

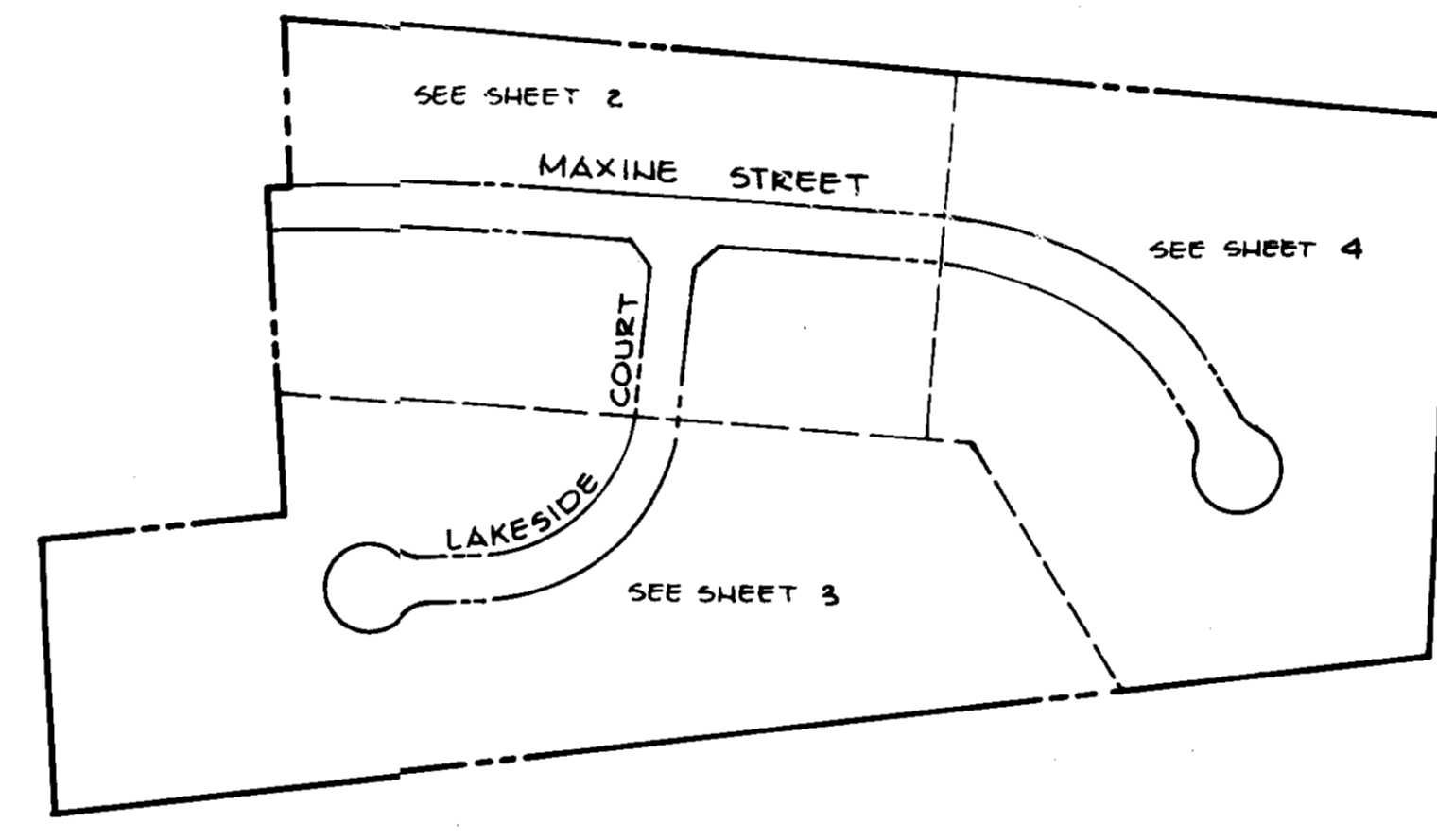
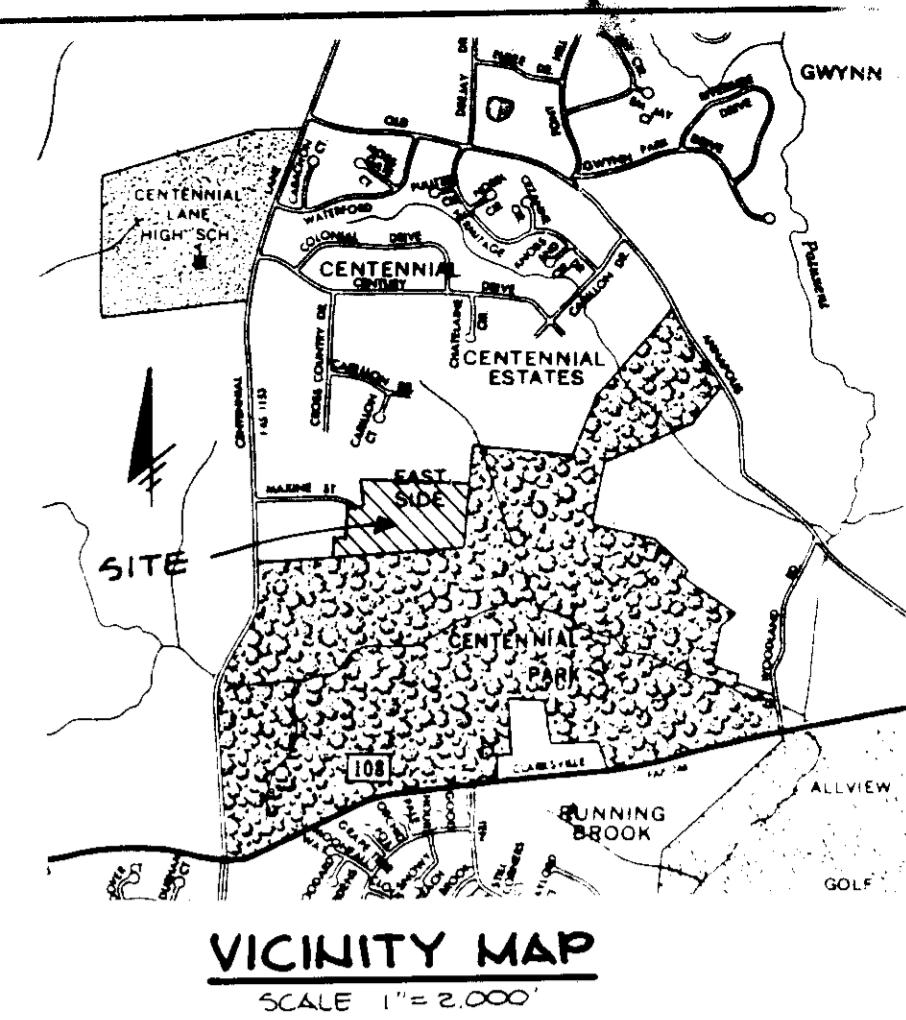
DRESS CHART		SHEET INDEX	
LOT NUMBER	STREET ADDRESS	NR.	TITLE
1	10190 MAXINE STREET	1	TITLE SHEET
2	10186 "	2	SITE DEVELOPMENT PLAN - LOTS 2-B, 24-26, 40-42
3	10182 "	3	LOTS 27-30
4	10178 "	4	LOTS 9-23
5	10174 "		
6	10170 "		
7	10162 "		
8	10158 "		
9	10154 "		
10	10150 "		
11	10146 "		
12	10142 "		
13	10134 "		
14	10130 "		
15	10126 "		
16	10122 "		
17	10137 "		
18	10141 "		
19	10145 "		
20	10149 "		
21	10153 "		
22	10157 "		
23	10161 "		
24	10165 "		
25	10169 "		
26	10105 LAKESIDE COURT		
27	10109 "		
28	10113 "		
29	10117 "		
30	10121 "		
31	10125 "		
32	10129 "		
33	10133 "		
34	10137 "		
35	10120 "		
36	10116 "		
37	10112 "		
38	10108 "		
39	10104 "		
40	10177 MAXINE STREET		
41	10181 "		
42	10185 "		
43	10189 "		

