APPROVED
DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED
OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-18-87

TURF VALLEY OVERLOOK

SECTION ONE AREA TWO

SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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.) ALL INLETS SHALL BE HOWARD COUNTY STANDARDS UNLESS OTHERWISE SHOWN ALL "A" INLETS SHALL BE DEPRESSED.
4.) STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
5.) ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING WILL BE CORRECTED AT THE CONTRACTOR S EXPENSE
6.) CONTRACTOR TO NOTIFY THE HOWARD COUNTY DEPT. OF INSPECTION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE: 792-7272.
7.) ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978 EDITION.

BENCH MARKS

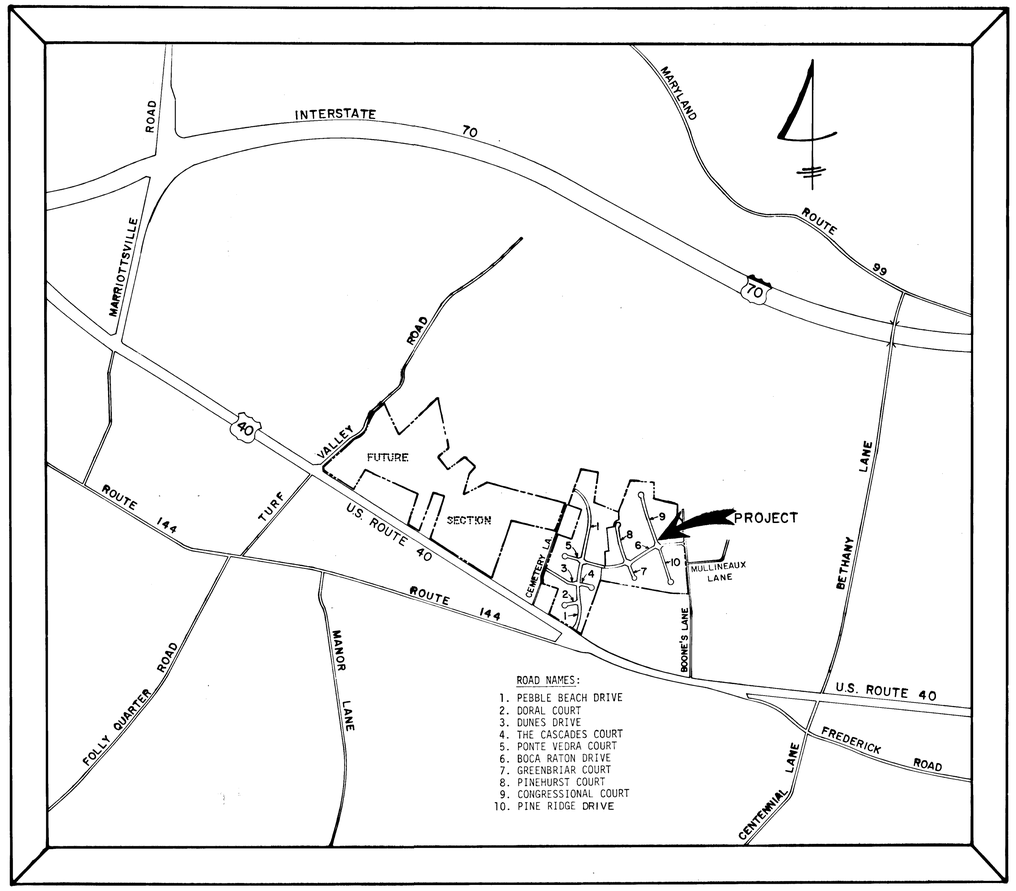
B.M. 'B' — ELEV. 432.38
R.R. SPIKE SET IN B.G.&E. POLE #140464 @ INTERSECTION OF BOONE'S LANE & MULLINEAUX LANE.
*SEE SHEET NUMBER 6 OF 12 FOR LOCATION.

B.M. 'C' — ELEV. 456.65
R.R. SPIKE SET IN B.G.&E. POLE #140468 @ END OF BOONE'S LANE
*SEE SHEET NUMBER 6 OF 12 FOR LOCATION.

STREET LIGHTS

6-(SIX)- 175 WATT "MODERN" MERCURY VAPOR LAMP, POST TOP FIXTURES ON A 14-FOOT GRAY FIBERGLASS POLE LOCATED 2-10' FROM BACK OF CURB AT THE FOLLOWING LOCATIONS:

1.) SOUTH CORNER OF PINEHURST COURT AND BOCA RATON DRIVE.
2.) SOUTHWEST CORNER OF PINE RIDGE DRIVE AND BOCA RATON DRIVE.
3.) THE NORTH CORNER OF BOONE'S LANE AND BOCA RATON DRIVE.
4.) STA. 4+00 LEFT PINEHURST COURT.
5.) STA. 4+05 LEFT CONGRESSIONAL COURT.
6.) AT B.G.&E. POLE # 140464.



VICINITY MAP
SCALE: 1" = 1200'

INDEX OF SHEETS

1) TITLE SHEET
2) PINEHURST COURT-PLAN, GREENBRIAR COURT-PLAN, BOCA RATON DRIVE-PLAN AND PROFILE.
3) PINEHURST COURT-PLAN AND PROFILE, GREENBRIAR COURT-PROFILE.
4) CONGRESSIONAL COURT-PLAN, BOCA RATON DRIVE-PLAN, PINE RIDGE DRIVE-PLAN AND PROFILE.
5) CONGRESSIONAL COURT-PLAN AND PROFILE.
6) BOCA RATON DRIVE-PLAN, BOONES LANE-PLAN AND PROFILE
7) PARABOLIC CHANNEL-PROFILES AND DESIGN DATA, ROADWAY SECTIONS AND DETAILS.
8) DRAINAGE AREA MAP, AND STRUCTURE SCHEDULE.
9) STORM DRAIN PROFILES, RIP-RAP CHANNEL DETAIL AND DESIGN DATA.
10) SEDIMENT CONTROL BASIN-PROFILE AND DETAILS.
11) STREET TREE, GRADING, AND SEDIMENT CONTROL PLAN.
12) STREET TREE, GRADING, AND SEDIMENT CONTROL PLAN.

FISHER, COLLINS, AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE (301) 461-2855

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP C/O
HOWARD COUNTY LAND SERVICES, INC.
10175 Baltimore National Pike · Suite 202 · Ellicott City, MD 21043 · 301-465-1643

STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER

P86-47 S86-20

AS-BUILT 11-1-88 F87-29

265

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."

CHARLES J. CROVO, SR. — DATE 7/26/86

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 COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY."

PEDDICORD PROPERTY PARTNERSHIP — DATE 8-1-86

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

U.S. SOIL CONSERVATION DISTRICT — DATE 2-18-87

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 2-18-87

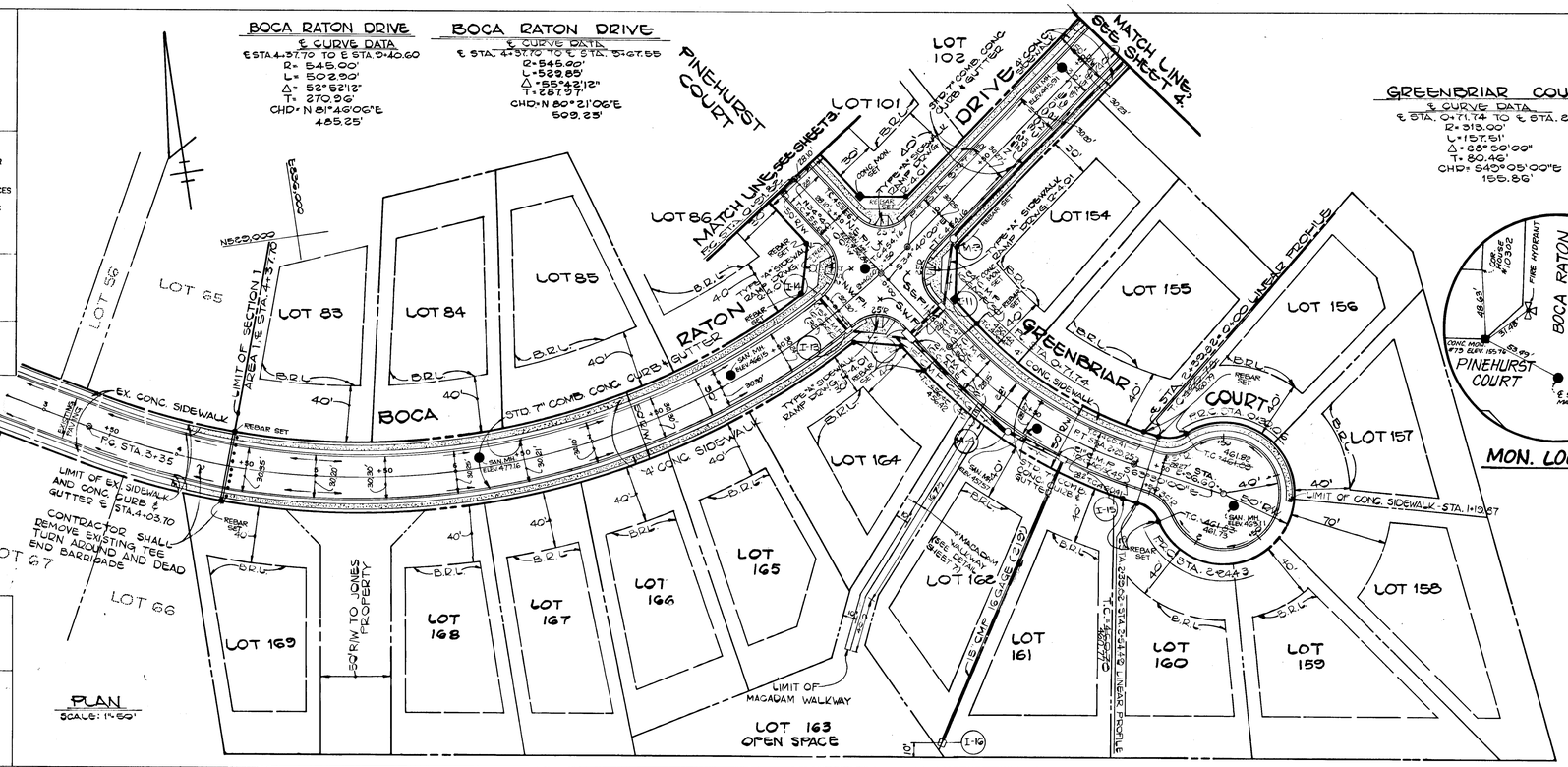
APPROVED
DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED
OFFICE OF PLANNING AND ZONING

DIRECTOR AND ZONING ADMINISTRATION — DATE 2-18-87

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



STATE OF MARYLAND — CHARLES J. CROVO, SR. — No. 13204 — PROFESSIONAL ENGINEER

CHARLES J. CROVO, SR. — DATE 7/26/86

TURF VALLEY OVERLOOK
SECTION ONE AREA TWO
LOTS 83 - 169
SECOND ELECTION DISTRICT
HOWARD COUNTY, MD.

