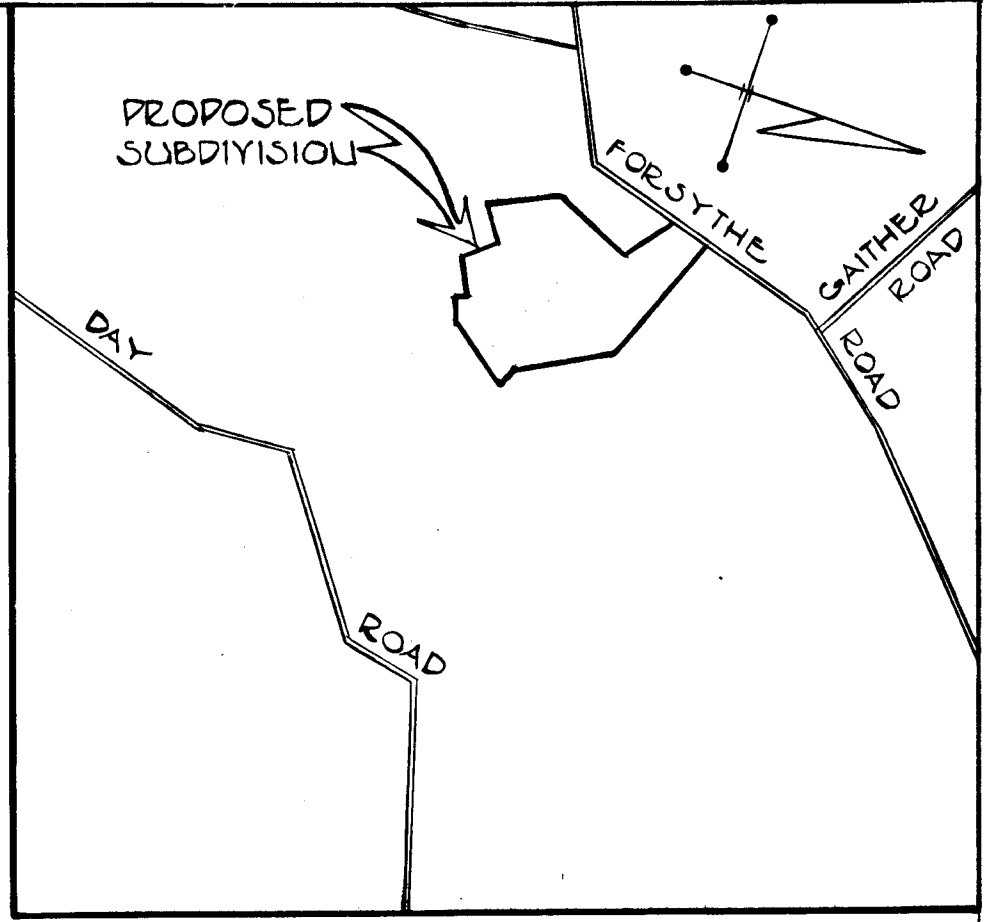
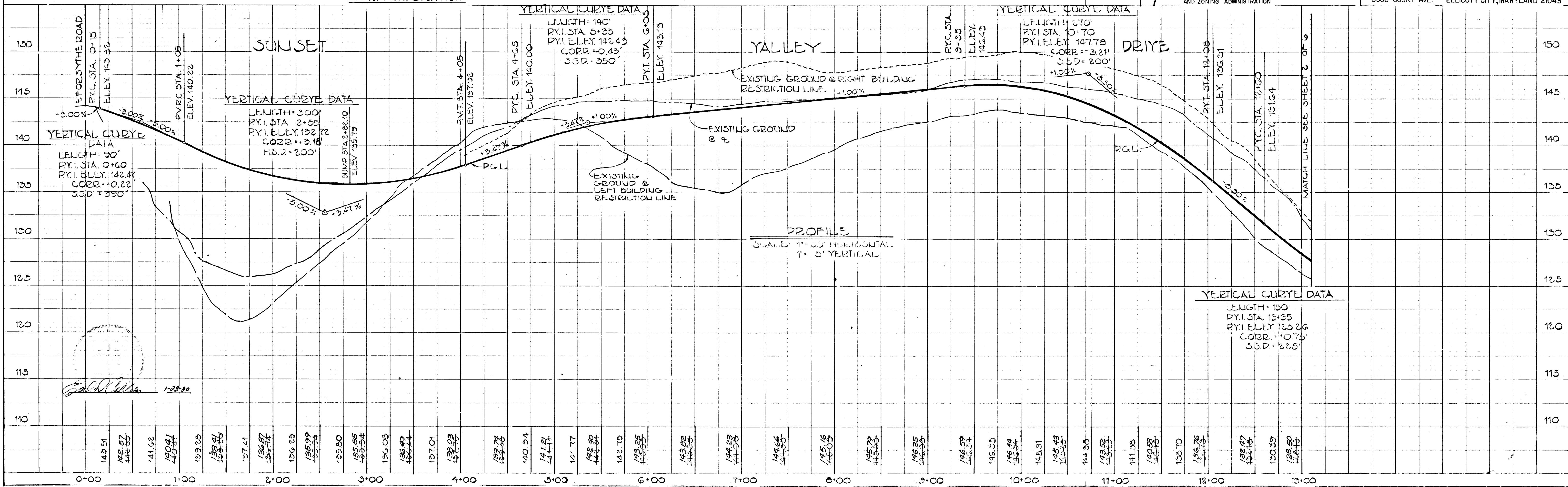
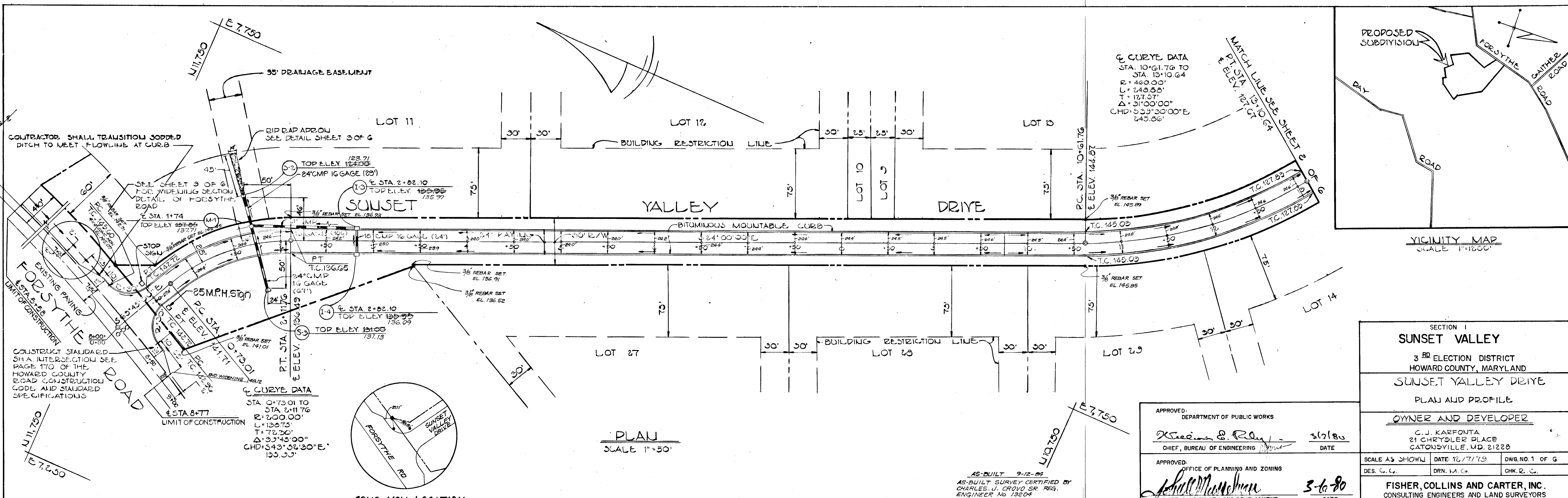


