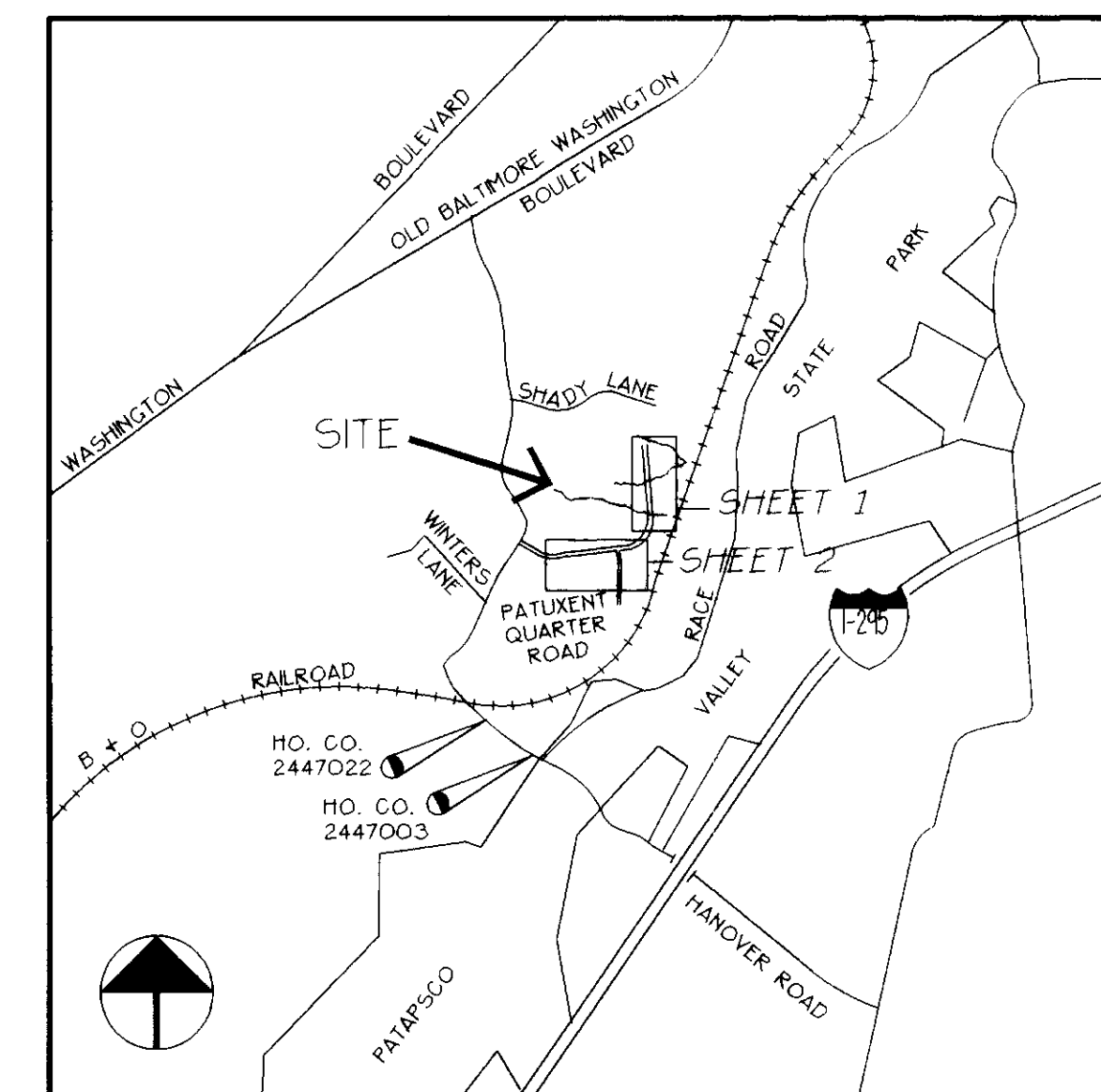


CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	300.00	6.33	3.16	6.33	N 18°56'55" W	01°12'31"
C2	405.00	14.42	7.21	14.42	N 89°17'03" W	02°02'24"

LINE	DIRECTION	DISTANCE
L1	N 70°26'49" E	20.00
L2	S 70°25'49" W	21.89
L3	S 76°33'11" E	10.00
L4	S 13°28'49" W	10.00
L5	N 77°04'40" W	25.90
L6	S 17°20'42" W	30.31
L7	S 03°56'35" E	11.14
L8	N 03°56'35" W	19.77
L9	N 06°18'34" E	3.27
L10	S 08°18'15" E	3.23
L11	S 08°18'15" E	3.23
L12	S 01°44'07" W	7.24

THE MERWETHER II
(NEW MODEL)

"THE MASON HOUSE TYPE"
(FOR PATRIOT HOMES INC.)
LOT 8



BENCH MARKS

HO CO BM 2447002 ELEV 89.82
N 494994.546 E 878209.658
CONC MONUMENT NE CORNER RR TRACKS
AND HANOVER ROAD 0.3' BELOW SURFACE

HO CO BM 2447003 ELEV 46.266
N 494376.047 E 879030.173
CONC MONUMENT 0.2' BELOW SURFACE NW
SIDE HANOVER ROAD AND RACE ROAD

NOTE: ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES. VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CURB
- PROPERTY LINE
- TREE PROTECTION FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- EARTH DIKE
- PROPOSED SWALE
- PROPOSED LIGHT STANDARD
- LIMIT OF CLEARING + DISTURBANCE
- EXISTING TREELINE
- LIMIT OF DISTURBANCE
- FIRE HYDRANT
- EASEMENTS
- STEEP SLOPES

