

VICINITY MAP
Scale: 1"=2,000'

LEGEND

- Contour Interval 2 FT
- Existing Contour 4.0
- Proposed Contour 4.0
- Spot Elevation +10.0
- Direction of Drainage
- Walk out Basement
- Trees to be Saved
- Existing Trees

GENERAL NOTES:

- 1 Subject property zoned NT per 8/2/85 Comprehensive Zoning Plan
- 2 The coordinates shown hereon are based upon traverse controls for Columbia established by Maps, Inc in 1965 and Furdum and Jeschke in 1968, which controls were tied to the Maryland Bureau of Control Surveys monuments and to U.S. Coast and Geodetic Survey monuments in the Columbia area.
- 3 All roads are public and existing
- 4 Any damage to county owned right of ways to be corrected at the developers expense
- 5 Total area included 3.37 Acres
- 6 Total number of lots 7
- 7 Reference Final Development Plan Section 3 phase 161 part VII
- 8 Maximum lot coverage is 30%
- 9 The contractor or developer shall contact the Construction Inspection Survey Division, 24 hours in advance of commencement of work at 792 2620
- 10 The Office of Planning and Zoning file reference number is F-87-105c

SPECIAL NOTES:

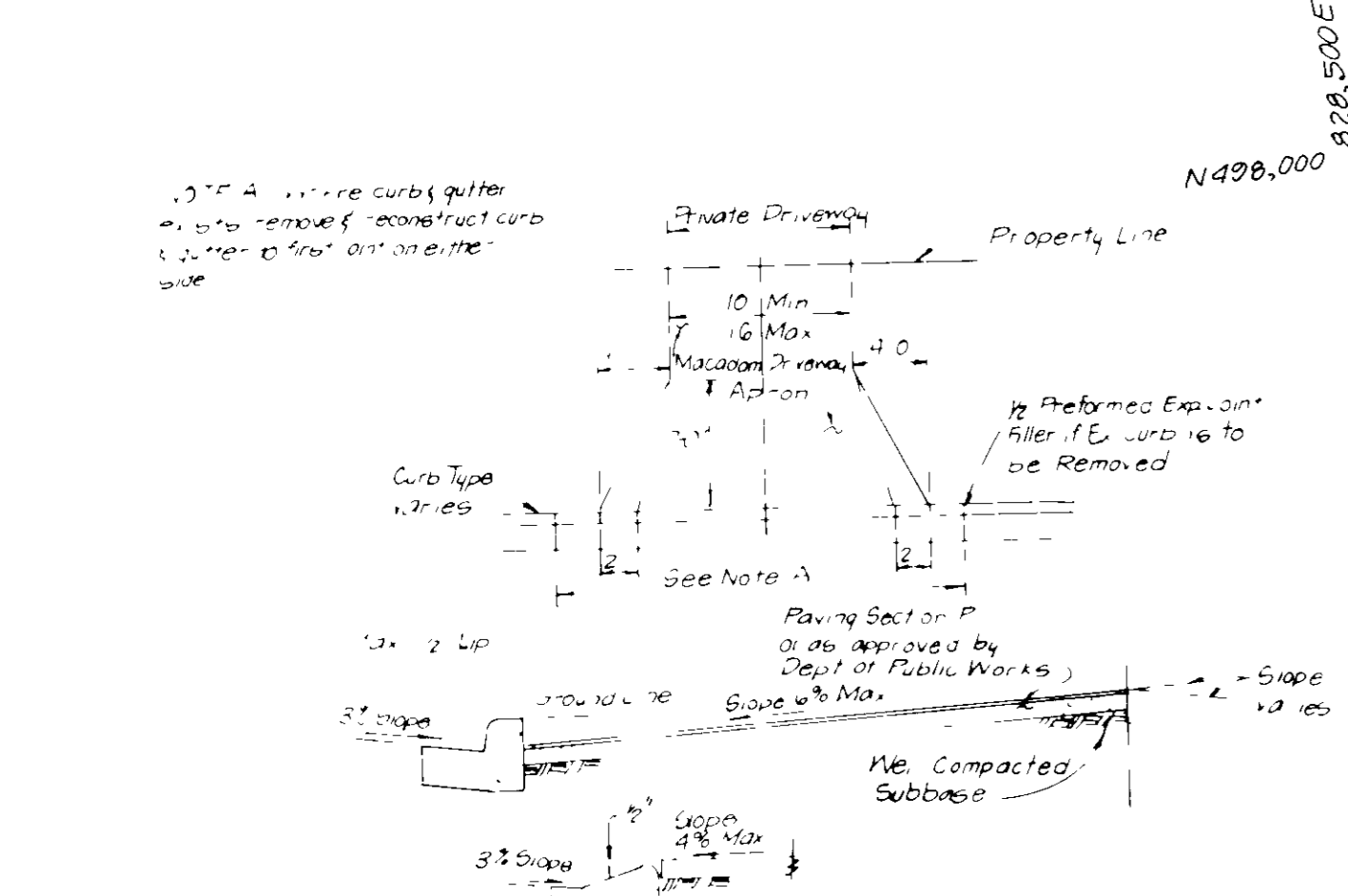
- 1 Approved Road Construction Plans shall be used for all public utilities
- 2 The water & sewer house connections not included in a Developers Agreement shall conform to Howard County Building Code. The on site WHC shall be 1" copper and the BHC shall be 4" Iron
- 3 Stormwater Management provided in the Village of Hickory Ridge, F-87-105
- 4 Public water & sewer shown for reference only. For more detailed information See Water and Sewer plans Contract No. 3-4-1501-D



