

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
84	6425 SUMMER SUNRISE DRIVE
85	6421 SUMMER SUNRISE DRIVE
86	6417 SUMMER SUNRISE DRIVE
87	6413 SUMMER SUNRISE DRIVE
88	6409 SUMMER SUNRISE DRIVE
	SUNRISE-EMPTYSONG DRIVE
81	6400 EMPTYSONG ROAD
82	6452 RIVER RUN

LEGEND

- CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- EXISTING TREES TO REMAIN
- Tree Protection Fence

SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-93-18 and/or approved Water and Sewer Plans Contract #C-94-3204-D. S.M.C. elevations shown are located at the property line.

VICINITY MAP

Scale: 1" = 2000'

Benchmark N#1 - Railroad Spike in pole #52560 (Hwy-77ter Road) Elev. 593.27
 N 496697.02
 E 822026.81

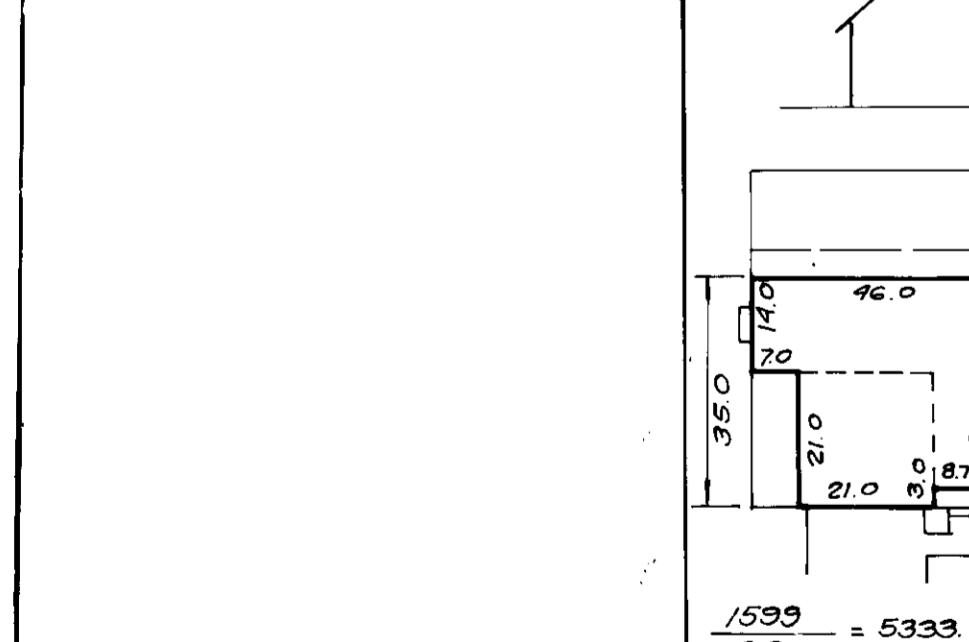
COLUMBIA HILL VILLAGE OF RIVER HILL SECTION 2 AREA 1

COLUMBIA HILL VILLAGE OF RIVER HILL SECTION 2 AREA 1 OPEN SPACE LOT 127

GENERAL NOTES:

1. Subject property is zoned: NTSFLD per B-2-85 Comprehensive Zoning Plan, and FCP Phase 2008 Plan #1.
2. The total area included in this submission is: 70,782 SF or 1.62 Ac.
3. The total number of lots included in this submission are: 7
4. Improvement to property: Single family detached
5. The maximum lot coverage permitted is: 30%
6. Department of Planning and Zoning reference file numbers are: S-91-03, P-92-13, WP-92-13, F-93-18, FDP Phase 2008 Part 1 & F-94-32
7. Utilities shown as existing are taken from approved water and sewer plan Contract # 94-3204-D, approved road construction plans F-93-18, and actual field survey.
8. Any damage to county owned rights-of-way shall be corrected at the developer's expense.
9. Storm water management is provided per F-93-18 Detention for All roadways are public and existing.
10. The existing topography shown was taken from plans prepared by Riemer Muegge and Associates, Inc. F-93-18.
11. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos. 2337001, 2337002, and 2437003.
12. The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 313-1810 at least five (5) working days prior to the start of work.
13. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
14. Under certain conditions, decks and porches may only extend 3 feet into front and rear setbacks as stated in FCP 2008 Item #6.
15. For driveway entrance details refer to H.C. Design Manual Volume II Site Details R-6.03.
16. Waiver petition 92-13 is to allow a cul-de-sac to exceed 120' and 100' ADT.

NO	REVISIONS	Date
2	Rev. grad. lot 85, Add base typical	2-2-94
1	Add Chrisfield & Tidewater II house typicals & Opt driveway lots 85, 87, 1, 26-34	1-26-94

