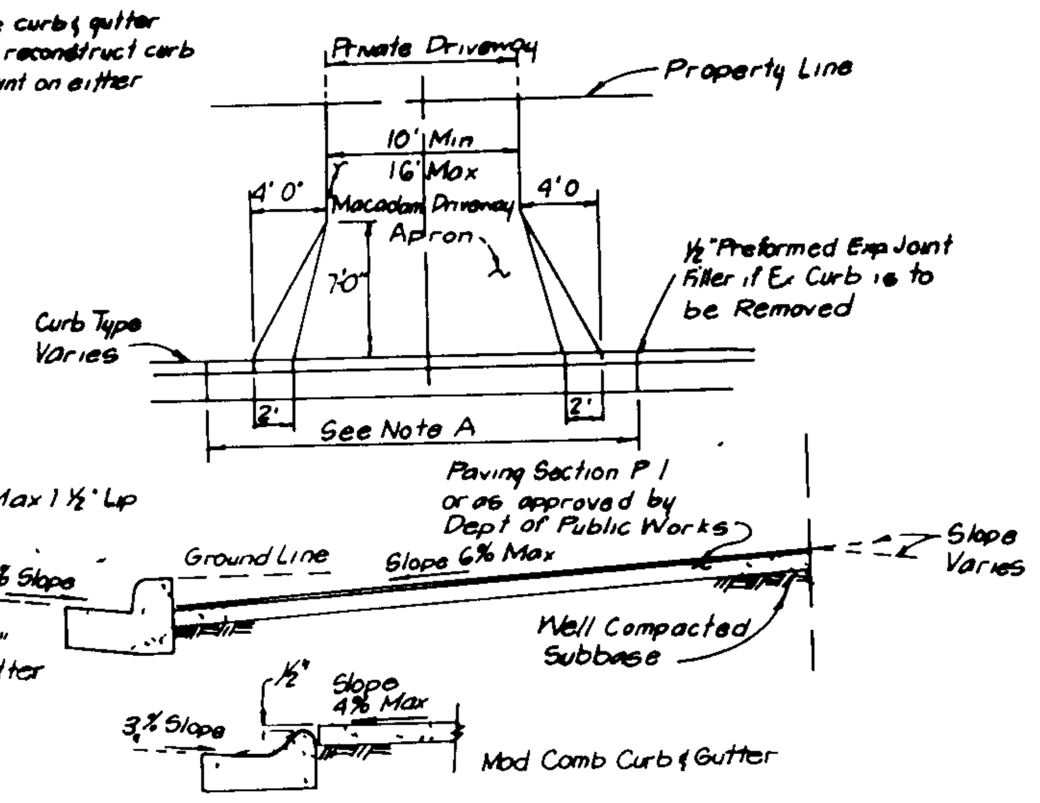
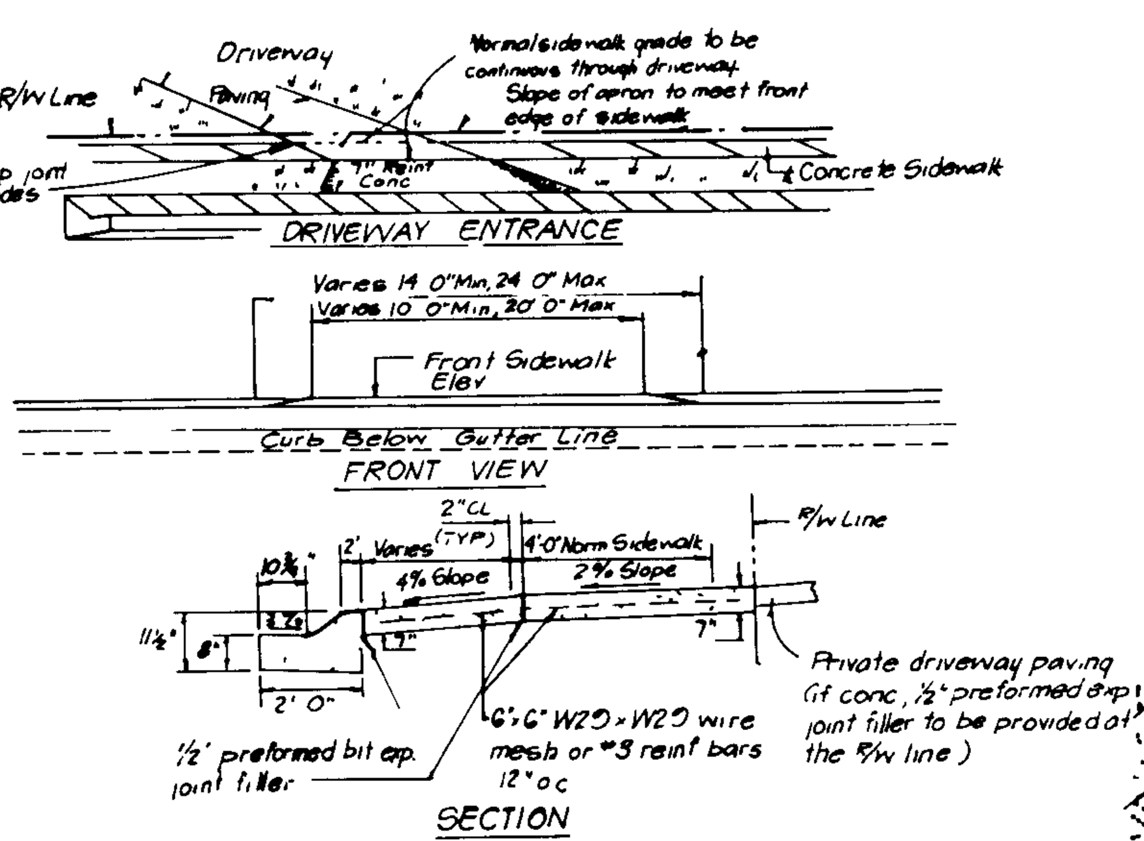
