AUTUMN MANOR

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.
8.) STORM WATER MANAGEMENT WAS PROVIDED FOR THIS SUBDIVISION IN AUTUMN MANOR SECTION 1 AREA 1., F88-154
9.) THE CONTRACTOR SHALL NOTIFY MR. JOE SCOTT OF A.T. &T. COMMUNICATIONS (703)691-6207 AT LEAST 5 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

BENCH MARKS

B.M.#5 — ELEV.= 431.84
R.R.SPIKE FOUND IN EAST SIDE OF B.G.& E. POLE #336878 25'WEST OF ℄ KINGS HEIGHTS ROAD.
* FOR LOCATION SEE SHEET 2.

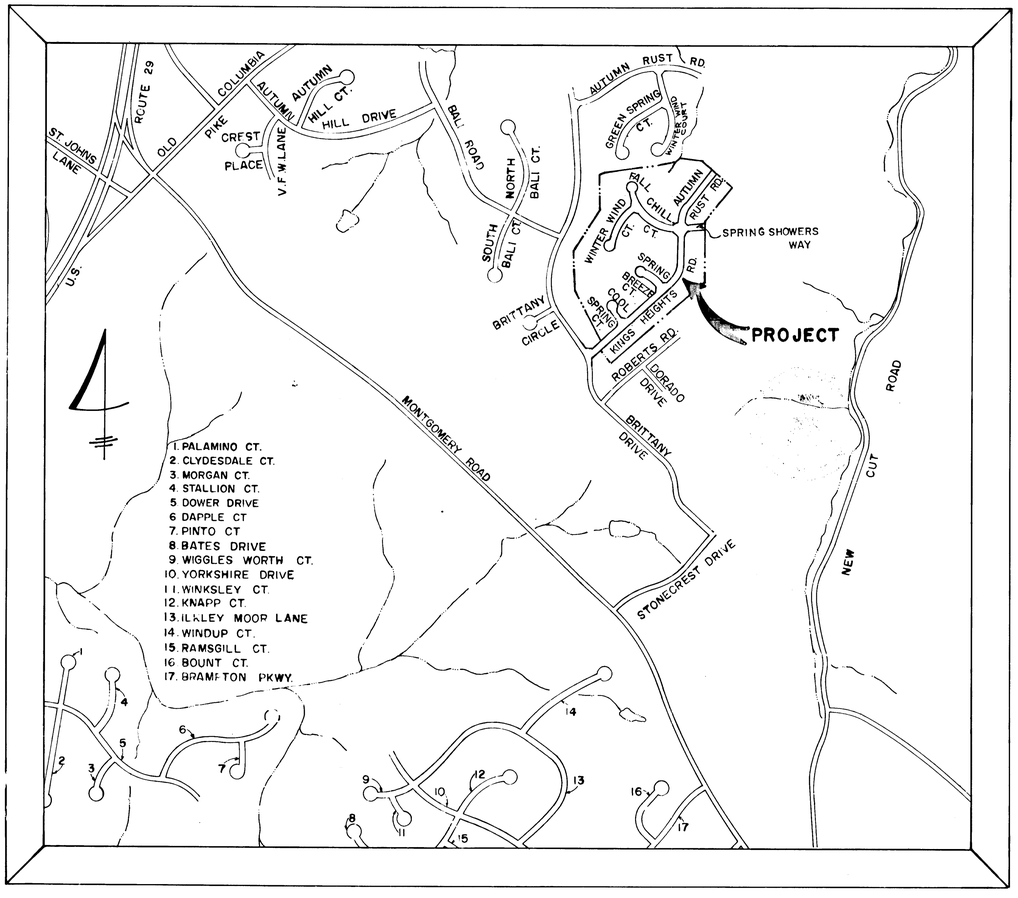
B.M.#6 — ELEV.= 402.78
R.R. SPIKE SET IN NORTH SIDE OF B.G.& E. POLE #464590 LOCATED 150'± NORTH-WEST OF ℄ WINTER WIND COURT.
* FOR LOCATION SEE SHEET 2

STREET LIGHTS

✧ 250 WATT MERCURY VAPOR MOUNTED FIXTURE ON A 25 FOOT GALVALIZED STEEL POLE LOCATED AT THE NORTH INTERSECTION OF BRITTANY DRIVE AND KINGS HEIGHTS ROAD

✦ 175 WATT MERCURY VAPOR LAMP POST TOP FIXTURE ON A 12 FOOT GRAY FIBERGLASS POLE AT THE FOLLOWING LOCATIONS:

1. THE NORTH INTERSECTION OF COOL SPRING COURT AND KINGS HEIGHTS ROAD
2. THE NORTH INTERSECTION OF SPRING BREEZE COURT AND KINGS HEIGHTS ROAD.
3. THE NORTH INTERSECTION OF FALL CHILL COURT AND AUTUMN RUST ROAD
4. AT STA. 18+50 LEFT ON AUTUMN RUST ROAD.
5. AT STA. 5+00 LEFT ON FALL CHILL COURT.



VICINITY MAP

SCALE: 1"= 600'

INDEX OF SHEETS

1.) TITLE SHEET
2.) KINGS HEIGHTS ROAD PLAN AND PROFILE, SPRING BREEZE CT.-PLAN
3.) AUTUMN RUST ROAD PLAN AND PROFILE, COOL SPRING COURT PROFILES, SPRING SHOWERS WAY PLAN
4.) WINTER WIND CT.& FALL CHILL CT-PLAN & PROFILE, COOL SPRING CT-PLAN
5.) SPRING BREEZE COURT, SPRING SHOWERS WAY, FALL CHILL COURT PROFILES, ROADWAY SECTION, DETAILS AND NOTES
6.) DRAINAGE AREA MAP
7.) STORM DRAIN PROFILES
8.) MITIGATION BASIN SPECIFICATIONS, DETAILS AND STORM DRAIN PROFILES
9.) STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
10.) STREET TREE, GRADING AND SEDIMENT CONTROL PLAN

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF HIGHWAYS — DATE

CHIEF, BUREAU OF ENGINEERING — DATE 9-2-88

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF LAND DEVELOPMENT DIVISION — DATE 9/1/88

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9-2-88

THE BOUNDARY AND TOPOGRAPHIC SURVEY FOR THIS PROJECT IS BASED ON FIELD RUN SURVEY COMPLETED IN [illegible]

1132

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

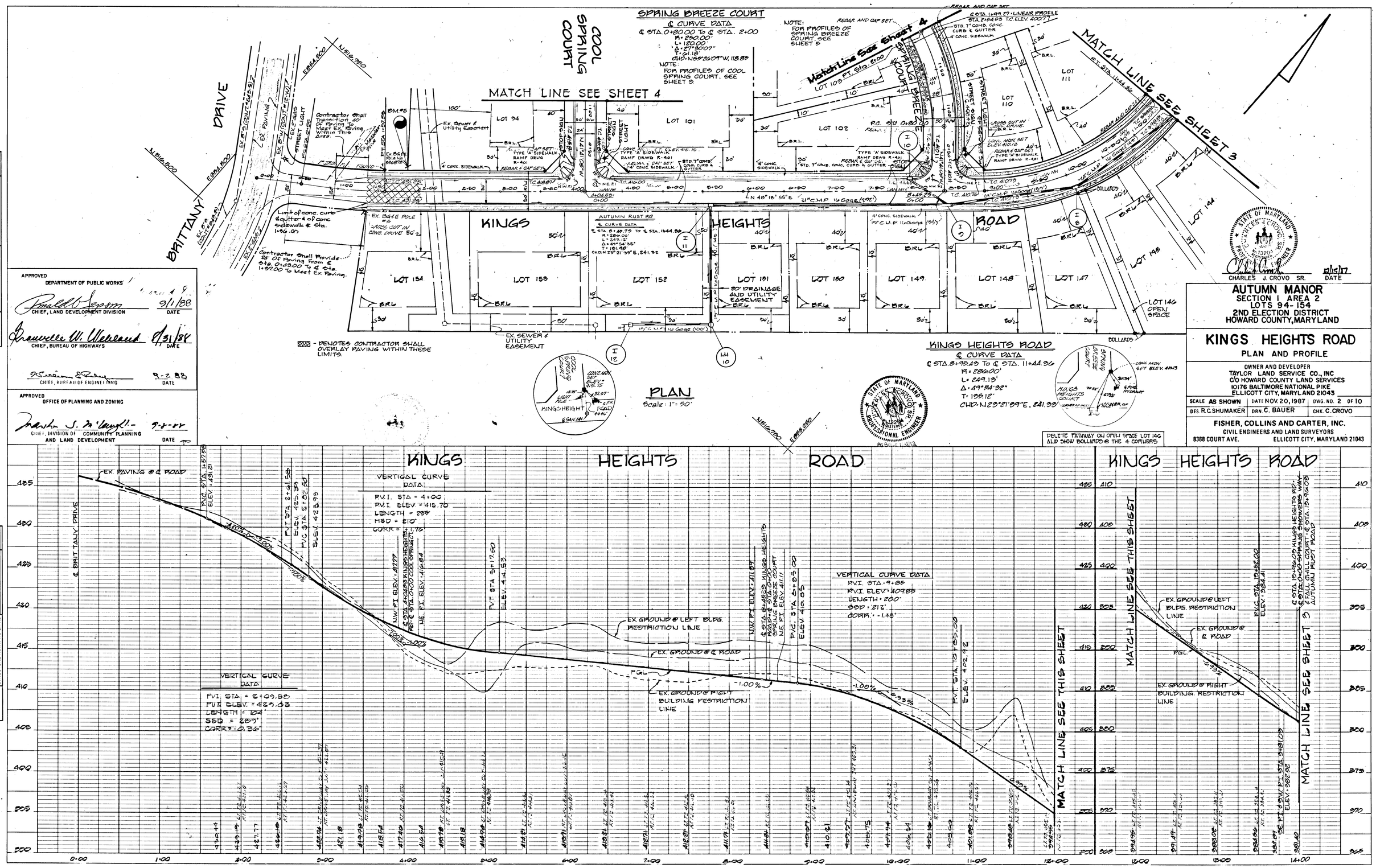
No.	Date	Descriptions
1	1/4/93	REMOVED MAC. WALKWAYS ON LOT 146
		REVISIONS

OWNER AND DEVELOPER
HOWARD COUNTY LAND SERVICES, INC.
10175 Baltimore National Pike • Suite 202 • Ellicott City, MD 21043 • 301-465-1643

AS-BUILT

DWG. No. 1 of 10

F 88-141



APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, LAND DEVELOPMENT DIVISION — DATE 9/1/88
CHIEF, BUREAU OF HIGHWAYS — DATE 8/31/88
CHIEF, BUREAU OF ENGINEERING — DATE 9-2-88

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9-8-88

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

CHARLES J. CROVO SR. — DATE 12/15/87

AUTUMN MANOR
SECTION 1 AREA 2
LOTS 94-154
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

KINGS HEIGHTS ROAD
PLAN AND PROFILE

OWNER AND DEVELOPER
TAYLOR LAND SERVICE CO., INC
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE NOV. 20, 1987	DWG. NO. 2 OF 10
DES. R.C. SHUMAKER	DRN. C. BAUER	CHK. C. CROVO

