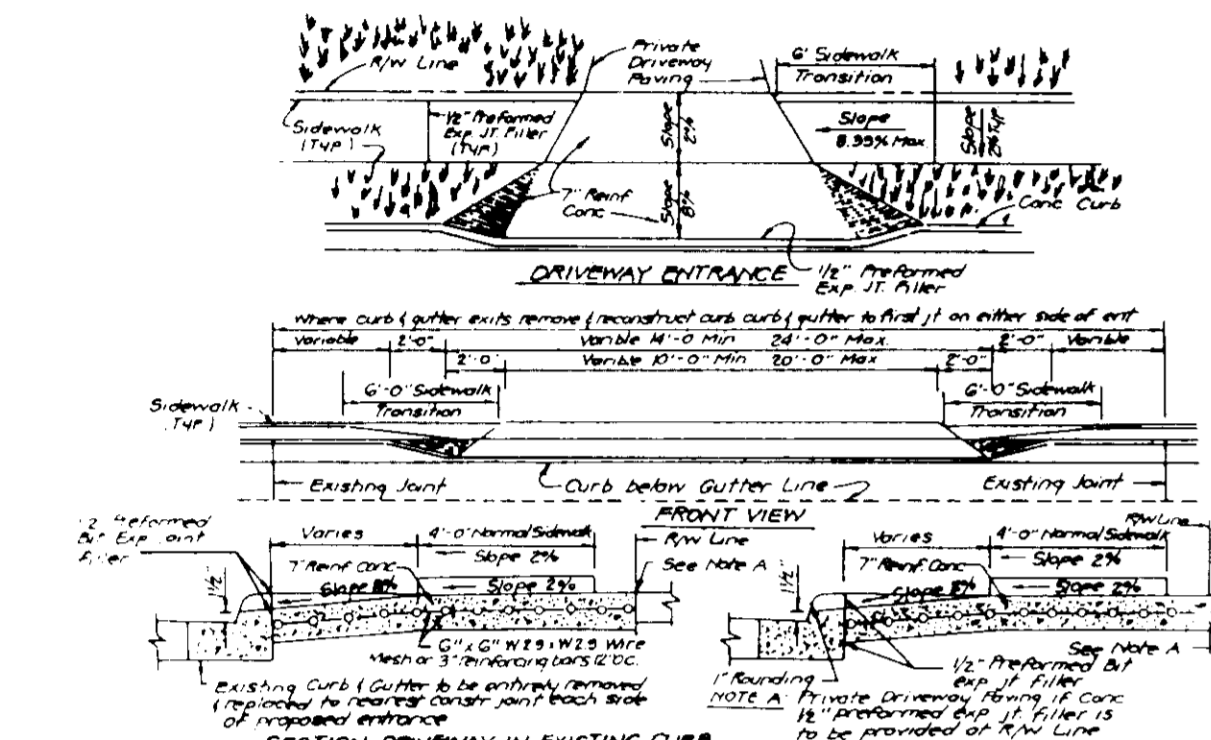
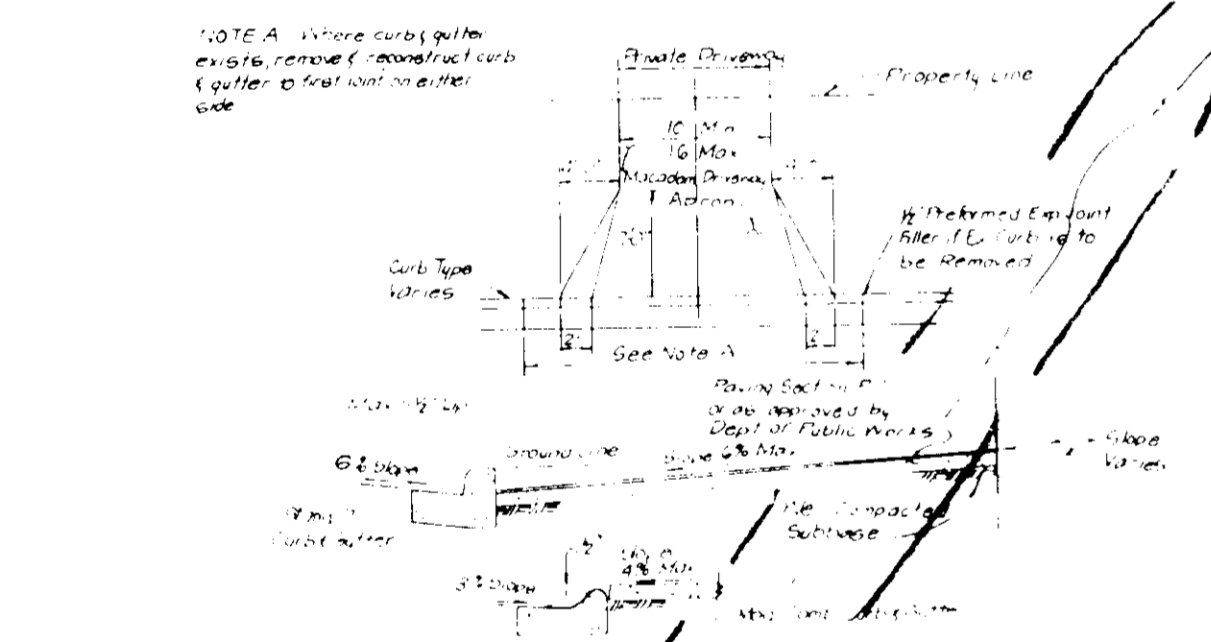


