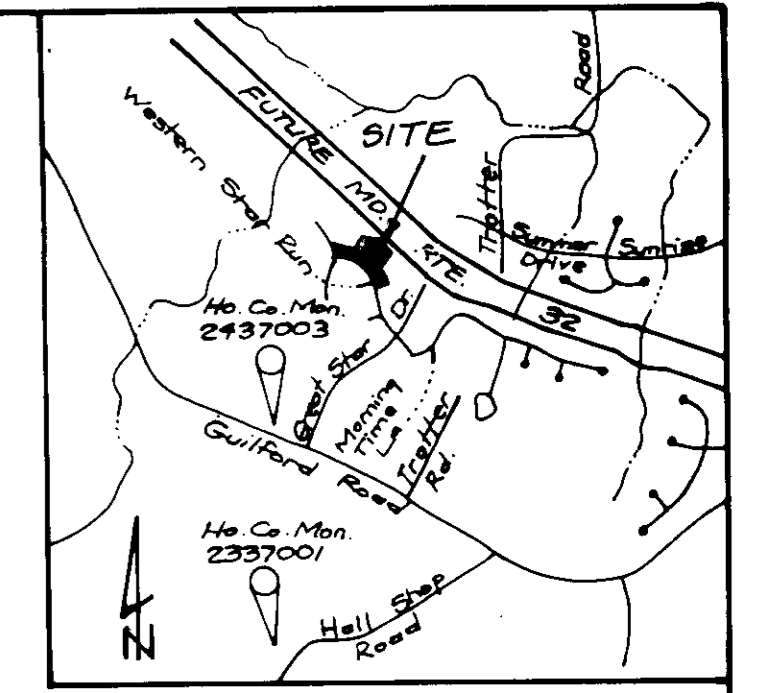


LOT	STREET ADDRESS
6	6124 Western Star Run
7	6128
8	6132
9	6100 Ready Bang Knoll
10	6104 Ready Bang Knoll
11	6108
12	6112
13	6116
14	6104
15	6108
16	6101 Western Star Run
17	6114
18	6118



LEGEND

- Contour Interval 2 FT
- Existing Contour ---
- Proposed Contour - - - -
- Spot Elevation +10%
- Direction of Drainage
- Walk out Basement
- Trees to be Saved
- Tree Protection Fence
- Minimum Cellar Elevation MCE



BENCHMARKS

- Howard County Monument No. 2337001 - Elev. = 426.035 North: 431672.385 East: 813527.783 34' Reinforcing Rod, 0.5' Below Surface
- Howard County Monument No. 2637003 - Elev. = 472.122 North: 434285.231 East: 820385.343 Concrete Monument, 0.25' Below Surface

GENERAL NOTES:

- Subject property is zoned: NT-SFLD per 10-18-78 Comprehensive Zoning Plan.
- The total area included in this submission is: 3.34 Ac.
- The total number of lots included in this submission are: 13
- Improvement to property: Single family detached
- The maximum lot coverage permitted is: 30%
- Department of Planning and Zoning reference file numbers are: 5-21-03; F-24-01; F-24-01; FDP 203 Phase III; F45127
- Utilities shown as existing are taken from approved water, gas and sewer plan contract #34-3296-D, approved road construction plans F-24-01, and actual field survey.
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- Storm water management is provided per: F-24-01
- All roadways are public and existing.
- The existing topography shown was field-run C, F & S, Inc. 2-13-05 Road Grades taken from F-24-01
- 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 & 2437003
- The contractor shall notify the Department of Public Works/Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours prior to the start of work and shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- Under certain conditions, decks and porches may only extend (3) three feet into front and rear setbacks as stated in FDP Phase 202, Part III; chimneys and bay windows not more than (10) ten feet in width may project up to (4) four feet into required setbacks.
- Deliver House Connections shown are located at the property line
- For Driveway Entrance Details refer to Ho Co Design Manual Vol. II, 3rd. Details R-6C3 & R-6C5
- The 65 dBA Noise Contour Line represents the approximate location of the 65 dBA (decibel) noise exposure level generated by MD RTE 32 traffic in the year 2015 based upon assumptions about actual conditions at that time. This value represents the average sound level during the single noisiest one hour period of vehicular traffic during a typical day. This calculation is based upon the SHAs estimate of year 2015 highway traffic volume. The contour line drawn on this plan is advisory as required by Ho Co Design Manual, Vol. III, Chapter B, para. 1502.2 and cannot be considered to locate exactly the 65 dBA Noise exposure.