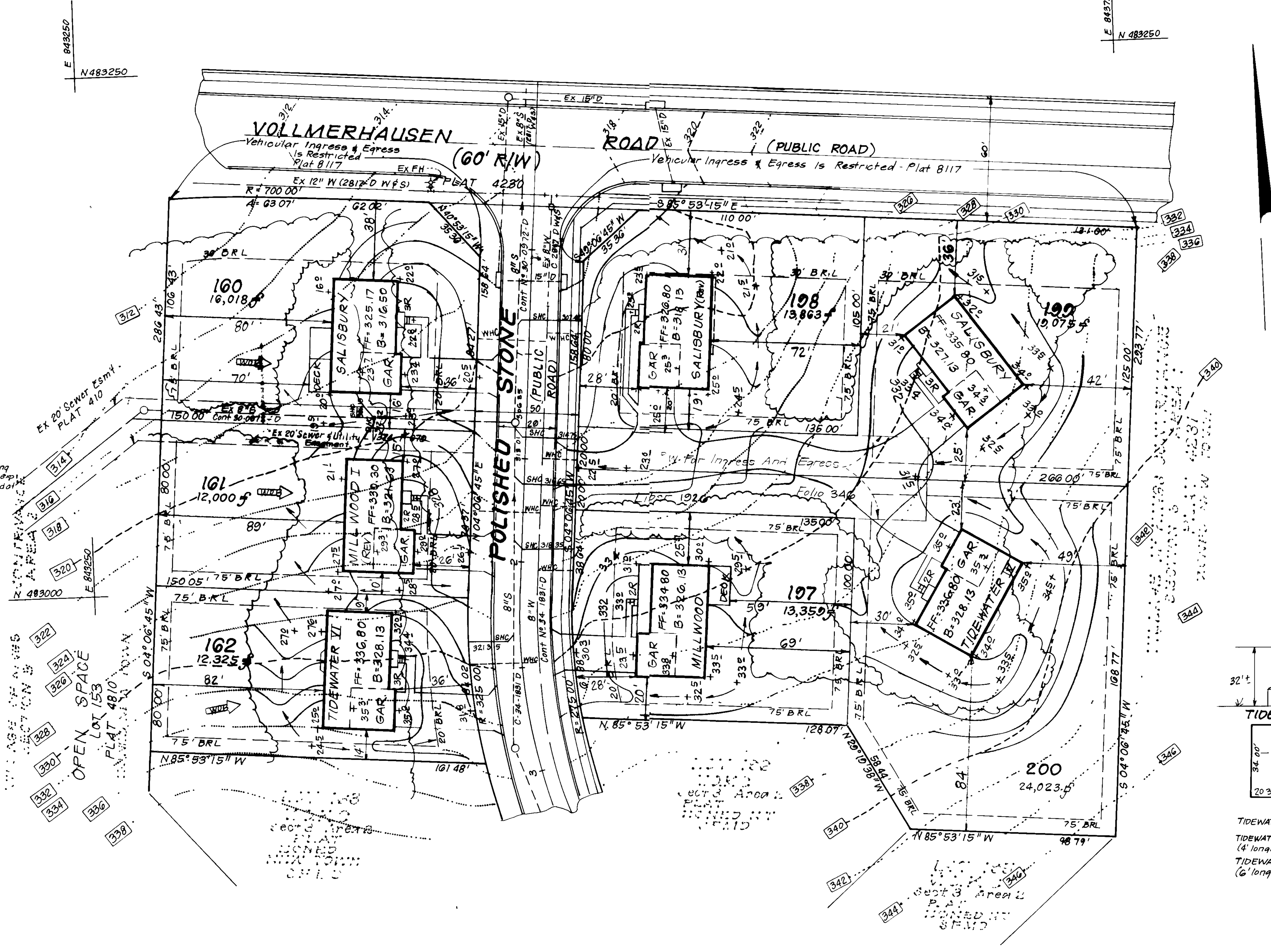
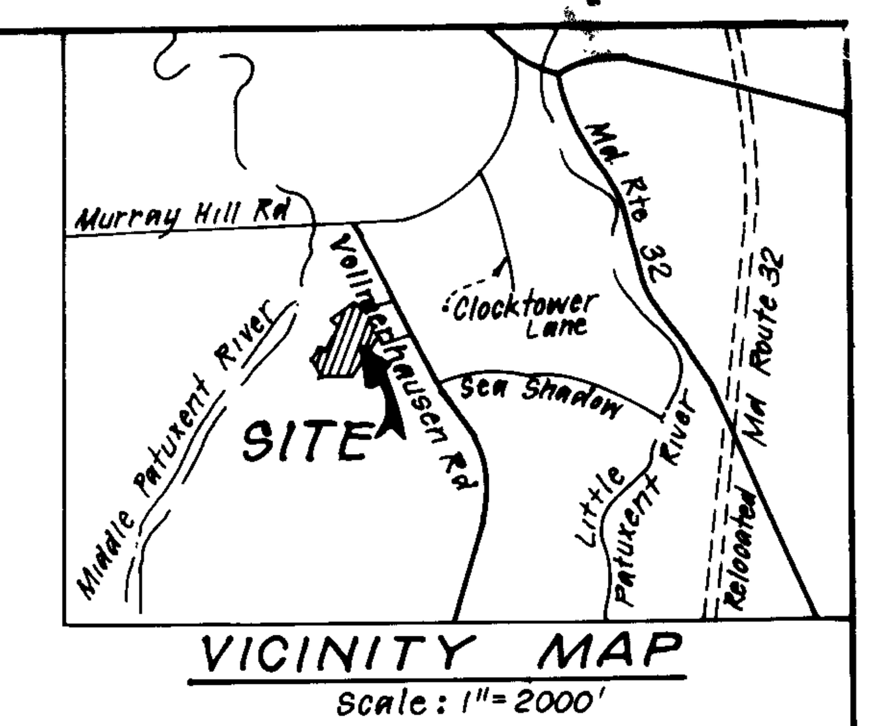


DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK



DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB. CURB & GUTTER & SIDEWALK





VICINITY MAP
Scale: 1"=2000'

LEGEND

1 Contour Interval 2 ft
2 Existing Contour
3 Proposed Contour
4 Spot Elevation +10.5
5 Direction of drainage
6 Walk-out basement WOB
7 Existing Trees
8 Trees to be saved

GENERAL NOTES

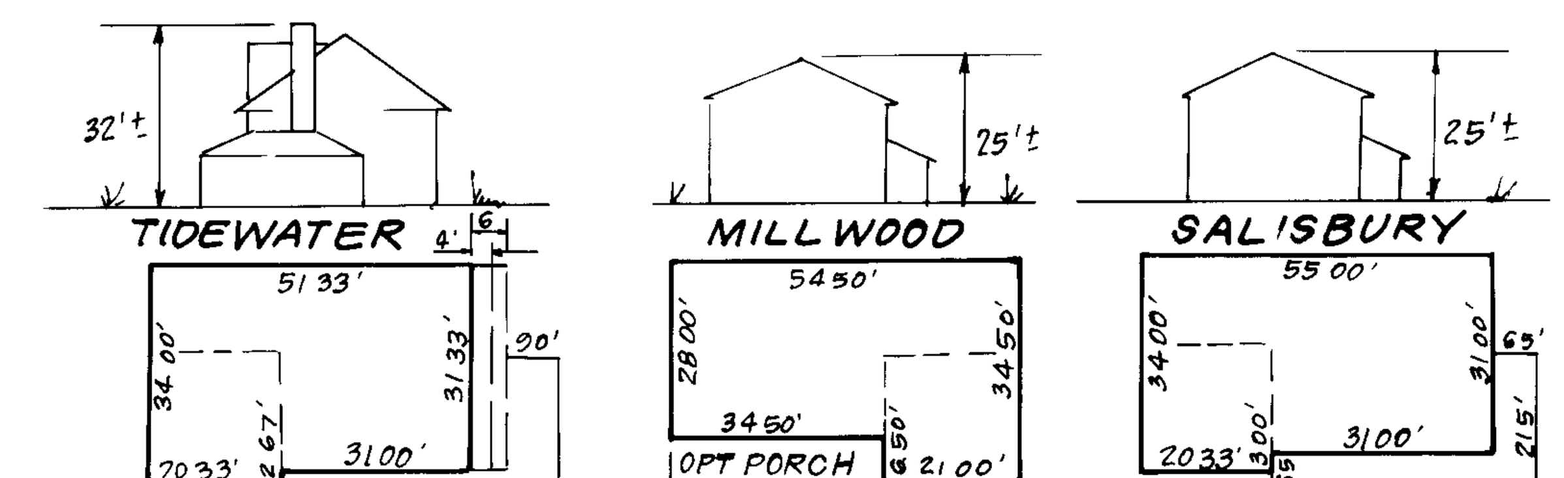
1 Subject property zoned NT SFMD+SFLD per 82.85 Comprehensive Zoning Plan
2 The coordinates shown hereon are based upon Howard County Geodetic Control Traverse which is based upon the Maryland State Plane Coordinate System
3 All roads are public and existing
4 Any damage to county owned rights-of-ways to be corrected at the developer's expense
5 Total area included 2.5405 Acres
6 Total number of lots 7
7 Reference Final Development Plan Criteria Phase 169A1, part II.
8 Maximum Lot Coverage 30%
9 The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of Commencement of work at 792-2630
10 The Office of Planning and Zoning file reference numbers are S 77-32, P 80 03, F-78-203, F-80-87, and WP-88 118.
11 The lots or parcels shown on this plan are subject to the supplemental sewer-in-aid-of-construction charge created by Section 20-311A of the Howard County Code and to Executive Order No 72-9