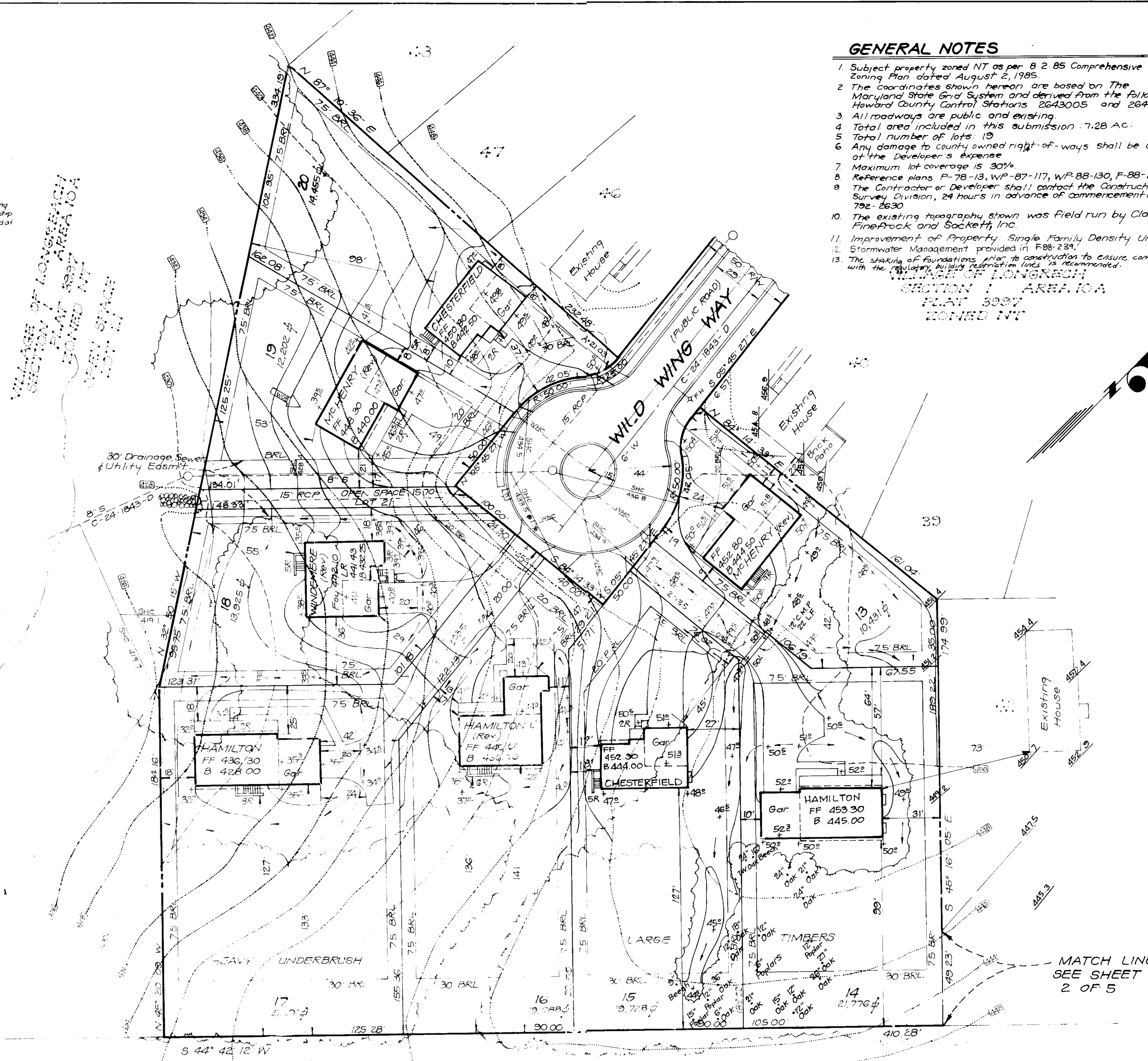
DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB CURB & GUTTER & SIDEWALK



DRIVEWAY ABUTTING CLOSED SECTION WITH STD 7\"/>



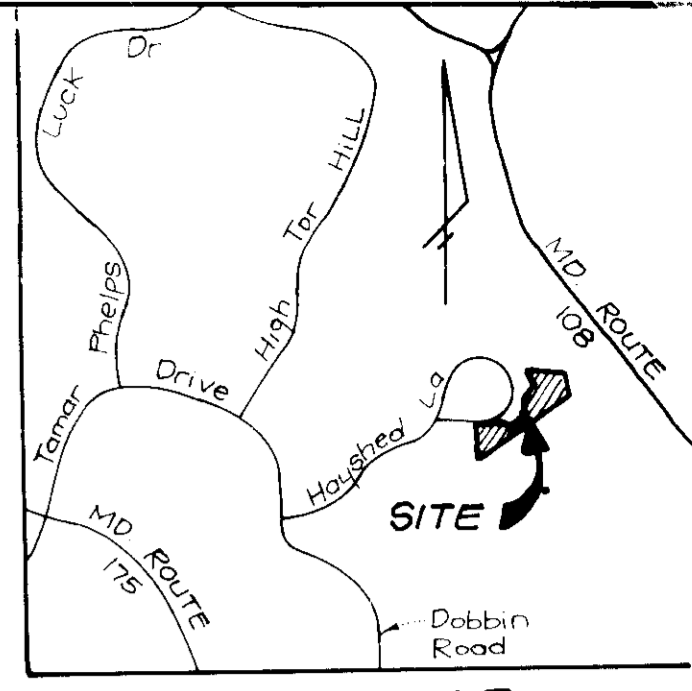
DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK



GENERAL NOTES

1. Subject property zoned NT as per B 2 85 Comprehensive Zoning Plan dated August 2, 1985.
2. The coordinates shown hereon are based on The Maryland State Grid System and derived from the following Howard County Control Stations 2643005 and 2643006.
3. All roadways are public and existing.
4. Total area included in this submission - 7.28 AC.
5. Total number of lots: 19.
6. Any damage to county owned right-of-ways shall be corrected at the Developer's expense.
7. Maximum lot coverage is 30%.
8. Reference plans P-78-13, WP-87-117, W/P-88-130, F-88-239.
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 existing topography shown was field run by Clark, FineRock and Sackett, Inc.
11. Improvement of Property: Single Family Density Units.
12. Stormwater Management provided in F88-239.
13. The shaking of foundations prior to construction to ensure compliance with the regulatory building restoration laws is recommended.

SECTION I AREA 11
 PLAN 89-058
 ZONED NT

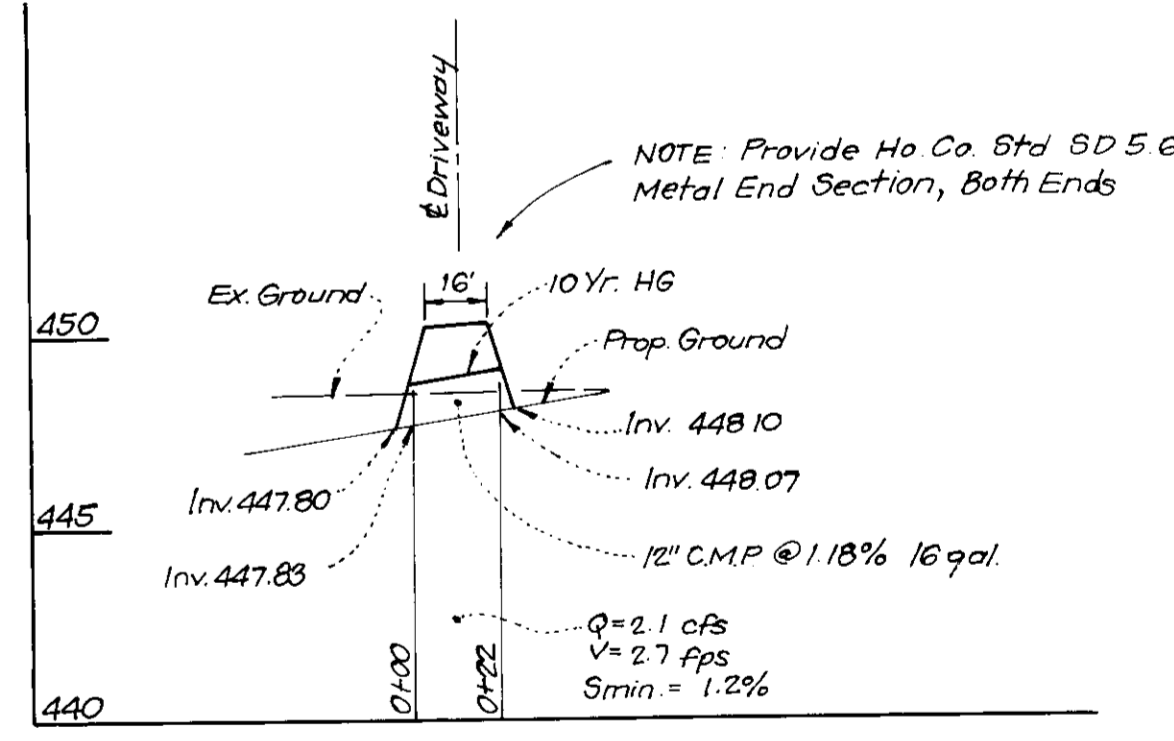


VICINITY MAP
 Scale: 1" = 2000'

