ENGINEER'S CERTIFICATE

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

EARL D. COLLINS — DATE 11-4-82

DEVELOPER'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 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. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY."

11/4/82 DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

1-21-83 DATE

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

HOWARD SOIL CONSERVATION DISTRICT — 1-21-83 DATE

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HOURS IN ADVANCE OF ANY CONSTRUCTION.
3. STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
4. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS OR PAVING WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
5. CONTRACTOR TO NOTIFY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWING. TELEPHONE: 992-2430

BENCH MARKS

B.M. CS-40 3/4" IRON PIPE SET	ELEV.= 353.89
B.M. CS-41 1" IRON PIPE SET	ELEV.= 370.03

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 1-24-83

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 1-24-83

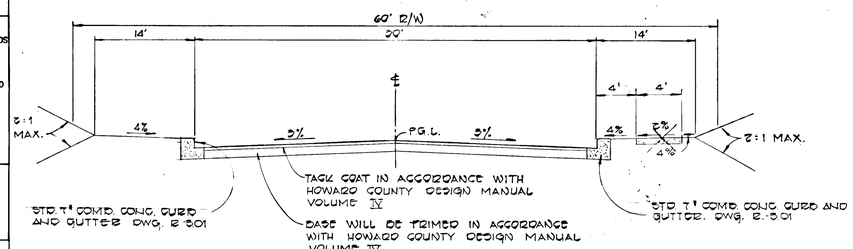
PLAN			BY	DATE
NOTE BOOK NO.	SURVEYED			
	PLOTTED			
	ALIGNMENT CHECKED			
	RT. OF WAY CHECKED			

BENCH MARK

HO.CO. 2544001 COORDINATES — ELEV. 401.055
N 450,210.70 — E 857,856.04

WOODLOO DRIVE

CLASSIFICATION - CUL-DE-SAC — DESIGN SPEED - 30 M.P.H.



PAVING SECTION SHALL BE IN ACCORDANCE WITH SECTION NUMBER T-2 DRWG. 2-2.01

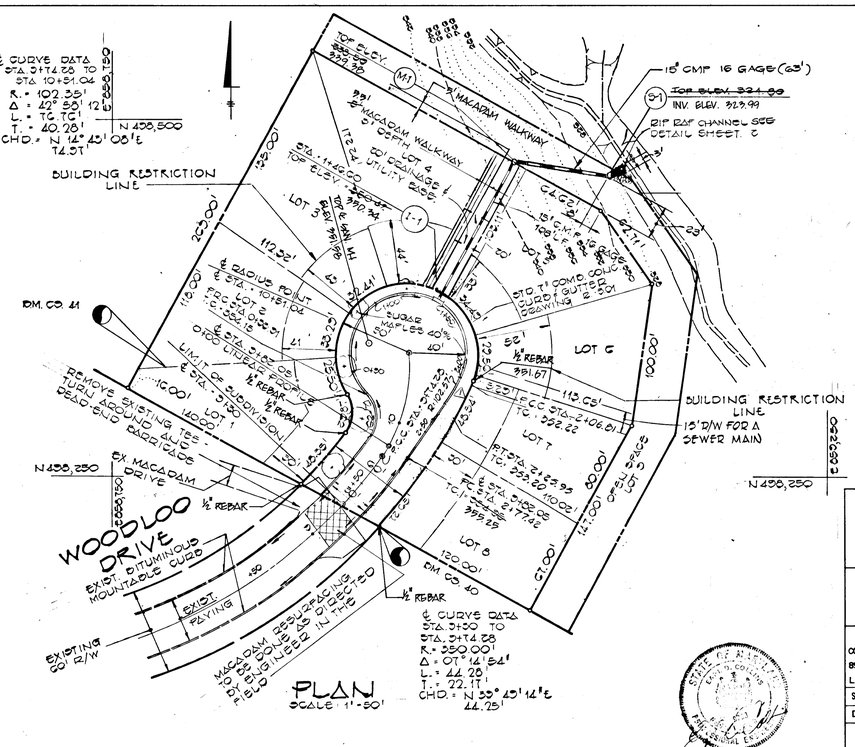
ZONED R.O.S.

