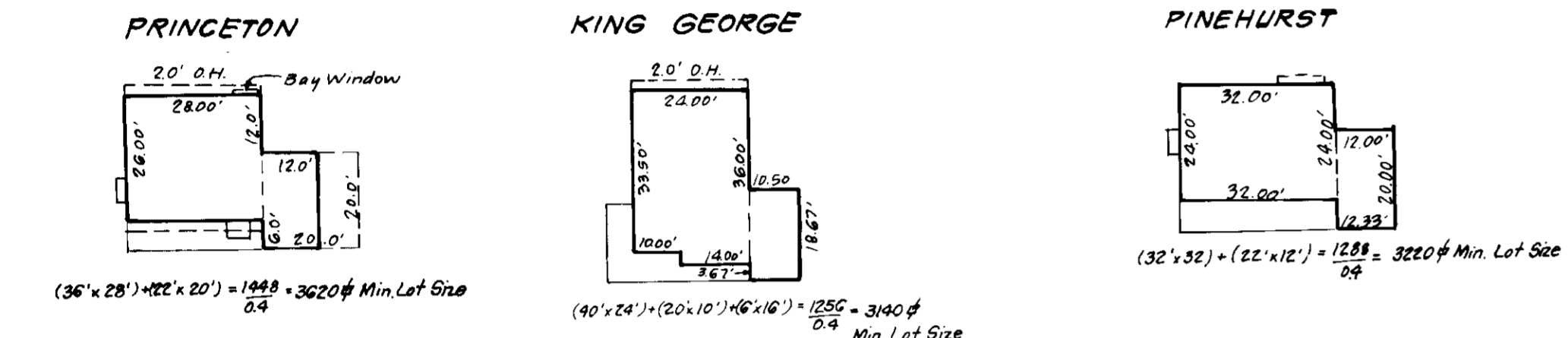


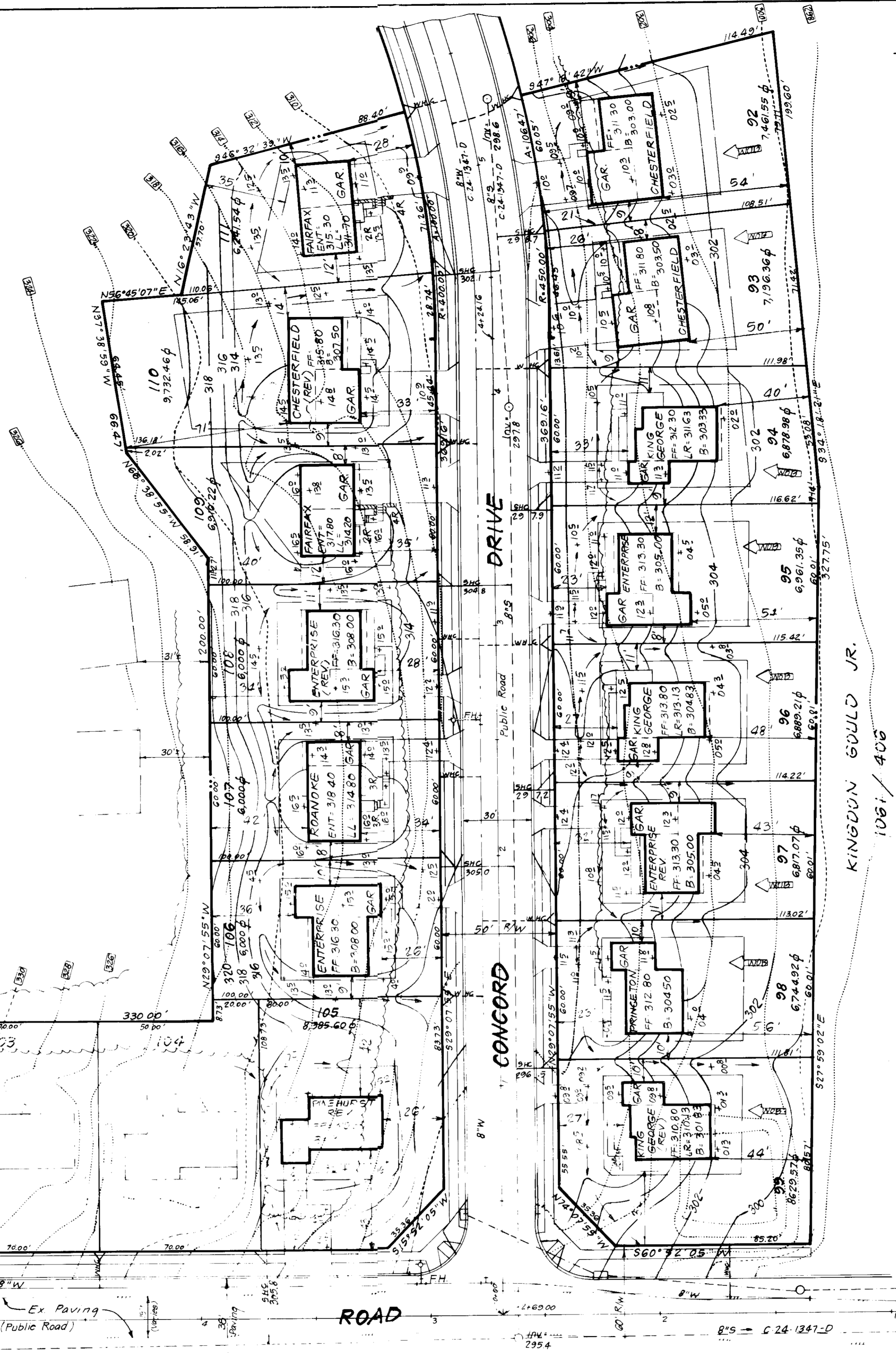
TYPICAL HOUSES

NO SCALE
(NOTE - All units have approx. 1" roof over front 1 rear.)

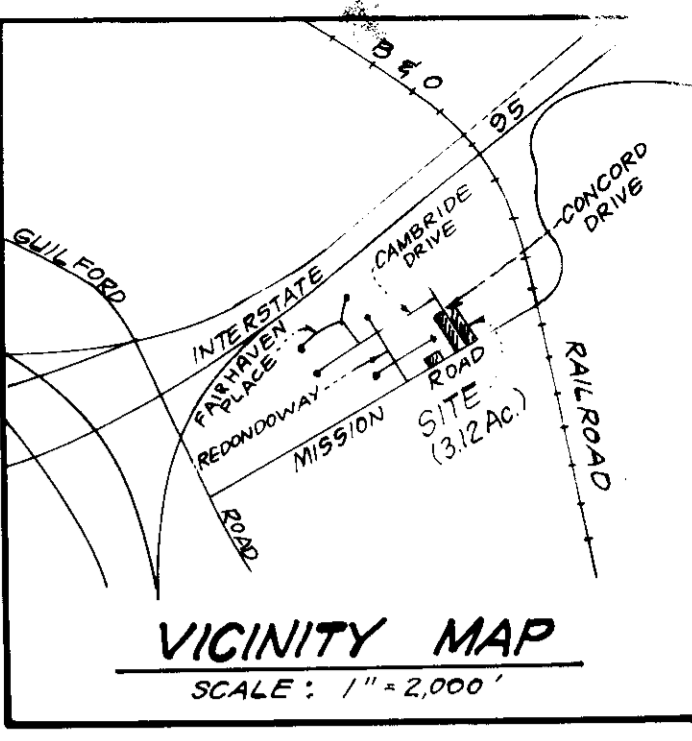


DRIVEWAY ABUTTING MODIFIED CURB & GUTTER
NO SCALE

MISSION HEIGHTS
SECTION 1 AREA 1
PLAT NO 5117
ZONED RSC



- LEGEND:**
- 1. Contour Interval 2 Ft.
 - 2. Existing Contour - - - - -
 - 3. Proposed Contour - - - - -
 - 4. Spot Elevation + 20'
 - 5. Direction of Drainage →
 - 6. Existing Trees to be Retained (Symbol)
 - 7. Walk-Out Basement (Symbol)



GENERAL NOTES:

1. All coordinates are based on Howard County Control Station Control Point Nos. 2243001R and 2142003R.
2. Total Number of Lots: 18 Total Number of Units: 18.
3. The total area included in this plan is 3.12 Acres.
4. All roadways are public and existing.
5. Any damage to county owned rights-of-way shall be corrected at the developer's expense.
6. The contractor or developer shall contact the construction inspection/survey division 24 hours in advance of commencement of work at 992-2417 or 992-2418.
7. The maximum lot coverage is 40% per lot.
8. Stormwater Management provided for in central facility in Heritage Woods Section 1 Area 1, approved plans F-65-143.

