

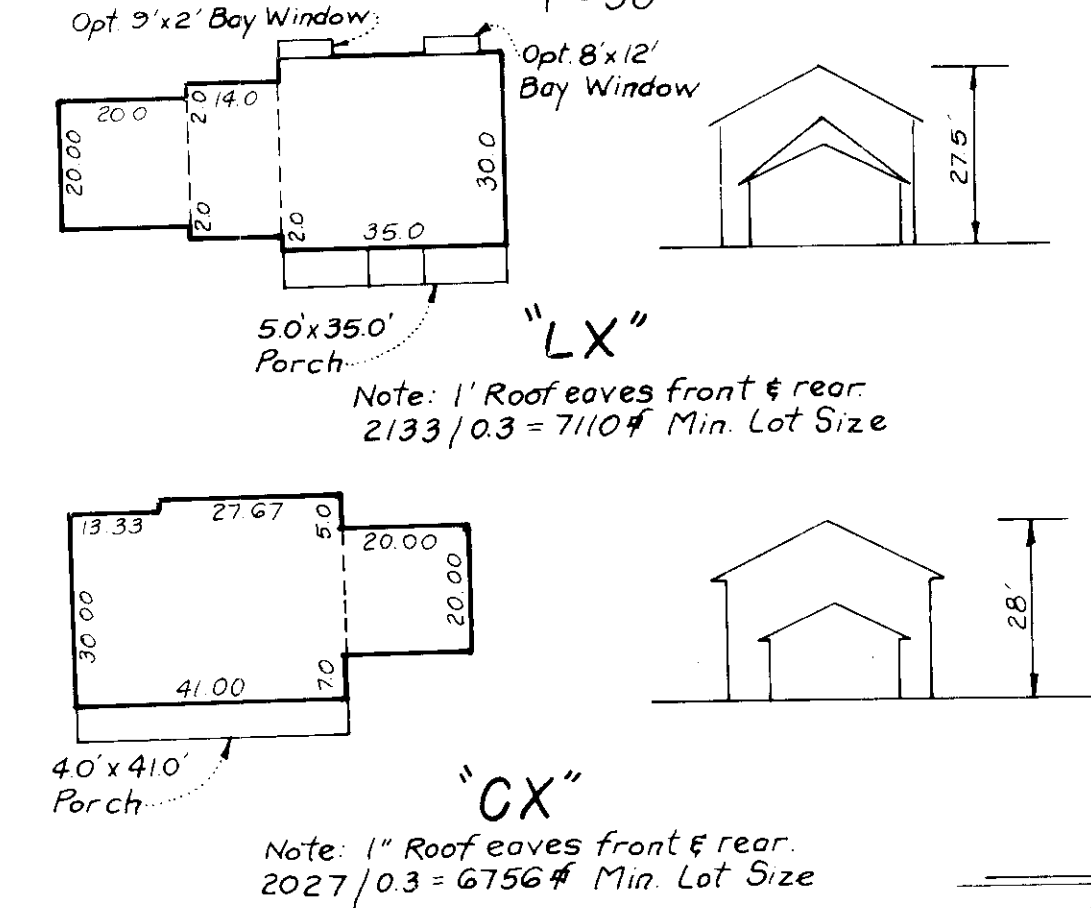
SPECIAL NOTES

- 1 Approved Road Construction Plans shall be used for all public utilities
- 2 Public Water & Sewer shown for reference only. For more detailed information - see water and sewer plans contract No. 24-1856-D
- 3 The water & sewer house connections not included in a "Developer's Agreement" shall conform to Howard County Plumbing Code. The on-site W.H.C. shall be 1" copper and the 5/8" C shall be 4" iron
- 4 Storm Water Management provided for by F89-41

GENERAL NOTES

- 1 The Land included in this plan is zoned R-20
- 2 Coordinates shown are based on the Maryland State Plane Coordinate System as projected by Howard County Control Station Nos 3440002, 3441004, R
- 3 All roadways are public and existing
- 4 Total area included in this plan: 4.27 Acres
- 5 Any damage to county owned rights of way shall be corrected at the developer's expense
- 6 Total number of lots: 9
- 7 For flag or pipestem lots, refuse collection, snow removal, and maintenance to be provided to the junction of flag or pipestem and the road R/W and not onto the flag or pipestem driveway
- 8 Storm Water Management provided in F89-41
- 9 Reference Nos 588-27, P88-8, F89-41
- 10 Topo Taken from F89-41 Street, Tree, Grading and Sediment Control Plan prepared by Fisher, Collins and Carter, Inc.

