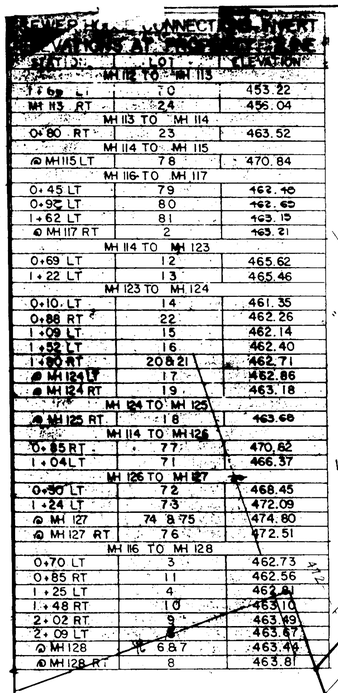
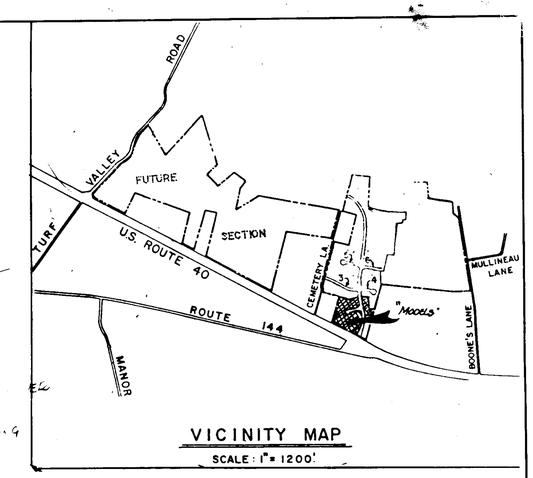
SEWER HOUSE CONNECTION ELEVATIONS AT PROPERTY LINE

STATION	LOT	ELEVATION
MH 112 TO MH 113		
1+62	10	453.22
MH 113 RT	24	456.04
MH 113 TO MH 114		
0+80 RT	23	463.52
MH 114 TO MH 115		
@ MH115 LT	78	470.84
MH 116 TO MH 117		
0+45 LT	79	462.10
0+95 LT	80	462.65
1+62 LT	81	463.15
@ MH 117 RT	2	463.21
MH 114 TO MH 123		
0+69 LT	12	465.62
1+22 LT	13	465.46
MH 123 TO MH 124		
0+10 LT	14	461.35
0+88 RT	22	462.26
1+09 LT	15	462.14
1+52 LT	16	462.40
1+80 RT	20&21	462.71
@ MH 124 LT	17	462.86
@ MH 124 RT	19	463.18
MH 124 TO MH 125		
@ MH 125 RT	18	463.66
MH 114 TO MH 126		
0+85 RT	77	470.62
1+04 LT	71	466.37
MH 126 TO MH 127		
0+30 LT	72	468.45
1+24 LT	73	472.09
@ MH 127	74 & 75	474.80
@ MH 127 RT	76	472.51
MH 116 TO MH 128		
0+70 LT	3	462.73
0+85 RT	11	462.56
1+25 LT	4	462.81
1+48 RT	10	463.10
2+02 RT	9	463.49
2+09 LT	5	463.67
@ MH 128	6 & 7	463.44
@ MH 128 RT	8	463.81





VICINITY MAP

SCALE: 1" = 1200'

GENERAL NOTES

1.) STORM WATER MANAGEMENT UNDER F-87-229

1A) THE LAND INCLUDED IS ZONED R-20

2.) COORDINATES SHOWN ARE EXTENSIONS MADE FROM THE MARYLAND STATE PLANE COORDINATE SYSTEM. BEARINGS REFER TO THE TRUE NORTH AND ARE BASED ON HOWARD COUNTY GEODETIC SURVEY

3.) THE AREA COVERED IN THIS SUBMISSION IS LOCATED ON TAX MAP

4.) THE TOTAL AREA ON THIS PLAN IS 165,000 SQ. FT. (3.78 Ac.)

