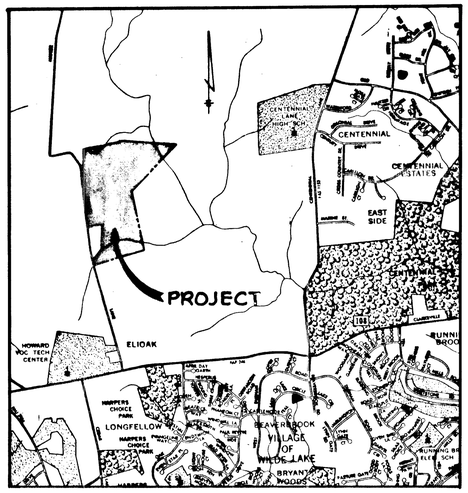
SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE OF ATHENA DRIVE
3	PLAN OF MANOR LANE, DETAILS & STORM DRAIN PROFILES
4	GRADING, SEDIMENT CONTROL & DRAINAGE AREA MAP
5	SEDIMENT CONTROL DETAILS

ROADWAY & STORM DRAIN

CARTHAGE MANOR

2 ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



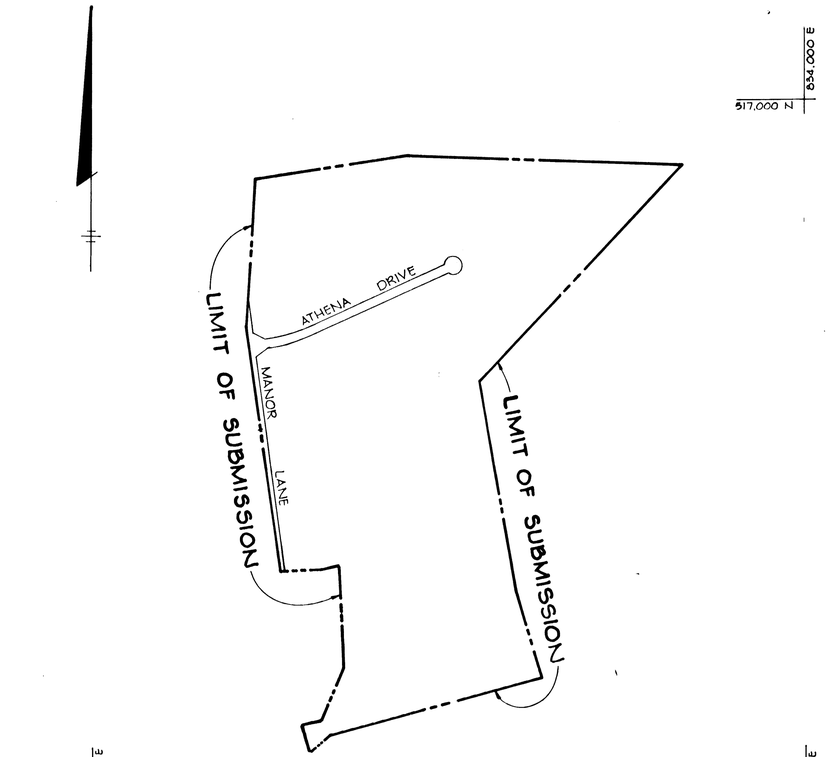
VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE STANDARD SPECIFICATIONS.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. 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.
3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC COMPANY	539-8000, EXT. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION	992-2417/2418

5. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 EDITION.
6. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
7. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS: ATHENA DRIVE: 30 M.P.H.
8. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
9. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% COMPACTION.
10. ALL PIPE ELEVATIONS SHOWN ARE INVERT ⌀ ELEVATIONS.
11. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
12. SUBJECT PROPERTY ZONED R PER 10-03-77 COMPREHENSIVE ZONING PLAN.



PLAN
SCALE: 1" = 400'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-28-81

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 5/13/81

DATE	NO.	REVISION
4-24-81	1	REVISED AS PER H.C. COMMENTS DATED 3-25-81

OWNER/DEVELOPER

MANOR LANE ASSOCIATES
9606 BELAIR ROAD
BALTIMORE, MARYLAND 21236

PROJECT:
CARTHAGE MANOR

AREA
2ND ELECTION DISTRICT HOWARD COUNTY, MD.
TAX MAP Nº 29 PARCEL 2

TITLE:
TITLE SHEET

Riemer · Tracy & Associates, Inc.
8659 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering

1-30-81
DATE

PROFESSIONAL ENGR. NO. 9566

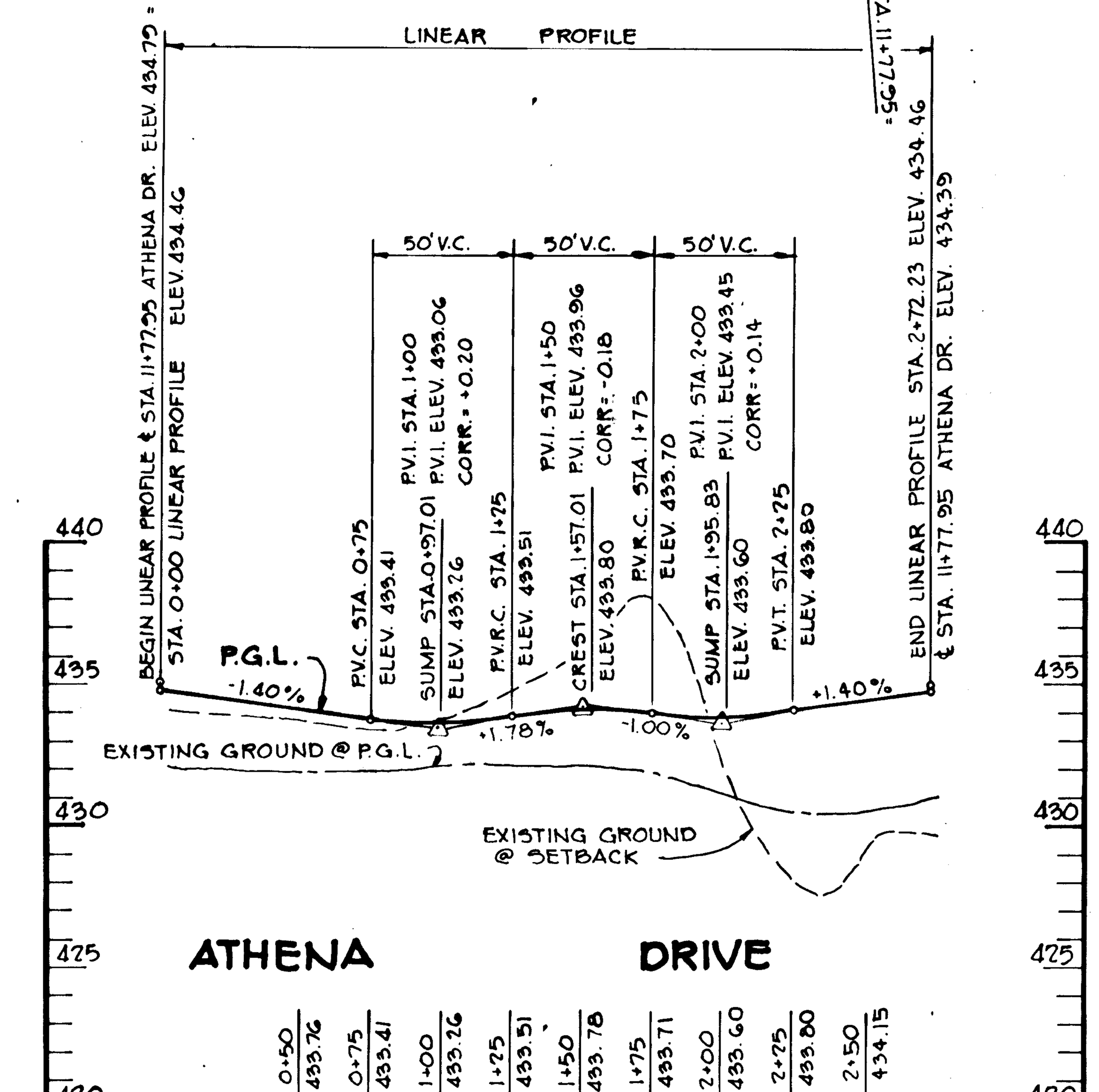
DESIGNED BY: L.J.D.	
DRAWN BY: T.E.S.	
PROJECT NO: 0980	
DATE: 1-30-81	
SCALE: 1"=400'	
DRAWING NO. 1 OF 5	

