

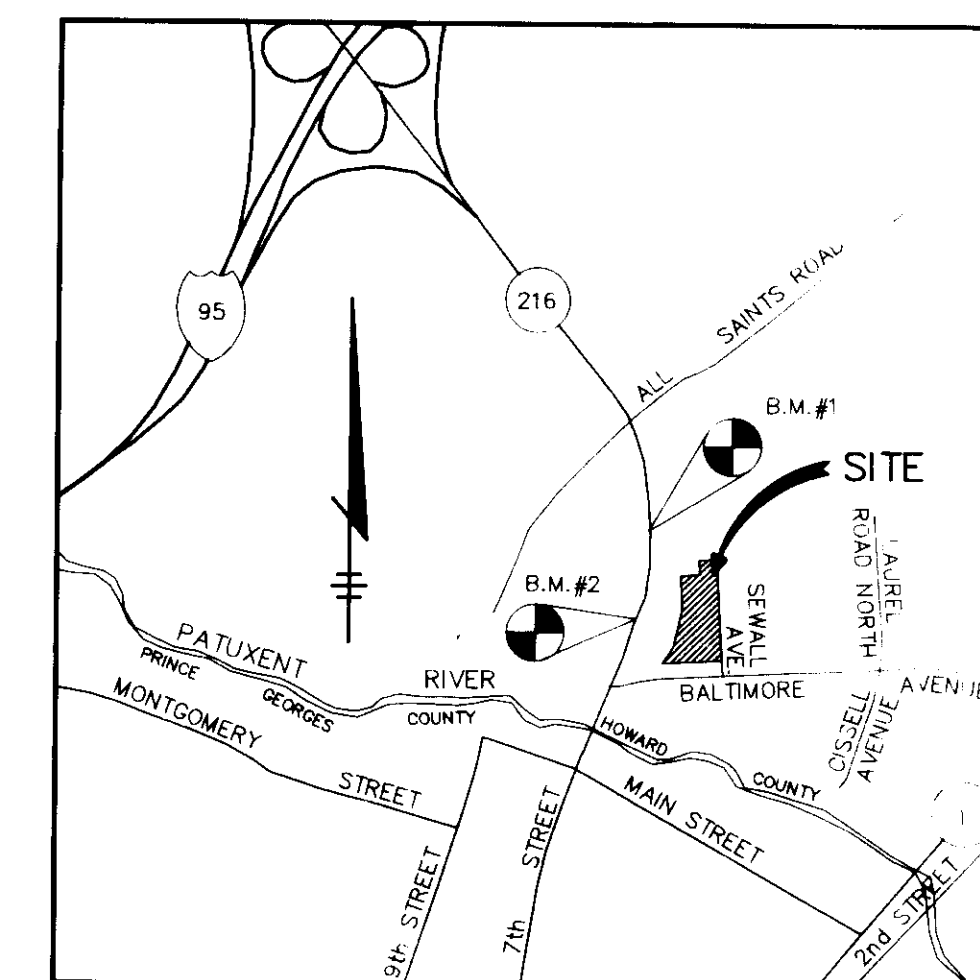
SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
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3	SITE DEVELOPMENT PLAN
4	SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL PLAN
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SITE DEVELOPMENT PLAN

PATUXENT HEIGHTS

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



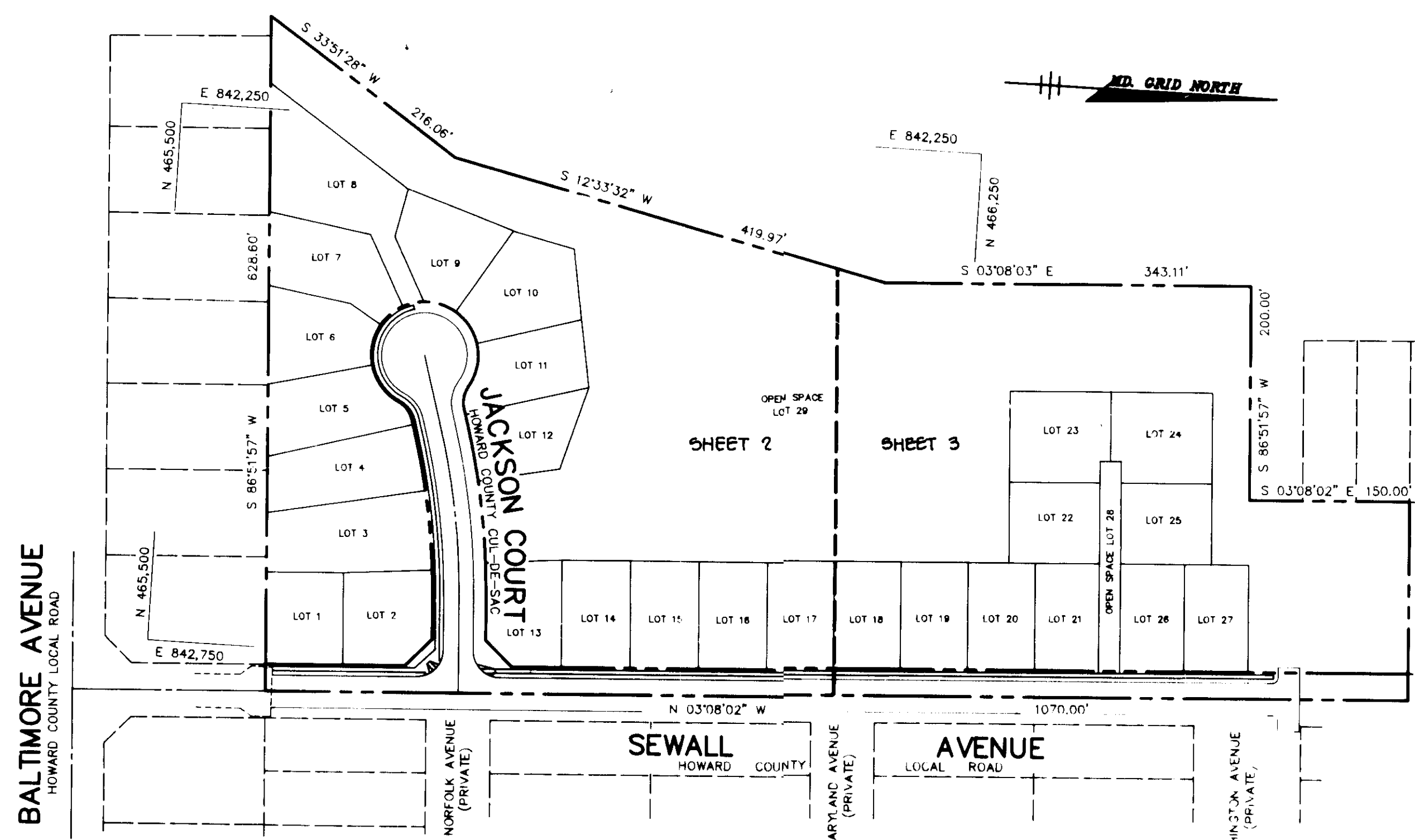
VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
 MISS UTILITY (48 HOURS PRIOR TO ANY EXCAVATION WORK.) 1-800-257-7777
 U&P TELEPHONE COMPANY 725-9976
 HOWARD COUNTY BUREAU OF UTILITIES 313-4900
 AT&T CABLE LOCATION DIVISION 393-3553
 BALTIMORE GAS & ELECTRIC COMPANY 685-0123
 STATE HIGHWAY ADMINISTRATION 531-5533
 HOWARD COUNTY CONSTRUCTION INSPECTION SURVEY DIVISION (5 WORKING DAYS PRIOR TO COMMENCEMENT OF WORK) 319-1880
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED FEB., 1991 BY RIEMER MUEGGE AND ASSOCIATES, INC.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- STORMWATER MANAGEMENT FOR THIS DEVELOPMENT IS PROVIDED UNDER F-02-70 AND IS AN INFILTRATION BASIN.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- EXISTING UTILITIES ARE SHOWN AS PER F-02-70 AND CONTRACT NO. 84-9200-D.
- THE 20' WIDE LANDSCAPED BUFFER SHOWN ON THIS PLAN IS REQUIRED BY SECTION 10.10.1(F)(1) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. NO CLEARING OF EXISTING VEGETATION IS PERMITTED; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.
- COUNCIL RESOLUTION # 226 (ADOPTED NOVEMBER 4, 1991) PERMITTED THE TRANSFERENCE OF HOWARD COUNTY'S RIGHTS, TITLE AND INTEREST IN SEWELL AVENUE TO THE WARD DEVELOPMENT CORPORATION FOR THE CONSTRUCTION OF SEWELL AVENUE AS A PUBLIC ROAD.