SPECIAL NOTES

1 Approved Road Construction Plans shall be used for all public utilities
2 The water & sewer house connections not included in a "Developers Agreement" shall conform to Howard County Plumbing Code. The on-site WHC shall be 1" Copper and the SHC shall be 4" iron
3 Public water & sewer shown for reference only. For more detailed information - See Water & Sewer plans Cont No 34-1831-D
4 For flag or pipestem lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestem and the road right-of-way only and not onto the flag or pipestem lot driveway
5 Stormwater Management Provided for in VOKC 3/2, F-80-87

ADDRESS CHART

LOT #	STREET ADDRESS	
160	9700	Polished Stone
161	9704	" "
162	9708	" "
197	9715	" "
198	9711	" "
199	9707	" "
200	9703	Polished Stone



TIDEWATER = 1734.11 / 0.3 = 5780.4 sf Min Lot Size
TIDEWATER IV = 1898.43 / 0.3 = 6,328.1 sf Min Lot Size (4' longer)
TIDEWATER VI 1965.09 / 0.3 = 6550.3 sf Min Lot Size (6' longer)
2021.75 / 0.3 = 6739.2 sf Min Lot Size
1754.9 / 0.3 = 5849.6 sf Min Lot Size

TYPICAL HOUSES

SCALE: 1" = 30'

SUBDIVISION NAME	SECT/AREA		LOTS
COLUMBIA - Village Of Kings Contrivance	3	2	160-162, 197-200

PLAT #	BLOCK No	ZONE	TAX/ZONE MAP	ELEC DIST	CENSUS TR
8117	21	NT SFLD & NT SFMD	42	6th	6021

WATER CODE	SEWER CODE
E 15	6240000 & 6250000

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 BALTO • (301) 621-8100 - WASH

DESIGNED JME	SITE DEVELOPMENT PLAN LOT 160-162 & 197-200 COLUMBIA VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DRAWN GB/VLM	
CHECKED JME	
DATE 10-21-88	FOR NU-HOMES, INC 10480 Little Patuxent Pkwy Columbia, Maryland 21044

SCALE 1" = 30'
DRAWING 1 OF 2
JOB NO 88-102
FILE NO 88-102X

SDP 89-78

STATE OF MARYLAND REGISTERED LAND SURVEYOR

NO	REVISION	Date
1	Rev. hse. & grd Lot 198 from Millwood to Salisbury	10-3-89

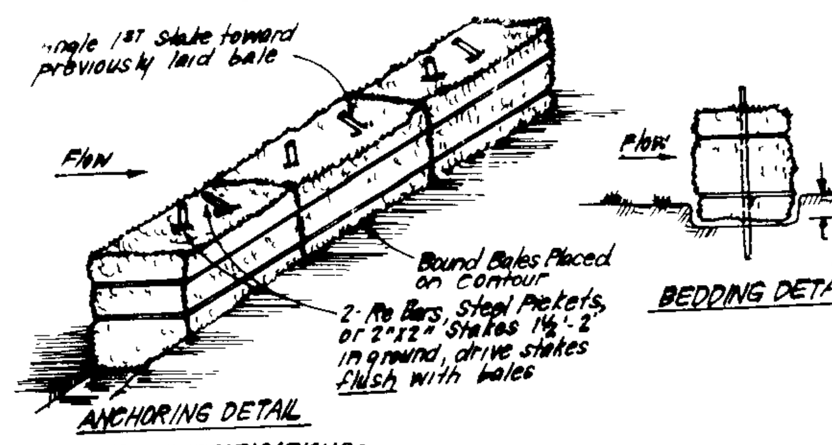
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 1-23-89

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 2.6.89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 2-2-89

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR Richard M. Hall for JMT — DATE 1/17/89
CHIEF BUREAU OF ENGINEERING — DATE 1-12-89