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-24-01 and/or approved Water and Sewer Plans Contract #34-3296-D

SHEET INDEX

SITE DEVELOPMENT PLAN	Sheet 1 of 3
SEDIMENT & EROSION CONTROL PLAN	Sheet 2 of 3

OWNER / DEVELOPER

HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 Little Patuxent Parkway
Columbia, Maryland 21044

SUBDIVISION NAME	COLUMBIA	SECTION/AREA	2/3 Ph. 1	LOTS/PARCELS	6 thru 18
PLAN NO.	11200 Ph. 1	ZONE	NT SFLD	ELECTION DIST.	5TH
REVISIONS	11/30/04 11/8/05			CENSUS TRACT	6055
WATER CODE	I-13	SEWER CODE	6652500 & 6653000		

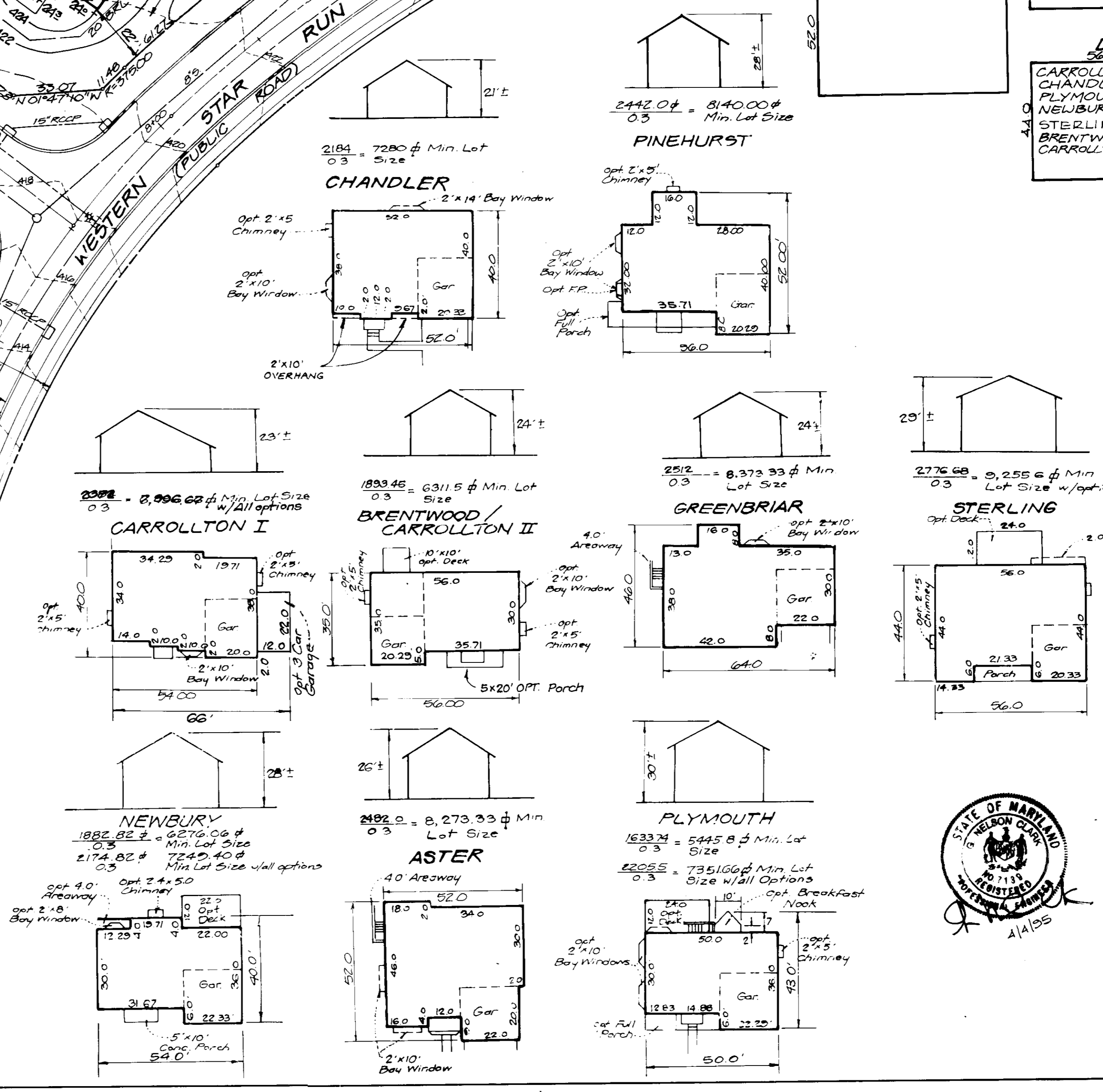
CLARK • FINEPROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-1500 - BALTO. • (301) 621-8100 - WASH.