LEGEND

- Contour Interval 2 FT
- Existing Contour 410
- Proposed Contour 410
- Spot Elevation +10[±]
- Direction of Drainage
- Walk out Basement
- Ex Trees to be saved

LOT	STREET	ADDRESS
13	8505	WILD WING WAY
14	8502	"
15	8513	"
16	8517	"
17	8516	"
18	8512	"
19	8508	"
20	8504	WILD WING WAY



PROFILE DRIVEWAY CULVERT

Subdivision Name	COLUMBIA VILLAGE OF LONGREACH	Sheet Area	8 - 20
Plan No	8324	Block No	1
Zone	NT	Trk. Map No	37
Water Cont.	6 08	Elec. Dist.	67H
		Genus Tr.	60,65,61
		Sewer Code	3550000

OWNER, DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 10275 Little Patuxent Pkwy.
 Columbia, MD 21044

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

DESIGNED: VHL
 DRAWN: BAL
 CHECKED: VHL, JME
 DATE: JUNE 1989

SITE DEVELOPMENT PLAN
 LOTS 1-6 AND 3-20
COLUMBIA VILLAGE OF LONGREACH
 SECTION I AREA 11
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 30'
 DRAWING: 1 OF 5
 JOB NO: 89-058
 FILE NO: 89-058

FOR THE RYLAND GROUP, INC.
 2130 Minnetonka Way Suite 215
 Columbia, Md 21045

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

COUNTY HEALTH OFFICER: [Signature] DATE: 8-19-89

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director: [Signature] DATE: 8/6/89

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT: [Signature] DATE: 8/23/89

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

DIRECTOR: [Signature] DATE: 10/16/89

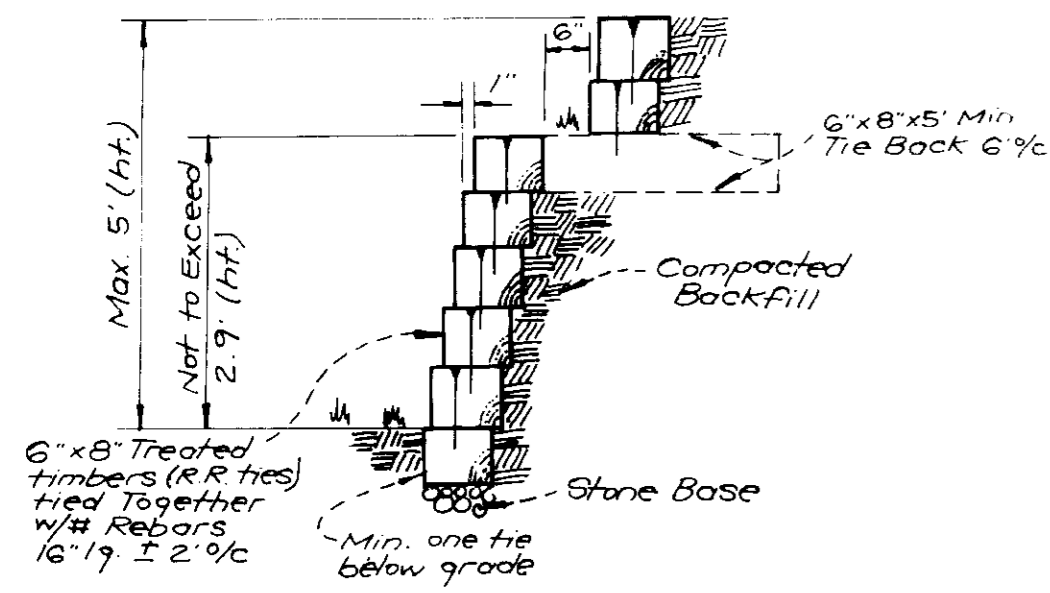
CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 10-12-89

No	REVISIONS	Date
2	Revise house and grade lots 15 & 20	8 28 89
1	Revised hse. type on lot 15, Moved hse back on lot 14 and rev. grading on lots 13, 14, 15 to save trees.	12 5 89



SDP 90-08

No	REVISIONS	Date
1	Rev. hse & grd lot 6 from Potomac to McHenry	12-18-91
2	Rev. hse & grd lot 4	2-7-91
3	Rev. hse & grd lot 2	3-30-92
4	Rev. hse & grd Lot 12	10-21-92
5	Rev. hse & grd lot 100	12-29-92



