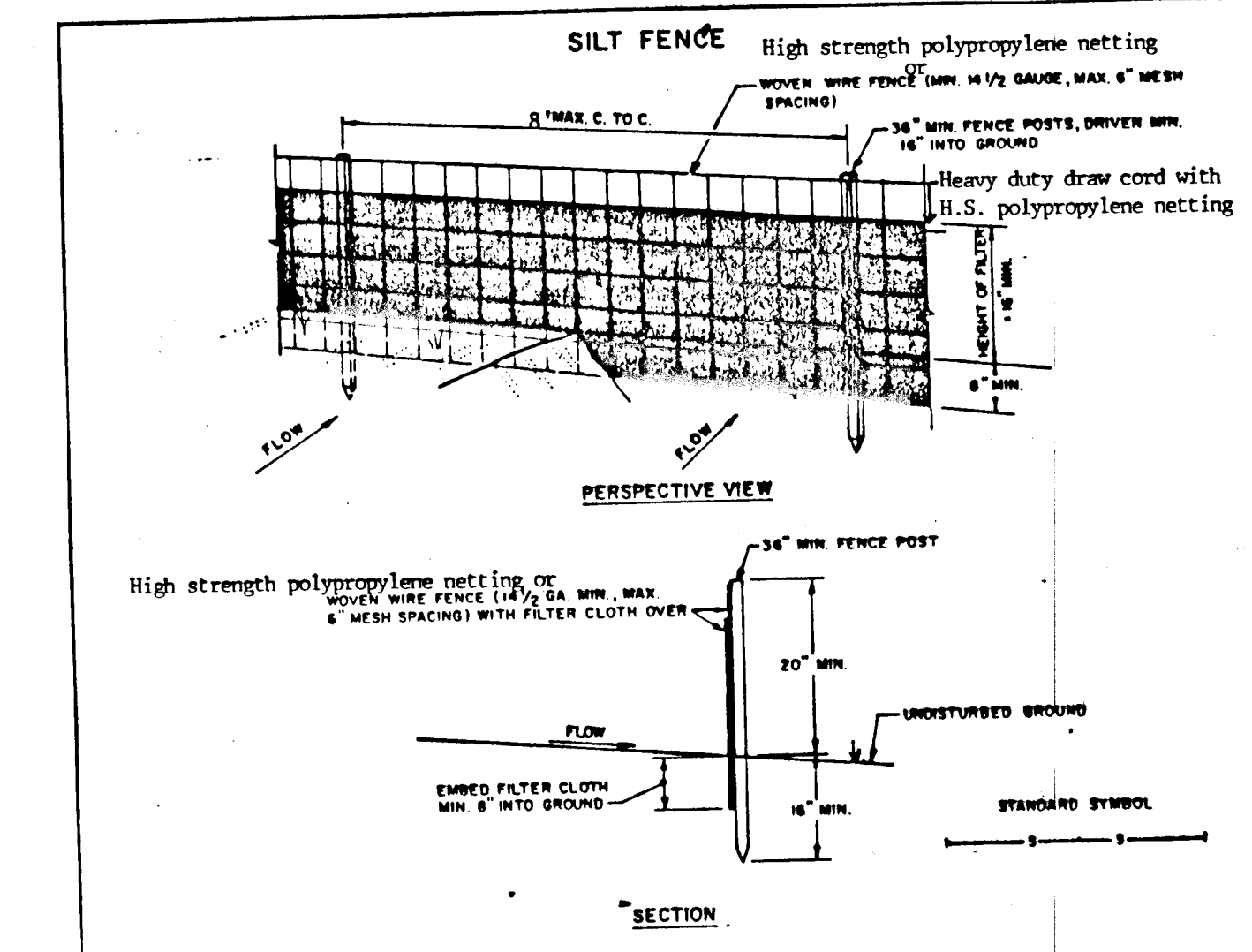
- LIMIT OF DISTURBANCE
- A-2- EARTH DIKE
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
- S-S- SILT FENCE
- (420) EX. CONTOURS
- 440 PROP. CONTOURS
- 430.0 100 YR. FLOOD PLAIN ELEV.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT
2. NOTIFY THE HO. CO. OFFICE OF INSPECTION & PERMITS AT LEAST 24 HRS. BEFORE STARTING WORK (892-2437)
3. CLEAR & GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES.
4. INSTALL SEDIMENT CONTROL DEVICES.
5. NOTIFY OFFICE OF INSPECTION AND PERMITS TO OBTAIN APPROVAL OF INSTALLATION.
6. ROUGH GRADE SITE
7. INSTALL STORM DRAINS, PROVIDE INLET PROTECTION.
8. PLACE SUB-BASE MATERIAL ON ROADS.
9. STABILIZE REMAINING AREAS
10. PAVE ROAD
11. REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE THOSE AREAS