SPECIAL NOTES:

Approved Road Construction Plans shall be used for all Public Utilities.
Public Water & Sewer shown for reference only. For more detailed information - see water and sewer plans Contract No. 24-1347-D.
The water & sewer house connections not included in a "Developer's Agreement" shall conform to Howard Co. Plumbing Code. The on-site WHC shall be 1" copper and the SHC shall be 4" iron.

LOT #	STREET ADDRESS
92	8628 Concord Drive
93	8624 " "
94	8620 " "
95	8616 " "
96	8612 " "
97	8608 " "
98	8604 " "
99	8600 Concord Drive
100	8600 Mission Road
101	8676 " "
102	8672 " "
105	8600 Mission Road
106	8605 Concord Drive
107	8609 " "
108	8613 " "
109	8617 " "
110	8621 " "
111	8625 Concord Drive

Owner: Security Development PO Box 417 Ellicott City, Maryland 21043	SUBDIVISION NAME: HERITAGE WOODS PLAT #: 5117 BLOCK #: 42 WATER CODE: E 14	SECT AREA: 2/1 TAX ZONE: RSC SEWER CODE: 4400900
--	---	--

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 5-2-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE: 5-5-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 5-4-86

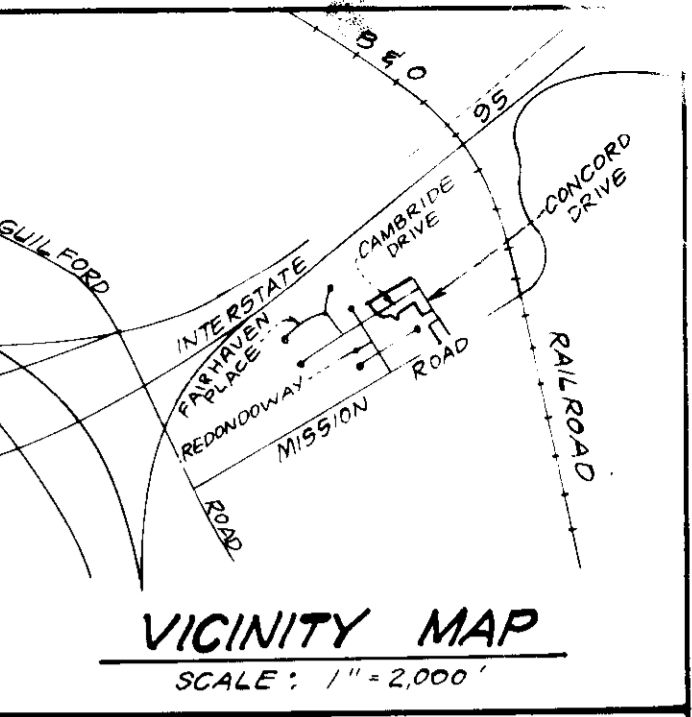
APPROVED
DIVISION OF LAND DEVELOPMENT & ADMINISTRATION
HOWARD COUNTY MARYLAND
DATE: 4-11-86

CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11515 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