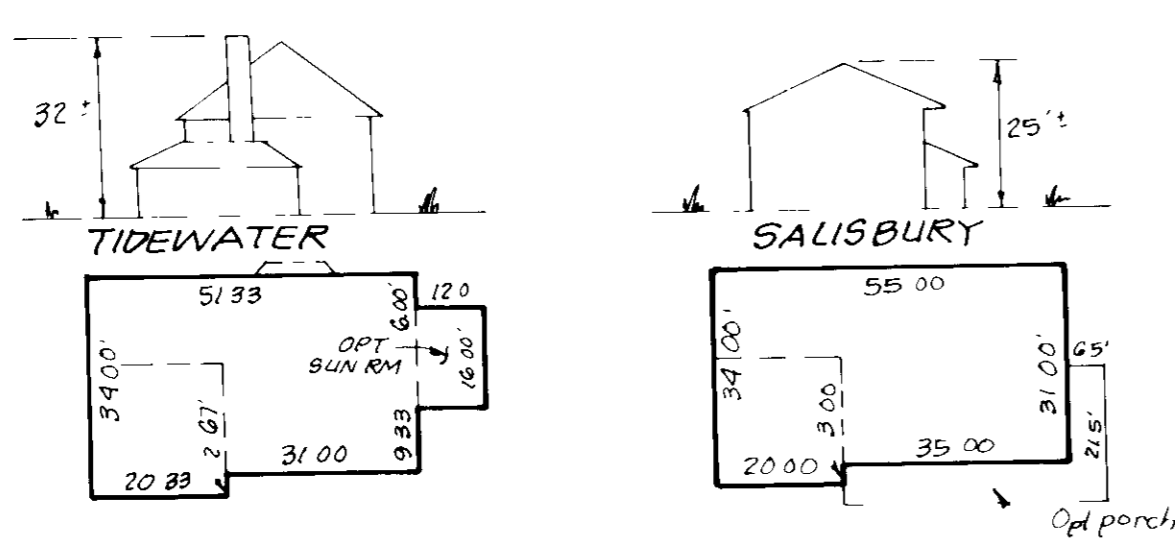
Subdivision Name	Columbia	Acres	3.37	Lot's	24 & 32-35
Village of Hickory Ridge					
Plot No	7178-7179	Zone	110-1G	Tax Zone	Man/Elec/Dist/Census P
Water Code	E-27	Sewer Code	6501000		

CLARK • FINEFROCK & SACKETT, INC ENGINEERS • PLANNERS • SURVEYORS 7135 ANNISTRELL WAY • COLUMBIA, MD 21031 • (301) 381-7500 • BALTO • MD •		
DESIGNED PDM	SITE DEVELOPMENT PLAN LOTS 2-4 & 32-35	SCALE 1" = 30'
DRAWN PDM	COLUMBIA VILLAGE OF HICKORY RIDGE	DRAWING 1 of 3
CHECKED JME	SECTION 3 AREA 14 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO 28-004
DATE 1-13-88	For NY-HOMES, INC 10480 Little Patuxent Pkwy Suite 1070 Columbia, Maryland 21044	FILE NO 28-004-X

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



DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK



TYPICAL HOUSES
No Scale

LOT	ADDRESS
2	11828 Bright Passage
3	11832 "
4	11836 "
32	11845 "
33	11841 "
34	11837 "
35	11802 Far Edge Path