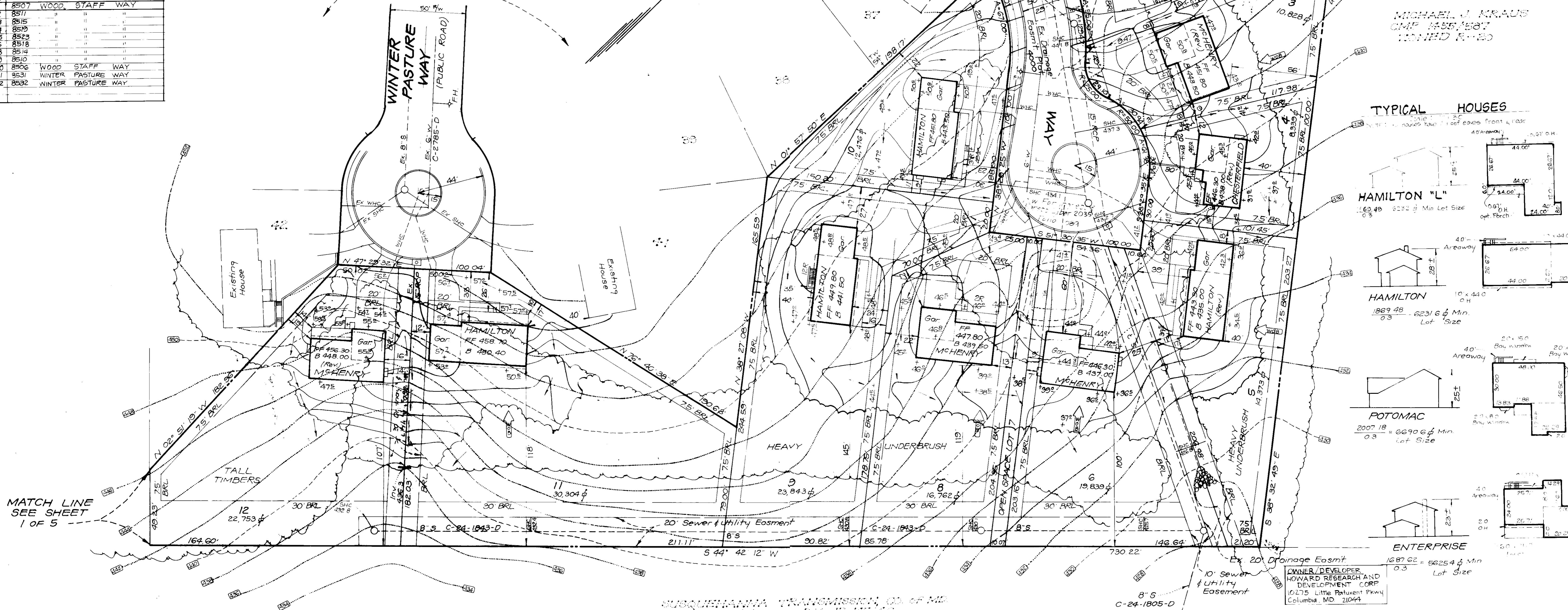
TYPICAL RETAINING WALL

No Scale

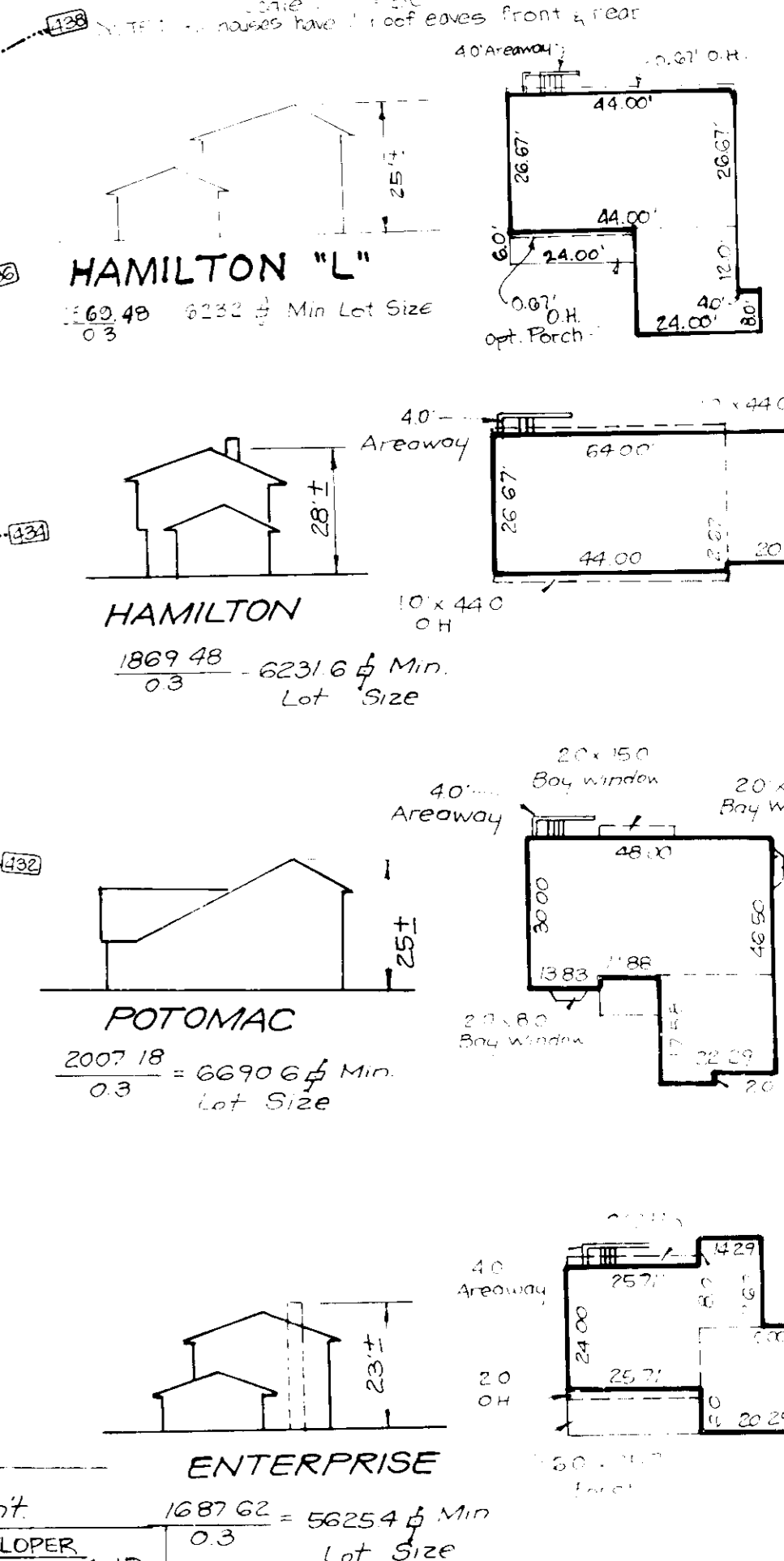
ADDRESS CHART

LOT #	STREET	ADDRESS
1	WOOD, STAFF WAY	
2	8511	
3	8515	
4	8519	
5	8523	
6	8518	
7	8514	
8	8510	
9	8506	WOOD STAFF WAY
10	8502	WOOD STAFF WAY
11	8531	WINTER PASTURE WAY
12	8532	WINTER PASTURE WAY

