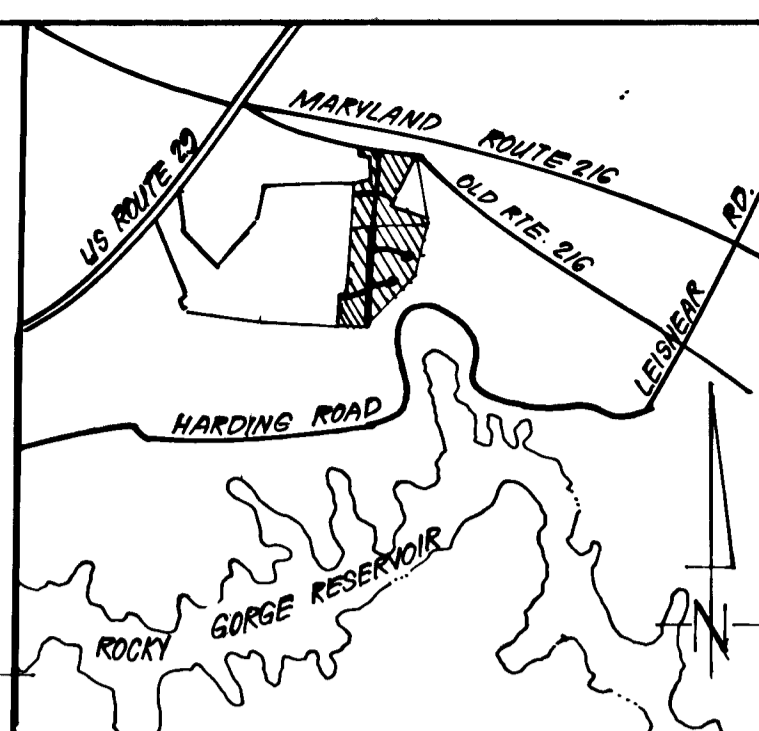


SEDIMENT TRAP TABLE						
TRAP No.	TYPE OF TRAP	D. (Ac.)	STORAGE REQUIRED	STORAGE PROVIDED	DEPTH	CREST ELEV.
1	R.O.S.T. ST. VI*	13.6 AC.	24,480 CF	38,744 CF	4'	366.0
2	S.O.S.T. ST. V	2.3 AC.	4,140 CF	8,976 CF	4'	365.0
3	S.O.S.T. ST. V	1.0 AC.	1,800 CF	3,591 CF	3'	403.0
4	R.O.S.T. ST. VI*	6.4 AC.	11,520 CF	24,500 CF	5'	321.0
5	R.O.S.T. ST. VI*	6.0 AC.	10,800 CF	10,800 CF	4'	336.0

TEMPORARY S.W.M. BASIN TABLE									
TRAP No.	WEIR CREST ELEV.	b	BOTTOM ELEV.	TOP EMBANKMENT ELEVATION	2 YEAR W.S. EL.	10 YEAR W.S. EL.	100 YEAR W.S. EL.	STORAGE DEPTH - D	DRAINAGE AREA
1	366.0	16.0	367.0	370.0	366.02	366.52	367.22	5'	13.6 AC.
2	365.0	10.0	365.0	366.5	**	365.22	365.68	5'	2.3 AC.
3	403.0	4.0	399.0	404.5	**	403.22	403.67	4'	1.0 AC.
4	321.0	15.0	315.0	324.25	321.01	321.58	322.01	5'	6.4 AC.
5	336.0	14.0	337.0	340.0	336.07	336.61	336.96	5'	6.0 AC.

Note: For Dimensions Not Shown, See Sediment Trap Table (L).
 * 1:1 Out Slopes
 ** W.S. EL. is Below Weir Crest.

Note: House & Driveways, Roads, and Utilities are shown for information and grading purposes only; and are not to be constructed with this plan.



