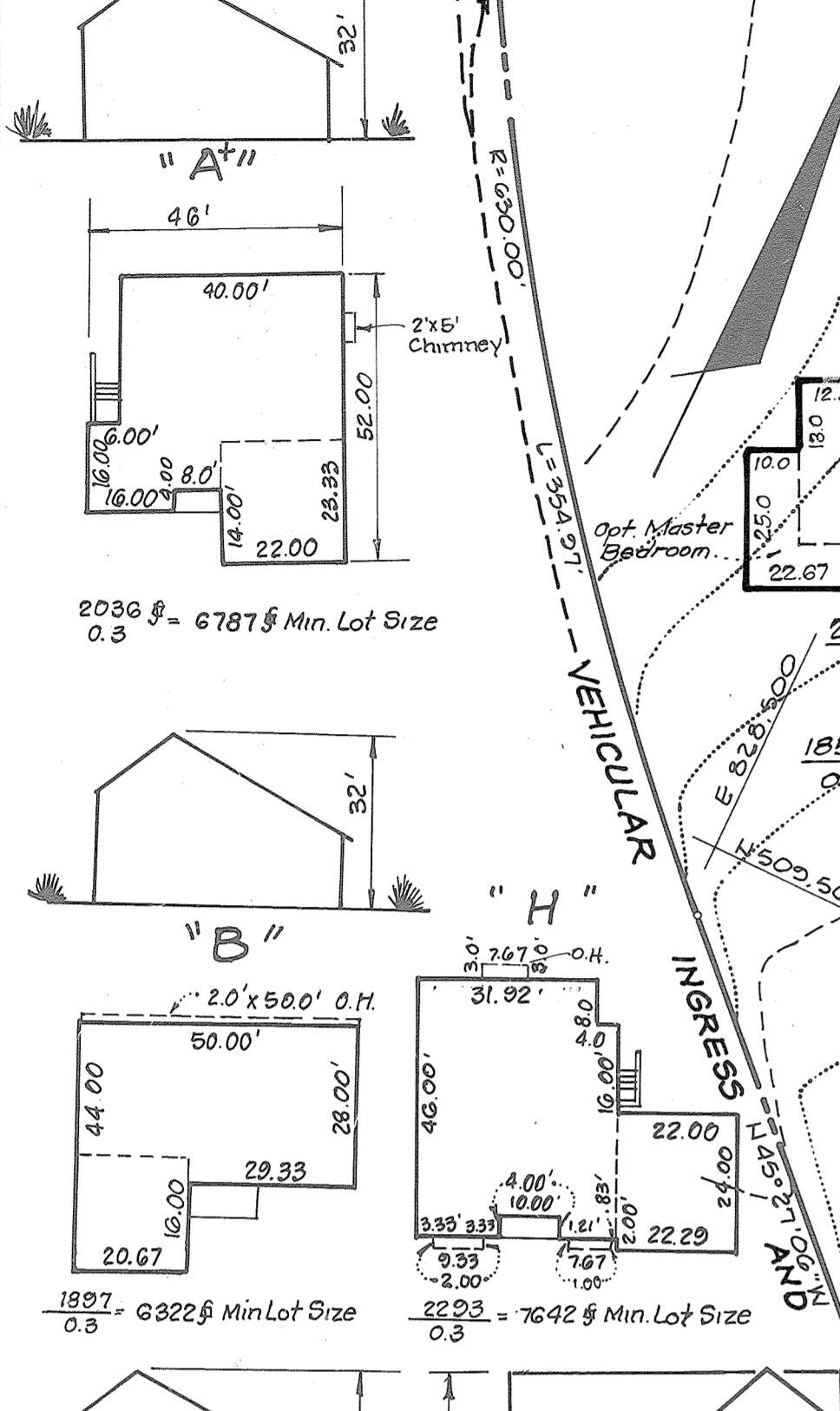


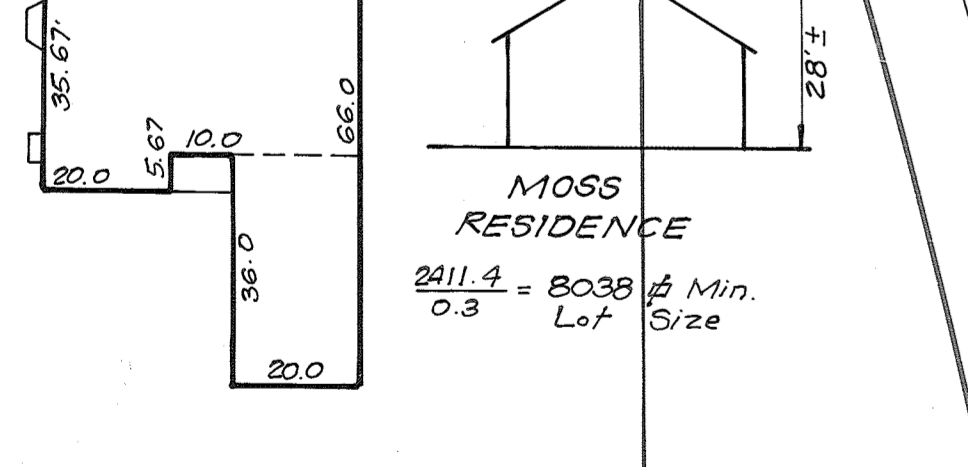
GOODIER BUILDERS, INC.
TYP HOUSES

Scale: 1"=30'
Note: All hses have 1' roof eaves front and rear.



2036 sq. = 6787 sq. Min. Lot Size
1897 sq. = 6322 sq. Min. Lot Size
2223 sq. = 7642 sq. Min. Lot Size

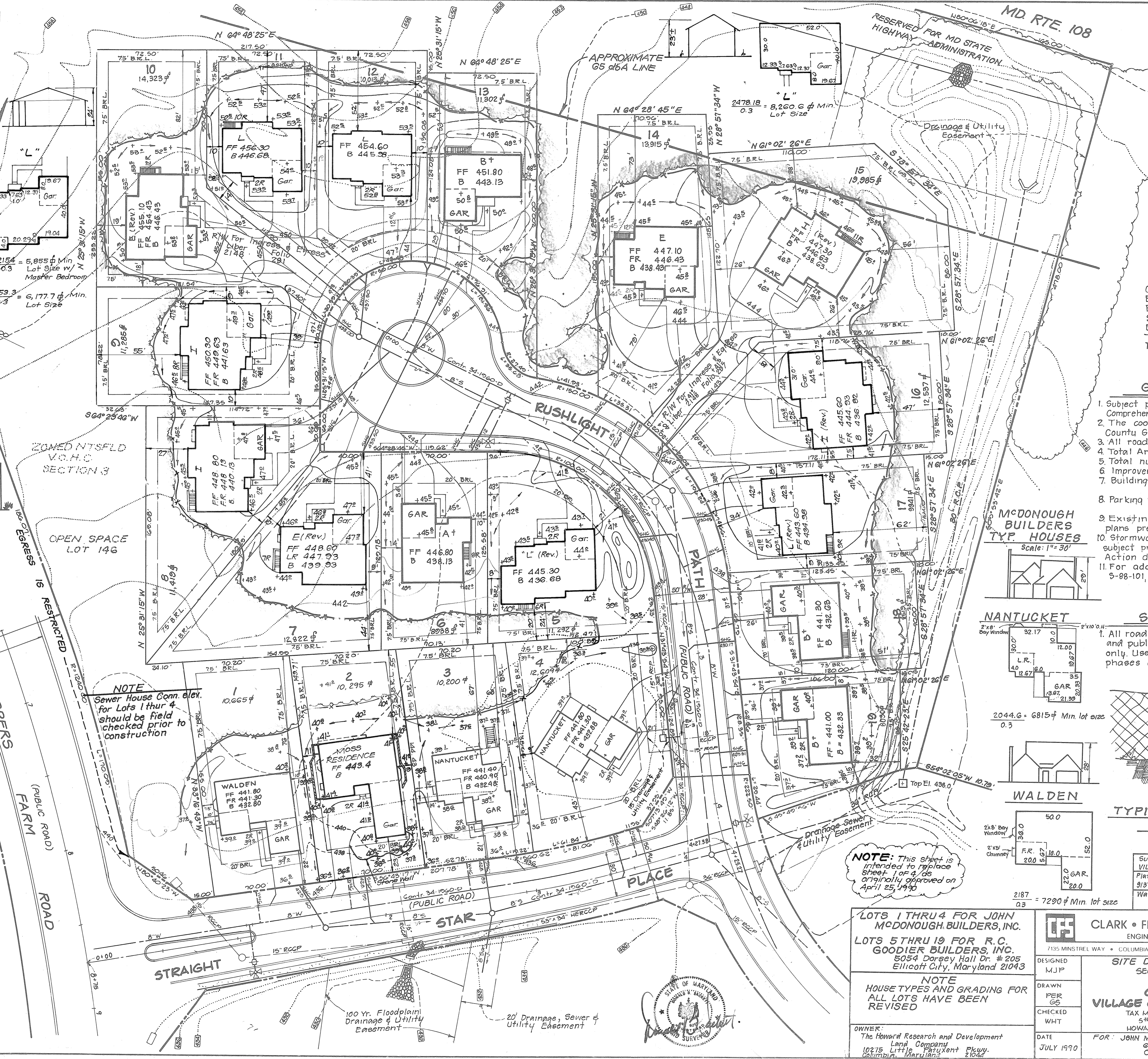
2,465 sq. = 8216 sq. Min. Lot Size
2,401 sq. = 8,003 sq. Min. Lot Size