VILLAGE OF LONGREACH SECTION I AREA 10A ZONED NT



TYPICAL HOUSES



MATCH LINE SEE SHEET 1 OF 5

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

10-15-89

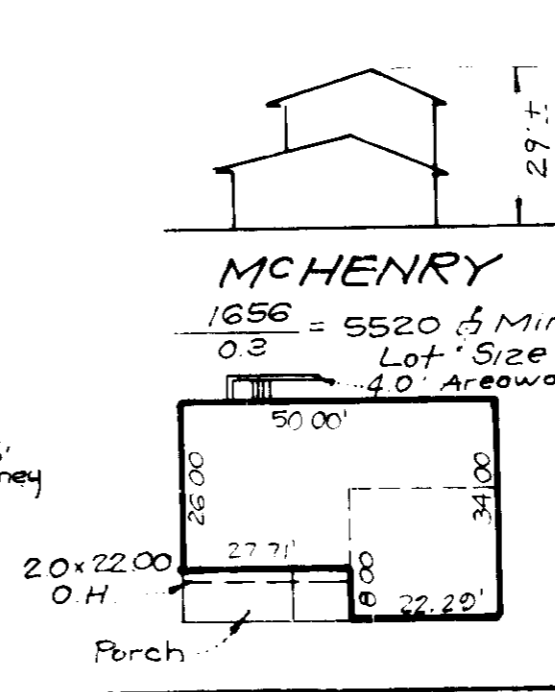
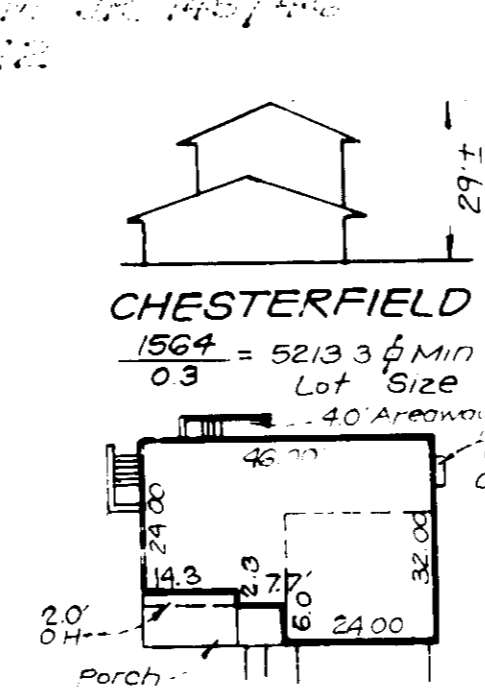
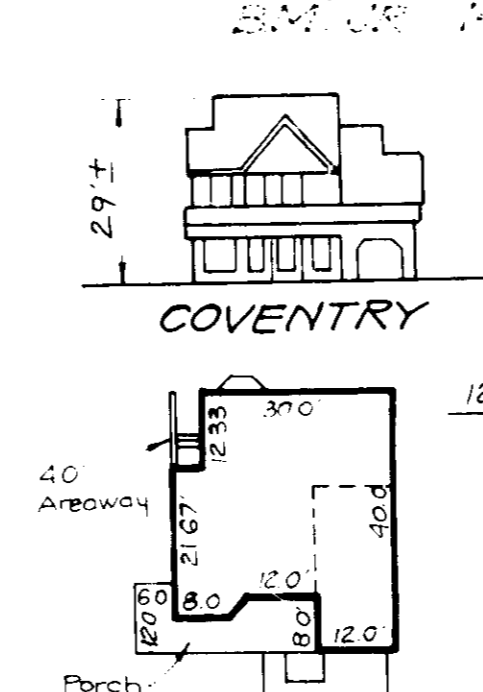
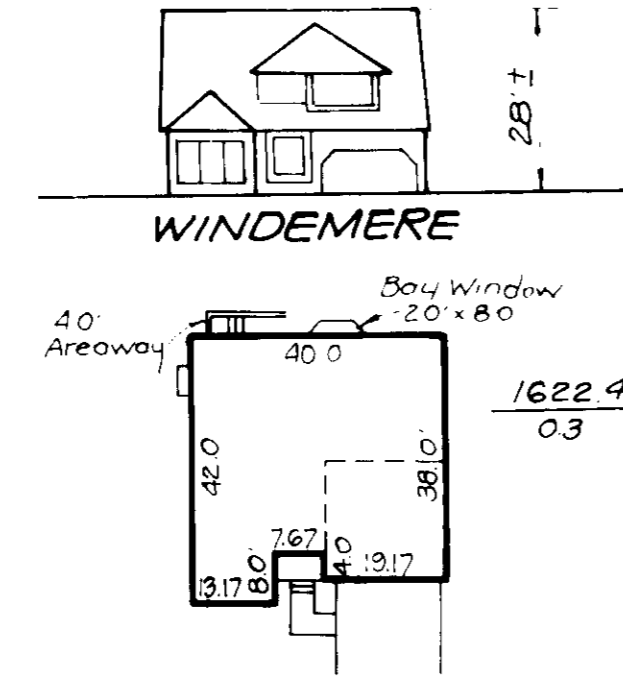
APPROVED: DEPARTMENT OF PLANNING AND ZONING

11/9/89

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

10/16/89

8/3/89



15

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

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO • (301) 621-1400 • WASH

DESIGNED: VHL

DRAWN: BAL

CHECKED: VHL, JME

DATE: JUNE 1989

SITE DEVELOPMENT PLAN LOTS 1-6 and 8-20

COLUMBIA VILLAGE OF LONGREACH SECTION I AREA 11 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FOR THE RYLAND GROUP INC 7130 Minstrel Way Suite 215 Columbia, Maryland 21045

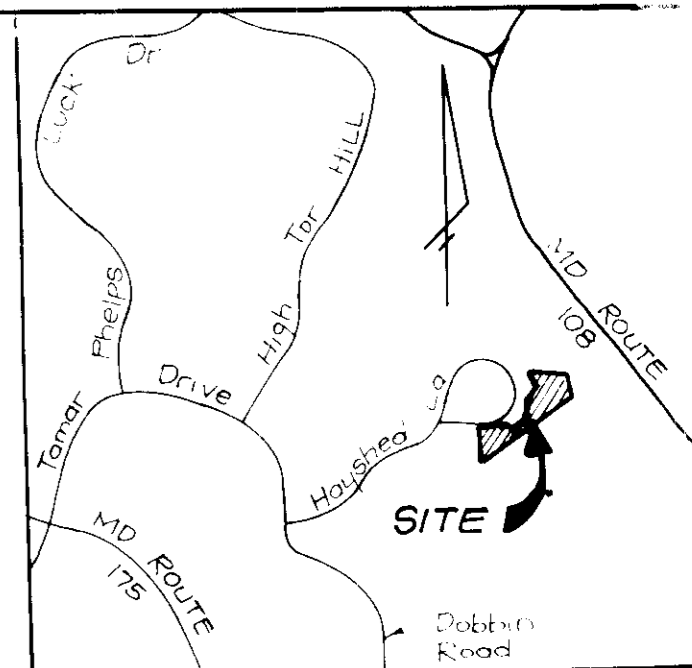
SCALE: 1" = 30'

DRAWING: 2 OF 5

JOB NO: 89-058

FILE NO: 89-058X

CLP 90-08



VICINITY MAP
Scale 1" = 2000'

VILLAGE OF LONGREACH
SECTION 1 AREA 10A
PLAN 8907
CORDED N/C

LEGEND

- Contour Interval 2 FT
- Existing Contour - - - - -
- Proposed Contour - - - - -
- Spot Elevation +10.5
- Direction of Drainage
- Walk out Basement
- Ex Trees to be saved
- Silt Fence S S
- Earth Dike E.D.(A-1)
- Stabilized Construction Entrance SCE

TRAP NO. 1 SOST (ST-V)*
Drainage Area 2.0 Ac.
Storage Required 3600 CF
Storage Provided 3600 CF
Depth 4'
Top of Stone Elevation 427.0
Bottom Elevation 422.0
Cleanout Elevation 424.0
Bottom Dimensions 41'x16'
* 1:1 Side Slopes in Cut
Weir Length 8'

TRAP NO. 4 SOST (ST-V)*
Drainage Area 0.5 Acres
Storage Required 900 CF
Storage Provided 960 CF
Depth 4'
Top of Stone Elev 445.0
Bottom Elevation 440.0
Clean out Elev 442.0
Bottom Dimensions 12'x11'
* 1:1 Side Slopes in Cut
Weir Length = 4'

ENGINEER'S CERTIFICATE

I hereby certify that this plan was prepared and designed by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Maryland.



Richard J. H. Stepp
RICHARD J. H. STEPP
7-7-89 Date

MATCH LINE
SEE SHEET
2 OF 5

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
10-15-89
APPROVED: DEPARTMENT OF PLANNING AND ZONING
11/8/89
1/21/89
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
10/16/89

Reviewed for HOWARD S.C.D.
10/5/89
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.
10/5/89 Date

DEVELOPER'S/BUILDER'S CERTIFICATE

I hereby certify that all development and construction will be done according to the plan of development and plan for erosion and sediment control submitted and approved by the State of Maryland and that I am a duly Licensed Professional Engineer in the State of Maryland.