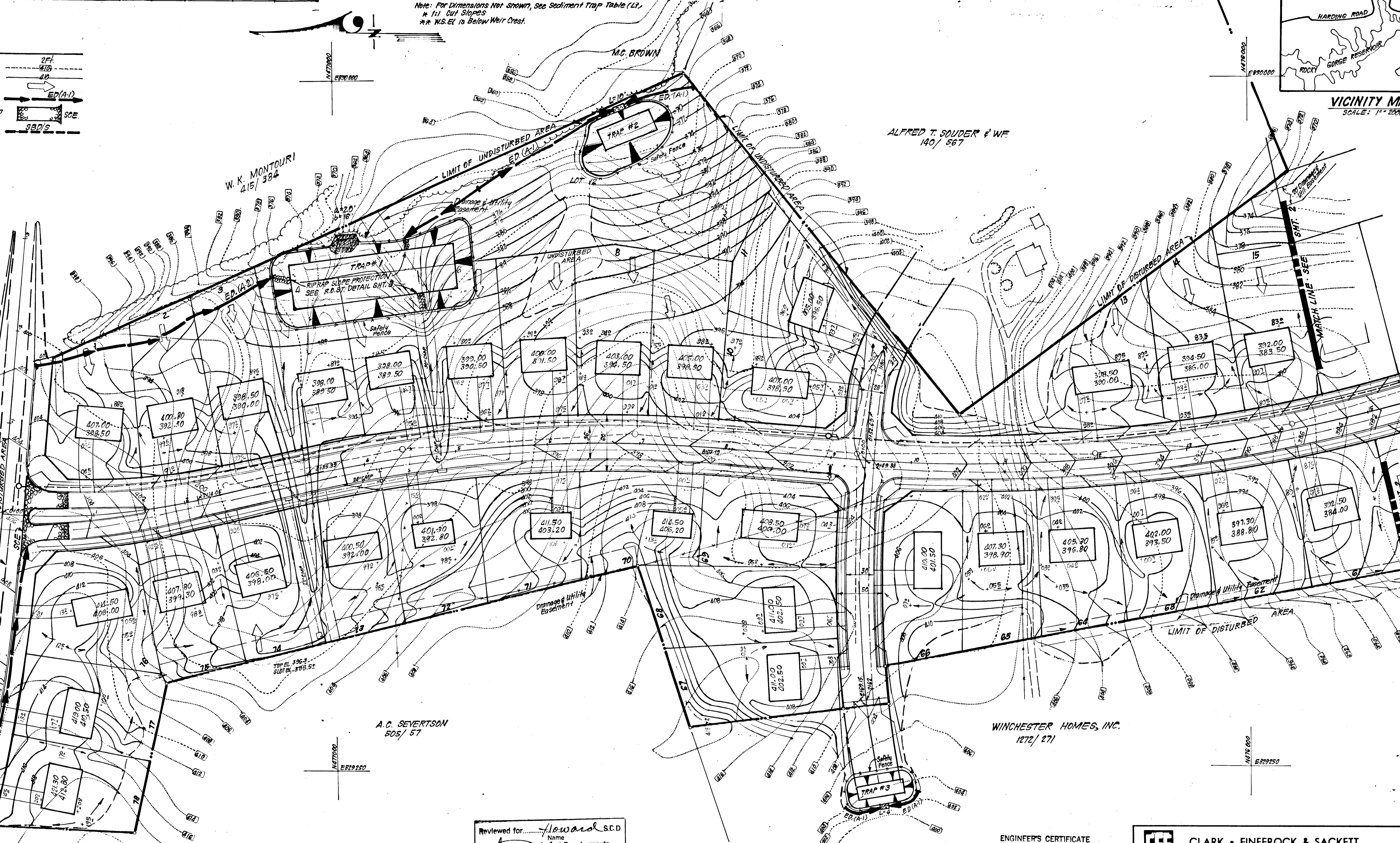
VICINITY MAP
SCALE: 1" = 2000'

- LEGEND:**
1. Contour Interval
 2. Existing Contour
 3. Prop. Contour
 4. Walk-Out Basement
 5. Earth Dike
 6. Stabilized Construction Entrance
 7. Straw Bale Dike or Silt Fence

Note: All areas disturbed during grading of Bypass Lane to be immediately stabilized.

MARYLAND ROUTE 216

ALFRED T. SOUDER & W.F.
140 / 567



W. K. MONTGOMERY
415 / 384

A. C. SEVERTSON
505 / 57

WINCHESTER HOMES, INC.
1272 / 271

Reviewed for Howard S.C.D.
Name: Howard S.C.D.
Signature: [Signature]
Date: 2/28/86
U.S. Soil Conservation Service

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 erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. 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 or their authorized agents, as are deemed necessary."
 Signature: Richard G. Kompa
Date: 12-4-85

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: Stephen L. Fisher
Date: 2/28/86