WATER AND SEWER HOUSE CONNECTION CHART

LOT NO.	MIN. CELLAR ELEV. *	CELLAR ELEV.	PROPER LINE ELEV.	IN. MAIN	PIPE SIZE	MIN. SIZE
1	106.50	109.10	102.30	152.90	4"	3/4"
2	109.10	106.70	101.40	101.04	4"	3/4"
3	104.80	105.00	101.02	100.66	4"	3/4"
4	104.00	100.00	100.78	100.46	4"	3/4"
5	104.00	200.00	100.94	100.00	4"	3/4"
6	104.70	201.40	100.97	100.01	4"	3/4"
7	105.40	202.00	100.70	100.74	4"	3/4"
8	100.00	100.00	100.97	100.91	4"	3/4"
9	101.00	100.50	101.85	101.65	4"	3/4"
10	101.00	107.80	101.15	104.25	4"	3/4"
11	104.00	105.00	101.01	100.51	4"	3/4"
12	104.00	107.50	100.02	100.24	4"	3/4"
13	105.00	204.50	101.71	101.07	4"	3/4"
14	206.40	207.00	202.50	202.14	4"	3/4"
15	209.00	210.00	205.04	204.68	4"	3/4"
16	211.50	214.00	207.68	207.22	4"	3/4"
17	214.10	216.00	210.15	209.77	4"	3/4"
18	216.70	217.00	212.75	212.40	4"	3/4"
19	210.00	210.00	206.00	205.80	4"	3/4"
20	217.50	217.00	209.21	209.01	4"	3/4"
21	204.40	215.70	200.00	200.00	4"	3/4"
22	204.00	206.00	200.45	200.25	4"	3/4"
23	203.00	206.50	202.11	200.37	4"	3/4"
24	203.50	206.50	100.99	101.80	4"	3/4"
25	198.00	207.40	104.73	104.53	4"	3/4"
26	200.00	210.50	100.11	100.01	4"	3/4"
27	197.50	209.00	103.04	102.64	4"	3/4"
28	OPEN SPACE	—	—	—	—	—
29	OPEN SPACE	—	—	—	—	—



PLAN
SCALE: 1"=100'

MINIMUM LOT SIZE TABULATION

LOT NO.	GROSS AREA	MIN. FLOORPLAN/25% STEEP SLOPES	MIN. PIPESTEM AREA	SUBTOTAL AREA	MIN. UNCREATED STEEP SLOPES	MIN. UNCREATED STEEP SLOPES (ADJ. TO EXCEED AREA OF CREATED STEEP SLOPES)	MINIMUM LOT AREA
3	9950	0	0	9950	0	0	9950
4	8170	0	0	8170	0	0	8170
8	11080	2525	1275	7180	920	500	7180
9	7145	175	0	6970	0	0	6970
10	8515	0	0	8515	1070	600	7445
11	7517	0	0	7517	1024	600	6093
12	7247	0	0	7247	1020	1020	7247

BENCH MARKS

B.M. #1 ELEV. 198.395
 N 467,020.503; E 842,118.765
 LOCATED ON ROUTE 216, APPROX. 1166'± SOUTH OF THE INTERSECTION WITH ALL SAINTS ROAD. 15'± EAST OF EDGE OF PAVING & 3'± EAST OF GUARDRAIL.

B.M. #2 ELEV. 197.368
 N 466,043.183; E 841,993.790
 LOCATED ON ROUTE 216, APPROX. 0.4 MILES SOUTH OF THE INTERSECTION WITH ALL SAINTS ROAD. 18'± EAST OF EDGE OF PAVING.

ADDRESS CHART

LOT NUMBER	STREET ADDRESS	LOT NUMBER	STREET ADDRESS
1	0440 SEWALL AVENUE	16	0408 SEWALL AVENUE
2	0440 SEWALL AVENUE	17	0400 SEWALL AVENUE
3	0405 JACKSON COURT	18	0302 SEWALL AVENUE
4	0409 JACKSON COURT	19	0384 SEWALL AVENUE
5	0415 JACKSON COURT	20	0370 SEWALL AVENUE
6	0417 JACKSON COURT	21	0308 SEWALL AVENUE
7	0421 JACKSON COURT	22	0302 SEWALL AVENUE
8	0425 JACKSON COURT	23	0360 SEWALL AVENUE
9	0422 JACKSON COURT	24	0350 SEWALL AVENUE
10	0418 JACKSON COURT	25	0344 SEWALL AVENUE
11	0414 JACKSON COURT	26	0338 SEWALL AVENUE
12	0410 JACKSON COURT	27	0330 SEWALL AVENUE
13	0406 SEWALL AVENUE	28	OPEN SPACE
14	0424 SEWALL AVENUE	29	OPEN SPACE
15	0416 SEWALL AVENUE		

SITE ANALYSIS

TOTAL AREA OF PARCEL 10,000 AC
 AREA OF TRACT WITHIN 100 YR FLOODPLAIN & STEEP SLOPES 1,051 AC
 AREA OF TRACT WITHIN WETLANDS AND STORMWATER MANAGEMENT 0,720 AC
 NET AREA 7,929 AC
 EXISTING ZONING R-0C
 NO. OF DWELLING UNITS ALLOWED 00
 NO. OF DWELLING UNITS PROPOSED 27
 DENSITY PER ACRE 0.5
 LOT COVERAGE PERMITTED 60%
 OPEN SPACE REQUIRED 2,000 AC
 OPEN SPACE PROVIDED 4,941 AC
 DRY GROUND RECREATION REQUIRED 1,00 AC (50%)
 DRY GROUND RECREATION PROVIDED 1,701 AC (50%)
 PROPOSED USE SINGLE FAMILY DETACHED HOMES

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

Joyce M. B. ... 8/30/93
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

... 10/1/93
 DIRECTOR DATE

Gina ... 10/1/93
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

... 8/27/93
 DIRECTOR DATE

... 8/26/93
 CHIEF, BUREAU OF ENGINEERING DATE

DATE NO. REVISION

OWNER / DEVELOPER
 WARD DEVELOPMENT COMPANY, INC.
 1300 PICCARD DRIVE
 ROCKVILLE, MARYLAND 20850

BUILDER: CORNERSTONE HOMES, INC.