PLAN
 SURV. BY: [Signature]
 DATE: [Date]
 CHECKED BY: [Signature]
 DATE: [Date]
 REVISIONS:
 1. [Description]
 2. [Description]
 3. [Description]

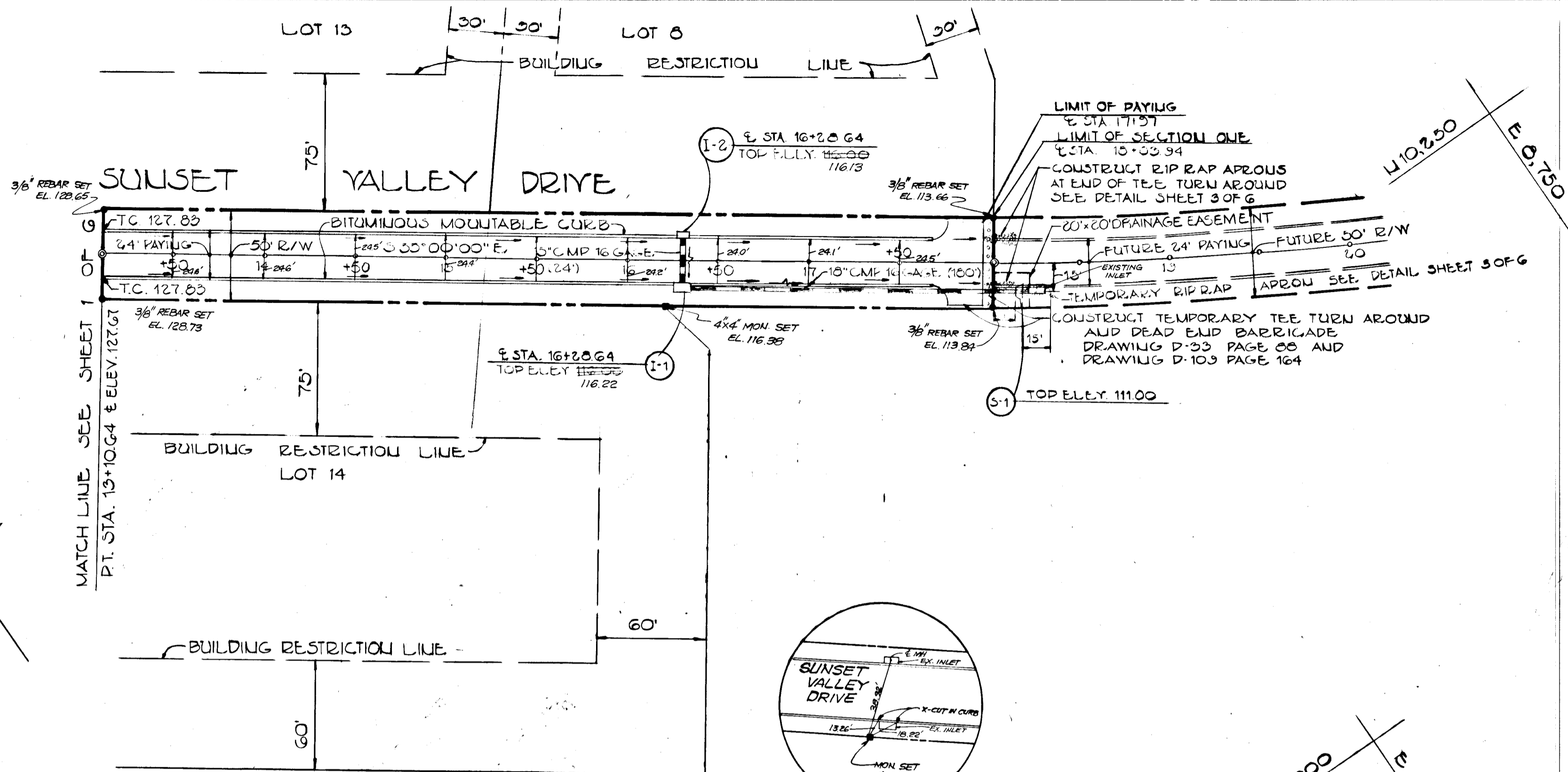
PROFILE
 SURV. BY: [Signature]
 DATE: [Date]
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 DATE: [Date]
 REVISIONS:
 1. [Description]
 2. [Description]
 3. [Description]



SECTION I
SUNSET VALLEY
 3RD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
SUNSET VALLEY DRIVE
 PLAN AND PROFILE
OWNER AND DEVELOPER
 C. J. KARFONTA
 21 CHRYSLER PLACE
 CATOWVILLE, MD. 21228
 SCALE AS SHOWN DATE 10/7/79 DWG. NO. 1 OF 6
 DES. C. C. DRN. M. G. CHK. C. C.
FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

DATE	
BY	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	
NO. 11	
NO. 12	
NO. 13	
NO. 14	
NO. 15	
NO. 16	
NO. 17	
NO. 18	
NO. 19	
NO. 20	
NO. 21	
NO. 22	
NO. 23	
NO. 24	
NO. 25	
NO. 26	
NO. 27	
NO. 28	
NO. 29	
NO. 30	

DATE	
BY	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	
NO. 11	
NO. 12	
NO. 13	
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NO. 17	
NO. 18	
NO. 19	
NO. 20	
NO. 21	
NO. 22	
NO. 23	
NO. 24	
NO. 25	
NO. 26	
NO. 27	
NO. 28	
NO. 29	
NO. 30	



PLAN
SCALE 1"=50'

AS-BUILT 9-12-84
AS-BUILT SURVEY CERTIFIED
BY CHARLES J. CROUD, MD. RES.
PROFESSIONAL ENGINEER
No. 15204

REVISIONS	
12/2/83	REMOVED HORIZON LANE, ETC.

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 3-7-80
CHIEF, BUREAU OF ENGINEERING DATE