F-81-80

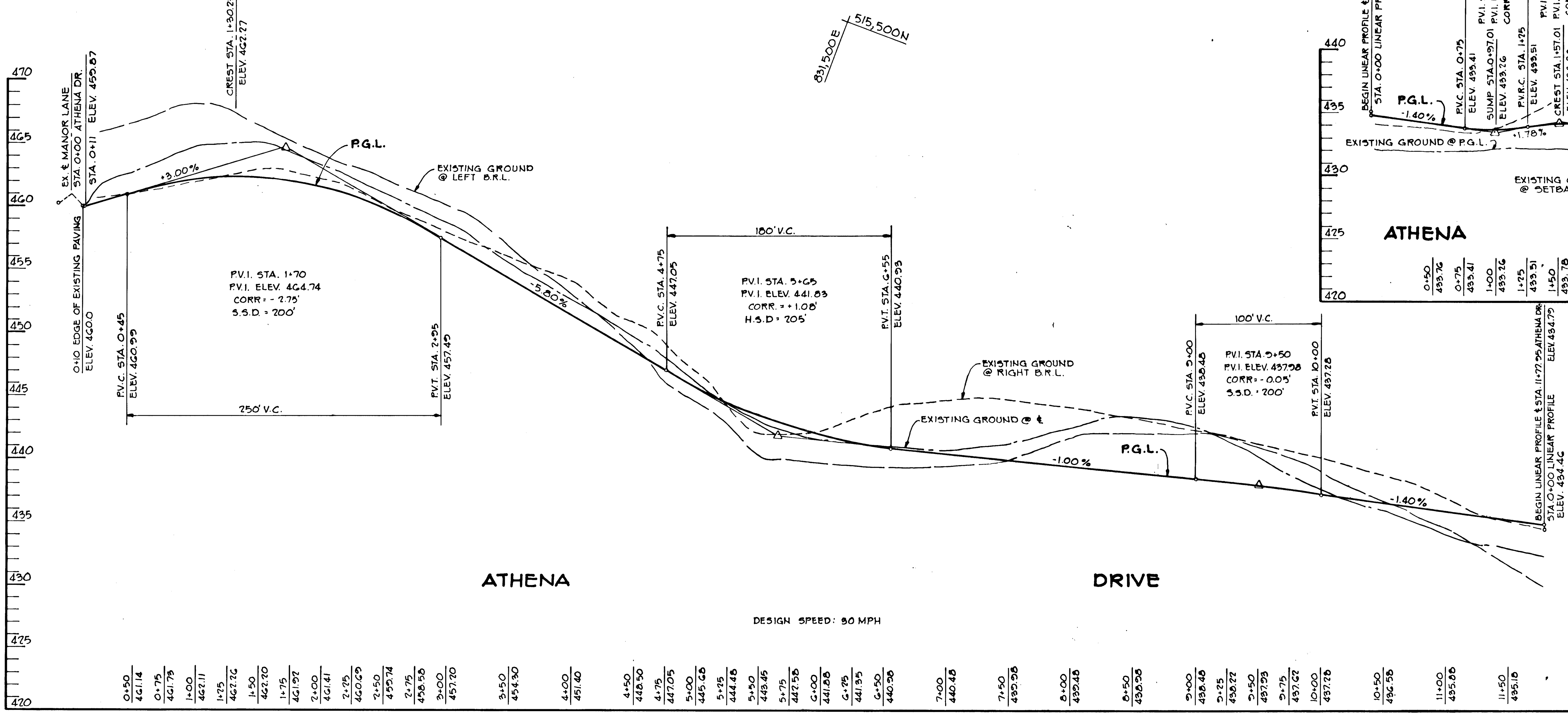
APRIL 24, 1981

℄ CURVE DATA
FROM ℄ STA. 1+15.00 TO ℄ STA. 3+45.17
Δ= 17°35'00"
R= 750.00'
L= 230.17'
T= 115.99'
Chd = N 72°02'45"E, 229.26'
CURVE① DATA
Δ= 52° 10'09"
R= 35.00'
L= 31.87'
T= 17.14'
CHD. = N 39°10'10"E, 30.78'
CURVE② DATA
Δ= 284° 20'18"
R= 40.00'
L= 198.51'
T= —
CHD. = N 24° 44'45"W, 49.07'
CURVE③ DATA
Δ= 52° 10'09"
R= 35.00'
L= 31.87'
T= 17.14'
CHD. = N 88° 39'41"W, 30.78'
NOTE:
FOR CONTINUATION OF MANOR LANE WIDENING SEE SHEET NO. 3
NOTE:
SLOPE PAVING AND GRADE AREA ALONG NORTHEAST EDGE TO PROVIDE POSITIVE DRAINAGE ACROSS INTERSECTION.
NOTE:
RESIDENTIAL DRIVEWAY ENTRANCES SHALL BE INSTALLED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL R-6.05
MANOR LANE
ATHENA DRIVE
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
℄ STA. 22+55= ℄ STA. 0+00
P.C. ELEV. 461.97
EL. 461.50
P.T. ELEV. 460.69
N 82°50'10"E
+46.00
P.T. ELEV. 460.69
EL. 459.82
P.C. ELEV. 458.57
EX. PAVING
14' TYP.
R=35
P.C. STA. 1+15.00
PT. STA. 3+45.17
N 65°15'15"E
831,500E
516,000N
20' DRAINAGE EASEMENT
END LINEAR PROFILE STA. ℄ STA. 11+77.95
30' DRAINAGE, UTILITY AND FLOODPLAIN ACCESS EASEMENT
3'-0" GRASSED SWALE
E-1
RIPRAP SEE DETAIL DRAWING NO. 3
N 65°15'15"E
64.23'
28 × 20" BCCMPA 16 Ga.
E-2
832,000E
516,000N
BEGIN LINEAR PROFILE ℄ STA. 11+77.95= STA. 0+00 L.P.
10' DRAINAGE EASEMENT

PLAN
Scale: 1"=50'



LINEAR PROFILE
BEGIN LINEAR PROFILE ℄ STA. 11+77.95 ATHENA DR. ELEV. 434.79 = STA. 0+00 LINEAR PROFILE ELEV. 434.46
END LINEAR PROFILE STA. 2+72.23 ELEV. 434.46 ℄ STA. 11+77.95 ATHENA DR. ELEV. 434.39
50' V.C.
50' V.C.
50' V.C.
P.V.C. STA. 0+75 ELEV. 433.41
SUMP STA. 0+97.01 ELEV. 433.26
P.V.I. STA. 1+00 P.V.I. ELEV. 433.06 CORR.= +0.20
P.V.R.C. STA. 1+25 ELEV. 433.51
CREST STA. 1+57.01 ELEV. 433.80
P.V.I. STA. 1+50 P.V.I. ELEV. 433.96 CORR.= -0.18
P.V.R.C. STA. 1+75 ELEV. 433.70
SUMP STA. 1+95.83 ELEV. 433.60
P.V.I. STA. 2+00 P.V.I. ELEV. 433.45 CORR.= +0.14
P.V.T. STA. 2+25 ELEV. 433.80
P.G.L.
-1.40%
+1.78%
-1.00%
+1.40%
EXISTING GROUND @ P.G.L.
EXISTING GROUND @ SETBACK
ATHENA DRIVE
0+50 433.76
0+75 433.41
1+00 433.26
1+25 433.51
1+50 433.78
1+75 433.71
2+00 433.60
2+25 433.80
2+50 434.15
440
435
430
425
420