5.) ALL ROADS ARE PUBLIC AND EXISTING.

6.) ANY DAMAGE TO COUNTY OWNED RIGHT-OF-WAYS SHALL BE CORRECTED AT THE DEVELOPERS EXPENCE.

7.) TOTAL NUMBER OF LOTS IN THIS SUBMISSION ARE 11

8.) STREET TREES WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS BY THE DEVELOPER.

JACQUELIN O'DONNELL
133-472
EXISTING ZONING
R-20

ADDRESS CHART		
LOT NUMBER	STREET ADDRESS	
3	# 3086	PEBBLE BEACH DRIVE
4	# 3107	ODRAL COURT
5	# 3111	" "
7	# 3115	" "
8	# 3114	" "
9	# 3110	" "
10	# 3106	" "
11	# 3102	" "
78	# 3087	PEBBLE BEACH DRIVE
79	# 3091	" " "
81	# 3089	" " "

J. NELSON SULLIVAN
368-268
EXISTING ZONING
R-20

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 1-8-87

ENGINEERS CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Walter P. Rhoades 1/13/87
ENGINEER # 4549 DATE

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 DEPT. OF NATURAL RESOURCES APPROVED TRAINNING 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 BUILDER

Donald K. Rounds Jr. 1/14/87
SIGNATURE OF DEVELOPER/BUILDER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER 1-27-87 DATE

RECOMMENDED HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR 1-28-87 DATE
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION 1-28-87 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR 1-22-87 DATE
CHIEF BUREAU OF ENGINEERING 1-22-87 DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
SIGNATURE 1-16-87 DATE
U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
APPROVED 1/16/87 DATE

SUBDIVISION NAME	TURF VALLEY OVERLOOK
SECT./AREA	1 1
LOT/PARCEL #	85 7-11 78 79&81
PLAT #	7035-7036
BLOCK #	24
ZONE	R-20
TAX/ZONE MAP	16
ELEC. DIST.	2ND
CENSUS TR.	6022
WATER CODE	40-7
SEWER CODE	5992000

ENGINEERING
LANDSCAPE DESIGN
CONSTRUCTION CONTRACTING
DEVELOPMENT COST
PROPERTY DEVELOPMENT

LAND DESIGN ASSOCIATES
718 HIGHWOOD DRIVE
BALTIMORE, MD 21212

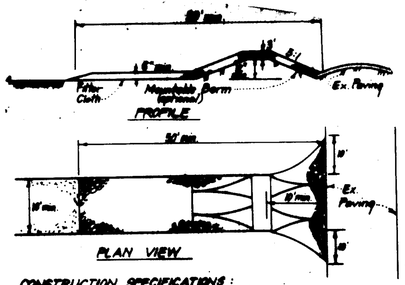
DESIGNED	R.L.W.
DRAWN	R.L.W.
CHECKED	R.L.W.
DATE	1/19/87

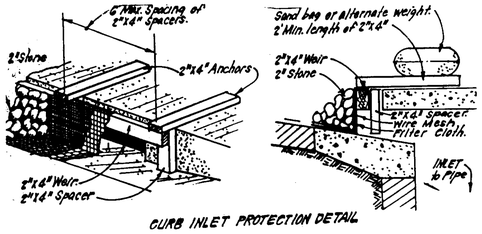
SITE DEVELOPMENT &
SEDIMENT CONTROL PLAN
TURF VALLEY OVERLOOK
SECTION ONE AREA ONE
LOTS 3-5, 7-11, 78, 79 & 81
SECOND ELECTION DISTRICT
HOWARD COUNTY, MD.

OWNER AND DEVELOPER :
PEDICORD PROPERTY CORP. 10176 BALTO. NAT. PIKE ELLICOTT CITY, MD 21043

SCALE	1"=30'
DRAWING	1 OF 2
JOB NO.	
FILE NO.	