TYPICAL ROADWAY SECTION

NO SCALE

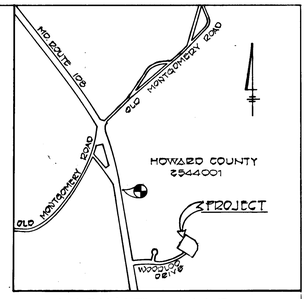
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION

NO	REVISION	DATE
1	REMOVE SIDEWALK	12/8/86



PLAN

SCALE 1"=50'



VICINITY MAP

SCALE: 1"=1,200'

AS-BUILT CERTIFICATION 4-10-86
BY: CHARLES J. CROVO
REG: NO 13204

WOODLAND PARK
SECTION ONE AREA ONE
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

WOODLOO DRIVE
PLAN AND PROFILE

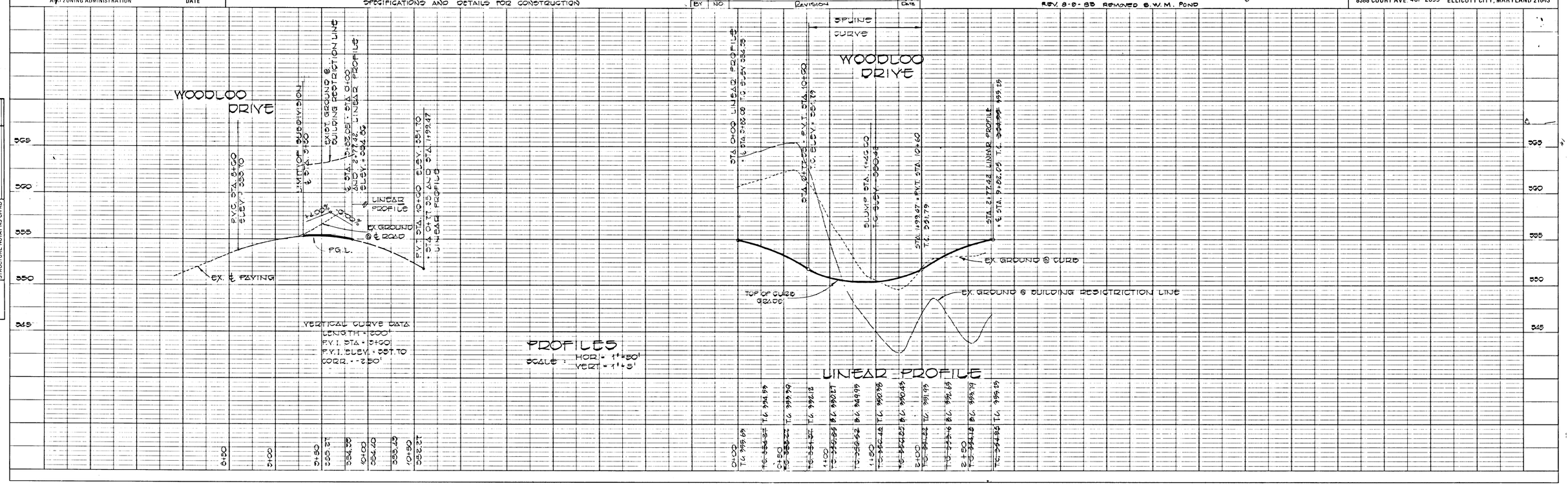
OWNER AND DEVELOPER
COLWELL-IAGER, 8904 BRIARCROFT LANE, LAUREL, MARYLAND 20810
MEADOWLAND JOINT VENTURE, 8659 BALTIMORE NATIONAL PIKE, ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE NOV. 4, 1982	DWG. NO. 1 OF 2
DES. C. CROVO	DRN. K. FRALIC	CHK. R.B. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE 461-2855 ELLICOTT CITY, MARYLAND 21043

REV. 8-8-88 REMOVED S.W.M. POND

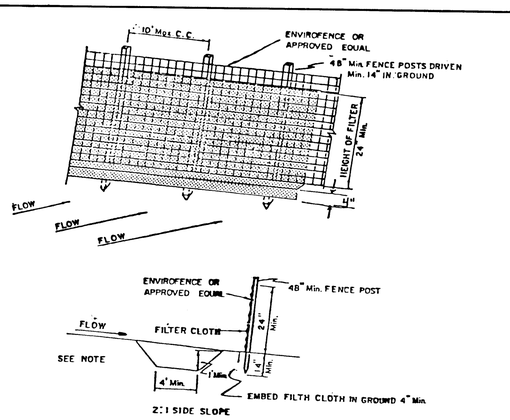
PROFILE			BY	DATE
NOTE BOOK NO.	SURVEYED			
	PLOTTED			
	GRADES CHECKED			
	STRUCTURE NOTATNS CHKD			