211.4 = 8038 sq. Min. Lot Size

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
8/21/90
APPROVED FOR HOWARD COUNTY DEPT. OF PLANNING & ZONING
9/4/90
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
8/17/90

CHIEF BUREAU OF ENGINEERING



ZONED NTSFLD V.O.H.C SECTION 3

OPEN SPACE LOT 14G

NOTE: Sewer House Conn. Elev. for Lots 1 thru 4 should be field checked prior to construction

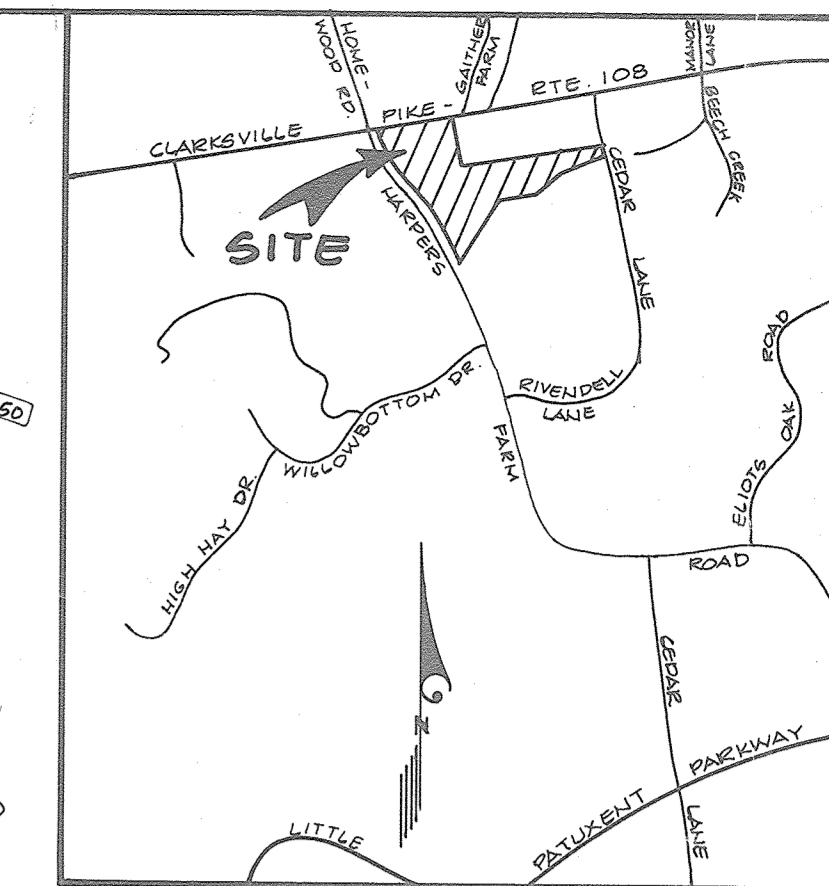
WALDEN RESIDENCE FF 441.80 FR 441.30 B 432.80

STAR PLACE

STRAIGHT PLACE

100 Yr. Floodplain Drainage & Utility Easement

20' Drainage, Sewer & Utility Easement

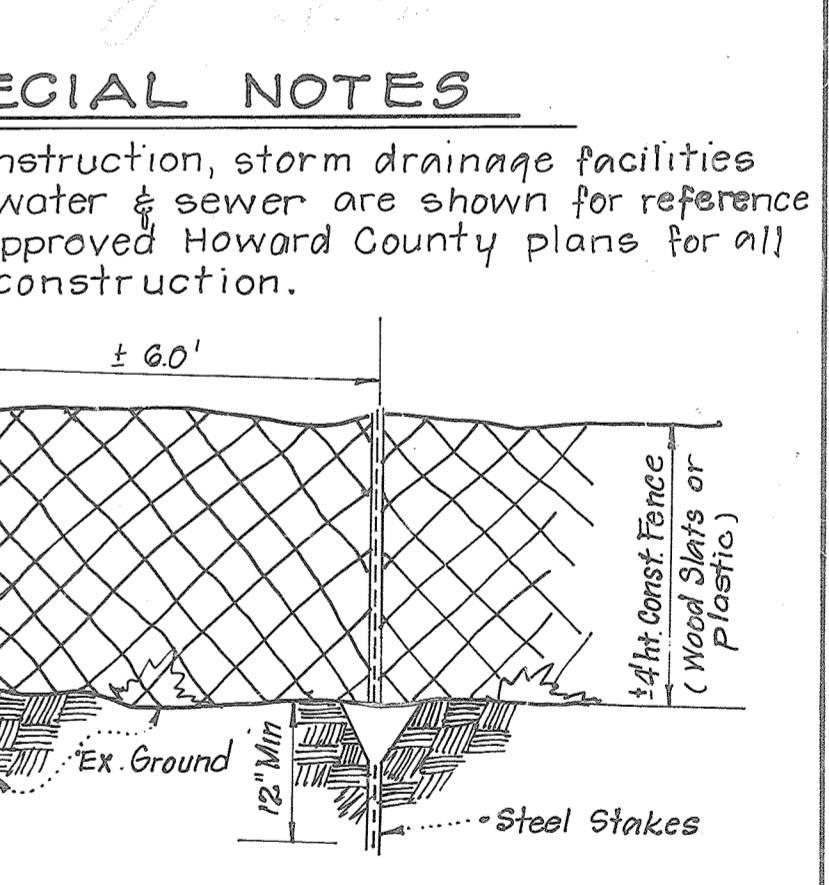


VICINITY MAP
Scale: 1"=2000'

LEGEND
Contour Interval 2 ft.
Existing Contour 440
Proposed Contour 446
Spot Elevation +46'
Direction of Drainage
Trees to be saved
Tree Protection

GENERAL NOTES

- Subject property zoned New Town SFLD as per Comprehensive Zoning Plan, dated 8-2-85.
- The coordinates shown are based upon Howard County Geodetic Control Stations 2739002 & 2739003.
- All roads are public and existing.
- Total Area of lots: 217,307 sq. ft. or 4.9886 Ac.
- Total number of lots: 19.
- Improvements to property: Single Family Dwelling Units.
- Building Coverage Permitted: 30%.
Proposed: See Bldg. Coverage Chart
- Parking Spaces Required: 38.
Proposed: 76
- Existing grade taken from approved road construction plans prepared by Kidde Consultants, Inc.
- Stormwater Management requirements for the subject property have been waived as per D.P.W. Action dated Sept. 6, 1988.
- For additional information see O.P.Z. file numbers 5-88-101, P-89-45 and WP-89-14, F-89-201 & FDP-204.