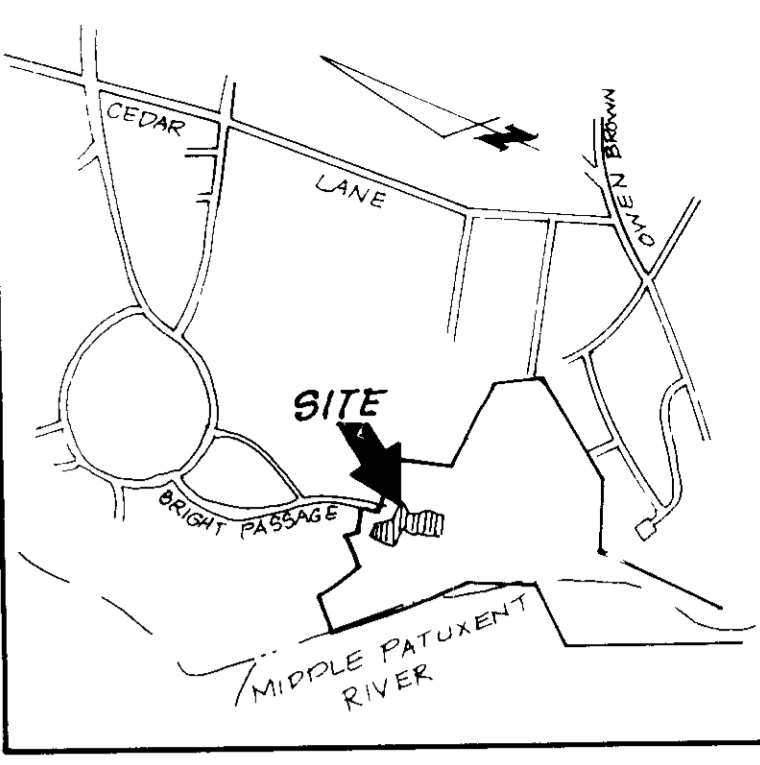
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER
 DATE 3/5/88
 LKS.

APPROVED FOR PLANNING AND ZONING
 HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR
 DATE 4/5/88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR
 DATE 4/14/88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR
 DATE 7-17-88

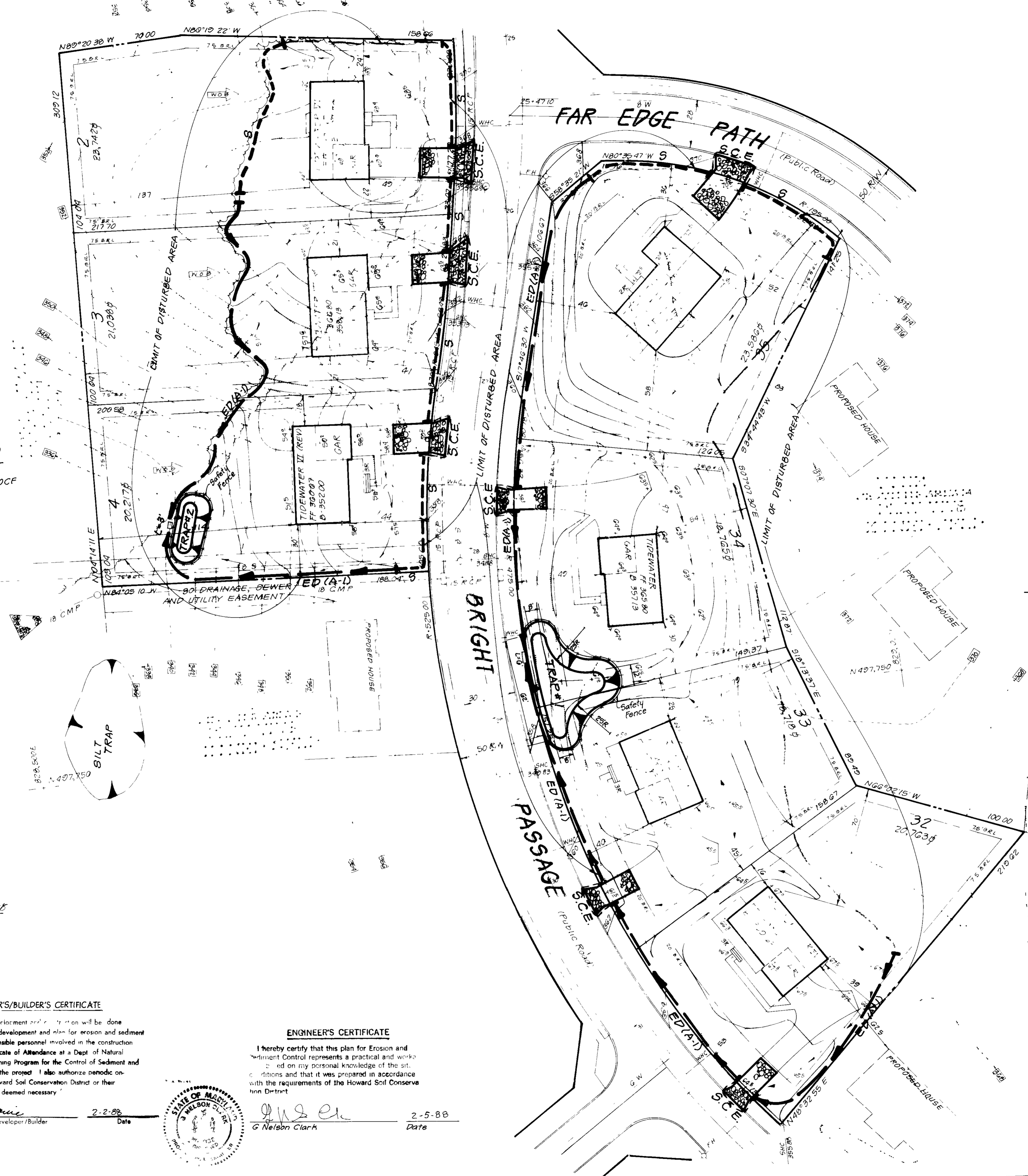
HOWARD COUNTY BUREAU OF ENGINEERING
 DATE 3-28-88