SITE DEVELOPMENT PLAN

CENTENNIAL LAKE

2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



- GENERAL NOTES**
- THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION, 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK, AT 792-7272.
 - THE LAND INCLUDED IN THIS PLAN IS ZONED R-20.
 - THERE ARE 43 BUILDABLE LOTS AND 4 OPEN SPACE LOTS.
 - THE TOTAL AREA INCLUDED IN THIS PLAN IS 23.00 ACRES.
 - ANY DAMAGE TO THE COUNTY RIGHTS-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 - ALL ROADS ARE PUBLIC AND EXISTING.
 - PLAT REFERENCE: N^o 6760, 6761, 6762 & 6763.
 - PUBLIC WATER AND SEWER SERVICE IS PROVIDED UNDER CONTRACT 24-14-35 D.
 - STREET TREES ARE REQUIRED IN THIS DEVELOPMENT AND SHALL BE PLANTED ALONG ALL PUBLIC RIGHTS-OF-WAY IN ACCORDANCE WITH SECTION 16.13 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. STREET TREE PLANTING IS THE RESPONSIBILITY OF J.J.M. INC., 5570 STERRETT PLACE, SUITE 201, COLUMBIA, MD, 21044 UNDER ROAD CONTRACT F-86-B1.
 - REFERENCE: S-86-04, P-86-21, F-86-B1, ZB-744
- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT.
 - INSTALL SEDIMENT CONTROLS SHOWN ON THIS PLAN (2 DAYS).
 - PERFORM ROUGH GRADING AND ANY OTHER REMAINING CONSTRUCTION (1 WEEK).
 - STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES (3 DAYS).
 - UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROLS (2 DAYS).
 - STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES (1 DAY).

SITE ANALYSIS

TOTAL AREA OF PARCEL EXISTING ZONING	23.00 AC.
TOTAL NUMBER OF RESIDENTIAL LOTS	43
OPEN SPACE REQUIRED	3.33 AC.
OPEN SPACE PROVIDED	4.25 AC.

LOT SIZE		NO. OF LOTS	AREA OF LOTS IN ACRES	MANDATORY OPEN SPACE PROVISIONS	AREA OF OPEN SPACE IN ACRES	AREA OF OPEN SPACE PROVIDED IN ACRES
20,000 OR LARGER	7	3.37	19	0.20	.80	
18,000 - 19,999	6	2.59	19	0.26	.08	
16,000 - 17,999	7	2.72	20	0.34	2.45	
14,000 - 15,999	23	3.22	30	2.33	.92	
TOTALS	43	16.43			4.25	

GROSS AREA		NET AREA	NO. OF DWELLING UNITS ALLOWED	FLOODPLAIN LOT ADJUSTMENT	TOTAL NO. OF D.U. ALLOWED	TOTAL NO. OF D.U. PROPOSED	DENSITY PER ACRE
23.00 AC.	0	23.00 AC.	43	0	0	43	1.87

- LEGEND**
- EXISTING CONTOURS
 - PROPOSED CONTOURS
 - SPOT ELEVATIONS
 - BUILDING RESTRICTION LINE
 - EARTH DIKE
 - LIMIT OF DISTURBANCE
 - STONE FILTER INLET PROTECTION
 - STABILIZED CONSTRUCTION ENTRANCE
 - SILT FENCE
 - DRAINAGE AREA

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."
 _____ DATE 11-7-86
 DEVELOPER

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."
 _____ DATE 11-7-86
 ENGINEER

REVIEWED FOR HOWARD S.C.D.
 AND MEETS TECHNICAL REQUIREMENTS
 _____ DATE 11-17-86
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 _____ DATE 11-17-86
 HOWARD S.C.D.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
 _____ DATE 11-24-86
 COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
 _____ DATE 11-25-86
 PLANNING DIRECTOR

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 _____ DATE 11-25-86
 DIRECTOR

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 _____ DATE 11-25-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 _____ DATE 11-25-86
 DIRECTOR

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 _____ DATE 11-25-86
 CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER/DEVELOPER: J.J.M. INC.
 STE 201, 5570 STERRETT PLACE
 COLUMBIA, MARYLAND 21045

BUILDER: F.G. MARKER CO.
 STE. 707, 5900 PENACROSS GARDEN PKWY.
 LANHAM, MARYLAND 20801

PROJECT: SECTION ONE
CENTENNIAL LAKE
 LOTS 2 THRU 43

AREA: TAX MAP NO 90 PARCEL B
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE:
SITE DEVELOPMENT PLAN
 SINGLE-FAMILY DETACHED UNITS