PROJECT
 PATUXENT HEIGHTS
 LOTS 1 - 29

AREA
 TAX MAP NO. 50 PARCEL 452
 A RESUBDIVISION OF
 BLOCK 5, LOTS 1-8 BLOCK 6, LOTS 1-12
 BLOCK 7, LOTS 1-12 BLOCK 8, LOTS 1-12
 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE
 TITLE SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
 410-997-8800 FAX: 410-997-9282

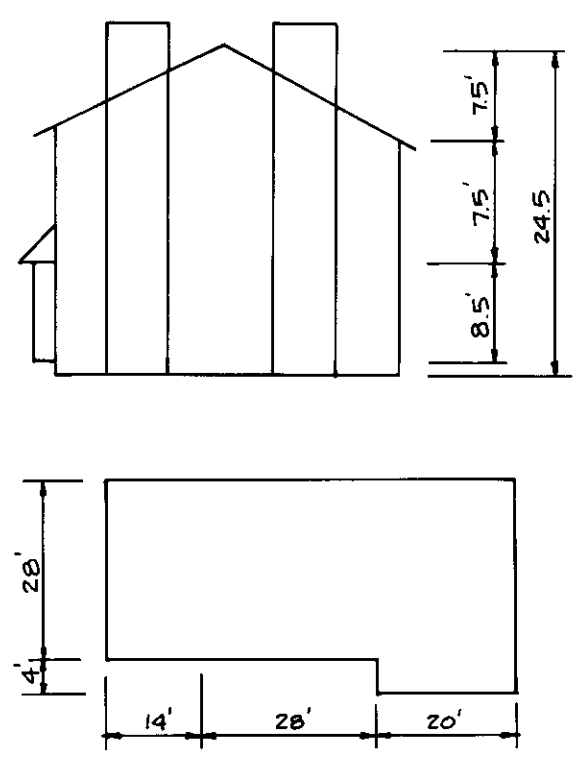
8.13.93
 DATE

S-89-88; P-91-12;
 F-92-75

DESIGNED BY: CB
 DRAWN BY: CB
 PROJECT NO.: 57807
 DATE: AUGUST 13, 1993
 SCALE: AS SHOWN
 DRAWING NO. 1 OF 6

SEARCHED INDEXED
 PATUXENT HEIGHTS
 BLOCK # - 5000 - TAX MAP NO. - 50
 10944-10948
 R-0C 50
 6th 6048 02
 WATER CODE - C 05
 7141500 & 7142000

MD. GRID NORTH



AMBERLY II

$$\frac{2040}{0.4} = 5100 \text{ SQ. FT. MIN LOT SIZE}$$



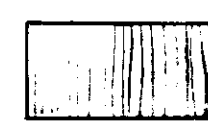
BALTIMORE AVENUE
HOWARD COUNTY LOCAL ROAD



PLANT LIST

KEY	QTY	NAME	SIZE	REMARKS
AC	6	AMALANCHIER CANADENSIS Downy Shadblow	8 - 10" ht	B&B
PL	34	PRUNUS LAUROCARIS 'SCHIPKAENSIS' Cherry Laurel	24 - 30" ht	B&B or cont.
TC	12	TSUGA CANADENSIS Canadian Hemlock	6 - 8' ht	B&B
VS	20	VIBURNUM SIEBOLDI Siebold Viburnum	4 - 5' ht	B&B

- NOTES:
1. B.R.L. - DENOTES BUILDING RESTRICTION LINE
 2. FOR HOUSE DIMENSIONS AND ELEVATIONS SEE SHEET G.
 3. W.O. - DENOTES WALK OUT
 4. THE WETLAND/STREAM BUFFER INDICATED ON THIS PLAN DOES NOT AFFECT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON ANY LOT. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENCES, LANDSCAPING AND UTILITIES IS PERMITTED.



INDICATES CREATED STEEP SLOPES GREATER THAN OR EQUAL TO 25%



INDICATES EXISTING STREET TREES PER F-02-76

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

Joyce M. Boyd per *J.R.* 8/30/93
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Wanda J. D'Angelo 11/1/93
DIRECTOR DATE

Gina Summari 10/1/93
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

James J. Lee 8/2/93
DIRECTOR DATE

Paul DeLeon 8/26/93
CHIEF, BUREAU OF ENGINEERING DATE SH

8-15-94 LOT B REVISED TO AMBERLY II BY TSA GROUP, INC.
DATE NO. REVISION

OWNER / DEVELOPER
WARD DEVELOPMENT COMPANY, INC.
1300 PICCADILLY DRIVE
ROCKVILLE, MARYLAND 20850

BUILDER: CORNERSTONE HOMES, INC.

PROJECT
PATUXENT HEIGHTS
LOTS 1-20

AREA
TAX MAP NO. 20 PARCEL 422
A REBUDIVISION OF
BLOCK C, LOTS 11 & 12; BLOCK D, LOTS 11 & 12
BLOCK E, LOTS 11 & 12; BLOCK F, LOTS 11 & 12
6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

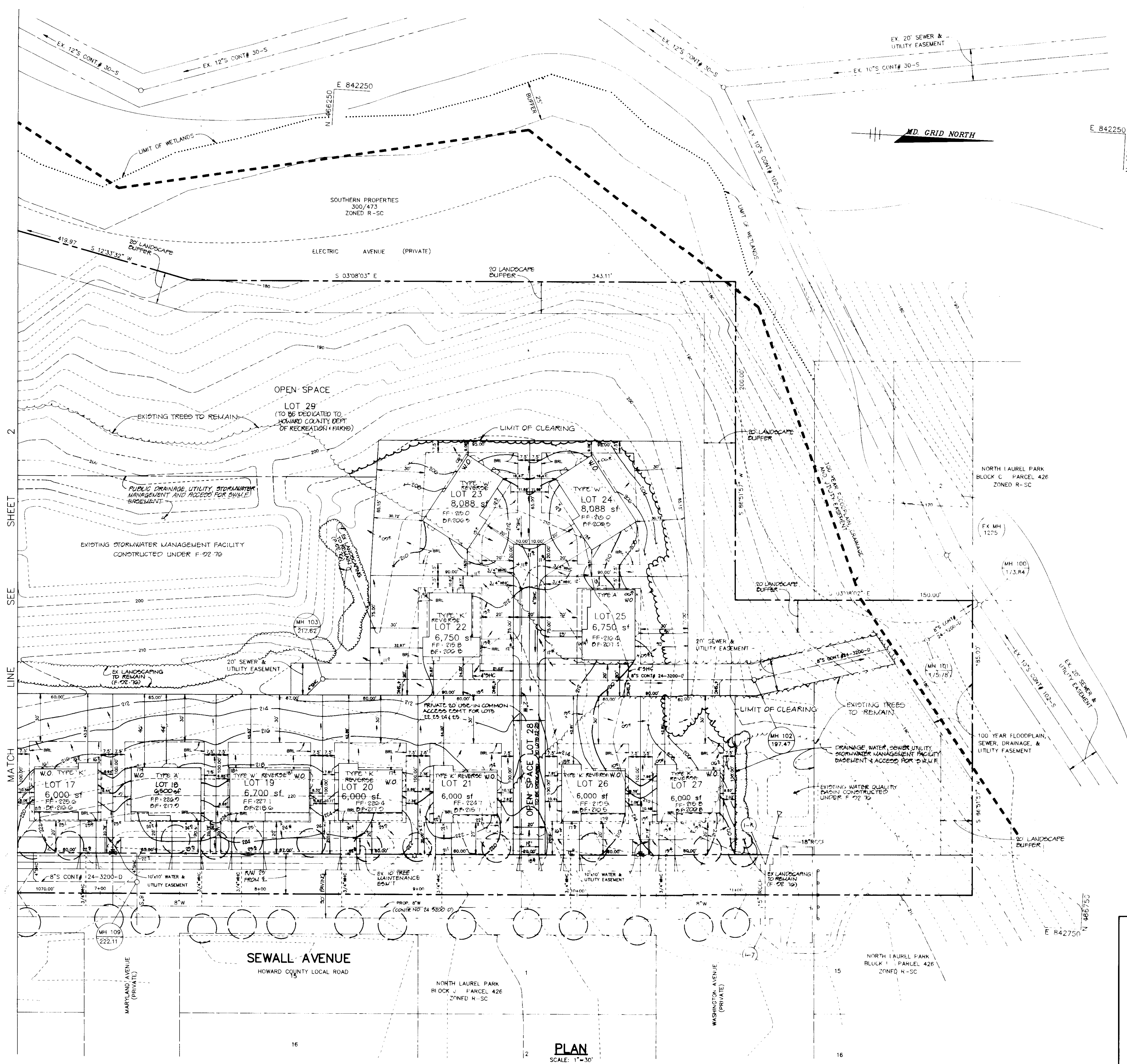
TITLE
SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8800 FAX: 410-997-9282