TYPICAL TREE PROTECTION FENCE DETAIL

Subdivision Name: COLUMBIA VILLAGE OF HARPERS CHOICE	Sect / Area: 7/4	Lots: 1-19
Plat No: 9137-9138	Block No: 16	Zone: NTSFLD
Tax Map No: 29	Election Dist: 5th	Census Tr: 6053.01
Water Code: I-03	Sewer Code: 6740000	

CLARK • FINEROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINISTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO. • (301) 621-8100 - WASH
DESIGNED: MJP
DRAWN: PER
CHECKED: WHT
DATE: JULY 1990

LOTS 1 THRU 4 FOR JOHN McDONOUGH BUILDERS, INC.
LOTS 5 THRU 19 FOR R.C. GOODIER BUILDERS, INC.
5054 Dorsey Hall Dr. # 205
Ellicott City, Maryland 21043

NOTE: HOUSE TYPES AND GRADING FOR ALL LOTS HAVE BEEN REVISED

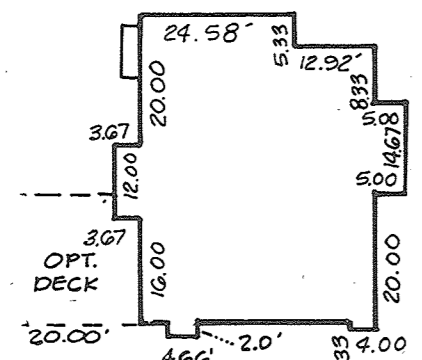
OWNER: The Howard Research and Development Land Company
10215 Little Patuxent Pkwy.
Columbia, Maryland 21044



BUILDING COVERAGE CHART		
LOT	PROPOSED COVERAGE	PERMITTED COVERAGE
1	20.8%	30%
2	21.6%	"
3	21.8%	"
4	17.7%	"
5	19.7%	"
6	25.0%	"
7	17.3%	"
8	19.6%	"
9	27.4%	"
10	21.6%	"
11	24.1%	"
12	22.3%	"
13	19.7%	"
14	16.0%	"
15	15.4%	"
16	17.7%	"
17	22.5%	"
18	26.1%	"
19	27.8%	"

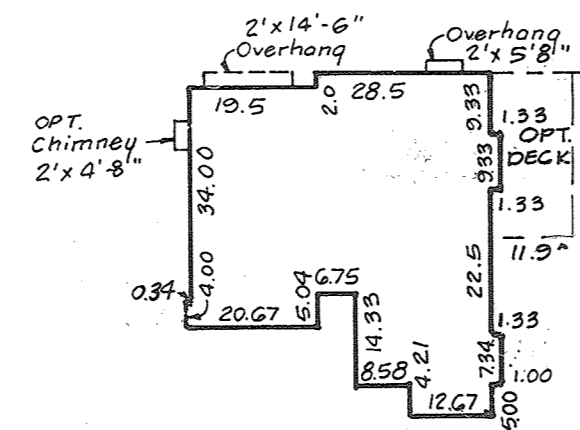
TYPICAL HOUSES

Scale: 1" = 30'
NOTE: All units have 1' roof eaves, front & rear.