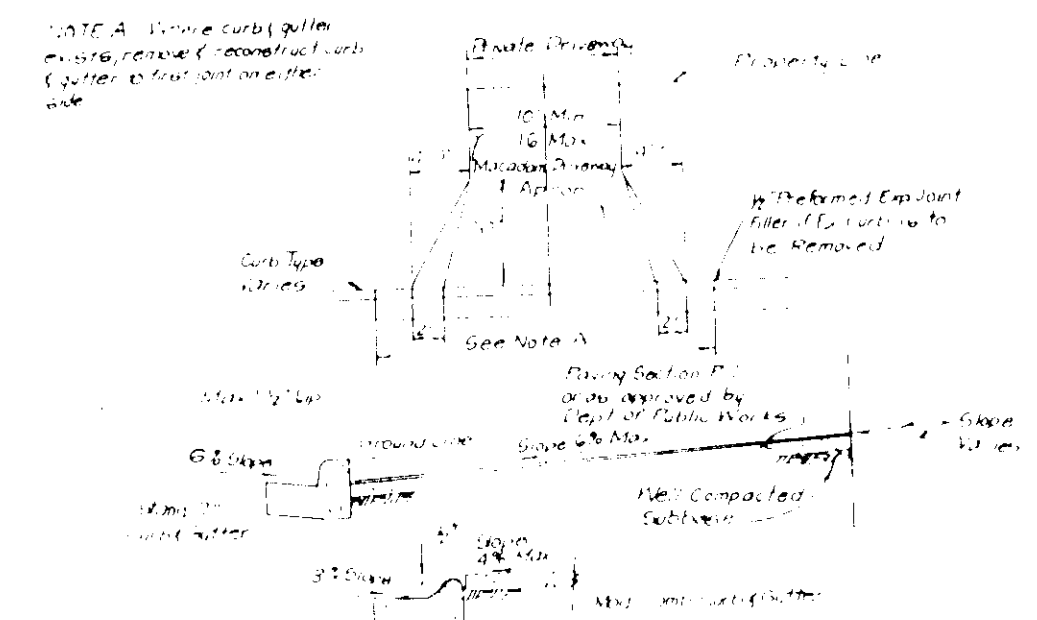
TYPICAL HOUSES



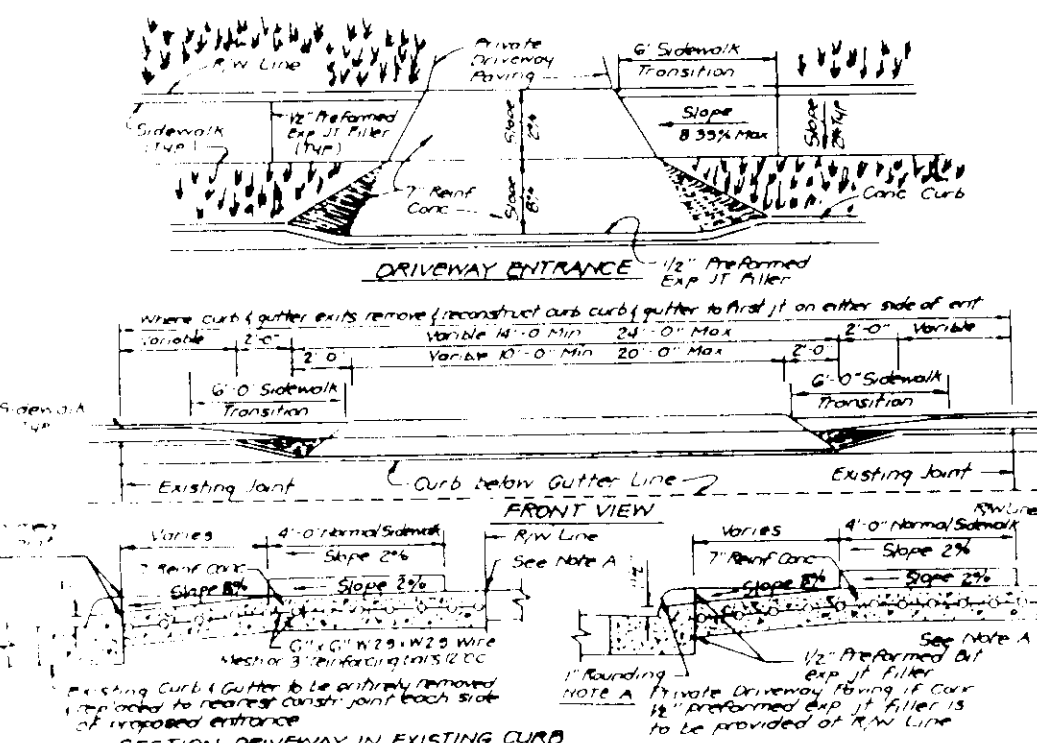
LEGEND

- Contour Interval 2 FT
- Existing Contour 410
- Proposed Contour 410
- Spot Elevation 410.5
- Direction of Drainage
- Walk out Basement
- Trees to be Saved
- Existing Trees

LOT	Total Area	Area of 25% Slope	Total Buildable Area
97	24,254 sq ft	3,132 sq ft	21,122 sq ft
98	36,213 sq ft	12,942 sq ft	23,271 sq ft
99	29,665 sq ft	10,611 sq ft	19,054 sq ft
102	15,437 sq ft	360 sq ft	15,077 sq ft
103	18,330 sq ft	4,005 sq ft	14,325 sq ft
104	21,056 sq ft	4,977 sq ft	16,079 sq ft
105	16,830 sq ft	90 sq ft	16,740 sq ft



DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK



DRIVEWAY ABUTTING CLOSED SECTION WITH STR 7" COMB CURB & GUTTER & SIDEWALK SET BACK FROM CURB

ADDRESS CHART

LOT NO	STREET ADDRESS
97	0868
98	0872
99	0876
100	0877
101	0873
102	0860
103	0865
104	0861
105	0857

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 5-30-87

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 6-26-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 5-24-87