EX. ℄ MANOR LANE STA. 0+00 ATHENA DR.
STA. 0+11 ELEV. 459.87
CREST STA. 1+30.23 ELEV. 462.27
0+10 EDGE OF EXISTING PAVING ELEV. 460.0
P.V.C. STA. 0+45 ELEV. 460.99
P.V.I. STA. 1+70
P.V.I. ELEV. 464.74
CORR= -2.75'
S.S.D. = 200'
P.V.T. STA. 2+95 ELEV. 457.49
250' V.C.
+3.00%
P.G.L.
EXISTING GROUND @ LEFT B.R.L.
-5.80%
P.V.C. STA. 4+75 ELEV. 447.05
180' V.C.
P.V.I. STA. 5+65
P.V.I. ELEV. 441.83
CORR. = +1.08'
H.S.D = 205'
P.V.T. STA. 6+55 ELEV. 440.93
EXISTING GROUND @ RIGHT B.R.L.
EXISTING GROUND @ ℄
-1.00%
P.G.L.
100' V.C.
P.V.C. STA. 9+00 ELEV. 438.48
P.V.I. STA. 9+50
P.V.I. ELEV. 437.98
CORR= -0.05'
S.S.D. = 200'
P.V.T. STA. 10+00 ELEV. 437.28
-1.40%
BEGIN LINEAR PROFILE ℄ STA. 11+77.95 ATHENA DR. ELEV. 434.79 STA. 0+00 LINEAR PROFILE ELEV. 434.46
ATHENA DRIVE
DESIGN SPEED: 30 MPH
470
465
460
455
450
445
440
435
430
425
420
0+50 461.14
0+75 461.73
1+00 462.11
1+25 462.26
1+50 462.20
1+75 461.92
2+00 461.41
2+25 460.69
2+50 459.74
2+75 458.58
3+00 457.20
3+50 454.30
4+00 451.40
4+50 448.50
4+75 447.05
5+00 445.68
5+25 444.48
5+50 443.45
5+75 442.58
6+00 441.88
6+25 441.35
6+50 440.98
7+00 440.48
7+50 439.98
8+00 439.48
8+50 438.98
9+00 438.48
9+25 438.22
9+50 437.93
9+75 437.62
10+00 437.28
10+50 436.58
11+00 435.88
11+50 435.18

PROFILE Scale: H: 1"=50' V: 1"=5'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible] 4-28-81
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] 5-13-81
CHIEF, BUREAU OF ENGINEERING — DATE

DATE	NO.	REVISION
4-24-81	1	REVISED AS PER H.C. COMMENTS DATED 3-25-81

OWNER / DEVELOPER

MANOR LANE ASSOCIATES
9606 BELAIR ROAD
BALTIMORE, MARYLAND 21236

PROJECT:
CARTHAGE MANOR

AREA
2ND ELECTION DISTRICT HOWARD COUNTY, MD.
TAX MAP Nº 29 PARCEL 2

TITLE:
PLAN AND PROFILE OF ATHENA DRIVE

Riemer · Tracy & Associates, Inc.
8659 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering

1-30-81
DATE

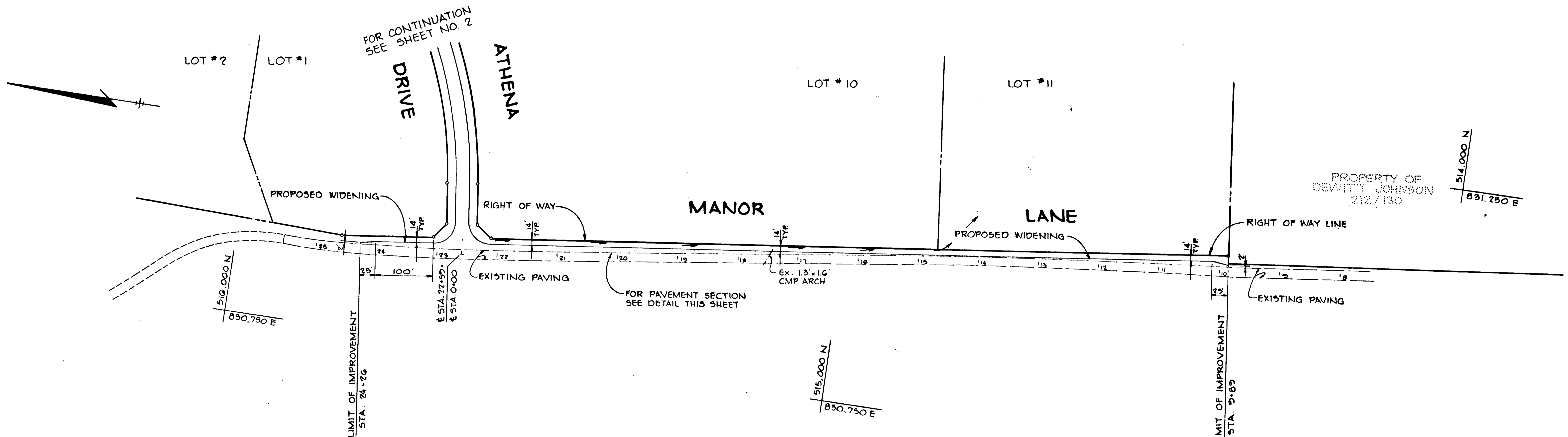
[illegible]
PROFESSIONAL ENGR. NO. 9566

DESIGNED BY: L.J.D.
DRAWN BY: T.E.S.
PROJECT NO: 0980
DATE: 1-30-81
SCALE: AS SHOWN
DRAWING NO. 2 OF 5

F-81-80

APRIL 24, 1981

900



PLAN
Scale: 1"=100'

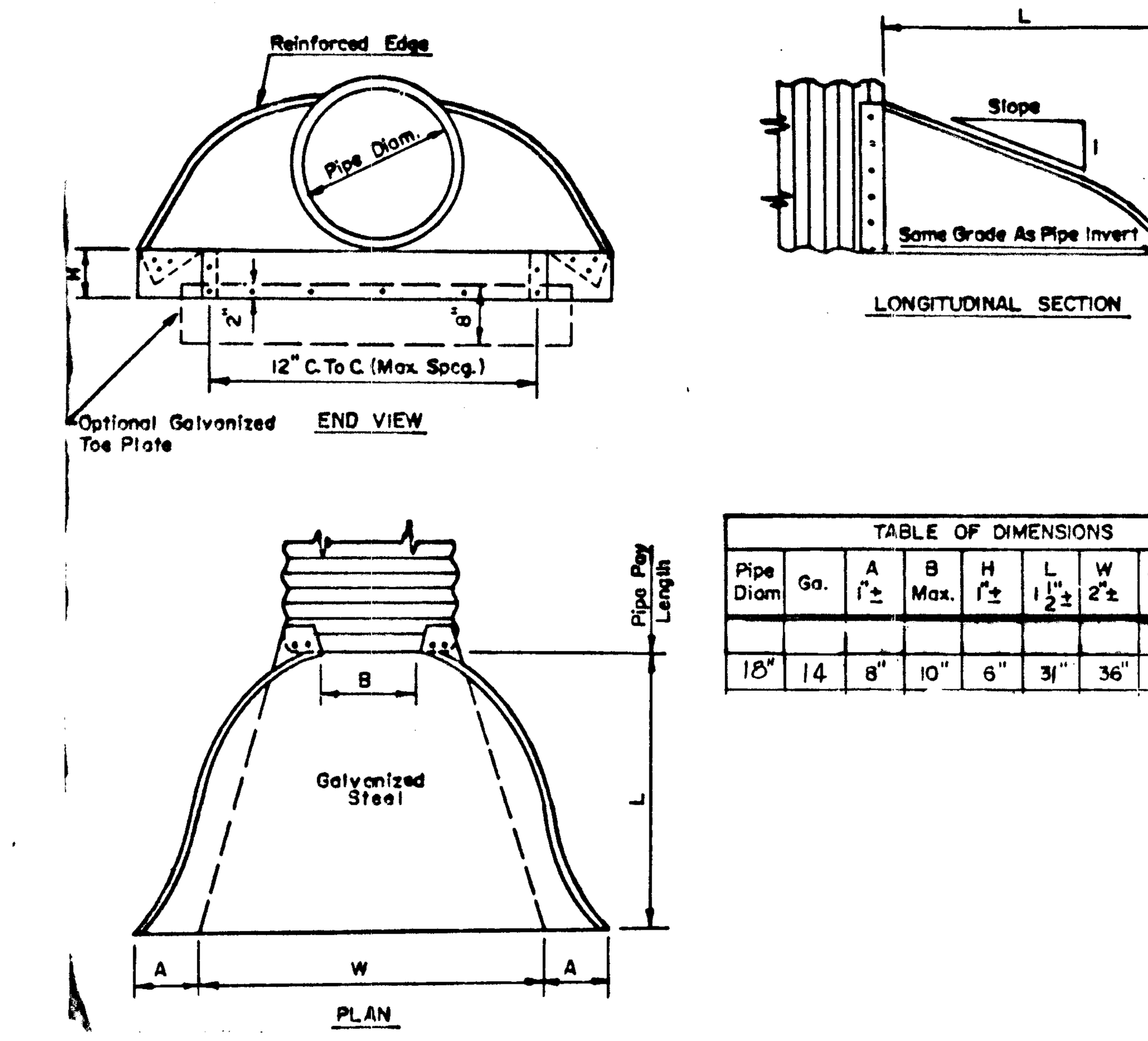
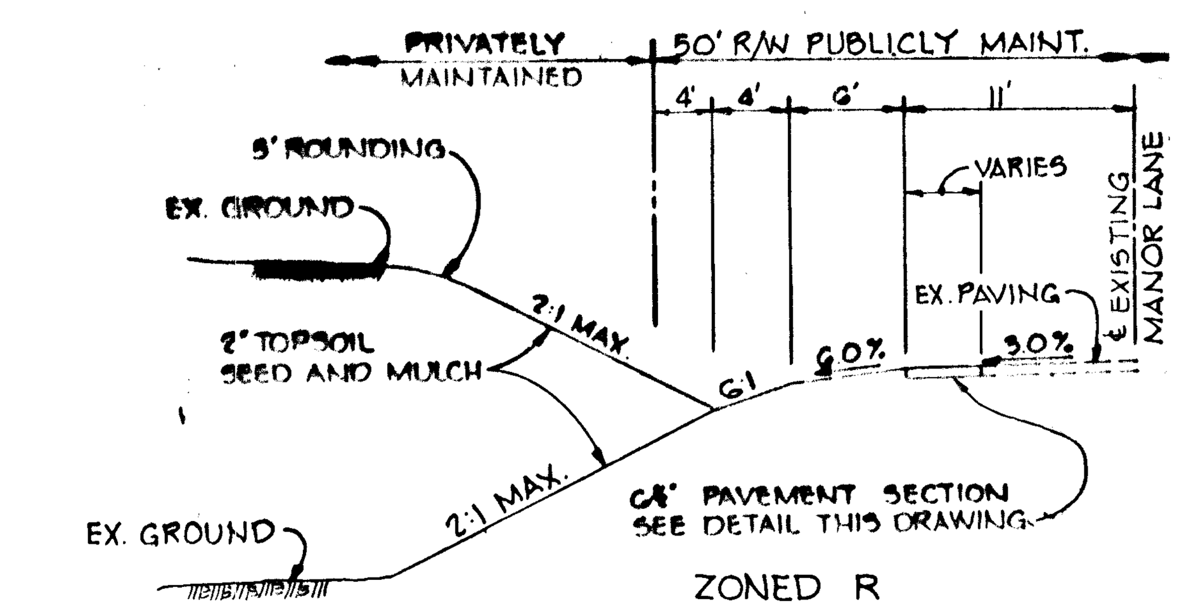