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

1132

AS-BUILT

F 88-141

APPROVED
DEPARTMENT OF PUBLIC WORKS

Ronald D. Lapsm — 9/1/88
CHIEF, LAND DEVELOPMENT DIVISION — DATE

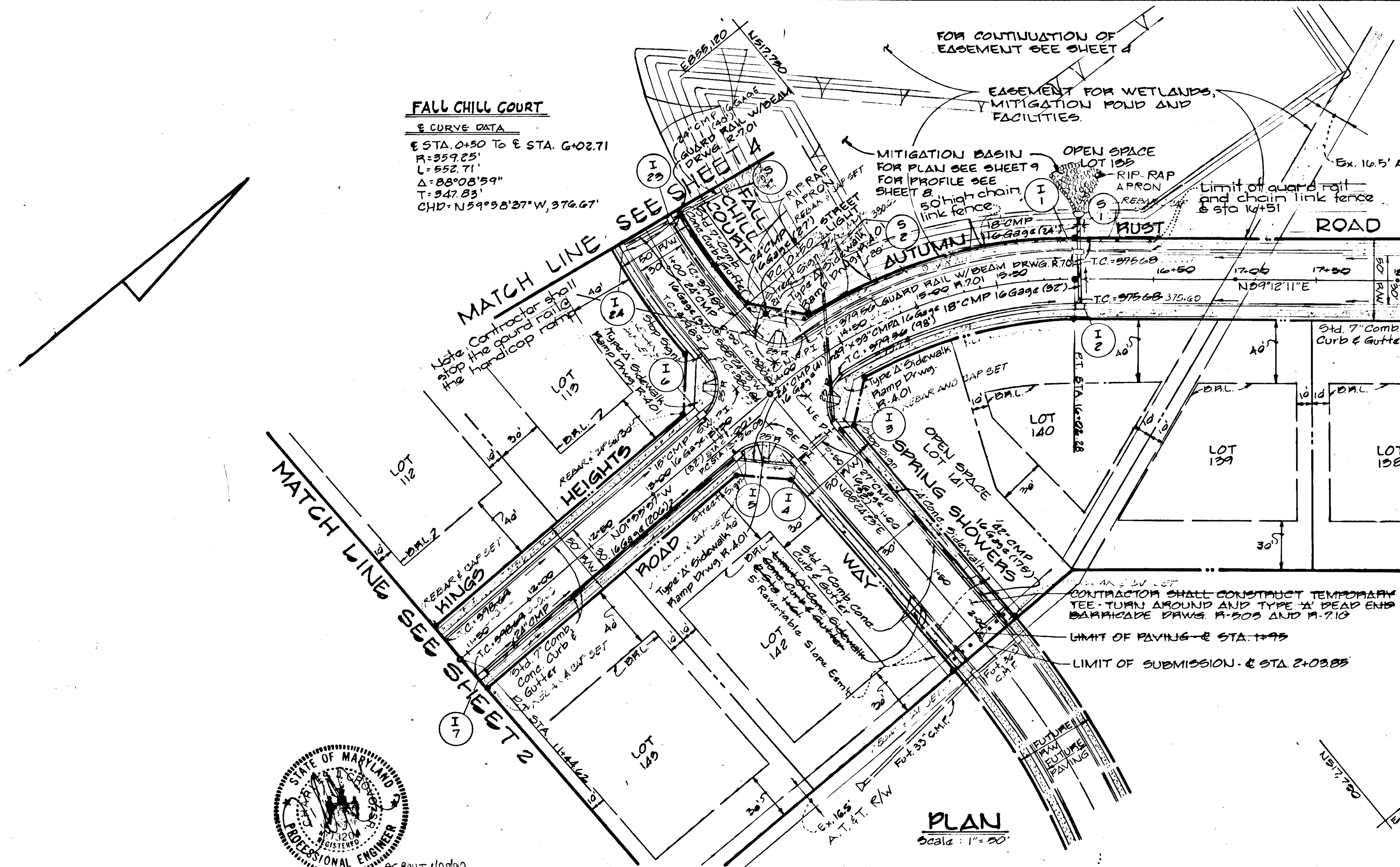
Granville W. Wehland — 8/31/88
CHIEF, BUREAU OF HIGHWAYS — DATE

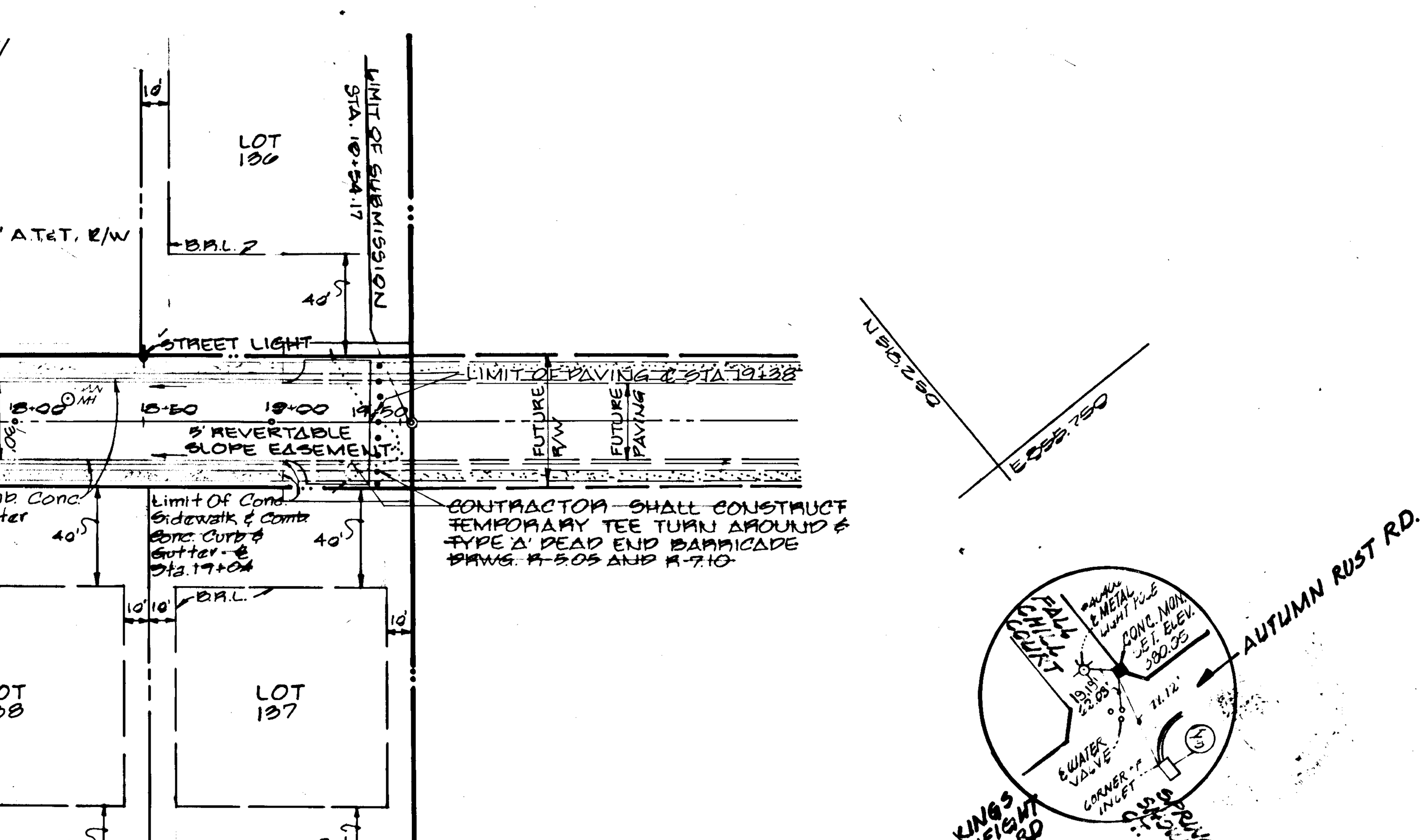
William E. Riley — 9-2-88
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED
OFFICE OF PLANNING AND ZONING

Martha S. McLaughlin — 9-8-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

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





AUTUMN RUST ROAD
℄ CURVE DATA
℄ STA. 13+36.03 TO ℄ STA. 16+02.28
R = 289.65
L = 206.25'
Δ = 40° 47'48"
T = 107.71'
CHD. = N 18°48'17" E 201.98'

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

Charles J. Crovo — 12/15/87
CHARLES J. CROVO SR. — DATE

AUTUMN MANOR
SECTION I AREA 2
LOTS 94-154
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

AUTUMN RUST RD. PLAN & PROFILE	SPRING SHOWERS WAY FALL CHILL CT. KINGS HEIGHTS RD. PLAN	COOL SPRING CT. PROFILE

OWNER AND DEVELOPER
TAYLOR LAND SERVICE CO., INC.
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE NOV 20, 1987	DWG. NO. 3 OF 10
DES. R. C. SHUMAKER	DRN. C. BAUER	CHK. C. CROVO

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

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	B. M.s NOTED		
	STRUCTURE NOTAT'NS CH'KD		

1132

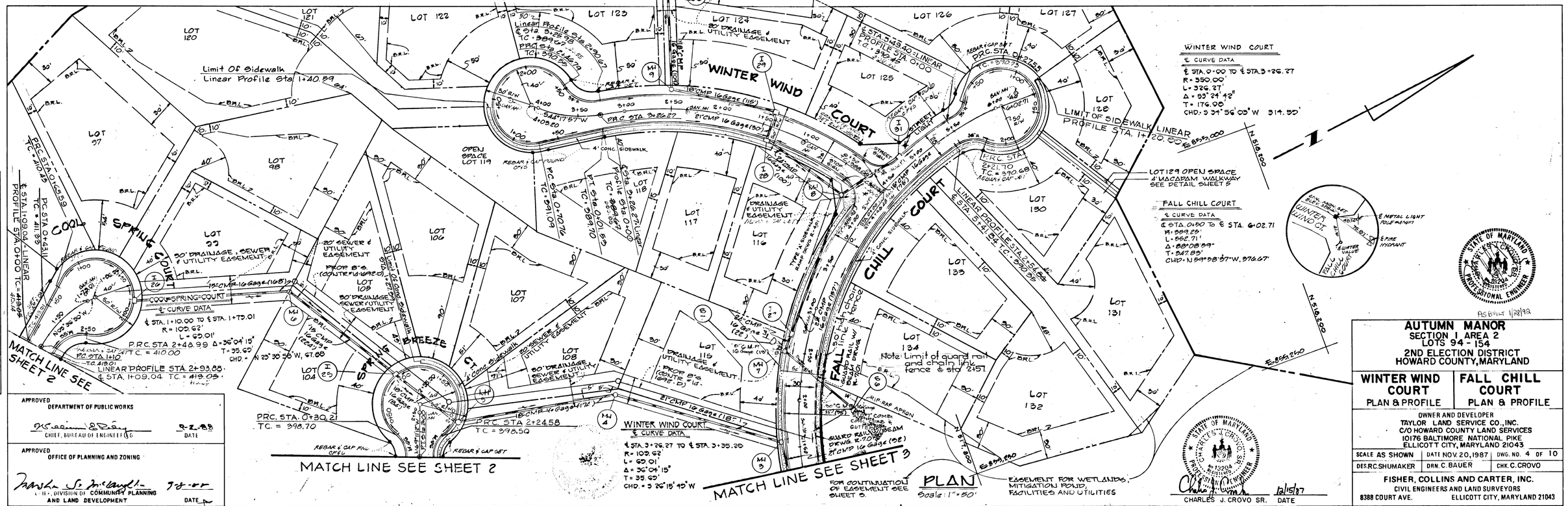
AS-BUILT

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

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 8-2-88

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 7-5-88

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, LAND DEVELOPMENT DIVISION — DATE 9/1/88
CHIEF, BUREAU OF HIGHWAYS — DATE 8/3/88



PROFILE	DATE	BY
SURVEYED		
DUTIES CHECKED		
B. M.'s NOTED		
NOTE BOOK		
NO.		
STRUCTURE NOTATIONS CHKD		

1132

AS BUILT 1/28/98

AUTUMN MANOR
SECTION 1 AREA 2
LOTS 94 - 154
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

WINTER WIND COURT PLAN & PROFILE

FALL CHILL COURT PLAN & PROFILE

OWNER AND DEVELOPER
TAYLOR LAND SERVICE CO., INC.
C/O HOWARD COUNTY LAND SERVICES
10175 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE NOV. 20, 1987	DWG. NO. 4 OF 10
DES. R.C. SHUMAKER	DRN. C. BAUER	CHK. C. CROVO

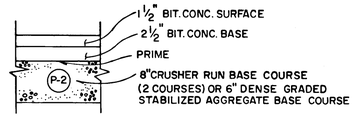
FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — REGISTERED PROFESSIONAL ENGINEER
12/15/87
CHARLES J. CROVO SR. DATE

STATE OF MARYLAND — CHARLES J. CROVO — No. 13204 — REGISTERED PROFESSIONAL ENGINEER
AS BUILT 1/28/98

F 88-141

AS-BUILT



PAVING SECTION P-2

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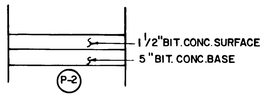

PAVING SECTION P-2

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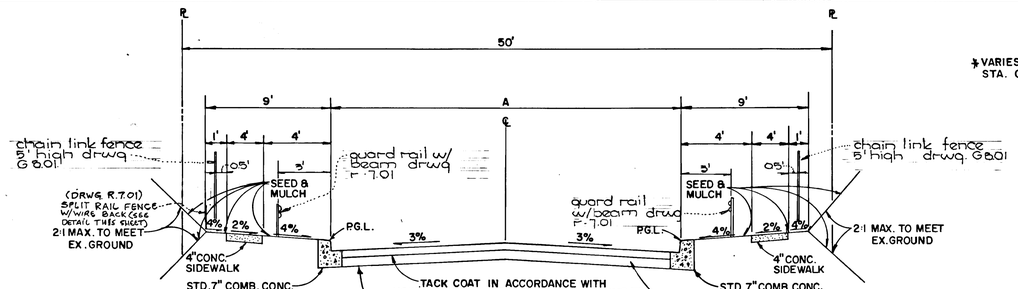
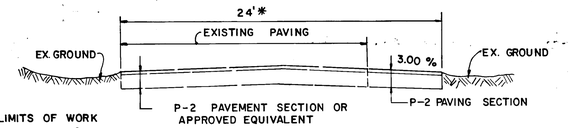


NOTE:
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL-VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.