REVISION TO LOT B ONLY
Am. 1/1/1994

8-15-93 DATE
S-89-RR-P-91-12; F-32-76
DESIGNED BY: CB
DRAWN BY: CB
PROJECT NO: 57807
DATE: AUGUST 13, 1992
SCALE: AS SHOWN
DRAWING NO. 2 OF 2

PLAN
SCALE: 1"=30'



- NOTES:
1. B.R.L. - DENOTES BUILDING RESTRICTION LINE
 2. FOR HOUSE DIMENSIONS AND ELEVATIONS SEE SHEET 9.
 3. W.O. - DENOTES WALK OUT.
 4. THE WETLAND/STREAM BUFFER INDICATED ON THIS PLAN DOES NOT AFFECT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON ANY LOT. IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENCES, LANDSCAPING AND UTILITIES IS PERMITTED.

○ INDICATES EXISTING STREET TREES PER F.02-76

SHEET 2
SEE LINE
MATCH

PLAN
SCALE: 1"=30'

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

Joyce M. Bond per *J. S. ...* 8/30/93
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Frank J. ... 10/1/93
DIRECTOR DATE

Gina ... 10/11/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

James ... 8/22/93
DIRECTOR DATE

Paul ... 8/26/93
CHIEF, BUREAU OF ENGINEERING DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
WARD DEVELOPMENT COMPANY, INC.
1300 PICCARD DRIVE
ROCKVILLE, MARYLAND 20850

BUILDER: CORNERSTONE HOMES, INC.

PROJECT
PATUXENT HEIGHTS
LOTS 1-20

AREA
PARCEL 426
A SUBDIVISION OF
BLOCK C, LOTS 1 TO 12
BLOCK E, LOTS 1 TO 8
BLOCK F, LOTS 1 TO 6
9TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-9282

DATE: 8-13-93
S-89-88; F-91-12; F-92-76

DESIGNED BY: CB

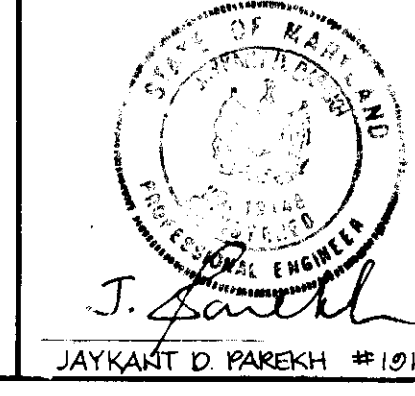
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PROJECT NO: 57807

DATE: AUGUST 13, 1993

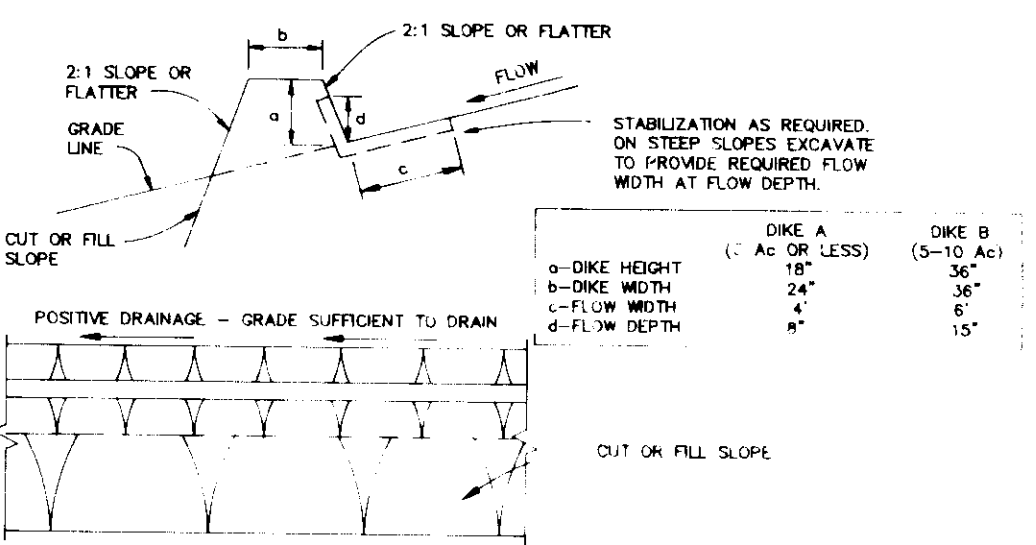
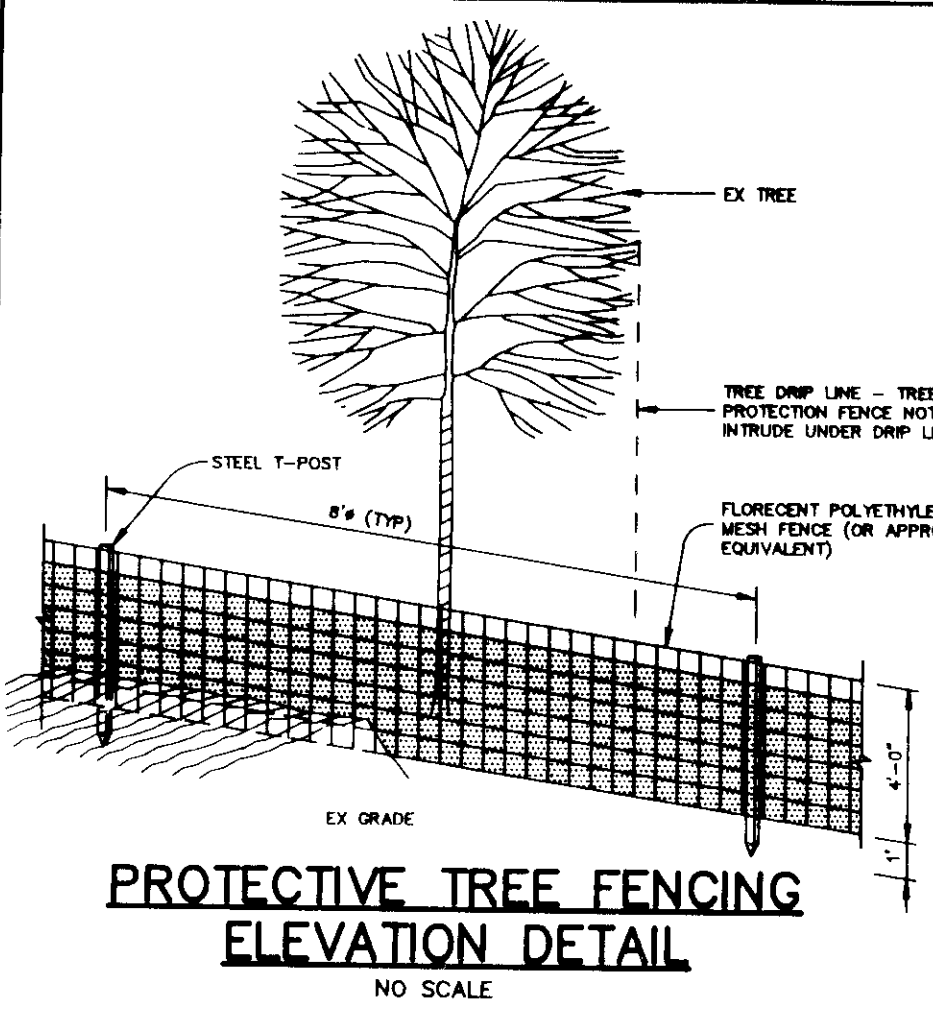
SCALE: AS SHOWN