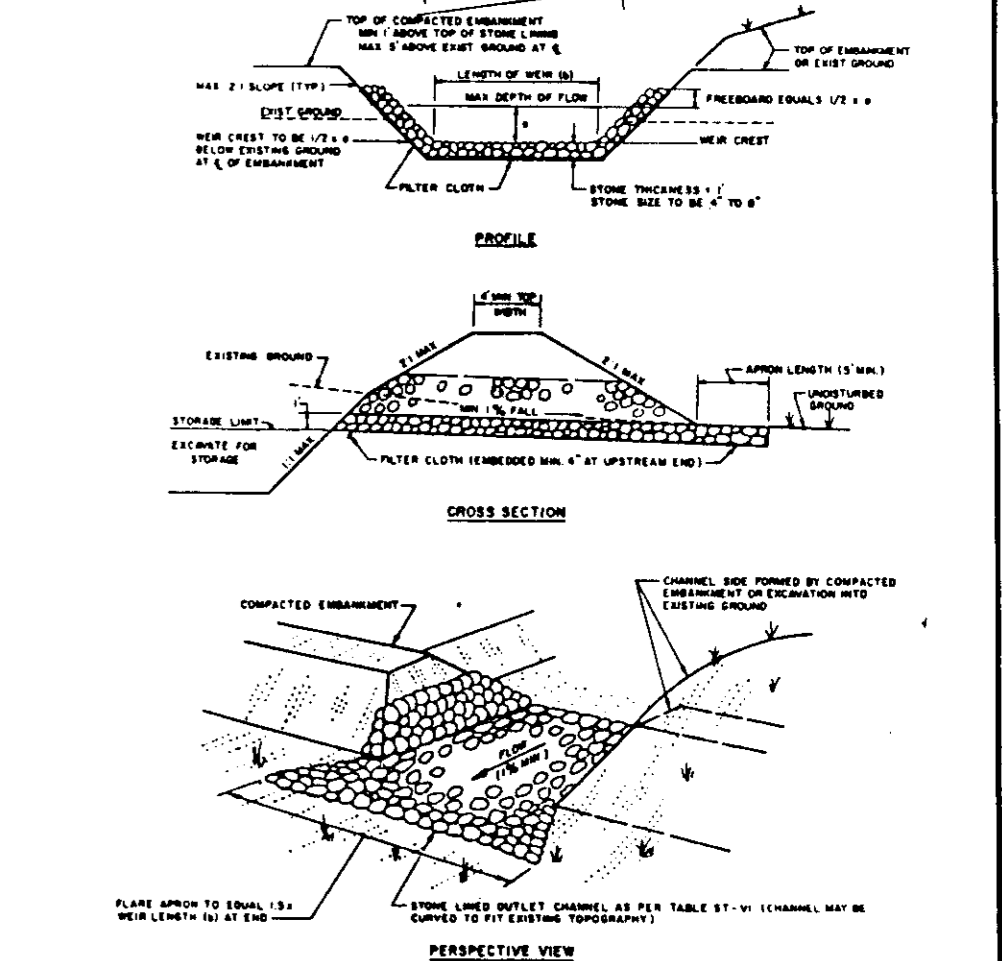
THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 Heath Park Drive, Ellicott City, Maryland 21043 (301) 461-2660

DATE: 11-7-86
 PLAT NO'S 6760-6763
 DESIGNED BY: T.D.F.
 DRAWN BY: J.G.R.
 PROJECT NO: 32000
 DATE: OCT. 6, 1986
 SCALE: AS SHOWN
 DRAWING NO. 1 OF 4

PROPERTY OF CHATEAU BUILDERS, INC. 1394/455 ZONED R-20

CONSTRUCTION SPECIFICATIONS FOR ST-11

- The 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 or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
- All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
- Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
- Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
- Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
- Stone used in the outlet channel shall be four (4) to eight (8) inches (riprap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
- Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected after each rain and repaired as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
- Drainage area for this practice is limited to 15 acres or less.



RIP-RAP OUTLET SEDIMENT TRAP

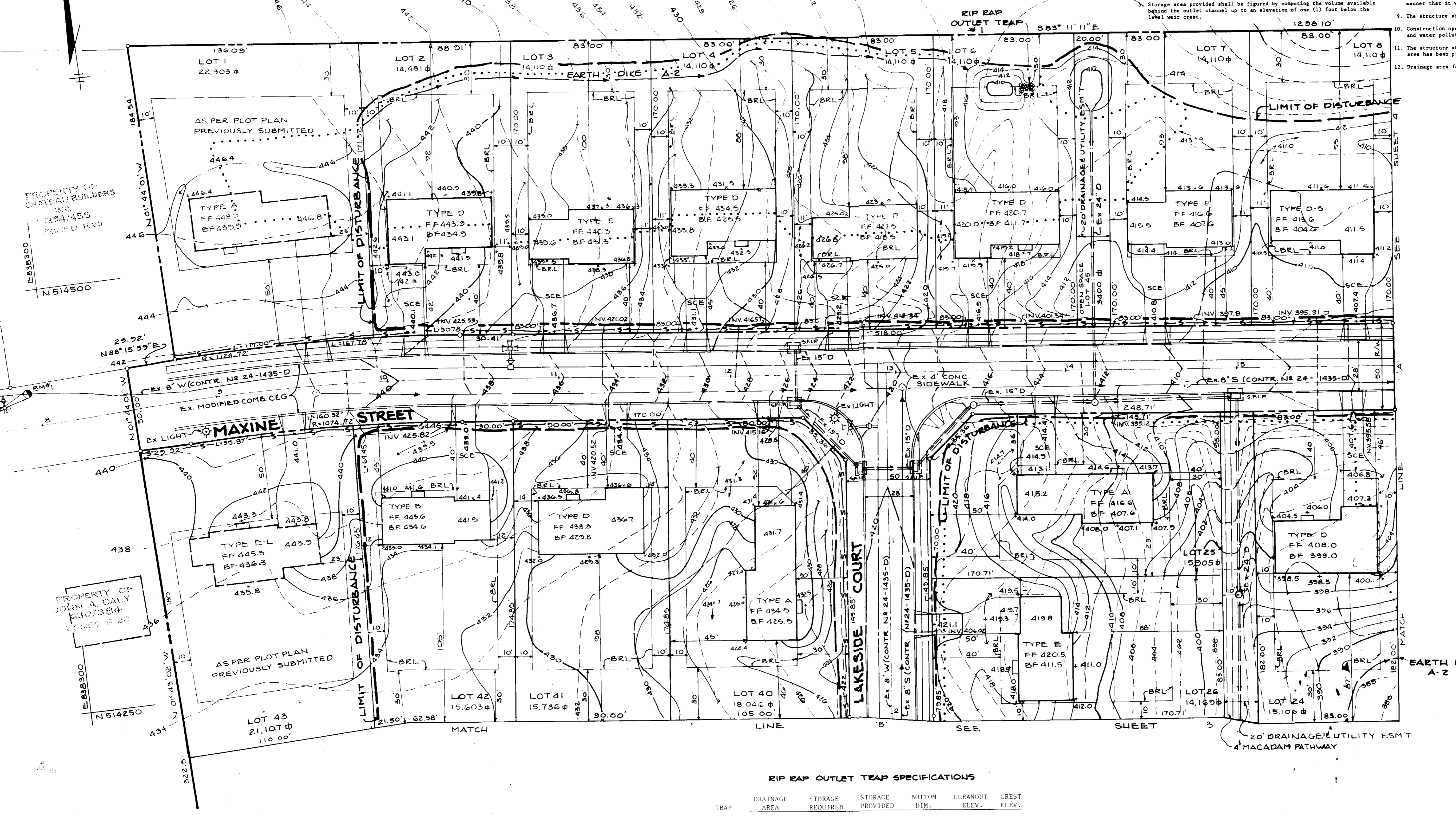
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
James G. Miller 11-24-86
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Thomas J. Davis 11-25-86
 PLANNING DIRECTOR DATE