SDP-87-85





CURB INLET PROTECTION DETAIL

II PROCEDURE: CURB INLET PROTECTION

1. Attach a continuous piece of wire mesh (specify min. width by throat length plus 4') to the 2"x4" weir (measuring throat length plus 2") as shown on std. drawing.
2. 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"x4" weir.
3. Securely nail the 2"x4" weir to 3' long vertical spacers to be located between the weir and inlet face (max. 6' apart).
4. Place the assembly against the inlet throat and nail (min. 2' lengths of 2"x4" to the top of the weir at spacer locations. These 2"x4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a min. 1' beyond both ends of throat opening.
6. From 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.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow to inlet.

INLET PROTECTION DETAIL (I.P.D.)

CONSTRUCTION SPECIFICATIONS:

1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply.
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) feet minimum, but not less than the full width of points where ingress or egress occurs.
5. 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.
6. 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.
7. 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 cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. Wheel washing is required, it shall be done on an area stabilized with stone and which drains into approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

NO SCALE

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. 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.
6. 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.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH.
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

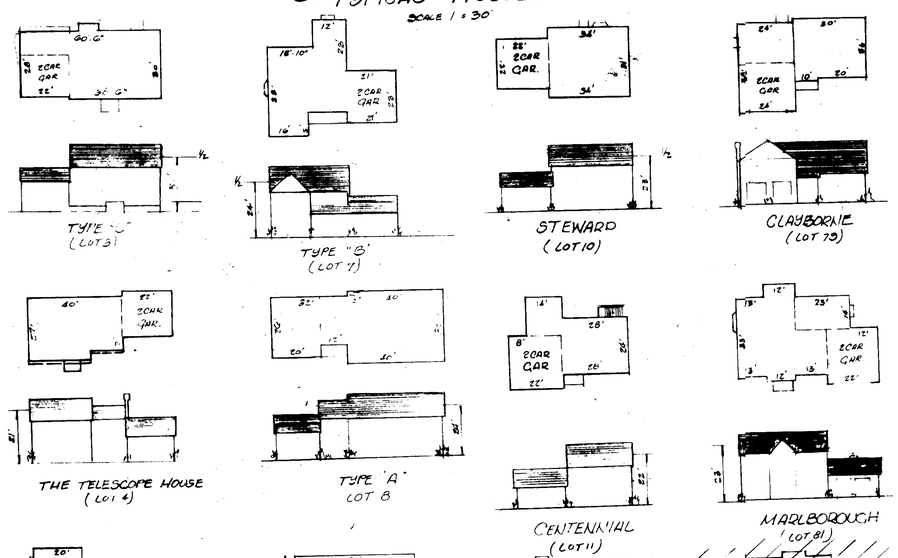
A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

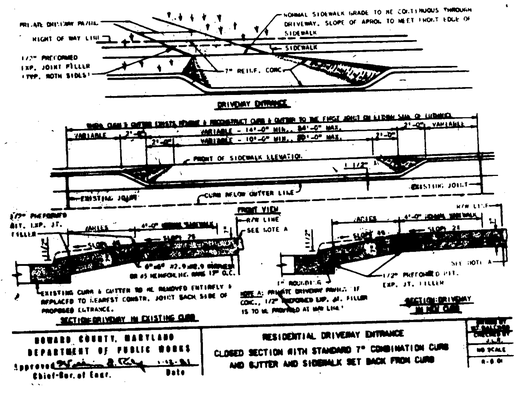
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE (E.D.)

~ TYPICAL HOUSES ~

SCALE 1 = 30'





APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 1-8-87

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.
DIRECTOR 1-27-87 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR 1-28-87 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION 1-28-87 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR 1-23-87 DATE
CHIEF BUREAU OF ENGINEERING 1-23-87 DATE

REVISED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
SIGNATURE 1-16-87 DATE
U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
APPROVED 1/16/87 DATE

SEDIMENT CONTROL NOTES

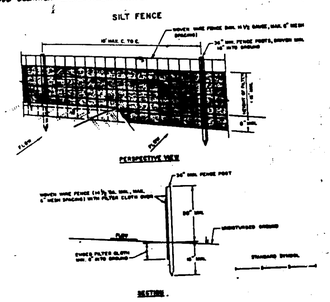
1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis:

Total Area of Site	3.78	Acres
Area Disturbed	3.78	Acres
Area to be roofed or paved	0.97	Acres
Area to be vegetatively stabilized	2.76	Acres
Total Cut	2600	Cu. yds
Total Fill	2600	Cu. yds
Offsite waste/borrow area location	N.A.	