OWNER/DEVELOPER: Barton Sullivan Corp, 3 Bethesda Metro Center, 200 Bethesda, MD 20814

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINISTREL WAY • COLUMBIA, MD 21046 • (301) 975-1500

SITE DEVELOPMENT PLAN
 LOTS 97-105
BRIDGEWATER
 SECTION 2

DESIGNED: VHL
 DRAWN: BAR 68
 CHECKED: JME
 DATE: Nov 1988

FOR: 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 PORTEN SULLIVAN CORP
 3 Bethesda Metro Center - Suite 200
 Bethesda, Maryland 20814
 SDP 89-131

SCALE: 1" = 30'
 DRAWING: 1 of 5
 JOB NO: 88-151
 FILE NO: 88-151-X

VICINITY MAP
 Scale 1" = 2000



1-26-89

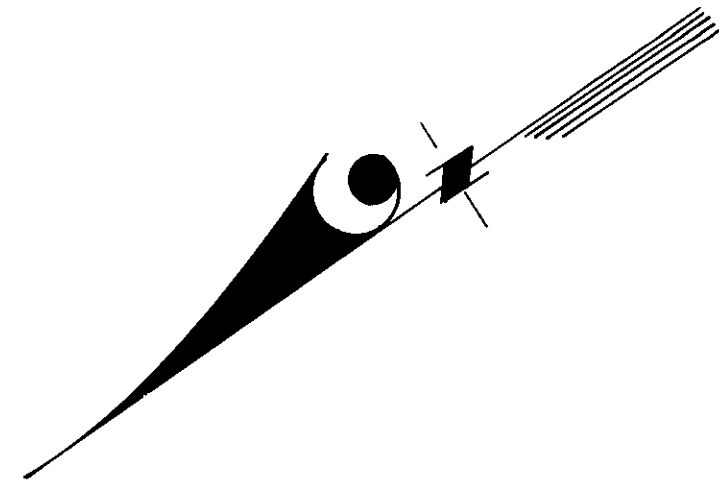
ALLENFORD SECTION 3
 PLAT NO 83364
 ZONE R-20

OPEN SPACE LOT 105
 ZONE R-20

AUTHORIZATION NOTE

Davis Property Partnership hereby authorizes Porten-Sullivan Corporation to refurbish existing Trap #1 and to utilize the existing sediment and erosion control measures shown on plan F-89-41 for sediment control for this project. If Davis Property Partnership removes the existing sediment and erosion control prior to completion of SDP-89-131, a revised sediment and erosion control plan shall be required.