NOV. 17, 1988

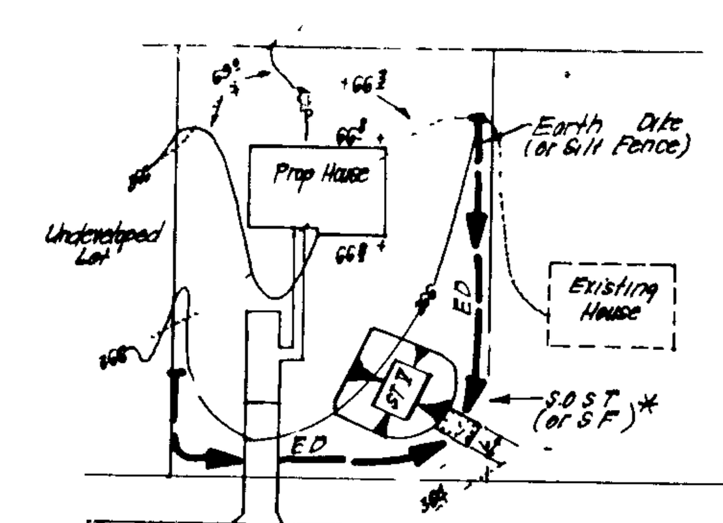
NOTE: EXISTING SEDIMENT & EROSION CONTROL MEASURES ARE TAKEN FROM PREVIOUSLY APPROVED SEDIMENT & EROSION CONTROL PLAN F 88-256.



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 1st stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale
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

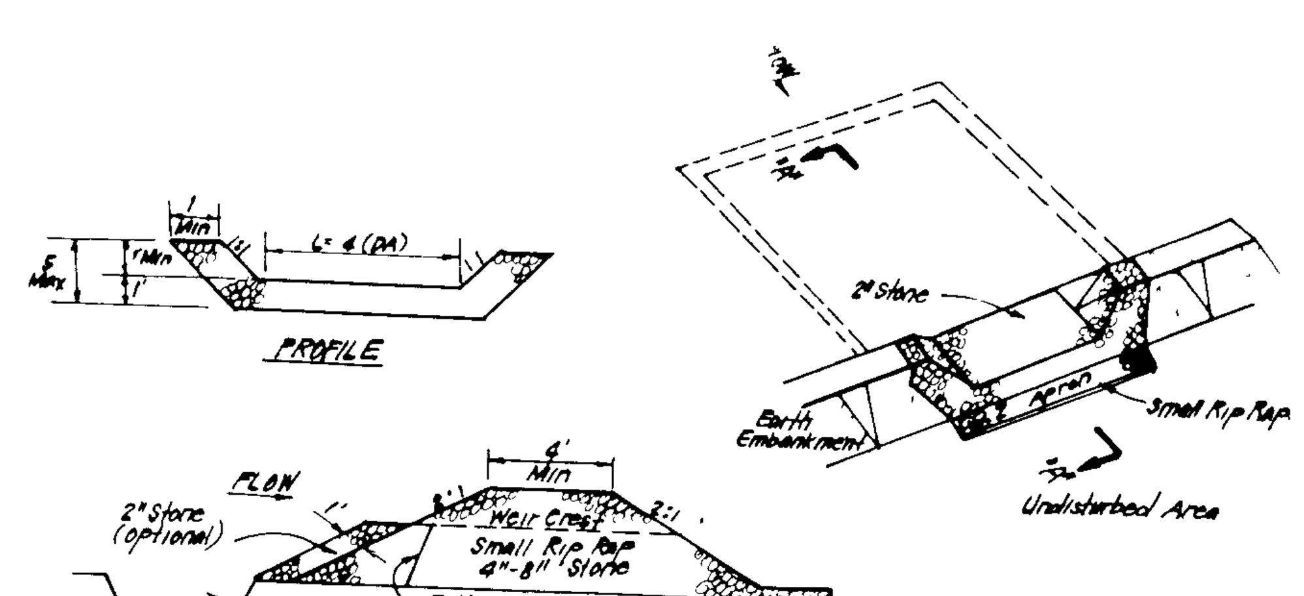


* NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap

* S.O.S.T. (ST V) Pg 16.12			
LOT SIZE	¼ Ac	½ Ac	1 Ac
L	2'	3'	4'
Depth	2'	2'	2'
Bot Length	11'	26'	26'
Bot Width	11'	11'	26'
Bot Area	121	286	676