TYPICAL ROADWAY SECTION

NO SCALE

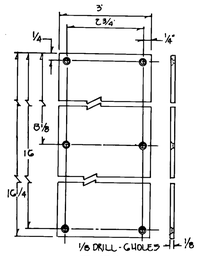
*VARIES IN TRANSITION BETWEEN STA. 0+97 AND STA. 1+37.00



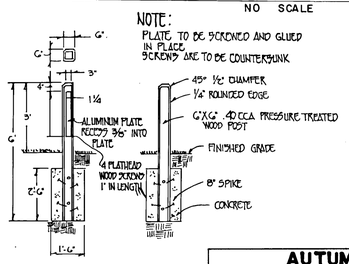
NOTE: LIMITS OF WORK ℄ STA. 0+43 = TO ℄ STA. 1+37.00

KINGS HEIGHTS ROAD ROAD WIDENING DETAIL

NO SCALE



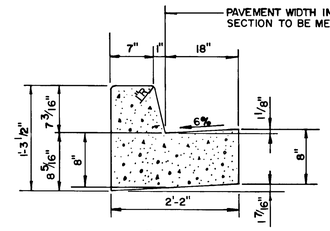
ALUMINUM PLATE



NOTE:
BOLLARDS WILL BE PLACED AT THE FOUR CORNERS OF THE OPEN SPACE ACCESS STRIP.
THE ALUMINUM PLATE WILL ONLY BE REQUIRED ON THE FRONT RIGHT BOLLARD DIRECTLY FACING THE ROAD.

OPEN SPACE BOLLARD DETAIL

NO SCALE



STANDARD SLOPE 7" COMB. CONC. CURB & GUTTER

NO SCALE

ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	A	℄ STATION LIMITS
KINGS HEIGHTS ROAD	LOCAL ROAD	30 M.P.H.	R-20	30'	1+37 TO 13+96.03
AUTUMN RUST ROAD	LOCAL ROAD	30 M.P.H.	R-20	30'	13+96.03 TO 19+38
COOL SPRING COURT	CUL-DE-SAC	25 M.P.H.	R-20	24'	0+00 TO 1+09.04
SPRING BREEZE COURT	CUL-DE-SAC	25 M.P.H.	R-20	28'	0+00 TO 1+98.91
FALL CHILL COURT	LOCAL ROAD	30 M.P.H.	R-20	30'	0+00 TO 4+46.48
	CUL-DE-SAC	25 M.P.H.		28'	4+46.48 TO 5+49.40
WINTER WIND COURT	CUL-DE-SAC	25 M.P.H.	R-20	28'	0+00 TO 3+26.27
SPRING SHOWERS WAY	LOCAL ROAD	30 M.P.H.	R-20	30'	0+00 TO 1+95

APPROVED
DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE 9/1/88

CHIEF, BUREAU OF HIGHWAYS — DATE 8/31/88

CHIEF, BUREAU OF ENGINEERING — DATE 9-2-88

APPROVED
OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9-6-88

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, ALL OF WAY CHECKED — BY — DATE — NOTE BOOK NO.

STATE OF MARYLAND — CHARLES J. CROVO — No. 12208 — REGISTERED PROFESSIONAL ENGINEER

AS BUILT 11/18/92

CHARLES J. CROVO SR. — DATE 12/15/87

AUTUMN MANOR
SECTION 1 AREA 2
LOTS 94-154
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SPRING BREEZE CT.
SPRING SHOWERS WAY
FALL CHILL CT.
PROFILES

TYPICAL ROADWAY SECTION & DETAILS

TAYLOR LAND SERVICE CO., INC.
C/O HOWARD COUNTY LAND SERVICES
10176 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

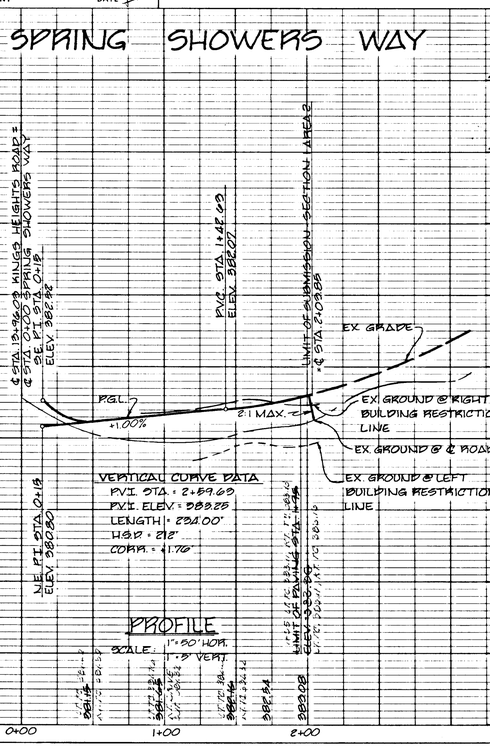
SCALE AS SHOWN | DATE NOV. 20, 1987 | DWG. NO. 5 OF 10
DES. R.C. SHUMAKER | DRN. C. BAUER | CHK. C. CROVO

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

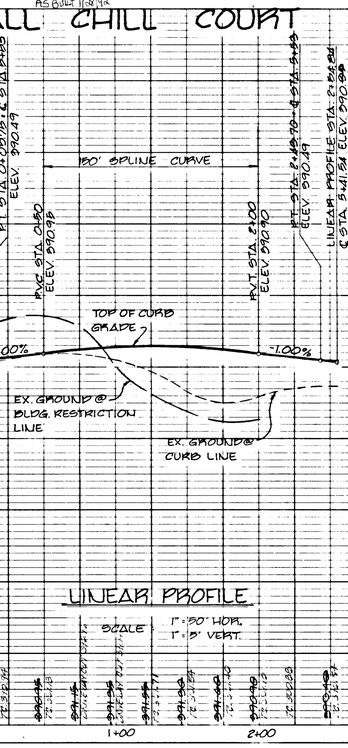
PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, ALL OF WAY CHECKED, STRUCTURE NOTATING CHKD — BY — DATE — NOTE BOOK NO.

1132

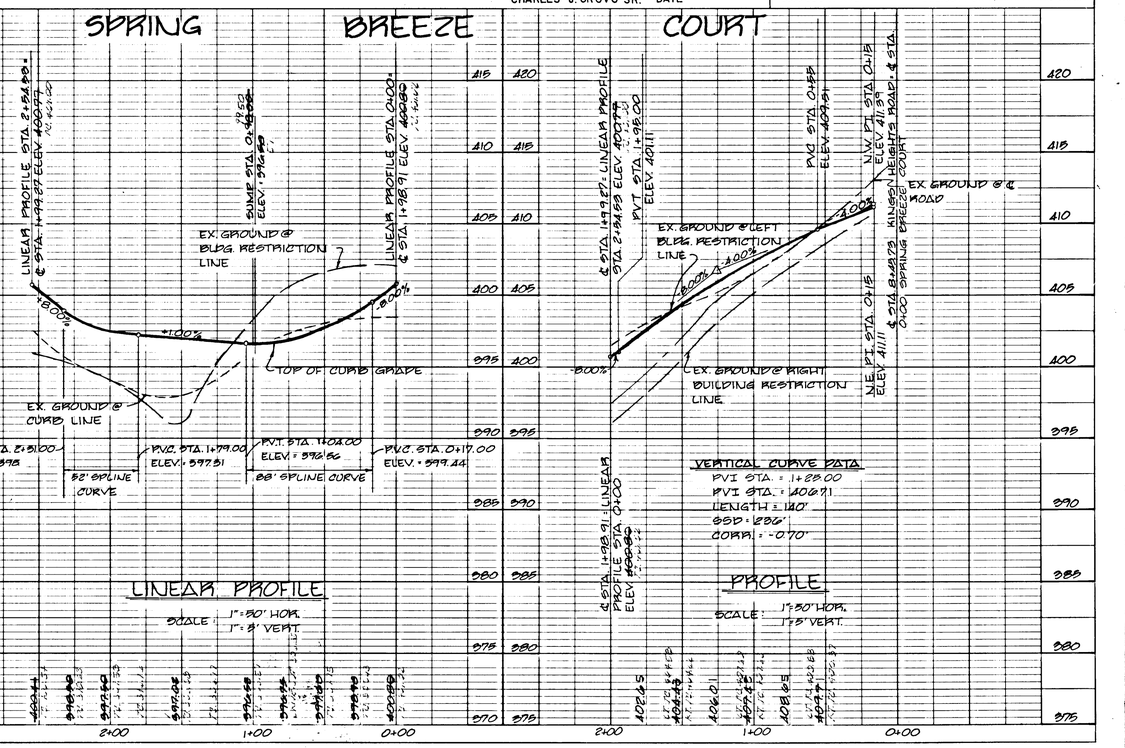
SPRING SHOWERS WAY



FALL CHILL COURT



SPRING BREEZE COURT



AS-BUILT

F 88-141

APPROVED
DEPARTMENT OF PUBLIC WORKS

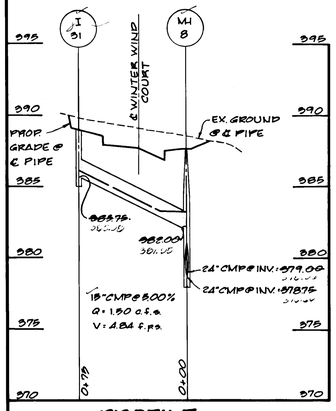
CHIEF, LAND DEVELOPMENT DIVISION — DATE 9/1/88

CHIEF, BUREAU OF HIGHWAYS — DATE 8/31/88

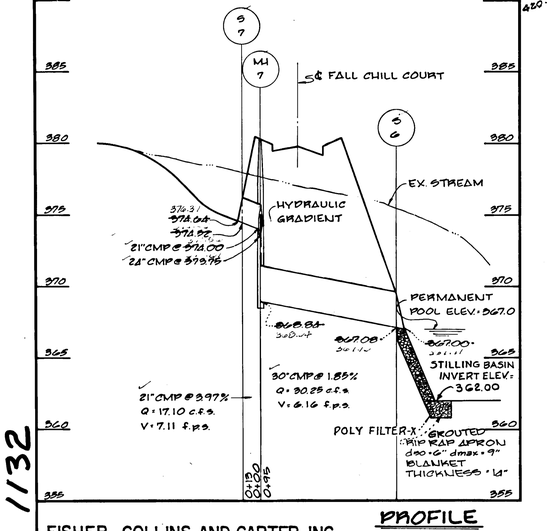
CHIEF, BUREAU OF ENGINEERING — DATE 9-2-88

APPROVED
OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9-2-88



PROFILE
Scale: 1"=50' Hor
1"=5' Vert.



PROFILE
Scale: 1"=50' Hor
1"=5' Vert.