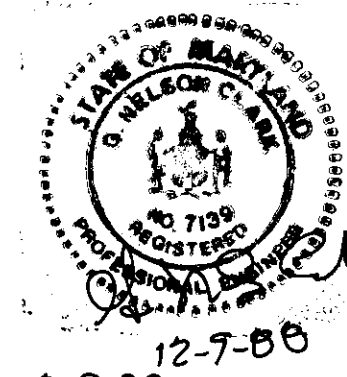
Sandra Gallagher
Sandra Gallagher, Director of Development
Date: 7-3-89



ENGINEER'S CERTIFICATE

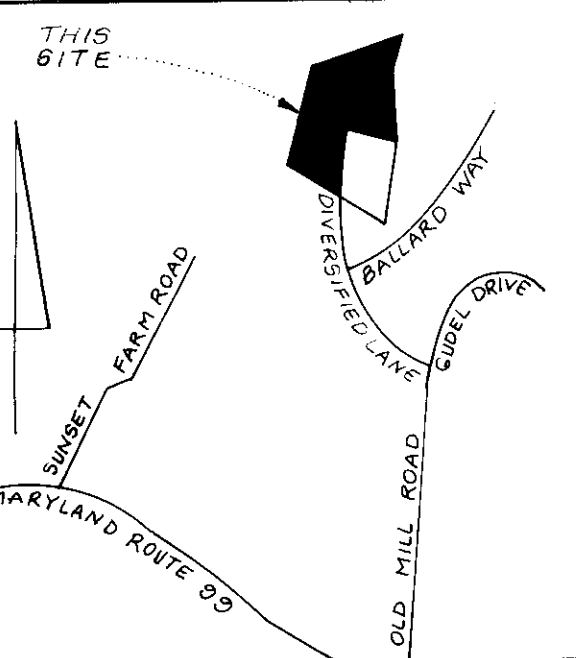
I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark
G. Nelson Clark
Date: 12-9-88



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

Stephen L. Kelly
Approved
Date: 5-22-89



VICINITY MAP
Scale: 1" = 2000'

LEGEND

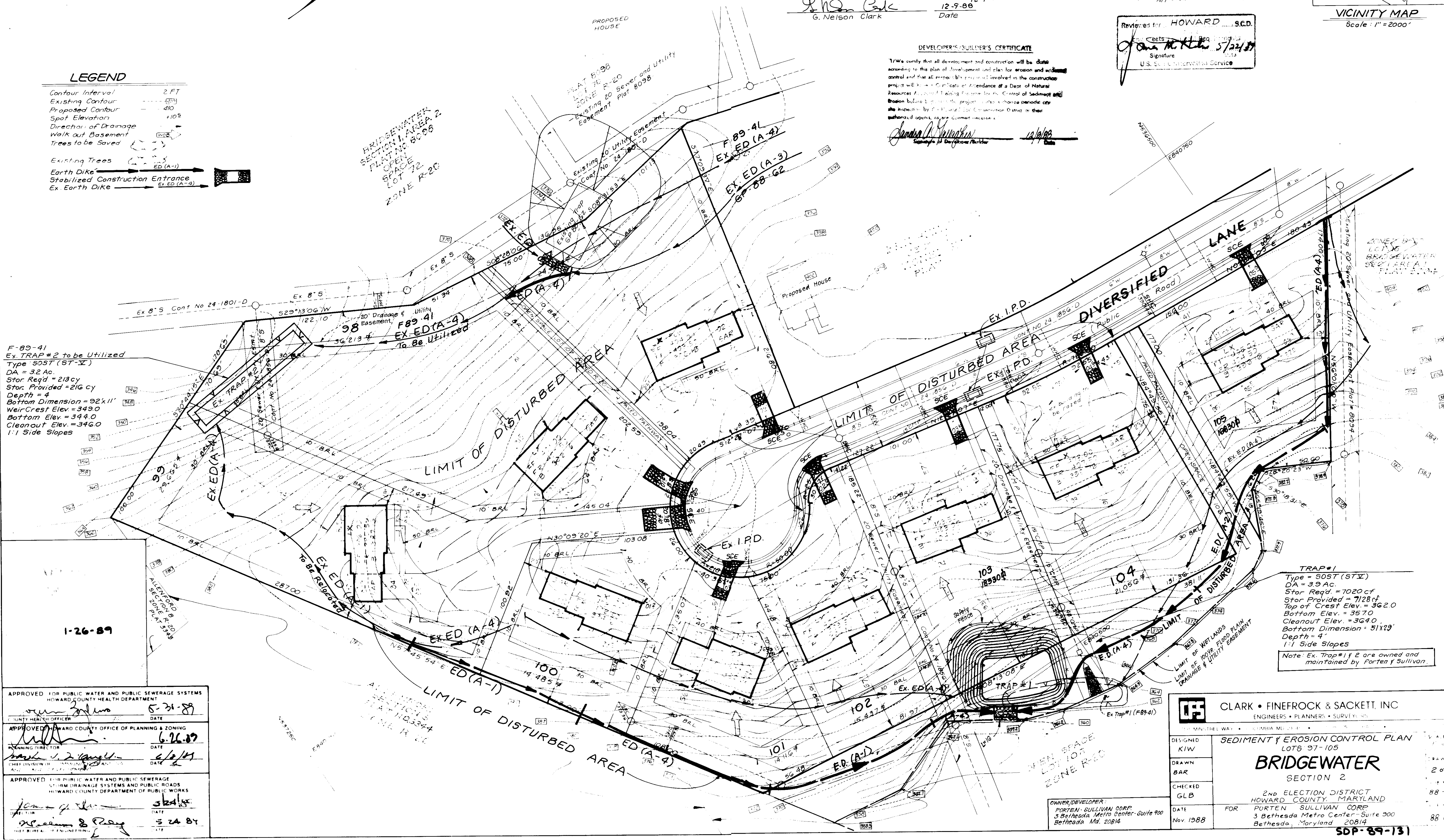
- Contour Interval: 2 FT
- Existing Contour: --- (with elevation)
- Proposed Contour: - - - - (with elevation)
- Spot Elevation: 110.5
- Direction of Drainage: --->---
- Walk out Basement: ---
- Trees to be Saved: ---
- Existing Trees: ---
- Earth Dike: ---
- Stabilized Construction Entrance: ---
- Ex. Earth Dike: ---