DRAWING NO. 3 OF 3



TREE PRESERVATION PROCEDURES

- THE EDGE OF WOODS TO BE PRESERVED WILL BE MARKED IN THE FIELD PER THE APPROVED SITE DEVELOPMENT PLAN PRIOR TO THE START OF CONSTRUCTION ACTIVITY.
- PROTECTIVE FENCING SHALL BE INSTALLED AT THE DMP LINE OF THE EDGE OF WOODS. ALL AREAS WITHIN PROTECTIVE FENCES ARE TO BE CONSIDERED OFF LIMITS FOR ANY CONSTRUCTION ACTIVITY.
- PROTECTIVE FENCING WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR WILL AFFIX SIGNS TO THE FENCING INDICATING THAT THESE AREAS ARE TREE PRESERVATION AREAS. THE GENERAL CONTRACTOR SHALL TAKE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING THE CONSTRUCTION CYCLE. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, CYCLING, WETTING FROM DE-WINTERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE, AND DRAINAGE OF SOLUTIONS CONTAINING MATERIALS HAZARDOUS TO TREE ROOTS.
- REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED. THE GENERAL CONTRACTOR SHALL BE PROHIBITED FROM PARKING ANY CONSTRUCTION EQUIPMENT, OR FROM STORING ANY BUILDING SUPPLIES OR EARTH STOREFILES WITHIN THE TREE PRESERVATION AREAS.
- FOOT TRAFFIC, AS WELL AS VEHICULAR TRAFFIC, IN THE TREE PRESERVATION AREAS SHALL BE KEPT TO A MINIMUM. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREE DAMAGED OR DESTROYED WITHIN THE TREE PRESERVATION AREAS, WHETHER CAUSED BY THE CONTRACTOR, HIS AGENTS, EMPLOYEES, SUB-CONTRACTORS, OR LICENSEES.
- CONSTRUCTION ACTIVITIES EXPRESSLY RESTRICTED WITHIN THE TREE PRESERVATION AREAS: PLACING BACKFILL IN PROTECTED AREAS; FELLING TREES INTO PROTECTED AREAS; DRIVING CONSTRUCTION EQUIPMENT INTO OR THROUGH PROTECTED AREAS; BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS; STACKING OR STORING SUPPLIES IN PROTECTED AREAS; CONDUCTING TRENCHING OPERATIONS IN PROTECTED AREAS; GRADING BEYOND THE LIMITS OF DISTURBANCE.
- THE GENERAL CONTRACTOR SHALL PROVIDE A WASH OUT AREA FOR CONCRETE TRUCKS ON SITE, WHICH WILL NOT DRAIN TOWARDS A PROTECTED AREA.
- ALL TREES WHICH ARE NOT TO BE PRESERVED WITHIN FIFTY FEET OF ANY TREE PRESERVATION AREA ARE TO BE PRESERVED THROUGHOUT THE CONSTRUCTION CYCLE. TREES THAT ARE DESIGNATED FOR PRESERVATION: IT IS HIGHLY RECOMMENDED THAT TREE STAMPS WITHIN THEIR FIFTY FOOT AREA BE GROUND OUT WITH A STAMP GRINDING MACHINE TO MINIMIZE DAMAGE.



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 THE CHART BELOW:

LOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-1.0%	SEED & STRAW MULCH	SEED & STRAW MULCH
2	1.1-5.0%	SEED & STRAW MULCH	SEED USING JUTE OR EXCELRIOR 500-2" STONE
3	5.1-8.0%	SEED WITH JUTE OR 500-2" STONE	LINED RIPRAP 4-8"
4	8.1-20%	LINED RIPRAP 4-8"	ENGINEERED DESIGN

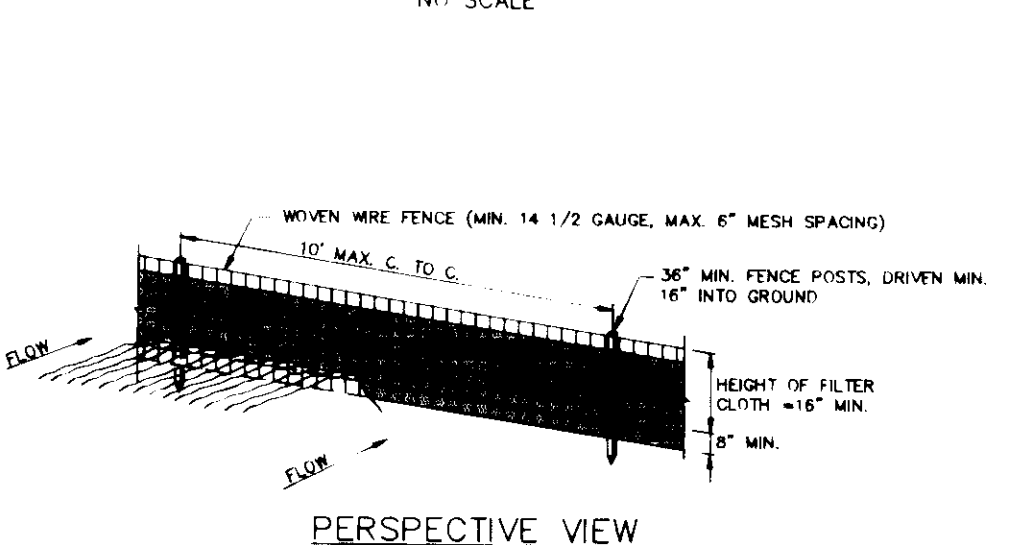
A. STONE TO BE 2" HIGH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 LINES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.