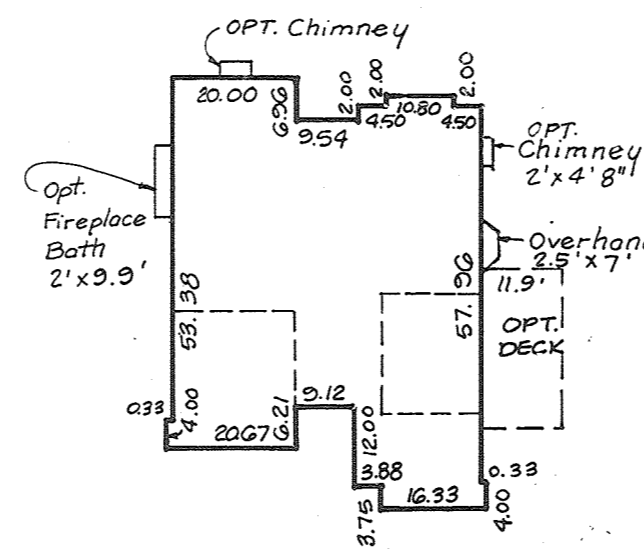
PINEHURST

w/2 car garage
2,239.4 = 7,464.6 #
0.3 = Min. Lot Size



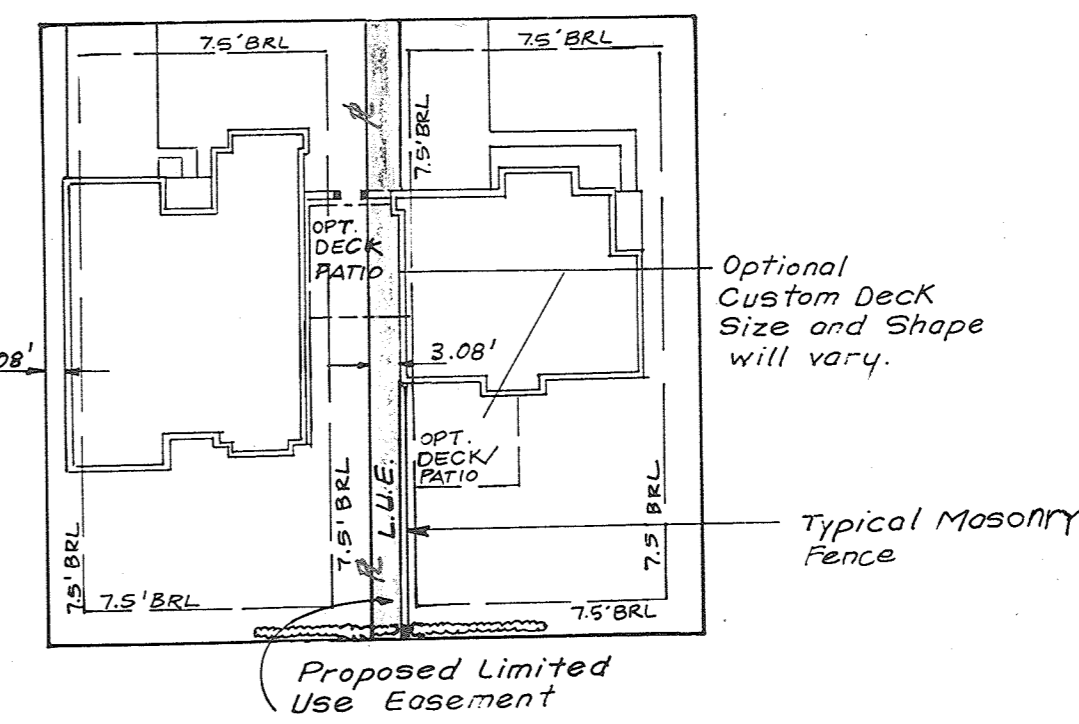
HOMESTEAD

w/2 car garage
2,228.8 = 7,429.3 #
0.3 = Min. Lot Size



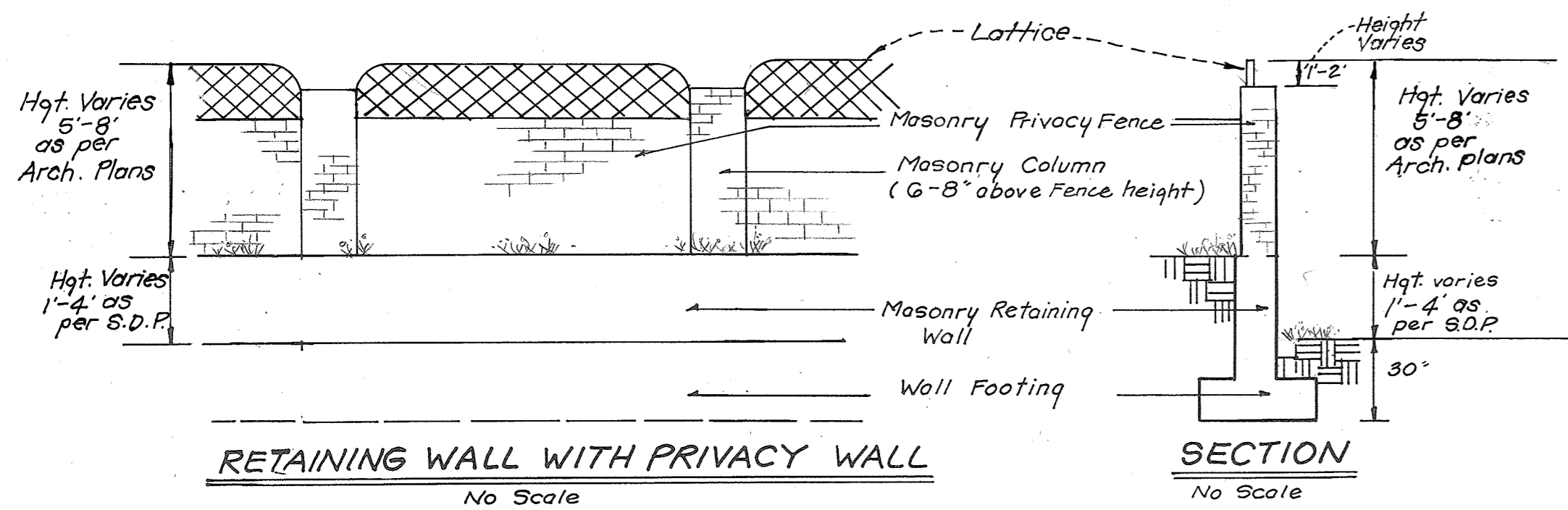
GREENBRIAR

w/2 car garage
3,096.0 = 10,320 #
0.3 = Min. Lot Size



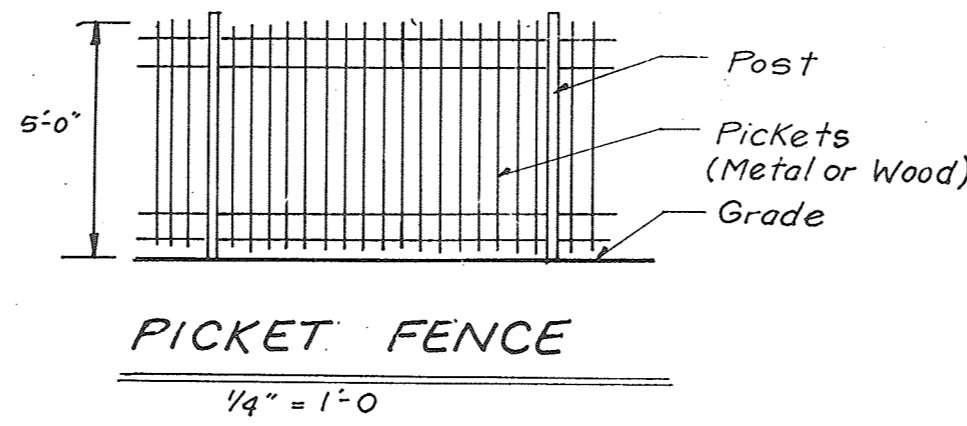
TYPICAL LIMITED USE EASEMENT DETAIL

ADDRESS CHART	
LOT NO.	STREET ADDRESS
1	5001 STRAIGHT STAR PLACE
2	5006 " " " "
3	5009 " " " "
4	5013 " " " "
5	5023 RUSHLIGHT PATH
6	5017 " " " "
7	5013 " " " "
8	5009 " " " "
9	5006 " " " "
10	5001 " " " "
11	5000 " " " "
12	5004 " " " "
13	5009 " " " "
14	5016 " " " "
15	5020 " " " "
16	5024 " " " "
17	5028 " " " "
18	5032 " " " "
19	5036 " " " "