#976

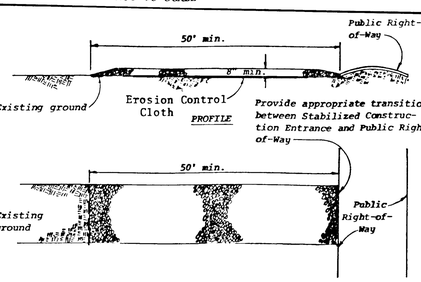
AS-BUILT 4-10-86

F83-45

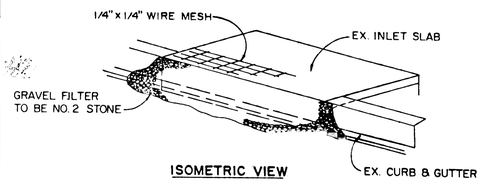


SILT FENCE DETAIL

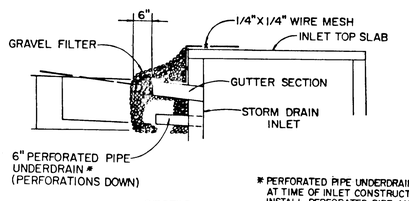
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE



ISOMETRIC VIEW

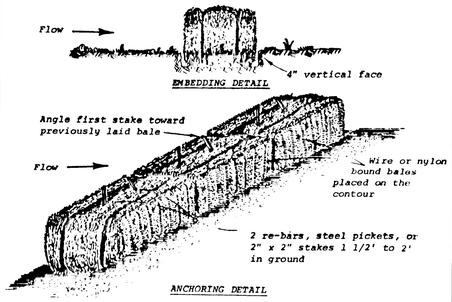


SECTION VIEW

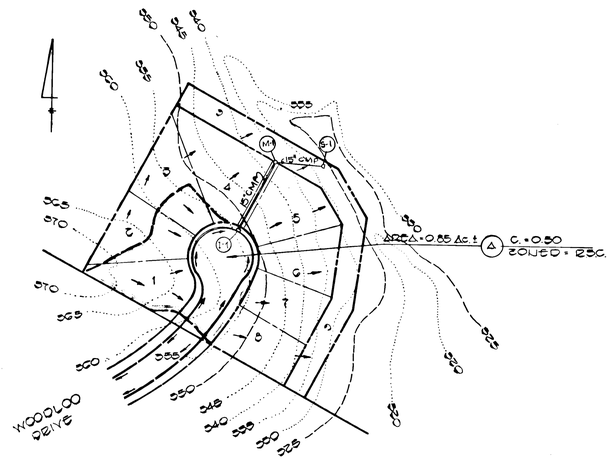
* PERFORATED PIPE UNDERDRAIN TO BE INSTALLED AT TIME OF INLET CONSTRUCTION. DO NOT INSTALL PERFORATED PIPE AND STONE BELOW GROUND IF INLET AND/OR PAVING ARE CONSTRUCTED

STONE FILTER INLET PROTECTION DETAIL

NO SCALE

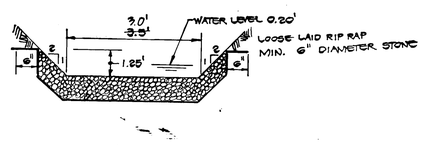


STRAW BALE DIKE



DRAINAGE AREA MAP

SCALE: 1" = 100'