TABLE OF DIMENSIONS								
Pipe Diam	Ga.	A 1"±	B Max.	H 1"±	L 1½"±	W 2"±	Approx Slope	Body
18"	14	8"	10"	6"	31"	36"	2½	1Pc.

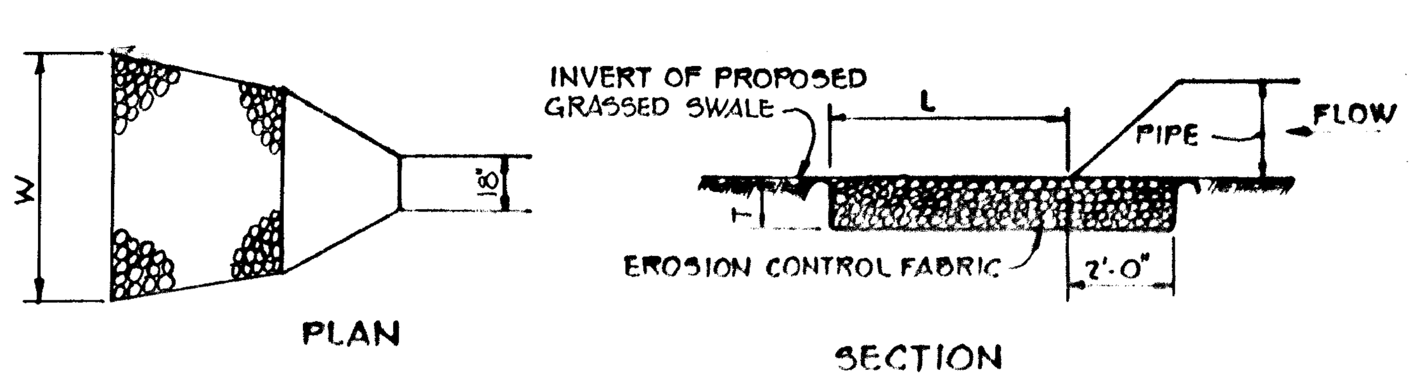
TYPICAL METAL END SECTION
No Scale



ZONED R
LOCAL ROAD

MANOR LANE WIDENING
STA. 9+89± TO STA. 24+26±

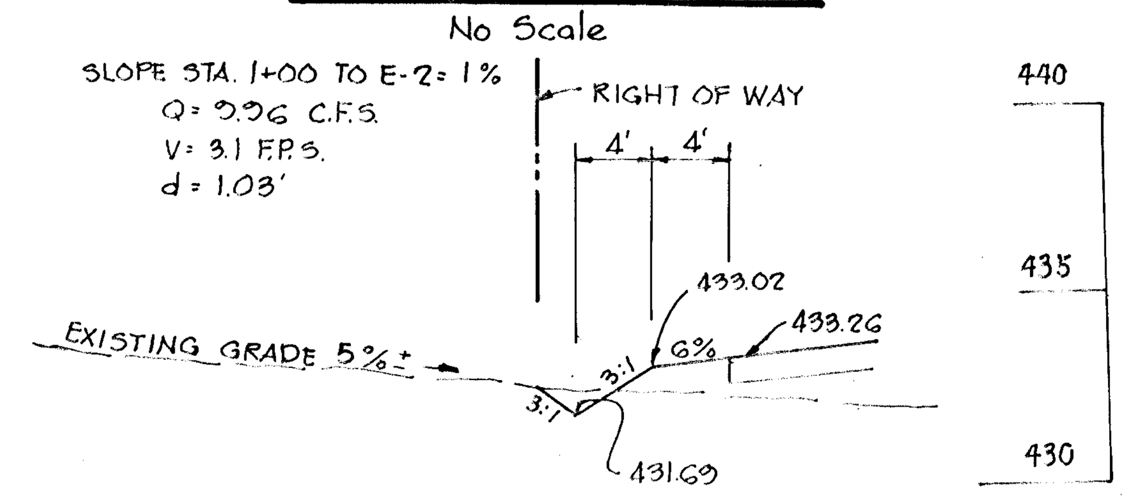
TYPICAL SECTION
No Scale



STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	5"	20'	3'	8"

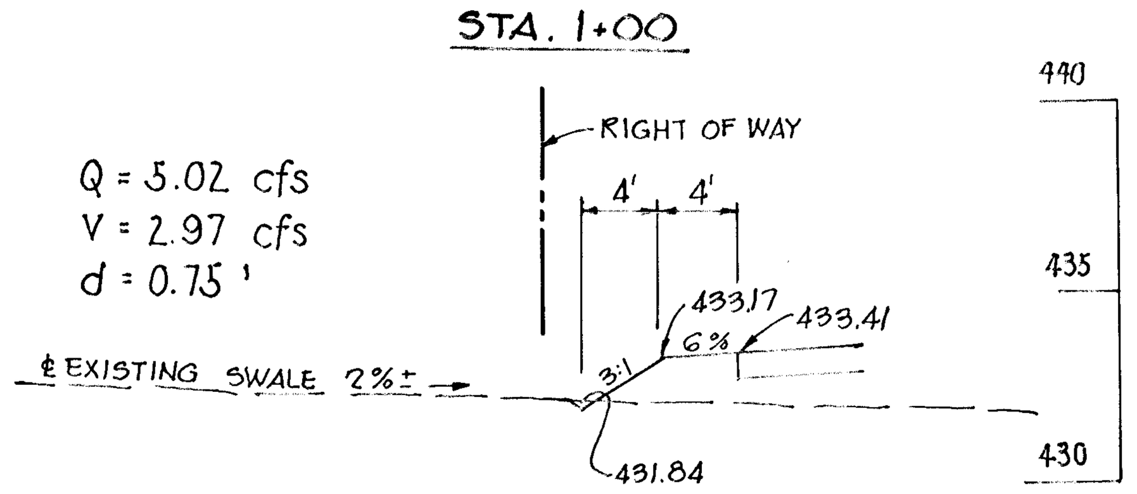
RIPRAP DETAIL
No Scale

SLOPE STA. 1+00 TO E-2 = 1%
Q = 9.96 C.F.S.
V = 3.1 F.P.S.
d = 1.03'