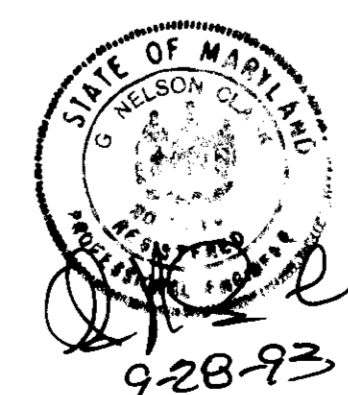
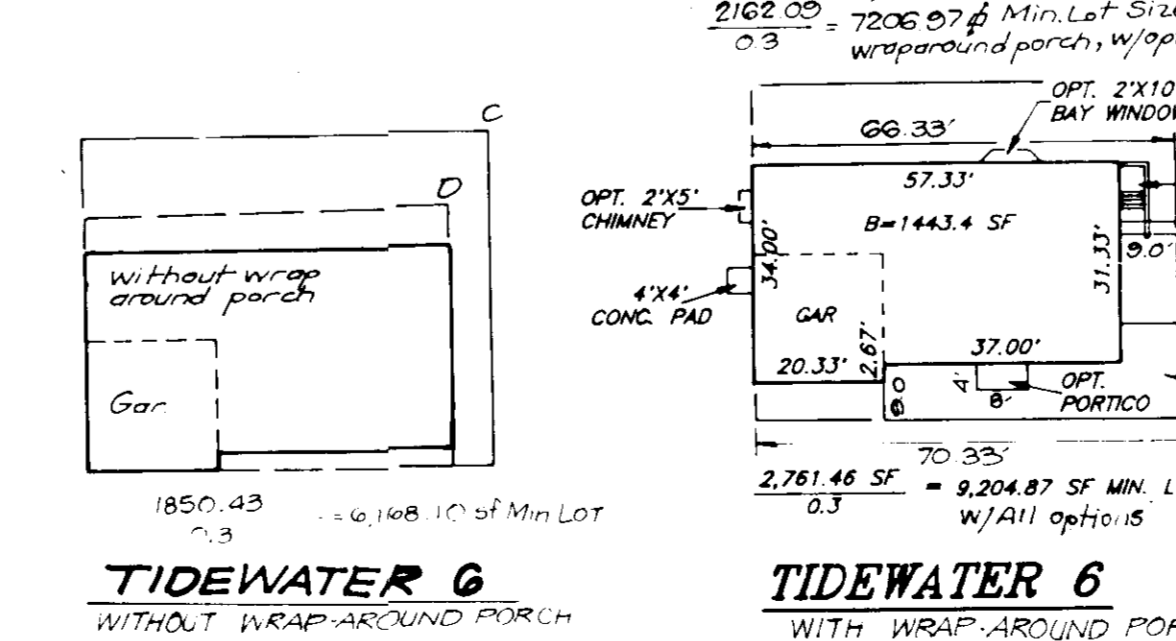
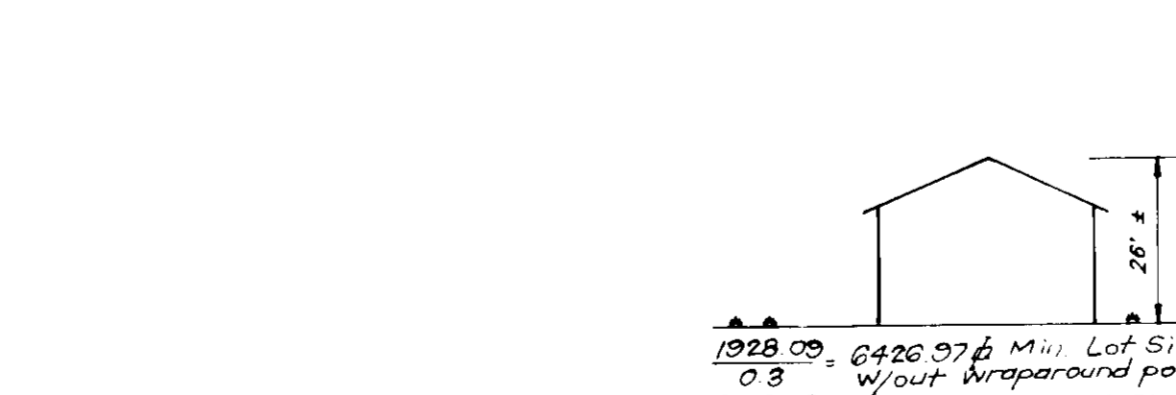
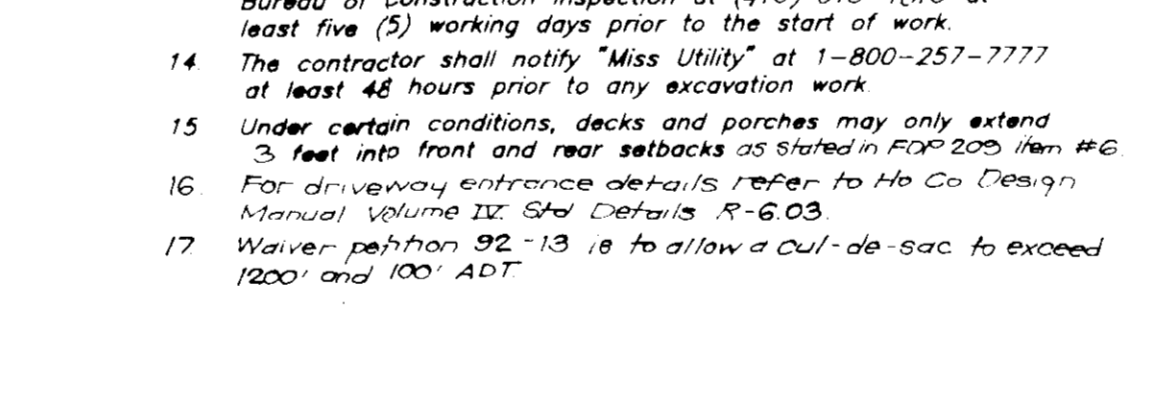