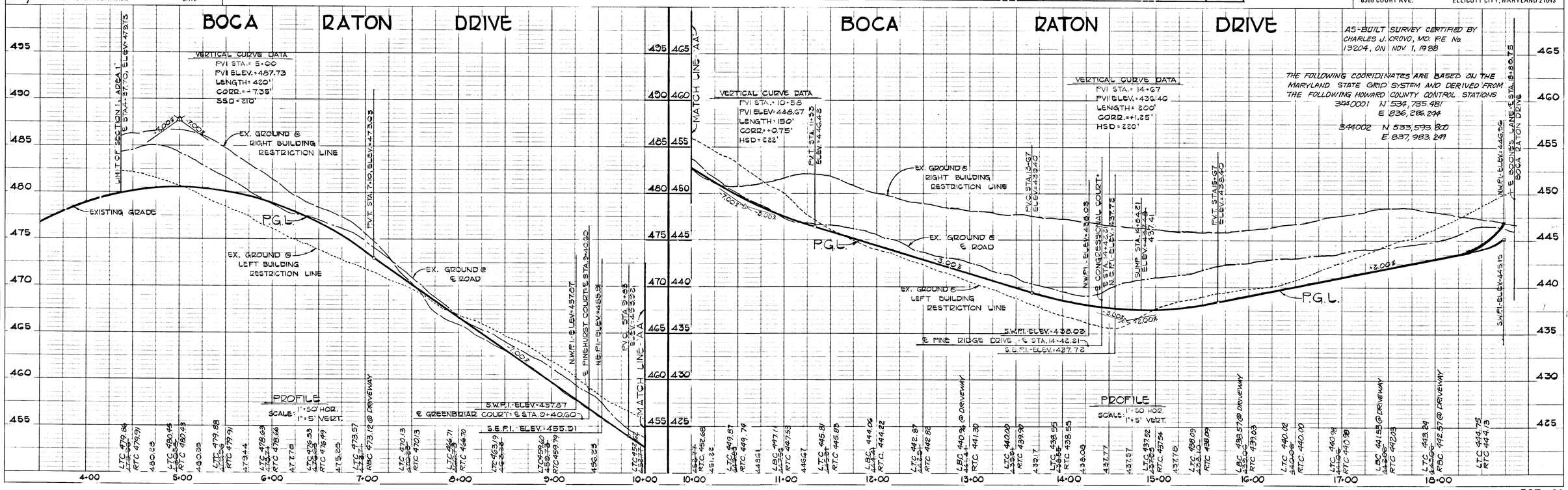
BOCA RATON DRIVE PLAN AND PROFILE	GREENBRIAR COURT PLAN	PINEHURST COURT PLAN

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JULY 18, 1986	DWG. NO. 2 OF 12
DES. C. CROVO, SR.	DRN. R. ISAACS	CHK. R.B. CARTER

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

PROFILE		BY	DATE
SURVEYED			
PLOTTED			
GRADES CHECKED			
B-M-N-NOTED			
STRUCTURE NOTATIONS CHKD.			
NOTE BOOK NO.			



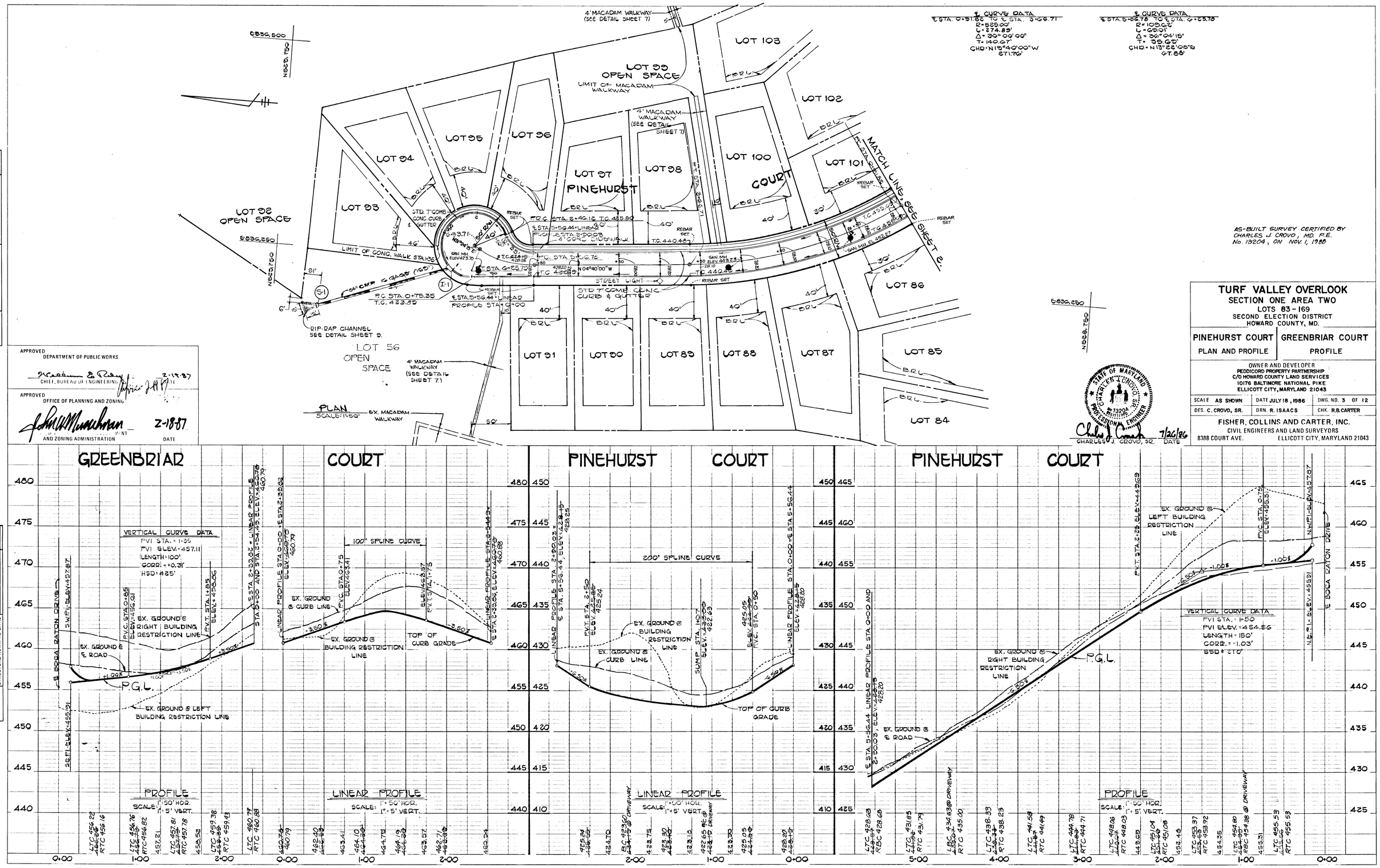
AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROVO, MD. P.E. No. 13204, ON NOV. 1, 1988

THE FOLLOWING COORDINATES ARE BASED ON THE MARYLAND STATE GRID SYSTEM AND DERIVED FROM THE FOLLOWING HOWARD COUNTY CONTROL STATIONS
344001 N 534,735.481 E 836,286.294
344002 N 533,593.800 E 837,983.249

F87-29

AS-BUILT 11-1-88

265



APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED
OFFICE OF PLANNING AND ZONING
DIRECTOR
AND ZONING ADMINISTRATION — DATE 2-18-87

TURF VALLEY OVERLOOK
SECTION ONE AREA TWO
LOTS 83 - 169
SECOND ELECTION DISTRICT
HOWARD COUNTY, MD.

PINEHURST COURT	GREENBRIAR COURT
PLAN AND PROFILE	PROFILE

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JULY 18, 1986	DWG. NO. 3 OF 12
DES. C. CROVO, SR.	DRN. R. ISAACS	CHK. R.B.CARTER

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

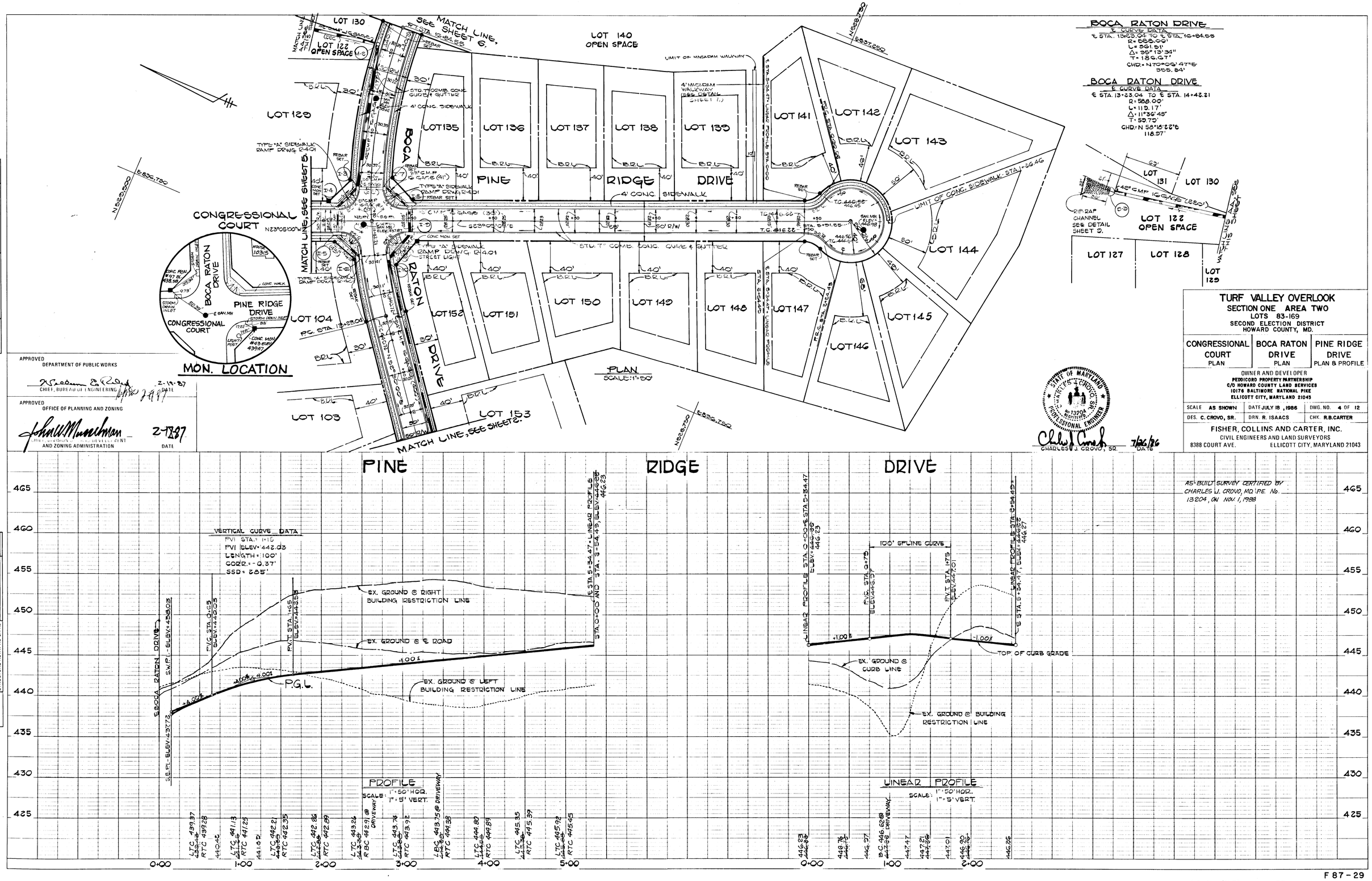
PLAN		BY	DATE
SURVEYED			
PLOTTED			
ALIGNMENT CHECKED			
ST. OF WAY CHECKED			
NOTE BOOK			
NO.			