NOTE:
EXTERIOR STAIRWAY MAY
INFRIERGE WITHIN REAR
SETBACK NO MORE THAN 16 FT.
PER SECTION 12B H.C. ZONING REGULATIONS

SEE GENERAL NOTES ON SHEET 2 OF 3

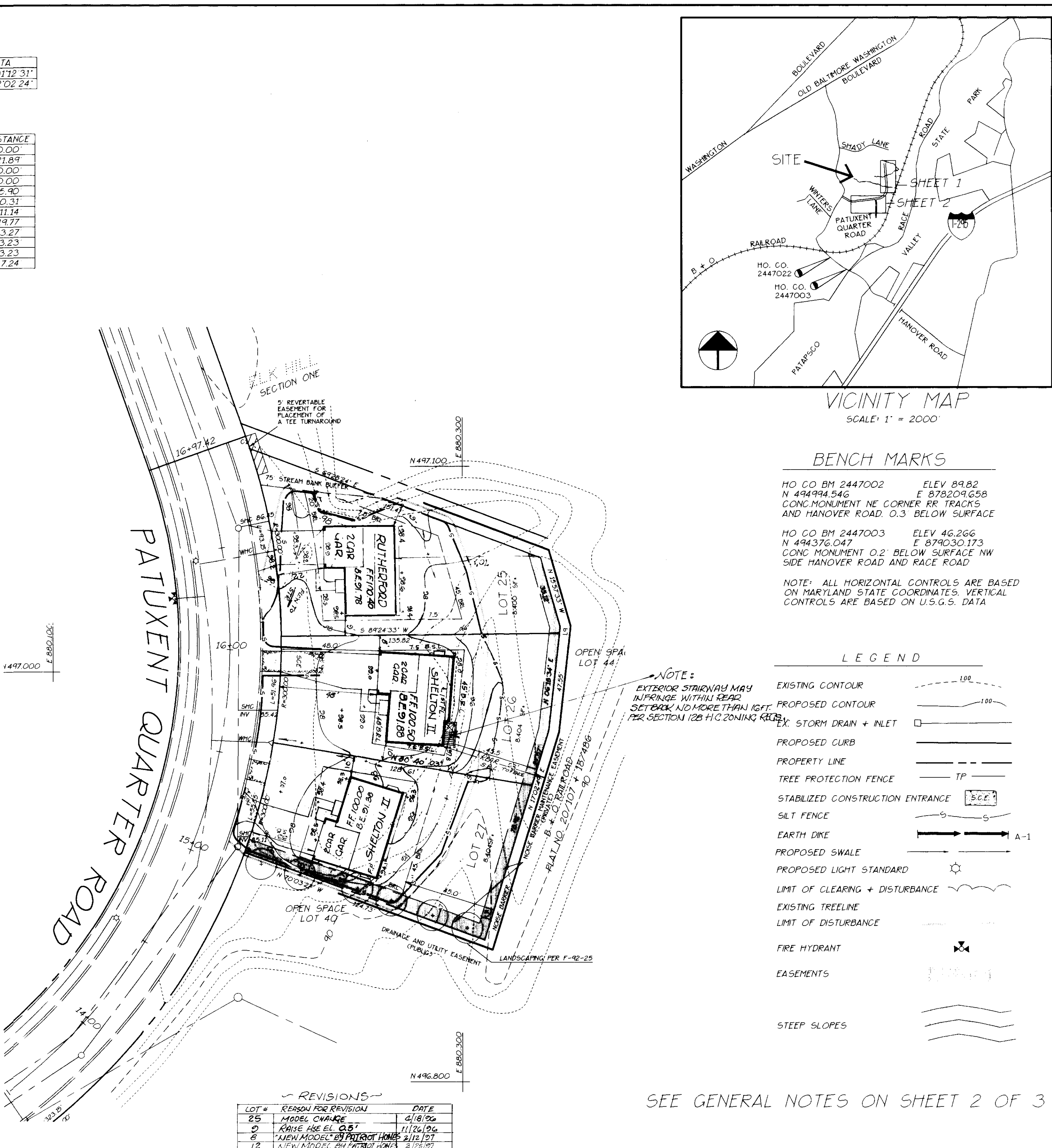
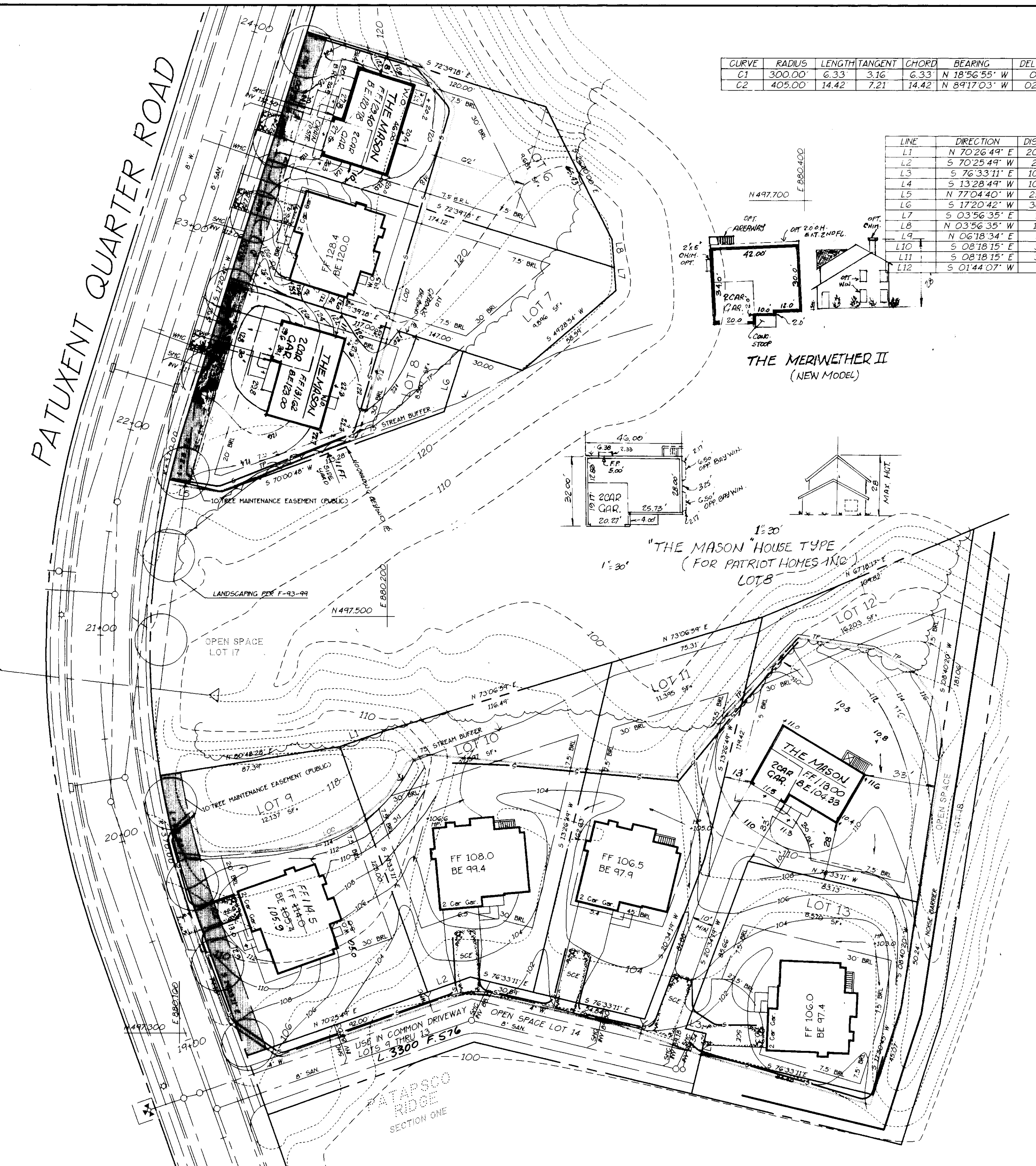
REVISIONS