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done according to the 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/We authorize periodic site inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Jessica A. Sullivan
Signature of Developer/Builder
Date: 12/9/88

Reviewed for HOWARD COUNTY, S.C.D.
Date: 5/22/89
John M. Kelly
Signature
U.S. Soil Conservation Service



F-89-41
Ex. TRAP #2 to be Utilized
Type = 505T (ST-V)
DA = 32 Ac.
Stor. Req'd = 213 cy
Stor. Provided = 216 cy
Depth = 4'
Bottom Dimension = 92' x 11'
Weir Crest Elev. = 349.0
Bottom Elev. = 344.0
Cleanout Elev. = 346.0
1:1 Side Slopes

TRAP #1
Type = 505T (ST-V)
DA = 3.9 Ac.
Stor. Req'd = 7020 cf
Stor. Provided = 7128 cf
Top of Crest Elev. = 362.0
Bottom Elev. = 357.0
Cleanout Elev. = 364.0
Bottom Dimension = 51' x 29'
Depth = 4'
1:1 Side Slopes
Note: Ex. Trap #1 & 2 are owned and maintained by Porten & Sullivan.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	<i>[Signature]</i> DATE: 5-31-89
APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING	<i>[Signature]</i> DATE: 6-26-89
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	<i>[Signature]</i> DATE: 5-24-89

CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS	
DESIGNED KIW	SEDIMENT & EROSION CONTROL PLAN LOT# 97-105
DRAWN BAR	BRIDGEWATER
CHECKED GLB	SECTION 2
DATE Nov. 1988	FOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND PORTEN SULLIVAN CORP. 3 Bethesda Metro Center-Suite 300 Bethesda, Maryland 20814

PERMANENT SEEDING NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection (992-2437) prior to the start of any construction.
- 2) All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in accordance 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 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1. 3) 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 11, 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. 50) and (Sec. 51) and (Sec. 54), temporary seeding with 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	4.37 Acres
Area Disturbed	3.21 Acres
Area to be roofed or paved	0.76 Acres
Area to be vegetatively stabilized	2.46 Acres
Total Cut	0.00 Cu. Yds
Total Fill	0.00 Cu. Yds
Off-site 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 control must be provided, if deemed necessary by the Howard County DCM 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 permanent 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) If houses are to be constructed on an "As-Sold" basis, at Random, Single Lot Sediment Control as shown below shall be implemented.
- 12) All pipes to be blocked at the end of each day (see detail below). N/A
- 13) The total amount of straw bale dike/silt fence equals 14000' L.F.

TEMPORARY 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 disc into upper three inches of soil. At time of seeding, apply 500 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 80 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 seed. 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 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 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.
- 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, if 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 November 15, seed with 25 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 15, 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 seed.
- Mulching:** Apply 1 1/2 to 2 tons per acre (70 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 more information.