PROFILE		BY	DATE
SURVEYED			
PLOTTED			
GRADES CHECKED			
S.W.M. NOTED			
STRUCTURE NOTATNS CHKD			
NOTE BOOK			
NO.			

265

F 87-29

AS-BUILT 11-1-88



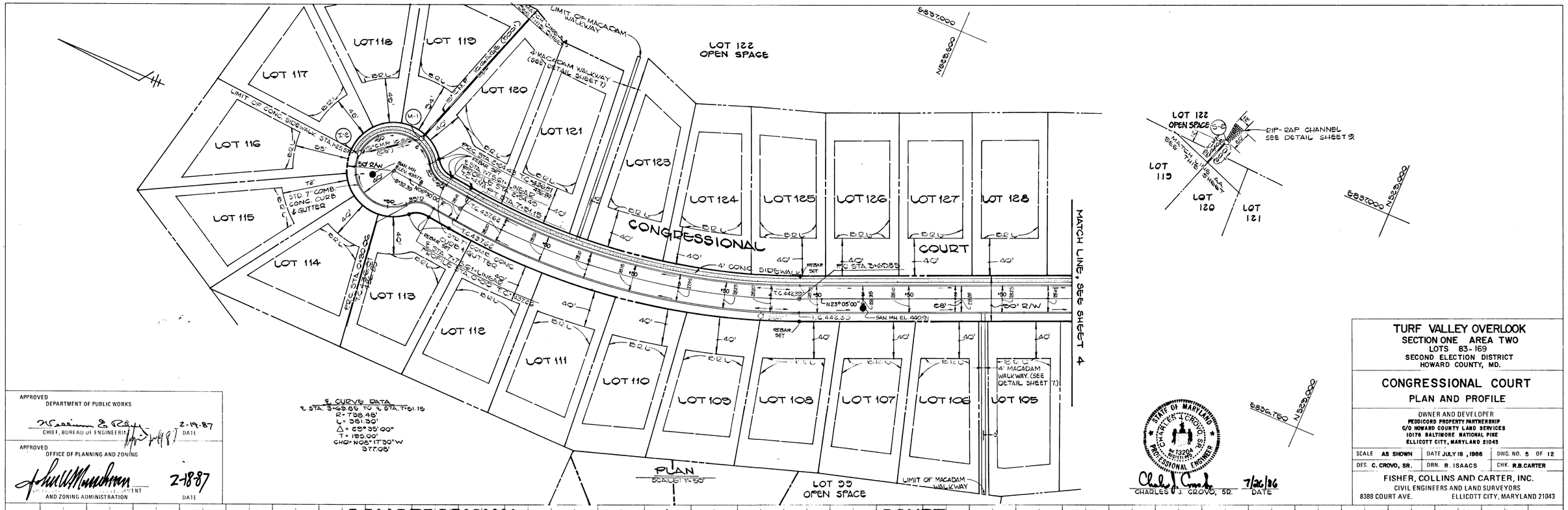
PLAN. SURVEYED PLOTTED ALIGNMENT CHECKED RT. OF WAY CHECKED NOTE BOOK NO. BY DATE

PROFILE SURVEYED PLOTTED GRADES CHECKED B.M.+NOTED STRUCTURE NOTATNS CH'KD NOTE BOOK NO. BY DATE

265

F 87-29

AS-BUILT 11-1-88



APPROVED
DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED
OFFICE OF PLANNING AND ZONING

DIRECTOR, OFFICE OF PLANNING AND ZONING ADMINISTRATION — DATE 2-18-87

STATE OF MARYLAND
CHARLES J. CROVO, SR.
No. 13204
REGISTERED PROFESSIONAL ENGINEER

CHARLES J. CROVO, SR. — DATE 7/26/86

TURF VALLEY OVERLOOK
SECTION ONE AREA TWO
LOTS 83-169
SECOND ELECTION DISTRICT
HOWARD COUNTY, MD.

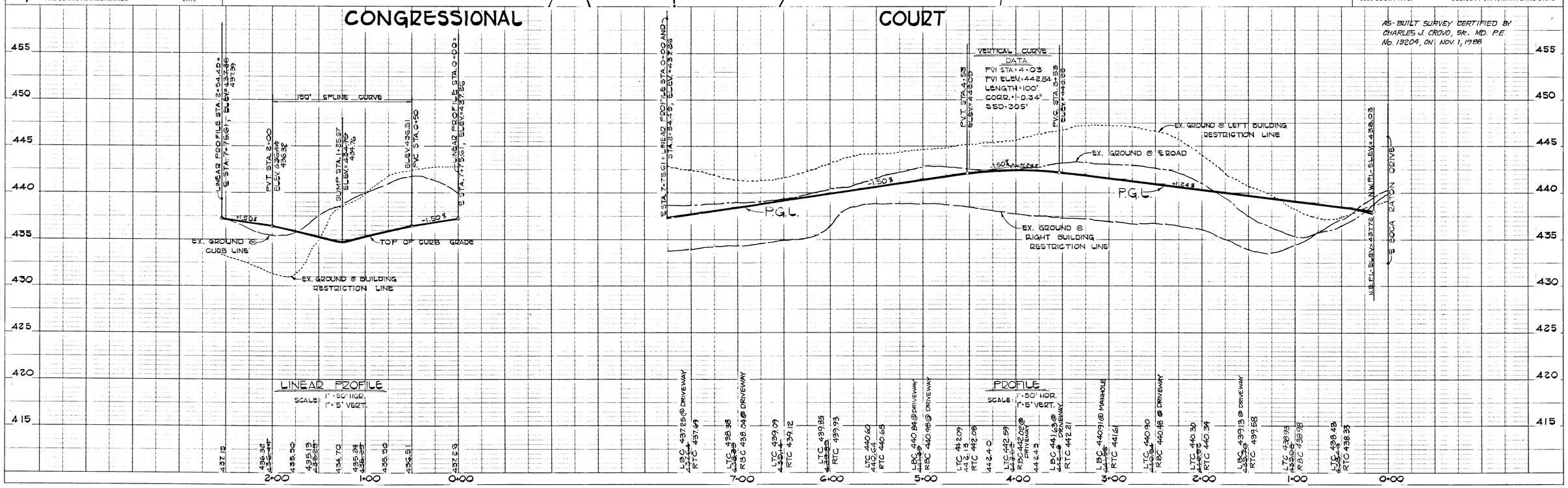
CONGRESSIONAL COURT
PLAN AND PROFILE

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JULY 18, 1986	DWG. NO. 5 OF 12
DES. C. CROVO, SR.	DRN. R. ISAACS	CHK. R.B.CARTER