DRAINAGE AREA MAP
SCALE: 1"=100

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

1132

STATE OF MARYLAND — CHARLES J. CROVO, SR. — No. 13704 — PROFESSIONAL ENGINEER

CHARLES J. CROVO, SR. — DATE 12/15/87

STATE OF MARYLAND — CHARLES J. CROVO, SR. — No. 13704 — PROFESSIONAL ENGINEER

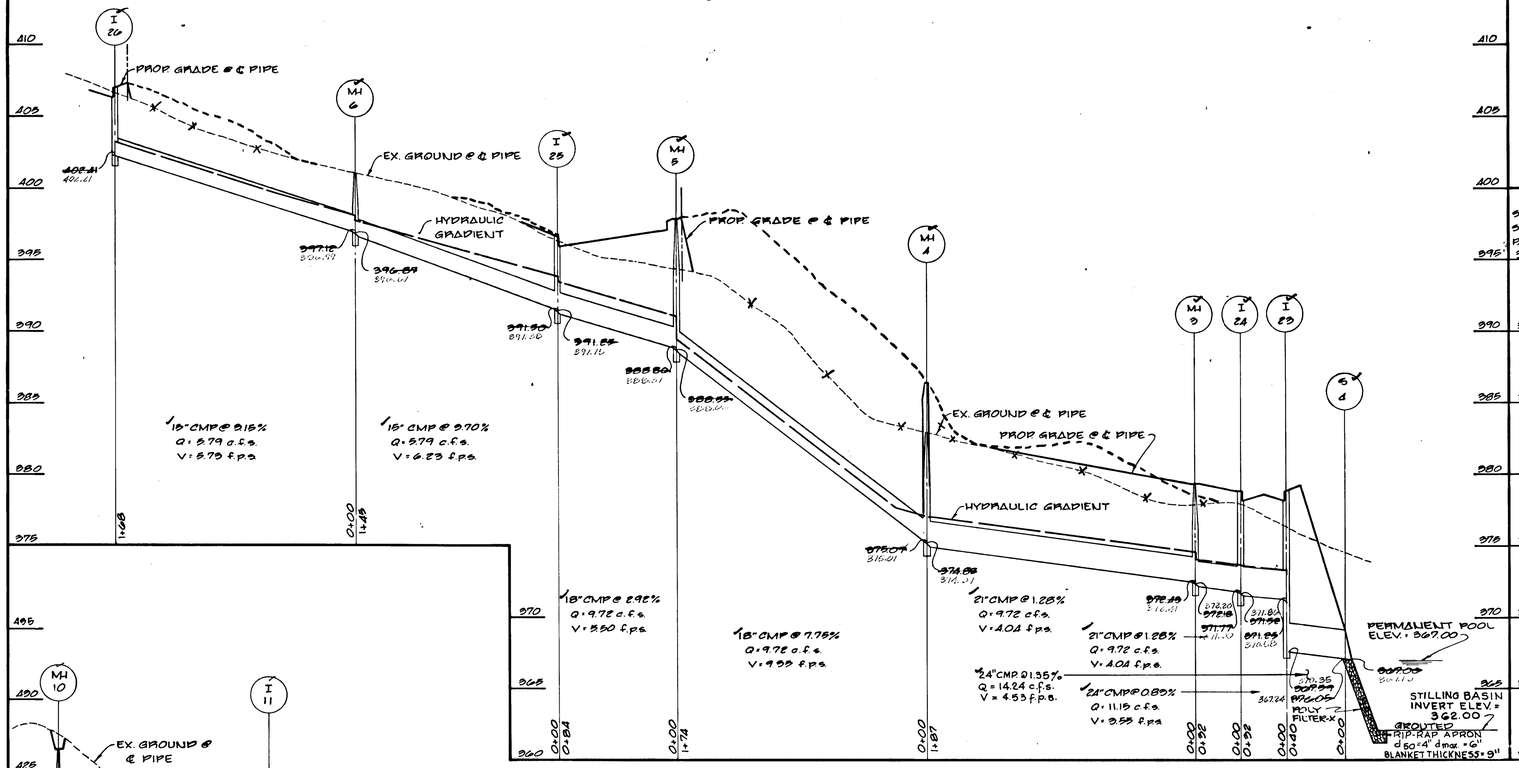
AS BUILT 1/29/92

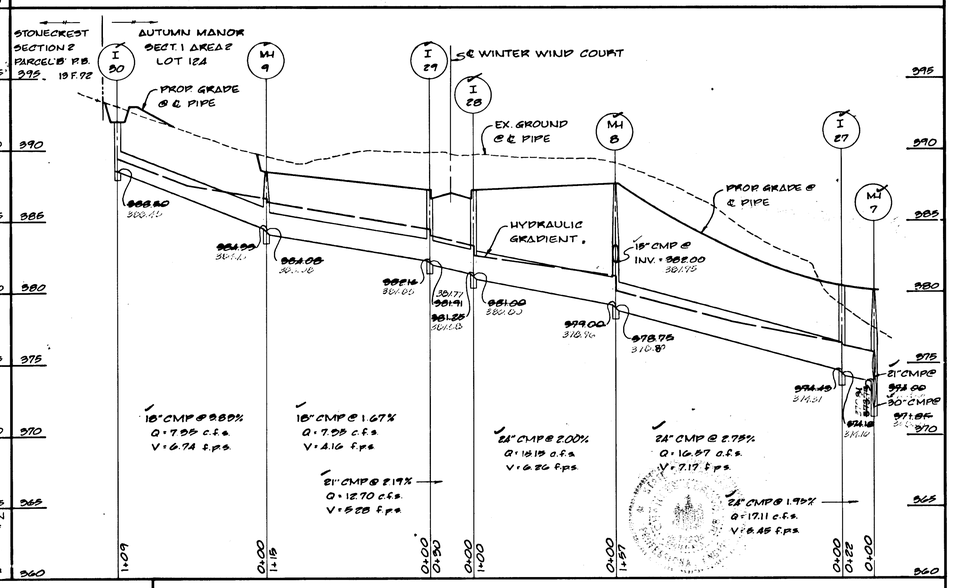
DRAINAGE AREA MAP
AUTUMN MANOR
SECTION 1 AREA 2
LOTS 94-154
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN SHEET 6 OF 10 NOVEMBER 20, 1987

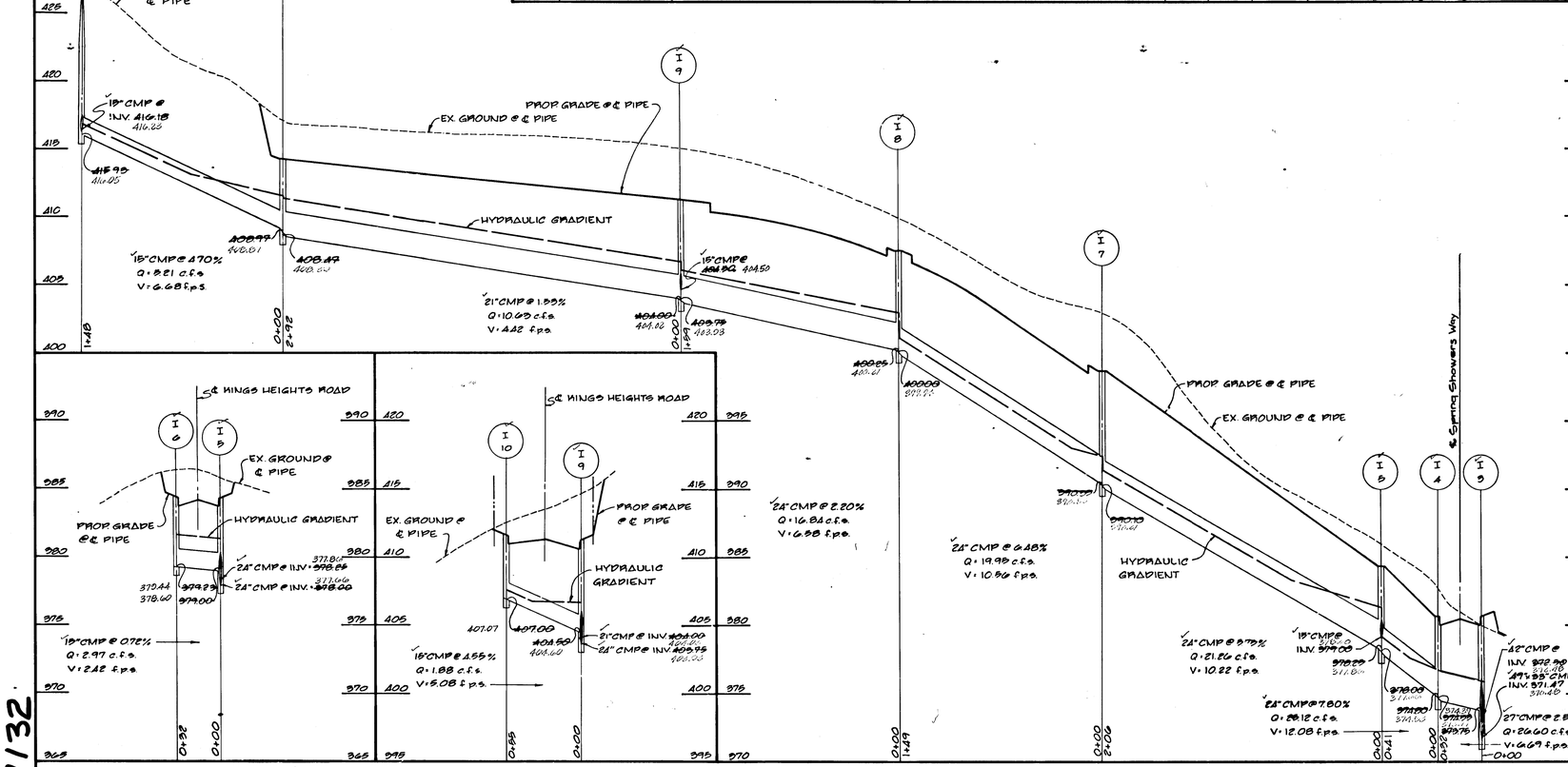
AS-BUILT F 88-141

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 8-2-88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Land Development Division — Date 9/1/88
Chief, Bureau of Highways — Date 8/31/88
Chief, Bureau of Engineering — Date 8-21-88







STATE OF MARYLAND — CHARLES U. CROVO SR. — No. 13208 — REGISTERED PROFESSIONAL ENGINEER
AS BUILT 1/28/88
CHARLES U. CROVO SR. — DATE 12/15/87

STORM DRAIN PROFILES

AUTUMN MANOR

SECTION 1, AREA 2
LOTS 94-154
2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' — NOVEMBER 20, 1987