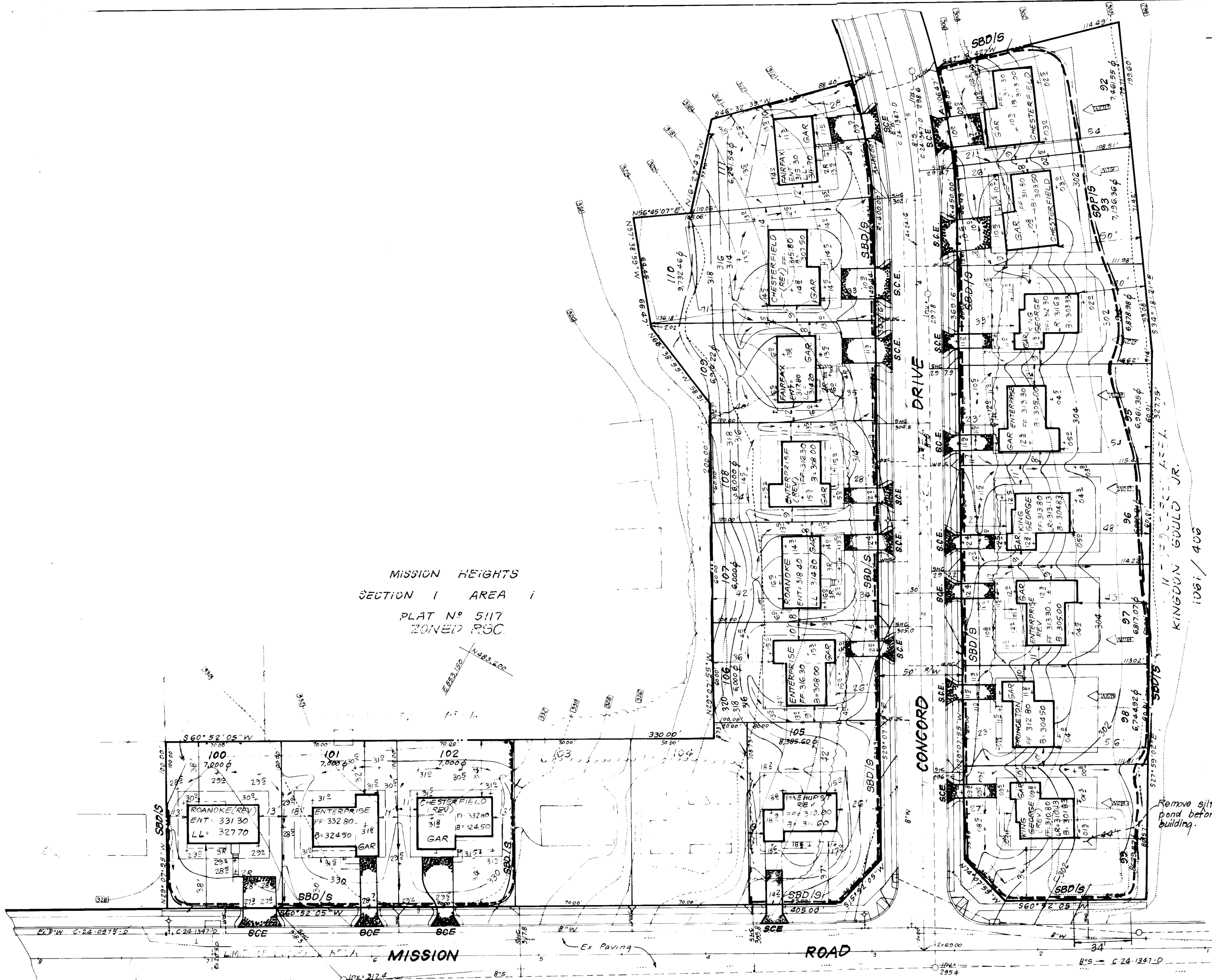
DESIGNED: B.A.F.	SITE DEVELOPMENT PLAN LOTS 92 thru 102 & 105 thru 111	SCALE: 1" = 30'
DRAWN: V.L.M.	HERITAGE WOODS	DRAWING: 1 OF 3
CHECKED: J.M.E.	SECTION 2 AREA 1	JOB NO: 85-140
DATE: 3-12-86	6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO: 85-140-X

FOR: THE RYLAND GROUP (Columbia Division)
7130 Minstrel Way Suite 215
Columbia, Maryland 21045
SDP 86-104

- LEGEND:**
- 1. Contour Interval 2 Ft
 - 2. Existing Contour
 - 3. Proposed Contour
 - 4. Spot Elevation
 - 5. Direction of Drainage
 - 6. Existing Trees to be Retained
 - 7. Walk-Out Basement
 - 8. Straw Bale Dike or Silt Fence
 - 9. Stabilized Construction Entrance