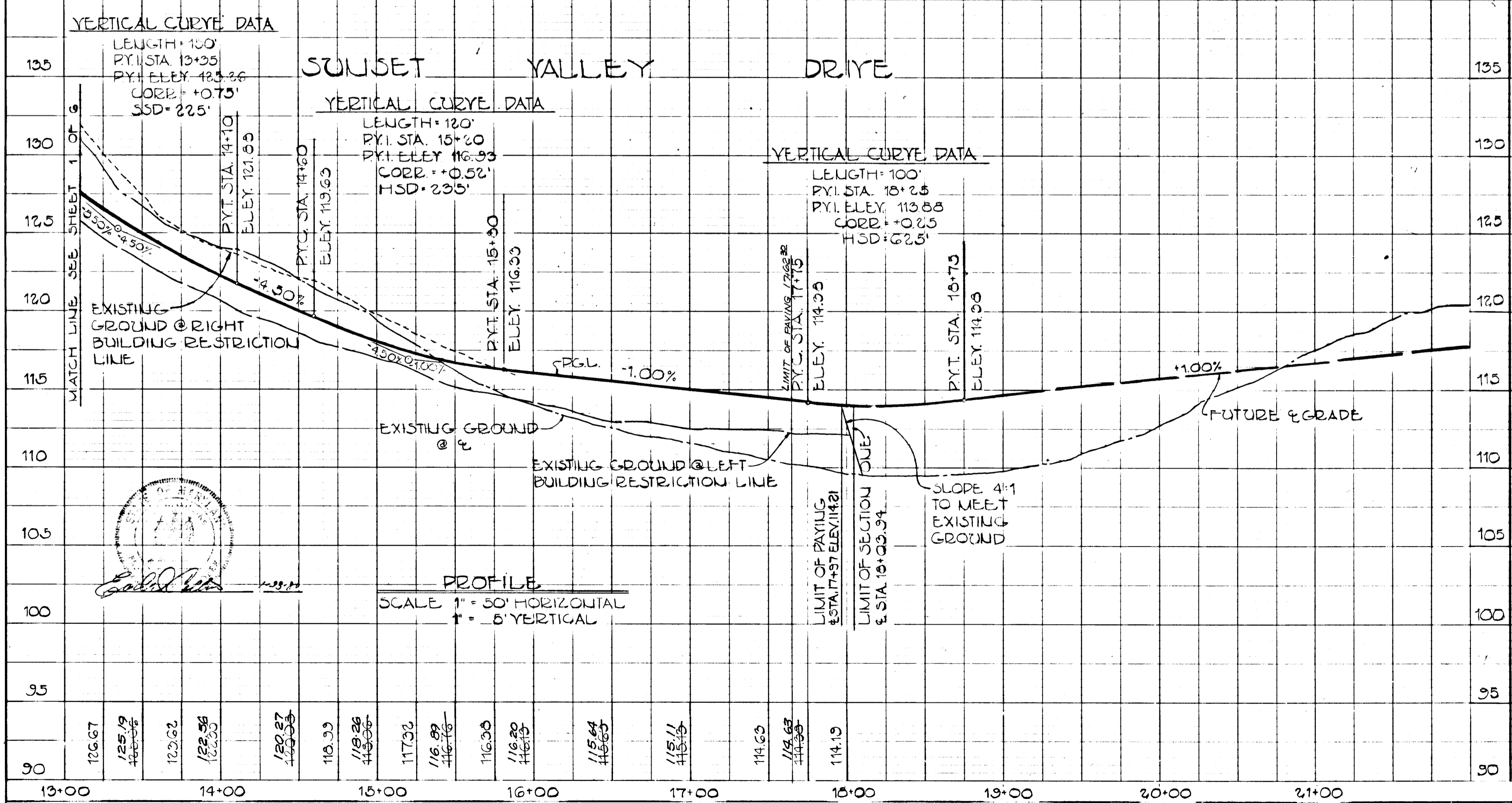
APPROVED: OFFICE OF PLANNING AND ZONING
[Signature] 3-7-80
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

SECTION 1
SUNSET VALLEY
3RD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SUNSET VALLEY DRIVE

PLAN AND PROFILE
OWNER AND DEVELOPER
C.J. KARFONTA
21 CHRYSLER PLACE
CATONSVILLE, MD. 21228

SCALE: AS SHOWN	DATE: 12/1/79	DWG. NO. 2 OF 6
DES. C.C.	DRN. M.G.	CHK. B.C.

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



PROFILE
SCALE 1"=50' HORIZONTAL
1"=5' VERTICAL

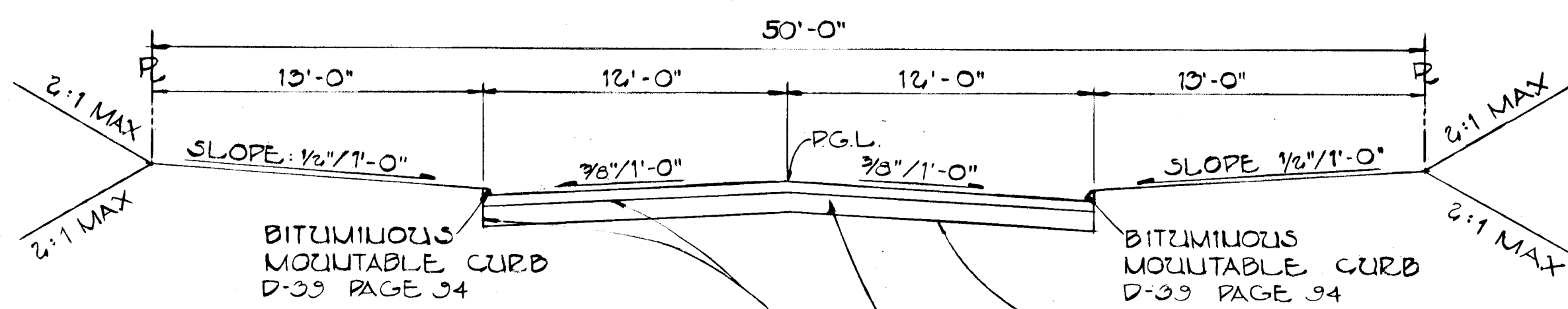
823

SUNSET VALLEY DRIVE AND HORIZON LANE

TYPE OF TRAFFICWAY LOCAL RESIDENTIAL ZONED R DESIGN SPEED 30 MPH

SUNSET VALLEY DRIVE
± STA. 0+00 TO ± STA. 17+97

HORIZON LANE
± STA. 0+00 TO ± STA. 2+80

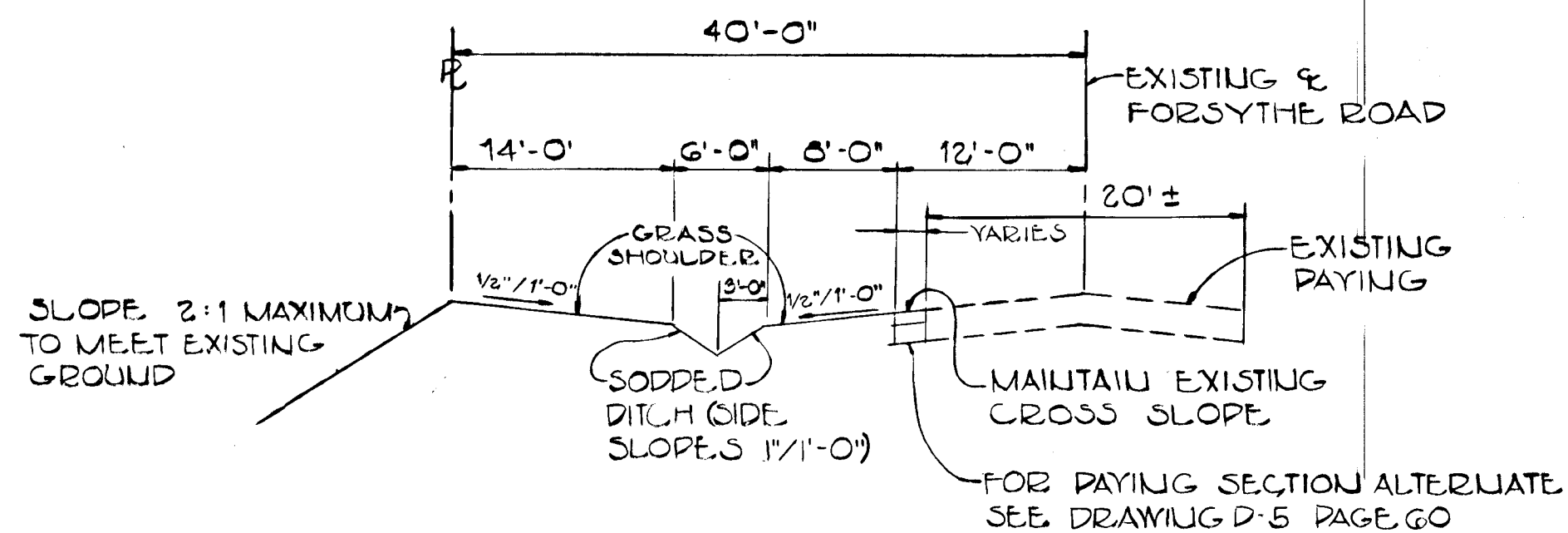


TACK COAT IN ACCORDANCE WITH SECTION C-21-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS

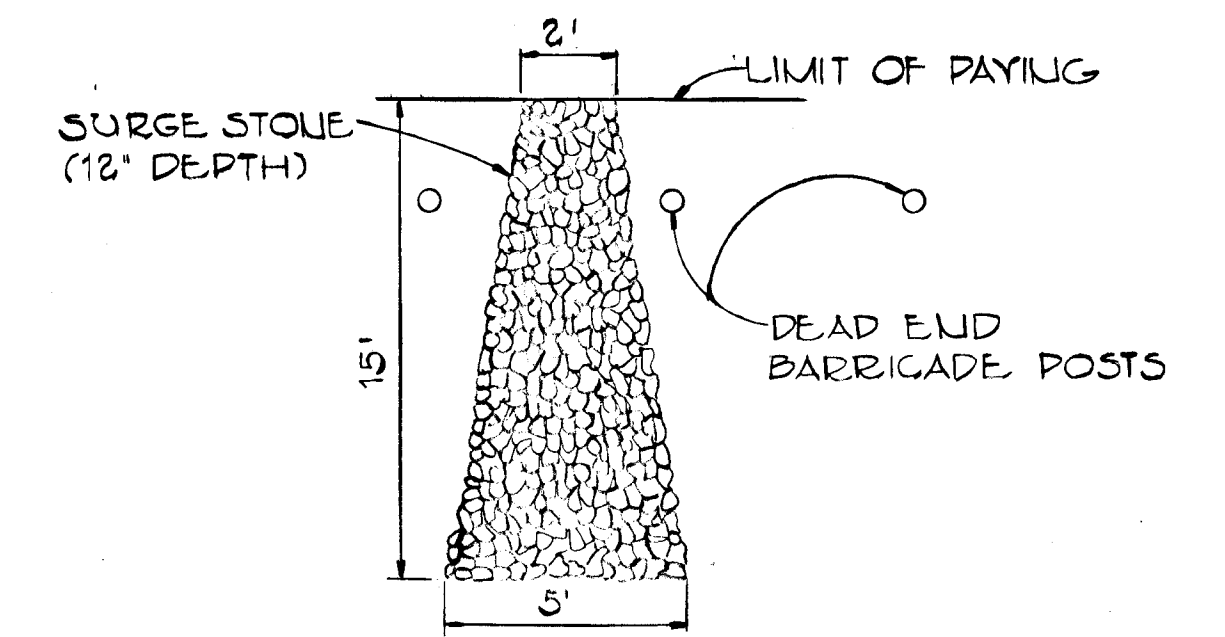
BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-3 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS

FOR PAVING SECTION ALTERNATES SEE DRAWING D-3 PAGE 50, D-4 PAGE 53 OR D-5 PAGE 60

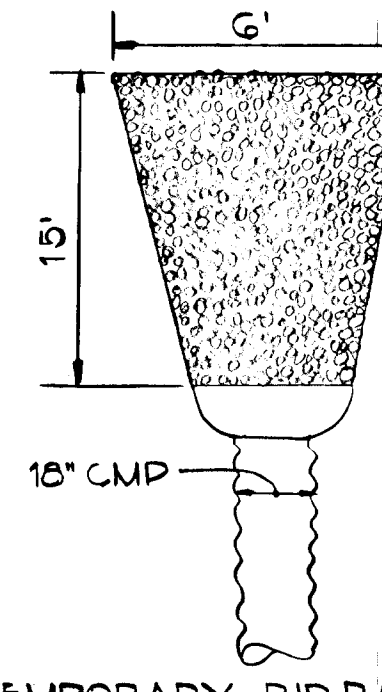
TYPICAL ROADWAY SECTION
NO SCALE



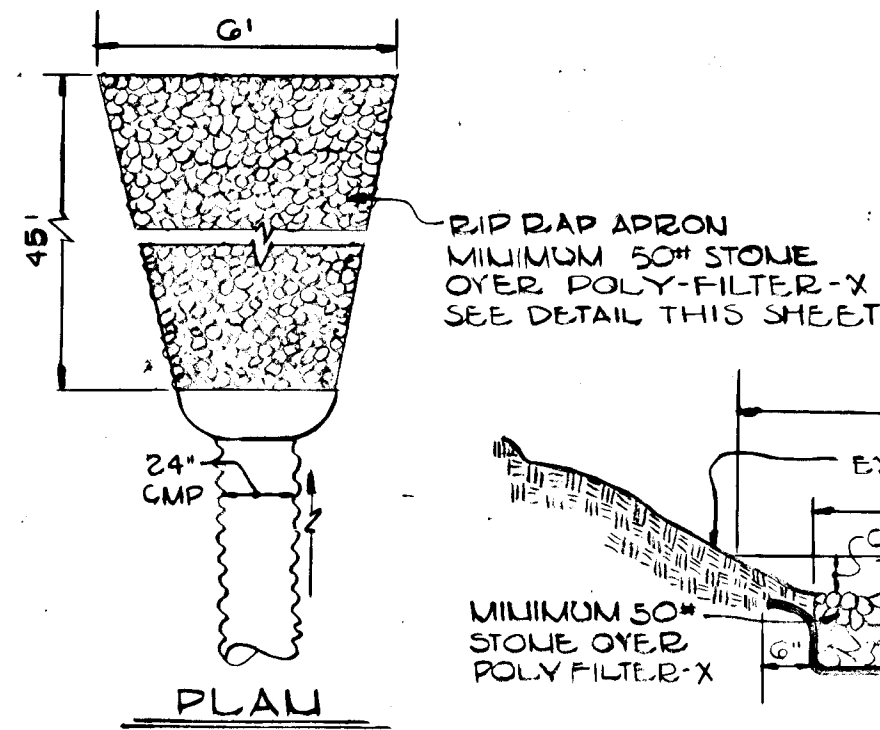
TYPICAL WIDENING SECTION
FORSYTHE ROAD
NO SCALE



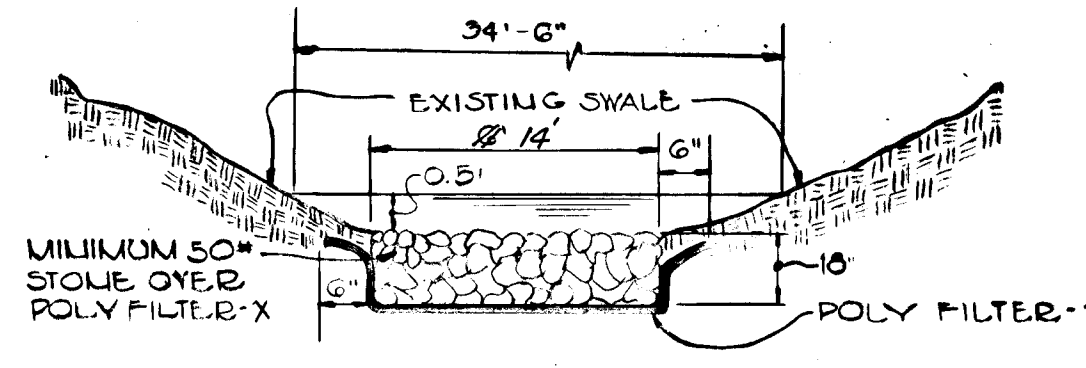
RIP RAP APRON DETAIL
NO SCALE



TEMPORARY RIP RAP APRON @ S-1
NO SCALE



RIP RAP APRON DETAIL @ S-2
NO SCALE



CHANNEL DESIGN DATA @ S-2
A=10.14' Y=1.300 x 16.72 x 5%
P=24.5' n
R=0.2925 Y=1.300 x 0.4409 x 0.1000
S=1% Q=4.47 cfs
S_{1/2}=0.1000 Q=10.1 x 1.30
N=0.033 Q=20.0 cfs