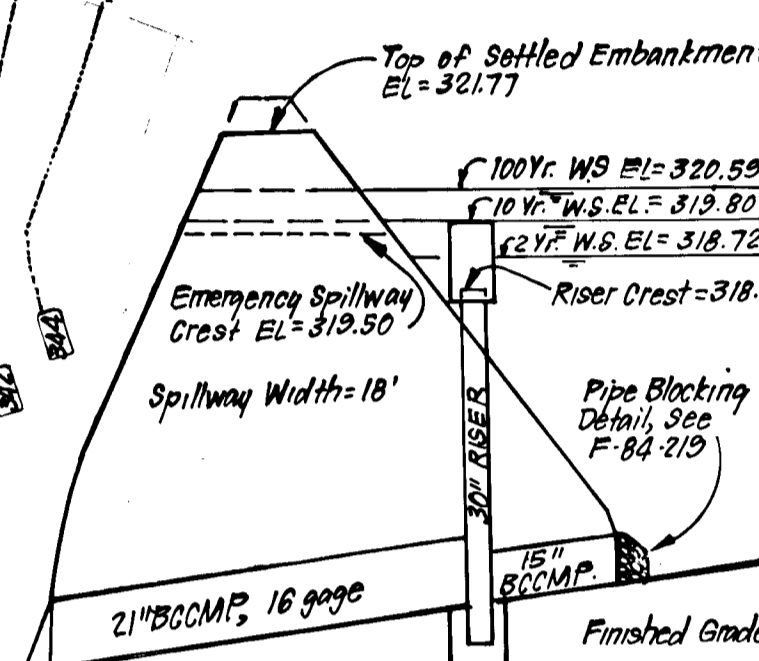
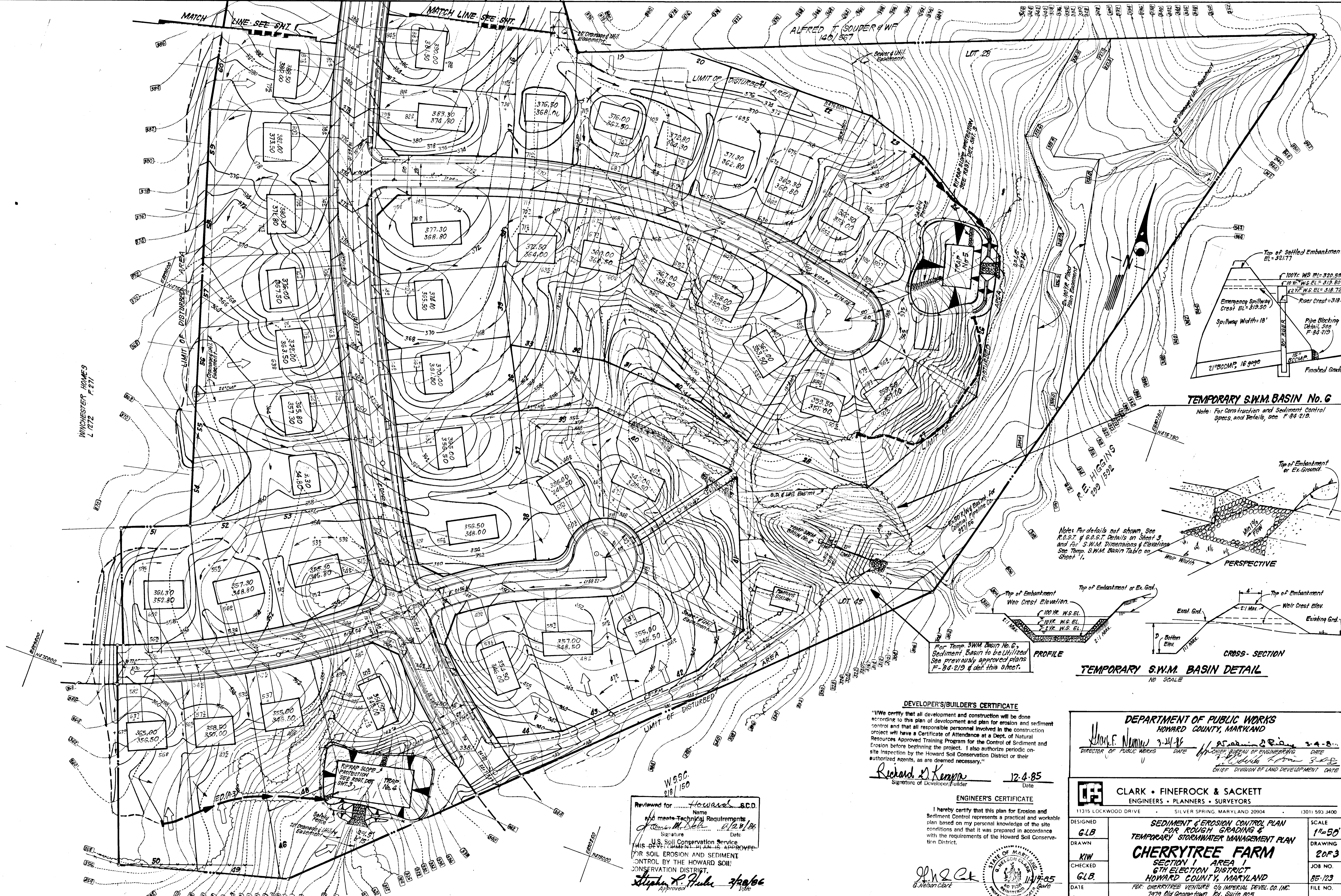
ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature: G. Nelson Clark
Date: 1-29-86

CLARK • FINEROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400	
DESIGNED GLB	SEDIMENT & EROSION CONTROL PLAN FOR ROUGH GRADING & TEMPORARY STORMWATER MANAGEMENT PLAN CHERRYTREE FARM SECTION 1 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: CHERRYTREE VENTURE, C/O IMPERIAL DEVEL. CO. INC. 7979 Old Georgetown Rd., Suite 805 Bethesda, Md. 20814
DRAWN KRW	
CHECKED GLB	
DATE 1-29-86	
SCALE 1" = 50'	DRAWING 10F3
JOB NO. 85-123	FILE NO. 85-123-5E