SHEET 7 OF 10

1132

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

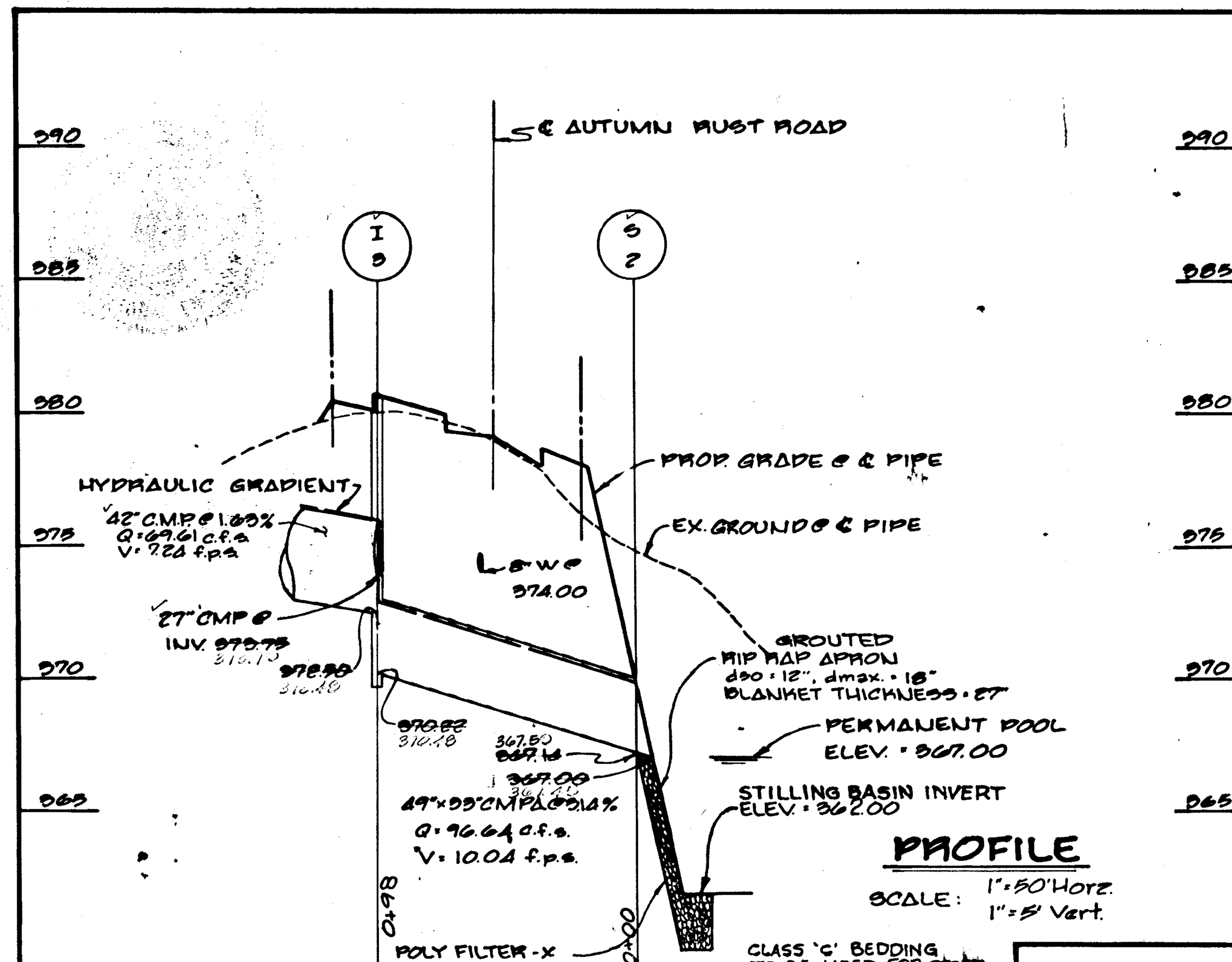
Profiles
Scale 1" = 50' Hor.
1" = 5' Vert.

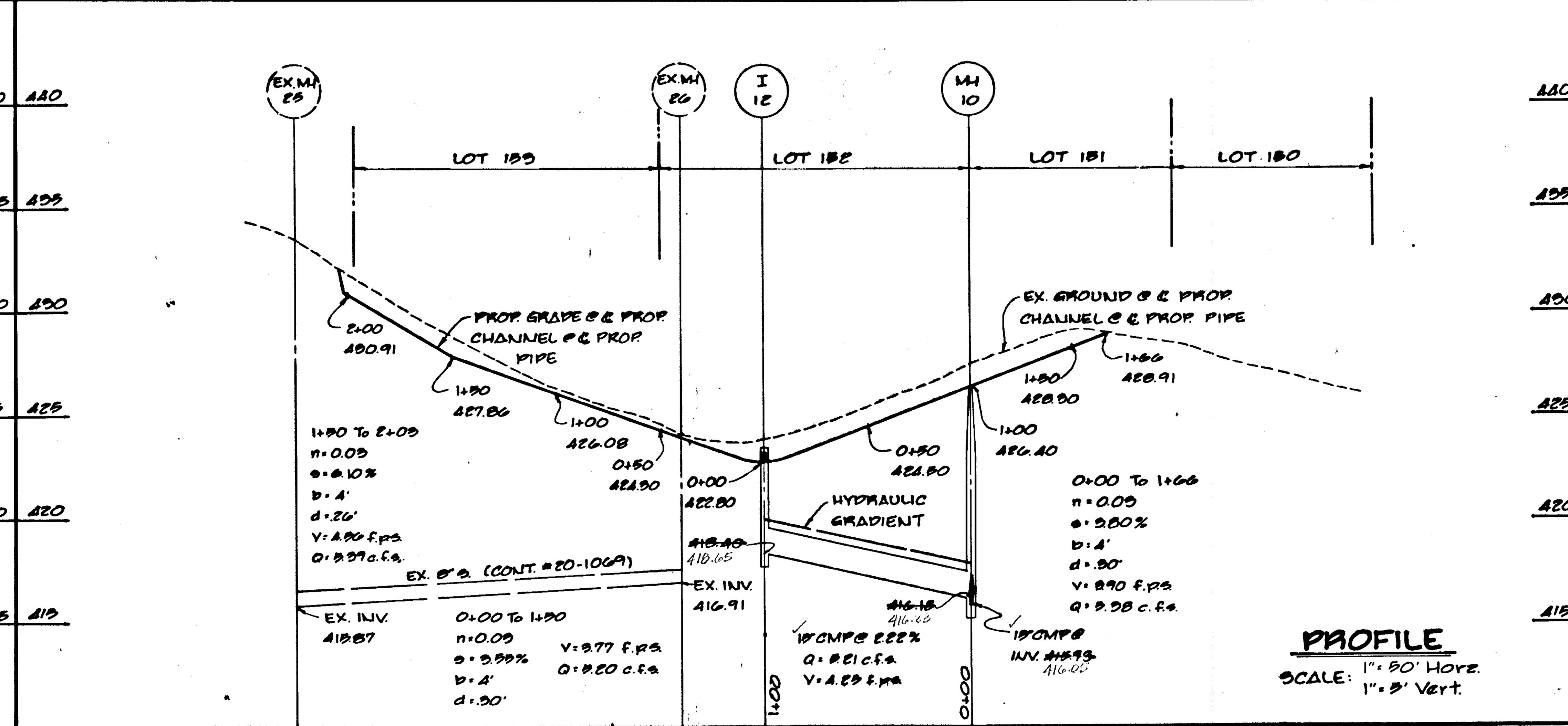
NOTE: FOR ALL STORM DRAINS CLASS 'C' BEDDING TO BE USED.

Revised: 2/6/89 by S.H.
Adjust Grading

AS-BUILT

F 88-141





MITIGATION BASIN SPECIFICATIONS

I. SITE PREPARATION

Areas under the embankment and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean out and restoration, it is recommended that the permanent pool area be cleared of all brush and trees.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free from roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased at least 10 percent above the design elevation (including freeboard) unless otherwise shown on the plans. All fill material shall be CL or ML, as approved by Soils Engineer.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Core Trench

Where specified, a core trench shall be excavated along or parallel to the centerline of the embankment, as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation with the minimum width being 4-feet. The depth shall be at least 4-feet or as shown on the plans. The side slopes of the trench shall be 1:1 or flatter. The backfill material for the core trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. Compact to 95% of AASHTO T-99 density. Materials shall be CL or ML as approved by Soils Engineer.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed 4-inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4-feet to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a structure or pipe unless there is a compacted fill of 2-feet or greater over the structure or pipe.

IV. PIPE CONDUITS

A. CORRUGATED METAL PIPE

1. Materials - METAL Pipe - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211, with watertight coupling bands.
2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the control structure shall be mortared all around. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
5. Backfilling shall conform to structural backfill as shown above.
6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

V. CONCRETE

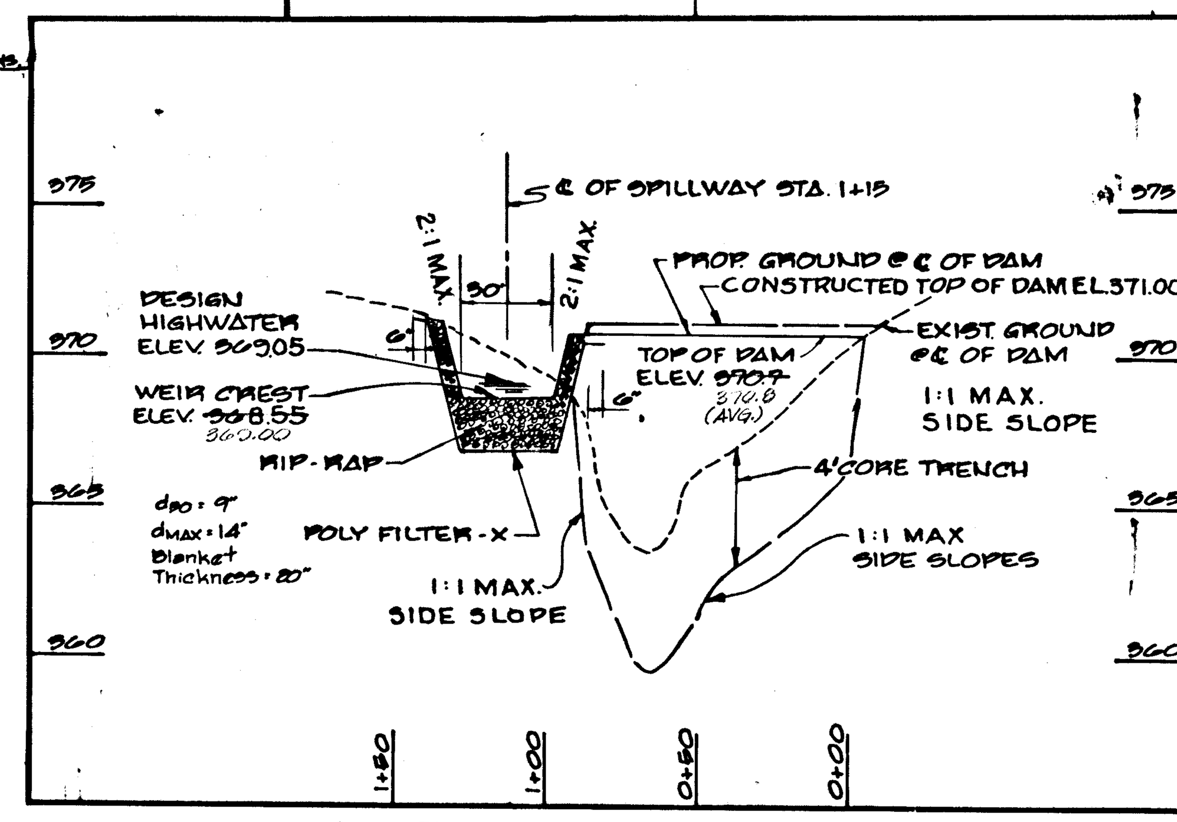
Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications for Materials, Highways, Bridges, and Incidental Structures, Article 20.07 (Portland Cement Concrete Mixtures), Mix No. 3.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be stabilized by permanent seeding and applying straw mulch in accordance with "Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas" immediately after finish grading.

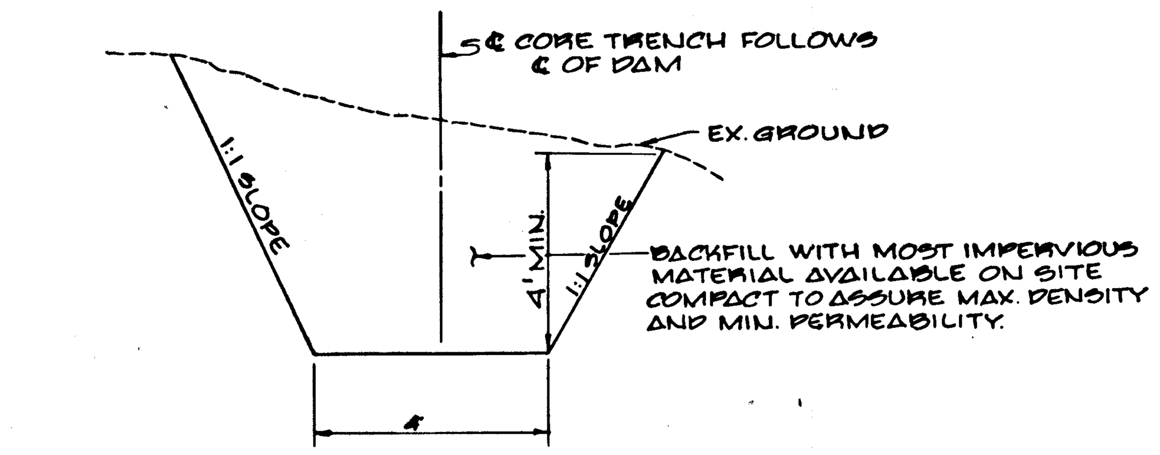
All exposed areas of the embankment and pond shall be stabilized by:

A. Spreading 4" topsoil (including bottom of pond).
B. Working in 1 ton of ground limestone and 1,000 pounds of 10-10-10 fertilizer per acre (including bottom of pond).
C. Seed with 40 lbs./acre of "Kentucky 31" tall fescue, and 15 lbs./acre of Crownvetch inoculated.
D. Mulch with 1-1/2 tons strew pre acre.
E. Tie down mulch with emulsified asphalt @ 348 gallons/acre.