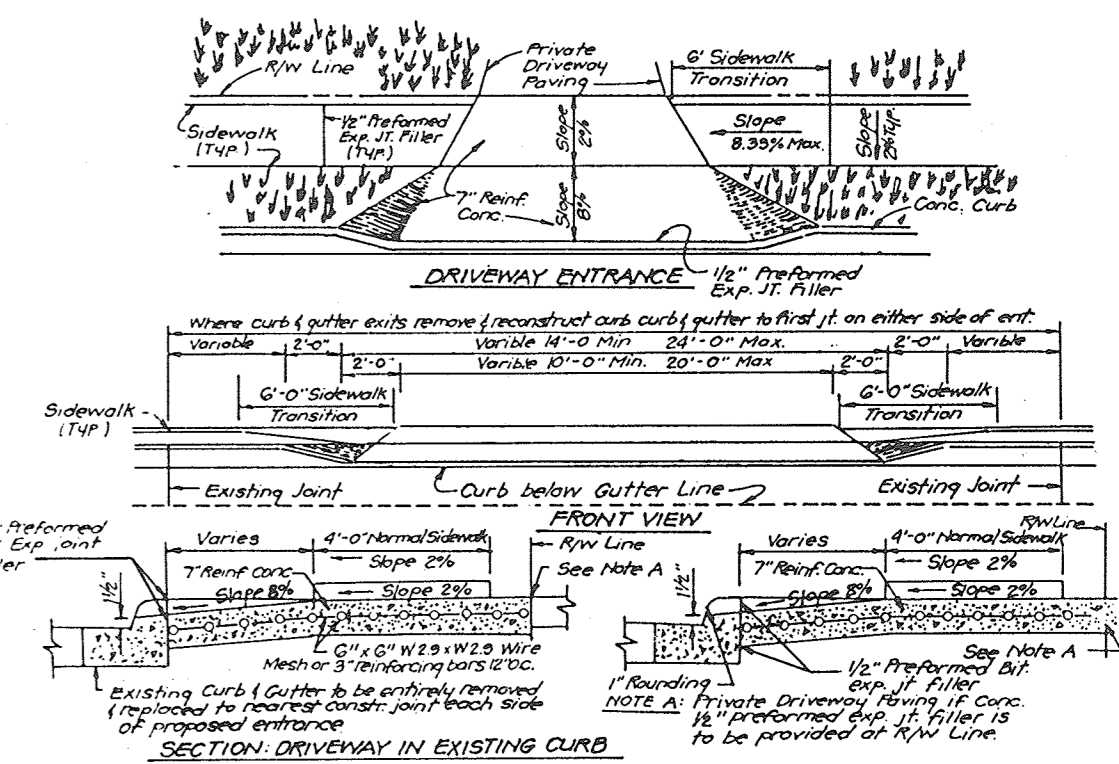


RETAINING WALL WITH PRIVACY WALL

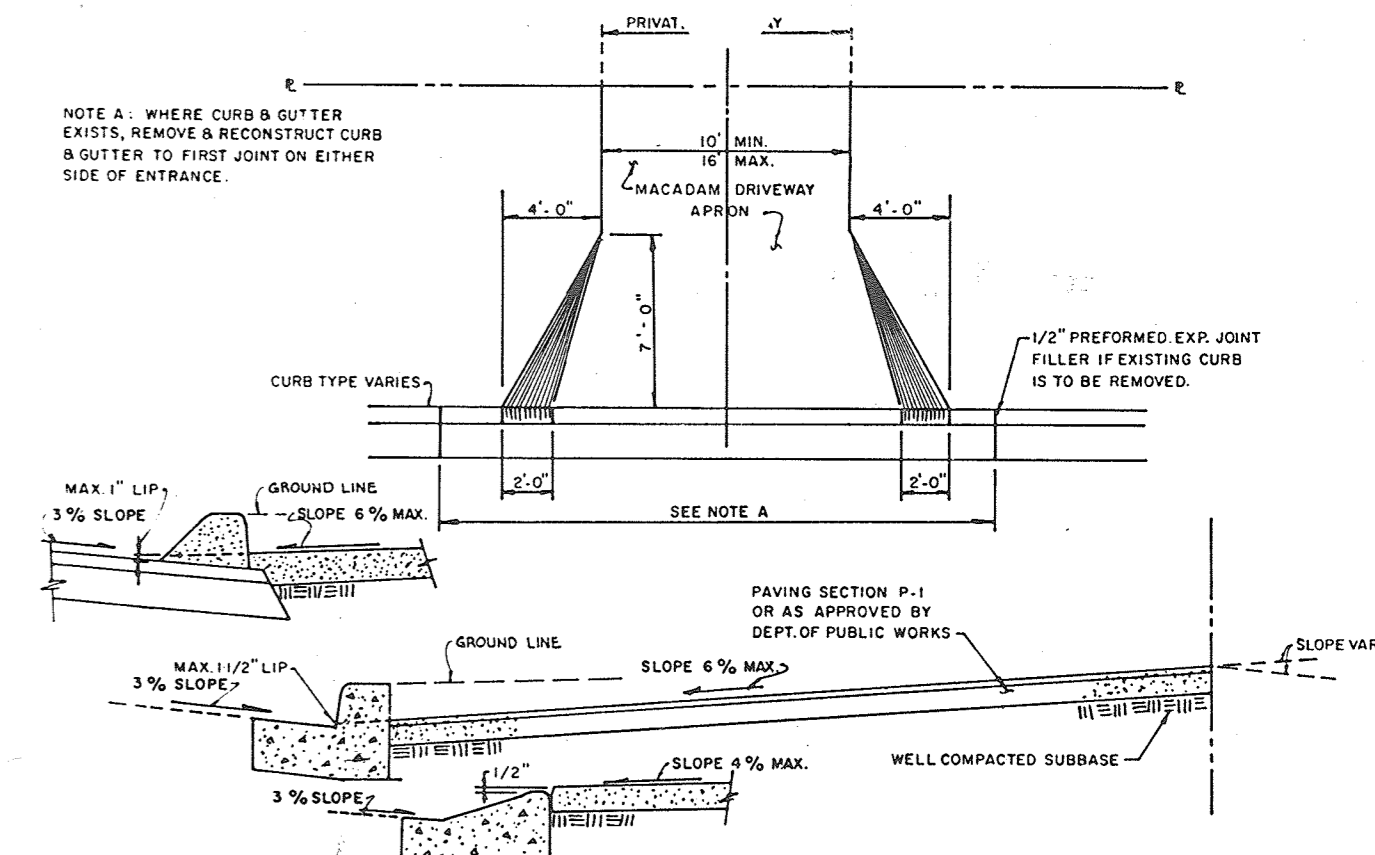
SECTION



PICKET FENCE



DRIVEWAY ABUTTING CLOSED SECTION WITH STD 7" COMB. CURB & GUTTER & SIDEWALK SET BACK FROM CURB

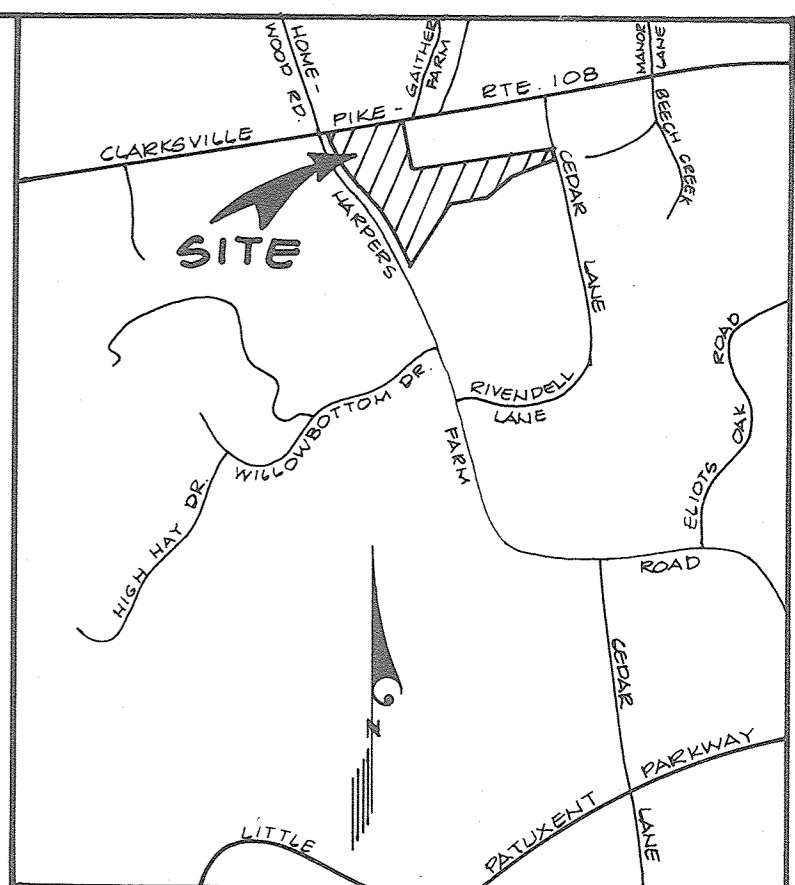
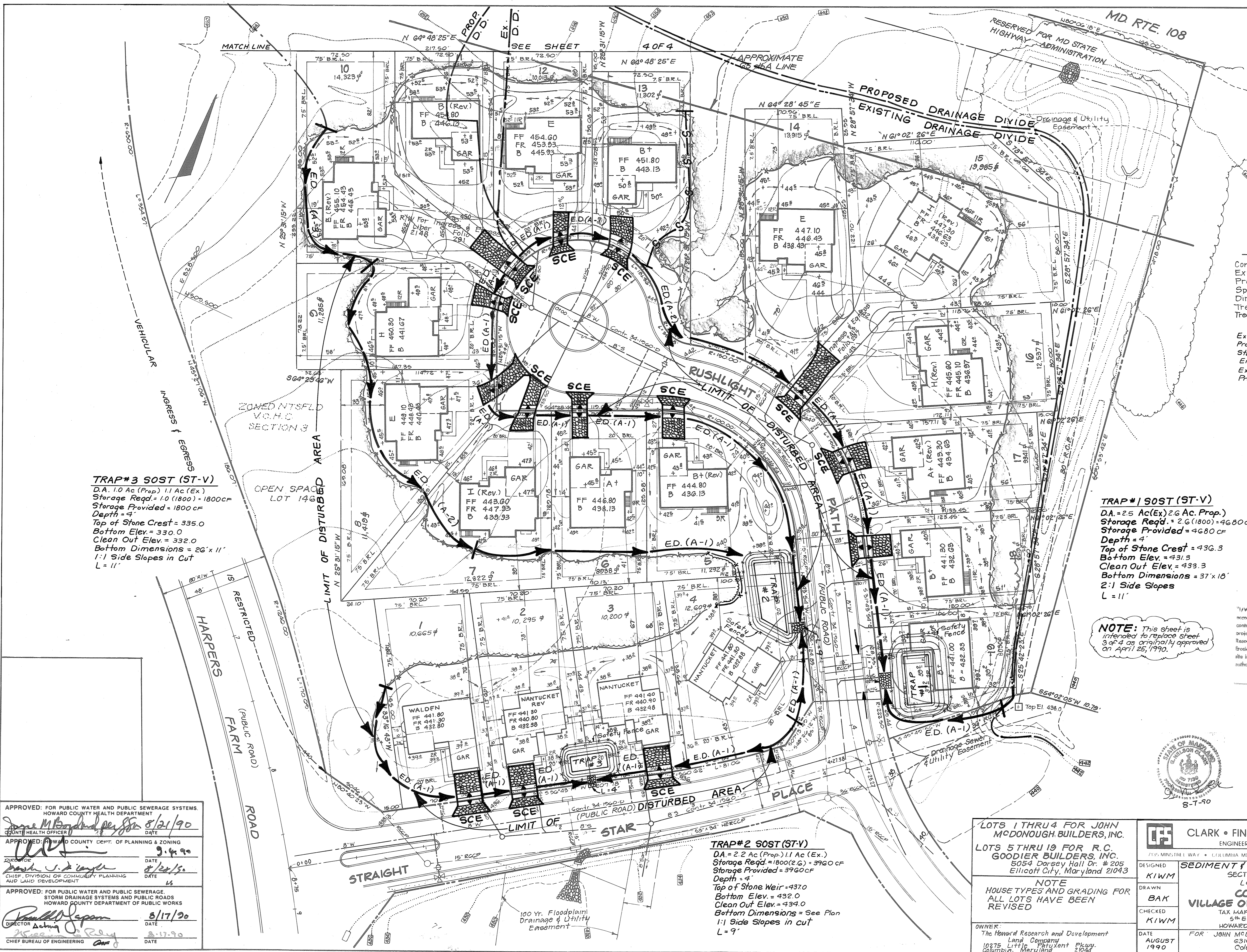


DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 4-19-90
COUNTY HEALTH OFFICER DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 4/25/90
DIRECTOR DATE
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 4-16-90
DIRECTOR DATE
CHIEF BUREAU OF ENGINEERING

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 3-14-90

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.
DESIGNED MJP
DRAWN BAL
CHECKED WHT
DATE JAN. 1989
SITE DEVELOPMENT PLAN
LOT 1 thru 13
COLUMBIA
VILLAGE OF HARPERS CHOICE
SECTION 7 AREA 14
5 TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: McDONOUGH BUILDERS INC.
6310 Stevens Forest Road #104
Columbia, Maryland 21045
SCALE AS SHOWN
DRAWING 2 OF 4
JOB NO. 89-170
FILE NO. 89-170X



LEGEND

- Contour Interval: 2 ft.
- Existing Contour: [Symbol]
- Proposed Contour: [Symbol]
- Spot Elevation: +446
- Direction of Drainage: [Symbol]
- Trees to be saved: [Symbol]
- Tree Protection: [Symbol]
- Existing Earth Dike: [Symbol]
- Proposed Earth Dike: [Symbol]
- Stabilized Construction Entrance: [Symbol]
- Existing Drainage Ditch: [Symbol]
- Proposed Drainage Ditch: [Symbol]

Reviewed for... **HOWARD**... S.C.D.
 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: _____

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: *John F. ...* Date: 8-7-90

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: 8-7-90

TRAP #1 SOST (ST-V)
 D.A. = 2.5 Ac (Ex) 2.6 Ac (Prop.)
 Storage Req'd. = 2.6 (1800) = 4680 CF
 Storage Provided = 4680 CF
 Depth = 4'
 Top of Stone Crest = 430.3
 Bottom Elev. = 431.3
 Clean Out Elev. = 433.3
 Bottom Dimensions = 37' x 10'
 2:1 Side Slopes
 L = 11'

NOTE: This sheet is intended to replace sheet 3 of 4 as originally approved on April 25, 1990.

TRAP #3 SOST (ST-V)
 D.A. = 1.0 Ac (Prop) 1.1 Ac (Ex)
 Storage Req'd. = 1.0 (1800) = 1800 CF
 Storage Provided = 1800 CF
 Depth = 4'
 Top of Stone Crest = 335.0
 Bottom Elev. = 330.0
 Clean Out Elev. = 332.0
 Bottom Dimensions = 26' x 11'
 1:1 Side Slopes in Cut
 L = 11'

TRAP #2 SOST (ST-V)
 D.A. = 2.2 Ac (Prop) 1.1 Ac (Ex.)
 Storage Req'd. = 1800 (2.6) = 3960 CF
 Storage Provided = 3960 CF
 Depth = 4'
 Top of Stone Weir = 437.0
 Bottom Elev. = 432.0
 Clean Out Elev. = 434.0
 Bottom Dimensions = See Plan
 1:1 Side Slopes in cut
 L = 9'

LOTS 1 THRU 4 FOR JOHN MCDONOUGH BUILDERS, INC.
 LOTS 5 THRU 19 FOR R.C. GOODIER BUILDERS, INC.
 5054 Dorsey Hall Dr. #205
 Ellicott City, Maryland 21043
NOTE
 HOUSE TYPES AND GRADING FOR ALL LOTS HAVE BEEN REVISED
 OWNER:
 The Howard Research and Development Land Company
 10275 Little Patuxent Pkwy.
 Columbia, Maryland

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 715 MINISTREL WAY • COLUMBIA MD 21045 • (410) 991-7500 • BALTO • (410) 421-8000 • WASH	
DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN
DRAWN BAK	SECTION 7, AREA 4
CHECKED KIWM	LOTS 1 thru 19
DATE AUGUST 1990	COLUMBIA VILLAGE OF HARPERS CHOICE
	TAX MAP #20 - PARCELS 126460
	5th ELECTION DISTRICT
	HOWARD COUNTY, MARYLAND
	FOR JOHN MCDONOUGH BUILDERS, INC.
	6310 Stevens Forest Rd. #104
	Columbia, Maryland 21045
	SCALE 1"=30'
	DRAWING 3 of 4
	JOB NO. 90-108
	FILE NO. 90-108-SE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 Signature: *James M. ...* DATE: 8/21/90
 COUNTY HEALTH OFFICER
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Signature: *...* DATE: 8/21/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *...* DATE: 8/17/90
 DIRECTOR
 CHIEF BUREAU OF ENGINEERING

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 sq 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, 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 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).

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.