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

PLAN — NOTE BOOK NO. — SURVEYED — PLOTTED — GRADES CHECKED — ALIGNMENT CHECKED — R/W OF WAY CHECKED — BY — DATE

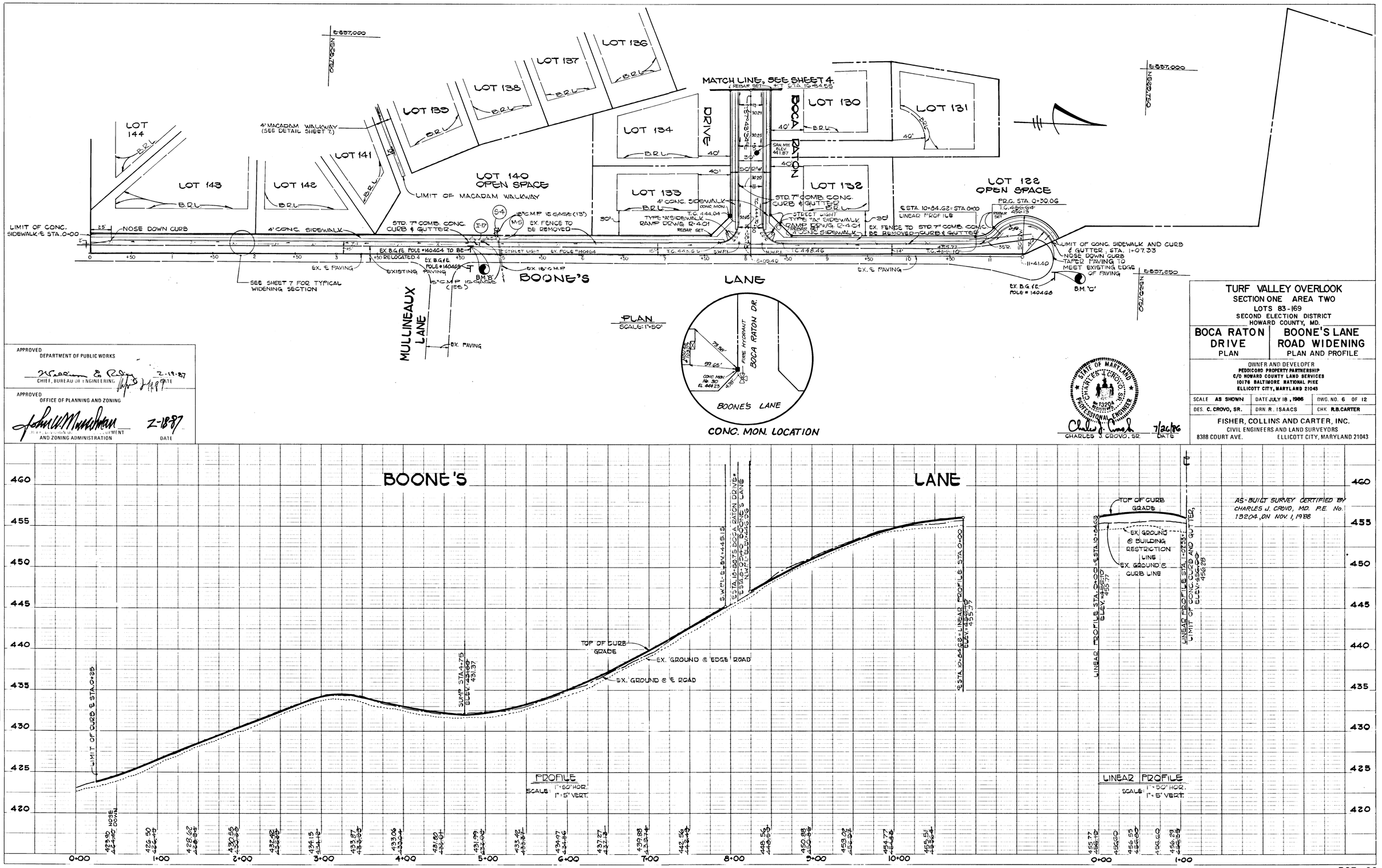


PROFILE — NOTE BOOK NO. — SURVEYED — PLOTTED — GRADES CHECKED — B.M. NOTED — STRUCTURE NOTATNS CHKD — BY — DATE

265

AS-BUILT 11-1-88

F 87-29



APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

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OFFICE OF PLANNING AND ZONING
DIRECTOR, DEPARTMENT OF PLANNING AND ZONING ADMINISTRATION — DATE 2-18-87

STATE OF MARLAND — CHARLES J. CROVO — No. 13204 — REGISTERED PROFESSIONAL ENGINEER
CHARLES J. CROVO, SR. — DATE 7/26/86

TURF VALLEY OVERLOOK
SECTION ONE AREA TWO
LOTS 83-169
SECOND ELECTION DISTRICT
HOWARD COUNTY, MD.

BOCA RATON DRIVE PLAN	BOONE'S LANE ROAD WIDENING PLAN AND PROFILE

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JULY 18, 1986	DWG. NO. 6 OF 12
DES. C. CROVO, SR.	DRN R. ISAACS	CHK R.B. CARTER

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

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

PROFILE	NOTE BOOK NO.	SURVEYED / PLOTTED / GRADES CHECKED / B.M.'s NOTED / STRUCTURE NOTATNS CHKD	BY	DATE

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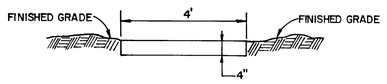
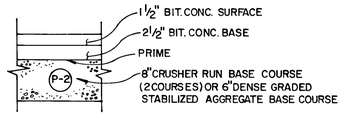
F87-29

AS-BUILT 11-1-88



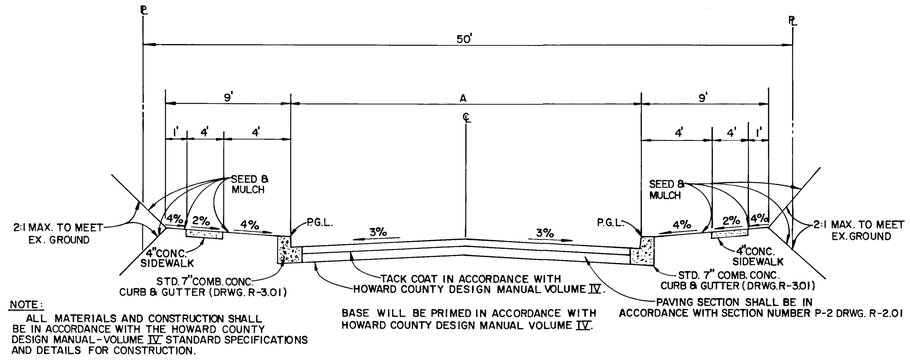
MACADAM WALKWAY DETAIL

NO SCALE



PAVING SECTION P-2

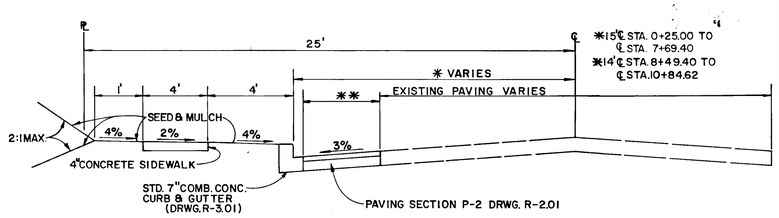
NO SCALE



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

TYPICAL ROADWAY SECTION

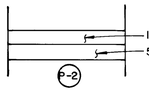
NO SCALE



TYPE OF TRAFFICWAY: LOCAL STREET DESIGN SPEED: 30MPH.
ZONED R-20
℄ STA. LIMITS 0+25.00 TO 10+84.62

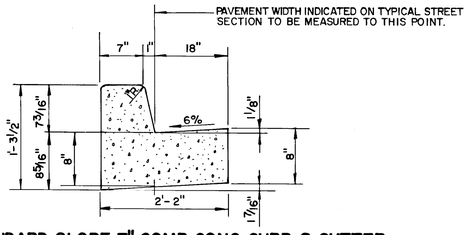
**NOTE: IF THE PAVEMENT WIDENING ALONG BOONE'S LANE IS LESS THAN 4 FEET THE CONTRACTOR SHALL REMOVE EXISTING PAVING IN ORDER TO PROVIDE 4' MINIMUM BASE WIDENING.

TYPICAL WIDENING SECTION ALONG BOONE'S LANE



PAVING SECTION P-2

NO SCALE



STANDARD SLOPE 7" COMB. CONC. CURB & GUTTER

NO SCALE

ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	A	℄ STATION LIMITS
PINEHURST COURT	CUL-DE-SAC	30 M.P.H.	R-20	28'	0+00 TO 5+56.44
GREENBRIAR COURT	CUL-DE-SAC	25 M.P.H.	R-20	28'	0+00 TO 2+39.82
PINE RIDGE DRIVE	CUL-DE-SAC	30 M.P.H.	R-20	28'	0+00 TO 5+34.47
CONGRESSIONAL COURT	CUL-DE-SAC	30 M.P.H.	R-20	28'	0+00 TO 7+75.61
BOCA RATON DRIVE	LOCAL ROAD	30 M.P.H.	R-20	30'	4+37.70 TO 18+88.75

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED
OFFICE OF PLANNING AND ZONING
DIRECTOR, OFFICE OF PLANNING AND ZONING ADMINISTRATION — DATE 2-18-87

STATE OF MARYLAND — CHARLES J. CROVO, JR. — No. 13204 — PROFESSIONAL ENGINEER

CHARLES J. CROVO, SR. — DATE 7/26/86

TURF VALLEY OVERLOOK
SECTION ONE AREA TWO
LOTS 83-169
SECOND ELECTION DISTRICT
HOWARD COUNTY, MD.

PARABOLIC CHANNEL PROFILES & DESIGN DATA, ROADWAY SECTIONS AND DETAILS

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JULY 18, 1986	DWG. NO. 7 OF 12
DES. C. CROVO, SR.	DRN. D. NEWTON	CHK. R.B. CARTER

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

PLAN — SURVEYED / PLOTTED / DESIGN CHECKED / R/W CHECKED — BY — DATE — NOTE BOOK — NO.

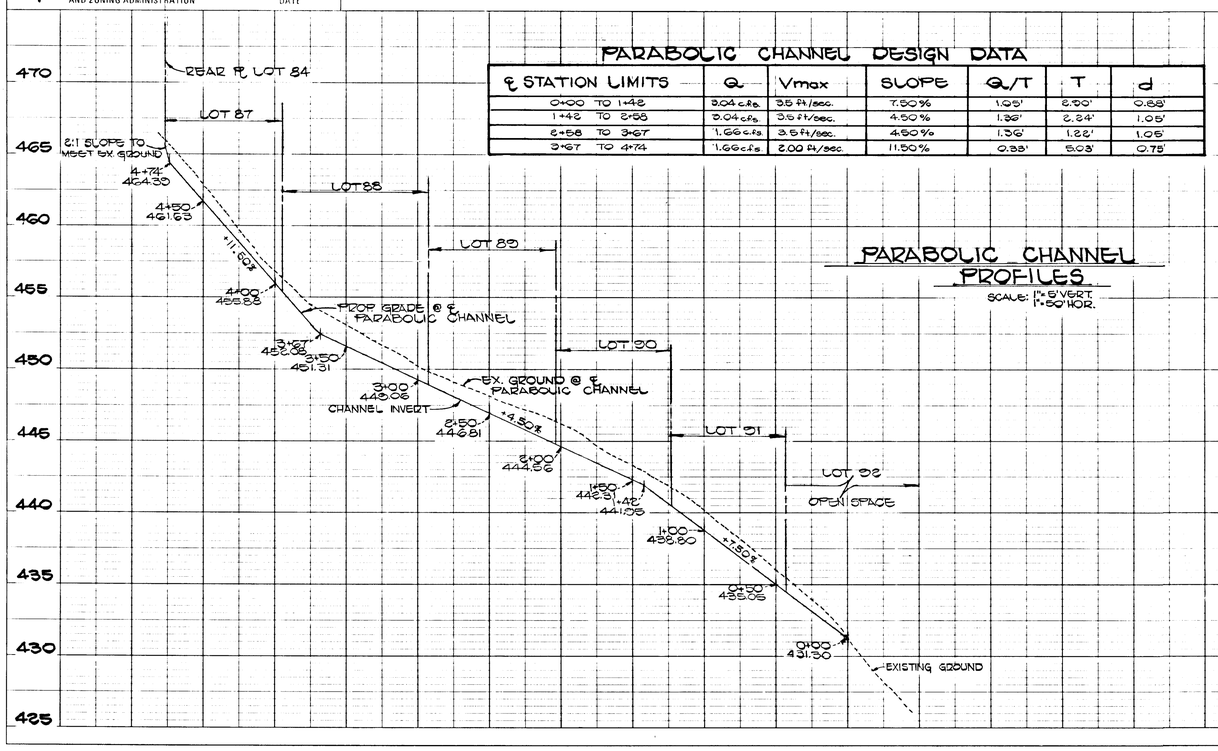
PROFILE — SURVEYED / PLOTTED / DESIGN CHECKED / AS-BUILTED / STRUCTURE NOTATNS CHKD — BY — DATE — NOTE BOOK — NO.