John M. Mueggel 11-25-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

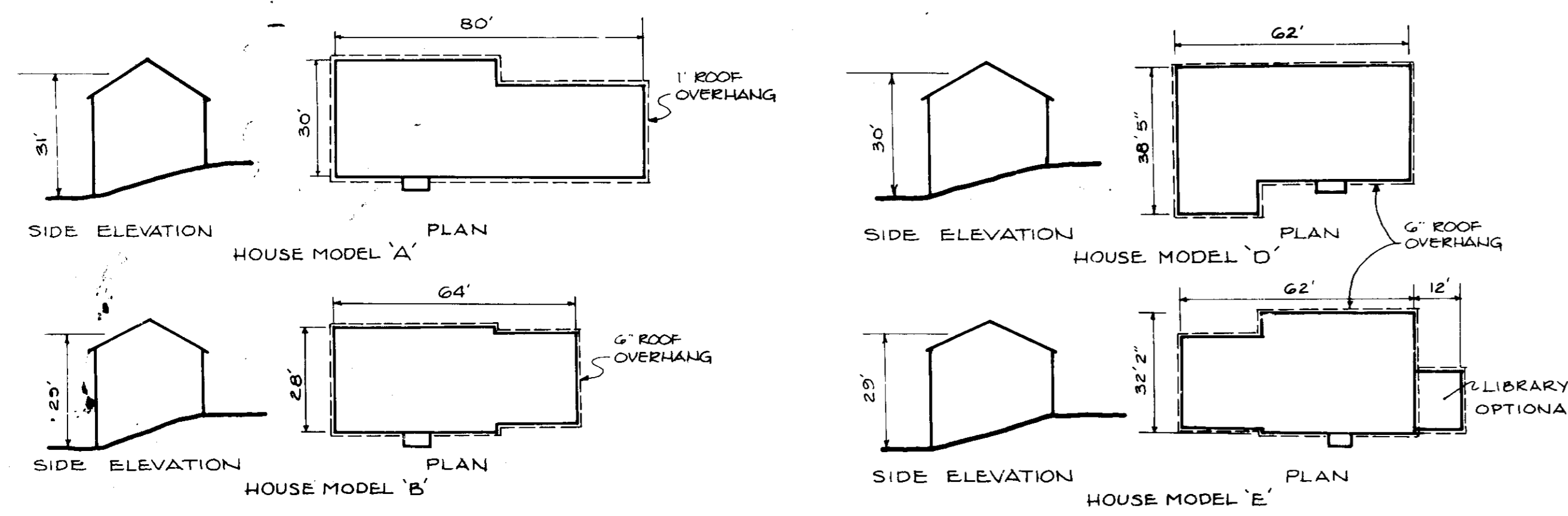
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul E. Nimmer 11-24-86
 DIRECTOR DATE

William E. Reilly 11-25-86
 CHIEF, BUREAU OF ENGINEERING DATE



RIP-RAP OUTLET TRAP SPECIFICATIONS

TRAP	DRAINAGE AREA	STORAGE REQUIRED	STORAGE PROVIDED	BOTTOM DIM.	CLEANOUT ELEV.	CREST ELEV.
1	0.91	1,638	1,564	16' X 8'	412	414
2	2.09	3,762	3,776	30' X 16'	384	386
3	2.42	4,356	4,496	14' X 18'	380	382
4	2.88	5,184	5,464	38' X 21'	386	388
5	0.99	1,782	1,792	18' X 8'	415	417
6	1.29	2,322	2,528	22' X 12'	416	418



BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENTATION BEFORE BEGINNING THE PROJECT."