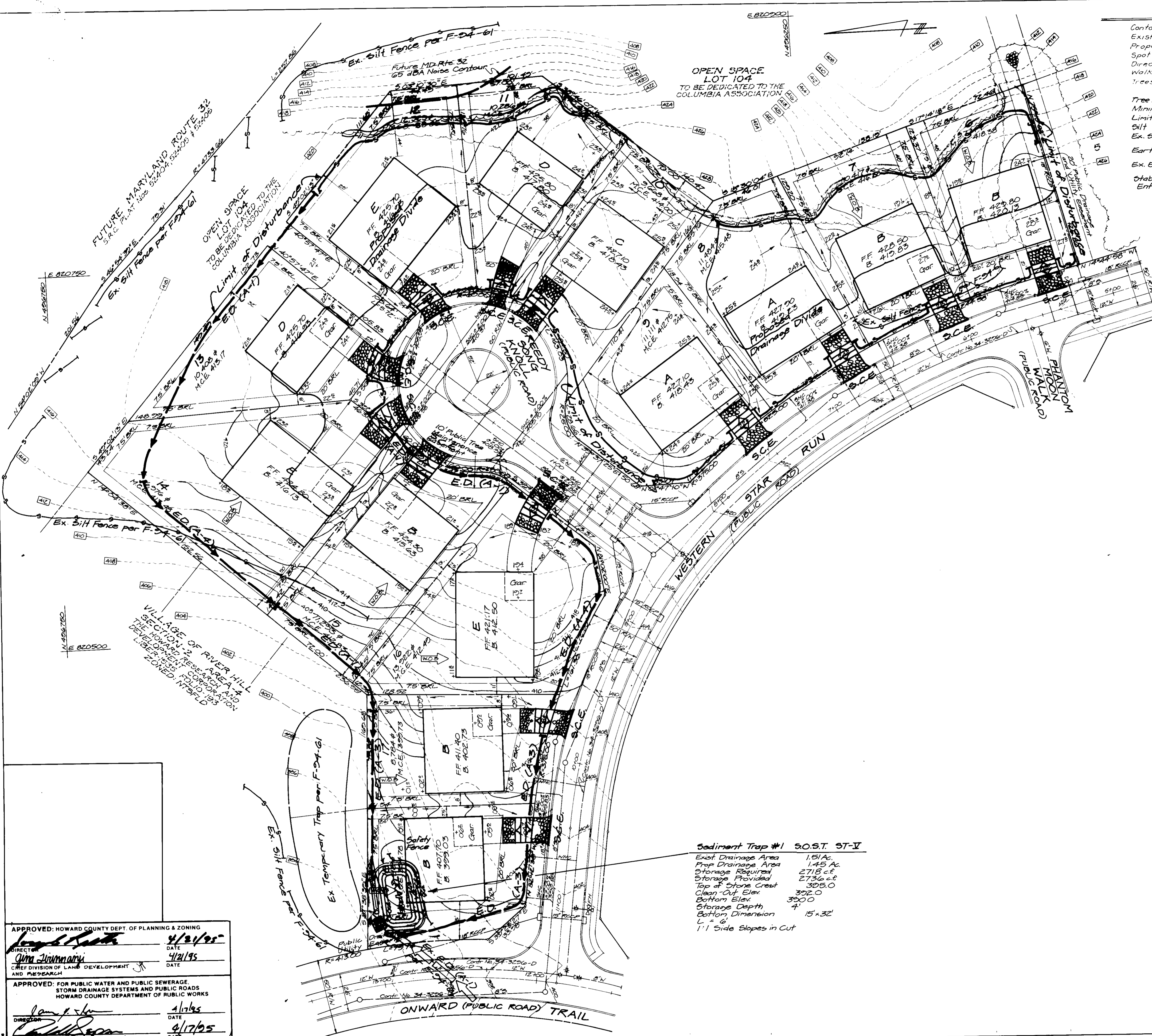


3	Rev. house & grad. lot 16	5-2-97
2	Rev. final & grad. lot 9	4-9-97
NB	Rev. lot numbers 4 and 15 to 108 & 109	10-25-96
	REVISIONS	DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
4/6/95
DIRECTOR
4/21/95
DATE
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH

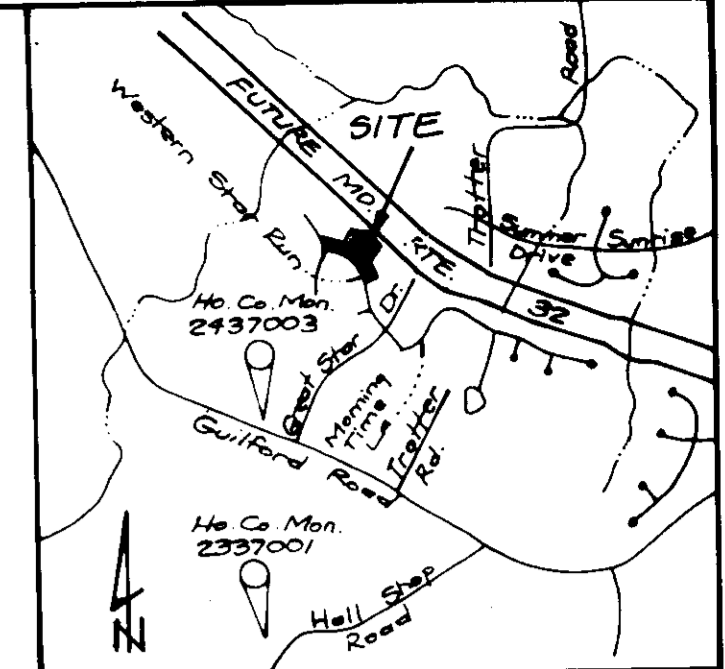
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
4/17/95
DATE
4/17/95
DATE
CHIEF BUREAU OF ENGINEERING





LEGEND

- Contour Interval: 2 FT
- Existing Contour: ---
- Proposed Contour: - - -
- Spot Elevation: +103
- Direction of Drainage: →
- Walk out Basement: [Symbol]
- Trees to be Saved: [Symbol]
- Tree Protection Fence: [Symbol]
- Minimum Cellar Elevation: MCE
- Limit of Disturbance: [Symbol]
- Silt Fence: [Symbol]
- Ex. Silt Fence: [Symbol]
- Earth Dike: [Symbol]
- Ex. Earth Dike: [Symbol]
- Stabilized Construction Entrance: [Symbol]



- BENCHMARKS**
- Howard County Monument No. 2337001 - Elev. = 426.085
North - 431672.385 East - 813527.785
34 Reinforcing Rod, 0.6' Below Surface
 - Howard County Monument No. 2437003 - Elev. = 472.122
North - 404285.231 East - 820385.343
Concrete Monument, 0.25' Below Surface

Reviewed for **HOWARD** S.C.D.
and meets Technical Requirements
John R. Rhoads
Signature
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John R. Rhoads 4/14/95

ENGINEER'S CERTIFICATE
Douglas J. Derringer 2-28-95
Douglas J. Derringer

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 2-28-95
G. Nelson Clark Date



OWNER / DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 Little Patuxent Parkway
Columbia, Maryland 21044

Sediment Trap #1 S.O.S.T. ST-V
Exist. Drainage Area: 1.51 Ac.
Prop. Drainage Area: 1.45 Ac.
Storage Required: 2718 cu ft
Storage Provided: 2736 cu ft
Top of Stone Crest: 305.0
Clean-Out Elev.: 302.0
Bottom Elev.: 300.0
Storage Depth: 4'
Bottom Dimension: 15 x 32'
1:1 Side Slopes in Cut

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John J. ... 4/12/95
DATE
John J. ... 4/21/95
DATE
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH

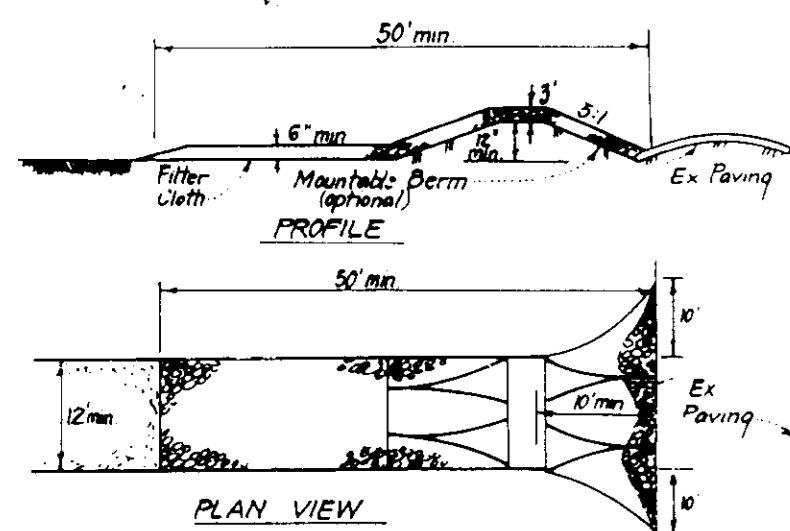
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John P. ... 4/17/95
DATE
John P. ... 4/17/95
DATE
CHIEF BUREAU OF ENGINEERING

SUBMISSION NAME	COLUMBIA	SECTION/AREA	2/3 Ph. 1	LOTS/PARCELS	6 thru 18
PLAT NO.	11220 thru 11304	TAX MAP NO.	35	ELECTION DIST.	5TH
WATER CODE	I-13	SEWER CODE	6652500 f 6653000	CENSUS TRACT	6055

DESIGNED	ZAL	SCALE	1" = 30'
DRAWN	MCR	DRAWING	2 OF 3
CHECKED	JAL	JOB NO.	94-179
DATE	4-4-95	FILE NO.	94-179

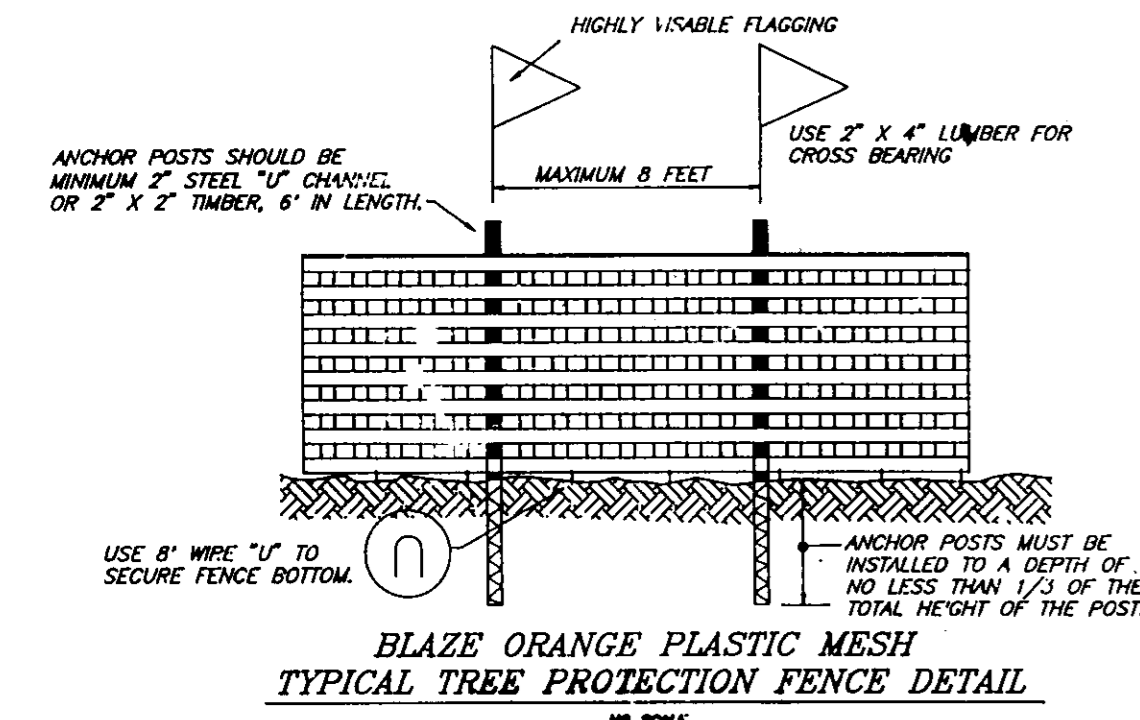
CLARK • FINEROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.