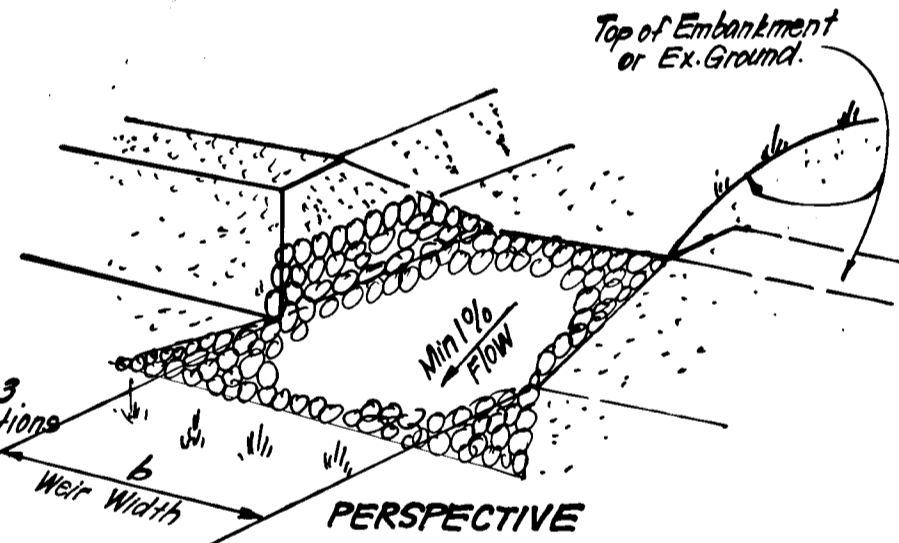
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director: F. [Signature]
 Date: 1/29/86
 Chief, Division of Land Development

1109

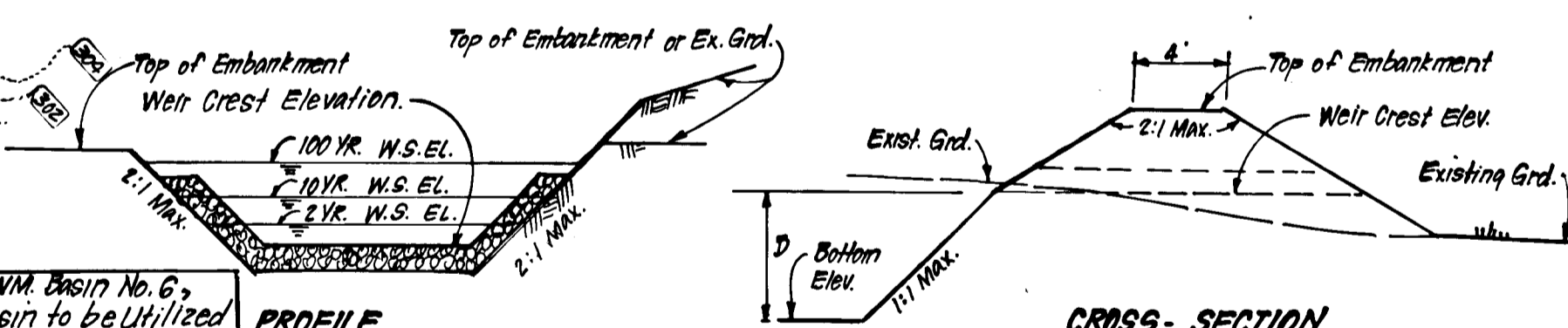
GP 86-35



TEMPORARY S.W.M. BASIN No. 6
 Note: For Construction and Sediment Control Specs. and Details, see F-84-219.



Notes for details not shown, see R.O.S.T. of G.O.S.T. Details on Sheet 3 and for S.W.M. Dimensions & Elevations See Temp. S.W.M. Basin Table on Sheet 1.



TEMPORARY S.W.M. BASIN DETAIL
 NO SCALE

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 erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. 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 or their authorized agents, as are deemed necessary."
 Richard D. Kempa 12-4-85
 Signature of Developer/Builder Date