REVIEWED FOR HOWARD S.C.D.
 AND MEETS TECHNICAL REQUIREMENTS
James M. Miller 11-17-86
 U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Stephen J. Fisher 11-17-86
 HOWARD S.C.D. DATE

Carl M. Marker 11/7/86
 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."
Arthur E. Mueggel 11-7-86
 ENGINEER DATE

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 11-3-86
John M. Mueggel

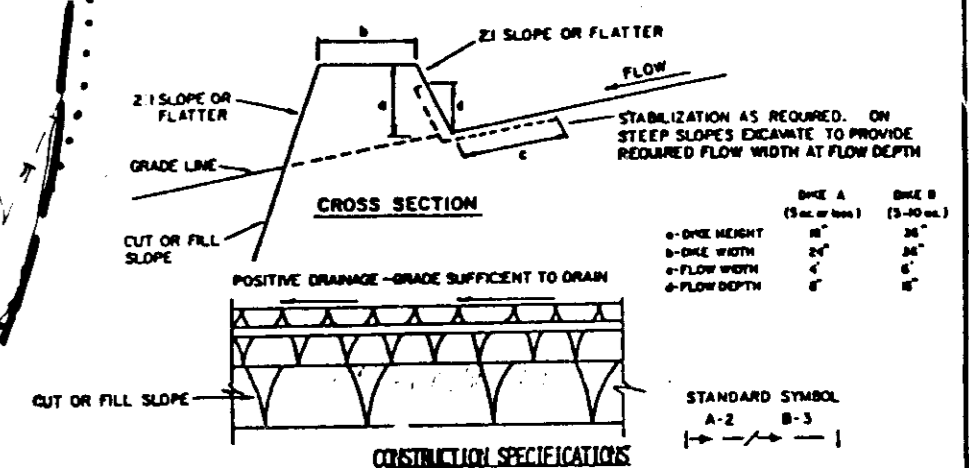
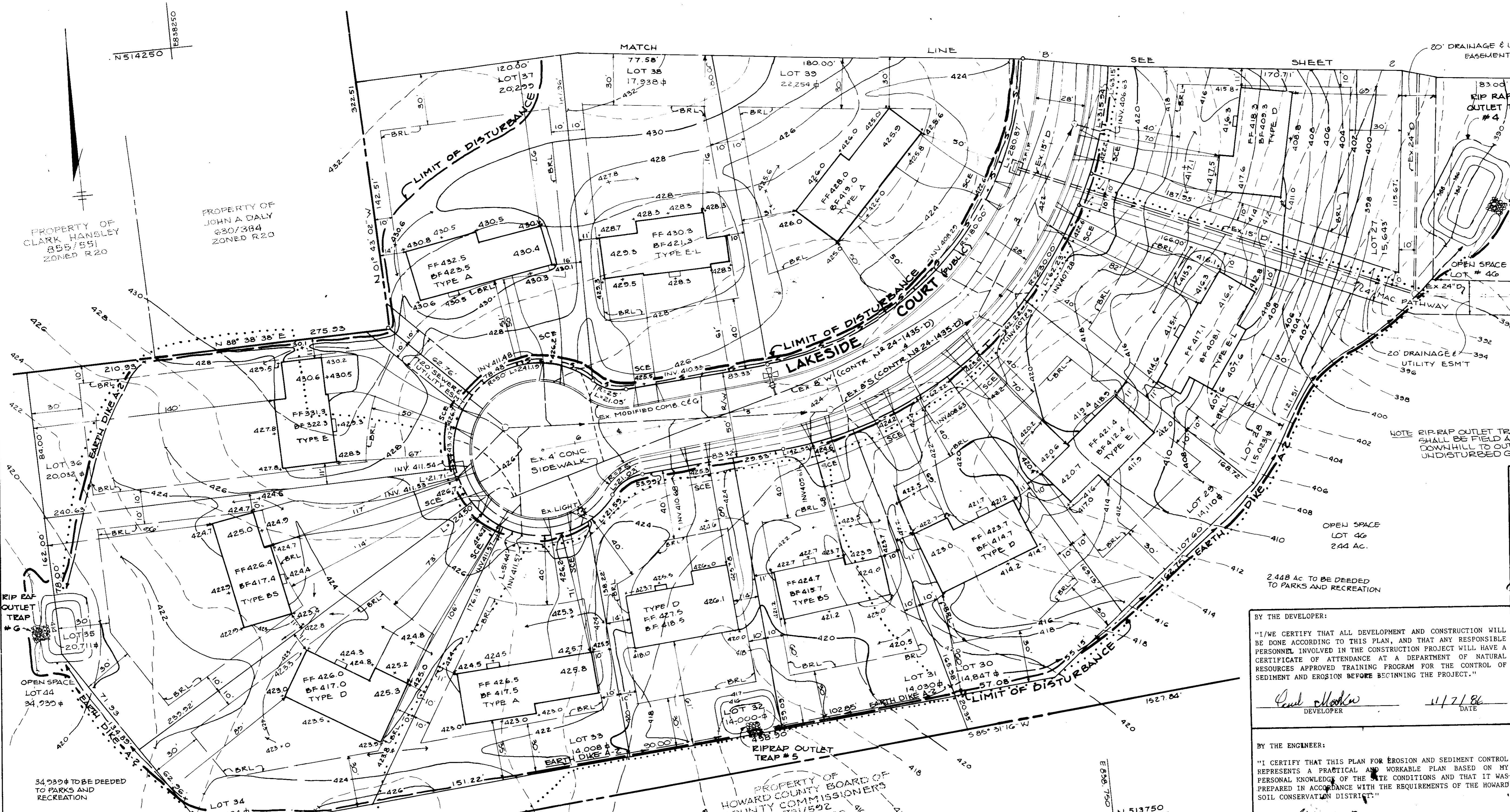
PROJECT SECTION ONE
CENTENNIAL LAKE
 LOTS 2 THRU 43

AREA TAX MAP 30 PARCELS B
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE:
SITE DEVELOPMENT PLAN
 SINGLE FAMILY DETACHED UNITS

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2690

DATE 11-2-86
 PLAT N# 3 6700 - 6703
 DESIGNED BY T.D.F.
 DRAWN BY J.G.R.
 PROJECT NO. 32000
 DATE OCT. 6, 1986
 SCALE: 1" = 30'
 DRAWING NO. 2 OF 4



CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE CONSTRUCTED BY EARTH-POURING 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 SHALL BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF PROBLEMS. PLANTS SHALL BE PLANTED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR REEDBANK WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT POSITIVELY STABILIZED.
- STABILIZATION SHALL BE IN ACCORDANCE WITH BROADBANK SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN BEEDING SEASON. SEE FLOW CHANNEL AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL	DISE A	DISE B
1	5-3.0X	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0X	SEED AND STRAW MULCH	SEED USING JUTE, OR EQUIVALENT; SOIL 2" STONE
3	5.1-8.0X	SEED WITH JUTE, OR SOIL	LINED RIP-RAP 4-8"
4	8.1-10X	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

EARTH DIKE
No Scale

NOTE: RIP-RAP OUTLET TRAP #4 SHALL BE FIELD ADJUSTED DOWNHILL TO OUTLET ON UNDISTURBED GROUND.