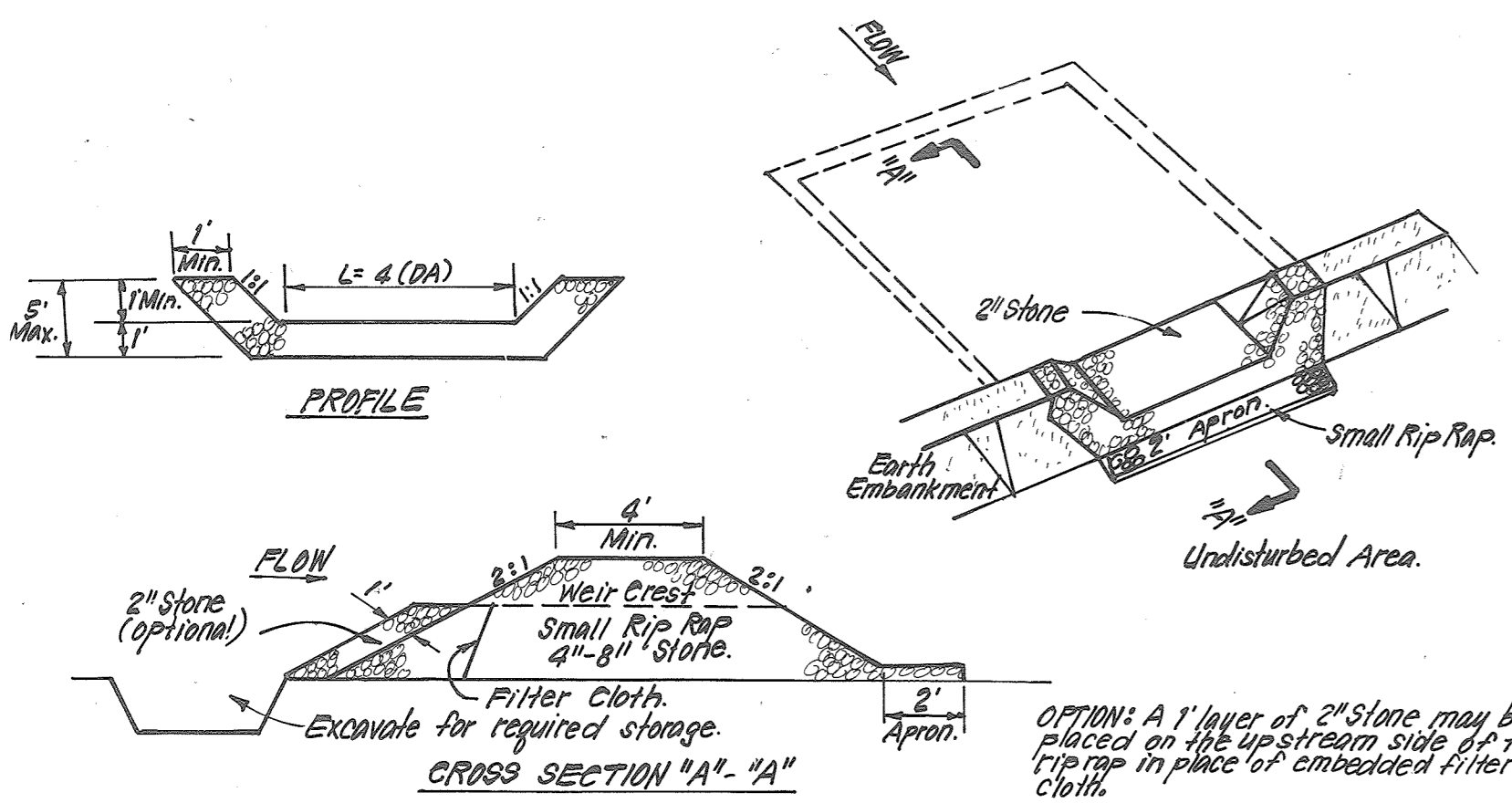
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction.
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, 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 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 4.78 Acres
Area Disturbed 4.78 Acres
Area to be roofed or paved 1.65 Acres
Area to be vegetatively stabilized 3.34 Acres
Total Cut 10,630 Cu. yds
Total Fill 11,959 Cu. yds
Offsite waste/borrow area location Undetermined
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 DFW 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 dikes/silt fence equals 162 L.F.

CONSTRUCTION SEQUENCE table with 2 columns: Description and No. of Days. Includes items like Obtain Grading Permit, Excavate for foundations, Construct Structures, Final Grade and stabilize, and Upon approval of the sediment control inspector.

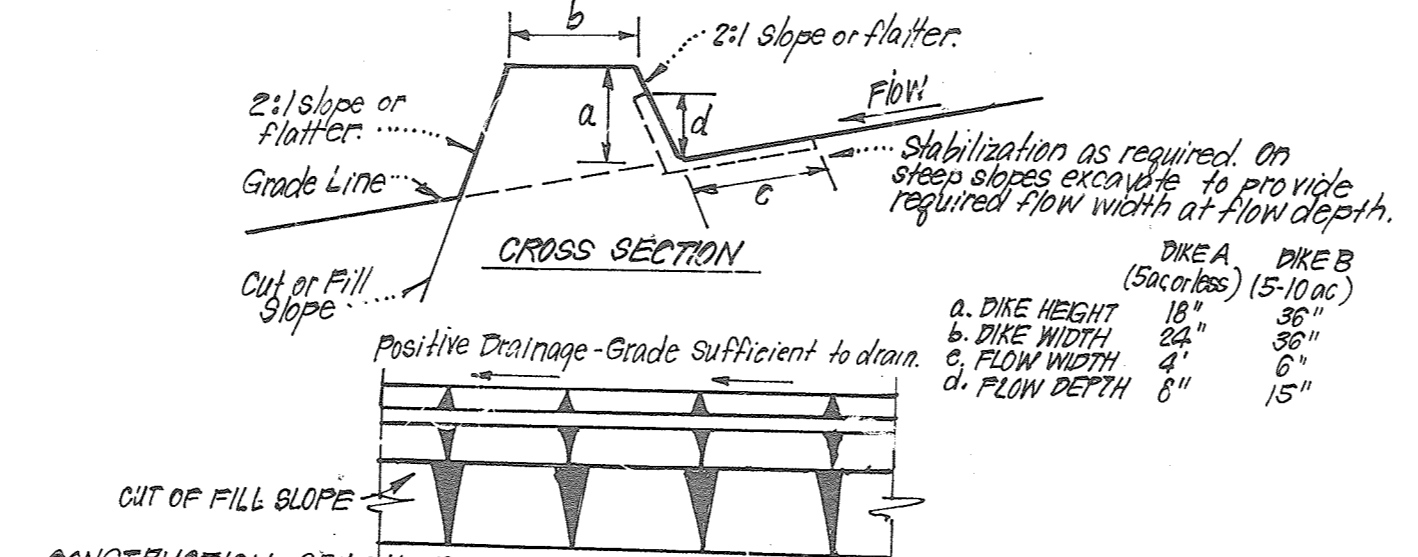
DEVELOPER'S/BUILDER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project.



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 or other objectionable material.
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" to 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.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST.V.



CONSTRUCTION SPECIFICATIONS:

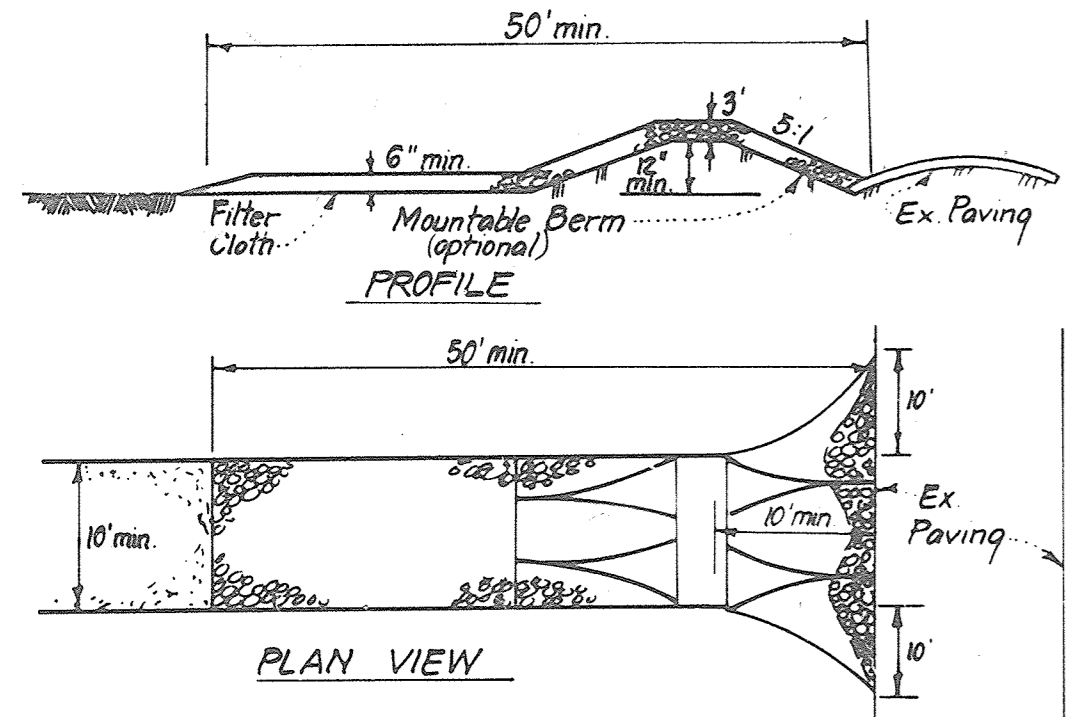
- 1. All dikes shall be constructed by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion.