VICINITY MAP
Scale: 1"=2,000'

LEGEND

- Contour Interval: 2 FT
- Existing Contour: ---
- Proposed Contour: - - -
- Spot Elevation: +10'
- Direction of Drainage: →
- Walk out Basement: [Symbol]
- Trees to be Saved: [Symbol]
- Existing Trees: [Symbol]
- Stabilized Construction Entrance: [Symbol]
- Earth Dike: [Symbol]
- Silt Fence: [Symbol]



TRAP #2 S.O.S.T. (STV)
 DA - G
 Required Storage = 6 x 1800 = 10800 CF
 Storage Provided = 10890 CF
 Stone Crest Elevation = 341.00
 Depth = 3'
 Bottom Elevation = 338.00
 Bottom Dimensions = 8' x 30'
 Cleanout Elevation = 339.50

TRAP #1 S.O.S.T. (STV)
 DA - 20
 Required Storage = 2 x 1800 = 3600 CF
 Storage Provided = 3630 CF
 Stone Crest Elevation = 358.00
 Depth = 2.8'
 Bottom Elevation = 355.2
 Bottom Dimensions see plan
 Clean Out Elevation = 355.6

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.
 Approved Date 2/16/88

DIVISION OF PLANNING & ZONING
 HOWARD COUNTY
 DATE 3-3-88
 LKS

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 3-30-88
 APPROVED FOR PLANNING & ZONING
 HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 4-5-88
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 3/23/88
 DATE 3-23-88

DEVELOPER'S/BUILDER'S CERTIFICATE
 I/We hereby certify that all development and construction will be done in accordance with 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 of Developer/Builder Date 2-2-88



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 of Engineer Date 2-5-88

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS		SCALE 1" = 30' DRAWING 2 of 3 JOB NO. 88 004 FILE NO. 88 0045E
DESIGNED DAB DRAWN PDM CHECKED DAB DATE 2-2-88	SEDIMENT AND EROSION CONTROL PLAN LOTS 2, 4 & 32-35 COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 14 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND For NU-HOMES, INC. 10480 Little Patuxent Pkwy, Suite 1070 Columbia, Maryland 21044	

SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the County Health Officer of Inspection and Permit prior to the start of any construction (992-2437)
- 2) All construction 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 redisturbance, 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, 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) and (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 Anal. Site
 Total Area of Site: 837 Acres
 Area Disturbed: 210 Acres
 Area to be roofed or paved: 2940 Acres
 Area to be vegetatively stabilized: 156 Acres
 Total Cut: 4,555 Cu. yds
 Total Fill: 1,010 Cu. yds
 Offsets to 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 a "As-Built" 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)
- 13) The total amount of straw bale dikes/silt fence walls: 570 L.F.