RIP RAP CHANNEL @ S-1

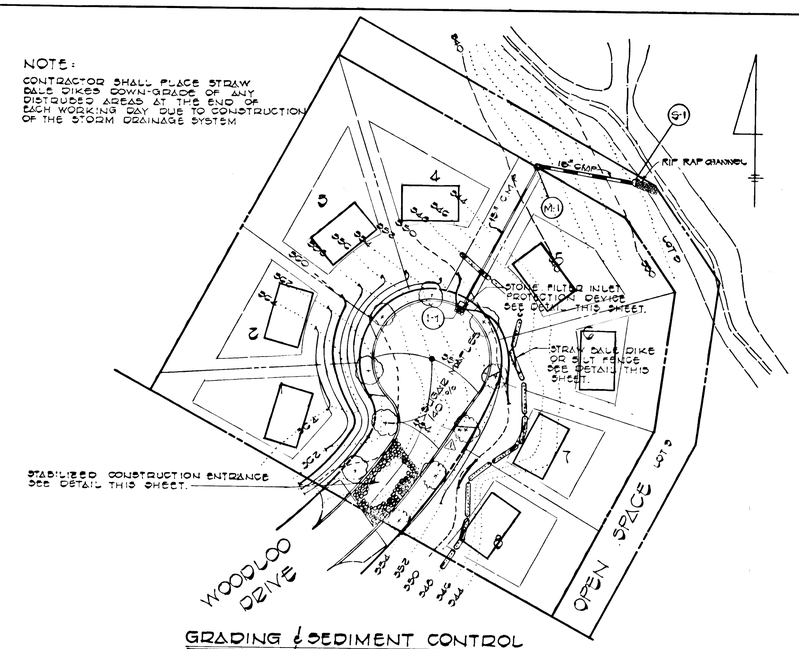
NO SCALE

CHANNEL DESIGN DATA @ S-1

A = 0.78 ft²
P = 4.40'
R = 0.1773
$R^{2/3}$ = 0.3156
S = 12%
$S^{1/2}$ = 0.3464
n = 0.04
$Y = \frac{1.49}{0.04} \times 0.3156 \times 0.3464 = 4.06$ fps
Q = 0.78 × 4.06 = 3.17 cfs

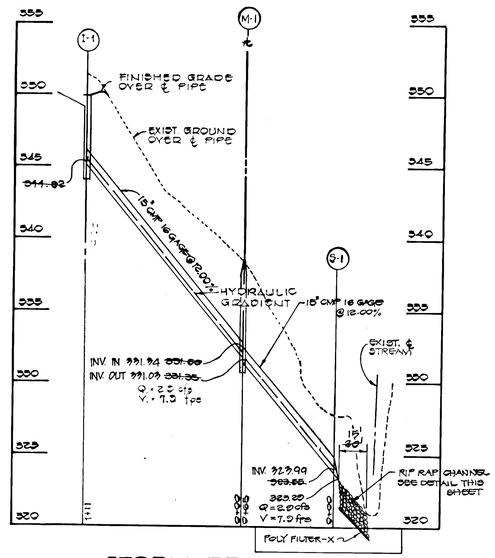
NOTE:

CONTRACTOR SHALL PLACE STRAW BALE DIKES DOWN-GRADE OF ANY DISTURBED AREAS AT THE END OF EACH WORKING DAY DUE TO CONSTRUCTION OF THE STORM DRAINAGE SYSTEM



GRADING & SEDIMENT CONTROL PLAN

SCALE: 1" = 50'



STORM DRAIN PROFILE

SCALE: HOR. 1" = 50'
VERT. 1" = 5'

SITE ANALYSIS

TOTAL AREA OF SUBDIVISION	: 2.50 Ac. ±
AREA TO BE DISTURBED	: 0.50 Ac. ±
IMPERVIOUS AREA TO BE	: 0.20 Ac. ±
	: 0.50 Ac. ±

1-12-88
CARL D. COLLINS DATE

APPROVED: OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 1-24-83

APPROVED: DEPARTMENT OF PUBLIC WORKS.

CHIEF, BUREAU OF ENGINEERING — DATE 1/28/83

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 1-21-83

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

DISTRICT ~~COORDINATOR~~
HOWARD SOIL CONSERVATION DISTRICT — DATE 1-21-83

SEDIMENT CONTROL NOTES

1. SPECIFICATIONS FOR THE SEDIMENT CONTROL DETAILS INCLUDED IN THE U.S.D.A. SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS."
2. THE DEVELOPER SHALL NOTIFY THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS AT LEAST 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION SHOWN HEREON (992-2433).
3. SEDIMENT CONTROL STRUCTURES TO BE CONSTRUCTED PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE TO ANY EXISTING SURFACE MATERIAL, AND ARE TO BE STABILIZED AS SOON AS CONSTRUCTED.
4. ALL SEDIMENT CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS (992-2433).
5. ALL GRADED AREAS NOT TO BE SODDED SHALL BE STABILIZED BY SEEDING AND MULCHING IN ACCORDANCE WITH THE FOLLOWING:
   1. SITE PREPARATION
      A. HARROW OR DISC IN AREAS PROPOSED TO BE SEEDED THE FOLLOWING MATERIALS
         1) PULVERIZED LIMESTONE AT 2 TONS/ACRE.
         2) COMMERICAL FERTILIZER 10-10-10 AT 3/4 TONS/ACRE.
         3) SUPER PHOSPHATE AT 600 LBS./ACRE.
   2. SEEDING
      A. SOW THE FOLLOWING SEED MIXTURE AT THE RATE OF 200 LBS./ACRE WITH A MECHANICAL SPREADER.
         1) TEMPORARY: ITALIAN OR PERENNIAL RYE GRASS.
         2) PERMANENT: 40% MARION BLUE GRASS, 40% DAKOTA BLUE GRASS AND 20% PENN LAWN CREEPING FESCUE.
      B. THE SEEDED AREA SHALL THEN BE RAKED WITH A YORK RATE (A MINIMUM OF 2 PASSES) COVERED AND COMPACTED WITH CULTIPACKER OR OTHER APPROVED METHOD.
   3. MULCHING
      A. SEEDED AREAS SHALL BE UNIFORMLY MULCHED IMMEDIATELY AFTER SEEDING WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2-2 TONS/ACRE.
      B. TIE MULCH DOWN WITH LIQUID ASPHALT AT 0.1 GAL./S.Y. OR EMULSIFIED ASPHALT AT 0.04 GAL./S.Y. OR MULCH NETTING.
6. A GRADING PLAN MUST BE DEVELOPED BY THE BUILDER AND APPROVED BEFORE BEGINNING CONSTRUCTION OF DWELLINGS.