7/7/89 Date

OWNER/DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
10215 Little Patuxent Pkwy.
Columbia, MD 21044

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

DESIGNED CVH
DRAWN BAL
CHECKED CVH
DATE JUNE 1989
SEDIMENT & EROSION CONTROL PLAN
LOTS 1-6 AND 8-20
COLUMBIA
VILLAGE OF LONGREACH
SECTION 1 AREA 11
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: THE RYLAND GROUP, INC.
7130 Minstrel Way Suite 215
Columbia, Md 21045
SCALE 1" = 30'
DRAWING 3 OF 5
JOB NO 89-058
FILE NO 89-058

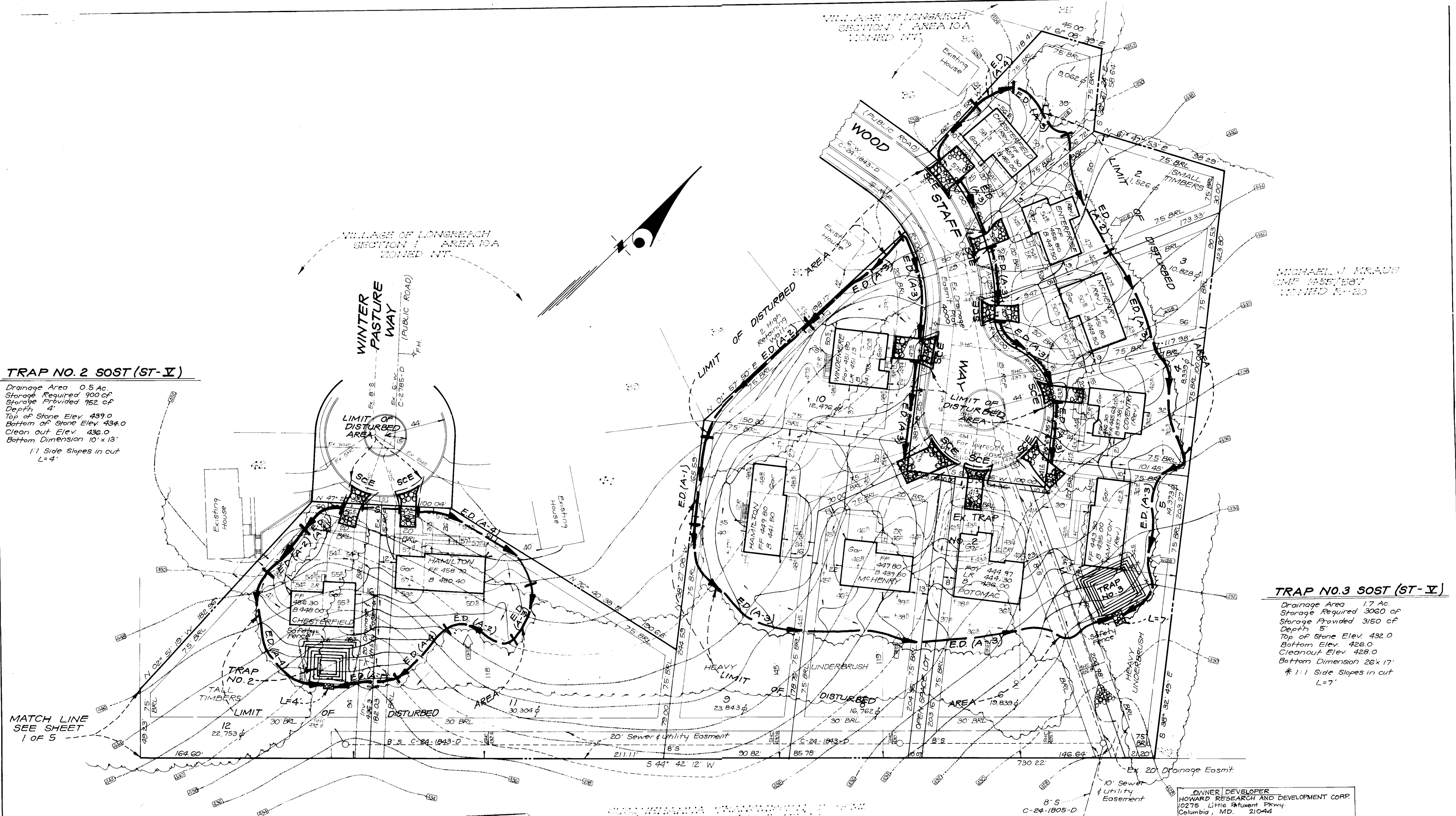
TRAP NO. 2 SOST (ST-V)

Drainage Area 0.5 Ac.
 Storage Required 900 cf
 Storage Provided 752 cf
 Depth 4'
 Top of Stone Elev 439.0
 Bottom of Stone Elev 434.0
 Clean out Elev 436.0
 Bottom Dimension 10' x 13'
 1:1 Side Slopes in cut
 L=4'

MATCH LINE
 SEE SHEET
 1 OF 5

TRAP NO. 3 SOST (ST-V)

Drainage Area 1.7 Ac.
 Storage Required 3060 cf
 Storage Provided 3150 cf
 Depth 5'
 Top of Stone Elev 432.0
 Bottom Elev 426.0
 Cleanout Elev 428.0
 Bottom Dimension 26' x 17'
 * 1:1 Side Slopes in cut
 L=7'



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* 10/12/89
 DATE
 APPROVED DEPARTMENT OF PLANNING AND ZONING
 DIRECTOR: *[Signature]* 11/12/89
 DATE
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION: *[Signature]* 10/12/89
 DATE
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* 10/16/89
 DATE
 CHIEF BUREAU OF ENGINEERING: *[Signature]* 10/16/89
 DATE

8/3/89
 [Stamp]

Reviewed for HOWARD COUNTY S.C.D.
 Signature: *[Signature]* 10/5/89
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
 FOR SOIL EROSION AND SEDIMENT
 CONTROL BY THE HOWARD SOIL
 CONSERVATION DISTRICT.
 Approved: *[Signature]* 10/5/89
 Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I, the undersigned, hereby certify that the plan for foundation and
 foundation 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: *[Signature]* 7/7/89
 Date



ENGINEER'S CERTIFICATE

Richard J. H. Stepp
 RICHARD J. H. STEPP
 Date: 7-7-89

OWNER/DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 10275 Little Patuxent Pkwy.
 Columbia, MD. 21044

CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 • BALTO. • (301) 621-8100 • WASH.		
DESIGNED CVH	SEDIMENT & EROSION CONTROL PLAN LOTS 1-6 and 8-20 COLUMBIA VILLAGE OF LONGREACH SECTION I AREA 11 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR THE RYLAND GROUP, INC. 7130 Minstrel Way Suite 215 Columbia, Maryland 21045	SCALE 1" = 30'
DRAWN BAL		DRAWING 4 OF 5
CHECKED CVH		JOB NO. 89-058
DATE JUNE 1989		FILE NO. 89-058

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, 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 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding.
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.

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 (.05 lbs/1000 sq ft) of weeping lovegrass.

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.

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.