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 or, previously loosened

Soil Amendments In lieu of soil test recommendations, use one of the following schedule:

- 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 (0.5 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 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

Inspection - Inspect all seeded areas and make needed repairs, replacements and reseeds.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed

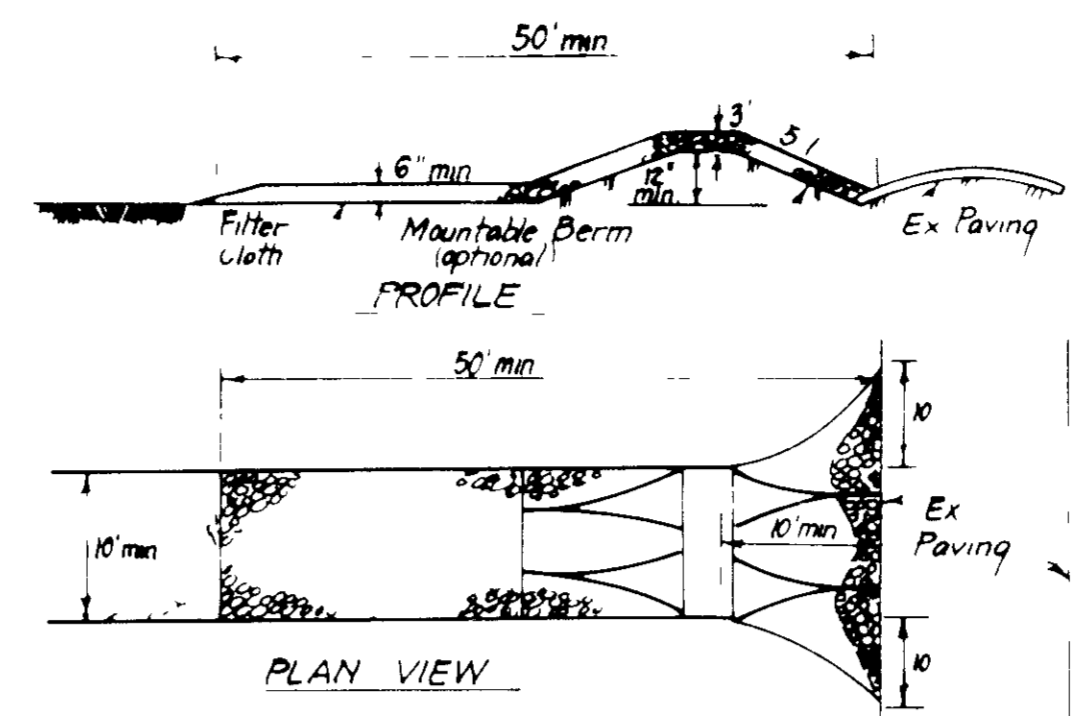
Seedbed Preparation Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened

Soil Amendment 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 14, seed with 3 lbs per acre of creeping lovegrass (0.7 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

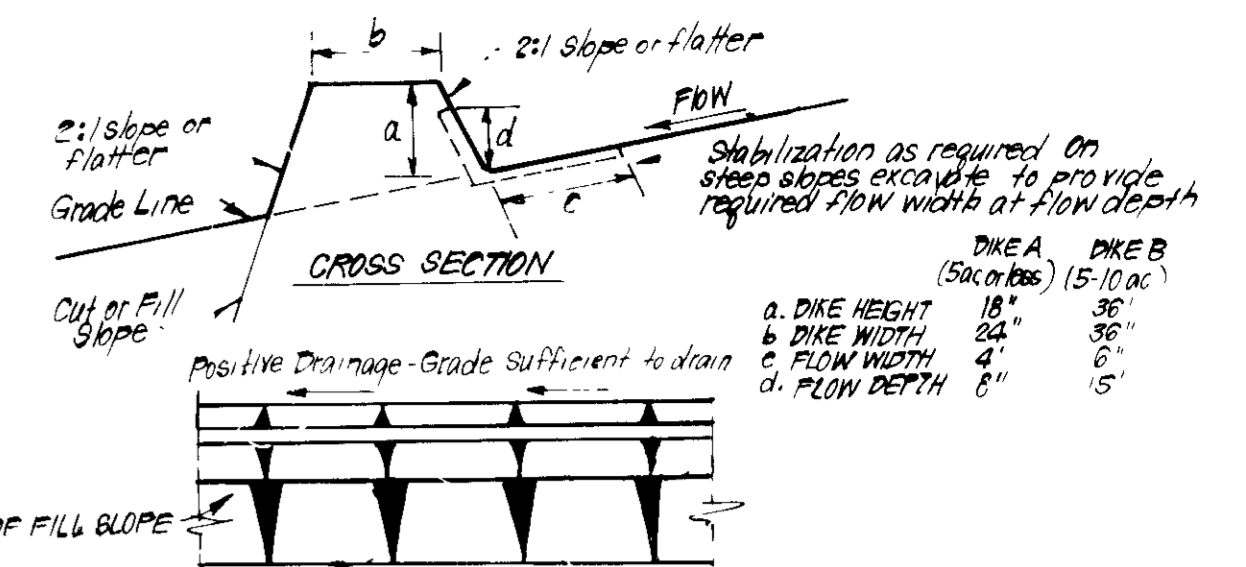
Mulching Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 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 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' 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 resources 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