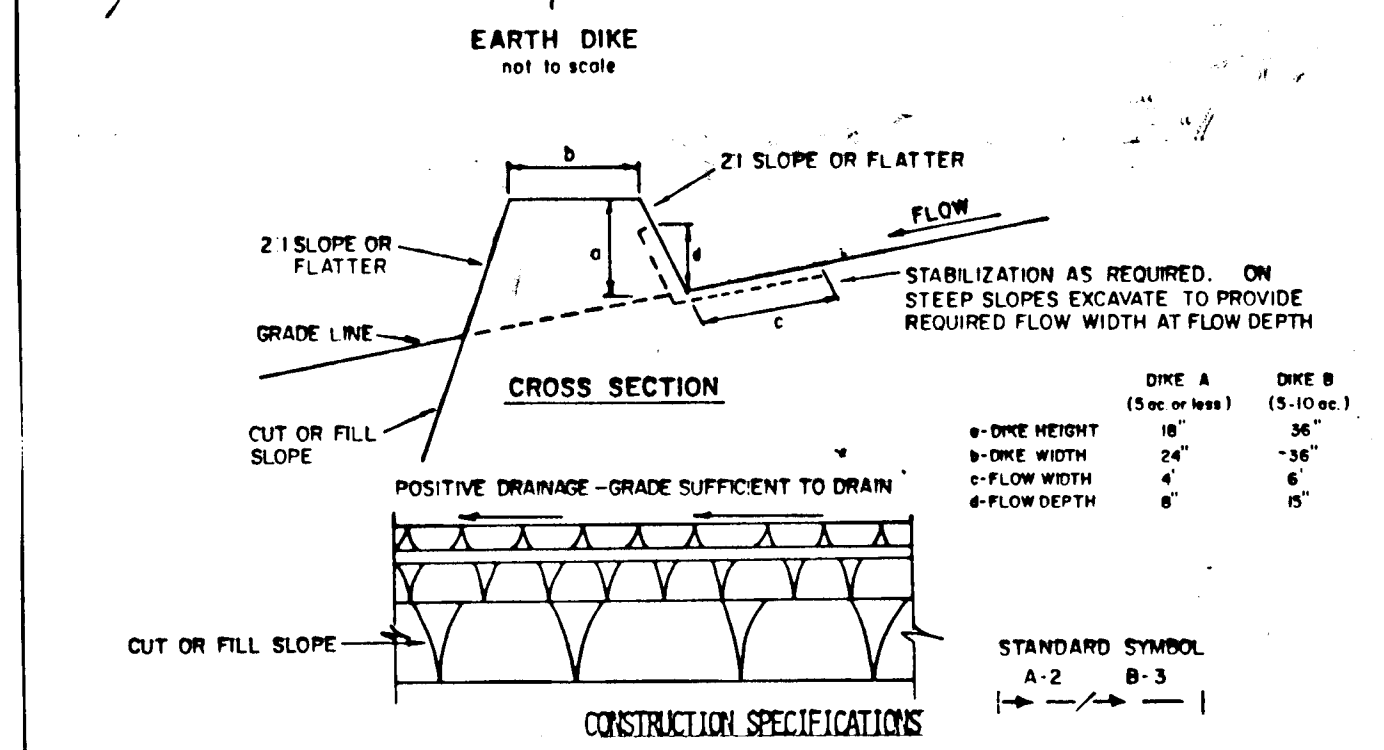


- Curb Inlet Protection.**
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
 2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the weir and securely attach to the 2" x 4" weir.
 3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
 4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
 6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
1. High strength polypropylene netting or 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 OVERLAPPED 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 1 1/2" MIN. (Actual)
 FENCE: HARDWOOD, 1 1/2" GA. 6" MAX. MESH OPENING or high strength polypropylene netting
 FILTER CLOTH: FILTER #40, STABILIZED LINEN OR APPROVED EQUAL
 PREFABRICATED UNIT: GEOTEX, UNWIREFENCE, OR APPROVED EQUAL.

- 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. (892-2437)
 - 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 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 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 6.12 Acres
 Area Disturbed 0.55 Acres
 Area to be seeded or paved 0.11 Acres
 Area to be vegetatively stabilized 0.38 Acres
 Total Cut 420 Cu. yds
 Total Fill 50 Cu. yds
 Offsite source/borrow area location NOT YET DETERMINED
 - 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 DPM 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 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.