As-BUILT CERTIFICATION 4-10-86
BY: CHARLES J. CROVO
REG: NO. 13204

STRUCTURE SCHEDULE

NO.		INV. IN		TOP ELEV.	REMARKS
1-1	A-5	-	~~345.25~~ ~~344.95~~	~~350.75~~ 350.34	DWG 50-4.04
S-1	STD METAL END SECTION	-	~~323.50~~ 323.99	324.80	DWG 50-5.01
M-1	STANDARD MANHOLE	~~331.35~~ 331.94	~~331.35~~ 331.09	~~338.50~~ 339.98	DWG. G.5.01

WOODLAND PARK

SECTION ONE AREA ONE
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE NOV. 4, 1982
SHEET 2 OF 2

AS-BUILT 4-10-86

#976

FISHER, COLLINS AND CARTER
CONSULTING ENGINEERS AND LAND SURVEYORS
8300 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043 461-5555

DAN	△	REMOVE SIDEWALK	11/18/85
BY	NO	REVISION	DATE

CONSTRUCTION SEQUENCE

1) OBTAIN GRADING PERMIT.
2) CONSTRUCT STONE CONSTRUCTION ENTRANCE.
3) CONSTRUCT STORM WATER MANAGEMENT POND AND STABILIZE USING TEMPORARY SEEDING.
4) THE 12" CMP SHALL BE BLOCKED IN ACCORDANCE WITH THE DETAIL ON THIS SHEET. THE 12" CMP SHALL REMAIN BLOCKED UNTIL SUCH TIME WHEN THE SEDIMENT BASIN TRANSITIONS TO FUNCTION AS A STORM WATER MANAGEMENT POND.
5) INSTALL STRAW BALE DIKE OR SILT FENCE.
6) CONSTRUCT STORM DRAIN SYSTEM.
7) INSTALL STONE FILTER INLET PROTECTION DEVICE @ I-1.
8) THE CONTRACTOR SHALL PLACE STRAW BALE DIKES DOWN-GRADE OF ANY DISTURBED AREAS AT THE END OF EACH WORKING DAY DUE TO CONSTRUCTION OF THE STORM DRAINAGE SYSTEM.
9) GRADE WOODLOO DRIVE TO SUBGRADE. STABILIZE SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB AND CUT AND FILL SLOPE AREAS DUE TO ROAD GRADING WITH PERMANENT SEEDING.
10) CONSTRUCT CONCRETE CURB AND LAY BASE COURSE.
11) UPON STABILIZATION OF GRADED AREAS, INLET I-1 SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEM.
12) CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE, AND LAY SURFACE COURSE, STABILIZE SHOULDERS.
13) DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STORM WATER MANAGEMENT POND WHEN THE CLEANOUT ELEVATION 328.0 HAS BEEN REACHED.
14) THE SEDIMENT BASIN SHALL BE DEWATERED BY PUMPING.
15) THE SEDIMENT FROM THE STORM WATER MANAGEMENT POND SHALL BE PLACED ALONG LOT 5.
16) THE STORM WATER MANAGEMENT POND SHALL BE GRADED IN ACCORDANCE WITH SHEET ONE AND STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS IN THE SEDIMENT CONTROL NOTES. INSTALL RIP RAP APRON.
17) DURING CONSTRUCTION AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
18) REMOVE STRAW BALE DIKES OR SILT FENCE.
19) ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED WITH PERMANENT SEEDING.

REV. 8-12 88 REMOVED S.W.M. POND; CHANGED PROFILE & REMOVED DETAILS

F83-45