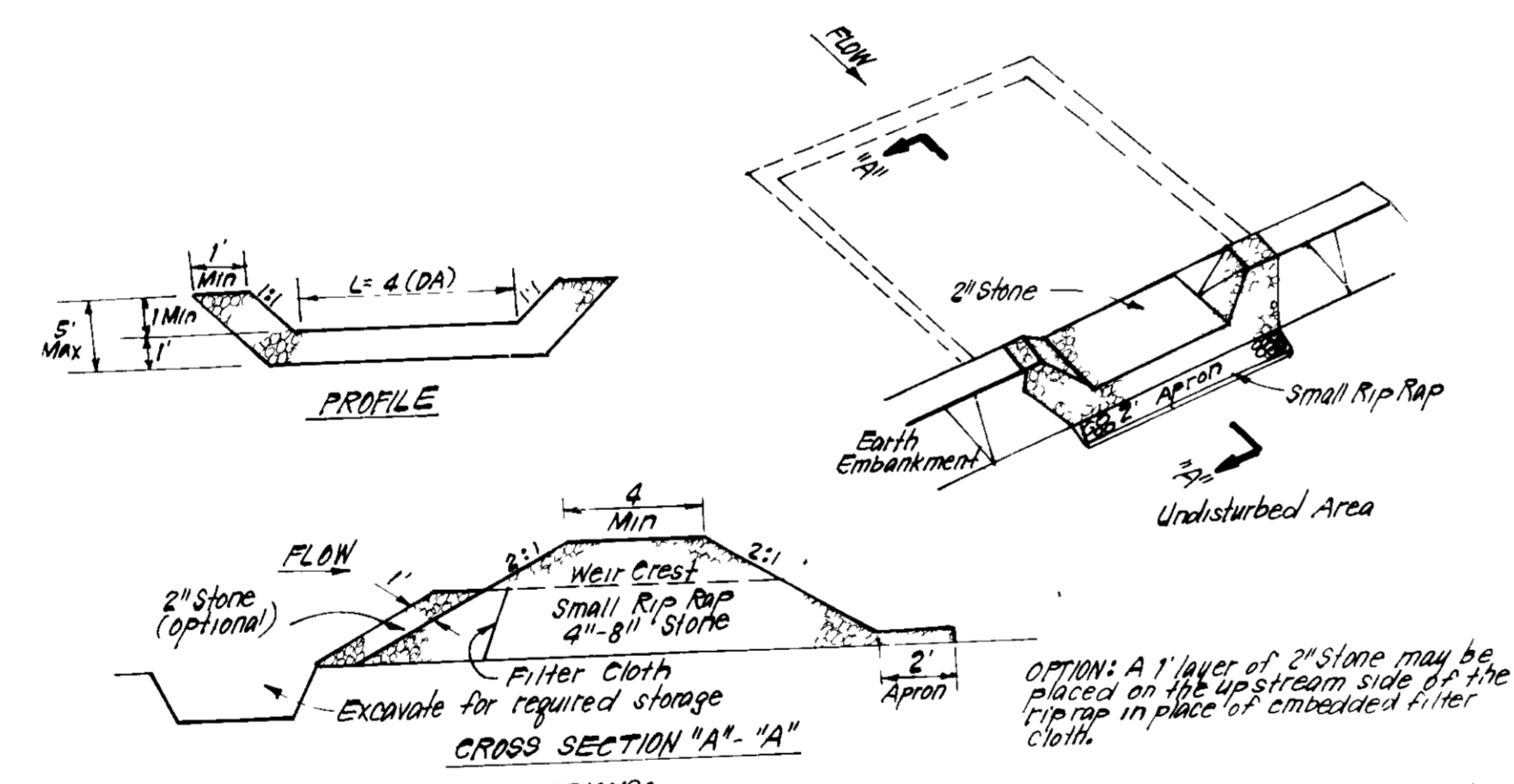
STABILIZED CONSTRUCTION ENTRANCE (SCE)



- 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.
- | 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 with or Excelsior Sod, 2" Stone |
| 3 | 5.1 - 8.0% | Seed with or Sod, 2" Stone | Lined Rip Rap & 2" Stone |
| 4 | 8.1 - 20.0% | Lined Rip Rap & 2" 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 2" 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