PARABOLIC CHANNEL DESIGN DATA

℄ STATION LIMITS	Q	Vmax	SLOPE	Q/T	T	d
0+00 TO 1+42	3.04 cfs	3.5 ft/sec.	7.50%	1.05'	2.00'	0.88'
1+42 TO 2+58	3.04 cfs	3.5 ft/sec.	4.50%	1.36'	2.24'	1.05'
2+58 TO 3+67	1.66 cfs	3.5 ft/sec.	4.50%	1.36'	1.22'	1.05'
3+67 TO 4+74	1.66 cfs	2.00 ft/sec.	11.50%	0.33'	5.03'	0.75'

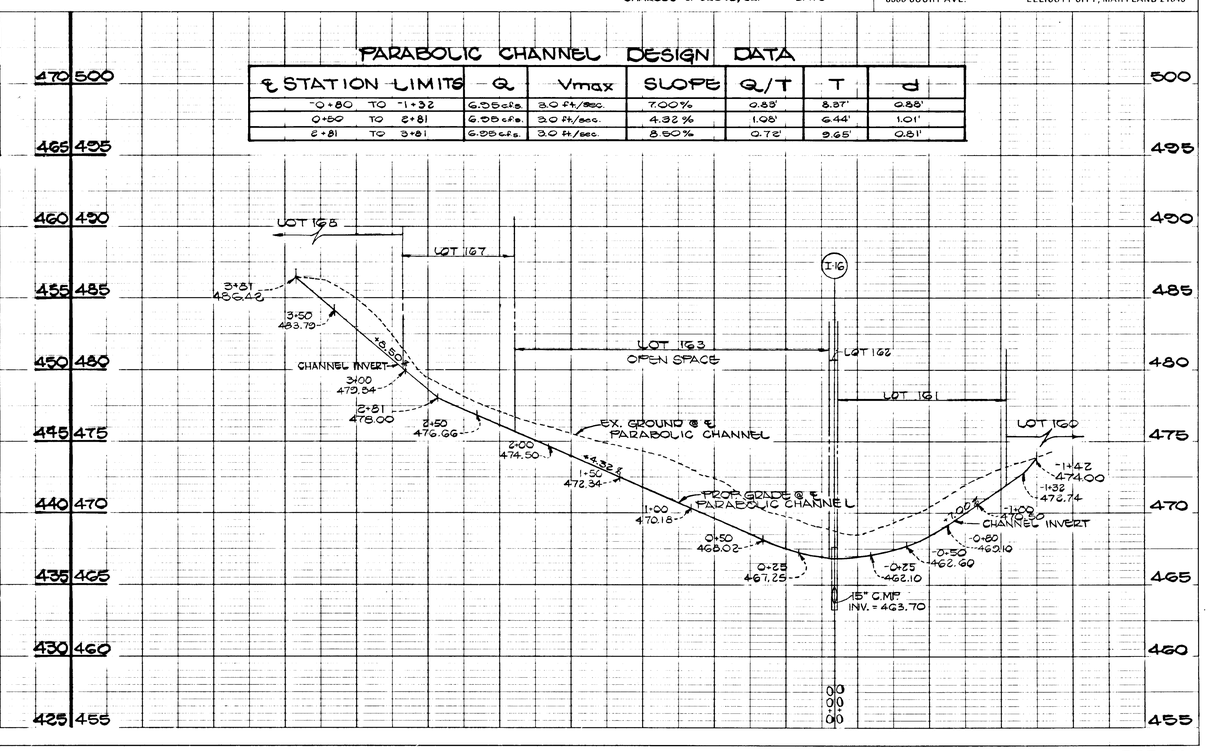
PARABOLIC CHANNEL DESIGN DATA

℄ STATION LIMITS	Q	Vmax	SLOPE	Q/T	T	d
-0+80 TO -1+32	6.05 cfs	3.0 ft/sec.	7.00%	0.83'	8.37'	0.88'
0+50 TO 2+81	6.05 cfs	3.0 ft/sec.	4.32%	1.08'	6.44'	1.01'
2+81 TO 3+81	6.05 cfs	3.0 ft/sec.	8.50%	0.72'	9.65'	0.81'



PARABOLIC CHANNEL PROFILES

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



265

F 87-29

AS-BUILT 11-1-88

APPROVED:
DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED
OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-18-87

STRUCTURE SCHEDULE

NO.	TYPE	INVERT IN	INVERT OUT	℄ TOP ELEV.	℄ ROAD STATIONS	REMARKS
I-1	A-10	--	~~418.00~~ 418.89	~~422.00~~ 422.63	L.P. Sta. 1+07.00 Pinehurst Court	S.D. 4.02
I-2	A-5	--	~~430.75~~ 431.36	~~434.00~~ 434.76	L.P. Sta. 1+25.57 Congressional Court	S.D. 4.01
I-3	A-5	~~421.75~~ 431.57	~~420.75~~ 421.91	~~437.00~~ 437.41	℄ Sta. 14+84.21 Boca Raton Drive	S.D. 4.01
I-4	A-5	~~427.75~~ 432.49	~~427.75~~ 432.25	~~438.00~~ 438.30	℄ Sta. 0+45.50 Congressional Court	S.D. 4.01
I-5	A-10	~~427.75~~ 433.13	~~427.75~~ 433.01	~~438.00~~ 438.51	℄ Sta. 0+45.50 Congressional Court	S.D. 4.02
I-6	A-10 w/ deflectors	--	~~434.00~~ 434.30	~~438.00~~ 438.57	℄ Sta. 13+97.71 Boca Raton Drive	S.D. 4.02 & S.D. 4.83
I-7	A-5	~~427.00~~ 430.72	~~430.00~~ 430.71	~~437.00~~ 437.21	℄ Sta. 14+84.21 Boca Raton Drive	S.D. 4.01
I-8	A-5 w/ deflectors	~~431.67~~ 431.81	~~431.67~~ 431.57	~~439.00~~ 439.12	℄ Sta. 0+45.50 Pine Ridge Drive	S.D. 4.01 & S.D. 4.83
I-9	A-10 w/ deflectors	~~432.46~~ 432.28	~~432.31~~ 432.27	~~439.25~~ 439.10	℄ Sta. 0+45.50 Pine Ridge Drive	S.D. 4.02 & S.D. 4.83
I-10	A-10 w/ deflectors	~~433.25~~ 432.69	~~433.00~~ 432.50	438.60 438.59	℄ Sta. 13+97.71 Boca Raton Drive	S.D. 4.02 & S.D. 4.83
I-11	A-5	~~450.31~~ 450.34	~~450.00~~ 450.15	~~456.22~~ 456.19	℄ Sta. 0+45.50 Greenbriar Court	S.D. 4.01
I-12	A-10	~~451.17~~ 450.96	~~450.00~~ 450.54	~~456.77~~ 456.06	℄ Sta. 0+45.50 Greenbriar Court	S.D. 4.02
I-13	A-5 w/ deflectors	~~454.41~~ 454.93	~~454.76~~ 454.76	~~459.87~~ 459.84	℄ Sta. 8+98.60 Boca Raton Drive	S.D. 4.01 & S.D. 4.83
I-14	A-5 w/ deflectors	--	~~455.65~~ 455.73	~~459.87~~ 459.68	℄ Sta. 8+98.60 Boca Raton Drive	S.D. 4.01 & S.D. 4.83
I-15	A-5 w/ deflectors	~~454.98~~ 454.06	~~453.98~~ 453.60	~~458.65~~ 458.52	℄ Sta. 1+77.36 Greenbriar Court	S.D. 4.01 & S.D. 4.83
I-16	'D' Inlet	--	~~467.74~~ 464.07	~~467.74~~ 467.74	----	S.D. 4.11
I-17	A-5	--	~~428.17~~ 427.82	~~431.00~~ 431.37	℄ Sta. 4+75.00 Boone's Lane	S.D. 4.01
MH-1	Standard Manhole	~~429.83~~ 433.31	~~429.44~~ 430.36	~~436.67~~ 436.49	⊕ 6' from face of curb L.P. Sta. 1+98.63 Congressional Court	G.5.01
MH-2	Standard Manhole	~~424.55~~ 428.64	~~428.70~~ 428.33	~~440.50~~ 440.43	⊕ 21' ℄ Sta. 16+54.00 Boca Raton Drive	G.5.03
MH-3	Shallow Manhole	~~446.00~~ 445.68	~~445.65~~ 445.58	~~453.77~~ 453.18	⊕ 21' ℄ Sta. 9+93.35 Boca Raton Drive	G.5.05
MH-4	Shallow Manhole	~~452.83~~ 452.70	~~452.58~~ 452.50	~~457.73~~ 457.60	⊕ 20' ℄ Sta. 1+39.47 Greenbriar Court	G.5.05
MH-5	Shallow Manhole	~~428.11~~ 427.98	~~427.86~~ 427.93	~~432.19~~ 432.16	To be set ⊕ 21' ℄ Boone's Lane opposite ex. 18" CMP	G.5.05
S-1	Std. Metal End Section	416.26	~~416.21~~ 416.25	~~418.26~~ 418.25	----	S.D. 5.61
S-2	Std. Metal End Section	416.78	~~416.64~~ 418.02	~~418.48~~ 419.27	----	S.D. 5.61
S-3	Std. Metal End Section	427.18	~~427.14~~ 426.90	~~430.68~~ 430.40	----	S.D. 5.61
S-4	Std. Metal End Section	428.36	~~428.37~~ 428.22	~~429.47~~ 429.72	----	S.D. 5.61

* Openings to be placed on all 4 sides at I-16

AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROUD, MD. P.E. No. 13204, ON NOV. 1, 1986

STATE OF MARYLAND CHARLES J. CROUD REGISTERED PROFESSIONAL ENGINEER

Drainage Area Map

Scale: 1" = 100'

OWNER & DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

TURF VALLEY OVERLOOK

SECTION 1 AREA 2
LOTS 83-169
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN SHEET 8 OF 12 JULY 18, 1986