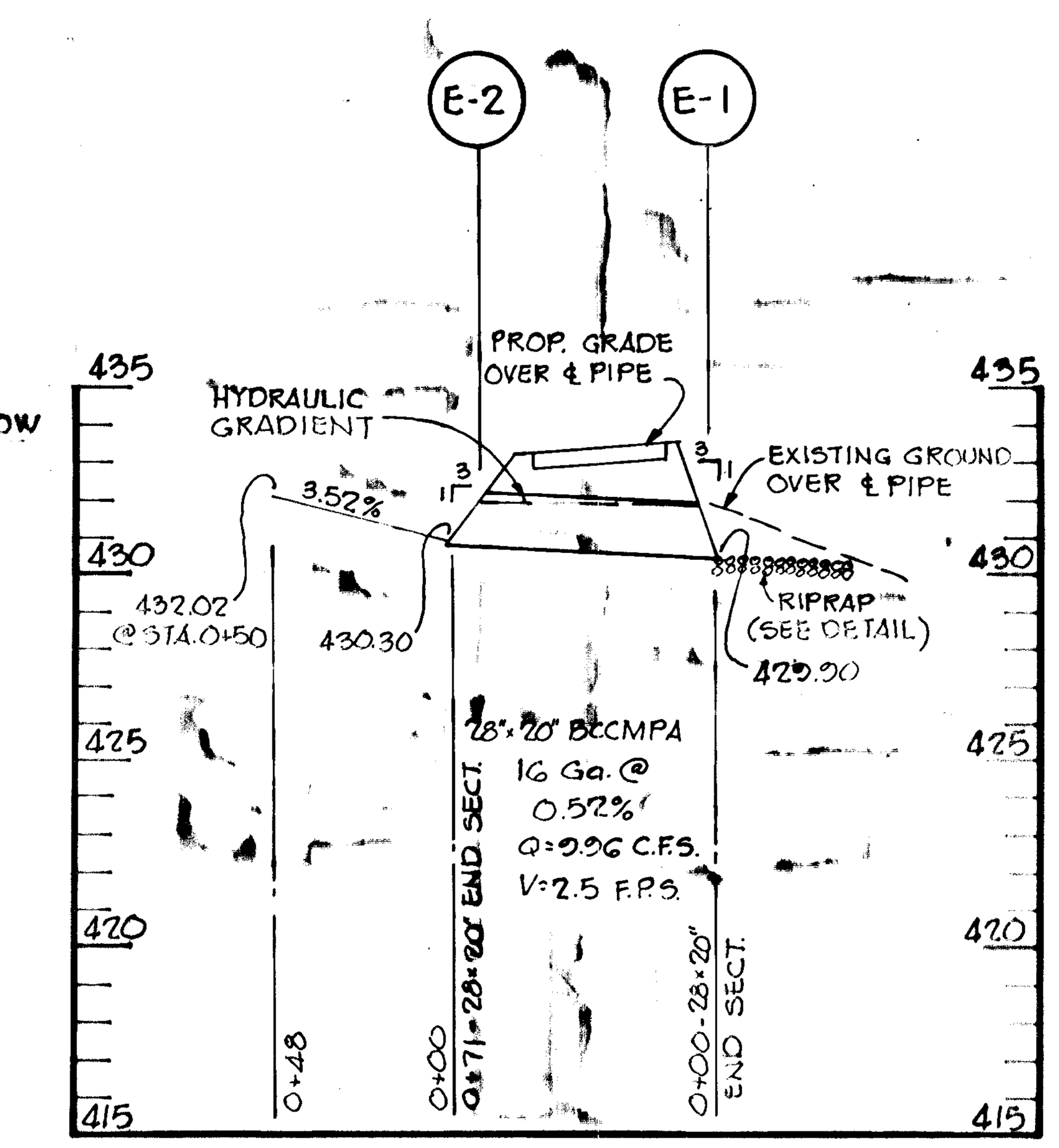
STA. 1+00

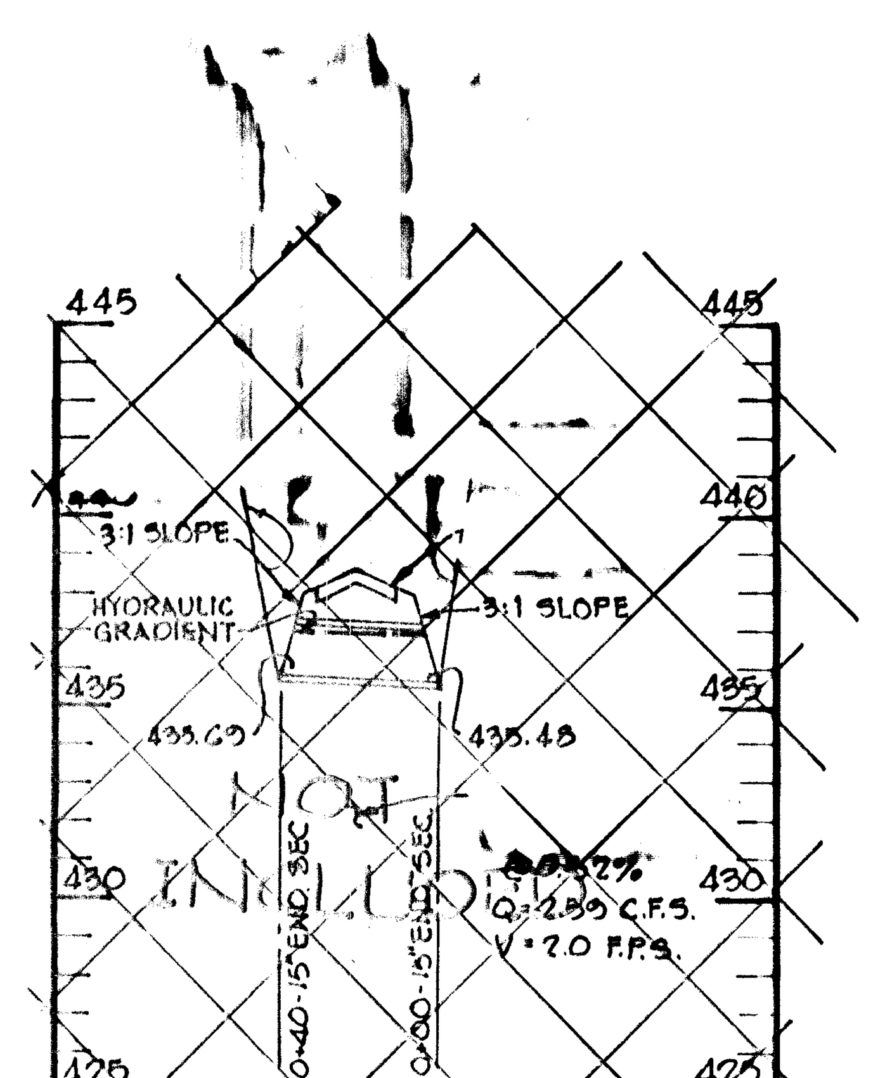
Q = 5.02 cfs
V = 2.97 cfs
d = 0.75'



STA. 0+75

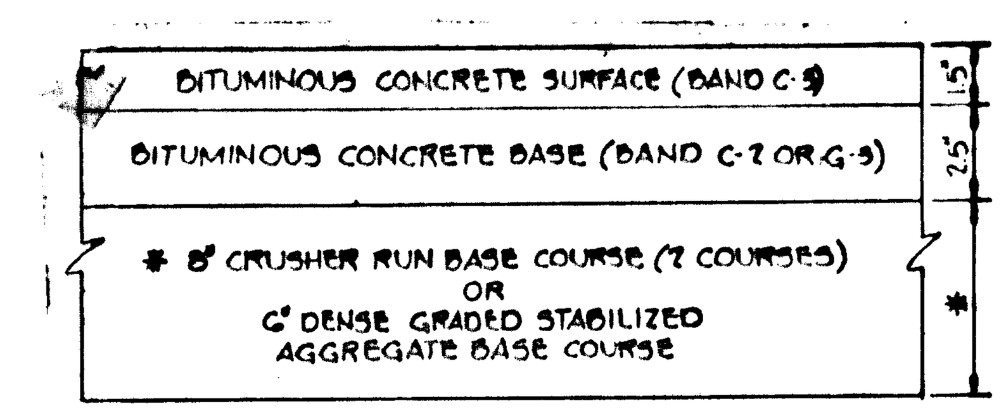
CUL-DE-SAC SECTIONS
SCALE: H: 1"=10' V: 1"=5'