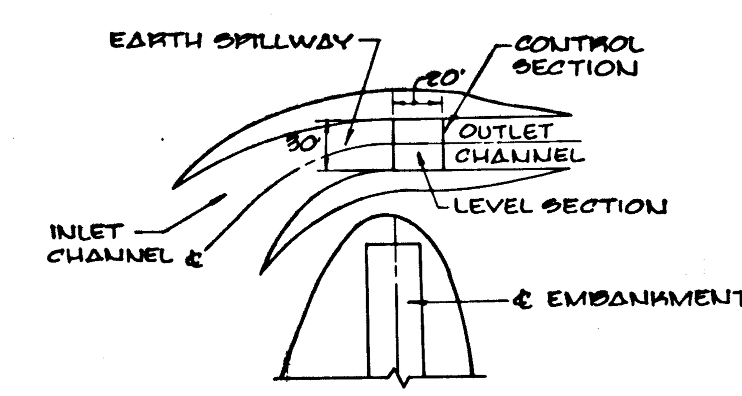
MITIGATION BASIN PROFILE ALONG ℄ OF DAM

SCALE: 1"=50' Horz. 1"=5' Vert.



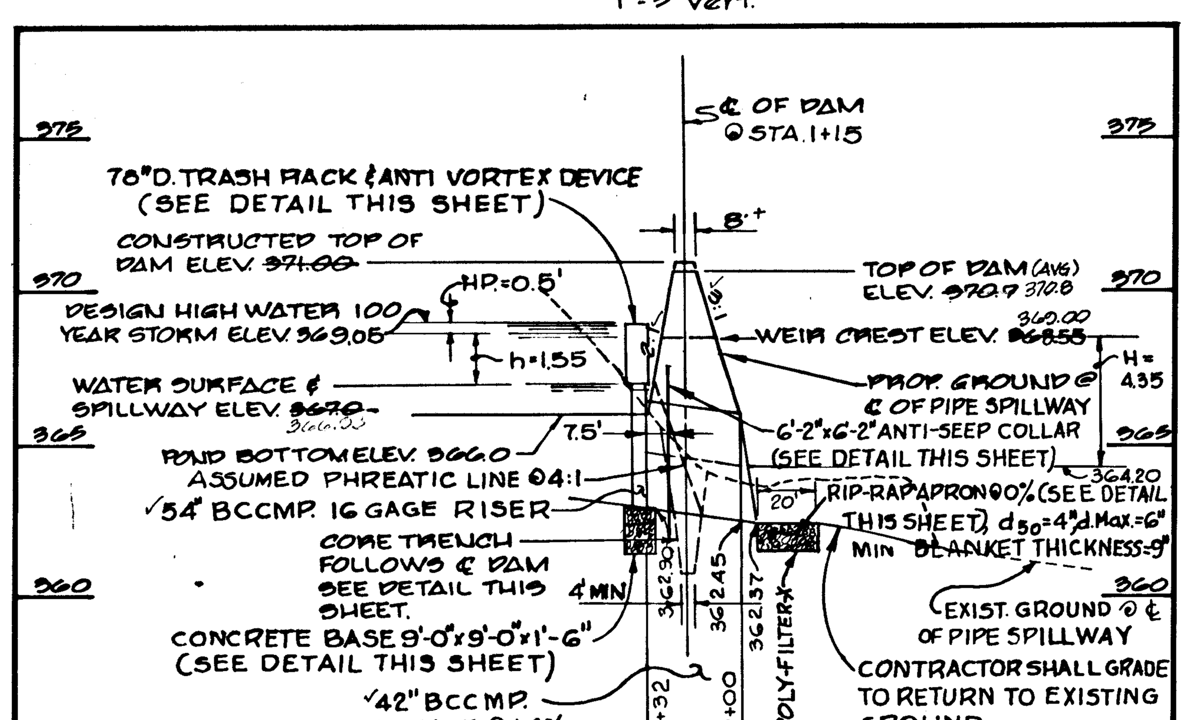
CORE TRENCH DETAIL

No Scale



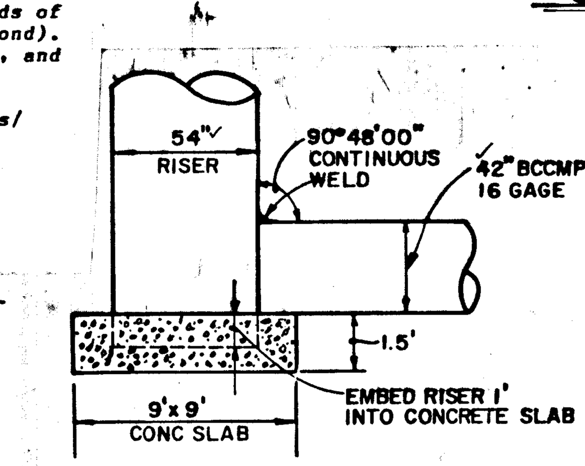
PLAN OF EARTH SPILLWAY

No Scale



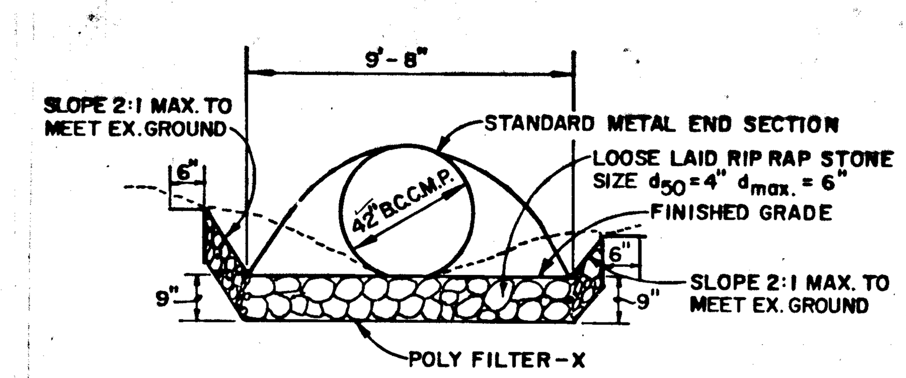
MITIGATION BASIN CROSS SECTION @ ℄ OF EXISTING STREAM

SCALE: 1"=50' Horz. 1"=5' Vert.



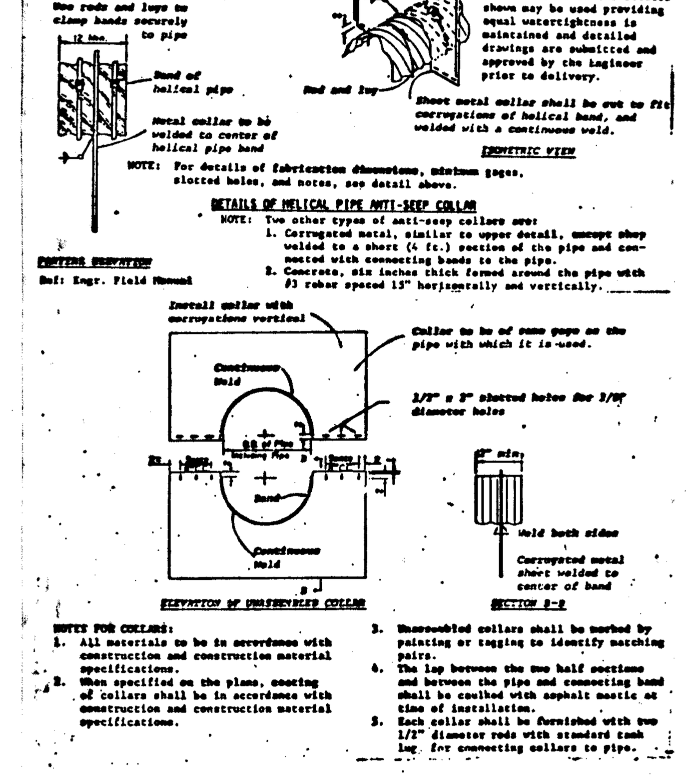
RISER STRUCTURE DETAIL

NO SCALE



RIP RAP APRON DETAIL

NO SCALE



CORRUGATED METAL ANTI-SEEP COLLAR DETAILS

NO SCALE

Revised: 2/6/89 by S.H.
Change MH elevation

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. Soil Conservation Service — 7/7/88 Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Howard Soil Conservation District — 7/7/88 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Land Development Division — 9/1/88 Date

Chief, Bureau of Highways — 8/31/88 Date

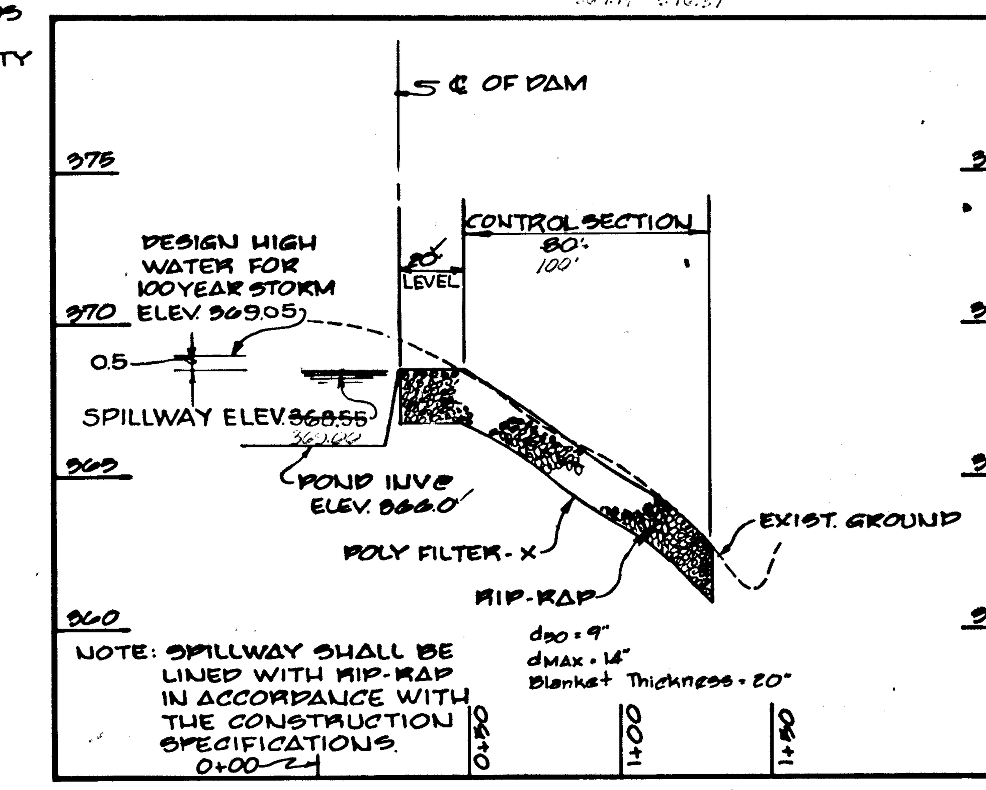
Chief, Bureau of Engineering — 9-2-88 Date