+ can be adjusted in field, but bottom area must be as given or greater

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

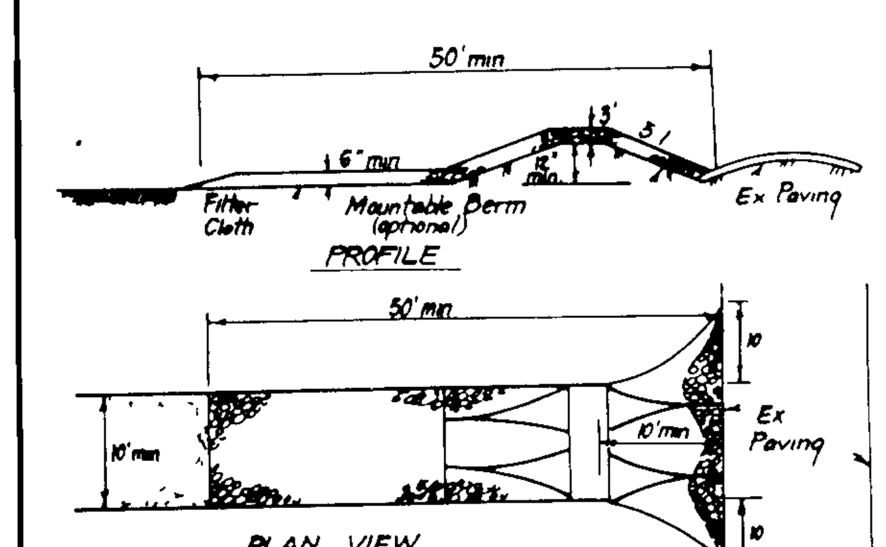


OPTION: A 1 layer of 2" Stone may be placed on the upstream side of the rip rap in place of embedded filter cloth.

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 over sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing 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 or embedded filter cloth in the rip rap
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ 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

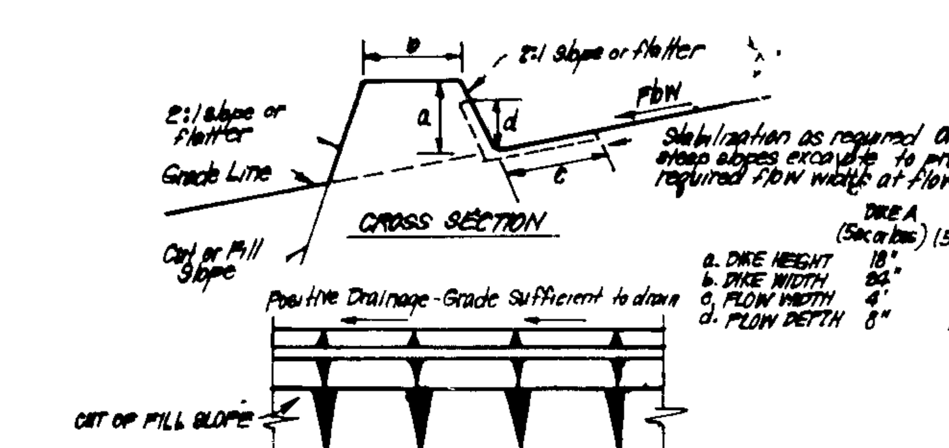
STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST.V.
NO SCALE



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 30 foot minimum length would apply
3. Thickness - Not less than six (6) inches
4. Width - Ten (10) foot 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 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. 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

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



	DIKE A (5ac or less)	DIKE B (5-10 ac)
a. DIKE HEIGHT	18"	36"
b. DIKE WIDTH	24"	36"
c. FLOW WIDTH	4'	6'
d. FLOW DEPTH	8"	15"

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 safe 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.