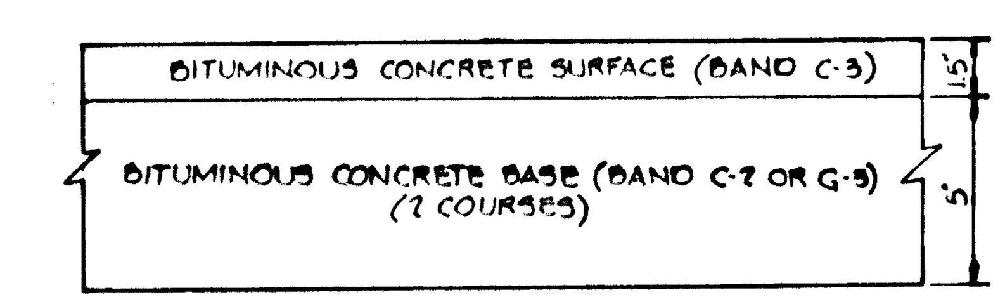


PROFILE
Scale: H: 1"=50' V: 1"=5'

ALL BEDDING SHALL BE CLASS 'C' UNLESS OTHERWISE SPECIFIED



(ALTERNATE PAVING)



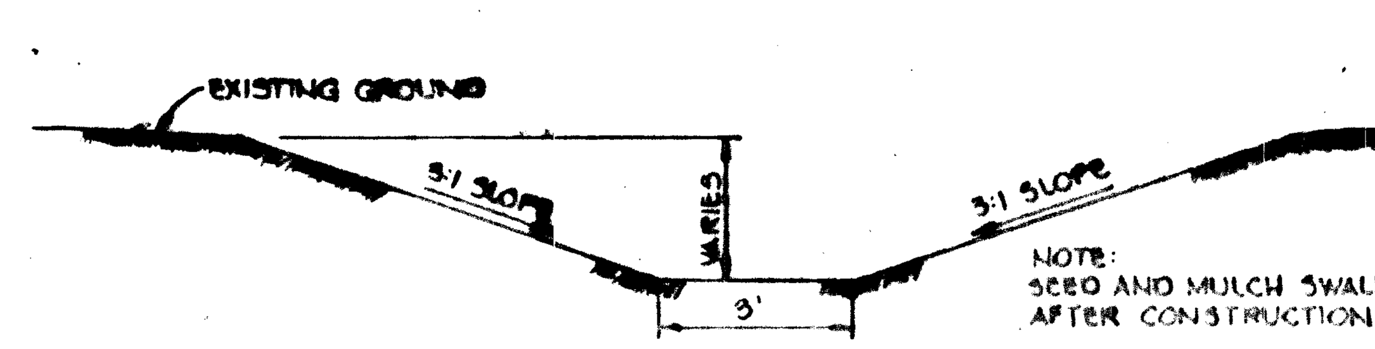
HOWARD COUNTY STANDARD (DRAWING NO. 8)

CLEARING AND GRADING	ARTICLE C-1
SUBGRADE	ARTICLE C-2
BASE COURSE	ARTICLE C-31 OR C-33
SURFACE COURSE	ARTICLE C-31

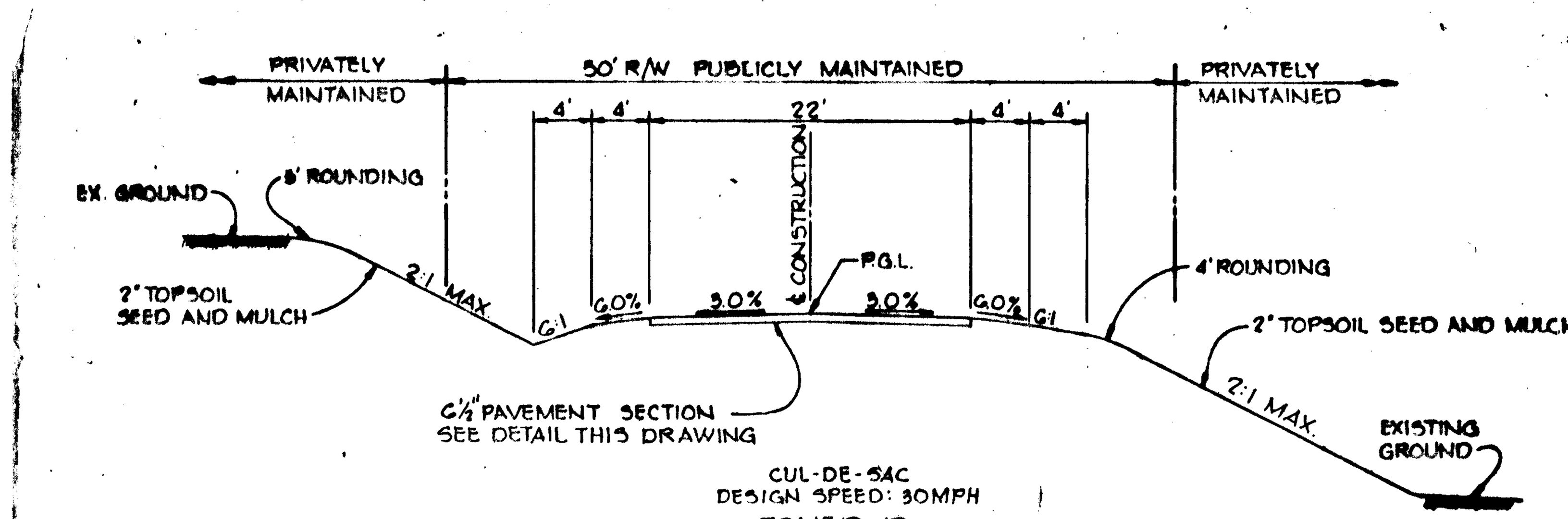
(6½" PAVING)

NOTES:
1. A TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
2. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-3 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
3. TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.

TYPICAL PAVING SECTION
No Scale



GRASSED SWALE
NO SCALE



CUL-DE-SAC
DESIGN SPEED: 30MPH
ZONED R

ATHENA DRIVE
STA. 0+46 TO STA. 11+77.95

TYPICAL SECTION - 50' R/W
No Scale

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[illegible] 5/13/81
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[illegible] 4-28-81
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

DATE	NO.	REVISION
4-24-81	1	REVISED AS PER H.C. COMMENTS DATED 3-25-81

OWNER/DEVELOPER
MANOR LANE ASSOCIATES
9606 BELAIR ROAD
BALTIMORE, MARYLAND 21236

PROJECT:
CARTHAGE MANOR

AREA
2ND ELECTION DISTRICT HOWARD COUNTY, MD.
TAX MAP Nº 29 PARCEL 2

TITLE:
PLAN OF MANOR LANE, DETAILS AND STORM DRAIN PROFILES

Riemer - Tracy & Associates, Inc.
8659 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering

1-30-81
DATE

[illegible]
PROFESSIONAL ENGR. NO. 9566

DESIGNED BY: RJW
DRAWN BY: RJW
PROJECT NO: 0980
DATE: 1-30-80
SCALE: AS SHOWN
DRAWING NO. 3 OF 5

F-81-80
APRIL 24, 1981

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. INSTALL PERIMETER DIKES, SILT FENCES AND SEDIMENT TRAPS NO. 1 AND 2 AND SEED AS PER TEMPORARY SEEDING NOTES.
4. GRADE SITE, MAINTAINING POSITIVE DRAINAGE ALONG PERIMETER DIKES AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
5. CONSTRUCT STORM DRAINS AND PAVING AND SEED DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
6. UPON APPROVAL OF THE HOWARD SOIL CONSERVATION DISTRICT, REMOVE ALL SEDIMENT CONTROL DEVICES AND SEED PER PERMANENT SEEDING NOTES.