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (301) 461-2855

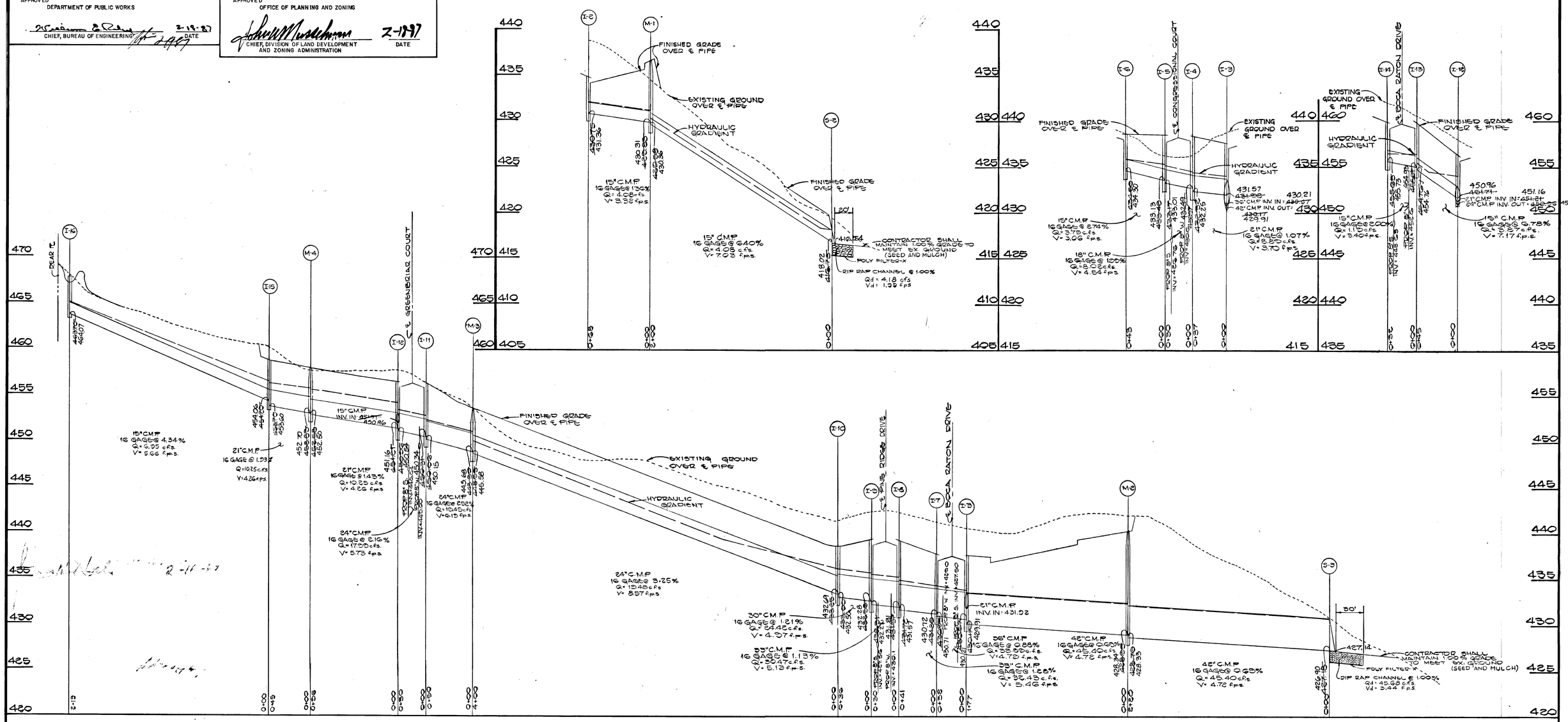
AS-BUILT 11-1-88

F 87-29

592

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 2-18-87

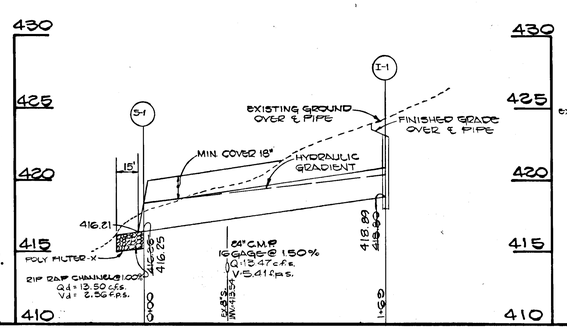
APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE Z-1997

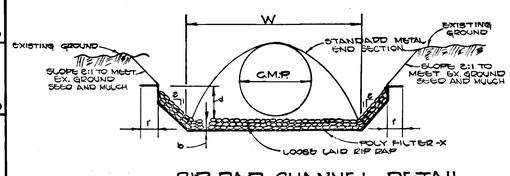


PROFILES
SCALE: 1"=50' HOR. 1"=5' VERT.

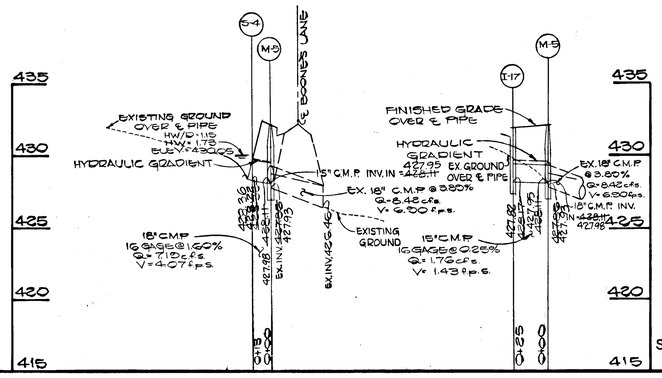
AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROVO, MD. RE. No. 13204, ON NOV. 1, 1988

RIP RAP CHANNEL DESIGN DATA														
STRUCTURE	A ft²	P'	R	R 2/3	S	S 1/2	n	Q	V	d	W	RIP RAP SIZE d 50	RIP RAP SIZE d max	b
S-1	5.27	9.18	0.5742	0.6895	1.00%	0.100	0.04	18.50 cfs	3.56 fps	0.71'	6'	6"	9"	14"
S-2	2.10	5.33	0.3946	0.5362	1.00%	0.100	0.04	4.18 cfs	1.99 fps	0.52'	3'	4"	6"	9"
S-3	13.28	14.67	0.9031	0.9670	1.00%	0.100	0.04	45.68 cfs	3.44 fps	1.09'	10'	6"	9"	14"





RIP RAP CHANNEL DETAIL
NO SCALE



CHARLES J. CROVO, SR. — DATE 7/20/86

OWNER AND DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (301) 461-2855

STORM DRAIN PROFILES AND DETAILS
TURF VALLEY OVERLOOK
SECTION 1 AREA 2
LOTS 83-169
2ND. ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN SHEET 9 OF 12 JULY 18, 1986

AS-BUILT 11-1-88

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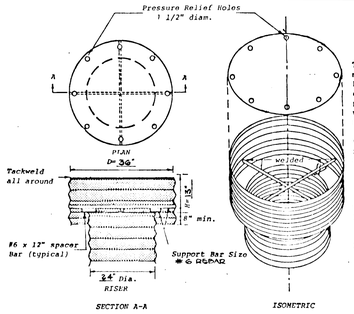
592



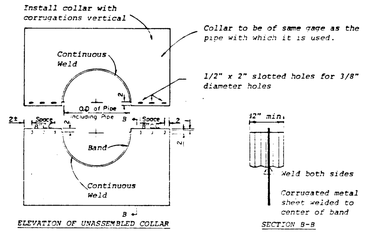
Top is 14 gage corrugated metal or 1/8" steel plate. Pressure relief holes may be omitted, if ends of corrugations are left fully open when corrugated top is welded to cylinder.

Cylinder is 16 gage corrugated metal pipe or fabricated from 1/8" steel plate.

Notes:
1) The cylinder must be firmly fastened to the top of the riser.
2) Support bars are welded to the top of the riser or attached by straps bolted to top of riser.

CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE DETAIL

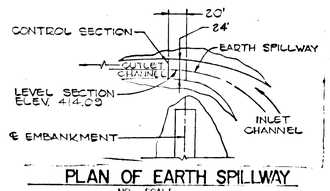
NOT TO SCALE



NOTES FOR COLLARS:
1. All materials to be in accordance with construction and construction material specifications.
2. When specified on the plans, coating of collars shall be in accordance with construction and construction material specifications.
3. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
4. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at time of installation.
5. Each collar shall be furnished with two 1/2" diameter rods with standard tank lugs for connecting collars to pipe.

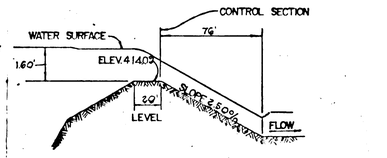
DETAILS OF CORRUGATED METAL ANTI-SEEP COLLAR

NO SCALE



PLAN OF EARTH SPILLWAY

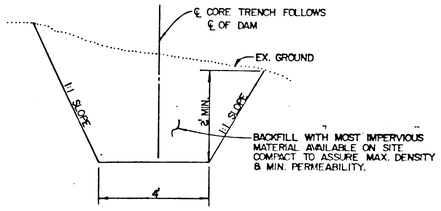
NO SCALE



PROFILE ALONG ℄ EARTH SPILLWAY

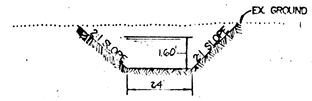
NO SCALE

EMERGENCY SPILLWAY DETAILS



CORE TRENCH DETAIL

NO SCALE



CROSS SECTION OF EARTH SPILLWAY AT CONTROL SECTION

NO SCALE

ENGINEER'S CERTIFICATE

I HEREBY 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.

SIGNATURE OF ENGINEER — DATE 7/26/86

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 8-1-86

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

U.S. SOIL CONSERVATION SERVICE — DATE 2-18-87

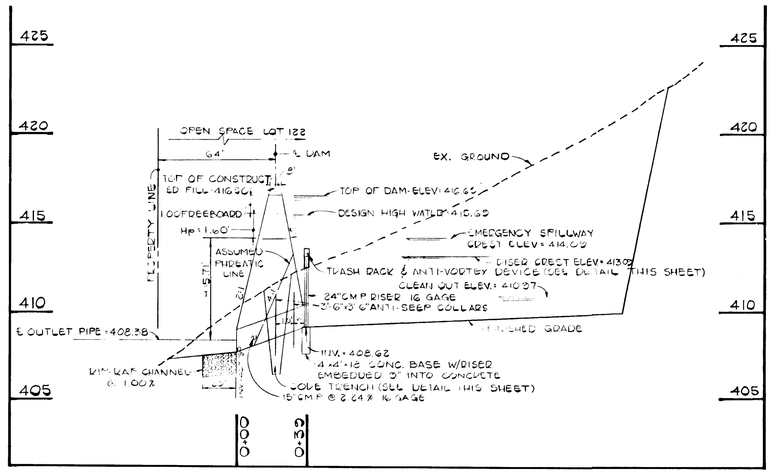
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:
DISTRICT — DATE 2-18-87
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

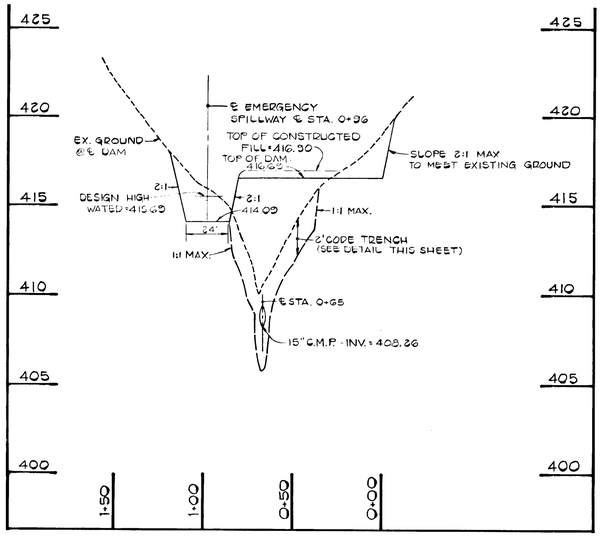
APPROVED: OFFICE OF PLANNING AND ZONING

DIRECTOR, OFFICE OF PLANNING AND ZONING ADMINISTRATION — DATE 2-19-87



SEDIMENT BASIN PROFILE

SCALE: 1"=40' HOR. 1"=4' VERT.