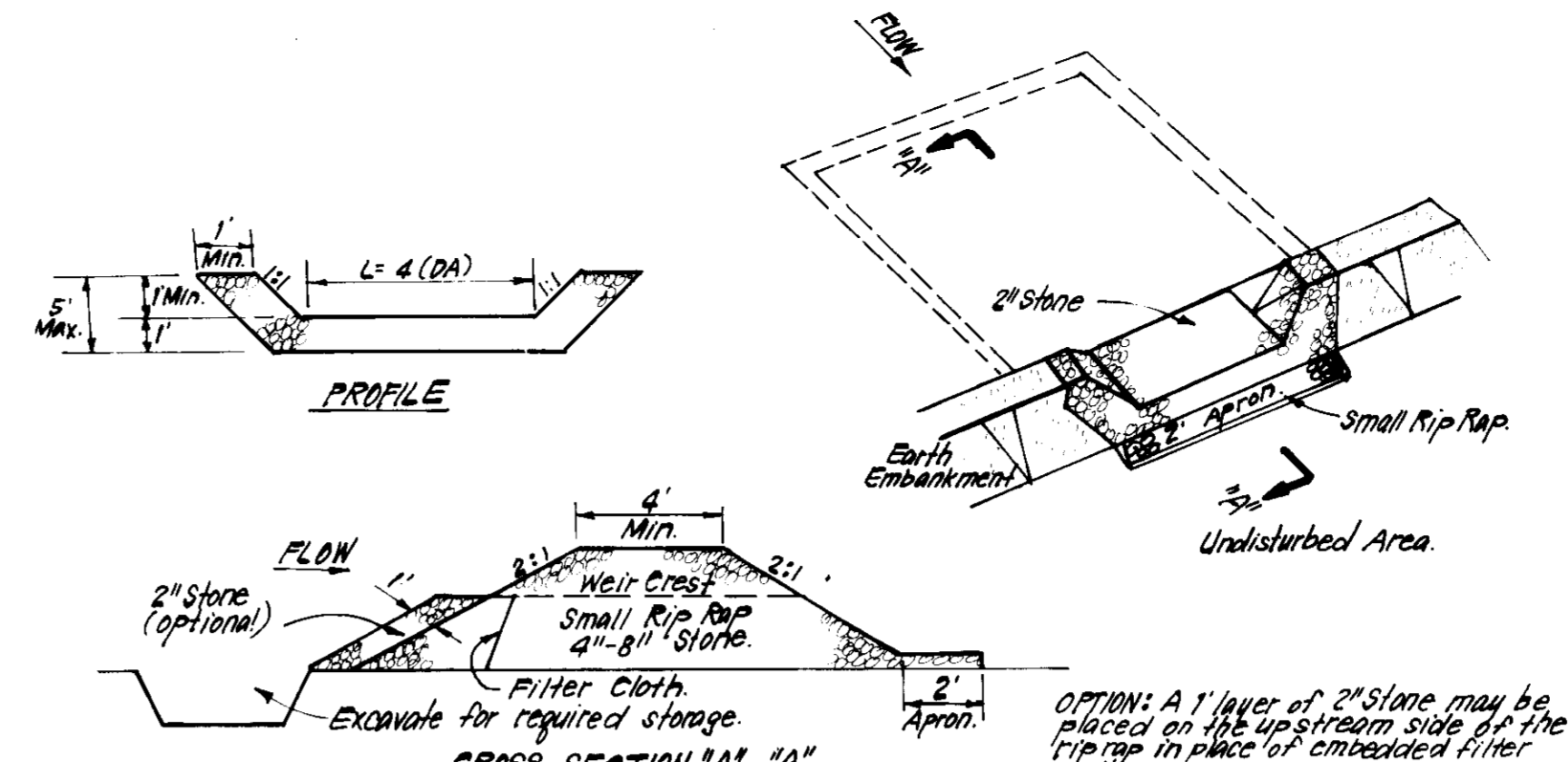
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

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 2 1/2 bushels 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 weeping lovegrass (.07 lbs/1000 sq ft).

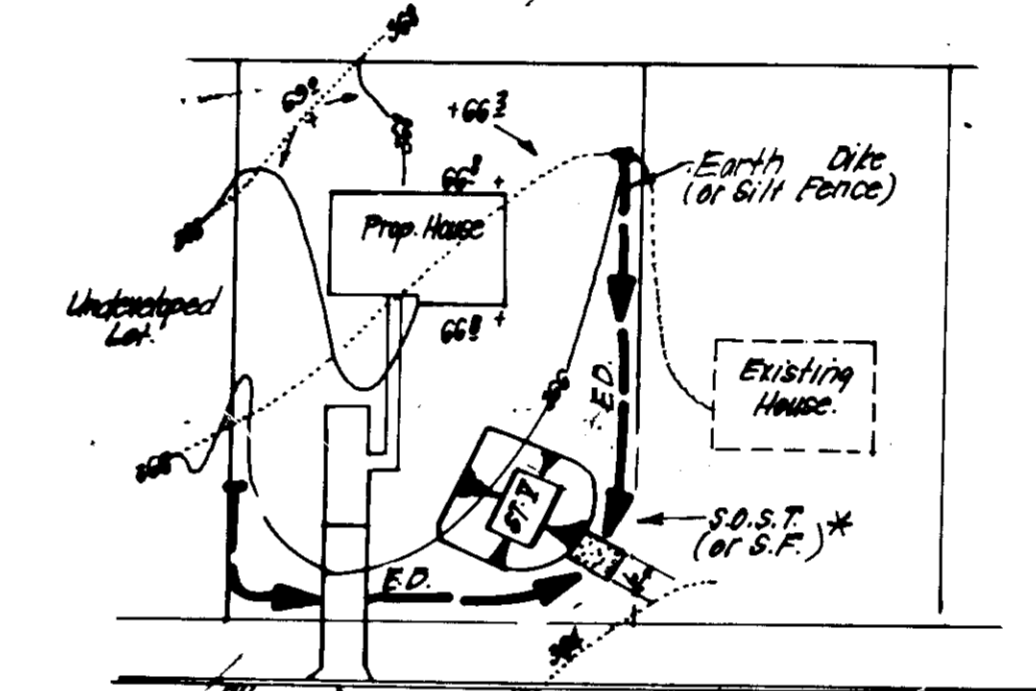
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



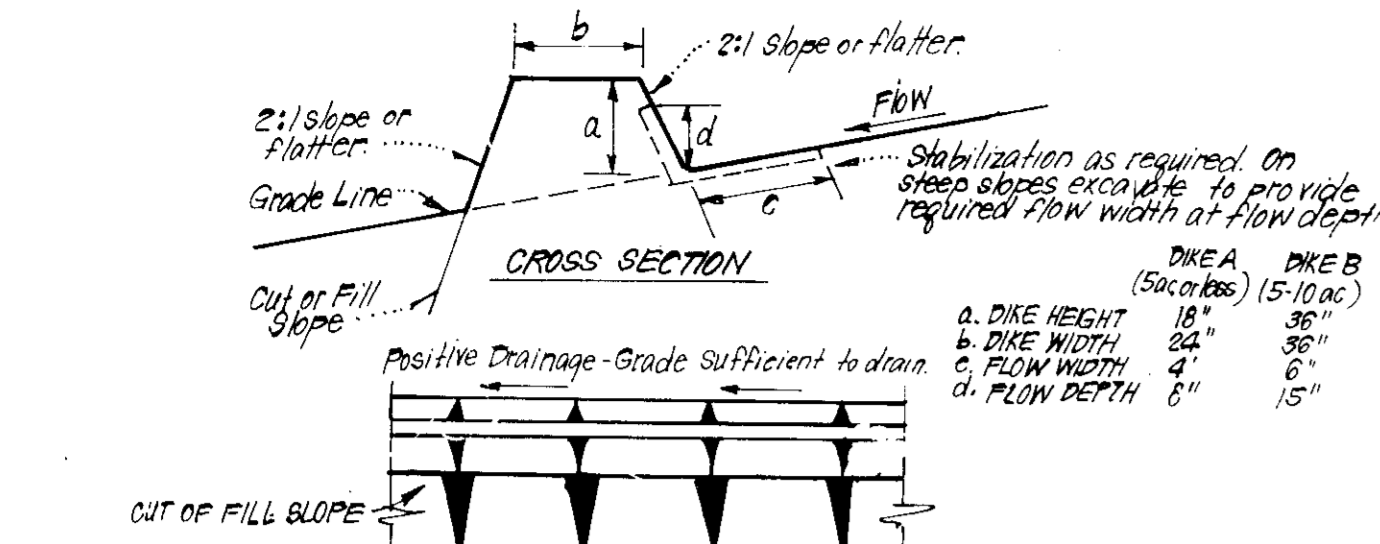
- CONSTRUCTION SPECIFICATIONS: 1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top grade shall be compacted. 2. The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material.