APPROVED OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 9-8-88 DATE

STRUCTURE SCHEDULE

STRUC	TYPE	INV. IN.	INV. OUT	TOP ELEV.	ROAD STATION	REMARKS
I-1	A-5	369.65	369.40	375.60	STA. 16+04.22 AUTUMN RUST RD.	S.D. 4.01
I-2	A-5	------	370.00	375.60	STA. 16+04.22 AUTUMN RUST RD.	S.D. 4.01
I-3	A-5	373.75	371.47	380.69	STA. 0+43.00 SPRING SHOWERS WAY	S.D. 4.01
I-4	A-5	374.80	374.55	380.69	STA. 0+43.00 SPRING SHOWERS WAY	S.D. 4.01
I-5	A-5 W/DEFLECTORS	379.00	378.00	384.35	STA. 13+53.03 KINGS HEIGHTS RD.	S.D. 4.01 & 4.83
I-6	A-5 W/DEFLECTORS	378.69	379.23	384.35	STA. 13+53.03 KINGS HEIGHTS RD.	S.D. 4.01 & 4.83
I-7	A-5 W/DEFLECTORS	390.35	390.10	398.62	STA. 11+47.03 KINGS HEIGHTS RD.	S.D. 4.01 & 4.83
I-8	A-5 W/DEFLECTORS	400.25	400.00	407.49	STA. 10+05.60 KINGS HEIGHTS RD.	S.D. 4.01 & 4.83
I-9	A-10	404.50	403.75	411.21	STA. 8+50.00 KINGS HEIGHTS RD.	S.D. 4.02
I-10	A-5 W/DEFLECTORS	------	407.00	411.68	STA. 8+03.23 KINGS HEIGHTS RD.	S.D. 4.01 & 4.83
I-11	A-10	408.97	408.47	414.11	STA. 5+59.50 KINGS HEIGHTS RD.	S.D. 4.02
I-12	'D' INLET	370.68	418.40	423.63	------	S.D. 4.11
I-23	A-5	371.25	371.00	378.85	STA. 1+24.66 FALL CHILL COURT	S.D. 4.01
I-24	A-5	371.77	371.52	378.85	STA. 1+24.66 FALL CHILL COURT	S.D. 4.01
I-25	A-5	391.50	391.25	396.50	L.P.STA.0+98.00 SPRING BREEZE CT.	S.D. 4.01
I-26	A-5	372.37	402.41	407.00	L.P.STA 1+80.43 COOL SPRING CT.	S.D. 4.01
I-27	A-5	378.43	374.18	380.49	STA. 2+67.50 FALL CHILL COURT	S.D. 4.01
I-28	A-5	381.25	381.00	387.11	STA. 1+41.67 WINTER WIND COURT	S.D. 4.01
I-29	A-5	382.16	381.91	387.11	STA. 1+41.67 WINTER WIND COURT	S.D. 4.01
I-30	'D' INLET	381.65	388.50	392.83	------	S.D. 4.11
I-31	A-5 W/DEFLECTORS	------	385.75	389.15	STA. 4+88.48 FALL CHILL COURT	S.D. 4.01 & 4.83
MH 3	STANDARD MANHOLE	372.43	372.28	378.93	STA. 1+56.25 FALL CHILL COURT	G. 5.01
MH 4	STANDARD MANHOLE	375.07	374.82	386.50	------	G. 5.01
MH 5	STANDARD MANHOLE	388.80	388.55	397.85	L.P.STA.2+03.00 SPRING BREEZE CT.	G. 5.01
MH 6	STANDARD MANHOLE	397.12	396.87	401.10	------	G. 5.01
MH 7	STANDARD MANHOLE	374.00	371.85	380.07	STA. 2+45.50 FALL CHILL COURT	G. 5.01
MH 8	STANDARD MANHOLE	382.00	378.75	386.54	STA. 4+17.60 FALL CHILL COURT	G. 5.01
MH 9	STANDARD MANHOLE	384.33	384.08	388.37	STA. 2+49.00 WINTER WIND COURT	G. 5.01
MH10	STANDARD MANHOLE	416.18	415.93	426.40	------	G. 5.01
S-1	STD. METAL END SECT	369.10	369.06	370.60	STA. 16+04.22 AUTUMN RUST RD @ 40' FROM ℄	S.D. 5.61
S-2	STD. METAL END SECT	368.52	368.38	371.52	STA. 14+58 AUTUMN RUST RD @ 46' FROM ℄	S.D. 5.61
S-4	STD. METAL END SECT	370.64	370.59	372.64	STA. 1+24.66 FALL CHILL COURT @ 45' FROM ℄	S.D. 5.61
S-6	STD. METAL END SECT	370.48	370.31	372.98	STA. 2+05.50 FALL CHILL CT. @ 44' FROM ℄	S.D. 5.61
S-7	STD. METAL END SECT	374.64	374.52	376.27	STA. 2+54 FALL CHILL CT. @ 36' FROM ℄	S.D. 5.61



PROFILE ALONG ℄ OF EARTH SPILLWAY

SCALE: 1"=50' Horz. 1"=5' Vert.

ENGINEER'S CERTIFICATE

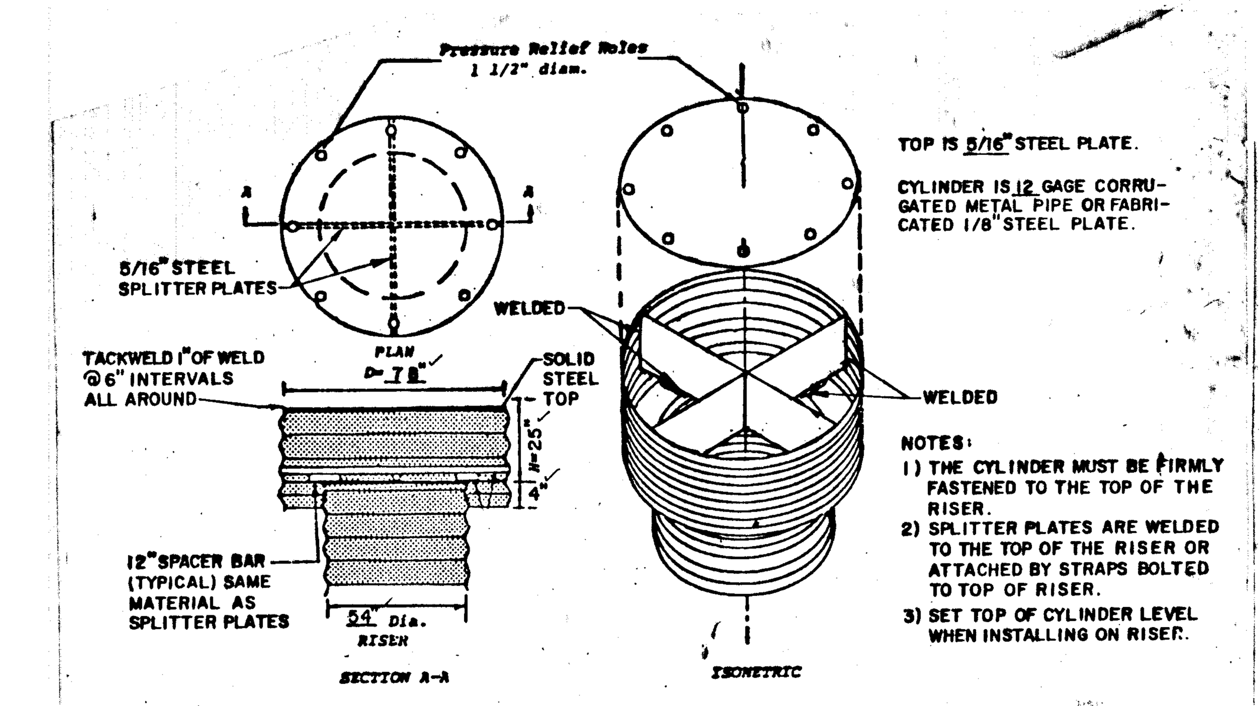
"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

Signature of Engineer — 6/27/88 Date

DEVELOPER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to these plans, 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. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Signature of Developer — 6-27-88 Date



CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE DETAIL

RIP-RAP CONSTRUCTION SPECIFICATIONS

1. The subgrade for the filter, rip-rap or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
2. The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.
3. Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.
4. Stone for the rip-rap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogenous with smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

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

AS BUILT 1/28/92

CHARLES J. CROVO SR. — 12/15/87 DATE

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

MITIGATION BASIN SPECIFICATIONS, DETAILS AND STORM DRAIN PROFILES

AUTUMN MANOR

SECTION 1 AREA 2
LOTS 94-154

2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN — NOVEMBER 20, 1987

SHEET 8 OF 10

1132

AS-BUILT

F 88-141

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 ____

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 6-27-88

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

U.S. SOIL CONSERVATION DISTRICT — DATE 7/7/88

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

DISTRICT — DATE 7/7/88
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

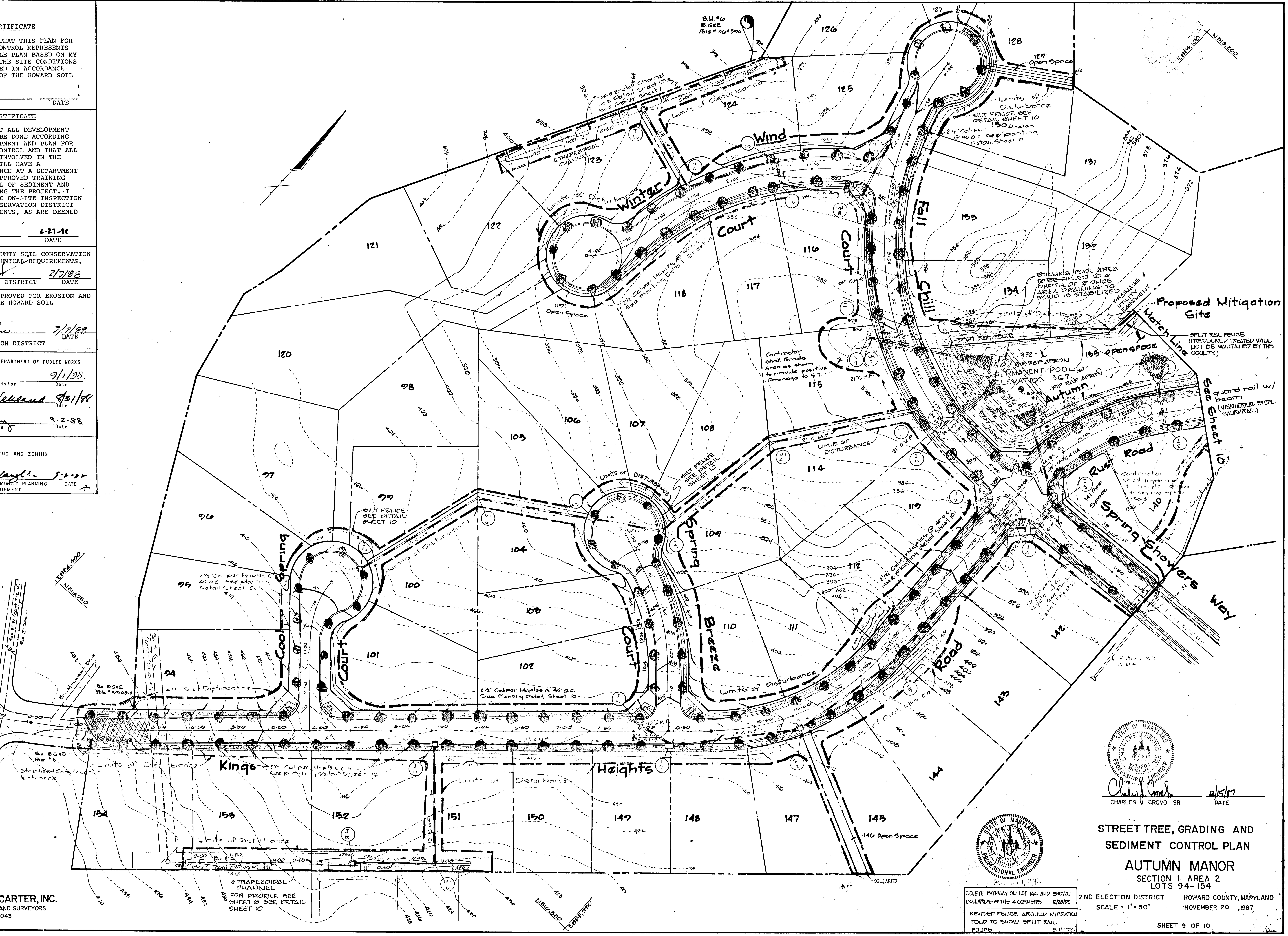
Chief, Land Development Division — Date 9/1/88.