LOT #	REASON FOR REVISION	DATE
25	MODEL CHANGE	2/18/96
8	RAISE HSE EL 0.5'	11/26/96
8	NEW MODEL BY PATRIOT HOMES	2/12/97
12	NEW MODEL BY PATRIOT HOMES	3/25/97
6	NEW MODEL BY PATRIOT HOMES	2/11/97
6	RAISE HSE PER FIELD ROAD	5/23/97
27	REVISE HSE LOCATION	7/15/97
26	ADD NEW MODEL MERWETHER	2/25/97
26	NEW MODEL ADDED TO PLAN	11/19/97

SUBDIVISION NAME ELK HILL/PATAPSCO RIDGE	SECT. AREA ONE	LOTS PP 8,9, 25-36 EIL 8-13
PLAT # 11/12/97	BLOCK # 38	ELEC. DIST. BEE
WATER CODE A01	SEWER CODE 2130000	CENSUS TR.

PREVIOUS SUBMITTALS
F-93-99 WP-91-54
WP-92-23 P-91-10
P-93-04 S-89-73
S-92-03 WP-92-127
F-92-25 P-92-11

LAND DESIGN ASSOCIATES 718 HIGHWOOD DRIVE BALTIMORE, MD 21212 410/323-6344	PATAPSCO RIDGE LOTS 8,9 AND 25 THRU 36 ELK HILL LOTS 6 THRU 13
REVISIONS 10-25-94	SITE DEVELOPMENT AND SEDIMENT CONTROL PLAN FIRST ELECTION DISTRICT TAX MAP 38 PARCEL 263.793 + 849 HOWARD COUNTY, MARYLAND ZONED R-12
FOR: GRAYSON HOMES, INC. 9025 CHEVROLET DRIVE ELLCOTT CITY, MD 21043	DESIGNED DRAWN CHECKED
SCALE: 1"=30' SHEET 1 OF 3 DATE: JULY 25, 1994	



APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

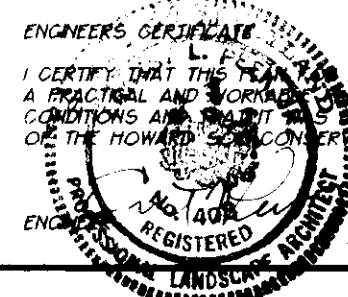
PLANNING DIRECTOR: *Jim Summerville* DATE: 12/5/94

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED FOR PUBLIC WATER AND PUBLIC SEWAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR: *James M. ...* DATE: 1/28/94

CHIEF BUREAU OF ENGINEERING: *Donald ...* DATE: 11/15/94



DEVELOPERS/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 PERSONS INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 40 DEPT. OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OF THEIR AUTHORIZED AGENTS AS DEEMED NECESSARY.