CONSTRUCTION SEQUENCE:

- Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.
- Excavate for foundations and Rough Grade & Temporarily Stabilize.
- Construct Structures, Sidewalks and Driveways.
- Final Grade and stabilize in accordance with Stds. & Specs.
- Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize.

NUMBER OF DAYS

Control Devices and Stabilize	7
Excavate for foundations and Rough Grade & Temporarily Stabilize	60
Construct Structures, Sidewalks and Driveways	120
Final Grade and stabilize in accordance with Stds. & Specs.	14
Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize	7

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

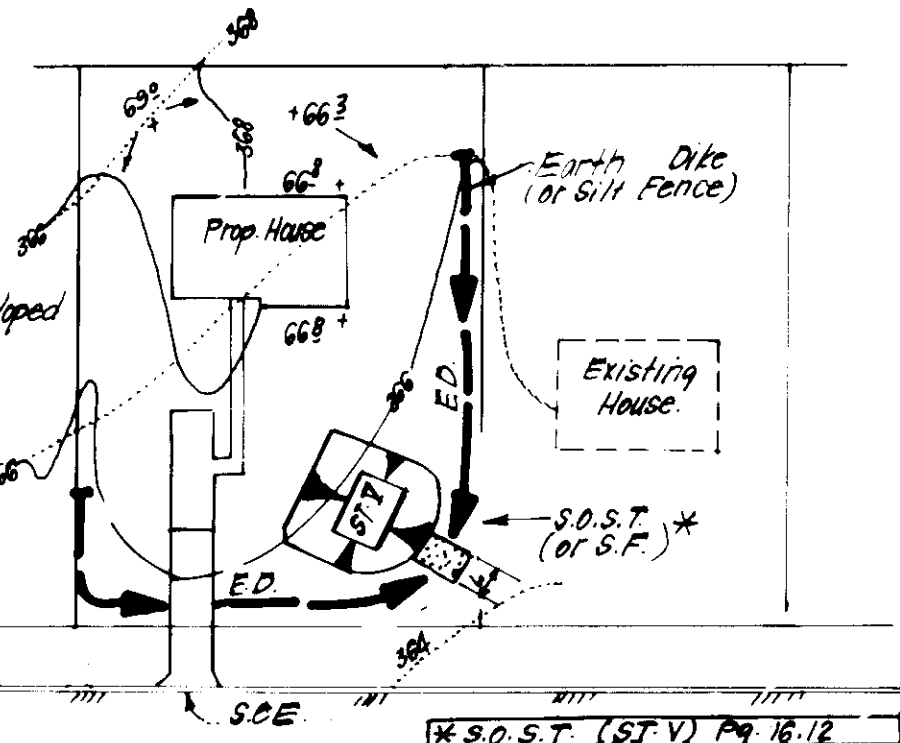
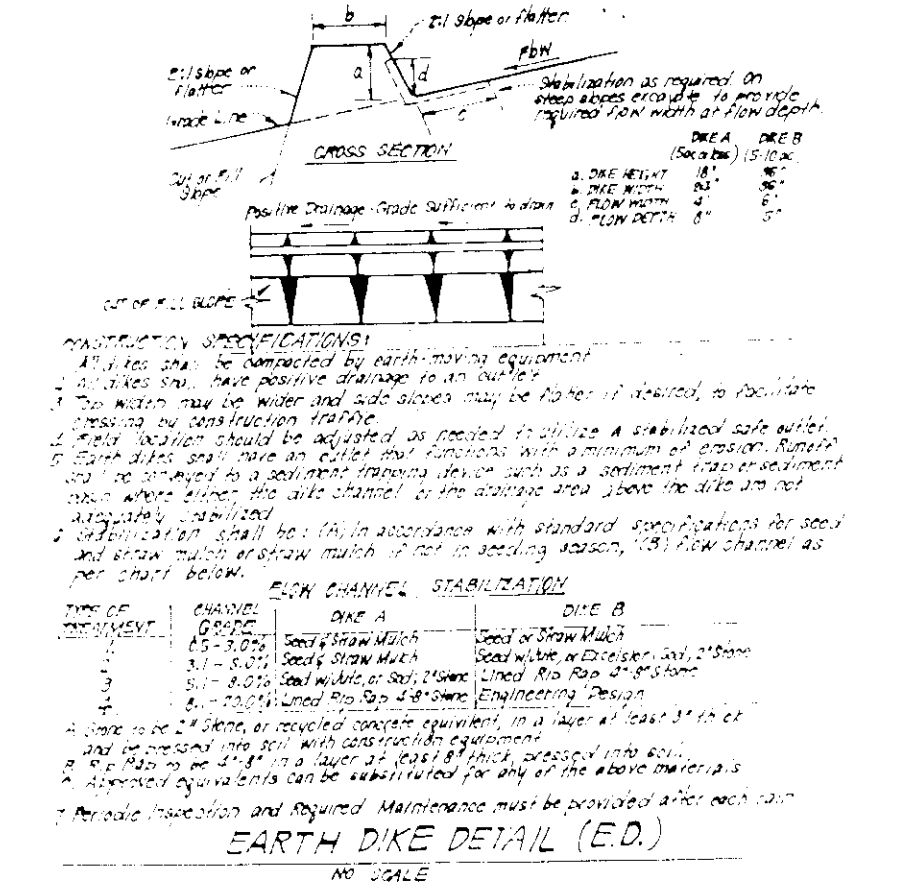
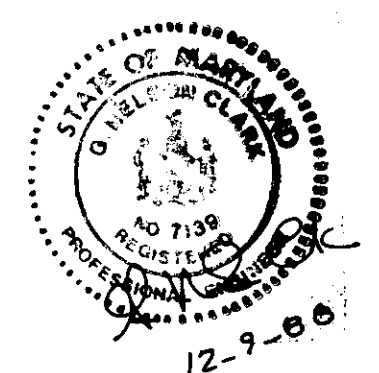
Stephen J. Clark
Approved 5/22/89
Date