MISSION HEIGHTS
SECTION 1 AREA 1
PLAT N° 517
ZONED R5C



SUBDIVISION NAME HERITAGE WOODS		SECT./AREA 2/1	LOT/PARCEL # Lots 92-102 & 105-111
PLAT # 6587	BLOCK # R5C	ZONE 42	TAX/ZONE/MAR/REC. DIST. CENSUS TR. 6
WATER CODE E14		SEWER CODE 4400900	

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
Joseph B. ... 5-2-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
... 5-5-86
PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
... 4-30-86
DIRECTOR DATE

CHIEF BUREAU OF ENGINEERING
... 4-29-86
DATE

DIVISION OF PLANNING & ZONING
UNITS ADMIN. CONTROL
HOWARD COUNTY, MARYLAND
DATE 4-11-86
...

DEVELOPER'S/BUILDER'S CERTIFICATE
I certify that all construction will be done in accordance with the instructions, notes and specifications on this plan.
Maurice M. Simpkins 3-18-86
SIGNATURE OF DEVELOPER/BUILDER DATE

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my knowledge of the site and the data furnished to me.
Howard ... 4-24-86
REVIEWER DATE

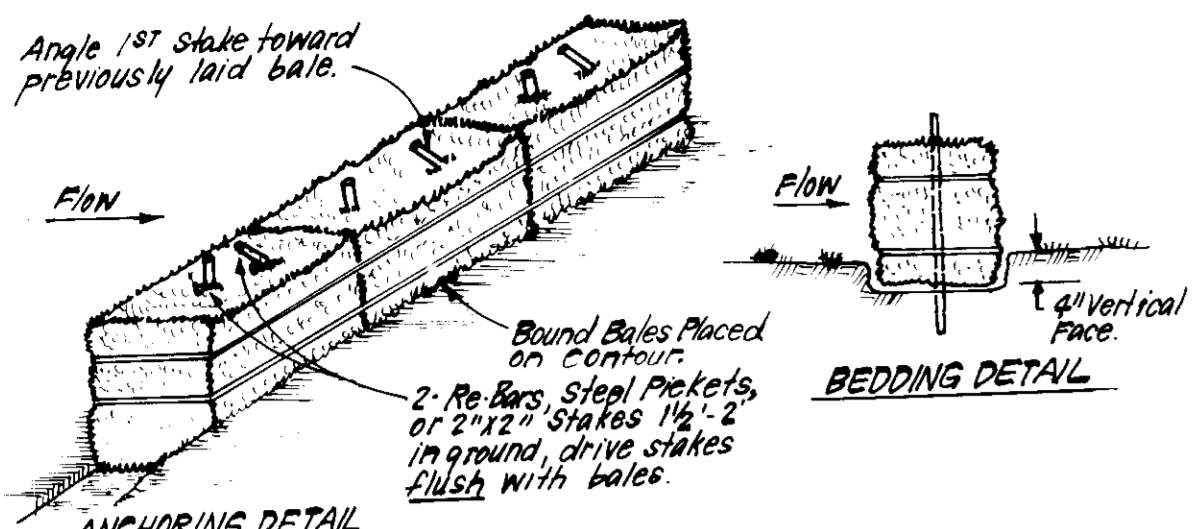
ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my knowledge of the site and the data furnished to me.
Stephen ... 4/24/86
REVIEWER DATE



CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED JK	SEDIMENT & EROSION CONTROL PLAN LOTS 92 THRU 102 & 105 THRU 111 HERITAGE WOODS SECTION 2 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN JTR & VL M		DRAWING 2 OF 3
CHECKED JK	JOB NO. 85-140	FILE NO. 85-140SE
DATE 3-10-86	FOR: THE RYLAND GROUP (Columbia Division) 7130 Minstrel Way Suite 215 Columbia, Maryland 21045	