AS-BUILT 9/12/84
AS-BUILT SURVEY CERTIFIED BY CHARLES CROUD, MD REG. ENGINEER No. 13204

APPROVED: DEPARTMENT OF PUBLIC WORKS
K. R. R. 3-7-80
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
A. W. M. 3-6-80
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

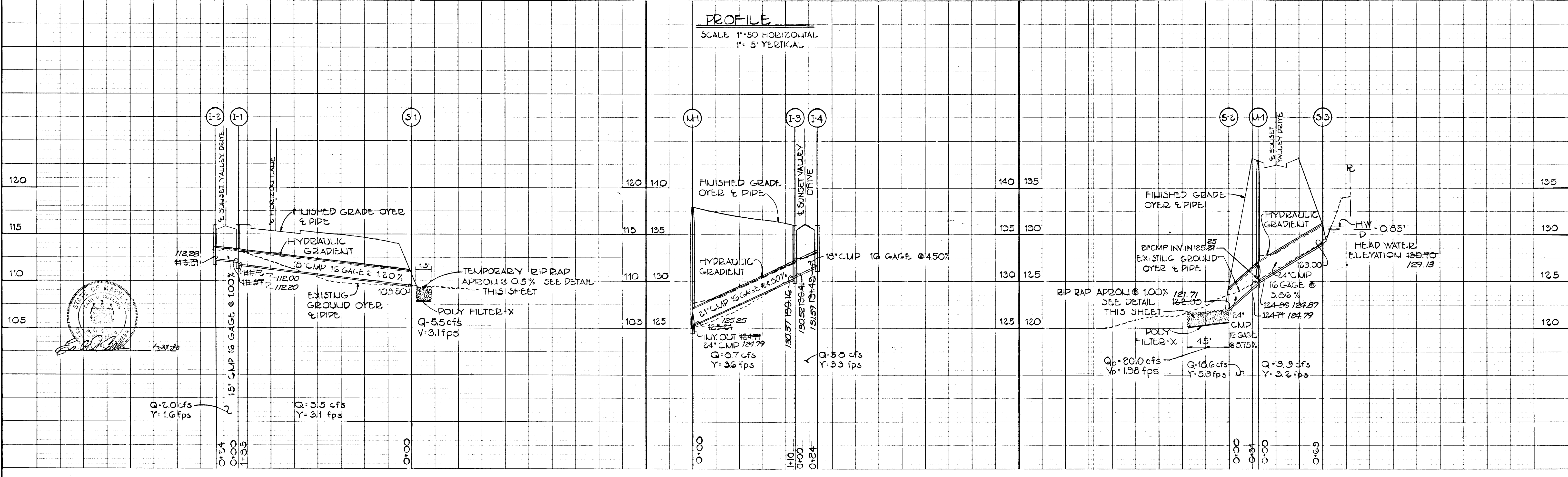
SECTION I
SUNSET VALLEY
3RD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

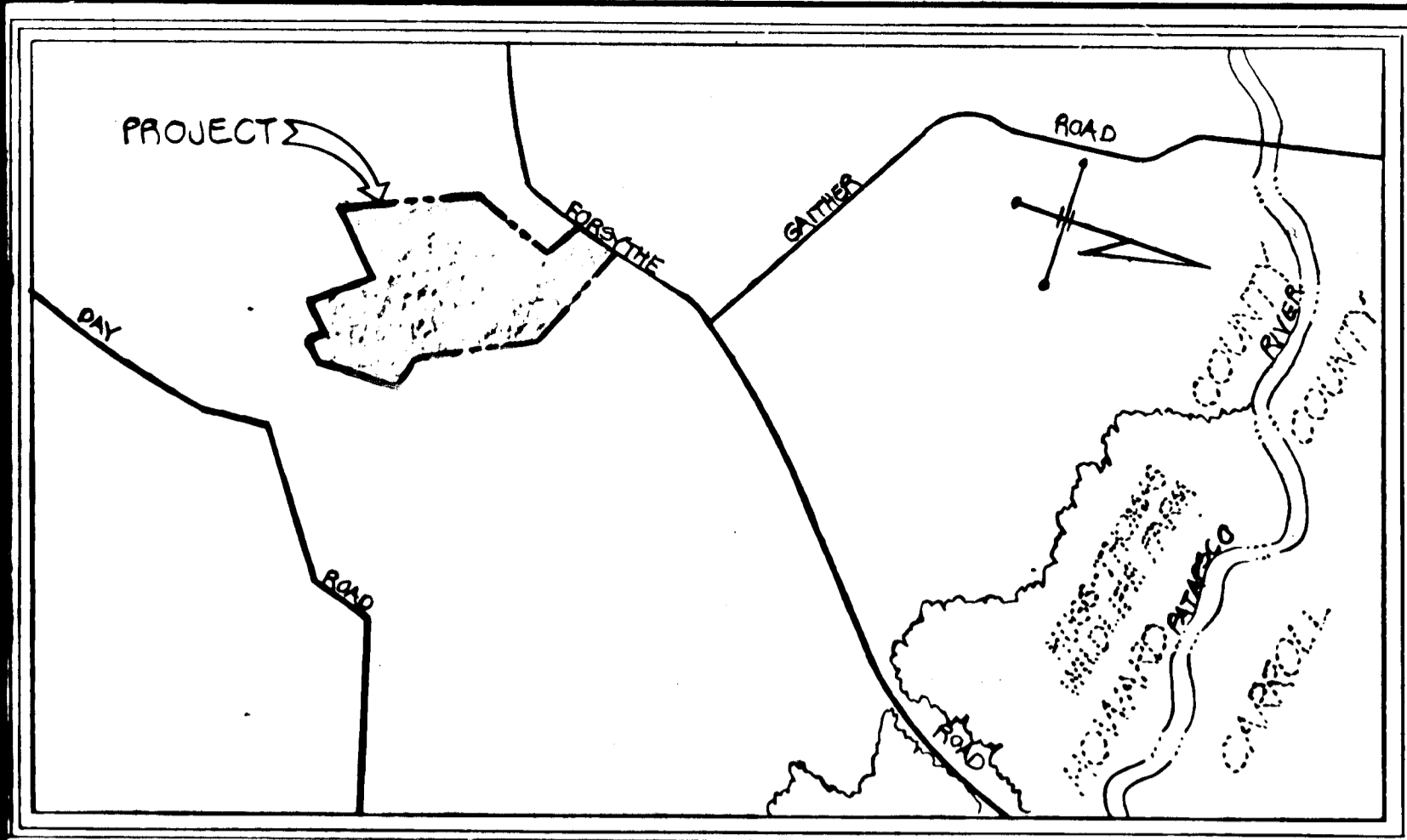
OWNER AND DEVELOPER
C. J. KARFONTA
21 CHRYSLER PLACE
CATONSVILLE, MD. 21228

SCALE: AS SHOWN DATE: 12/7/79 DWG. NO. 3 OF G
DES. G.G. DRN. M.G. CHK. R.C.