8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11) If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented. N/A
12) All pipes to be blocked at the end of each day (see detail below).
13) The total amount of stone-bale-ditches/silt fence equals 110 L.F.

CONSTRUCTION SEQUENCE:

A. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.
B. Excavate for Foundations and Rough Grade & Temporarily Stabilize.
C. Construct Structures, Sidewalks and Driveways.
D. Final Grade and stabilize in accordance with Stds. & Specs.
E. Upon approval of the sediment control inspector, remove sediment and stream controls and stabilize.



DEVELOPERS/BUILDER'S CERTIFICATE

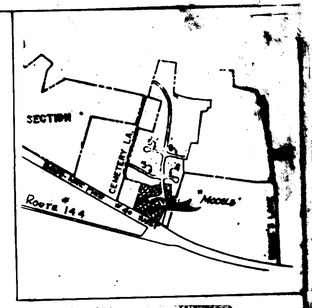
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONS INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINNING 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.

SIGNATURE OF DEVELOPER/BUILDER — 1/16/87 DATE

ENGINEERS CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Walter P. Hardee — 1/13/87 DATE



VICINITY MAP

SCALE 1" = 1200'

GENERAL NOTES

1.) STORM WATER MANAGEMENT UNDER F-87-229
2A) THE LAND INCLUDED IS ZONED R-20
2.) COORDINATES SHOWN ARE EXTENSIONS MADE FROM THE MARYLAND STATE PLANE COORDINATE SYSTEM. BEARINGS REFER TO THE TRUE NORTH AND ARE BASED ON HOWARD COUNTY GEODETIC SURVEY POINT NO. AND NO.
3.) THE AREA COVERED IN THIS SUBMISSION IS LOCATED ON TAX MAP
4.) THE TOTAL AREA ON THIS PLAN IS 165,000 SQ. FT. (3.78 Ac.)
5.) ALL ROADS ARE PUBLIC, AND EXISTING.
6.) ANY DAMAGE TO COUNTY OWNED RIGHT-OF-WAYS SHALL BE CORRECTED AT THE DEVELOPERS EXPENCE.
7.) TOTAL NUMBER OF LOTS IN THIS SUBMISSION ARE 11
8.) STREET TREES WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS BY THE DEVELOPER.

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:

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. 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 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 per acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw mulch.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted straw immediately after seeding. Anchor mulch immediately after application with 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.

Matinenance - 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 2½ 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 well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted straw immediately after seeding. Anchor mulch immediately after application with 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.

STATE OF MARYLAND — WALTER P. HARDEE — No. 4111 — PROFESSIONAL ENGINEER

ENGINEERING LANDSCAPE DESIGN CONSTRUCTION CONTRACTING DEVELOPMENT COST PROPERTY DEVELOPMENT	LAND DESIGN ASSOCIATES 716 RIDGWOOD DRIVE BALTIMORE, MD 21212
DESIGNED R.L.W.	SITE DEVELOPMENT & SEDIMENT CONTROL PLAN
DRAWN "	TURF VALLEY OVERLOOK
CHECKED R.L.W.	SECTION ONE AREA ONE LOTS 3-5, 7-11, 78, 79 & 81 SECOND ELECTION DISTRICT HOWARD COUNTY, MD.
DATE 1/19/87	OWNER AND DEVELOPER : PEDCORD PROPERTY CORP 10706 BALTO. NAT. PIKE ELLICOTT CITY, MD.
	SHEET 8 OF 8

SDP-87-85