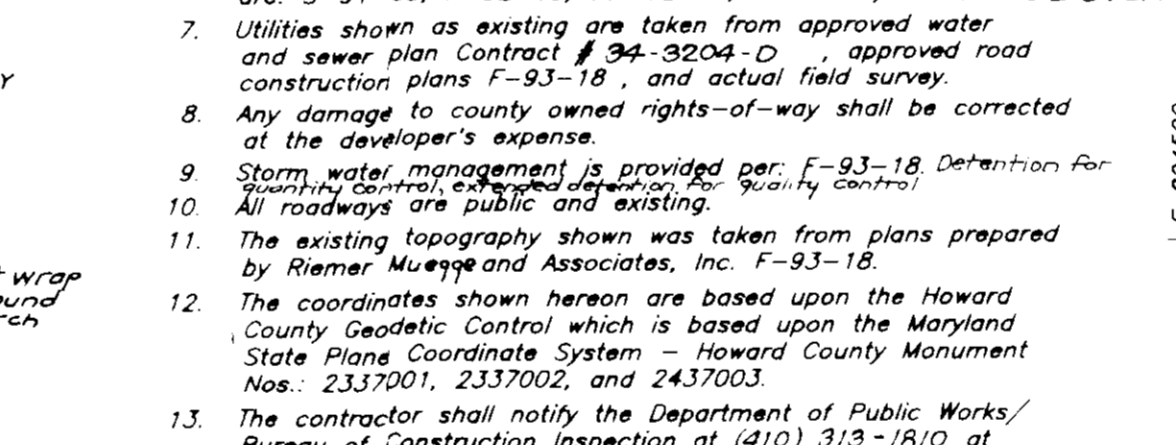
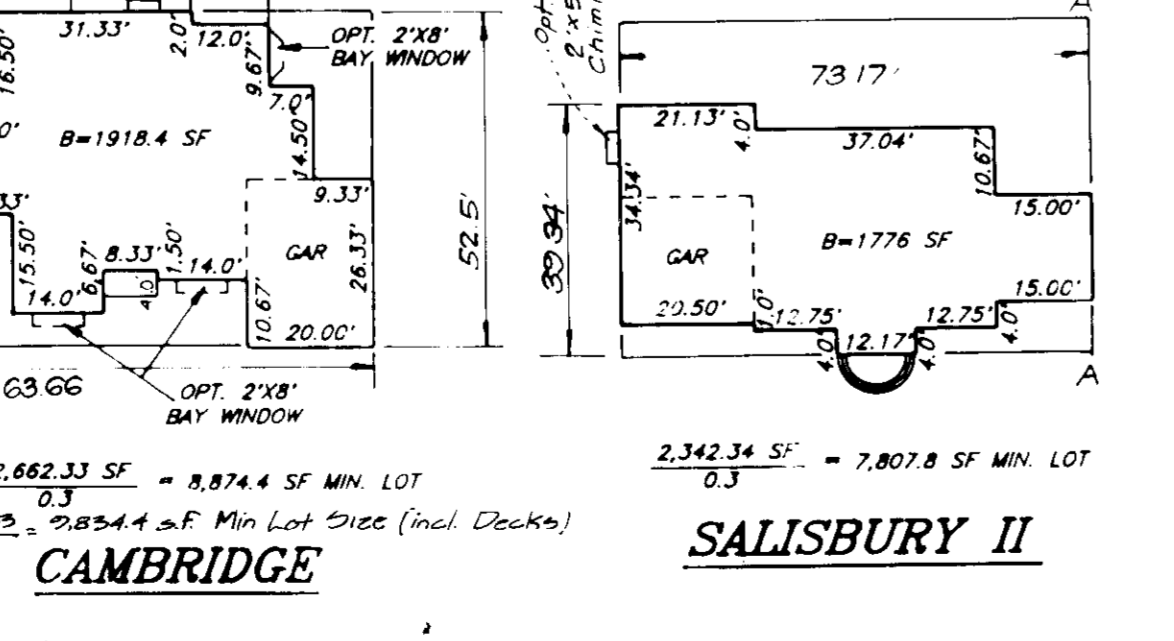
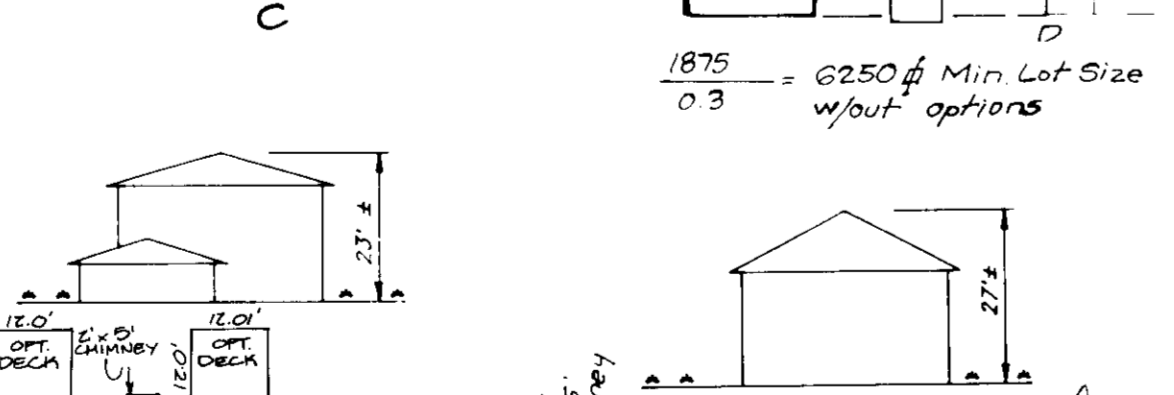
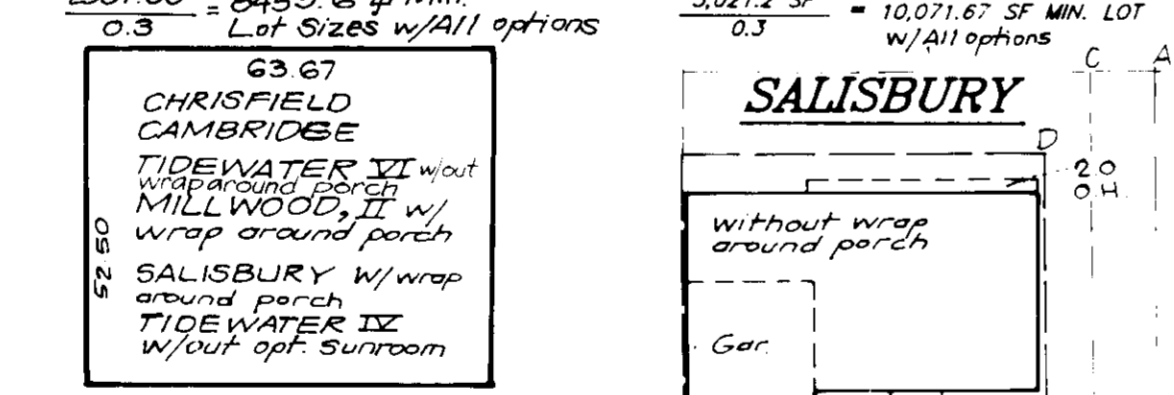
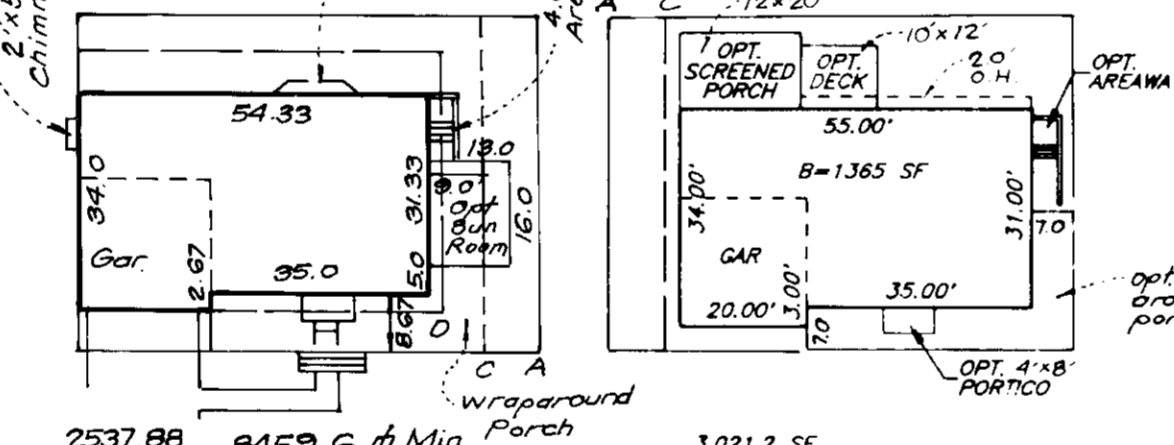