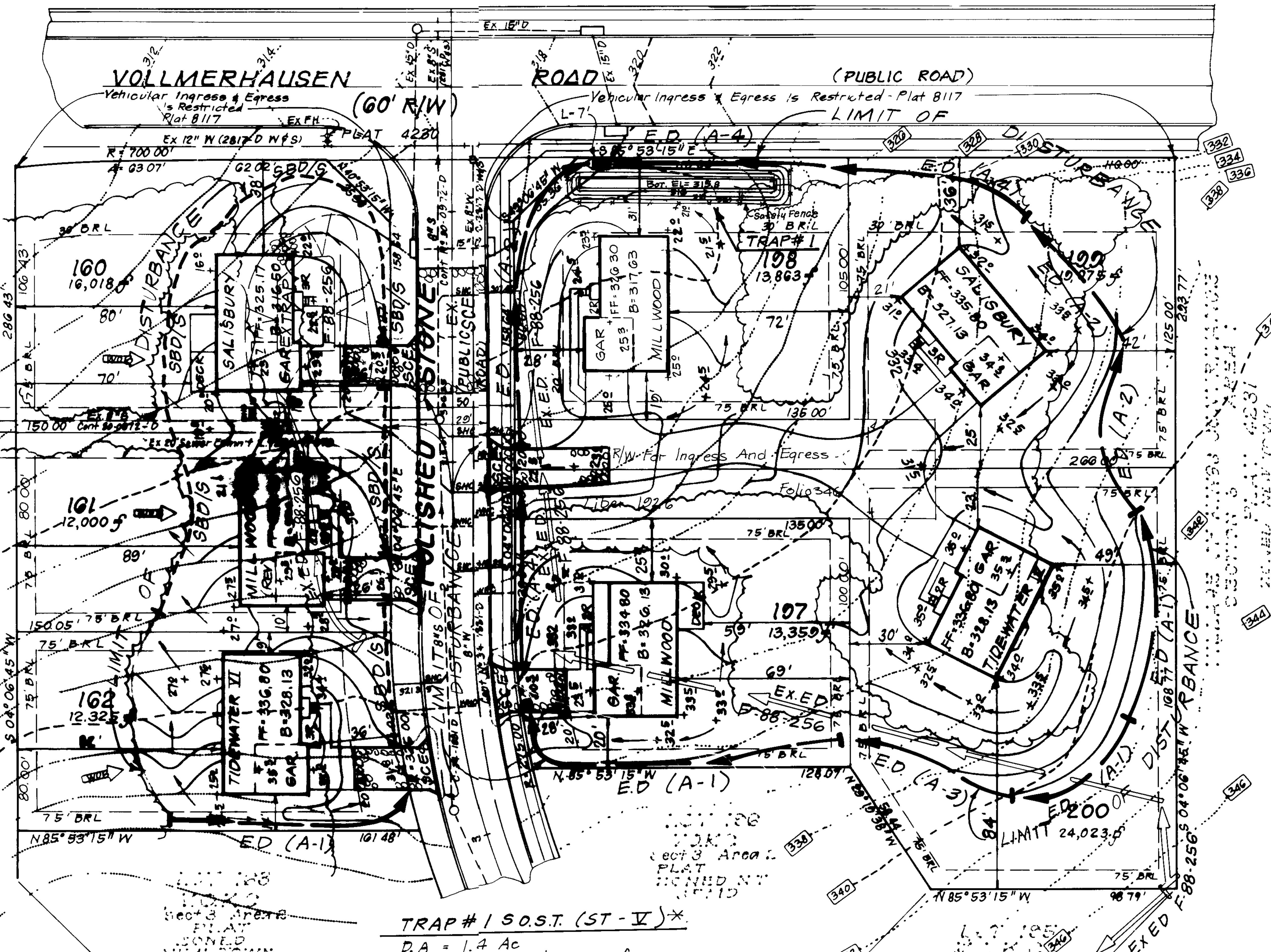
FLOW CHANNEL STABILIZATION

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 w/Jute, or Excelsior; Sod, 2" Stone
3	5.1-8.0%	Seed w/Jute 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 8" thick, pressed into 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