B. RIPRAP 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.

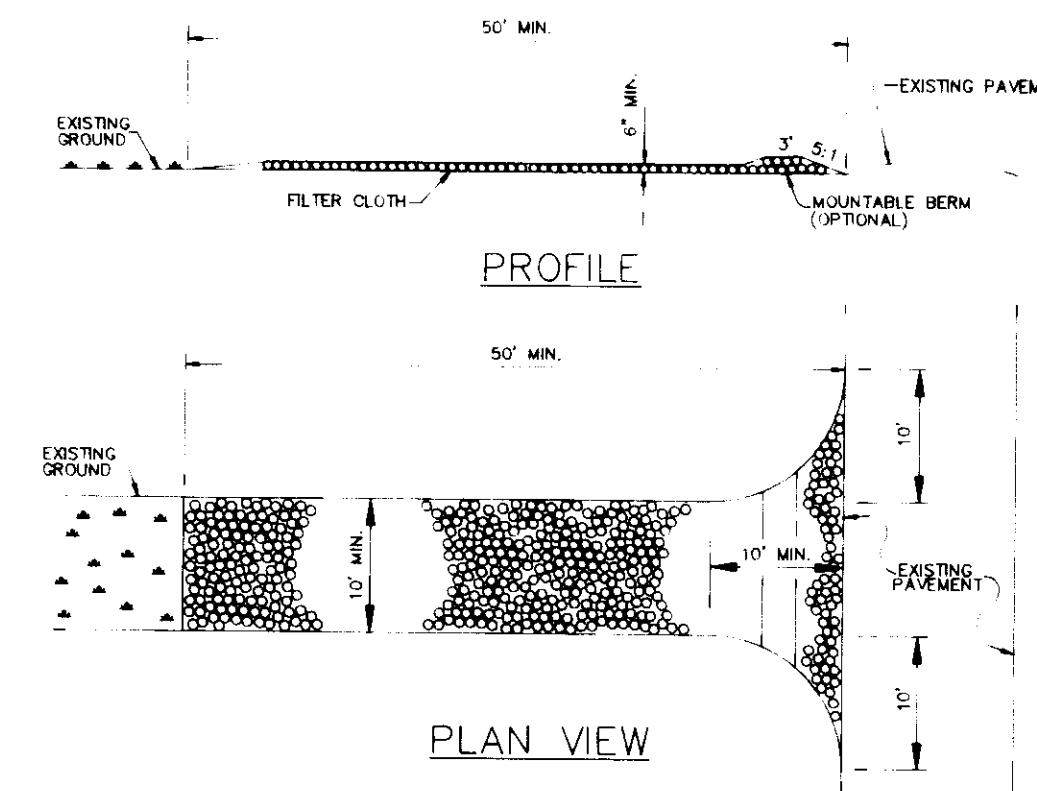
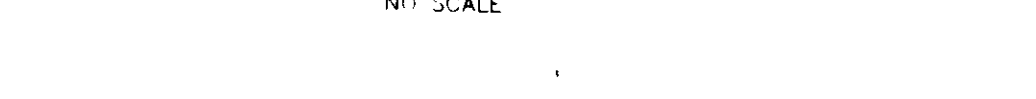
EARTH DIKE



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 overlap each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed and material removed when "bumps" develop in the filter fence.
- RIPRAP: 1" steel, 1/2" or 1/4" type or 2" hardwood.
 FENCE: Woven wire, 14 GA., 6" max. mesh spacing.
 FILTER CLOTH: Fibre A, 100% Shrinkless, 3/16" or approved equal.
 PREFABRICATED UNIT: Geotab, Envirofence or approved equal.

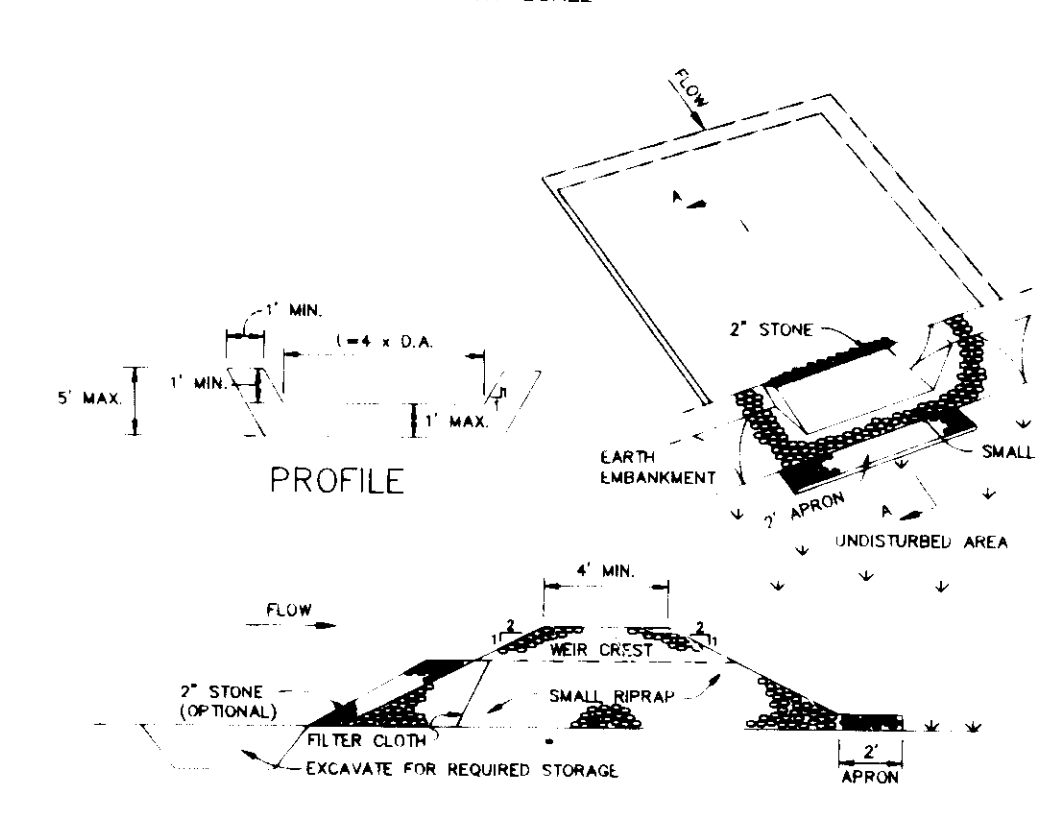
SILT FENCE DETAIL



CONSTRUCTION SPECIFICATIONS

- Stone Size - Use 2" stone, or recycled or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).
- Thickness - Not less than 6 inches.
- Width - Ten (10) foot minimum, but not less than the full width of points where ingress and egress occur.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residence lot.
- Surface Water - All surface water flowing or downed toward construction entrance shall be piped across the entrance. If piping is impractical, a mounded berm with 2:1 slope will be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any material used to trap sediment. All sediment washed, dropped, washed or tracked onto public right-of-way must be removed immediately.
- Warning - Where needed, signs shall be placed to remove sediment prior to entrance onto public right-of-way. When warning 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.

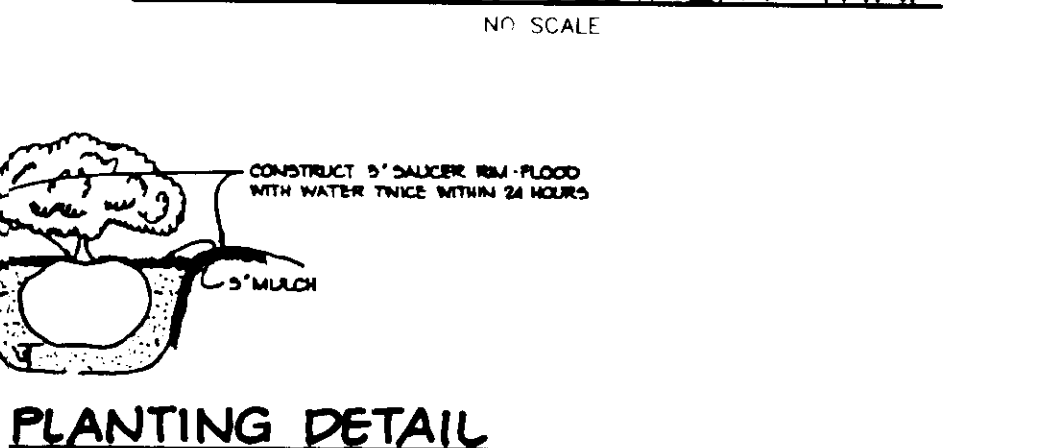
STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATIONS

- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
- THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER UNDESIRABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
- ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
- THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4-8" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE 1/2" GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
- SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL UNDISTURBED WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DEPTH OF THE 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 URNANCE AREA HAS BEEN PROPERLY STABILIZED.