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

John P. ... 11-24-86
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
Thomas J. ... 11-25-86
DATE

John M. ... 11-25-86
DATE

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

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John ... 11-25-86
DATE

John ... 11-25-86
DATE

BY THE DEVELOPER:
"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."
Paul ... 11/7/86
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 COUNTY SOIL CONSERVATION DISTRICT."
Arthur E. Muegge 11-7-86
ENGINEER DATE

REVIEWED FOR *HOWARD* S.C.D. NAME
AND MEETS TECHNICAL REQUIREMENTS
John ... 11-17-86
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Stephen L. ... 11-17-86
HOWARD S.C.D. DATE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 11-3-86
John ...

DATE	NO.	REVISION

OWNER/DEVELOPER: J.J.M. INC.
57E 201, 5570 STEPKETT PLACE
COLUMBIA, MARYLAND 21044
FG, MARKER CO.

BUILDER: STE. 707, PRINCESS GARDEN PKWY
LANHAM, MARYLAND 20801

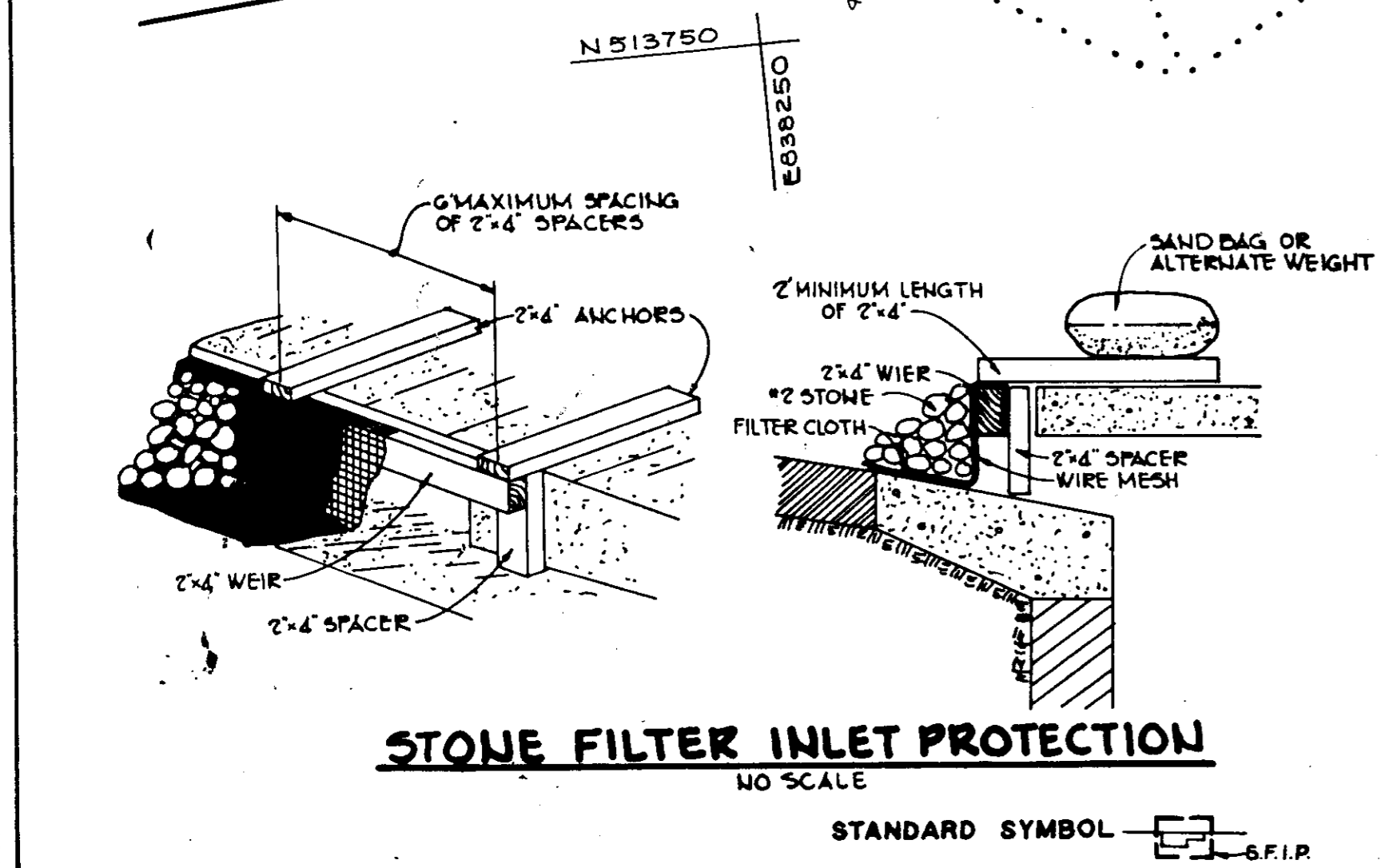
PROJECT: SECTION ONE
CENTENNIAL LAKE
LOTS 2 THRU 43

AREA TAX MAP 30 PARCEL B
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN
SINGLE FAMILY DETACHED UNITS

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3108 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2680

DATE: 11-7-86	PLAT NO: 6700-6703
DESIGNED BY: T.D.F.	
DRAWN BY: J.G.R.	
PROJECT NO: 32000	
DATE: OCT 6, 1986	
SCALE: 1"=30'	
DRAWING NO. 3 OF 4	



- Curb Inlet Protection.
 - Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
 - Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
 - Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
 - Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 - The assembly shall be placed so that the 2x4 spacers are a minimum 1" beyond both ends of the throat opening.
 - Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
 - This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 - Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

TEMPORARY SEEDING NOTES
Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

Soil Amendments: Apply 800 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) where soil is highly acidic; apply dolomitic limestone at the rate of 1 ton per acre.

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 of emulsified asphalt on flat areas. On slopes (8 feet or higher, use 3/8 gallon per acre (8 gal./1000 sq.ft.) for anchoring.

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

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 140 lbs. per acre of annual type (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-thrashed 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 gallons of emulsified asphalt on flat areas. On slopes (8 feet or higher, use 3/8 gallon per acre (8 gal./1000 sq.ft.) for anchoring.