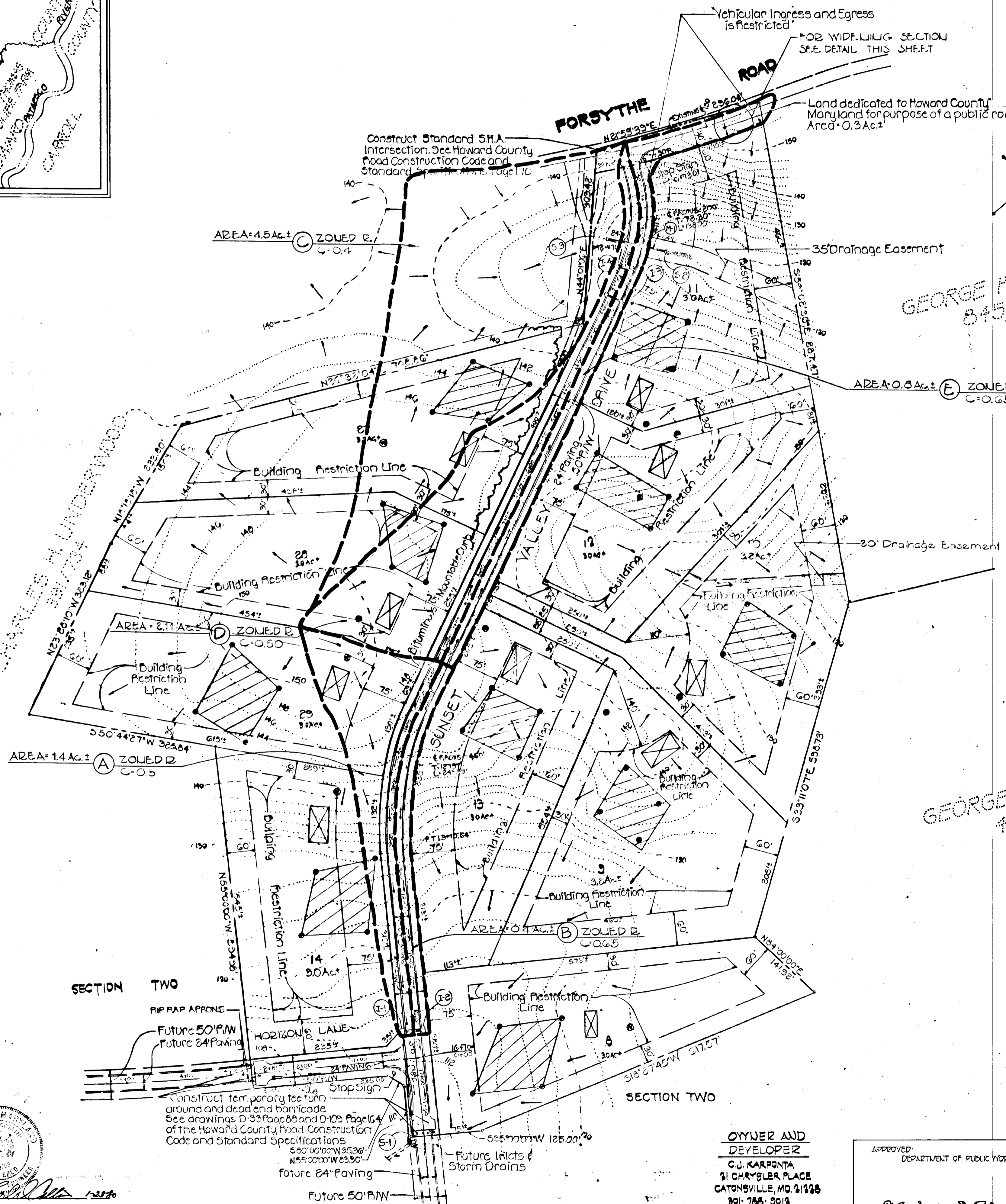
FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

NO.	TYPE	INLET IN	INLET OUT	TOP ELEV.	LOCATION	REMARKS
I-1	A-10 WITH DEFLECTORS	11-97/12-20	11-77/12-20	116.2825	16+20.64	D-69A R-113-A
I-2	A-5 WITH DEFLECTORS	11-97/12-20	11-97/12-20	116.2825	16+28.64	
I-3	A-5	130.41/30.58	130.17/30.58	135.95	2+02.10	
I-4	A-5	131.49/31.59	135.95	2+02.10		
M-1		125-2/125.25	124-7/124.79	137.05	1+74	D-103 R-158
S-1	METAL END SECTION		109.50	111.00		
S-2			124.00	124.50		
S-3		129.33		131.60		





VICINITY MAP
SCALE: 1"=1200'



PERCOLATION TEST DATA		
LOT NO.	AVERAGE PERCOLATION TIME IN MINUTES FOR SECOND INCH	MAX DEPTH PERMITTED FOR EFFLUENT PIPES TO ENTER SEWAGE DISPOSAL AREA AT ITS HIGHEST ELEVATION WITH REFERENCE TO EXISTING GRADE AT TIME OF PERCOLATION TEST
8	10 Min.	5'
9	12 Min.	5'
10	14 Min.	5'
11	15 Min.	5'
12	16 Min.	4 1/2'
13	10 Min.	5'
14	11 Min.	4 1/2'
27	8 Min.	4'
28	10 Min.	4'
29	17 Min.	5'

Note: The lots shown hereon comply with minimum ownership width and lot area as required by the Maryland State Department of Health and Mental Hygiene.

LEGEND

This area designates a private sewage easement of approximately 10,000 square feet as required by the Maryland State Health Department of Health and Mental Hygiene for individual sewage disposal. Improvements of any nature in this area are restricted until public sewerage is available and servicing any residential structure constructed on these building sites. This easement shall become null and void upon connection to a public sewage system.

Approximate location of dwelling

Approximate location of well

Field location of percolation test hole

Approved for private water and private sewerage systems
Howard County Health Department
James B. Baker 6-7-75
County Health Officer Date

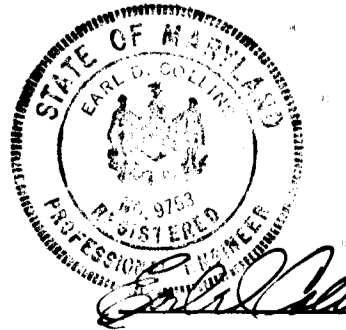
NOTES

- 1) Private water and private sewerage systems will be utilized in this subdivision.
- 2) Present Zoning R
- 3) Total Number of lots - 10
- 4) Total Area of Roads and Street Dedication 2.9 Ac. ±
- 5) Area of lots 30.4 Ac. ±
- 6) Total Area of Section One 33.3 Ac. ±

GEORGE HARDING
845/265

GEORGE P. GARRATT,
407/651

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND
LAND SURVEYORS
3368 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043