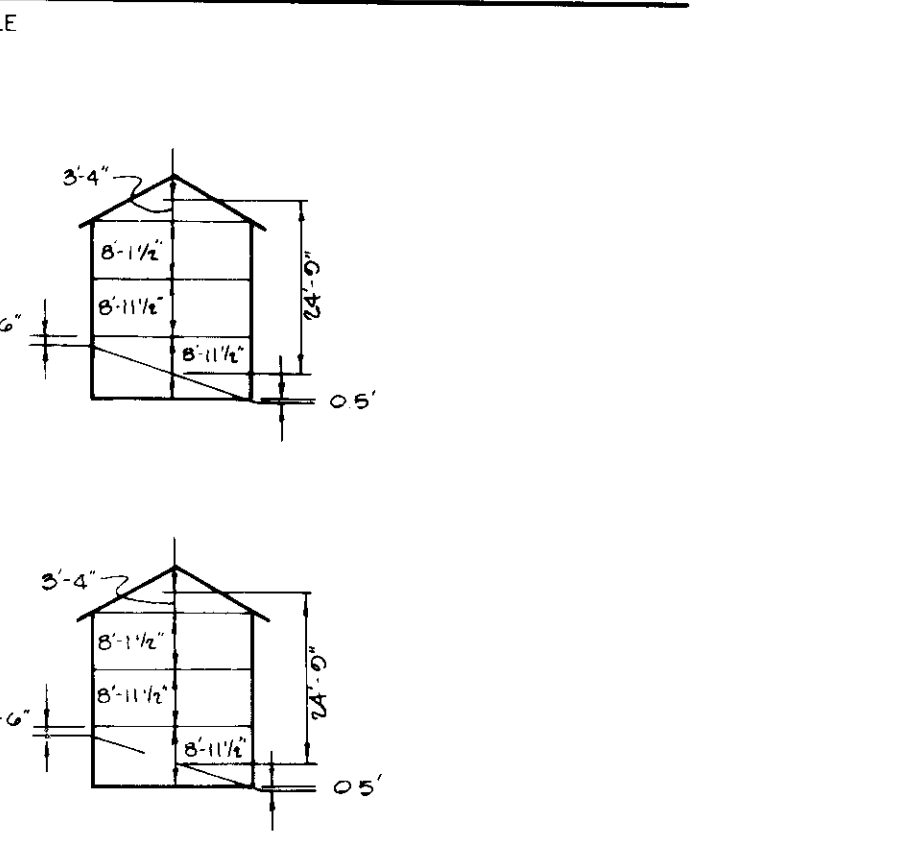
STONE OUTLET SEDIMENT TRAP



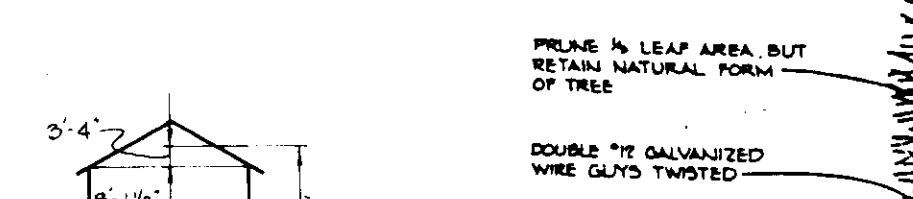
SHRUB PLANTING DETAIL



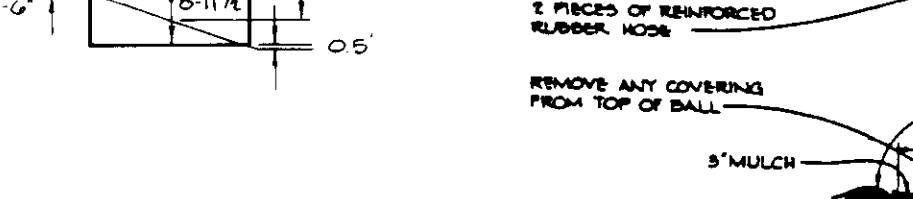
RESIDENTIAL DRIVEWAY ENTRANCE - MODIFIED CURB