SEDIMENT & EROSION CONTROL PLAN
LOTS 6 thru 18
COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 1
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
For: DOUGLAS HOMES
P.O. Box 628
Ellicott City, Md. 21043

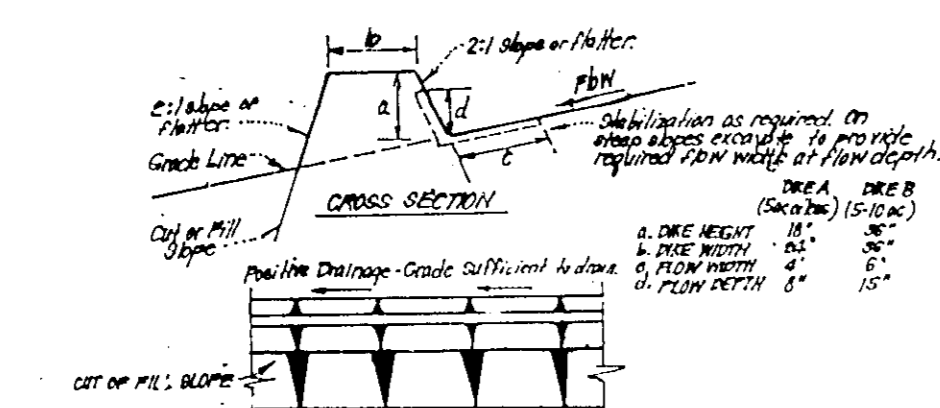


- CONSTRUCTION SPECIFICATIONS:**
- Stone size - Use 2" stone or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (exception a single residence lot where a 30 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) feet minimum, 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 entrances shall be piped across the entrance. If piping is impractical, a mounded curb with 3" slope will be permitted.
 - 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 measures used to trap sediment. All sediment applied, dragged, 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 on 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.

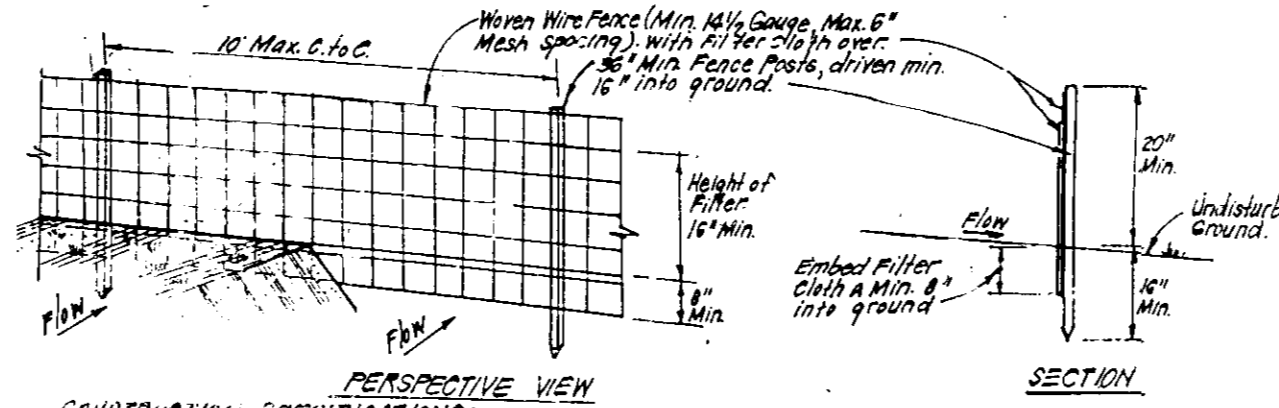
STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