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

SEEDING PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

SOIL AMENDMENTS: Apply 0-20-20 fertilizer at the rate of 800 lbs. per acre. Harrow or disc (line and 0-20-20 fertilizer into the soil to a minimum depth of 3". Lawn or high maintenance areas will be dragged with a vert. rake. At the time of seeding, apply 400 lbs. of 10-0-0 ureaform fertilizer and 500 lbs. of 10-20-20 or equivalent fertilizer per acre.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 40 lbs. per acre (1 lb./1000 sq.ft.) of a mixture of certified 'Merion' Kentucky bluegrass; common Kentucky bluegrass @ 40 lbs. per acre (1 lb./1000 sq.ft.) and Red Fescue, Pennium or Jamestown @ 20 lbs. per acre (0.5 lb./1000 sq.ft.) for the period May 1 thru July 31, seed with 40-40-20 mix as specified above and 2 lbs. per acre (0.05 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 40-40-20 mix as specified above and mulch with 2 tons/acre well-anchored straw.

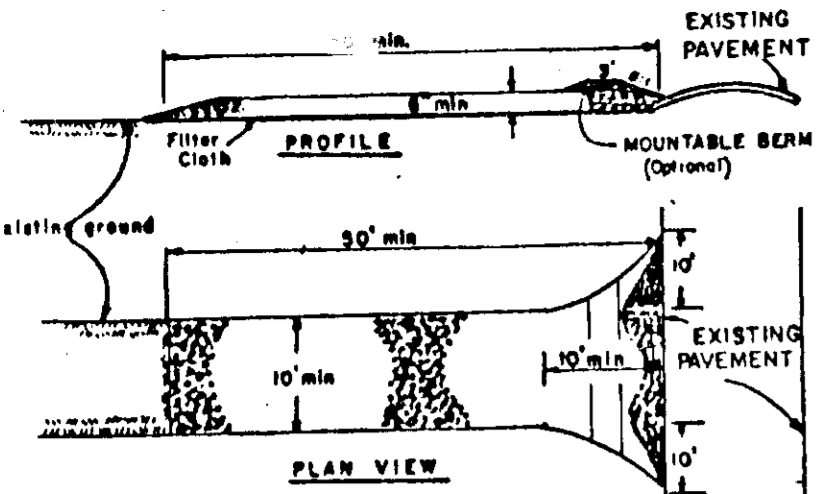
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons of emulsified asphalt on flat areas. On slopes (8 feet or higher, use 3/8 gallon per acre (8 gal./1000 sq.ft.) for anchoring.

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

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 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.
- 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) and (Sec. 54), temporary seedings (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	23.0 acres
Area Disturbed	22.7 acres
Area to be roofed or paved	17.2 acres
Area to be vegetatively stabilized	11.3 acres
Total Cut	21,500 cu. yds.
Total Fill	23,500 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 controls must be provided, if deemed necessary by the Howard County DPM 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 the clean out elevation shown on the plans.

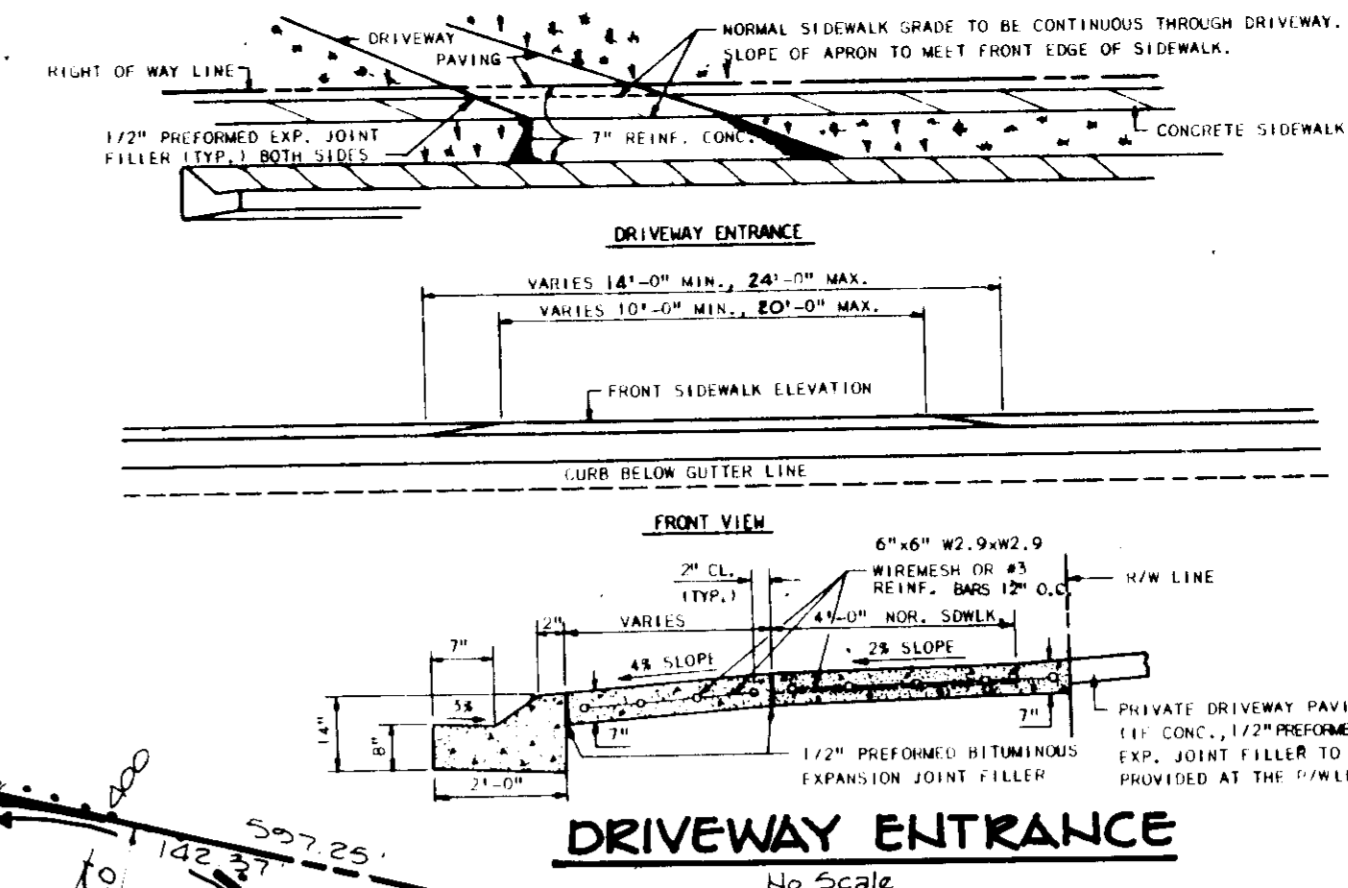


CONSTRUCTION SPECIFICATIONS

- Stone Size - 2" stone, or specified or recycled concrete equivalent.
- Length - As required, but not less than 30 feet (except on a single residence lot where a 20 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Two (2) foot 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 entrance shall be piped across the entrance. If pipes are lateral, entrance shall be sealed with 2" slopes will be specified.
- 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 cleaning of any measures used to trap sediment. All sediment applied, 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 event.