SEDIMENT TRAP NO. 1 WITH STONE OUTLET STRUCTURE

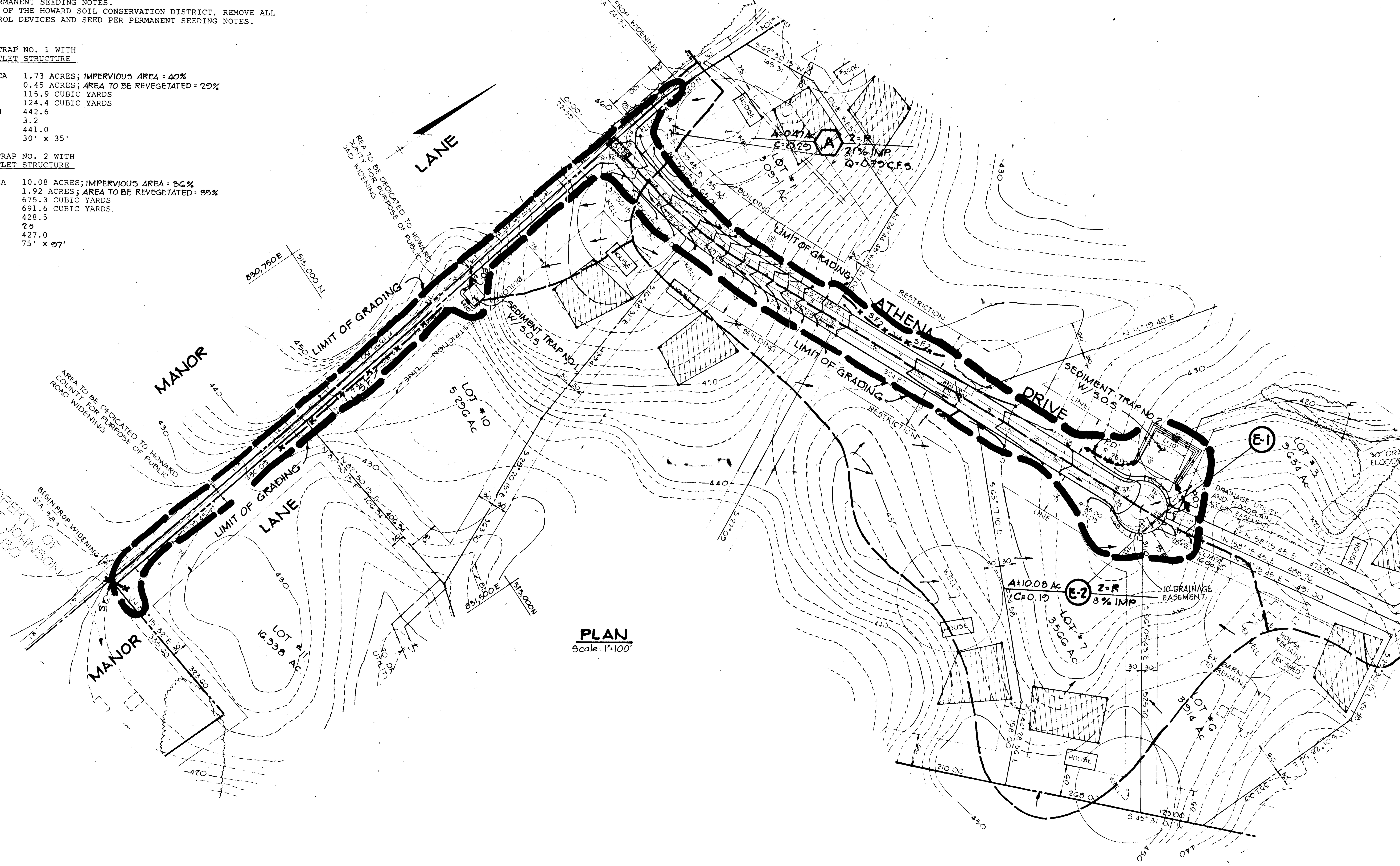
TOTAL DRAINAGE AREA	1.73 ACRES; IMPERVIOUS AREA = 40%
DISTURBED AREA	0.45 ACRES; AREA TO BE REVEGETATED = 29%
VOLUME REQUIRED	115.9 CUBIC YARDS
VOLUME AVAILABLE	124.4 CUBIC YARDS
CLEANOUT ELEVATION	442.6
DEPTH OF CREST	3.2
BOTTOM ELEVATION	441.0
BOTTOM DIMENSIONS	30' x 35'

SEDIMENT TRAP NO. 2 WITH STONE OUTLET STRUCTURE

TOTAL DRAINAGE AREA	10.08 ACRES; IMPERVIOUS AREA = 36%
DISTURBED AREA	1.92 ACRES; AREA TO BE REVEGETATED = 35%
VOLUME REQUIRED	675.3 CUBIC YARDS
VOLUME AVAILABLE	691.6 CUBIC YARDS
CLEANOUT ELEVATION	428.5
DEPTH OF CREST	2.5
BOTTOM ELEVATION	427.0
BOTTOM DIMENSIONS	75' x 97'

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	DESCRIPTION
E-1	28 × 20" METAL END SECTION	SEE PLAN	—	429.90	—	SEE DETAIL SHEET #3
E-2	28 × 20" METAL END SECTION	SEE PLAN	430.30	—	—	SEE DETAIL SHEET #3



PLAN
Scale: 1"=100'

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."

Jack T. Gibson — 1-29-81
JACK T. GIBSON — 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."

James K. Tracy — 1.30.81
JAMES K. TRACY — DATE

REVIEWED FOR Howard S.C.D.
NAME
AND MEETS TECHNICAL REQUIREMENTS

[signature] — 4.28.81
U.S. SOIL CONSERVATION SERVICE — DATE

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

William V. Rowe — 4-28-81
HOWARD S.C.D. — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[signature] — 4-28-81
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William E. Riley — 5/13/81
CHIEF, BUREAU OF ENGINEERING — DATE

DATE	NO.	REVISION
4-24-81	1	REVISED AS PER H.C. COMMENTS DATED 3-25-81

OWNER/DEVELOPER

MANOR LANE ASSOCIATES
9606 BELAIR ROAD
BALTIMORE, MARYLAND 21236

PROJECT: **CARTHAGE MANOR**

AREA: 2ND ELECTION DISTRICT, TAX MAP Nº 29 — HOWARD COUNTY, MD, PARCEL 2

TITLE: GRADING, SEDIMENT CONTROL AND DRAINAGE AREA MAP

Riemer · Tracy & Associates, Inc.
8659 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering

1.30.81
DATE

James K. Tracy
PROFESSIONAL ENGR. NO. 9566

DESIGNED BY:	L.J.D.
DRAWN BY:	T.E.S.
PROJECT NO:	0980
DATE:	1-30-81
SCALE:	1" = 100'
DRAWING NO.	4 OF 5

F-81-80 APRIL 24, 1981

#900

SEDIMENT CONTROL CONSTRUCTION NOTES
GENERAL 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 (922-2070).
2. ALL SEDIMENT CONTROL STRUCTURES WILL BE INSTALLED IN ACCORDANCE WITH "THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" AS PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
3. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
4. ALL DISTURBED AREAS ARE TO BE DRESSED AND STABILIZED ACCORDING TO THE TEMPORARY OR PERMANENT SEEDING SCHEDULES AS SOON AS PROPER WEATHER CONDITIONS EXIST FOR THE ESTABLISHMENT OF A PERMANENT VEGETATIVE COVER.
5. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN THE DEPTH REACHES THE CLEAN OUT ELEVATION SHOWN ON THE PLANS.
6. FERTILIZER AND LIME RATES MAY BE CHANGED THROUGH AUTHORIZATION BY THE HOWARD SOIL CONSERVATION DISTRICT IF SOIL TESTS DETERMINE A REDUCTION IN THE SPECIFIED RATES IS JUSTIFIED.
7. 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.
8. REFERENCES CALLED FOR ON THE SEDIMENT CONTROL CONSTRUCTION PLAN AND DETAILS ARE MADE TO "THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".
9. SEDIMENT CONTROL WILL BE INSTALLED BEFORE CLEARING AND GRUBBING REMAINDER OF SITE.