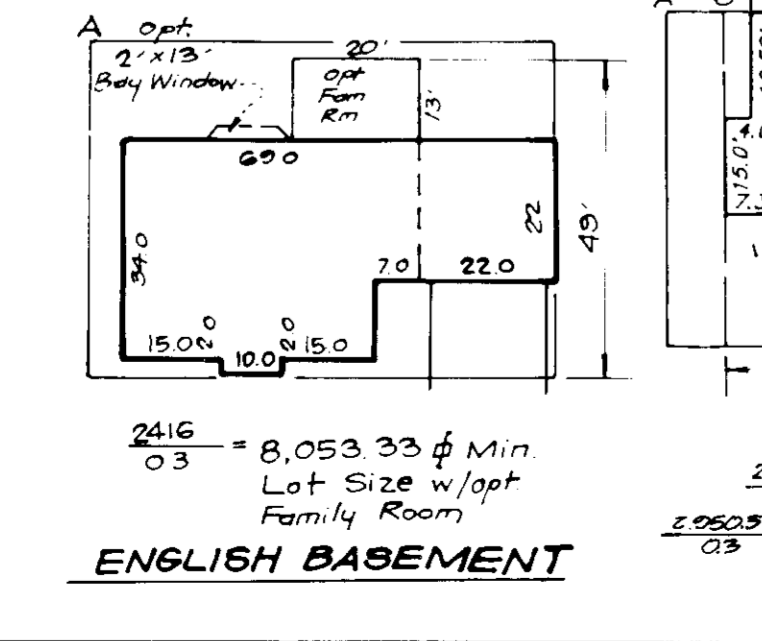
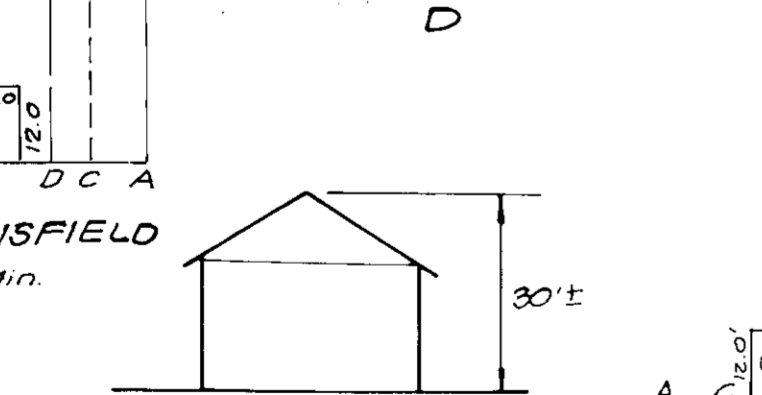
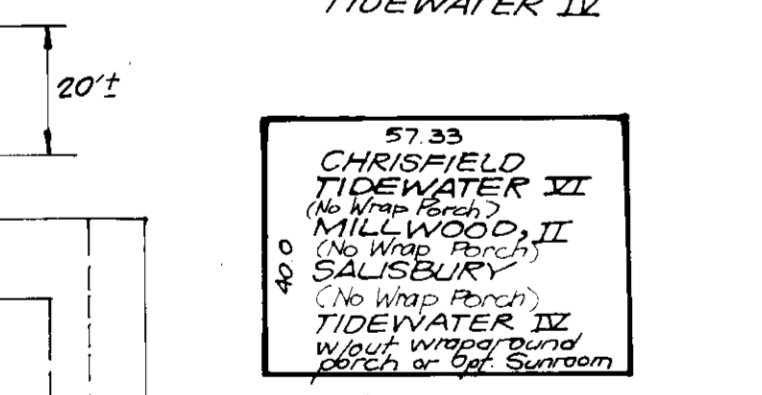
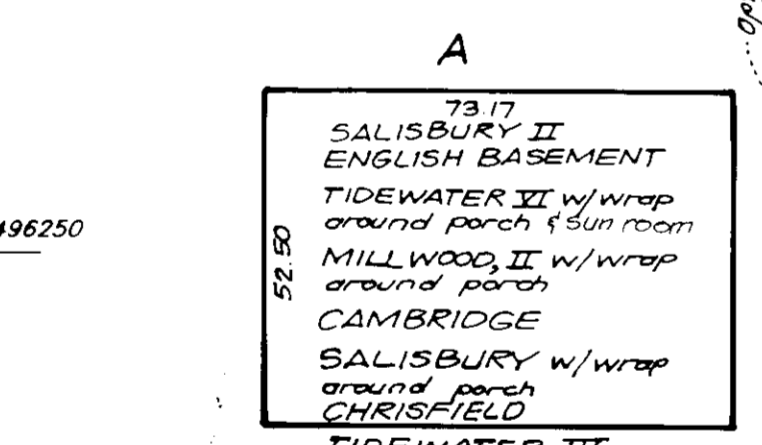


APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 10-24-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DIRECTOR: [Signature] DATE: 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC WORKS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 11/10/93

CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 10/15/93



SHEET INDEX:

SHEETS	DESCRIPTION
1	SITE DEVELOPMENT PLAN
2 & 3	SEDIEMENT & EROSION CONTROL PLAN

SUBMISSION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	2/1	LOTS 81, 82 & 84-88
PLAT NO.	BLOCK NO.	ZONE
10298	14	NT
TAX MAP NO.	ELECTION DIST.	CENSUS TRACT
10298	35	5TH 6055
WATER CODE	SEWER CODE	
I-12	6652500	

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

714 MINISTRE WAY • COLUMBIA, MD 21046 • (410) 275-3030 • BALTO. • (410) 431-8500 • WASH. • (202) 462-1100

DESIGNED: VLP
 DRAWN: LAI, BAL
 CHECKED: JME
 DATE: APRIL, 1993

SCALE: 1" = 30'
 DRAWING: 1 OF 3
 JOB NO: 93-050
 FILE NO: 93-050X

SITE DEVELOPMENT PLAN
 LOT 81, 82 AND 84 THRU 88
COLUMBIA
 VILLAGE OF RIVER HILL
 SECTION 2 AREA 1
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

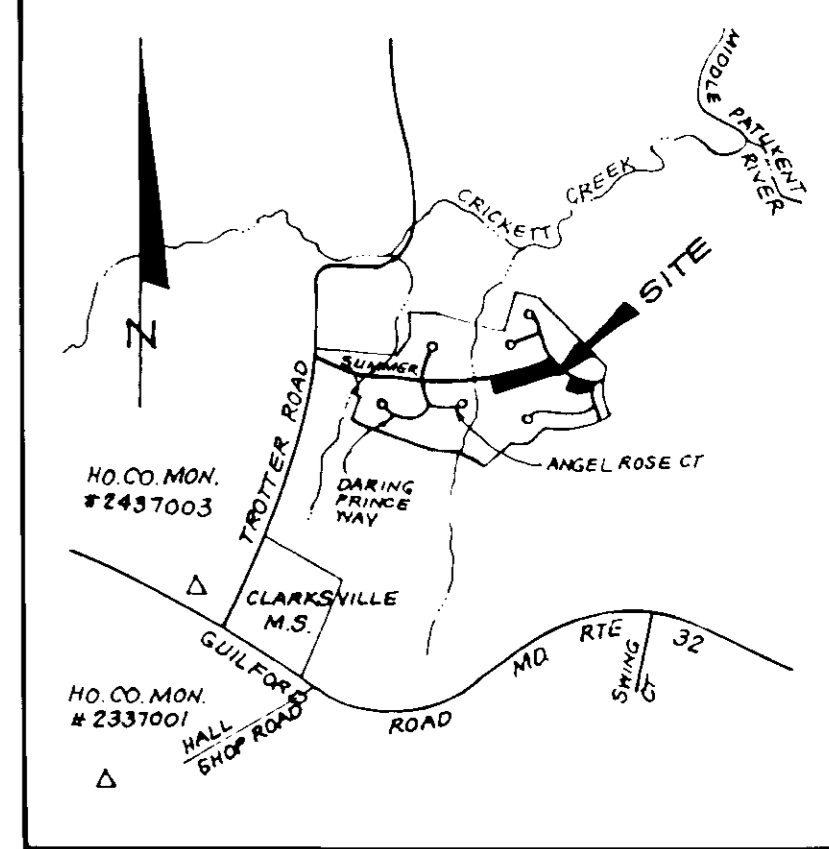
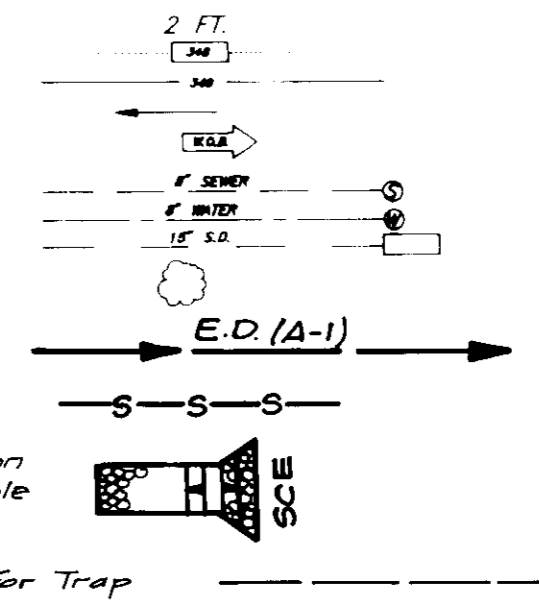
FOR: NU-HOMES, INC.
 8391 Broken Land Pkwy #401
 Columbia, MD 21046-1165

SDP 93-100

No	REVISIONS	Date
1	Revise grd on lots 84-88	5-28-93

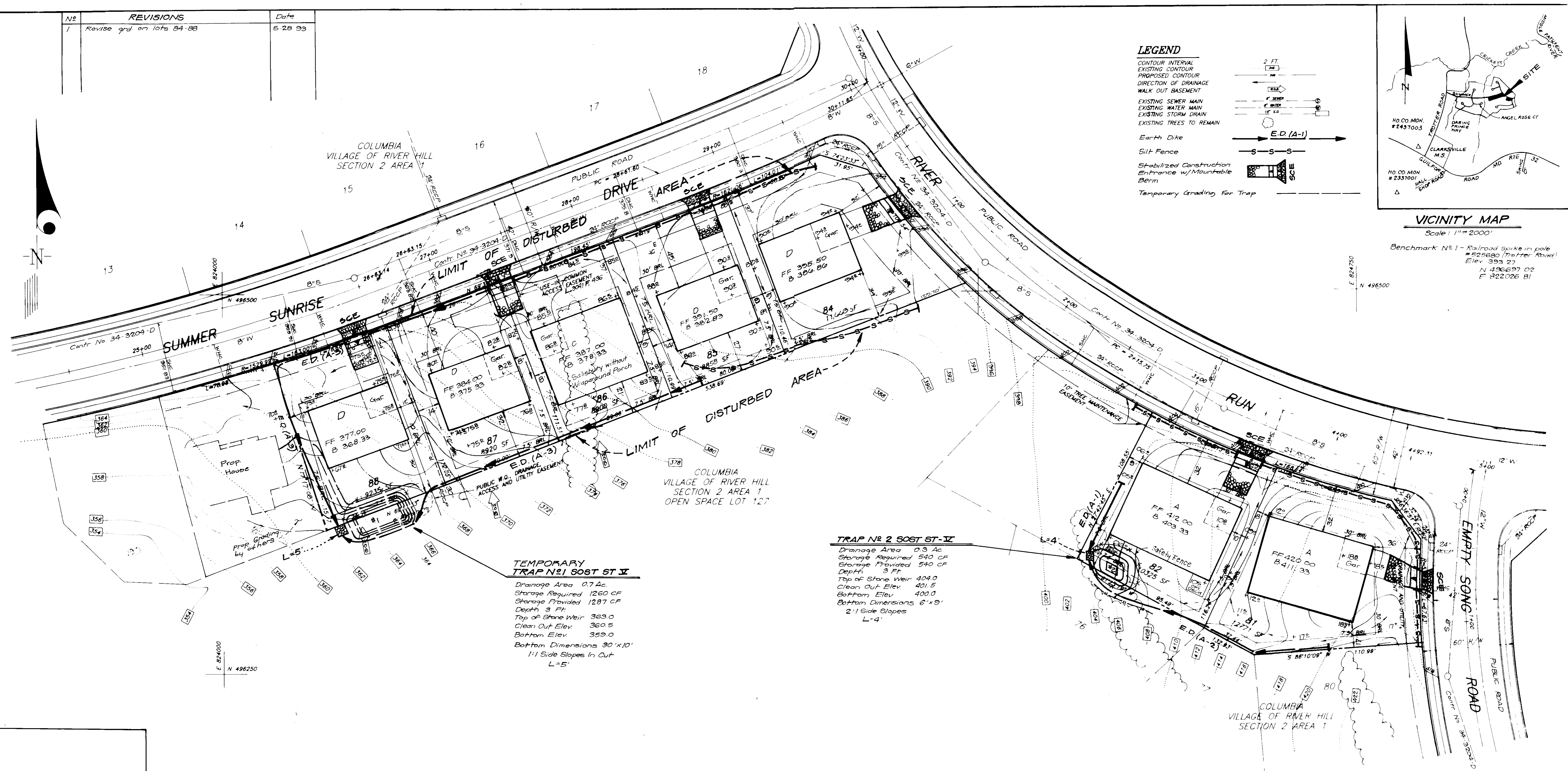
LEGEND

- CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- EXISTING TREES TO REMAIN
- Earth Dike
- Silt Fence
- Stabilized Construction Entrance w/ Mountable Berm
- Temporary Grading For Trap



VICINITY MAP

Scale: 1" = 2000'
 Benchmark N 1 - Railroad Spike in pole
 # 525880 (Tetter Road)
 Elev 393.27
 N 496697 02
 F 822026 81