STABILIZED CONSTRUCTION ENTRANCE

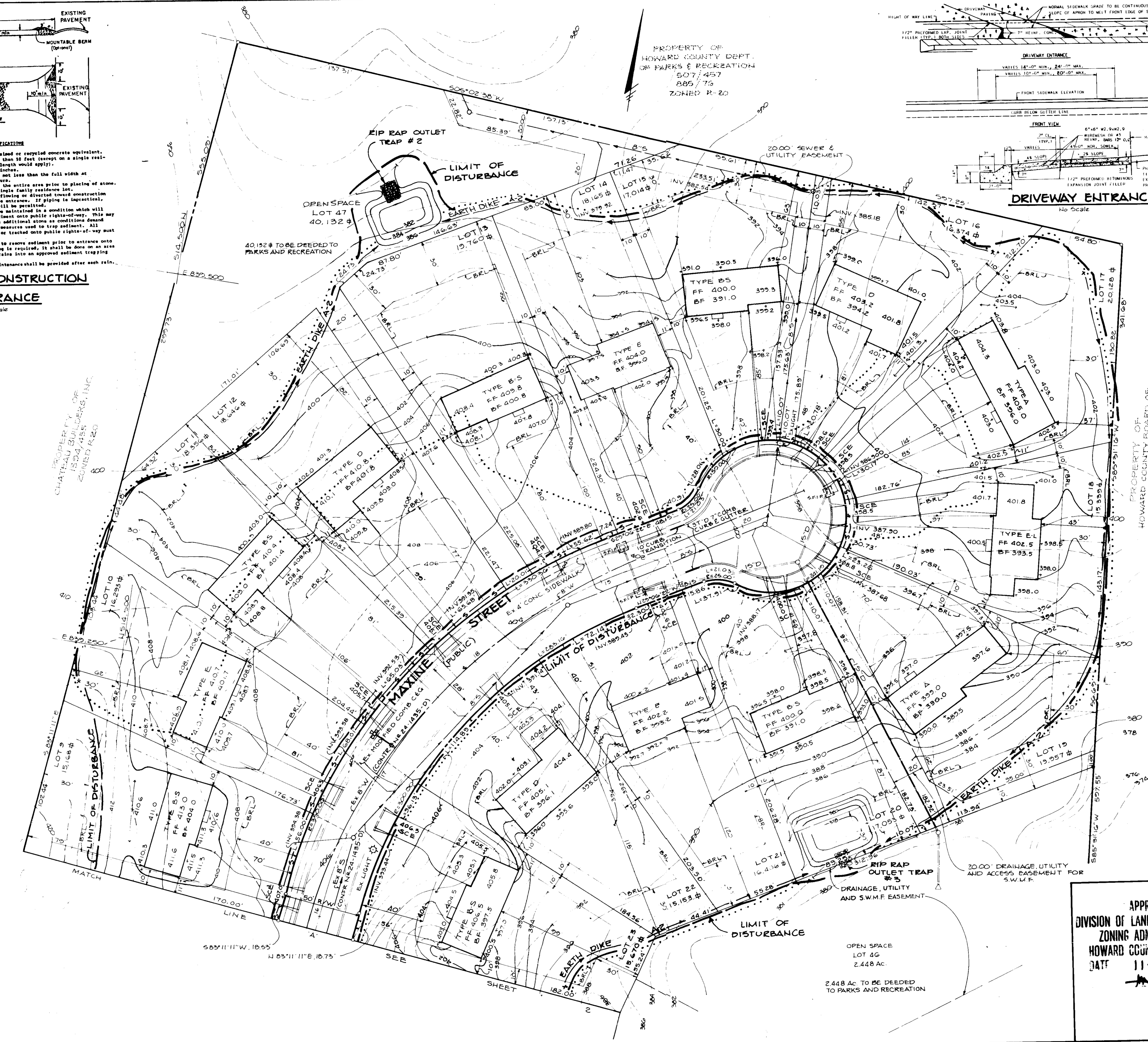
No Scale



DRIVEWAY ENTRANCE

No Scale

PROPERTY OF HOWARD COUNTY DEPT. OF PARKS & RECREATION
507/457
889/716
ZONED R-20



PROPERTY OF HOWARD COUNTY BOARD OF COUNTY COMMISSIONERS
723/592
ZONED R-20

BY THE DEVELOPER:
11/17/86
DATE

BY THE ENGINEER:
11/17/86
DATE

REVIEWED FOR HOWARD COUNTY S.C.D.
AND MEETS TECHNICAL REQUIREMENTS
11-17-86
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.
11-24-86
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
11-25-86
DATE

11-25-86
DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
11-13-86
DATE

DATE	NO	REVISION

OWNER/DEVELOPER: JJK INC
SUITE 201, 5570 STERRETT PLACE
COLUMBIA, MARYLAND 21045

BUILDER: FG MARKER CO.
5200 PRINCESS GARDEN PKWY
SUITE 707, LANHAM, MARYLAND 20681

PROJECT: SECTION ONE
CENTENNIAL LAKE
LOTS 2 THRU 25

AREA: TAX MAP N# 30 PARCEL B
258 ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE:
SITE DEVELOPMENT PLAN
SINGLE FAMILY DETACHED UNITS

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2990

11-7-86
DATE

DESIGNED BY: T.D.F.
DRAWN BY: J.G.R.
PROJECT NO: 32000
DATE: OCT 6, 1986
SCALE: 1" = 30'
DRAWING NO: 4 OF 4

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 11-3-86