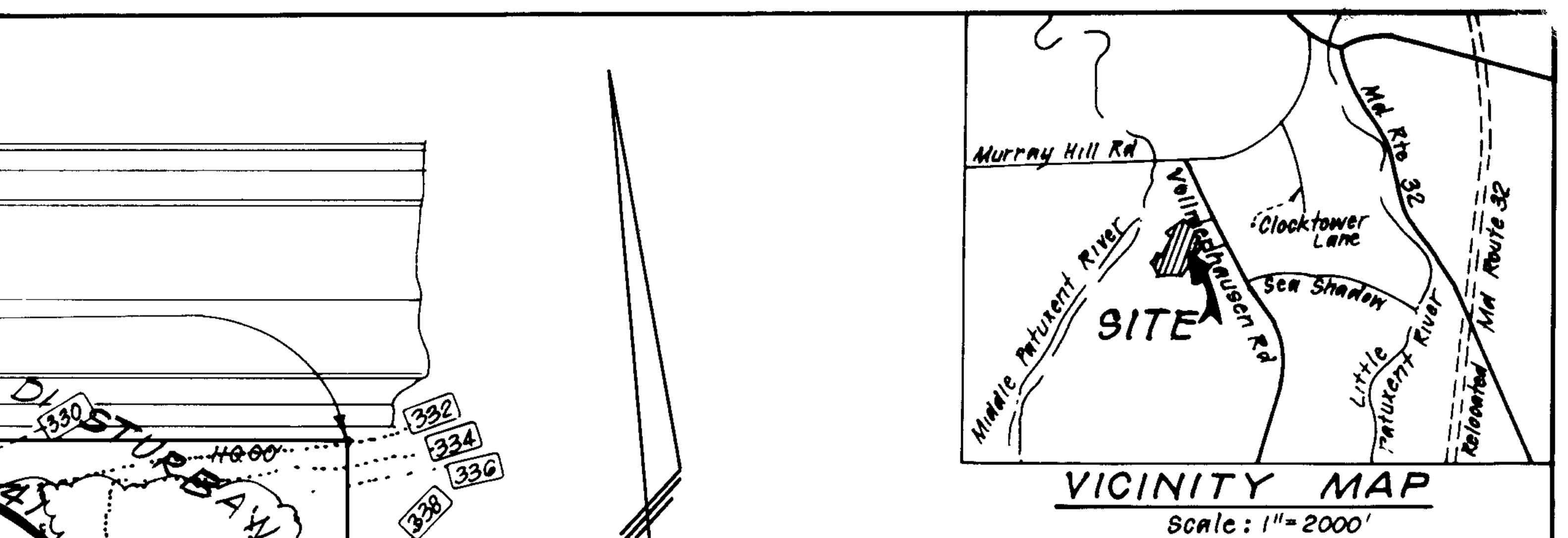
EARTH DIKE DETAIL (E.D.)
NO SCALE



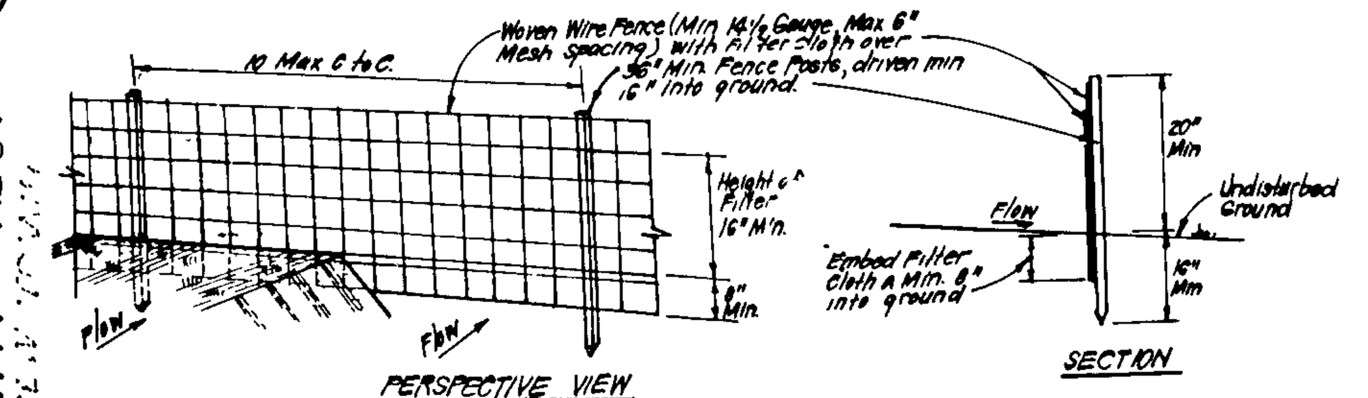
TRAP # 1 S.O.S.T. (ST - V) *

D.A = 1.4 Ac
Storage Required = 2520 cf
Storage Provided = 2526 cf
Depth = 4'
Bottom Dimensions = 79'x4'
Top of Stone El = 318 8
Bottom El = 313 8
Clean-out El = 315 8

* NOTE: 1:1 side slopes in cut



VICINITY MAP
Scale: 1" = 2000'



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 24" 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 Silt Fence

POSTS: Steel either T or U Type or 2" Hardwood
FENCE: Woven Wire, 14½ Gage 6" Max Mesh Opening
FILTER CLOTH: Filter X, Mirafi 100X, Stablinka, T140N or Approv equal
PREFABRICATED UNIT: Geofab, Envirofence, or Approv. equal

SILT FENCE DETAIL (S)
NO SCALE

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, discing 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 square 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 thre 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 1½ 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, discing 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 2½ 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 1½ 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

SEDIMENT CONTROL NOTES

1) A minimum of 24 hour notice must be given to the Howard County Office of Inspection and Permit 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, Chaper 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	2.54	Acres
Area Disturbed	1.86	Acres
Area to be roofed or paved	0.42	Acres
Area to be vegetatively stabilized	1.44	Acres
Total Cut	2280	Cu yds
Total Fill	2430	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 control must be provided, if deemed necessary by the Howard County DPW 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 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
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 400 LF

LEGEND

1. Contour Interval — 2 Ft
2. Existing Contour — 330 (dashed)
3. Proposed Contour — 330 (solid)
4. Spot Elevation — + 30 5
5. Direction of Drainage — arrow
6. Walk-Out Basement — WOB
7. Trees to be Saved
8. Earth Dike — ED (A-1) (Proposed); Ex ED F 88256 (Existing)
9. Straw Bale Dike or Silt Fence — SBD/S
10. Stabilized Construction Entrance — SCE

CONSTRUCTION SEQUENCE.

		# OF DAYS
A.	Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.	7
B.	Excavate for foundations and Rough Grade & Temporarily Stabilize	30
*C.	Construct Structures, Sidewalks and Driveways.	120
D.	Final Grade and stabilize in accordance with Stds & Specs	30
E.	Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize	30

* House on lot 160 not to be constructed until permission to remove Ex Trap has been obtained from the sediment control inspector.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
[signature] 1-23-89
COUNTY HEALTH OFFICER — DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
[signature] 2.6.89
PLANNING DIRECTOR — DATE
[signature] 2-2-89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Richard M. Hall for JMI 1/17/89
DIRECTOR — DATE
[signature] 1-12-89
CHIEF BUREAU OF ENGINEERING — DATE

NOV. 17, 1988

Reviewed for HOWARD SCD
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
[signature] 12/89
Approved — Date

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] 10/25/88
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

[signature] 10-21-88
G Nelson Clark — Date

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7200 – BALTO • (301) 621-8100 – WASH

DESIGNED KIW	SEDIMENT & EROSION CONTROL PLAN LOT 160-162 & 197-200 COLUMBIA VILLAGE OF KINGS CONTRIVANCE	SCALE 1" = 30'
DRAWN GB/VLM		DRAWING 2 OF 2
CHECKED KIW	SECTION 3 AREA 2 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO 88-102
DATE 10-21-88	FOR NU-HOMES, INC 10480 Little Patuxent Pkwy. Columbia, Maryland 21044	FILE NO 88-102 SE

SLF 89-78