Reviewed for Howard S.C.D. requirements
James H. Hahn
Signature 5/22/89
U.S. Conservation Service

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a plan that is workable and 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
G. Nelson Clark
12-9-88
Date



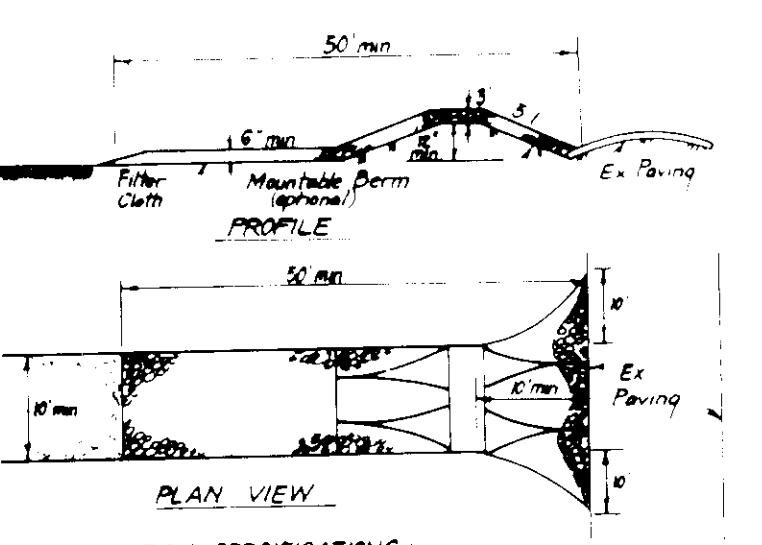
* NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap

NO.	DESCRIPTION	AREA (SQ. FT.)	PERCENTAGE
1	Prop House	1,000	10%
2	Existing House	2,000	20%
3	S.O.S.T. (or S.F.)	10,000	100%
4	Other	0	0%
Total		13,000	100%