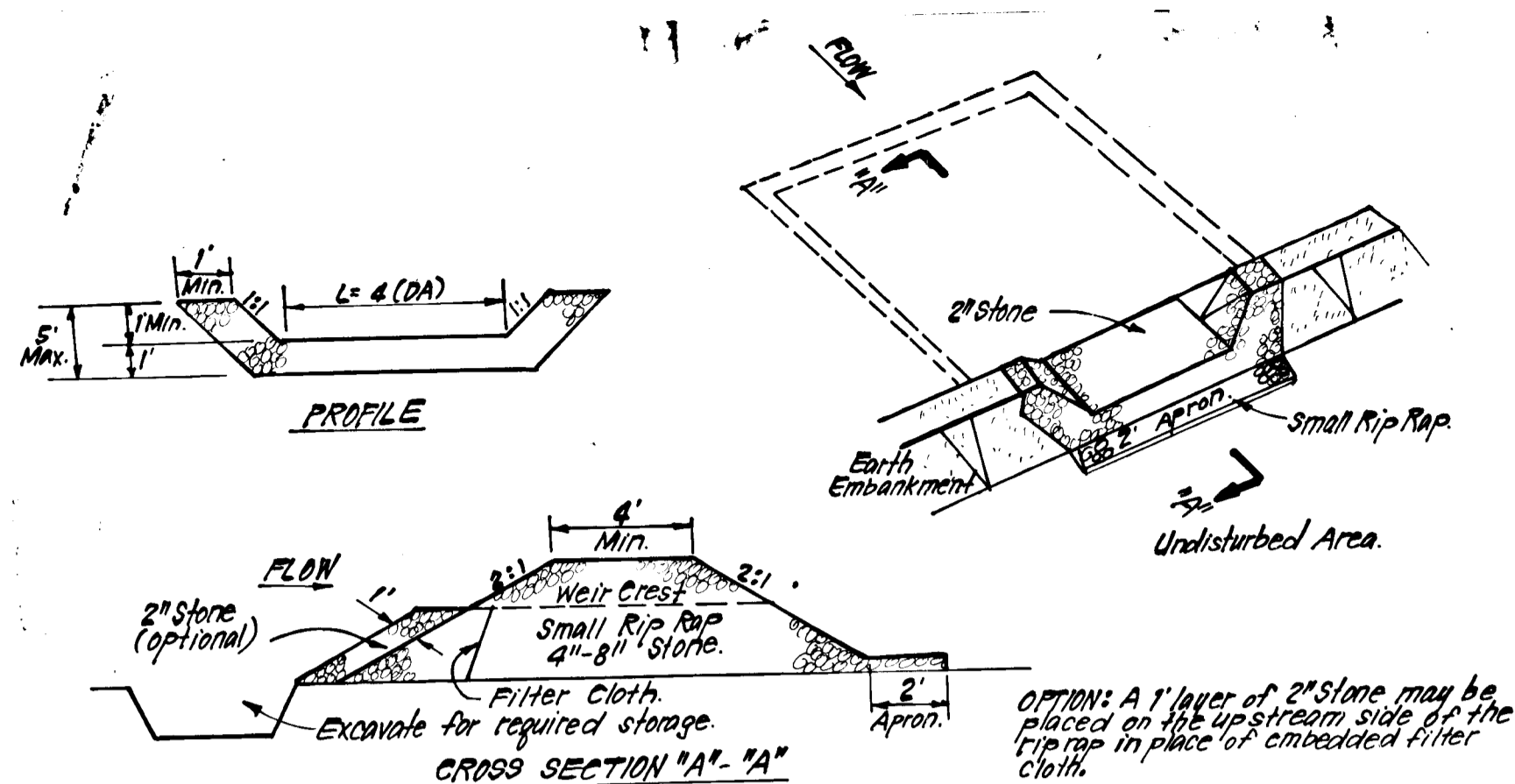
ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 G. Nelson Clark 11/17/85
 Signature Date

Reviewed for Howard S.C.D. Name and meets Technical Requirements
 Signature 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 7/20/86
 Approved Date

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works Date
 Chief, Bureau of Engineering Date
 Chief, Division of Land Development Date

CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

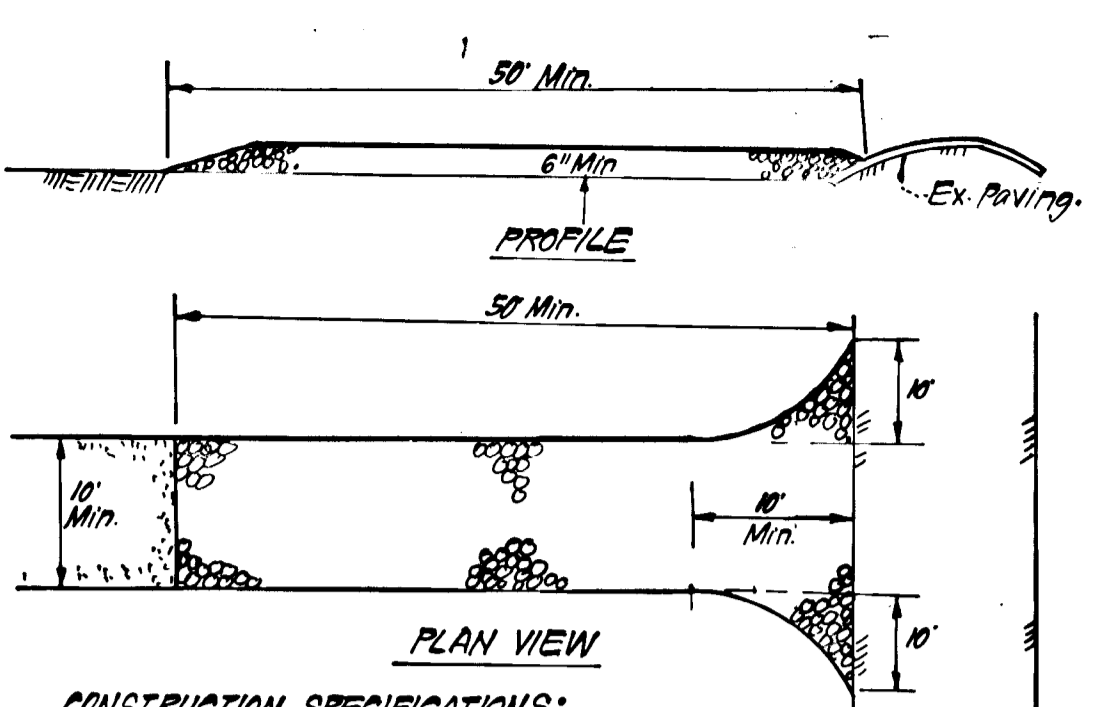
DESIGNED G.L.B.	SEDIMENT & EROSION CONTROL PLAN FOR ROUGH GRADING & TEMPORARY STORMWATER MANAGEMENT PLAN CHERRYTREE FARM SECTION 1 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND <small>FOR: CHERRYTREE VENTURE OF IMPERIAL DEVELOPMENT CO. INC. 1979 Old Geomart Rd. Suite 805 Bethesda, Md. 20814</small>	SCALE 1"=50'
DRAWN K.W.		DRAWING 20F3
CHECKED G.L.B.		JOB NO. 85-123
DATE 1-29-86		FILE NO. 85-123.5E