TEMPORARY TRAP NO 1 SOST ST-V

Drainage Area 0.74 Ac
 Storage Required 1260 CF
 Storage Provided 1287 CF
 Depth 3 Ft
 Top of Stone Weir 363.0
 Clean Out Elev 360.5
 Bottom Elev 359.0
 Bottom Dimensions 30' x 10'
 1:1 Side Slopes In Cut
 L=5'

TRAP NO 2 SOST ST-V

Drainage Area 0.9 Ac
 Storage Required 540 CF
 Storage Provided 540 CF
 Depth 3 Ft
 Top of Stone Weir 404.0
 Clean Out Elev 401.5
 Bottom Elev 400.0
 Bottom Dimensions 6' x 9'
 2:1 Side Slopes
 L=4'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 10-21-93
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DIRECTOR: [Signature] DATE: 11/10/93
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 11/10/93
 CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 10/15/93

Reviewed for HOWARD S.C.D.
 Name: [Signature]
 and meets Technical Requirements
 Date: [Signature]
 US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
 FOR SOIL EROSION AND SEDIMENT
 CONTROL BY THE HOWARD SOIL
 CONSERVATION DISTRICT
 [Signature] DATE: 10/15/93

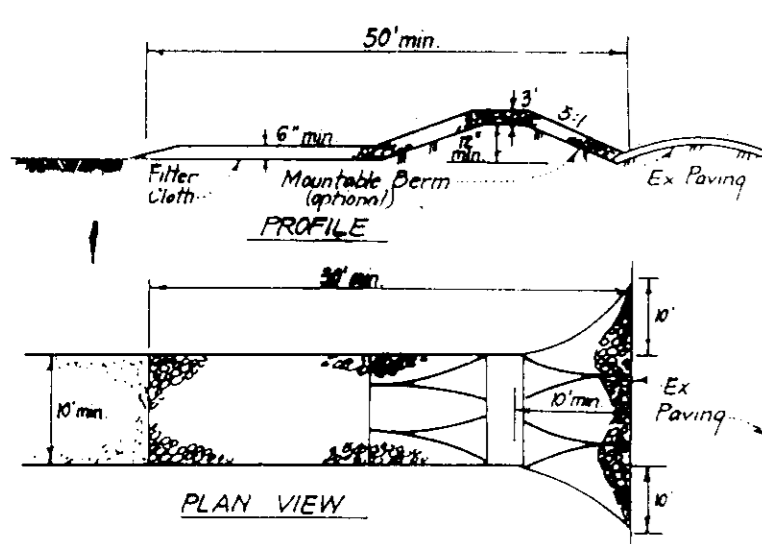
DEVELOPER'S/BUILDER'S CERTIFICATE
 I/We certify that all development and construction will be done according
 to this plan of development and plan for sediment and erosion control and
 that all responsible personnel involved in the construction project will have
 a Certificate of Attendance at a Department of the Environment 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] DATE: 4-21-93

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 Conserva-
 tion District.
 [Signature] DATE: 4-22-93
 JEFFREY L. SCHWAB

OWNER:
 HOWARD RESEARCH AND
 DEVELOPMENT CORPORATION
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

CLARK • FINEROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 391-7500 BALTO. • (301) 621-8100 - WASH

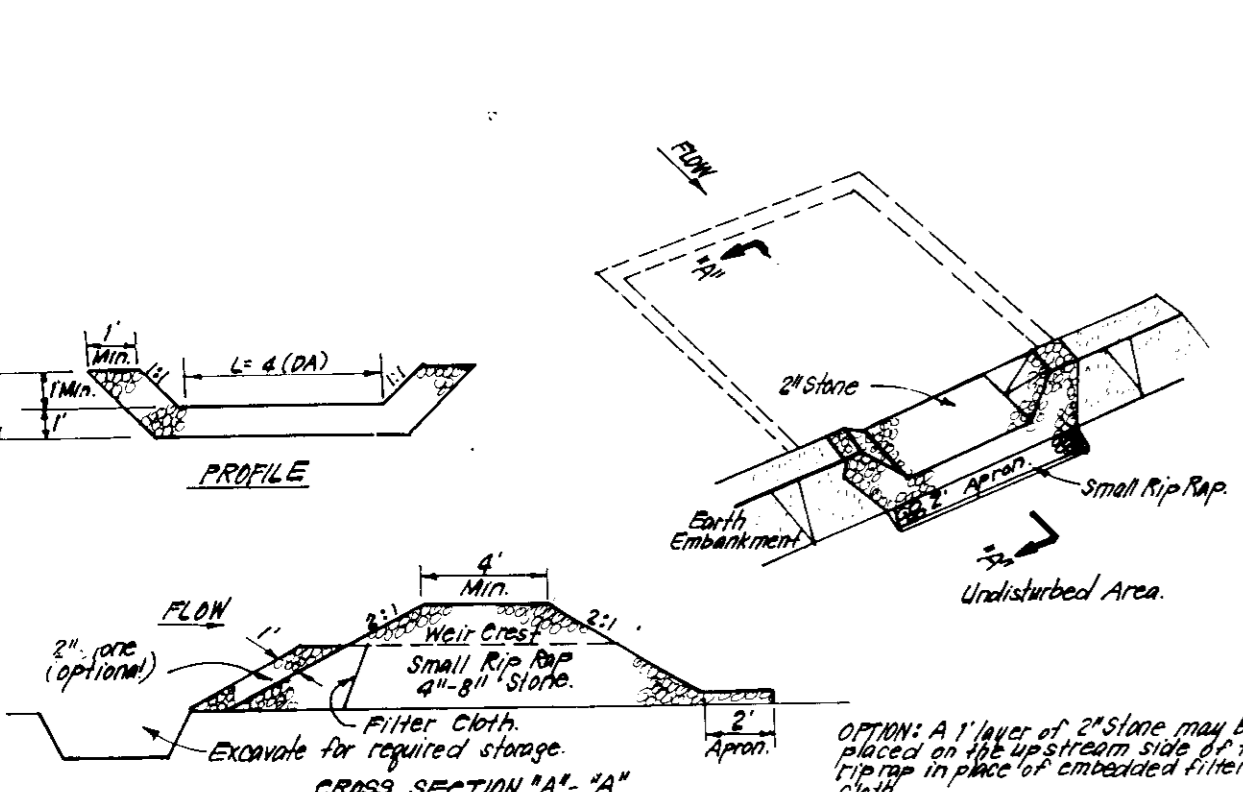
DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOT 81, 82 AND 84 THRU 88 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 1 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: NU-HOMES, INC 9891 Broken Land Pkwy #401 Columbia, Md 21046-1165	SCALE 1" = 30'
DRAWN BAL		DRAWING 2 OF 3
CHECKED KIWM		JOB NO 93-050
DATE APRIL, 1993		FILE NO 93-050
		SDP - 93-100



CONSTRUCTION SPECIFICATIONS:

- Stone size - Use 2" stone or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50' feet, except on a single residence lot where a 30' feet maximum length would apply.
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet minimum, but not less than the full width of points where ingress or egress occurs.
- 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.
- Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If drainage is required, a maximum of 5' slopes will be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or blowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleaning of any openings used to trap sediment. All sediment applied, trapped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done in an area stabilized with stone and which drains into an approved sediment trapping device.
- Periodic inspection and needed maintenance shall be provided after each rain.