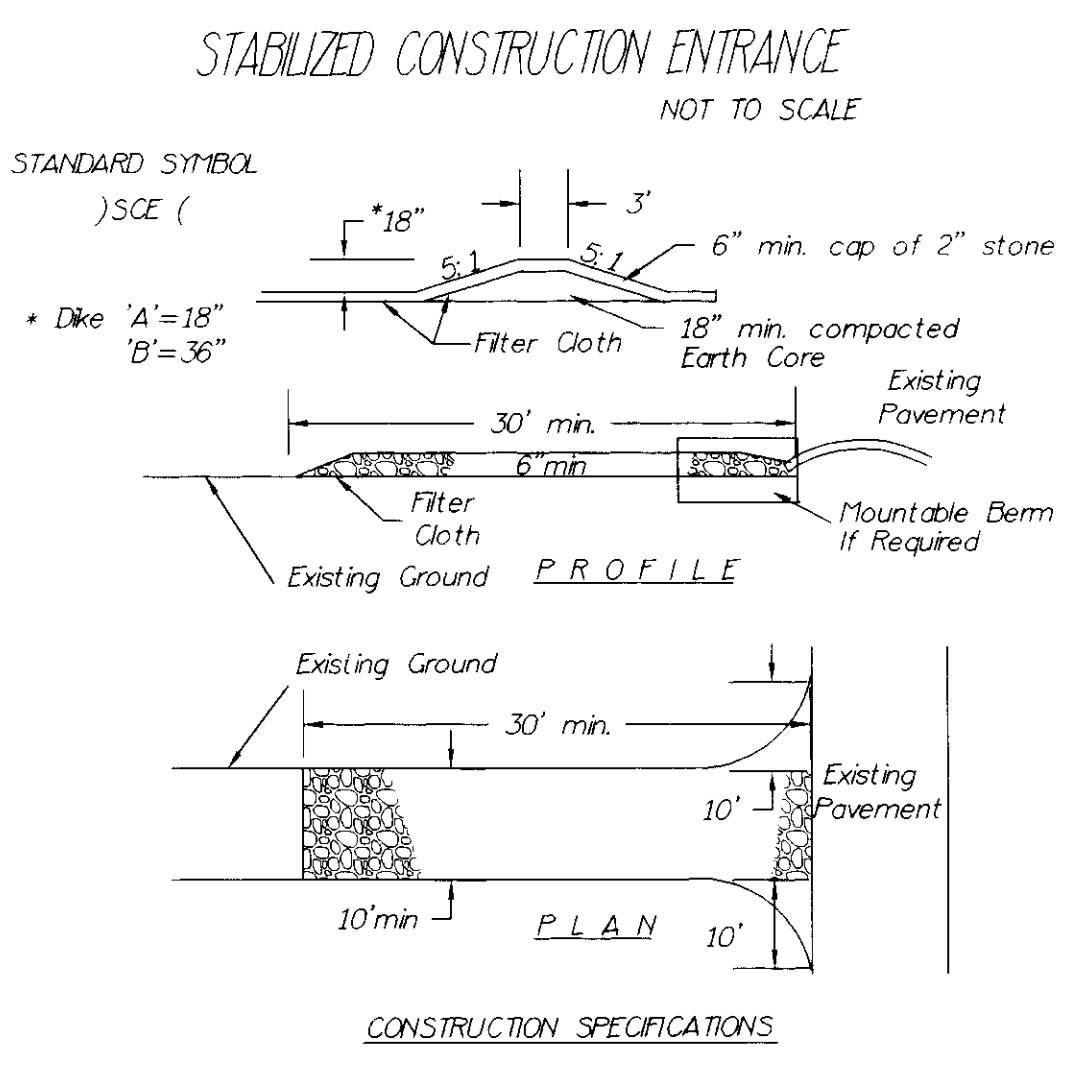
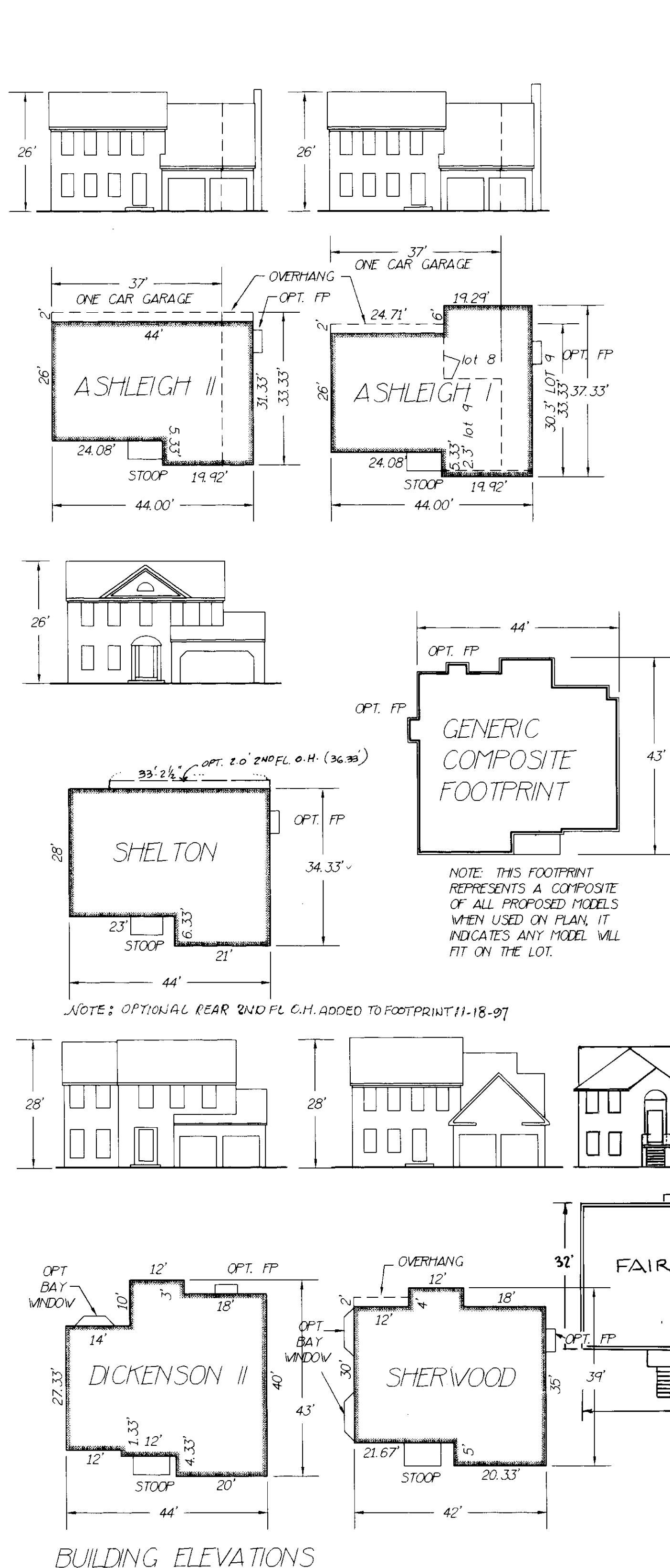
John F. ... DATE: 10/31/94