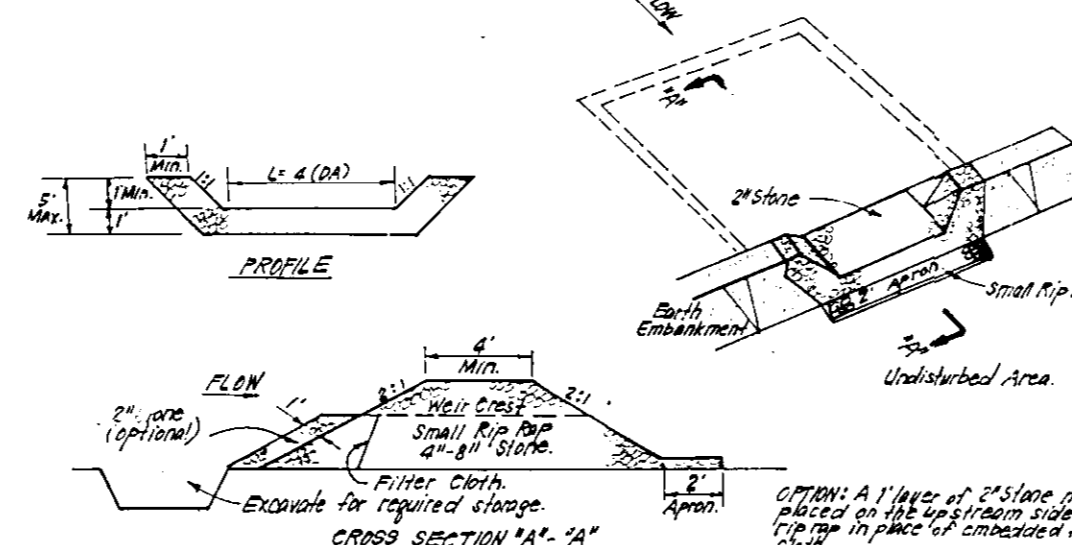
- NOTES:**
- Forest protection device only.
 - Retention area will be set as part of the review process.
 - Boundaries of retention area should be staked and flagged prior to installing device.
 - Root damage should be avoided.
 - Protection signage may also be used.
 - Device should be maintained throughout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



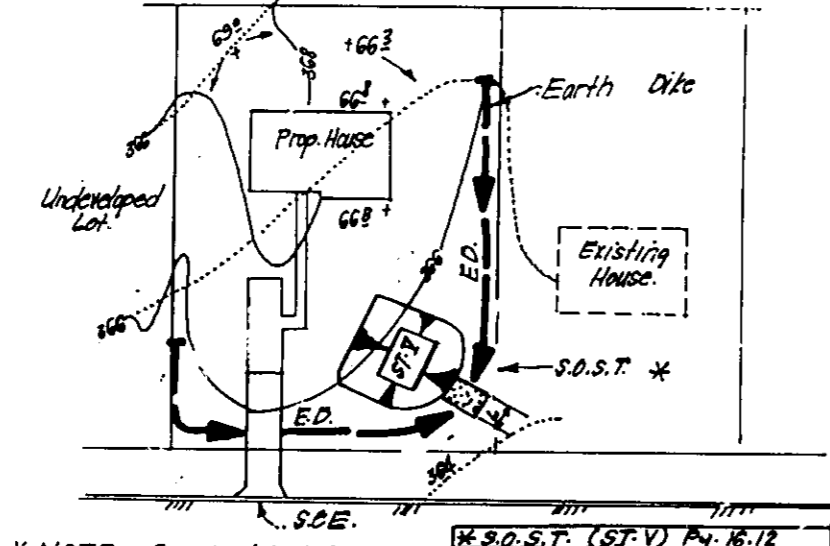
- CONSTRUCTION SPECIFICATIONS:**
- Earth dike shall be constructed by earth-moving equipment.
 - All dike shall have positive drainage to an outlet.
 - The width may be wider and side slopes may be steeper if observed to facilitate clearing by construction traffic.
 - Final dike should be adjusted as needed to utilize a stabilized soil with 5% earth dike 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 outlet, the dike channel, or the drainage area above the dike are not adequately stabilized.
 - Subdrainage shall be: (a) In accordance with standard specifications for sand and straw matting or straw matting of use to seedling season, (b) flow channel as per chart below.
- | TYPE OF TERRAIN | CHANNEL | DIKE A | DIKE B |
|-----------------|-----------------|--------------------|--------------------|
| 1 | 15" x 15" SOD | Seed Straw Matting | Seed Straw Matting |
| 2 | 3" x 3" SOD | Seed Straw Matting | Seed Straw Matting |
| 3 | 1.5" x 1.5" SOD | Seed Straw Matting | Seed Straw Matting |
| 4 | 1" x 1" SOD | Seed Straw Matting | Seed Straw Matting |
- EARTH DIKE DETAIL (E.D.)**
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- Woven wire fence to be fastened securely to fence posts with wire ties of 1/4" diameter.
 - Filter cloth to be fastened securely to woven wire fence with 1/2" spaced every 24" at top and mid section.
 - When 2 sections of filter cloth begin each other they shall be overlapped by 6" and secured with staples.
 - Maintain filter cloth in original condition when the sediment has accumulated in the silt trap.
 - Silt Fence to be staked at 30' to 50' intervals.
- SILT FENCE DETAIL (S)**
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- Trap area establishment shall be cleared, grubbed and stripped of any vegetation and rock material. The trap area shall be compacted.
 - The fill material for the establishment shall be free of rocks and other debris. The establishment shall be completed by installing with appropriate material while it is being constructed.
 - All cut and fill shall be 5% at minimum.
 - The stone used in the outlet shall be small rip rap 4" x 4" with 1" thickness of 2" aggregate placed on the non-erosion side to the extent of 2' (2' x 2' x 2') on the rip rap.
 - Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated in the silt 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.)**
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 if any lots showing a sediment trap.**
- | NO. | DESCRIPTION | DATE |
|-----|-------------|--------|
| 1 | DESIGNED | 4/1/95 |
| 2 | DRAWN | 4/1/95 |
| 3 | CHECKED | 4/1/95 |
| 4 | DATE | 4/1/95 |
- SINGLE LOT SEDIMENT CONTROL PLAN**
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:
- 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 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 50 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 unrattled 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 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 unrattled 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