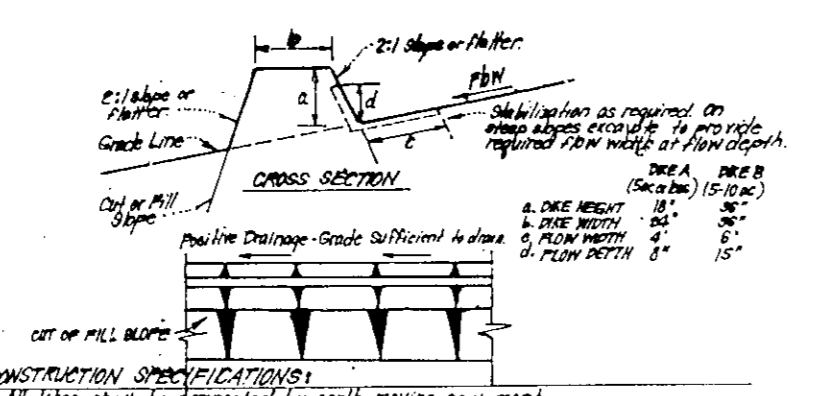
STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be compacted.
- 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 completed by traversing with equipment while it is being constructed.
- All cut and fill slopes shall be 2:1 or flatter.
- The stone used in the outlet shall be small rip rap 4"-8" with 1" thickness of #4 aggregate placed on the up-slope side on the small rip rap of embankment. Filter cloth in the rip rap accumulates to 1/2 the design depth of the trap.
- 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.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

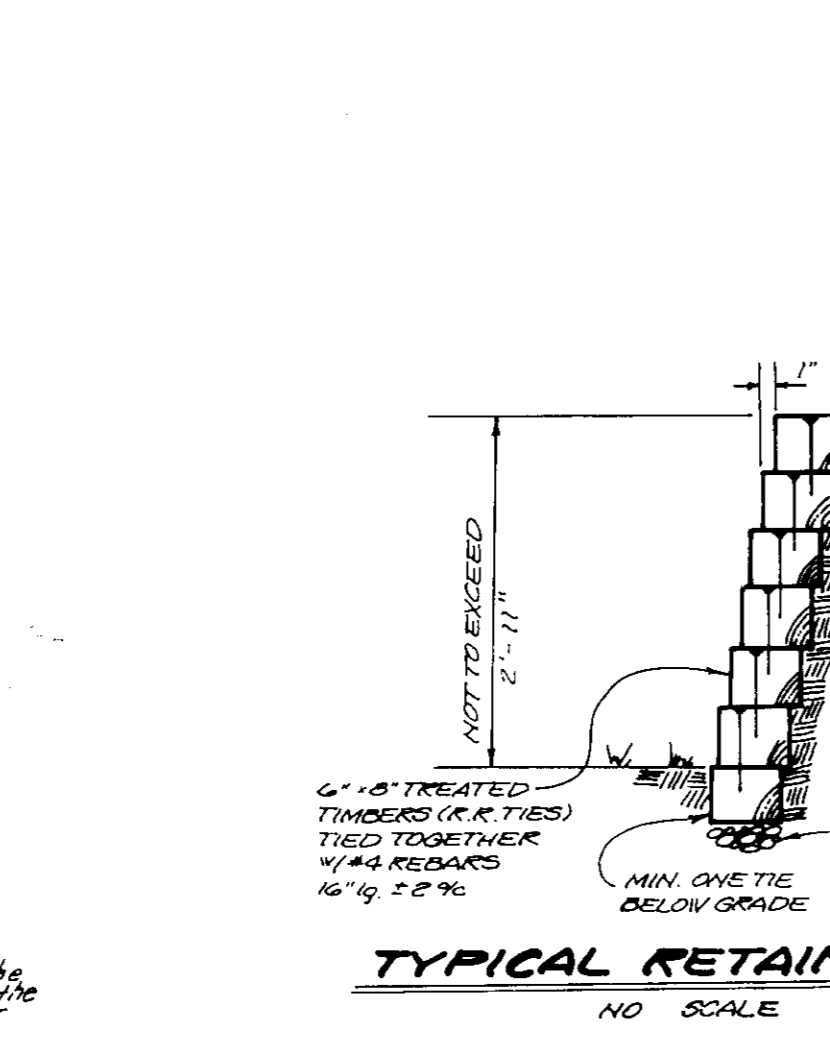
STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STY.
NO SCALE



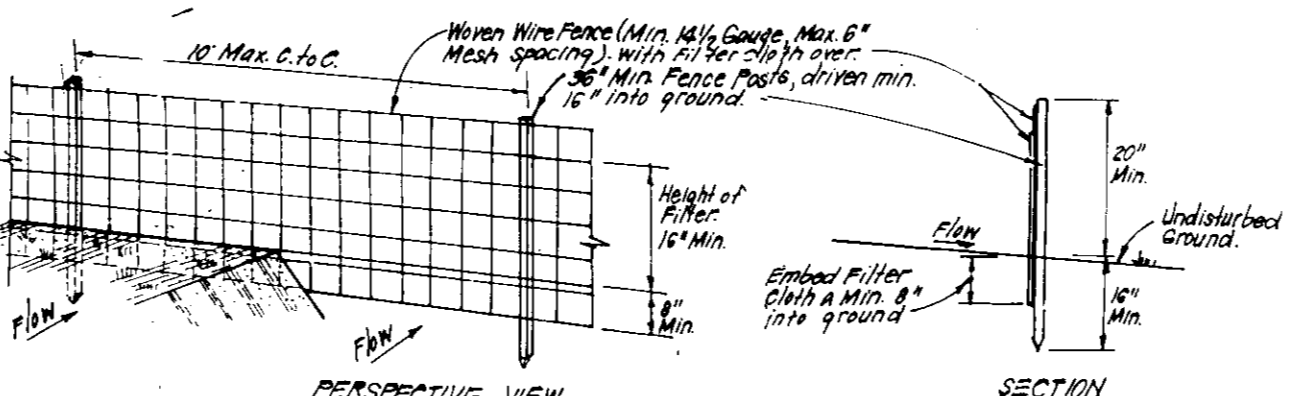
CONSTRUCTION SPECIFICATIONS:

- E.D. shall be constructed by earth moving equipment.
- All dikes shall have a minimum clearance for an outlet.
- The mesh may be wider and side slopes may be steeper if desired to facilitate clearing by construction traffic.
- Mesh height shall be adjusted as needed to utilize a stabilized embankment.
- Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be directed to a sediment trapping device such as a sediment trap or retention basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
- Installation shall be: (A) in accordance with standard specifications for road and street work or (B) as required by the local jurisdiction.
- Approved equivalents can be substituted for any of the above materials.
- Periodic inspection and required maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)
NO SCALE



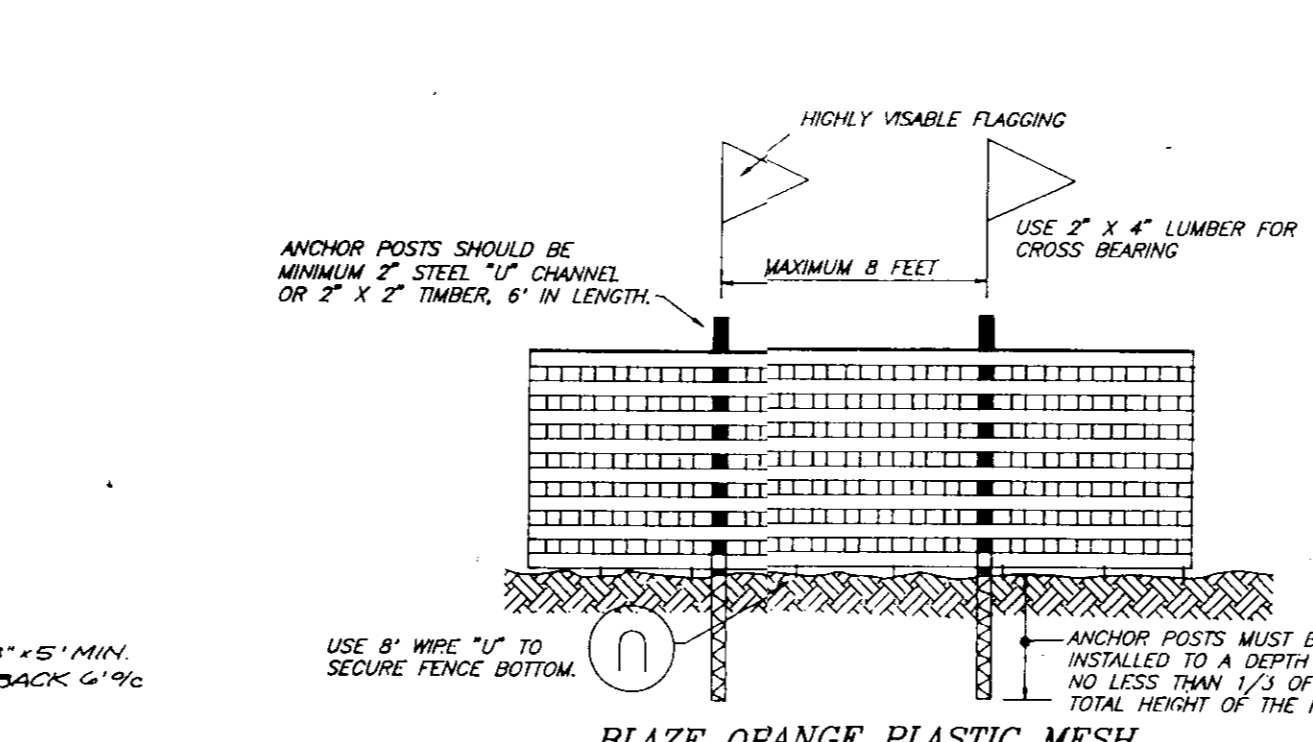
TYPICAL RETAINING WALL
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire section with 1/2" staples every 24" at top and mid section.
- When 2 sections of filter cloth meet each other they shall be overlapped by 6" and stapled.
- Maintenance shall be performed as needed and material removed when the dike channel is not adequately stabilized.

SALT FENCE DETAIL (S)
NO SCALE



BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL/SAFETY FENCE
NO SCALE

NOTES:

- Forest protection device only.
- Retention area will be set as part of the review process.
- Boundaries of retention area should be staked and flagged prior to installing device.
- Root damage should be avoided.
- Protection signage may also be used.
- Device should be maintained throughout construction.

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:

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/100 sq ft) and 800 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq ft.)
- 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 60lbs 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 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 reseedings.

TEMPORARY SEEDING NOTES

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 2 1/2 bushels per acre of annual ryegrass (32 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 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.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION 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. (303-1855)

2. All vegetative and structural practices are to be installed in accordance with the provisions of the 1983 MARYLAND STANDARDS AND SPECS. 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 erosion control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days for 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 perimeters 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 rates 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:	1.02 Ac
Area to be roofed or paved:	1.00 Ac
Area to be vegetatively stabilized:	0.02 Ac
Total Cut:	283 cu yd
Total Fill:	281 cu yd

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. 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.

10. If houses are to be constructed on an "as sold" basis, at random, single family Sediment Control, as shown below shall be implemented.

11. All pipes to be blocked at the end of each day (see detail this sheet).

12. The total amount of silt fence = 600 LF

* It is the responsibility of the contractor to identify the spoil/borrow site and gain approval from the sediment control inspector of the site and its grading permit number at the time of construction.

CONSTRUCTION SEQUENCE:

	NO. OF DAYS
A. Obtain grading permit	7
B. Install tree protection fence	7
C. Install sediment and erosion control devices and stabilize	14
D. Excavate for foundations, rough grade and temporarily stabilize	30
E. Construct structures, sidewalks and driveways	60
F. Final grade and stabilize in accordance with Stds. and Specs.	14
G. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize	7

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

Signature: *[Signature]* Date: 10-21-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Signature: *[Signature]* Date: 11/10/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Signature: *[Signature]* Date: 11/10/93

Signature: *[Signature]* Date: 10/15/93

Reviewed for HOWARD S.C.D. Name: *[Signature]* Date: 10/13/93

Signature: *[Signature]* Date: 10/13/93

US 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 sediment and erosion control and that all responsible personnel involved in the construction project will be trained in the use of the plan and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature: *[Signature]* Date: 4-21-93

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.

Signature: *[Signature]* Date: 4-22-93

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION, 10275 Little Patuxent Parkway, Columbia, Maryland 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

SEDIMENT & EROSION CONTROL PLAN
LOT 81, 82 AND 84 THRU 88

COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 1
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

FOR: NU-HOMES, INC. 3901 Broken Land Pkwy #401 Columbia, Md 21046-1165

DATE: APRIL, 1993

SCALE: As Shown
DRAWING: 30F 3
JOB NO: 93-050
FILE NO: 93-050