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

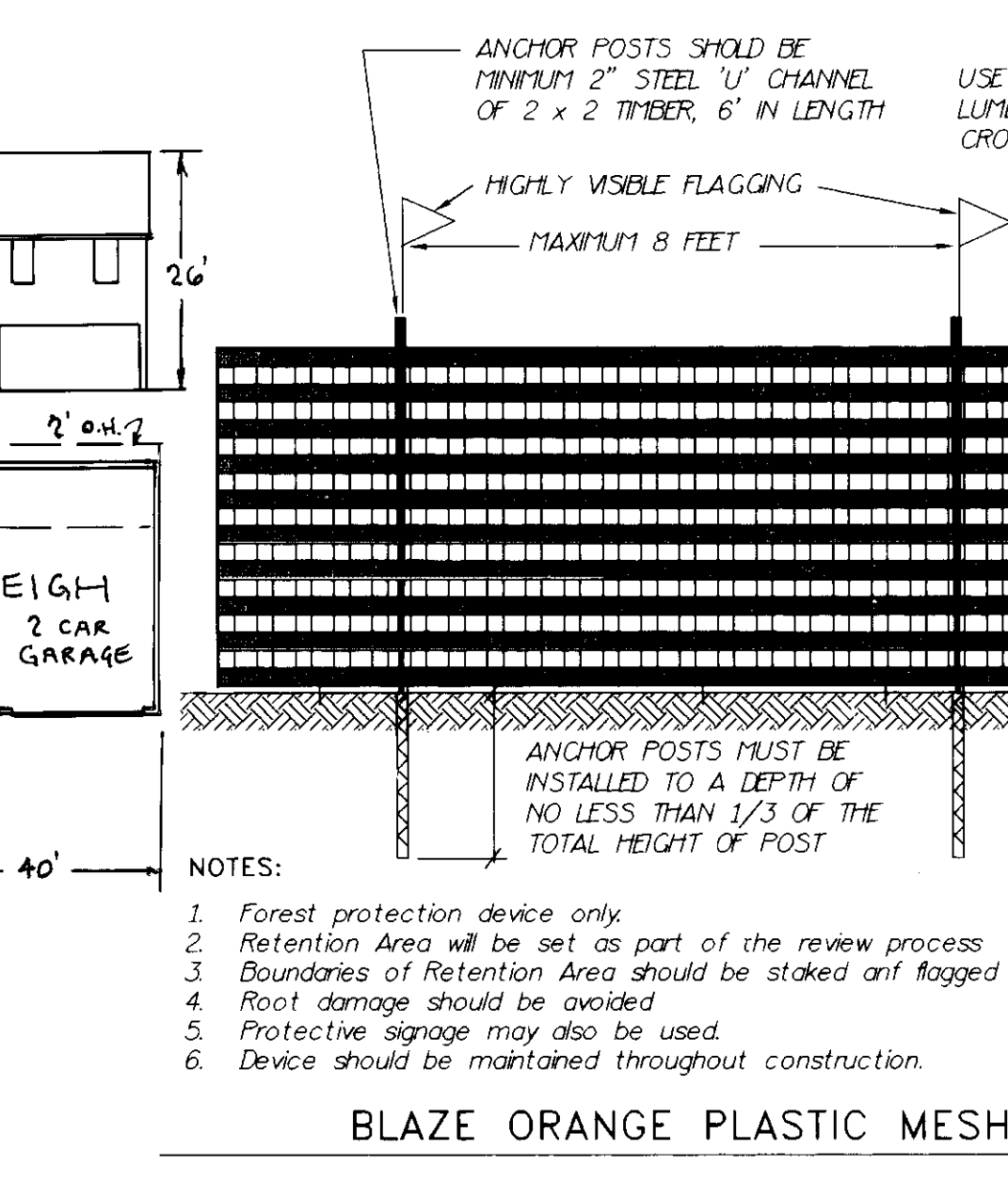
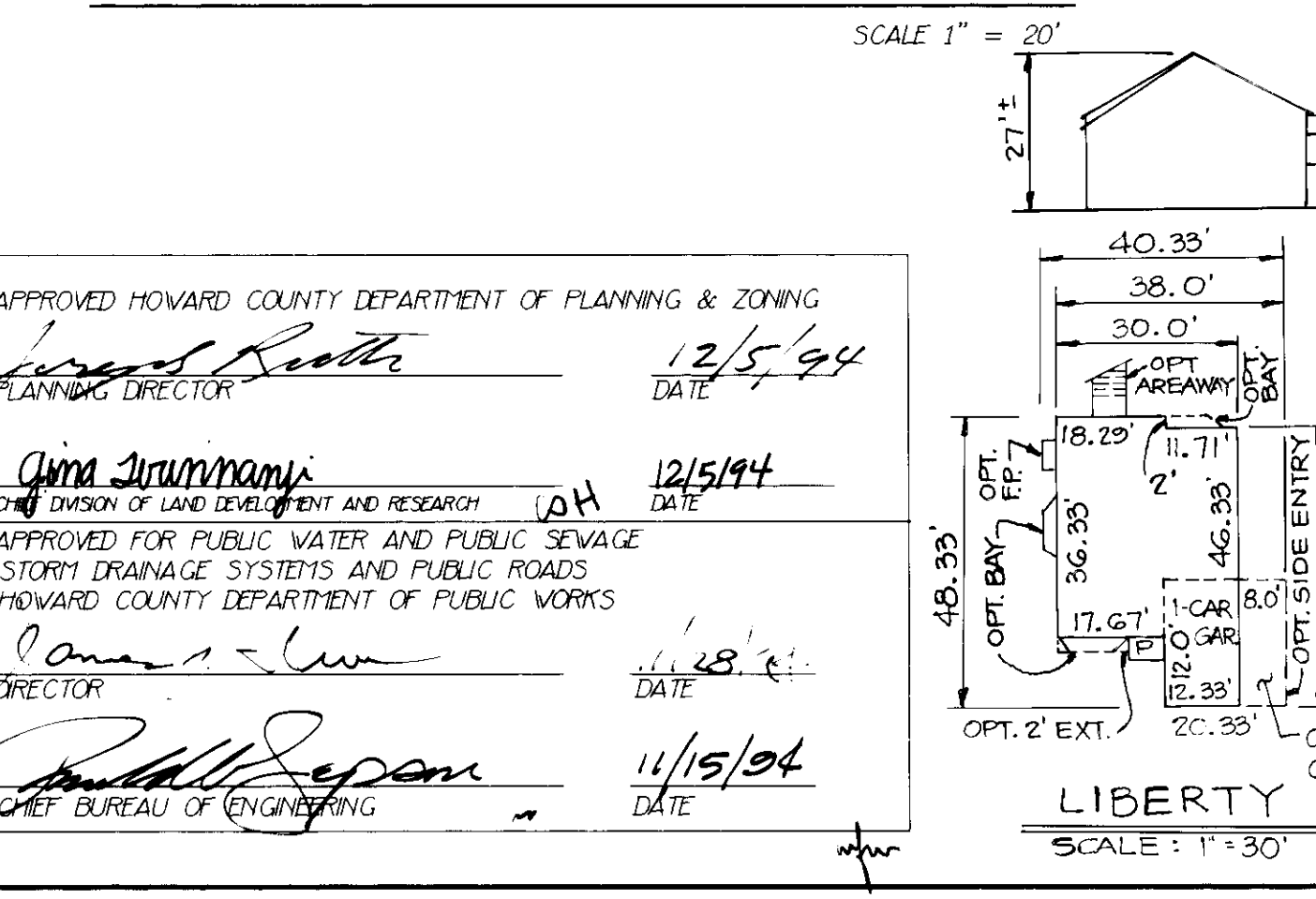
John F. ... DATE: 11/16/94