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



- * 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.

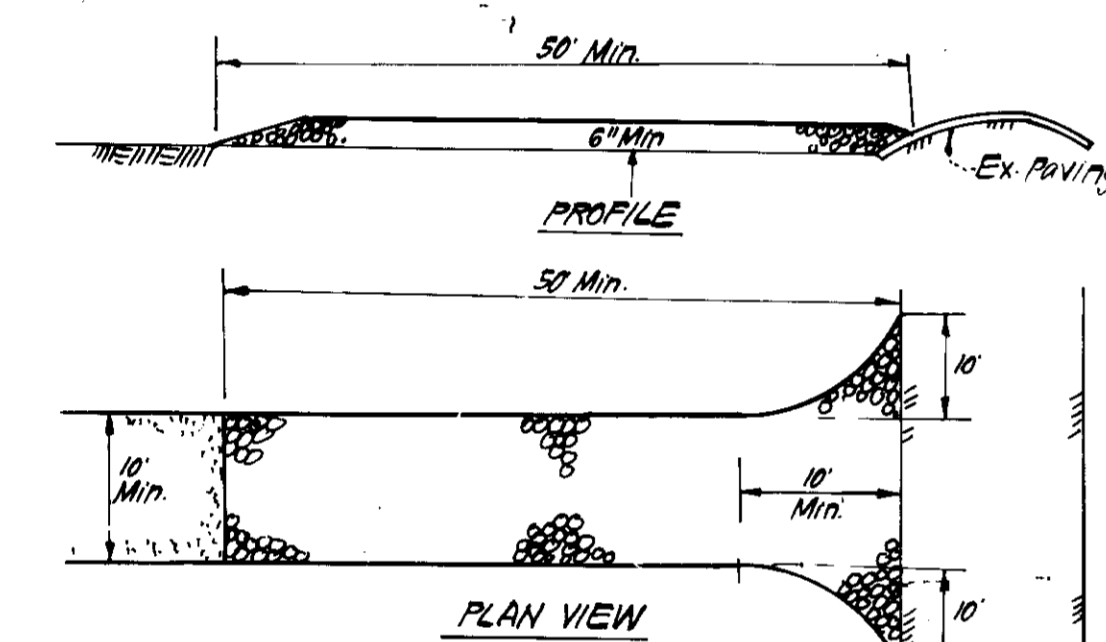
SINGLE LOT SEDIMENT CONTROL PLAN



- 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 equipment.

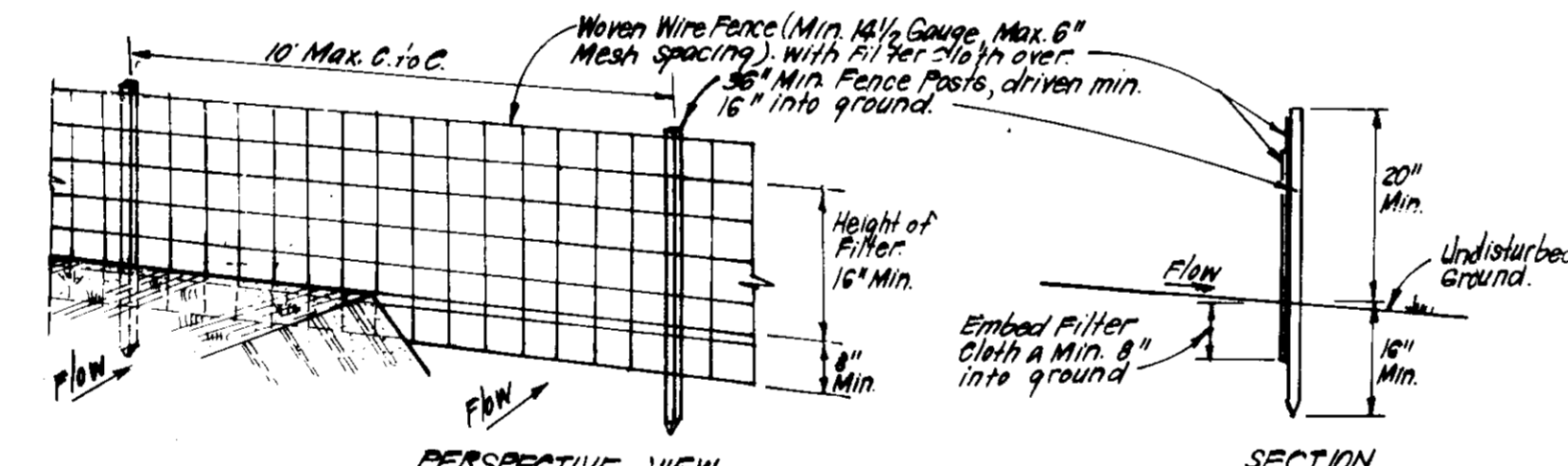
Table with columns: TYPE OF TREATMENT, CHANNEL GRADE, DIKE A, DIKE B. It lists various treatment options like seed and straw mulch, seed with lime or Extol, sod, stone, lined rip rap, and lined rip rap with stone engineering design.

EARTH DIKE DETAIL (E.D.)



- 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 15' min. length will apply).

STABILIZED CONSTRUCTION ENTRANCE (S.C.E.)



- 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.

SILT FENCE DETAIL (S)

Reviewed for HOWARD SCD... 11/5/89

Approved... 11/5/89

OWNER/DEVELOPER: HOWARD RESEARCH AND DEVELOPMENT... 7/7/89

OWNER/DEVELOPER: HOWARD RESEARCH AND DEVELOPMENT... 7/7/89

- SEDIMENT 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. (992-2437) 2) All vegetative and structural practices are to be installed according to the provisions of this plan...

Table with columns: CONSTRUCTION SEQUENCE, No. of Days. It lists tasks like Obtain Grading Permit, Excavate for foundations, Construct Structures, and Final Grade, with corresponding day counts.

ENGINEER'S CERTIFICATE: I hereby certify that this plan for erosion and sediment control... RICHARD J.R. STEFF... 7-7-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT. APPROVED: DEPARTMENT OF PLANNING AND ZONING. APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS. 7130 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO • (301) 621-8811 • WASH.