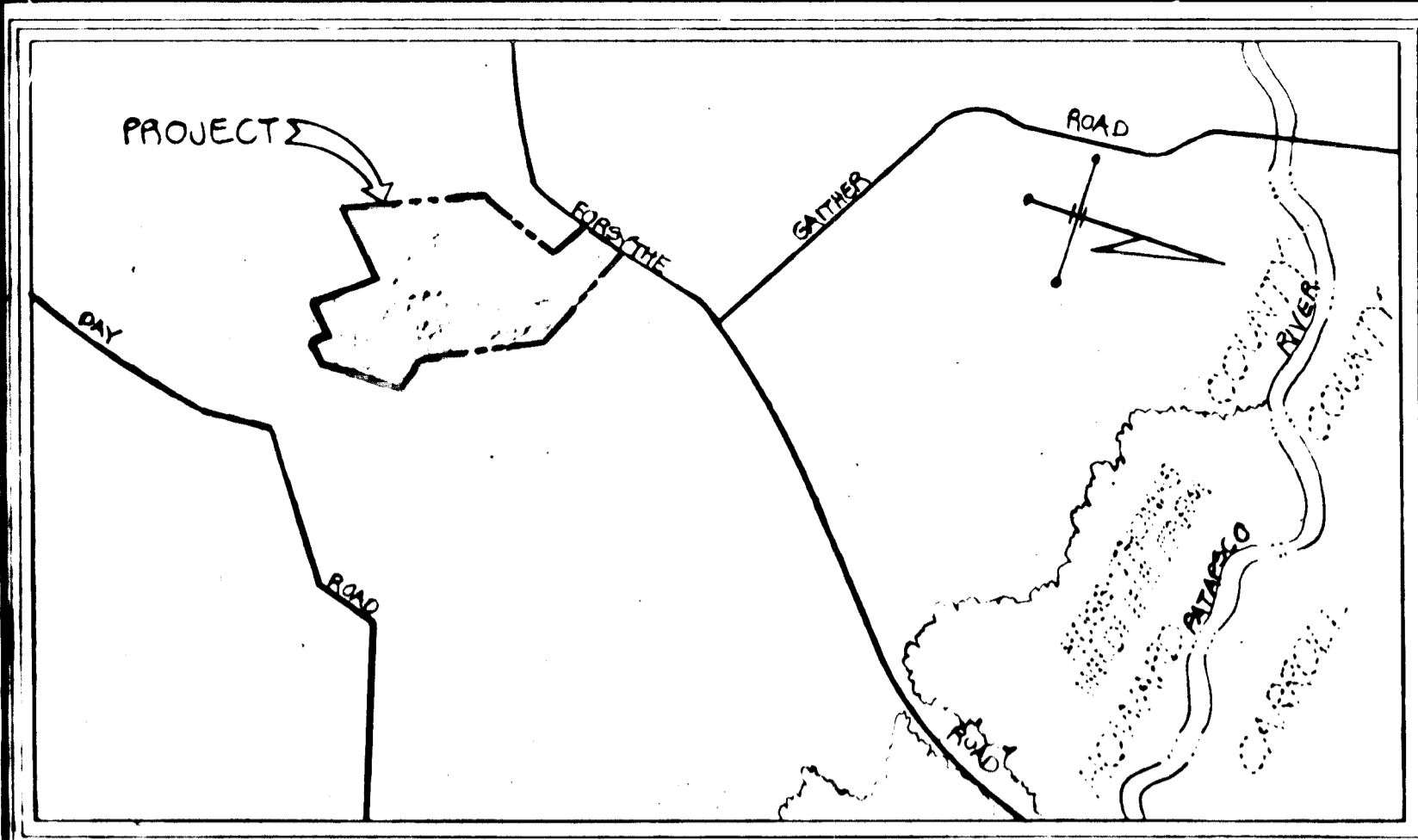


OWNER AND DEVELOPER
C.J. KARPONTA
21 CHRYSLER PLACE
CATONSVILLE, MD. 21228
301-765-3018

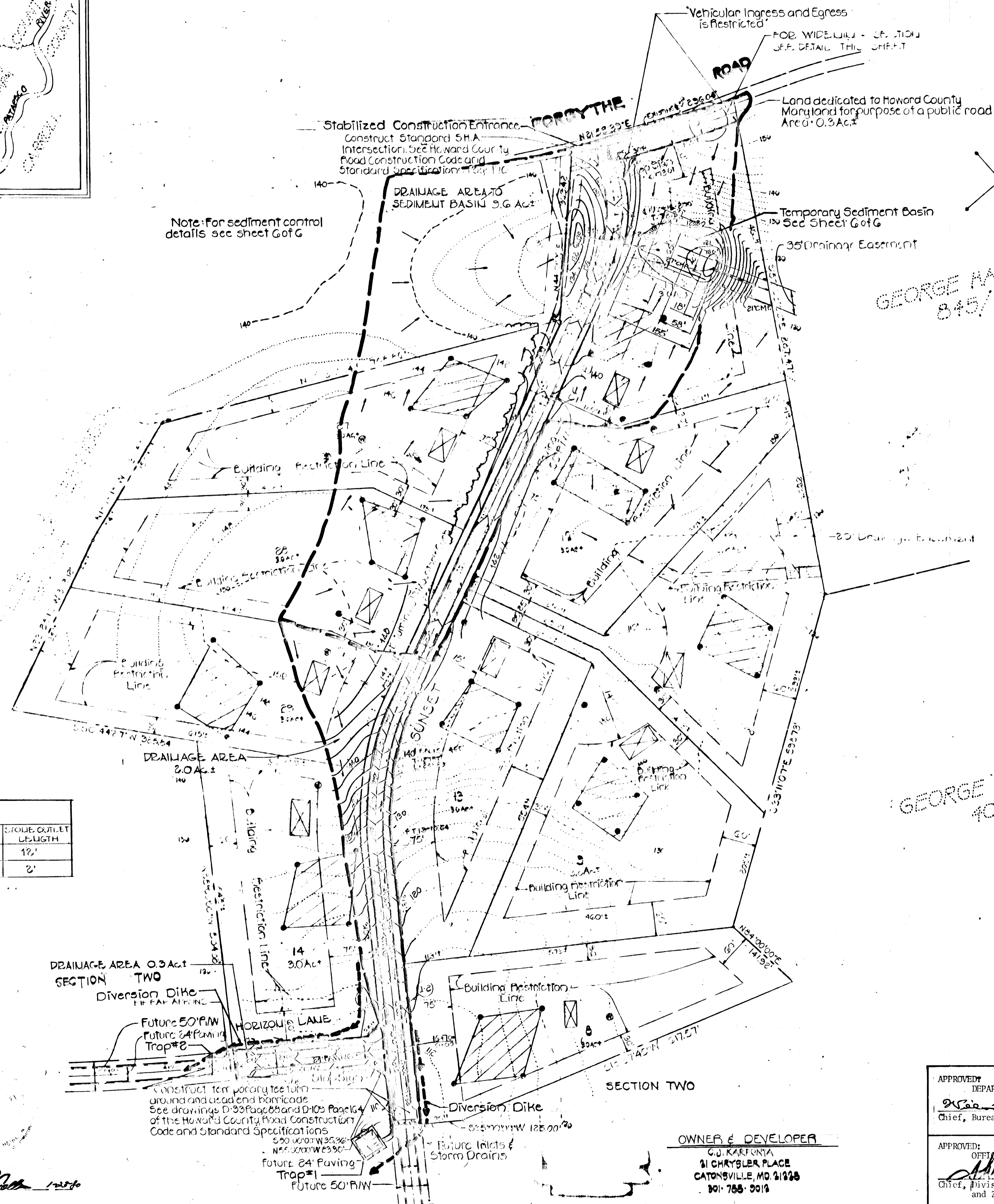
APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard E. Ryan 5-7-80
Chief, Bureau of Engineering Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
William Mackinnon 5-6-80
Chief, Division of Land Development and Zoning Administration Date

DRAINAGE AREA MAP
SUNSET VALLEY
SECTION ONE
TAX MAP 4 PARCELS 178, 179 & 970 PARCEL 36
3RD ELECTION DISTRICT HOWARD COUNTY, MD.
DECEMBER 7, 1975 4 OF 6 SCALE: 1"=100'



VICINITY MAP
SCALE 1"=1200'



Note: For sediment control details see sheet G of G

GEORGE HARDING
845/265

GEORGE P. GARRATT
407/651

PERCOLATION TEST DATA		
LOT NO.	AVERAGE PERCOLATION TIME IN MINUTES FOR SECOND INCH	MAX. DEPTH PERMITTED FOR EFFLUENT PIPE TO ENTER SEWAGE DISPOSAL AREA AT ITS HIGHEST ELEVATION WITH REFERENCE TO EXISTING GRADE AT TIME OF PERCOLATION TEST
6	10 Min.	5'
9	12 Min.	5'
10	14 Min.	5'
11	15 Min.	5'
12	16 Min.	4 1/2'
13	10 Min.	5'
14	11 Min.	4 1/2'
27	8 Min.	4'
28	10 Min.	4'
29	17 Min.	5'

Note: The lots shown herein comply with a minimum ownership width and lot area as required by the Maryland State Department of Health and Mental Hygiene.