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

John F. ... DATE: 11/16/94



- CONSTRUCTION SPECIFICATIONS**
- Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 ft. (except on a single residence lot where a 30 ft. minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) ft. minimum, but not less than the full width at 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 mountable berm with 5:1 slopes 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 cleanout of any measures used to trap sediment. All sediment spilled, 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 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.

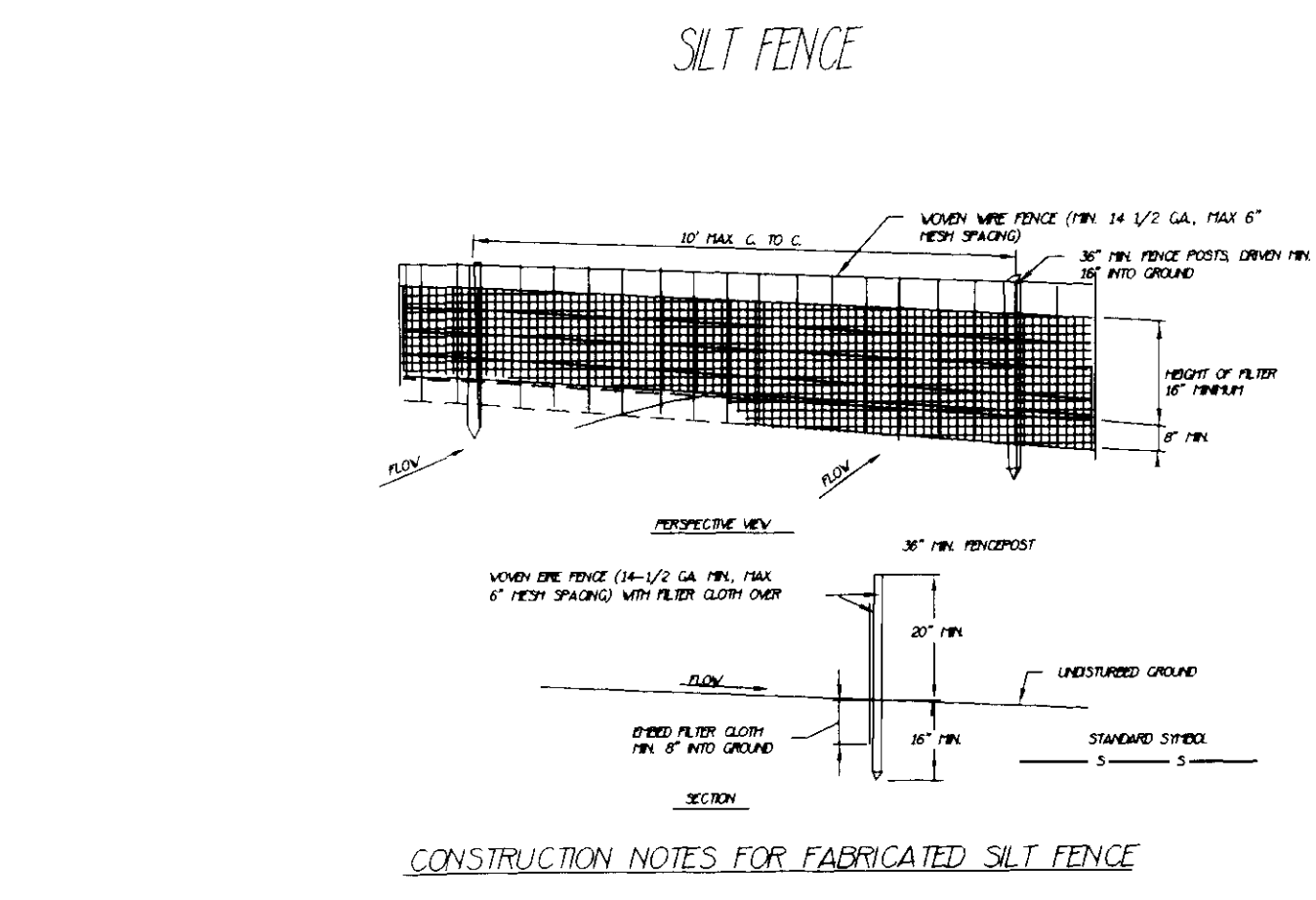


ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING.

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 PERSONS INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 10 DEPT. OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING AGENTS AS DEEMED NECESSARY.



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- 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 two sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and materials removed when "bulges" develop in the silt fence.
- Posts: Steel either T or U type or 2" hardwood sound quality min. cross section 1-1/4" x 1-1/4" (actual dimensions).
- Fence: woven wire, 14-1/2 ga. 6" max mesh opening or high strength polypropylene netting.
- Filter Cloth: Filter X, filter 100, Stab-fila T-140n or approved equal the approved woven fabric must have a grade tensile strength of 160 lbs with a double stitched hem at the top for a draw cord.
- Heavy duty draw cord: this cord is placed in the double stitched hem at the top of the fence to stiffen, strengthen and support the filter fabric when using the polypropylene net.
- Pre-fabricated unit: geotab, envirofence, or approved equal.

- HOWARD SOIL CONSERVATION DISTRICT**
- STANDARD SEDIMENT CONTROL NOTES**
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction, (313-1855).
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
 - Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within:
 - 2 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1.
 - 14 days 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch done 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	5 Acres
Area Disturbed	4 Acres
Area to be roofed or paved	1 Acres
Area to be vegetatively stabilized	3 Acres
Total Cut	6,000 Cu. Yds.
Total Fill	6,000 Cu. Yds.
 - All excavation to be disposed of on site.
 - 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 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.
 - Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

HOWARD SOIL CONSERVATION DISTRICT