SDP-86-194

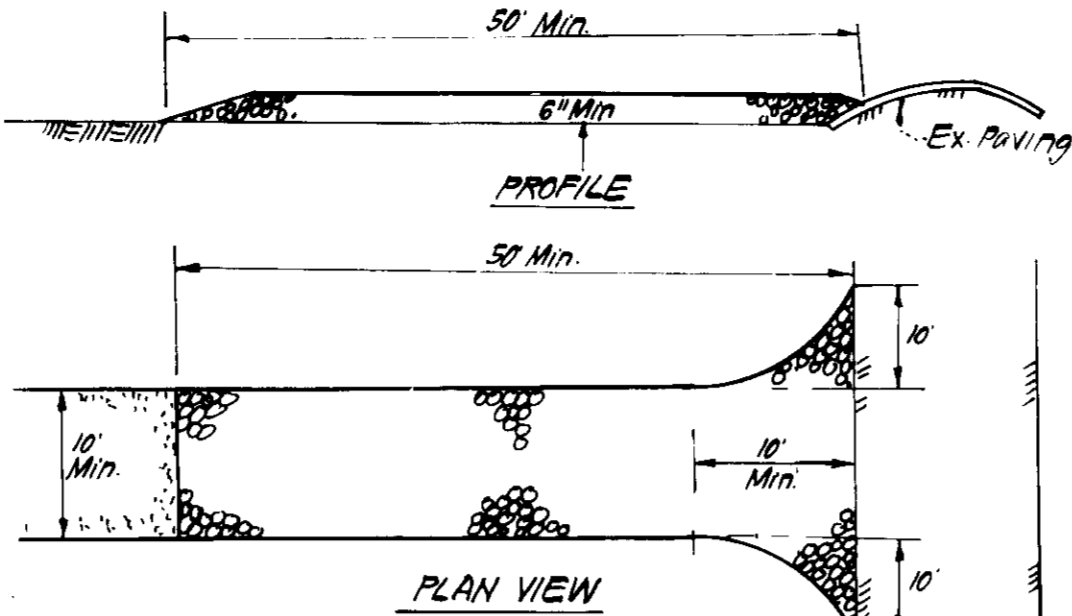


CONSTRUCTION SPECIFICATIONS:

- Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
- Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
- Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The 1st stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
- Inspection shall be frequent and repair replacement shall be made promptly as needed.
- Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW BALE DIKE DETAIL (SBD)

NO SCALE

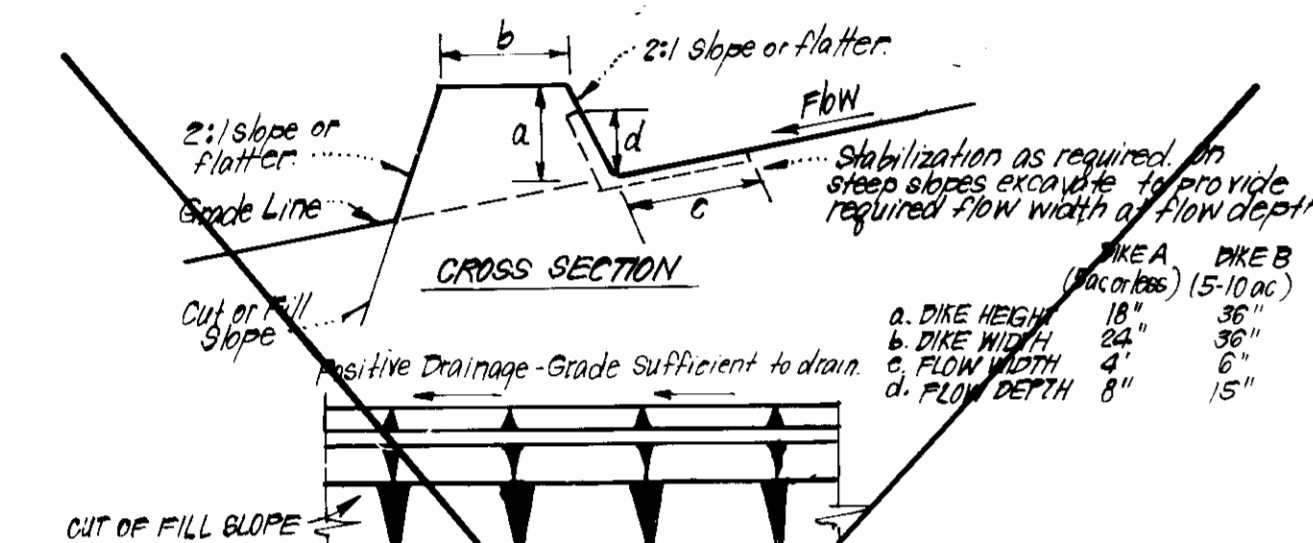


CONSTRUCTION SPECIFICATIONS:

- 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 150' min. length would apply).
- Thickness - Not less than 6".
- Width - Ten foot min, but not less than the full width at point where ingress 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.
- 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 cleanout of any measures used to trap sediment. All sediment dropped, 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 at 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 (S.C.E.)

NO SCALE



CONSTRUCTION SPECIFICATIONS:

- All dikes shall be compacted by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
- Field location should be adjusted, as needed, to utilize a stabilized safe outlet.
- 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.
- 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.

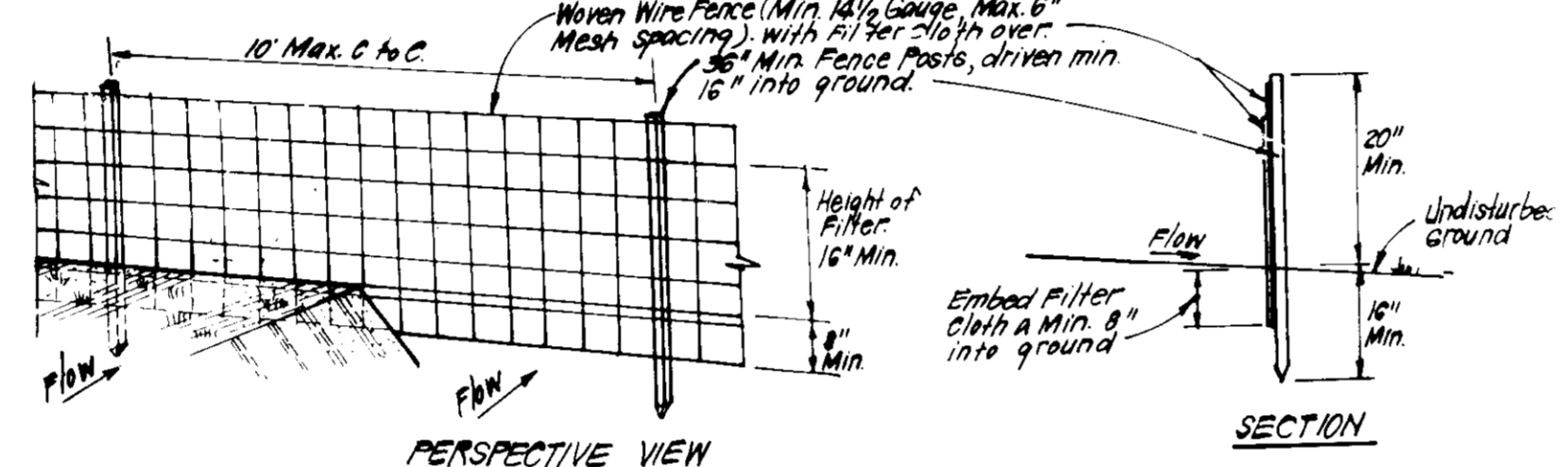
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	3.1 - 10.0%	Seed & Straw Mulch	Seed w/Urte. or Excelsior, Sod, 2" Stone
3	5.1 - 8.0%	Seed w/Urte. or Sod, 2" Stone	Lined Rip Rap 4" Stone
4	8.1 - 20.0%	Lined Rip Rap 4" Stone	Engineering Design

- Stone to be 2" stone, or recycled concrete equivalent, in a layer at least 4" thick and be pressed into soil with construction equipment.
- Rip rap to be 4" in a layer at least 8" thick, pressed into soil.
- 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