- CONSTRUCTION SPECIFICATIONS:**
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
 2. The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by swagers with equipment while it is being constructed.
 3. All cut and fill slopes shall be 2:1 or flatter.
 4. The stone used in the outlet shall be small rip rap 4"-8" along with 1" thickness of 2" aggregate placed on the up-grade side on the small rip rap of embedded filter cloth in the rip rap.
 5. Sediment shall be removed and traps restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
 6. The structure shall be inspected after each rain and repairs made as needed.
 7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.ST.) ST.V.

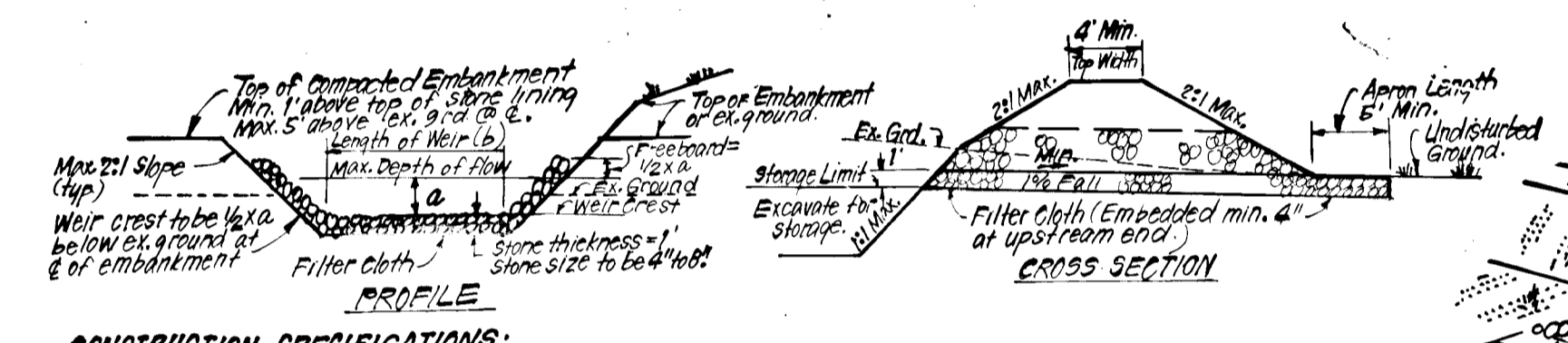
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
1. Stone Size - Use 2" stone or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 50 feet (except on a single residence lot where a 1/30' min length would apply).
 3. Thickness - Not less than 6".
 4. Width - 75' to 100' min, but not less than the full width at point where ingress of grass 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.
 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 cleanout 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. Wheel washing is required if it will 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.

STABILIZED CONSTRUCTION ENTRANCE (S.C.E.)