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded 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:

- 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 disk 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 disk 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 gal per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance - Inspect all seeding areas and make needed repairs, replacements and reseedings.

Lot No.	Gross Area	Pipestem Area	Remaining Area	100 Year Floodplain	25% Slopes or Greater to Remain	Minimum Lot Size
PATAPSCO RIDGE						
8	8,400		8,400		180	8,220
9	8,433		8,433		2,988	5,445
28	9,333		9,333		558	8,775
29	11,124		11,124		2,025	9,099
30	8,722		8,722		1,431	7,291
31	8,400		8,400		990	8,400
32	9,135		9,135		9,135	8,145
33	9,372		9,372		1,220	8,152
34	8,414		8,414		456	7,958
35	9,206		9,206		1,278	7,928
36	11,236		11,236		2,511	8,725
25	8,400		8,400		378	8,022
26	8,404		8,404		8,404	8,404
27	8,404		8,404		8,404	8,404
ELK HILL						
6	9,681		9,681		702	8,979
7	9,896		9,896		396	9,500
8	8,507		8,507		12,137	11,561
9	12,137		12,137		1,350	11,047
10	12,397		12,397		1,863	9,532
11	11,395		11,395		1,462	13,066
12	16,203	1,675	14,528		846	7,724
13	8,570		8,570			

Address Chart

Lot	Street Address
PATAPSCO RIDGE	
8	6208 Patuxent Quarter Road
9	6204 Patuxent Quarter Road
28	6425 Hanover Crossing Way
29	6421 Hanover Crossing Way
30	6415 Hanover Crossing Way
31	6414 Hanover Crossing Way
32	6242 Patuxent Quarter Road
33	6238 Patuxent Quarter Road
34	6234 Patuxent Quarter Road
35	6230 Patuxent Quarter Road
36	6226 Patuxent Quarter Road
25	6286 Patuxent Quarter Road
26	6282 Patuxent Quarter Road
27	6278 Patuxent Quarter Road
ELK HILL	
6	6338 Patuxent Quarter Road
7	6324 Patuxent Quarter Road
8	6320 Patuxent Quarter Road
9	6316 Patuxent Quarter Road
10	6312 Patuxent Quarter Road
11	6308 Patuxent Quarter Road
12	6304 Patuxent Quarter Road
13	6300 Patuxent Quarter Road

SEQUENCE OF OPERATIONS

- Obtain a grading permit (2 days).
- Clear and grub for sediment and erosion control measures only (1 day).
- Install all sediment and erosion control measures install tree protection fences (2 days).
- Clear and grub remainder of site. (5 days)
- Excavate foundations and rough grade site. (4 weeks)
- Install utilities (2 weeks)
- Stabilize paving areas with aggregate (1 week)
- Construct houses (3 months)
- Final grade, topsoil and seed all disturbed areas (6 months, concurrent with steps 5-8)
- After turf is established and upon approval of the sediment control inspector, remove temporary sediment control measures and clean up site.
- Note: Any sediment accumulated in receiving SWM facilities due to grading shown on these plans shall be removed and the facility to be refurbished to its original stabilized condition.