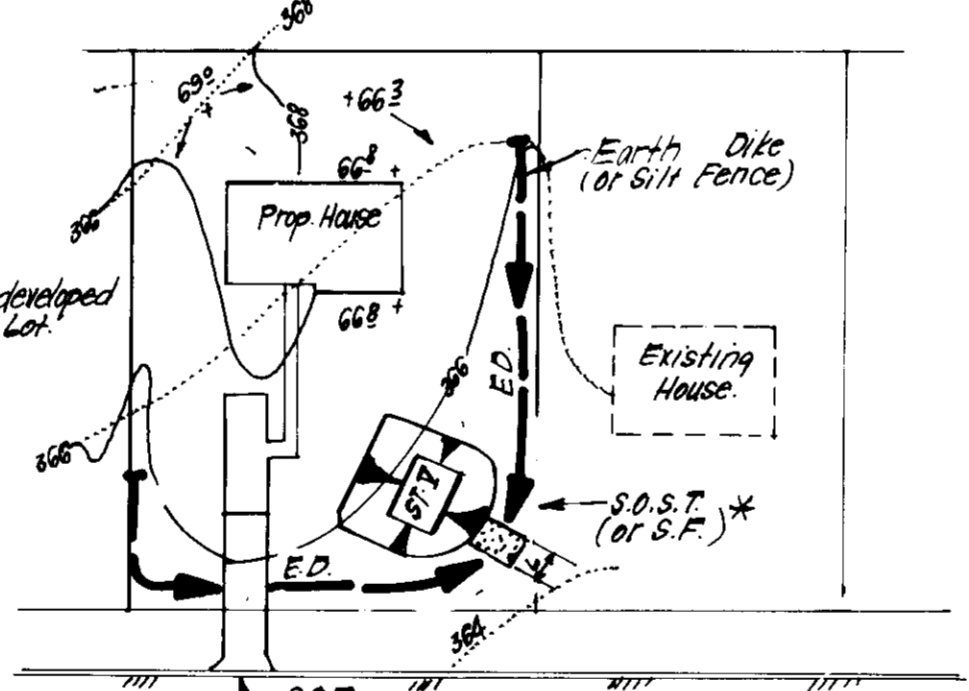


CONSTRUCTION SPECIFICATIONS:

- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
- When 2 sections of filter cloth begin each other they shall be overlapped by 6" and stapled.
- Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.

SILT FENCE DETAIL (S)

NO SCALE



LOT SIZE	MAX	MIN	TAC
Length	2'	3'	6'
Depth	2'	2'	2'
Bot. Length	11'	26'	26'
Bot. Width	11'	11'	26'
Bot. Area	121 sq ft	276 sq ft	676 sq ft

* 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.

SEDIMENT CONTROL NOTES

- 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)
- 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.
- 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 as to all other disturbed or graded areas on the project site.
- 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.
- 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.
- 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: 3.12 Acres
Area Disturbed: 2.0 Acres
Area to be roofed or paved: 0.7 Acres
Area to be vegetatively stabilized: 2.2 Acres
Total Cut: 4955 Cu. yds
Total Fill: 4073 Cu. yds
Offsite waste/borrow area location: N/A
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPM 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.
- If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail below). N/A
- The total amount of straw bale dikes/silt fence equals 1850 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.
- 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 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 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. 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.

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.

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). 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 SEQUENCE:

	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.	30
C. Construct Structures, Sidewalks and Driveways.	150
D. Final Grade and stabilize in accordance with Stds. & Specs.	14
E. Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize.	7

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

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 4-11-86

Maurice M. Simpkins
 3-18-86

Howard
 4-24-86

Stephen L. Huber
 Approved Date 4/24/86

ENGINEER'S CERTIFICATE
 I hereby certify that the plan for Erosion and Sediment Control is in accordance with the applicable provisions of the Howard County Ordinance...
 STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 5-23-86

SUBDIVISION NAME HERITAGE WOODS	SECT./AREA 2/11	LOT/PARCEL # 102 & 103
PLAT # 6587	BLOCK # R.S.C.	TAKE/ZONE/MAP/REG. DIST. 42 G
OWNER CODE E14	SEWER CODE 4400900	

CLARK • FINEFROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 583-3400
 SCALE 1"=30'
 DRAWING 3 OF 3
 JOB NO. 85-140
 FILE NO. 85-140SE
 SDP-86-194