NO SCALE

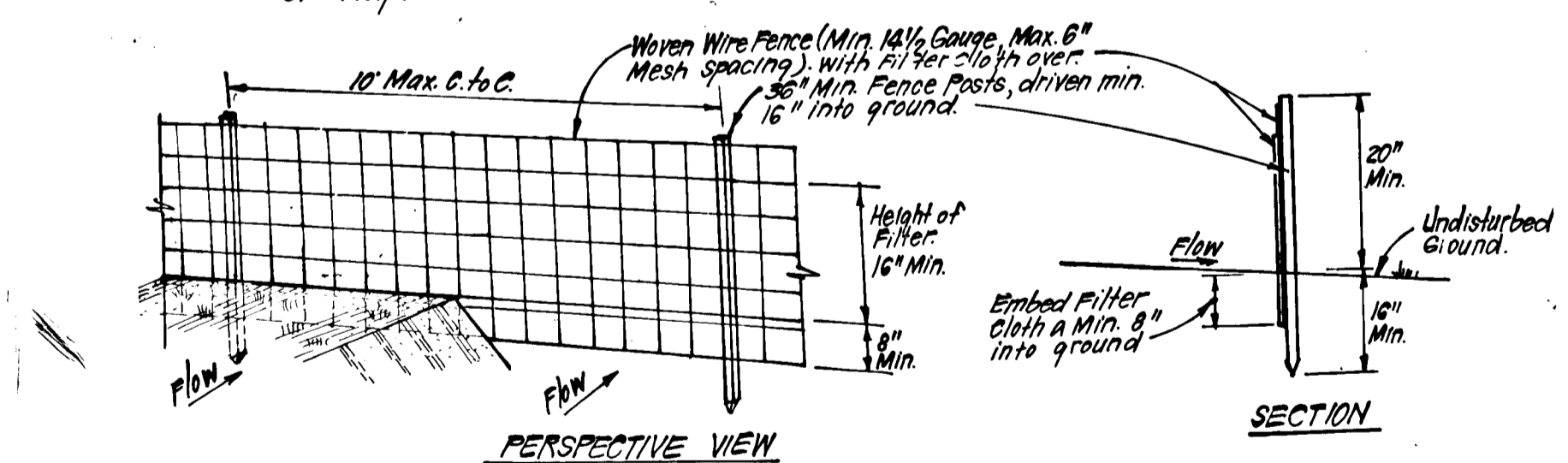


- CONSTRUCTION SPECIFICATIONS:**
1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
 2. The fill material for the embankment shall be free of roots or other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by swagers with equip. while it is being constructed. Max. height of embankment shall be 5' measured at 4' of embankment.
 3. All fill slopes shall be 2:1 or flatter's cut slopes 1:1 or flatter.
 4. Elevation of the top of any dike directing water into trap must equal or exceed height of embankment.
 5. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of 1' below the lower weir crest.
 6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
 7. Stone used in the outlet channel shall be 4" to 8" rip rap to provide a filtering effect, a layer of filter cloth shall be embedded 1' back into the upstream face of the outlet stone or a 1" thick layer of 2" or finer aggregate shall be placed on the upstream side of the outlet.
 8. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
 9. The structure shall be inspected after each rain and repaired as needed.
 10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
 11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
 12. Drainage area for this practice is limited to 15 acres or less.

RIPRAP OUTLET SEDIMENT TRAP - ST-II

NO SCALE

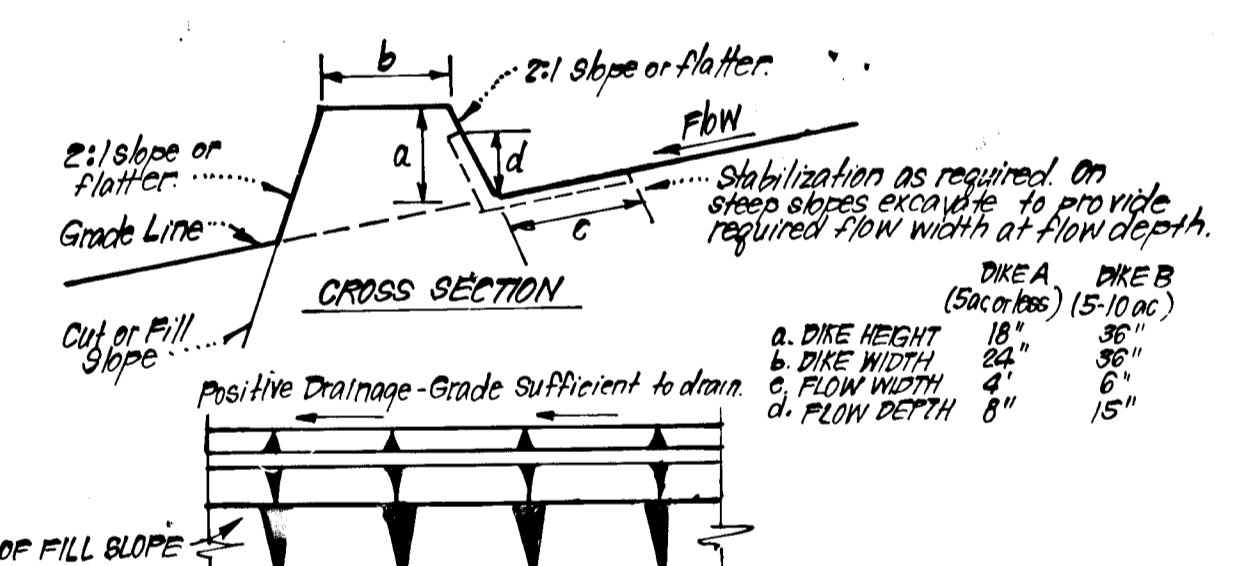
Note: Provide 4" to 8" Rip Rap Slope Protection w/Filter Cloth at Points of Concentrated Flow into traps (see Plan). Rip Rap to extend to bottom of trap.



- CONSTRUCTION SPECIFICATIONS:**
1. 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 36" at top and mid section.
 3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
 4. Maintenance shall be performed as needed and material removed when "bulges" develop in Silty Fence.
- POSTS: Steel either T or U Type or Hardwood
 FENCE: Woven Wire, 14 1/2 Gauge, 6" Max. Mesh Opening
 FILTER CLOTH: Filter-X, Mirafix 100X, Stabilink, T140N or Approv. equiv.
 PREFABRICATED UNIT: Geofab, Envirofence, or Approv. equiv.