FLOW CHANNEL STABILIZATION

Table with columns: TYPE OF TREATMENT, CHANNEL GRADE, DIKE A, DIKE B. Lists treatments like Seed & Straw Mulch, Seed & Straw Mulch, Seed White or Soft, 2" Stone, Lined Rip Rap, and 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" to 8" in a layer at least 8" thick, pressed into soil.
C. Approved equivalents can be substituted for any of the above materials.

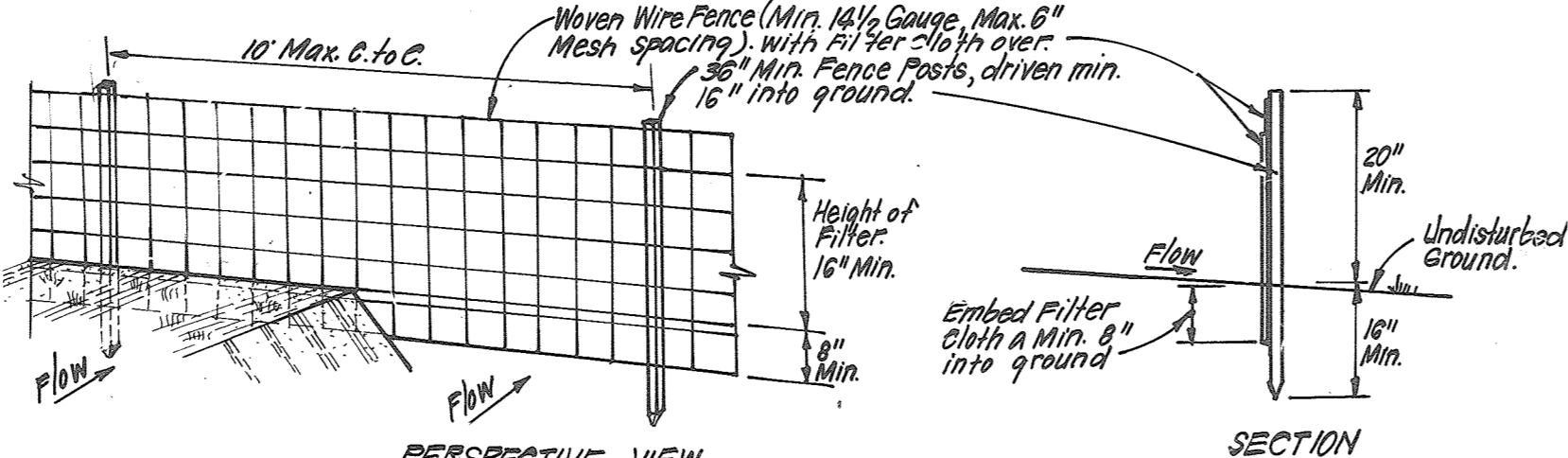
EARTH DIKE DETAIL (E.D.)



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 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.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance.

STABILIZED CONSTRUCTION ENTRANCE (SCE)



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.

SILT FENCE DETAIL (S)

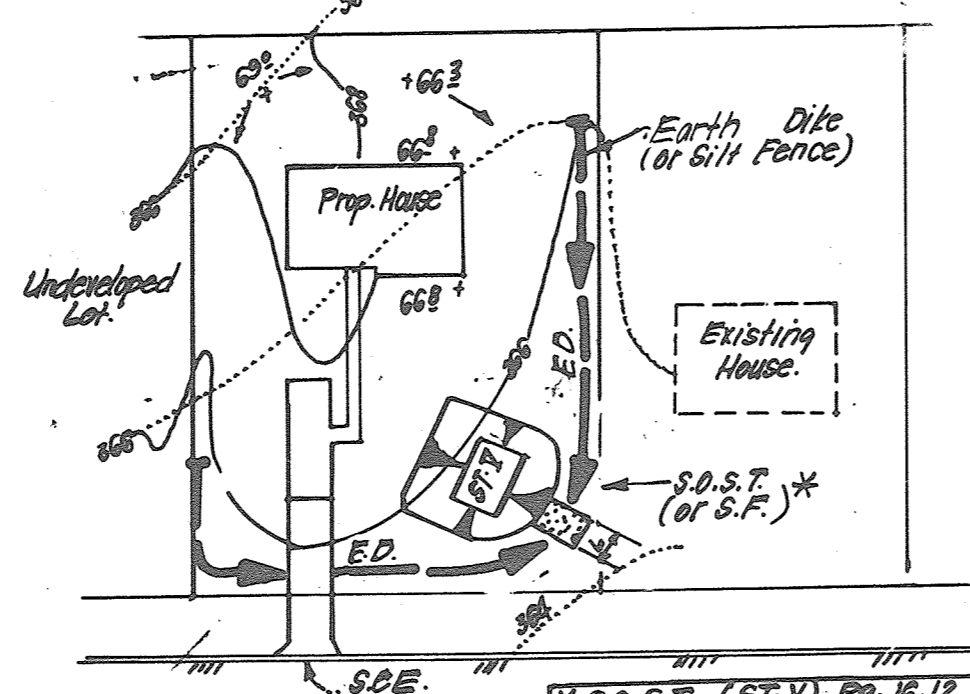


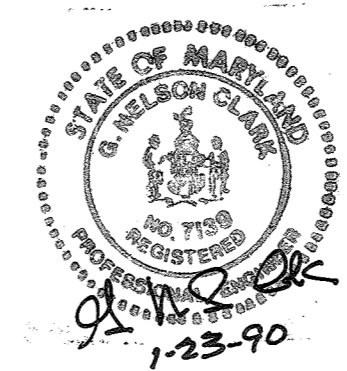
Table for Single Lot Sediment Control Plan with columns: LOT SIZE, VAC, VAC, TAC, Depth, Lot Length, Lot Width, Lot Area. Includes a note: 'NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap.'

SINGLE LOT SEDIMENT CONTROL PLAN

Reviewed for HOWARD COUNTY S.C.D. and meets Technical Requirements. Signature: James M. Smith, Date: 7/2/90, U.S. Soil Conservation Service.

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

Signature: Jeff R. Kelly, Date: 7/2/90, Approved.



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 County Conservation District.

Signature: G. Nelson Clark, Date: 1-23-90, G. Nelson Clark.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. County Health Officer: Steven Bagley, Date: 4-19-90. Approved: HOWARD COUNTY DEPT. OF PLANNING & ZONING. Director: Joseph Butler, Date: 4/25/90. Chief, Division of Community Planning and Land Development: Patrick S. DeLong, Date: 7/2/90. Approved: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE PERMITS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. Director: James J. Sh..., Date: 4/16/90. Chief Bureau of Engineering: D..., Date: 4-16-90.

APPROVED PLANNING BOARD OF HOWARD COUNTY. DATE: 3-14-90.

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 SECTION 7, AREA 4 LOTS 1-19 & PART OF LOT 146 COLUMBIA VILLAGE OF HARPERS CHOICE TAX MAP # 20 - PARCELS 12G400 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND. McDonough Builders, Inc. 6310 Stevens Forest Rd. #104 Columbia, Maryland 21046. SCALE: 1"=30'. DRAWING: 4 OF 4. JOB NO.: 89-1701. FILE NO.: 89-1703E.