BARRINGTON



KENSINGTON



WELLINGTON

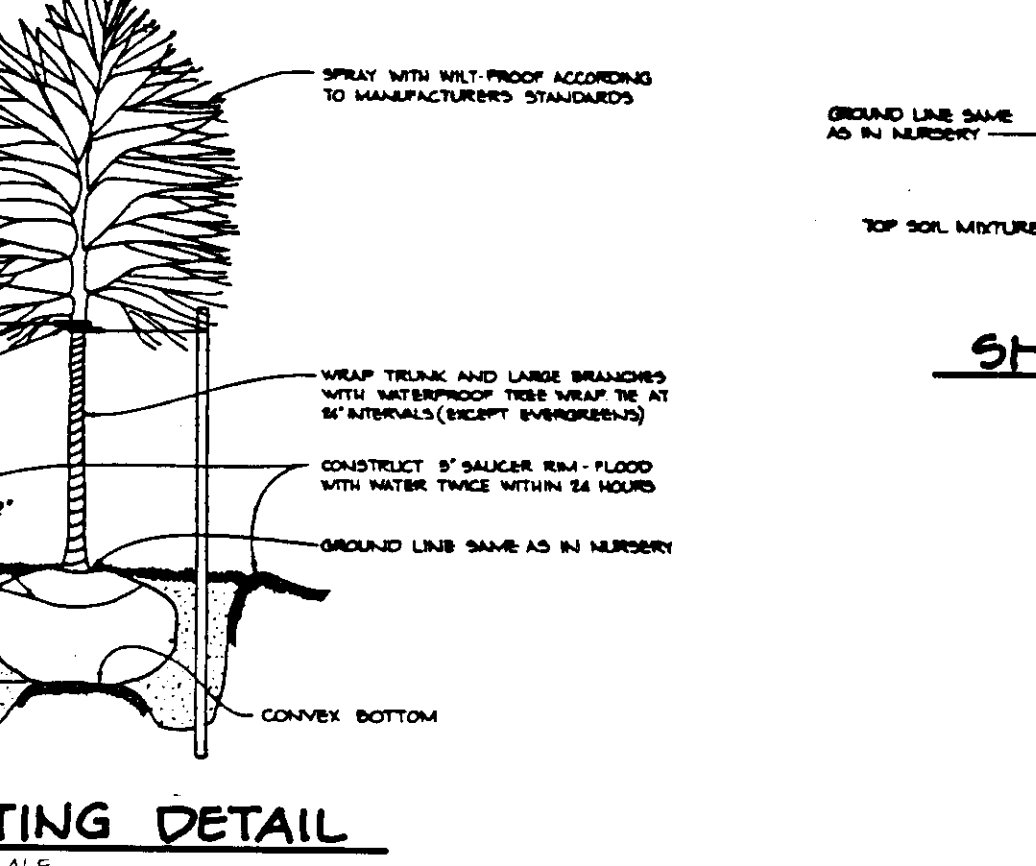
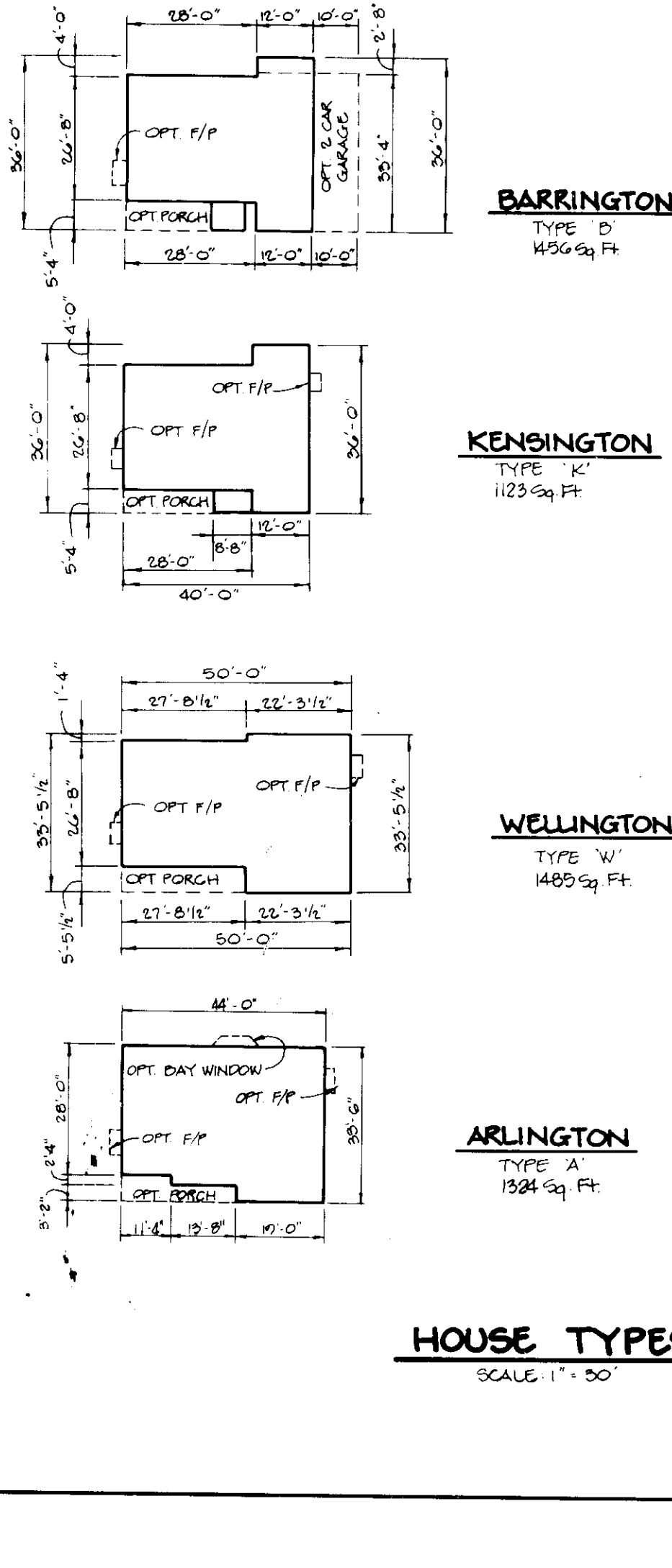


ARLINGTON



HOUSE TYPES

SCALE: 1" = 8'



TREE PLANTING DETAIL



TEMPORARY SEEDING NOTES

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

Seeding: Apply 400 lbs. per acre (10-10-10 fertilizer) (14 lbs. per 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 (12 lbs. per 1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq ft). For the period November 15 thru February 28, protect site by applying 2 tons per acre of well-weathered straw mulch and seed as soon as possible in the spring, or use seed.

Mulches: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq ft.) of untreated wood grain straw immediately after seeding. Annual mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 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.

PERMANENT SEEDING NOTES

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

Seeding: Permanent: Apply 400 lbs. per acre (10-10-10 fertilizer) (14 lbs. per 1000 sq ft.).

Seeding: Acceptable: Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq ft.) and 80 lbs. per acre (10-10-10 fertilizer) (14 lbs. per 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 uniform fertilizer (8 lbs. per 1000 sq ft.).

2. Acceptable: Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq ft.) and 100 lbs. per acre (10-10-10 fertilizer) (23 lbs. per 1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushels per acre of annual ryegrass (12 lbs. per 1000 sq ft.). For the period May 1 thru July 31, seed with 30 lbs. per acre (3 gal. per 1000 sq ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq ft.) for anchoring. During the period October 15 thru February 28, protect site by one of the following options:

- 2 tons per acre of well-weathered straw and seed as soon as possible in the spring.
- Use seed.
- Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well-weathered straw.

Mulches: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq ft.) of untreated wood grain straw immediately after seeding. Annual mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq ft.) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, reseedings and weedings.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (303-10998).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION 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 the 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 AND EROSION CONTROL for permanent stabilization (Sec. 51) and (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	10.00 acres
Area to be graded or paved	4.35 acres
Area to be vegetatively stabilized	5.65 acres
Total Cut	3.75 cu yds.
Total Fill	0.146 cu yds.
- 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 Department of Public Works Sediment Control Inspector.
- Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
- Sediment will be removed from traps when its depth reaches clean out elevation shown on the plans.
- Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unstable material. The contractor shall furnish a plan with site conditions which may affect the work.
- BORROW SITE TO BE PRE-APPROVED BY SEDIMENT CONTROL INSPECTOR. OR, IN CASE OF EXCESS MATERIAL, AN APPROVED SEDIMENT CONTROL PLAN WILL BE NEEDED TO DEPOSIT EXCESS OFF SITE.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONTROL MEASURES WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THIS PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE WILL MAINTAIN PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DEVELOPER: _____ DATE: _____

BY THE ENGINEER:

I 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.

ENGINEER: J. Powell DATE: 8/2/93

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

James M. Helm / JMH DATE: 8/2/93

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

John R. Kintner DATE: 8/2/93

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

Joyce M. Boyd and per JFM DATE: 8/30/93

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Director: _____ DATE: 10/1/93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

Gina Summery DATE: 10/1/93

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

Director: _____ DATE: 8/27/93

Chief, Bureau of Engineering: _____ DATE: 8/26/93

DATE NO. _____ REVISION _____

OWNER / DEVELOPER _____

BUILDER: WALK DEVELOPMENT WITH A FUTURE (S) PISCATAWAY RICK WILE, MARYLAND

PROJECT: PATUXENT HEIGHTS LOT 1-20

AREA: TAX MAPING 50 PARCEL 452 A RECONSTRUCTION OF BLOCK C, LOTS 14-B, BLOCK D, LOTS 10-12, BLOCK E, LOTS 11-13, BLOCK F, LOTS 11-13, 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: DETAIL SHEET

RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21048 410-997-8900 FAX: 410-997-9282

DATE: 8-13-93

DESIGNED BY: JMH

DRAWN BY: JMH

PROJECT NO.: 504

DATE: AUGUST 13, 1993

SCALE: 1" = 8'

DRAWING NO.: 01

JAYKANT O PAREKH # 10418