PROFILE ALONG ℄ DAM

SCALE: 1"=40' HOR. 1"=4' VERT.

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — CHARLES LUDOVICI, JR. — 7/26/86

OWNER & DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043

SEDIMENT CONTROL BASIN
PROFILE AND DETAILS
TURF VALLEY OVERLOOK
SECTION ONE, AREA TWO
2ND. ELECTION DISTRICT — HOWARD COUNTY, MD.
SCALE: AS SHOWN — JULY 18, 1986
SHEET 10 OF 12

F 87-29

AS-BUILT 11-1-88

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SEDIMENT CONTROL NOTES:

1) 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 (301-313-1855).
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) ALL SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED TO PROVIDE FOR THE SAFETY AND STABILIZATION SHALL BE COMPLETED WITHIN ONE (1) CALENDAR DAY AFTER REMOVAL OF SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, 30 (W DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4) 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. STABILIZATION MEANS EITHER PERMANENT OR TEMPORARY SEEDING (SEC.50) AND MULCHING (SEC.51). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
5) 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.
6) ESTIMATED QUANTITIES

TOTAL AREA OF SITE	40.374	ACRES
AREA DISTURBED	17.4	ACRES
AREA TO BE ROOFED OR PAVED	1.4	ACRES
AREA TO BE VEGETATIVELY STABILIZED	3.4	ACRES
TOTAL CUT	21,700	CU. YDS.
TOTAL FILL	21,700	CU. YDS.

7) OFF SITE STOCKPILE/BORROW AREA LOCATION TO BE DETERMINED
8) ALL SEDIMENT CONTROL PRACTICES WHICH IS DISTURBED BY GRADING OPERATIONS MUST BE REPLACED ON THE SAME DAY OF DISTURBANCE.
9) PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
10) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SOIL SEDIMENT CONTROL INSPECTOR.

PERMANENT SEEDING NOTES:

APPLY TO GRADED OR CLEARED AREA 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 DOSAGES:

1) PREFERRED : APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.) BEFORE SEEDING. MARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. APPLY 400 LBS PER ACRE 10-10-10 MAINTENANCE 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. MARROW OR DISC INTO UPPER THREE-INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 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 40 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ.FT.) OF SEREDO BIRDSFOOT TREFOIL. FOR THE PERIOD NOVEMBER 1 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) SEE 500. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE STRAW.

MULCHING: APPLY 1½ 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 PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 345 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS, REPLACEMENTS AND REFERTILIZE.

TEMPORARY SEEDING NOTES:

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

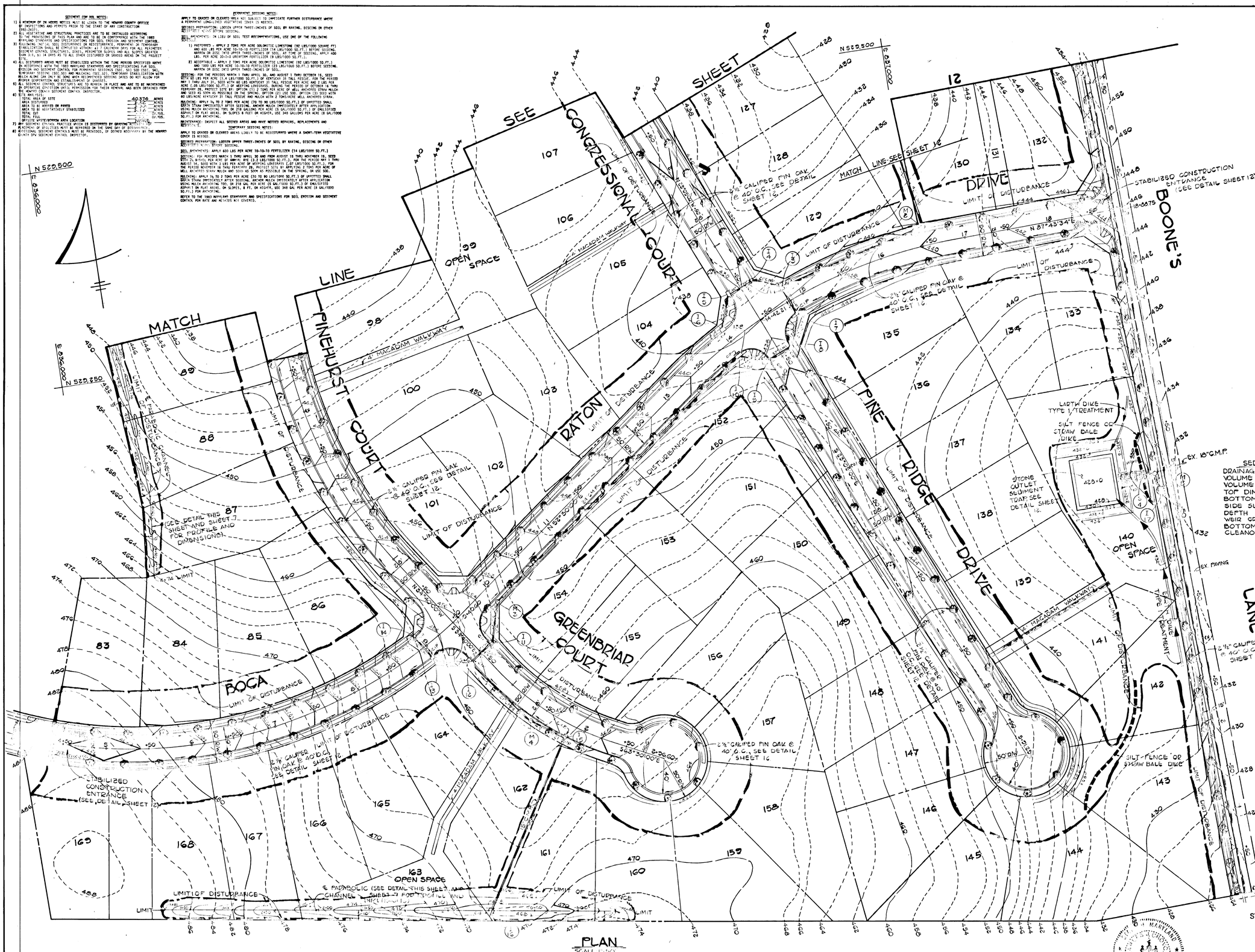
SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

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 BUSHELS 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 OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE 500.

MULCHING: APPLY 1½ 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 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.



PLAN
SCALE 1"=50'

ENGINEER'S CERTIFICATE

"I HEREBY 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."

SIGNATURE OF ENGINEER — DATE 7/26/86

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 8-1-86

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

U.S. SOIL CONSERVATION SERVICE — DATE 2-18-87

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:
DISTRICT — DATE 2-18-87
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS.

CHIEF, BUREAU OF ENGINEERING — DATE 2-18-87

APPROVED: OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 2-18-87

SEDIMENT TRAP DATA

DRAINAGE AREA	=	3.27 Ac.±
VOLUME REQUIRED	=	210 Cu. Yds.
VOLUME PROVIDED	=	226 Cu. Yds.
TOP DIMENSIONS	=	60'×55'
BOTTOM DIMENSIONS	=	50'×45'
SIDE SLOPES	=	2:1
DEPTH	=	2.2'
WEIR CREST ELEV.	=	431.2
BOTTOM ELEV.	=	428.0
CLEANOUT ELEV.	=	429.1

Construction Specifications

1. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the waterway.
2. The waterway shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein, and be free of bank projections or other irregularities of construction will impede flow.
3. Fills shall be compacted as needed to prevent unusual settlement that would cause damage to the complete waterway.
4. All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the waterway.
5. Stabilization shall be done according to the appropriate Standard and Specifications for Vegetative Practices.
   A. For design velocities of less than 3.5 ft. per sec., seeding and mulching may be used for the establishment of the vegetation. It is recommended that, when conditions permit, temporary diverting of water around the seeded waterway be used to insure adequate time for establishment of the vegetation.
   B. For design velocities of more than 3.5 ft. per sec., the waterway shall be stabilized with sod, with seeding protected by jute or excelsior matting or with sverting and mulching, including temporary diversion of the water until the vegetation is established.
   C. Structural - Vegetative Protection
      (1) Subsurface drain for base flow shall be constructed as shown on the Standard Drawing and as specified in the Standard and Specifications for Subsurface Drain.

PARABOLIC CHANNEL DETAIL
NO SCALE

OWNER & DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

STREET TREE, GRADING, AND SEDIMENT CONTROL PLAN

TURF VALLEY OVERLOOK

SECTION 1 AREA 2
LOTS 83-169
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN SHEET 11 OF 12 JULY 18, 1986

CHARLES J. CROVO, JR. — DATE 7/26/86

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8380 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (301) 461-2855