Chief, Bureau of Highways — Date 8/31/88

Chief, Bureau of Engineering — Date 9-2-88

APPROVED
OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9-7-88



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

1132

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

CHARLES J. CROVO SR — DATE 12/15/87

DELETE PATHWAY ON LOT 146 AND SHOWN BOLLARDS @ THE 4 CORNERS 12/28/92

REVISED FENCE AROUND MITIGATION POND TO SHOW SPLIT RAIL FENCE. 5.11.92

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN

AUTUMN MANOR

SECTION I. AREA 2
LOTS 94-154

2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' — NOVEMBER 20, 1987

SHEET 9 OF 10

AS-BUILT

F 88-141

PERMANENT SEEDING NOTES:
APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTRUBANCE 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, IF NOT PREVIOUSLY LOOSENED.
SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULE.
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 400 LBS. PER 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 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 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/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.
MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OR 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 HIGHTER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.
MAINTENANCE: 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.

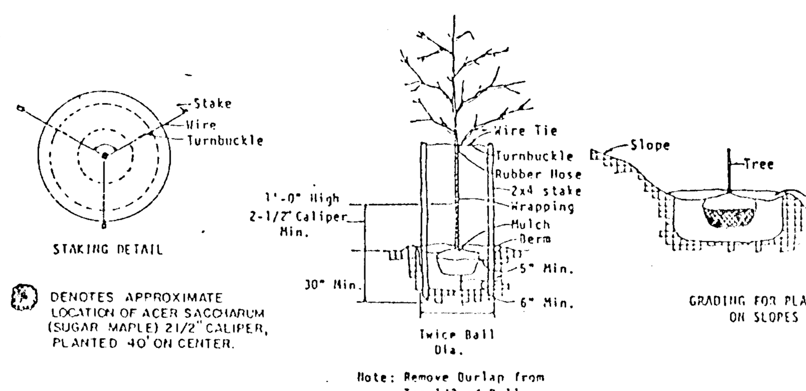
SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED
SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)
SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 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 OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.
MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 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.

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 (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, CHAPTER 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	29.58	ACRES
AREA DISTURBED	8.97	ACRES
AREA TO BE ROOFED OR PAVED	3.68	ACRES
AREA TO BE VEGETATIVELY STABILIZED	5.29	ACRES
TOTAL CUT	15,000	CU.YDS.
TOTAL FILL	15,000	CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION		CU.YDS.

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 PROVIDE, 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.



DENOTES APPROXIMATE LOCATION OF ACER SACCHARUM (SUGAR MAPLE) 2 1/2" CALIPER, PLANTED 40' ON CENTER.

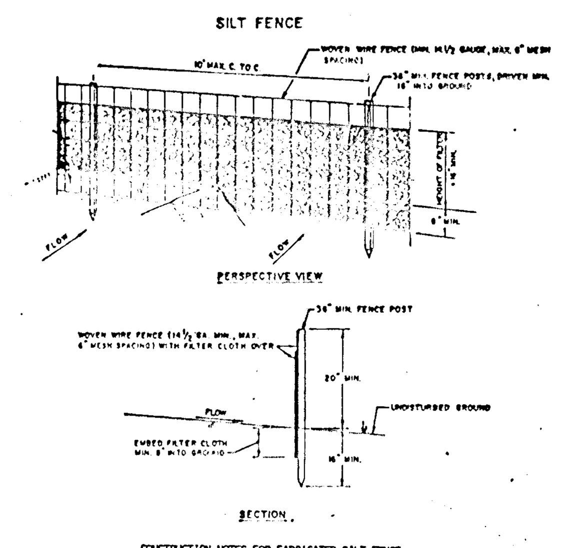
TREE PLANTING DETAIL
NO SCALE

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.

NOTE: SEE DETAIL 'A' THIS SHEET FOR PLANTING LOCATION OF STREET TREES WITHIN THIS SUBDIVISION.

NOTE: For Profiles And Details Of Mitigation Basin See Sheet 8.

SILT FENCE

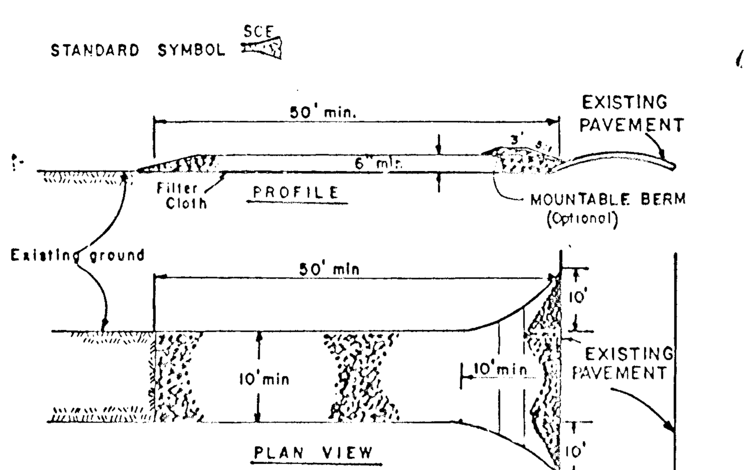


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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, 14½ GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

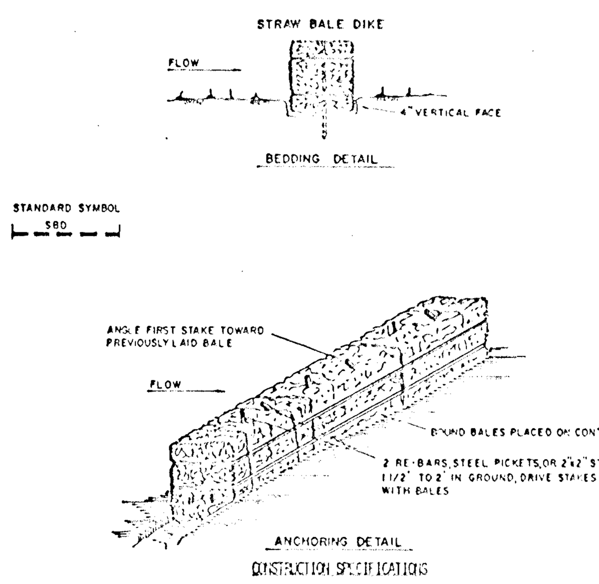
STABILIZED CONSTRUCTION ENTRANCE
not to scale



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.

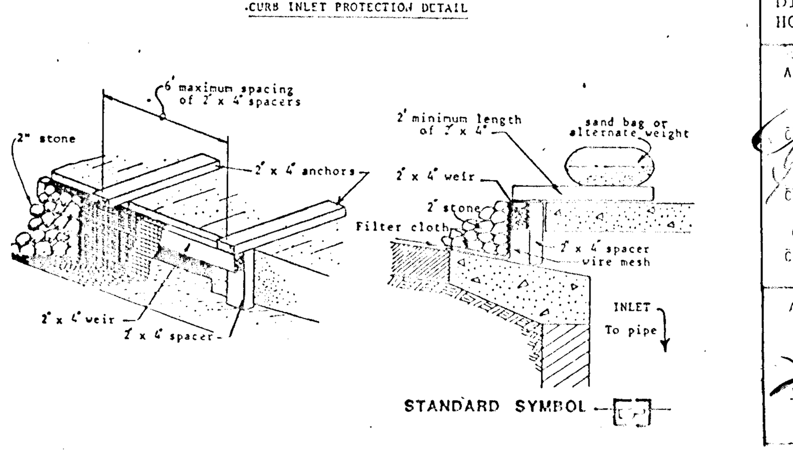
STRAW BALE DIKE



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.

CURB INLET PROTECTION DETAIL



8. 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 9" 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.

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 4/27/88

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 6-27-88

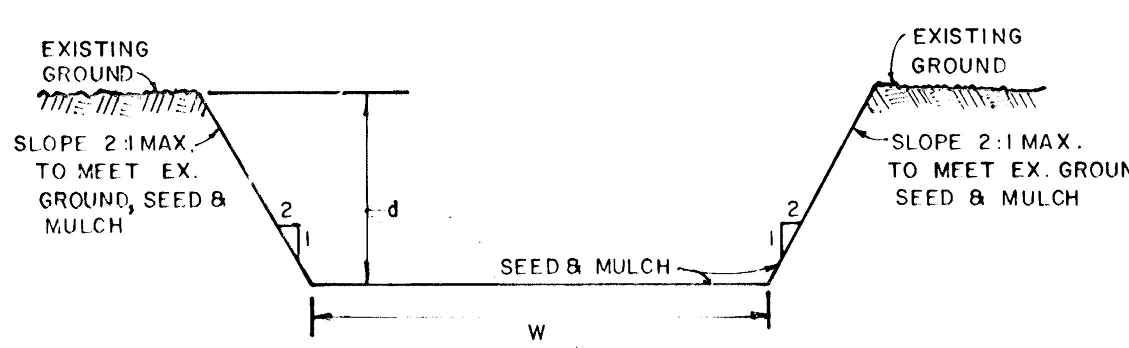
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
U.S. SOIL CONSERVATION DISTRICT — DATE 7/8/88

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:
DISTRICT — DATE 7/8/88
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Land Development Division — Date 9/1/88
Chief, Bureau of Highways — Date
Chief, Bureau of Engineering — Date 9-2-88

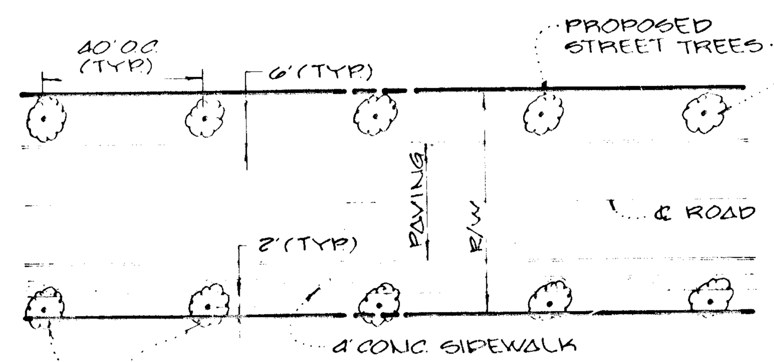
APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9-8-88

NOTE: FOR DIMENSIONS OF CHANNELS, SEE PROFILES ON SHEETS 7 AND 8.



TRAPEZOIDAL CHANNEL DETAIL
ALONG REAR OF LOTS 151-154 AND 123-124

NO SCALE



DETAIL 'A'
No Scale

CONSTRUCTION SEQUENCE:

1. OBTAIN GRADING PERMIT.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN ON LOT 135 AS SHOWN ON PLAN. STABILIZE THE BASIN WITH TEMPORARY SEEDING.
3. GRADE ROADS TO SUBGRADE.
4. CONSTRUCT STORM DRAIN SYSTEM AND INSTALL INLET PROTECTION DEVICES AT ALL INLETS.
5. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON, AFTER EACH RAINFALL AND ON A DAILY BASIS.
6. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
7. THE SEDIMENT BASIN SHALL BE DEWATERED BY PUMPING.
8. REMOVE SEDIMENT FROM ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED.
9. REMOVE INLET PROTECTION DEVICES AND FLUSH STORM DRAIN SYSTEM TO REMOVE ANY TRAPPED SEDIMENT.
10. REMOVE STONE CONSTRUCTION ENTRANCE. CLEAN BASE COURSE. APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE.
11. REMOVE ALL ACCUMULATED SEDIMENT FROM MITIGATION BASIN AND GRADE TO FINISH ELEVATIONS ACCORDING TO MITIGATION PLAN.
12. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
13. 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, SWALES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
14. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT.

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
AUTUMN MANOR
SECTION I, AREA 2
LOTS 94-154

2ND ELECTION DISTRICT — HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' — NOVEMBER 20, 1987

SHEET 10 OF 10

REVISED FENCE AROUND MITIGATION POND TO SHOW SPLIT RAIL FENCE 5.11.92

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

STATE OF MARYLAND PROFESSIONAL ENGINEER

CHARLES J. CROVO SR. — DATE 12/16/87

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