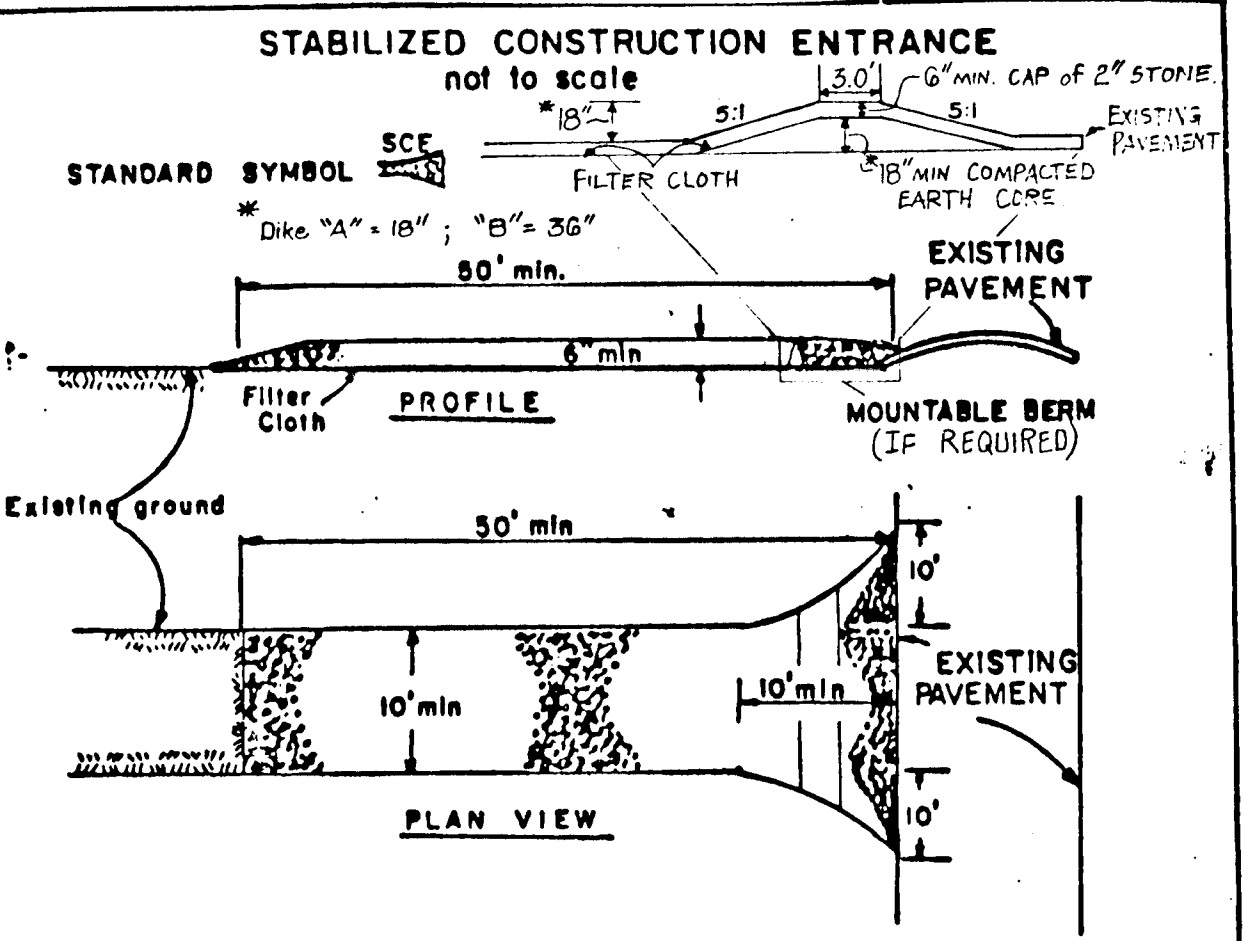


- EARTH DIKE**
not to scale
- 2:1 SLOPE OR FLATTER
GRADE LINE
POSITIVE DRAINAGE - GRADE SUFFICIENT TO DRAIN
CUT OR FILL SLOPE
- STABILIZATION AS REQUIRED. ON STEEP SLOPES ENHANCE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH
- STANDARD SYMBOL
A-2 B-3

EARTH CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3:00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5:00	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8:00	SEED WITH JUTE, OR SOD; STONE	LINED RIP-RAP 4-8"
4	8.1-20:00	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 THICKNESS 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.



- STABILIZED CONSTRUCTION ENTRANCE**
not to scale
- STANDARD SYMBOL SCE
- 6" MIN. CAP OF 2" STONE
EXISTING PAVEMENT
FILTER CLOTH
MOUNTABLE BERM (IF REQUIRED)
EXISTING GROUND
EXISTING PAVEMENT
- CONSTRUCTION SPECIFICATIONS
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 50 ft. (except on a single residence lot where a 30 ft. minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Width - Ten (10) ft. 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 will not be required on a single family residence lot.
 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 cleanup 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 rain.

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 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 time of seeding, apply 600 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 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 creeping 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 15 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.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

Soil Amendments: Apply 60 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 21 bushel 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 overseed 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 15 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 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.

Reviewed for HOWARD S.C.D. and meets Technical Requirements
 Howard S.C.D. 11-5-87
 U.S. Soil Conservation Service
 Date
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 Howard S.C.D. 11/4/87
 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division DATE
 Chief, Bureau of Highways DATE
 Chief, Bureau of Engineering DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
 Chief, Division of Land Development and Zoning Administration DATE

By the Engineer:
 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 Department of Public Works.
 Date 1/21/87

By the Developer:
 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 County Department of Public Works.
 Signature of Developer: Shepherd L. McDuffie
 Date: 9/14/1987



SHEPHERD L. McDUFFIE
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL PLAN

OWNER AND DEVELOPER
 SHEPHERD L. McDUFFIE
 8624 SAXON CIRCLE
 WHITMARSH MARYLAND 21162

SCALE: AS SHOWN DATE: SEPT. 12, 1987 DWG. 2 OF 2
 DES. D.W.B. DRN. D.W.B. CHK. R.B.C.
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MD. 21103

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