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permit prior to the start of any construction. (918-1855).
- 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 SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, 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 for all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol. I, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 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 stabilization (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.
- 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.
- SITE ANALYSIS:**

Total Area of Site:	3.35A
Area Disturbed:	2.81A
Area to be roofed or paved:	1.02A
Area to be vegetatively stabilized:	1.77A
Total Cut:	4.85C5Y
Total Fill:	3.25B3Y
Offsite Waste/Borrow Area Location:	

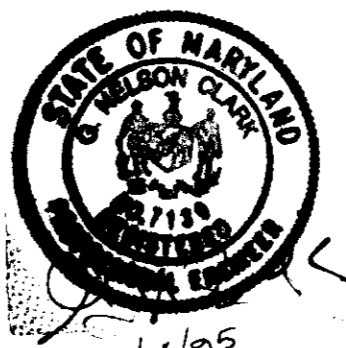
- The total amount of silt fence = 1000 LF.
- It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

CONSTRUCTION SEQUENCE:	NO. OF DAYS
1. Obtain grading permit	7
2. Install tree protection fence	7
3. Install sediment and erosion control devices and stabilize	14
4. Excavate for foundations, rough grade and temporarily stabilize	30
5. Construct structures, sidewalks and driveways	60
6. Final grade and stabilize in accordance with Stds. and Specs.	14
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize	7

*Delay construction of houses on lots: 1B See single lot sediment control detail, this sheet.

OWNER / DEVELOPER

HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 Little Patuxent Parkway
Columbia, Maryland 21044



CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED	ZAL	SCALE	AS NOTED
DRAWN	MCR		
CHECKED	JL		
DATE	4-1-95		

SEDIMENT & EROSION CONTROL DETAILS
LOTS 6 thru 18
COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 1
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

For: DOUGLAS HOMES
P.O. Box 628
Ellicott City, Md 21043

3 OF 3
JOB NO. 94-179
FILE NO. 94-179

SDP-95-78

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
4/2/95
4/2/95
CHIEF DIVISION OF DEVELOPMENT AND RESEARCH
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
4/1/95
4/1/95

Reviewed for HOWARD S.C.D.
meets Technical Requirements
4/1/95
US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robinson 4/1/95
Approved

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 of 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.

Douglas J. Danner 2-28-95
Date

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 4/1/95
Date