TEMPORARY SEEDING

AREA TO BE SEEDED SHALL BE RECENTLY LOOSENED. IF THE GROUND IS PACKED, CRUSTED OR HARD, THE TOP LAYER OF SOIL SHALL BE LOOSENED BY DISCING, RACKING OR OTHER ACCEPTABLE MEANS.

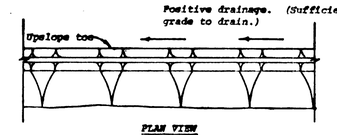
A. APPLY 10-20-10 FERTILIZER (OR EQUIVALENT) AT THE RATE OF 600 LBS. PER ACRE OR 15 LBS. PER 1000 SQ. FT.
B. WHERE SOIL IS KNOWN TO BE HIGHLY ACID, APPLY DOLOMITIC LIMESTONE AT THE RATE OF 1 TON PER ACRE.
C. WORK BOTH INTO SOIL AND SEED WITH CYCLONE SEEDER, DRILL, CULTIPAKER SEEDER OR HYDROSEEDER (SLURRY WILL INCLUDE SEED AND FERTILIZER) AT THE RATE OF 40 LBS. PER ACRE OF ITALIAN OR PERENNIAL RYEGRASS.
D. MULCH WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 TO 2 TONS, PER ACRE AND ANCHOR WITH A CUTBACK ASPHALT OR EMULSIFIED ASPHALT AT THE RATE OF 5 GAL. PER 1000 SQ. FT.

PERMANENT SEEDING

FINAL STABILIZATION WILL TAKE PLACE AS SOON AS POSSIBLE AS WEATHER CONDITIONS PERMIT, AS FOLLOWS:

A. APPLY DOLOMITIC LIMESTONE AT THE RATE OF 2 TONS PER ACRE (ONE TONE PER ACRE IF APPLICATION OF TON PER ACRE WAS MADE FOR TEMPORARY SEEDING).
B. APPLY 0-20-20 FERTILIZER AT THE RATE OF 600 LBS. PER ACRE HARROW OR DISC LIME AND 0-20-20 FERTILIZER INTO THE SOIL TO A MINIMUM DEPTH OF 3" LAWNS OR HIGH MAINTENANCE AREAS WILL BE DRAGGED AND LEVELED WITH A YORK RAKE. AT THE TIME OF SEEDING APPLY 400 POUNDS OF 38-0-0 UREAFORM FERTILIZER AND 500 LBS. OF 10-20-20 OR EQUIVALENT FERTILIZER PER ACRE.
C. SEED WITH A MIXTURE OF CERTIFIED "MERION" KENTUCKY BLUEGRASS - 40 LBS. PER ACRE; COMMON KENTUCKY BLUEGRASS @ 40 LBS. PER ACRE; RED FESCUE, PENNLAWN OR JAMESTOWN @ 20 LBS. PER ACRE.
D. MULCH WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE AND ANCHOR WITH A CUTBACK ASPHALT OR EMULSIFIED ASPHALT AT THE RATE OF 5 GAL. PER 1000 SQ. FT.
E. SEED ALL SLOPES WITH A MIXTURE OF CERTIFIED KENTUCKY 31 TALL FESCUE @ 50 LBS. PER ACRE AND INOCULATED KOREAN LESPEDEZA @ 15 LBS. PER ACRE.

CROSS SECTION



PLAN VIEW

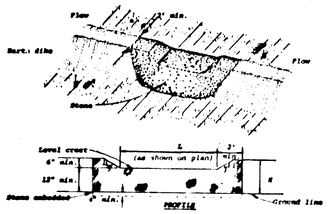
Construction Specifications

1. All dikes shall be machine compacted.
2. All perimeter dikes shall have positive drainage to an outlet.
3. A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or into a level spreader or grade stabilization structure.
   B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as sediment trap or a sediment basin or to an area protected by any of these practices.
4. Stabilization, when required, shall be done in accordance with Standard and Specifications for Grassed Waterway. The minimum area to be stabilized shall be the channel flow area.
5. Periodic inspection and required maintenance shall be provided.

Standard Symbol PD

* Drainage area less than 5 acres

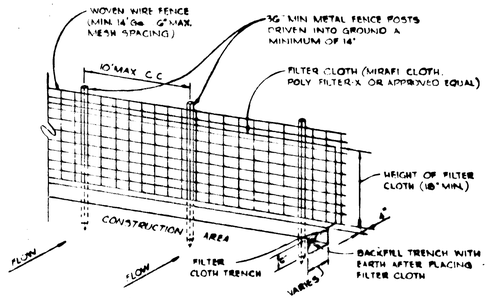
PERIMETER DIKE
No Scale



Construction Specifications

1. The stone shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet MSHA Size No. 2 or AASHTO designation M-43 Size No. 1 or 24.
2. The crest of the stone dike shall be at least six inches lower than the lowest elevation of the top of the earth dike and shall be level.
3. The stone outlet structure shall be embedded into the soil a minimum of four inches.
4. The minimum length, in feet, of the crest of the stone outlet structure shall be equal to six times the number of acres of contributing drainage area.
5. The stone outlet structure shall be inspected after each rain, and the stone shall be replaced when the structure ceases to function as intended due to silt accumulation among the stone, washout, construction traffic damage, etc.

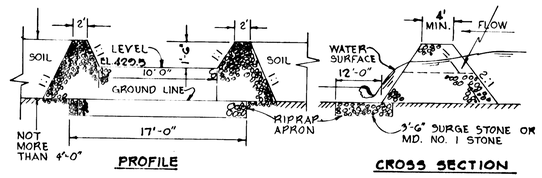
STONE OUTLET STRUCTURE FOR SEDIMENT TRAP NO. 1
No Scale



NOTES:
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS BY USE OF WIRE TIES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES SPACED EVERY 24"x 24"
3. SILT FENCE TO BE PLACED IN LIEU OF STRAW BALES AND/OR DIVERSION DIKES AT THE OPTION OF THE DEVELOPER.

SILT FENCE
No Scale

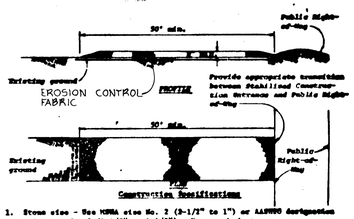
DESIGN DATA
A= 10.08 Ac.
CN= 80
R.O.= 2.98
PEAK DISCHARGE = 740 CSM/IN.
Q= 34.7



PROFILE

CROSS SECTION

STONE OUTLET STRUCTURE FOR SEDIMENT TRAP NO. 2
No Scale



Construction Specifications

1. Stone size - Use MSHA size No. 2 (2-1/2" to 1") or AASHTO designation M43, size No. 2 (2-1/2" to 1-1/2"). Use crushed stone.
2. Length - As effective, but not less than 50 feet.
3. Thickness - Not less than eight (8) inches.
4. Width - Not less than full width of all points of ingress or egress.
5. Washing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved methods.
6. 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.

Standard Symbol SCE

STABILIZED CONSTRUCTION ENTRANCE
No Scale

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."

Jack T. Gibson — 1-29-81
JACK T. GIBSON — 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."

James K. Tracy — 1.30.81
JAMES K. TRACY — DATE

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

Barry L. Perdue — 4.28.81
U.S. SOIL CONSERVATION SERVICE — DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED William V. Rice — 4-28-81
HOWARD S.C.D. — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

John Moore Dean — 4-28-81
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Charles E. Ridge — 5/13/81
CHIEF, BUREAU OF ENGINEERING — DATE

DATE	NO.	REVISION
4-24-81	1	REVISED AS PER H.C. COMMENTS DATED 3-25-81

OWNER/DEVELOPER

MANOR LANE ASSOCIATES
3606 BELAIR ROAD
BALTIMORE, MARYLAND 21236

PROJECT:
CARTHAGE MANOR

AREA 2ND ELECTION DISTRICT HOWARD COUNTY, MD
TAX MAP Nº 29 PARCEL 2

TITLE:
SEDIMENT CONTROL DETAILS

Riemer-Tracy & Associates, Inc.
8659 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering

1.30.81
DATE

PROFESSIONAL ENGR. NO. 9566

DESIGNED BY: L.J.D.	
DRAWN BY: D.A.M.	
PROJECT NO: 0980	
DATE: 1-30-81	
SCALE: AS SHOWN	
DRAWING NO. 5 OF 5	

F-81-80

APRIL 24, 1981