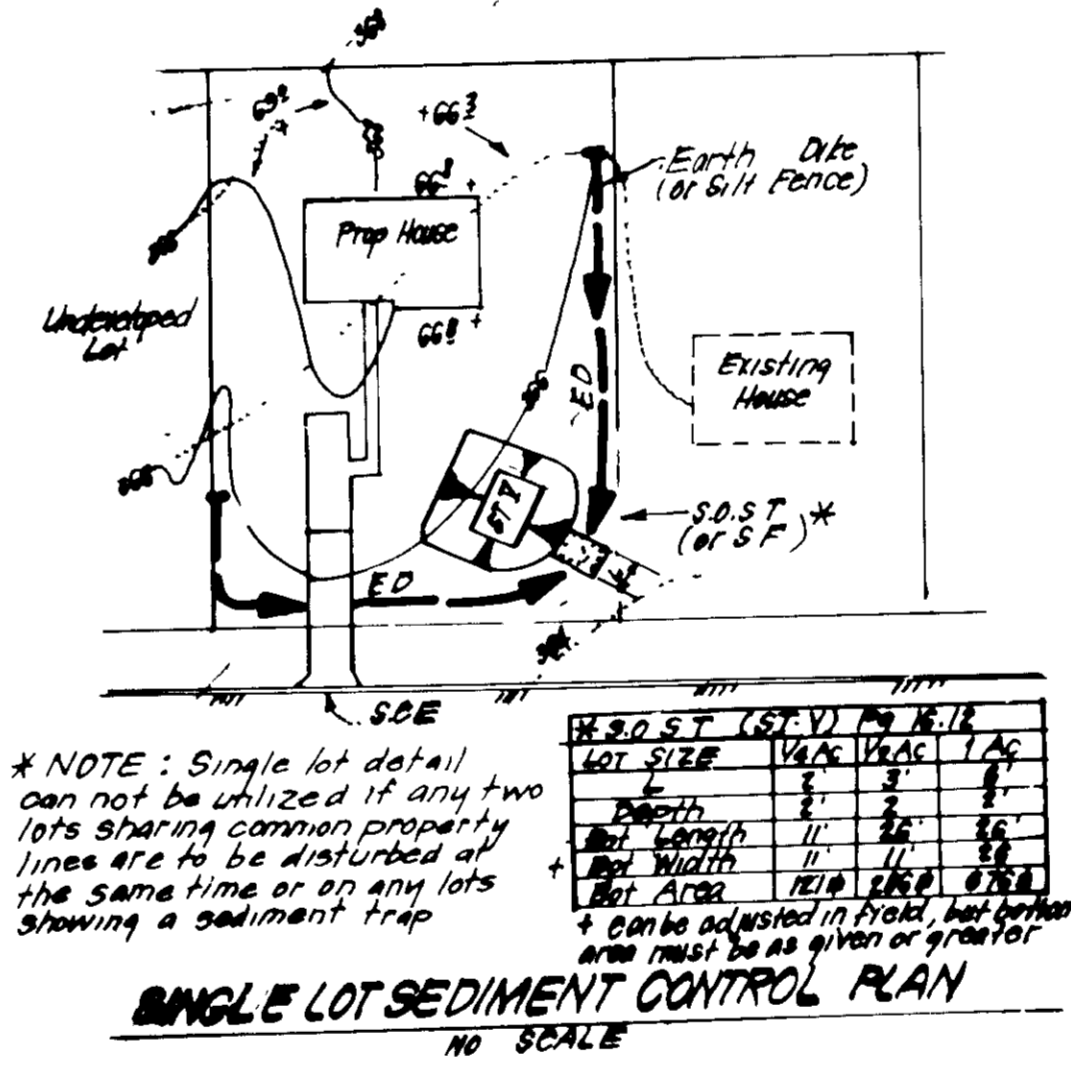
CONSTRUCTION SEQUENCE

Activity	No 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	7
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	14



- CONSTRUCTION SPECIFICATIONS:**
- 1 Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted
 - 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 1/2 the design capacity 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