SILTY FENCE DETAIL (S)

NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
1. All dikes shall be compacted by earth-moving equipment.
 2. All dikes shall have positive drainage to an outlet.
 3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
 4. Field location should be adjusted as needed to utilize a stabilized soft outlet.
 5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
 6. Stabilization shall be: (A) In accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) Flow channel as per chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	3.1 - 5.0%	Seed & Straw Mulch	Seed, White, or Excelsior; Sod; 2" Stone
3	5.1 - 8.0%	Seed, White, or Sod; 2" Stone	Lined Rip Rap 4"-8" Stone
4	8.1 - 20.0%	Lined Rip Rap 4"-8" Stone	Engineering Design

A. Stone to be 2" Stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
 B. Rip Rap to be 4"-8" in a layer at least 3" thick, pressed into soil.
 C. Approved equivalents can be substituted for any of the above materials.

EARTH DIKE DETAIL (E.D.)

NO SCALE

DEVELOPER'S/BUILDER'S CERTIFICATE

I hereby certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. 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 or their authorized agents, as are deemed necessary.

Richard N. Kempner
Signature of Developer/Buyer Date 12-4-85

Reviewed for... Howard County S.C.D. Name and meets Technical Requirements Signature Date 12/21/85 U.S. Soil Conservation Service

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

Stephen L. Fisher
Signature Date 12/21/85

ENGINEER'S CERTIFICATE

I hereby 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.

G. Nelson Clark
Signature Date 12/21/85

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 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 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 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 seeded areas and make needed repairs, replacements and reseeding.

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)

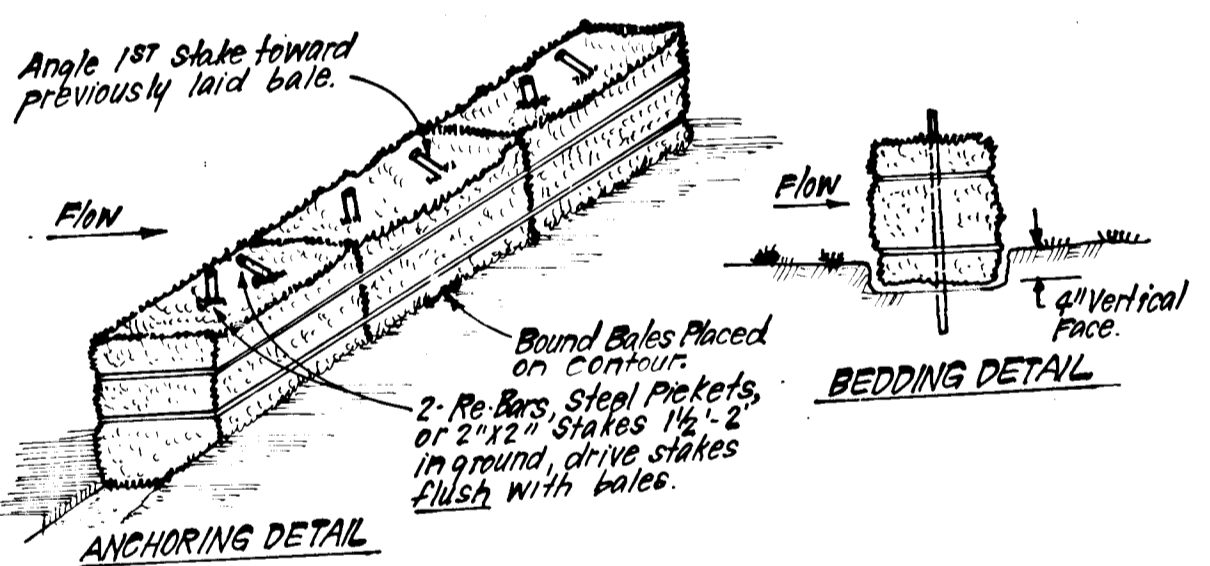
Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect 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 (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.

CONSTRUCTION SEQUENCE:

1. Obtain Grading Permit. No. of DAYS 2
 2. Install Sediment & Erosion Control Measures and Construct sediment Basin No. 6 in accordance with previously approved plans P-84-219. 30
 3. Clear and Rough Grade site. 30
 4. Stabilize all disturbed areas onsite in accordance with s.d.s. 10
 5. Upon approval of the sediment control inspector, remove sediment control measures & stabilize. 10
- Note: Sediment Basin No. 6 to be retained for use of Sediment Control for Road Construction.



- CONSTRUCTION SPECIFICATIONS:**
1. Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
 2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
 3. Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The bales together. Stakes shall be driven flush with the bales.
 4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
 5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW BALE DIKE DETAIL (SBD)

NO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works DATE 3-24-86
Chief, Division of Land Development DATE

1109

CLARK • FINEPROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400
DESIGNED: GLB
DRAWN: GLB
CHECKED: R/W
DATE: 7-29-86
SCALE: 1"=50'
DRAWING: 3 OF 3
JOB NO.: 85-123
FILE NO.: 85-123-SE
SEDIMENT & EROSION CONTROL PLAN FOR ROUGH GRADING & TEMPORARY STORMWATER MANAGEMENT PLAN CHERRYTREE FARM
SECTION 1 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
FOR: CHERRYTREE VENTURE, 96 IMPERIAL DEVEL. CO., INC. 7979 Old George town Rd. Suite 805 Bethesda, Md. 20814
G.P. 86-35