TEMPORARY SEEDING NOTES

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

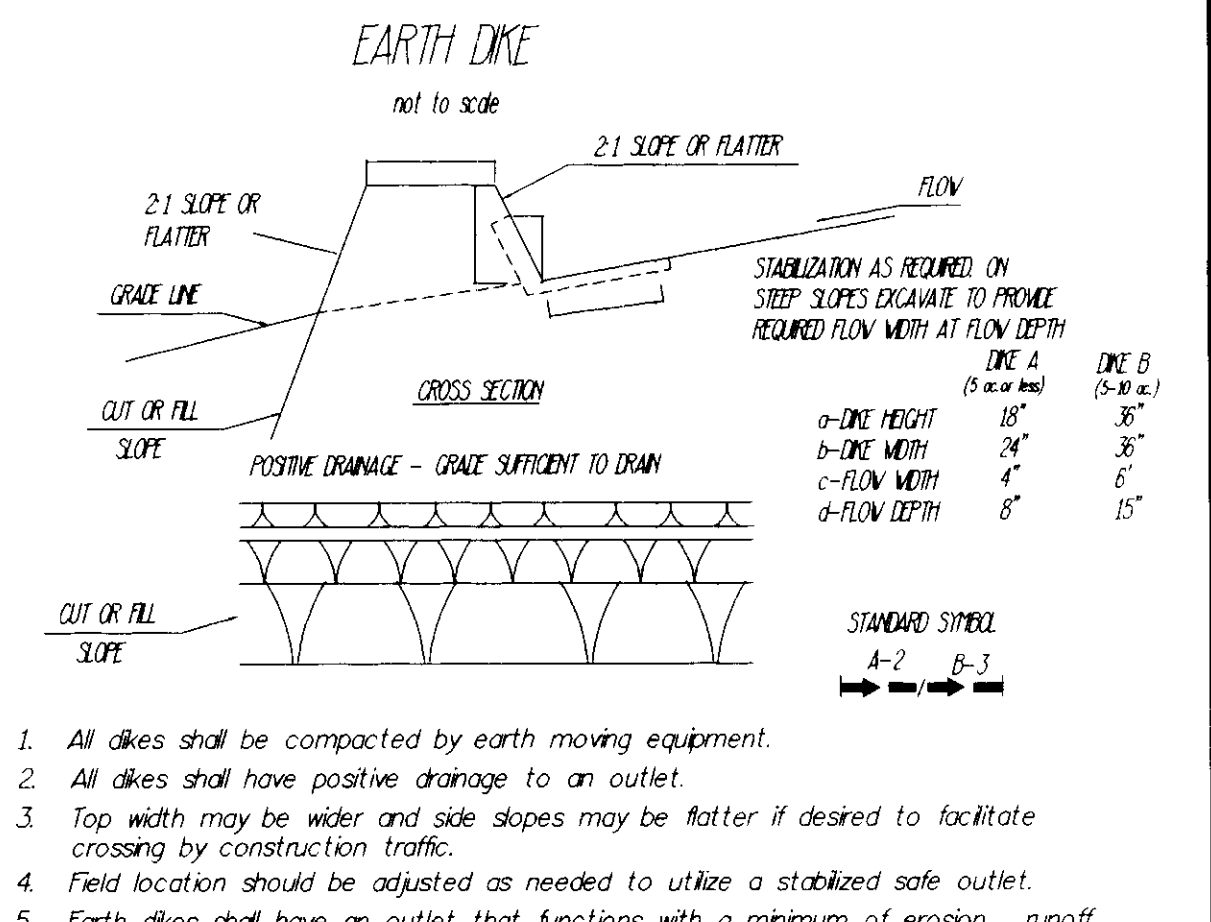
Seeded preparation: - - Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

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 October 15, seed with 2-1/2 bushel per acre of annual ryegrass (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 weed free 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 feet 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 additional rates and methods not covered.



- EARTH DIKE**
- not to scale
- 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 the chart below.
- | TYPE OF TREATMENT | CHANNEL GRAZE | FLOW CHANNEL STABILIZATION | DIKE A | DIKE B |
|-------------------|---------------|---------------------------------|--|--|
| 1 | 5-10% | SEED AND STRAW MULCH | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 31-50% | SEED AND STRAW MULCH | SEED USING LIME OR EXCESSIVE SOD, 2" STONE | SEED USING LIME OR EXCESSIVE SOD, 2" STONE |
| 3 | 51-80% | SEED WITH LIME OR SOD, 2" STONE | LIME RP-RAP 4-8" | LIME RP-RAP 4-8" |
| 4 | 81-100% | LIME RP-RAP 4-8" | ENGINEERING DESIGN | ENGINEERING DESIGN |
- a. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
- b. Rip-rap to be 4-8 inches in a layer at least 8 inches thickness and pressed into the 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 event.

REVISIONS

NO.	DATE	REVISION
10	2-1-94	ENCL. COMMENTS
11	1-1-95	ADDED HSE. TYPE (TSA, INC.)

LAND DESIGN ASSOCIATES, INC.
718 HIGHWOOD DRIVE
BALTIMORE, MD. 21212 410/322-6244

PATAPSCO RIDGE LOTS 8, 9 AND 25 THRU 36
ELK HILL LOTS 6 THRU 13

SITE DEVELOPMENT AND SEDIMENT CONTROL PLAN

FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TAX MAP 38 PARCEL 263, 793 & 849
ZONED R-12

FOR: GRAYSON HOMES, INC.
9025 CHEVROLET DRIVE
ELLICOTT CITY, MD 21043

DESIGNED: BLP
DRAWN: CAD
CHECKED: RLW

SCALE: AS SHOWN
SHEET 3 OF 3
DATE: SEP 15, 1994