DEVELOPER'S BUREAU'S CERTIFICATE

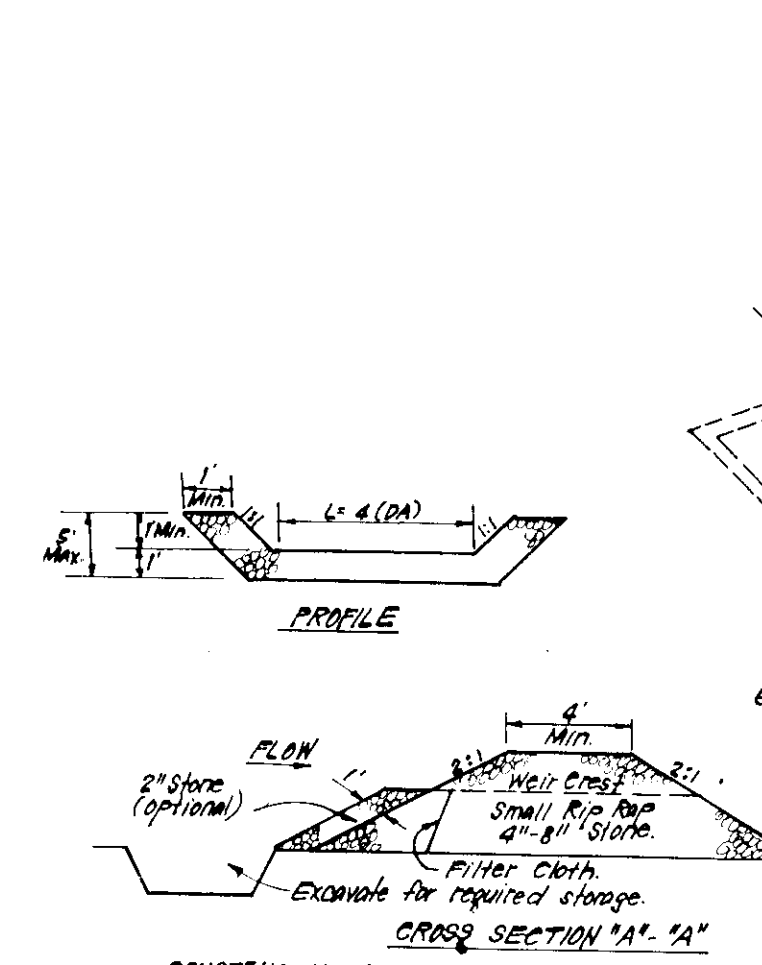
I/We certify that all development and construction will be done according to this plan of development and also for erosion and sediment control and that all necessary permits and approvals in the construction process will be obtained from the Howard County Department of Natural Resources and the Howard County Department of Public Works and that the Howard County Department of Public Works and the Howard County Department of Natural Resources will be kept advised of the progress of the construction and that the Howard County Department of Natural Resources and the Howard County Department of Public Works will be kept advised of the progress of the construction and that the Howard County Department of Natural Resources and the Howard County Department of Public Works will be kept advised of the progress of the construction.

Judith A. Sullivan
Signature of Developer/Builder 12/19/88
Date



- CONSTRUCTION SPECIFICATIONS**
1. Stone size: Use 2" stone or equivalent of crushed concrete equipment.
 2. Length: As required, but not less than 30 feet, except on a single residence lot where a 30 foot maximum length would apply.
 3. Thickness: Not less than 18" inches.
 4. Width: Top 10" flat minimum, but never less than the full width of 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 and stone should be washed.
 6. Surface Water: All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a manhole side basin with 3" slope will be permitted.
 7. Maintenance: The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public right-of-way. This may require periodic top dressing with additional stone as needed. All sediment traps shall be inspected and repaired as needed. All sediment traps shall be inspected and repaired as needed.
 8. Washing: Washing shall be obtained to remove sediment from the entrance and public right-of-way. Washing is required. It shall be done on an area stabilized with stone and which drains into an approved sediment trap. Washing shall be done on an area stabilized with stone and which drains into an approved sediment trap.
 9. Periodic inspection and needed maintenance shall be provided after each rain.

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



- CONSTRUCTION SPECIFICATIONS:**
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and roof run. The roof area shall be cleared.
 2. The filter 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.
 3. The filter cloth shall be placed over the embankment and secured to the original embankment when the sediment trap is being constructed.
 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 stream side of the small rip rap or crushed stone 1/4" filter cloth in the rip rap.
 5. Sediment shall be deposited in the trap and removed to its original destination 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.S.T.) ST.V.

NO SCALE

1-26-89

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
James Hahn
COUNTY HEALTH OFFICER 5-30-89
DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
James Hahn
PLANNING DIRECTOR 6-26-89
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James Hahn
12-24-89
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James Hahn
5-24-89
DATE

OWNER/DEVELOPER
Porten Sullivan Corp.
3 Bethesda Metro Center - 200
Bethesda, MD 20814

CLARK • FINEROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

DESIGNED BY: KTW
DRAWN BY: BAR
CHECKED BY: GLB
DATE: Nov 1988

SEDIMENT & EROSION CONTROL PLAN
LOTS 97-105
BRIDGEWATER
SECTION 2
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR PORTEN SULLIVAN CORP.
3 Bethesda Metro Center, Suite 200
Bethesda, Maryland 20814

SCALE: 1" = 30'
DRAWING: 3 of 3
SHEET NO: 88-151
DATE: 88-15-SE