265

AS-BUILT 11-1-88

F 87-29

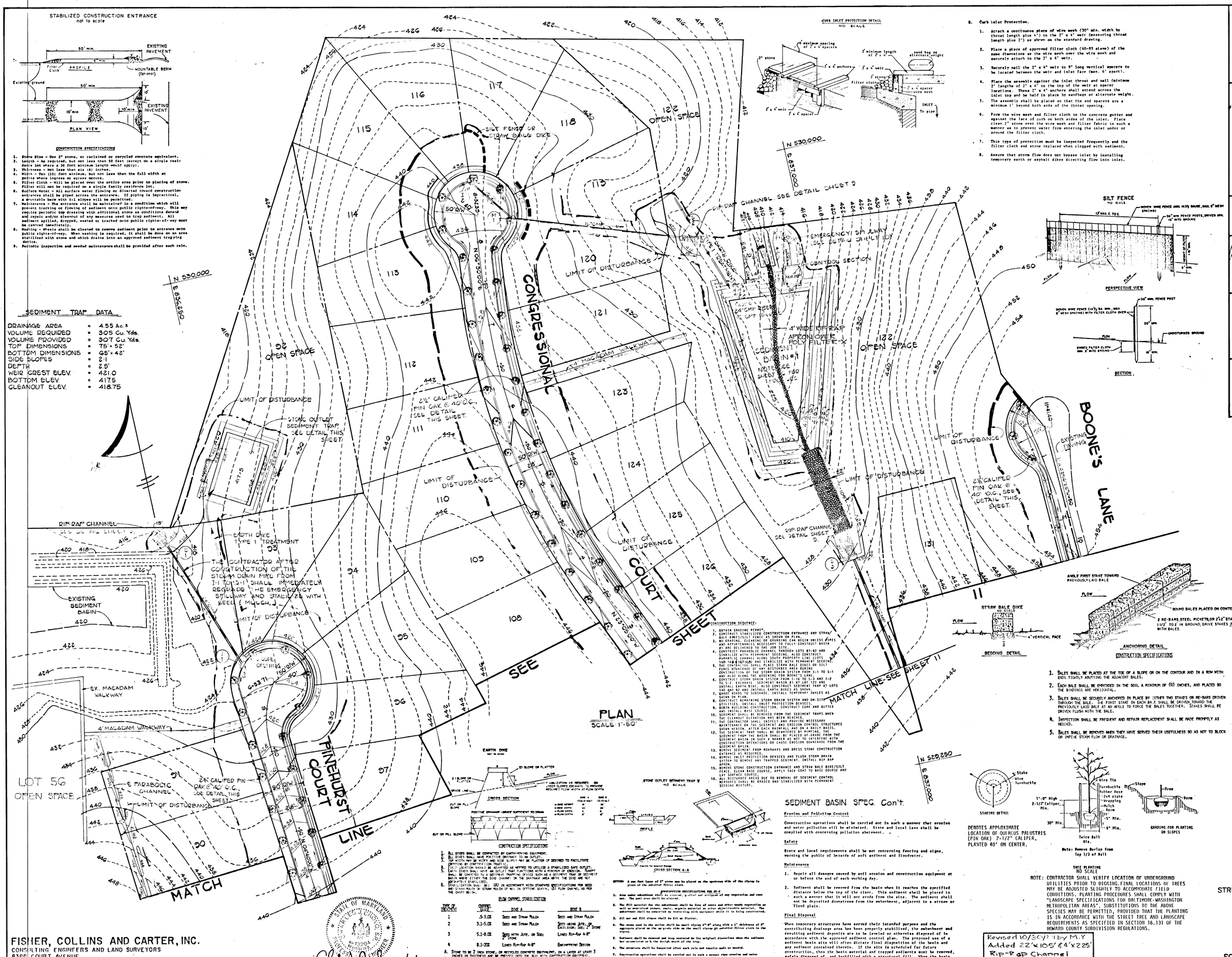
STABILIZED CONSTRUCTION ENTRANCE
not to scale

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) foot minimum, but not less than the full width at 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 rights-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 rights-of-way must be removed immediately.
8. 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.
9. Periodic inspection and needed maintenance shall be provided after each rain.

SEDIMENT TRAP DATA

DRAINAGE AREA	=	4.55 Ac. ±
VOLUME REQUIRED	=	305 Cu. Yds.
VOLUME PROVIDED	=	307 Cu. Yds.
TOP DIMENSIONS	=	75' x 52'
BOTTOM DIMENSIONS	=	45' x 42'
SIDE SLOPES	=	2:1
DEPTH	=	2.5'
WEIR CREST ELEV.	=	421.0
BOTTOM ELEV.	=	417.5
CLEANOUT ELEV.	=	418.75



PLAN
SCALE 1"=50'

CURB INLET PROTECTION DETAIL
NO SCALE

B. Curb inlet Protection.

1. 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.
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" x 4" weir.
3. Securely nail the 2" x 4" weir to 8" 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 (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.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. 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.
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 into inlet.

SILT FENCE
NO SCALE

ENGINEER'S CERTIFICATE

STATE OF MARYLAND

I HEREBY 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.

SIGNATURE OF ENGINEER — DATE 7/24/86

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 8-1-86

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

U.S. SOIL CONSERVATION SERVICE — DATE 8-18-87

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: Stephen L. Auler — DATE 2/18/87
DISTRICT
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS.

CHIEF, BUREAU OF ENGINEERING — DATE 2-19-87

APPROVED: OFFICE OF PLANNING AND ZONING

John W. Moscarillo — 2-18-87
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 36" GA. OR EQUAL MESH OPENING

FILTER CLOTH: FILTER X, MIRAFI 140N, STAKELINK 1140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SEDIMENT BASIN SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

Site Preparation

Areas under the embankment shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. In order to facilitate clean-out and restoration, the pool area (measured at the top of the pipe spillway) will be cleared of all brush, trees, and other objectionable materials.

Cut-off-Trench

A cut-off trench shall be excavated along the centerline of earth fill embankments. The minimum depth shall be two feet. The cut-off trench shall extend up both abutments to the clear crest elevation. The minimum bottom width shall be four feet, but wide enough to permit operation of excavation and compaction equipment. The side slopes shall be no steeper than 1:1. Compaction requirements shall be the same as those for embankment. The trench shall be dewatered during the backfilling-compaction operations.

Embankment

The fill material shall be taken from approved areas shown on the plans. It shall be clean mineral soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Relatively pervious materials such as sand or gravel (Unified Soil Classes GW, GP, SW & SP) shall not be placed in the embankment. Areas on which fill is to be placed shall be scarified prior to placement of fill. The fill material shall contain sufficient moisture so that it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. The fill material shall be placed starting in eight-inch thick continuous layers over the entire length of the fill. Compaction shall be obtained by routing and hauling the construction equipment over the fill so that the entire surface of each layer of the fill is traversed by at least one wheel or tread track of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement.

Pipe Spillways

The riser shall be securely attached to the barrel or barrel stub by welding the full circumference making a watertight connection. The barrel shall be attached to the riser at the same percent (angle) of grade as the outlet conduit. The connection between the riser and the riser base shall be watertight. All connections between barrel sections must be achieved by approved watertight band assemblies. (See page 18.22 for details.) The barrel and riser shall be placed on a firm, smooth foundation of impervious soil. Pervious materials such as sand, gravel, or crushed stone shall not be used as backfill around the pipe or anti-seep collars. The fill material around the pipe spillway shall be placed in four inch layers and compacted under and around the pipe to at least the same density as the adjacent embankment.

A minimum depth of two feet of hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment. Steel plate placers on riser shall have at least 2-1/2 feet of compacted earth, stone or gravel placed over it to prevent flotation.

Emergency Spillway

The emergency spillway shall be installed in undisturbed ground. The achievement of planned elevations, grades, design width, entrance and exit channel slopes are critical to the successful operation of the emergency spillway and must be constructed within a tolerance of ± 0.2 feet.

Vegetative Treatment

Stabilize the embankment and emergency spillway in accordance with the appropriate vegetative Standard and Specifications immediately following construction. In no case shall the embankment remain unstabilized for more than seven(7) days.

ANGLE FIRST STAKE TOWARD PREVIOUSLY LAID BALE

FLOW

BOUND BALES PLACED ON CONTOUR

2 RE-BARS, STEEL PICKETS OR 2"x2" STAKES 1½' TO 2' IN GROUND, DRIVE STAKES FLUSH WITH BALES.

ANCHORING DETAIL

STRAW BALE DIKE
NO SCALE

BEDDING DETAIL

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

SEDIMENT BASIN SPEC. Con't.

Erosion and Pollution Control

Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws shall be complied with concerning pollution abatement.

Safety

State and local requirements shall be met concerning fencing and signs, warning the public of hazards of soft sediment and floodwater.

Maintenance

1. Repair all damages caused by soil erosion and construction equipment at or before the end of each working day.
2. Sediment shall be removed from the basin when it reaches the specified distance below the top of the riser. This sediment shall be placed in such a manner that it will not erode from the site. The sediment shall not be deposited downstream from the embankment, adjacent to a stream or flood plain.

Final Disposal

When temporary structures have served their intended purpose and the contributing drainage area has been properly stabilized, the embankment and resulting sediment deposits are to be leveled or otherwise disposed of in accordance with the approved sediment control plan. The proposed use of a sediment basin site will often dictate final disposition of the basin and any sediment contained therein. If the site is scheduled for future construction, then the basin material and trapped sediments must be removed, safely disposed of, and backfilled with a structural fill. When the basin area is to remain open space the pond may be pumped dry, graded and back filled.

Revised 10/30/87 by M.Y
Added 22'x105'&4'x225'
Rip-Rap Channel

STATE TO STATE TURNBUCKLE

STAKING DETAIL

DENOTES APPROXIMATE LOCATION OF QUERCUS PALUSTRIS (PIN OAK) 2-1/2" CALIPER, PLANTED 40' ON CENTER.

Note: Remove Burlap from Top 1/3 of Ball

TREE PLANTING
NO SCALE

GRADING FOR PLANTING ON SLOPES

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH "LANDSCAPE SPECIFICATIONS FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS". SUBSTITUTIONS TO THE ABOVE SPECIES MAY BE PERMITTED, PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.

EARTH DIKE
NOT TO SCALE

CROSS SECTION

* FABRICATION AS REQUIRED ON STEEP SLOPES (VICINITY OF PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH

	DIKE A	DIKE B
W-BASE WITHOUT	6'	10'
W-BASE WIDTH	2'	2'
W-FLOW WIDTH	6'	10'
H-FLOW DEPTH	1'	1'

CONSTRUCTION SPECIFICATIONS

1. ALL DITCHES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DITCHES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING WITH TILLAGE EQUIPMENT.
4. DITCH 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 DIRECTED 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 SOD WITHIN (7 DAYS) OF INSTALLATION (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0-5.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	5.1-9.0%	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR; SOD; 2" STONE
3	9.1-18.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 6-8"
4	18.1-25%	LINED RIP-RAP 6-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, ON A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 6-8 INCHES IN A LAYER AT LEAST 2 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. ENGINEERING DESIGN CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

STONE OUTLET SEDIMENT TRAP
NO SCALE

OPTION: A one foot layer of 2" stone may be placed on the upstream side of the stone to place of the annotated filter cloth.

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as perennial stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 6"-8" along with a 1' minimum of 2" aggregate placed on the upgrade side on the small riprap or another filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized.
8. The structure shall be removed and the site stabilized when the drainage area has been properly stabilized.

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STATE OF MARYLAND — CHARLES W. CROSIER — No. 13004 — PROFESSIONAL ENGINEER

7/24/86

OWNER & DEVELOPER
PEDDICORD PROPERTY PARTNERSHIP
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

STREET TREE, GRADING, AND SEDIMENT CONTROL PLAN

TURF VALLEY OVERLOOK

SECTION 1 AREA 2
LOTS 83-169
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN SHEET 12 OF 12 JULY 18, 1986

AS-BUILT 11-1-88 F 87-29

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