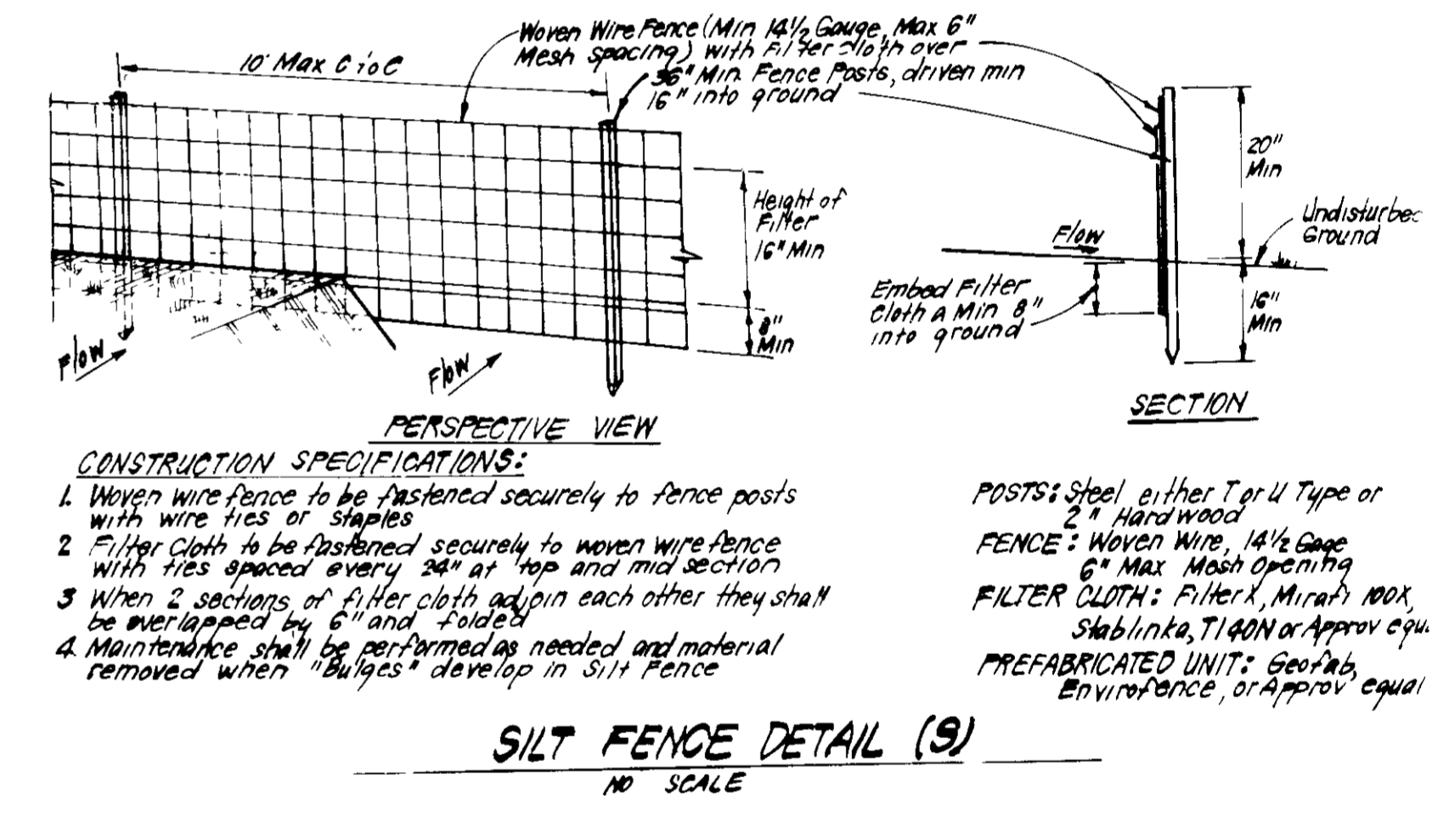
STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STY.



Reviewed for Howard County SCD and meets Technical Requirements

Signature: _____ Date: _____

U.S. Soil Conservation Service



- 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 stapled
 - 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, 14 1/2 Gauge
 6" Max Mesh opening
 FILTER CLOTH: Filter Cloth, 100% Synthetic, 1/4" or 1/2" or approved equivalent
 PREFABRICATED UNIT: Silt Fence, or approved equal

SILT FENCE DETAIL (S)

DEVELOPER'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: Harry G. Bowie Date: 2-2-88

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: 2-2-88

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

Signature: Stephen A. Frank Date: 2/16/88

DIVISION OF COMMUNITY PLANNING AND DEVELOPMENT

DATE: 3-3-88

DATE: 4-6-88

DATE: 4/4/88

DATE: 3-23-88

DATE: 3-23-88

CLARK • FINEFROCK & SACKETT, INC
 ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO • (301) 621-8811 - MD

DESIGNED: DAB SCALE: 1"=30'

DRAWN: PDM DRAWING: 3 of 3

CHECKED: DAB JOB NO: 87-004

DATE: 2-1-88 FILE NO: 88-0049E

SEDIMENT AND EROSION CONTROL PLAN
 LOTS 2-4 & 32-35

COLUMBIA VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 14
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

For: NU HOMES, INC
 10480 Little Patuxent Pkwy Suite 1070
 Columbia, Maryland 21044