LEGEND

- This area designates a private sewage easement of approximately 10,000 square feet as required by the Maryland State Health Department of Health and Mental Hygiene for individual sewage disposal. Improvements of any nature in this area are restricted until public sewerage is available and servicing any residential structure constructed on these building sites. This easement shall become null and void upon connection to a public sewerage system.
- Approximate location of dwelling
- Approximate location of well
- Field location of percolation test hole

Approved: For private water and private sewerage systems
Howard County Health Department

John B. ... 6-7-79
County Health Officer Date

NOTES

- 1) Private water and private sewerage systems will be utilized in this subdivision.
- 2) Present Zoning R
- 3) Total Number of lots - 10
- 4) Total Area of Roads and Street Dedication - 9A ±
- 5) Area of lots 30.4 A.C. ±
- 6) Total Area of Section One 33.3A ±

STONE OUTLET SEDIMENT TRAP DATA								
TRAP NO.	INSIDE DIMENSION	OUTSIDE DIMENSION	SIDE SLOPE	DRAINAGE AREA	CAPACITY REQUIRED	CAPACITY PROVIDED	DEPTH	STONE OUTLET LENGTH
1	32" x 32"	43" x 43"	2:1	2.0 A.C. ±	3615 cuft.	3673 cuft.	2.5'	12'
2	15" x 15"	19" x 19"	2:1	0.3 A.C. ±	543 cuft.	566 cuft.	2'	2'

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.
Carl D. Collins P.E. Reg. No. 9753 Date 1-23-80

DEVELOPER'S CERTIFICATE
I certify that all development and or construction will be done according to this plan of development and plan for erosion and sediment control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.
C.J. Harfont Date 4/12/80

Review for Howard County Soil Conservation District and meets technical requirements.
J.S. ... 3-5-80
U.S. Soil Conservation Service Date
This Development Plan is approved for erosion and sediment control by the Howard Soil Conservation District.
John V. ... 3-5-80
District Administrator Date
Howard Soil Conservation District

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND
LAND SURVEYORS
3300 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043

APPROVED
DEPARTMENT OF PUBLIC WORKS
... 3-7-80
Chief, Bureau of Engineering Date

APPROVED
OFFICE OF PLANNING AND ZONING
... 3-8-80
Chief, Division of Land Development and Zoning Administration Date

OWNER & DEVELOPER
G.J. KARPENYA
31 CHRYSLER PLACE
CATONSVILLE, MD. 21228
801-785-9919

SEDIMENT CONTROL PLAN
SUNSET VALLEY
SECTION ONE
TAX MAP 4 PARCELS 172, 173 & 990 PARCEL 96
3RD ELECTION DISTRICT HOWARD COUNTY, MD.
DECEMBER 7, 1970 5 OF 6 SCALE: 1"=100'

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

Carl D. Collins 12/20/89
P.E. REG. NO. 9755 DATE

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.

C.J. Karfonta 12/12/89
C.J. KARFONTA DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Dennis J. Blum 3-5-80
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Wm. V. Rame 3-5-80
DISTRICT ADMINISTRATION DATE

APPROVED - DEPARTMENT OF PUBLIC WORKS
William D. Riley 3-7-80
CHIEF, BUREAU OF ENGINEERING DATE

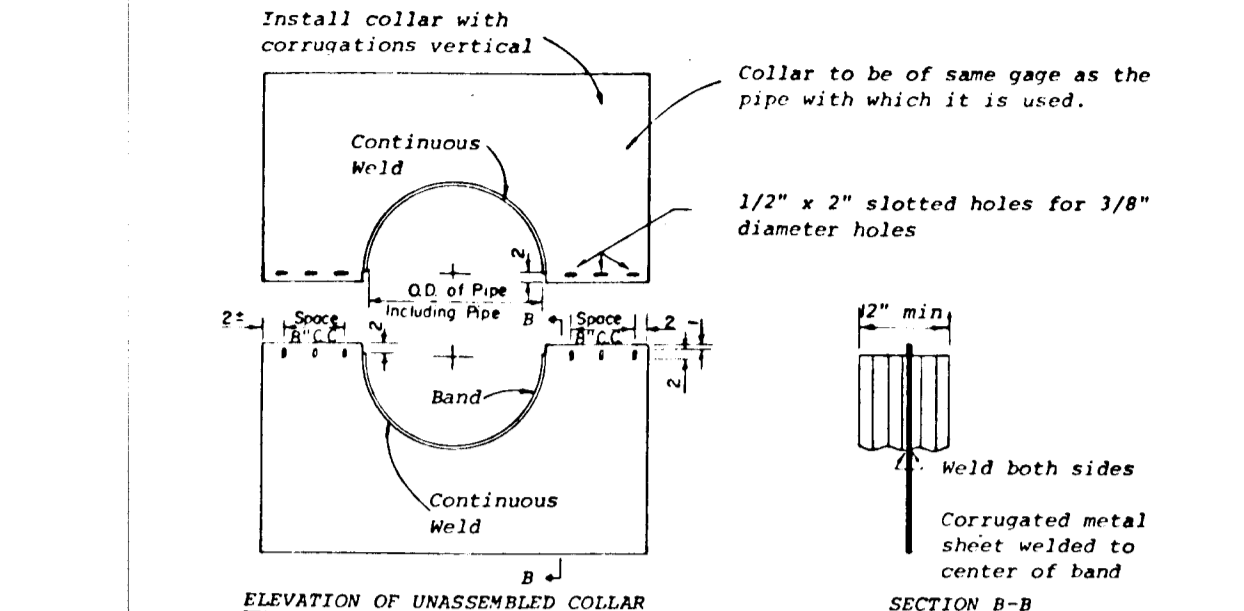
APPROVED - OFFICE OF PLANNING AND ZONING
William D. Riley 3-6-80
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

SEDIMENT CONTROL NOTES

- Specifications for the Sediment Control Details shown hereon are included in the U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."
- The developer shall notify the Howard County Office of Inspection and Permits at least 24 hours prior to beginning any construction shown hereon (992-2433).
- Sediment control structures to be constructed prior to any on-site grading or disturbance to any existing surface material, and are to be stabilized as soon as constructed.
- All sediment control structures to remain in place until permission for their removal has been obtained from the Howard County Office of Inspection and Permits (992-2433).
- All graded areas not to be sodded shall be stabilized by seeding and mulching in accordance with the following:
 - Site Preparation
 - Harrow or disc in areas proposed to be seeded the following materials:
 - Pulverized limestone at 2 tons/acre.
 - Commercial fertilizer 10-10-10 at 3/4 tons/acre.
 - Super phosphate at 600 lbs./acre.
 - Seeding
 - Sow the following seed mixture at the rate of 200 lbs./acre with a mechanical spreader.
 - Temporary: Italian or Perennial Rye Grass
 - Permanent: 40% Marion Blue Grass, 40% South Dakota Blue Grass and 20% Penn Lawn Creeping Red Fescue.
 - The seeded area shall then be raked with a York Rake (a minimum of 2 passes) covered and compacted with Cultipacker or other approved method.
 - Mulching
 - Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1-1/2-2 tons/acre.
 - Tie mulch down with liquid asphalt at 0.1 gal./s.y. or emulsified asphalt at 0.04 gal./s.y. or mulch netting.

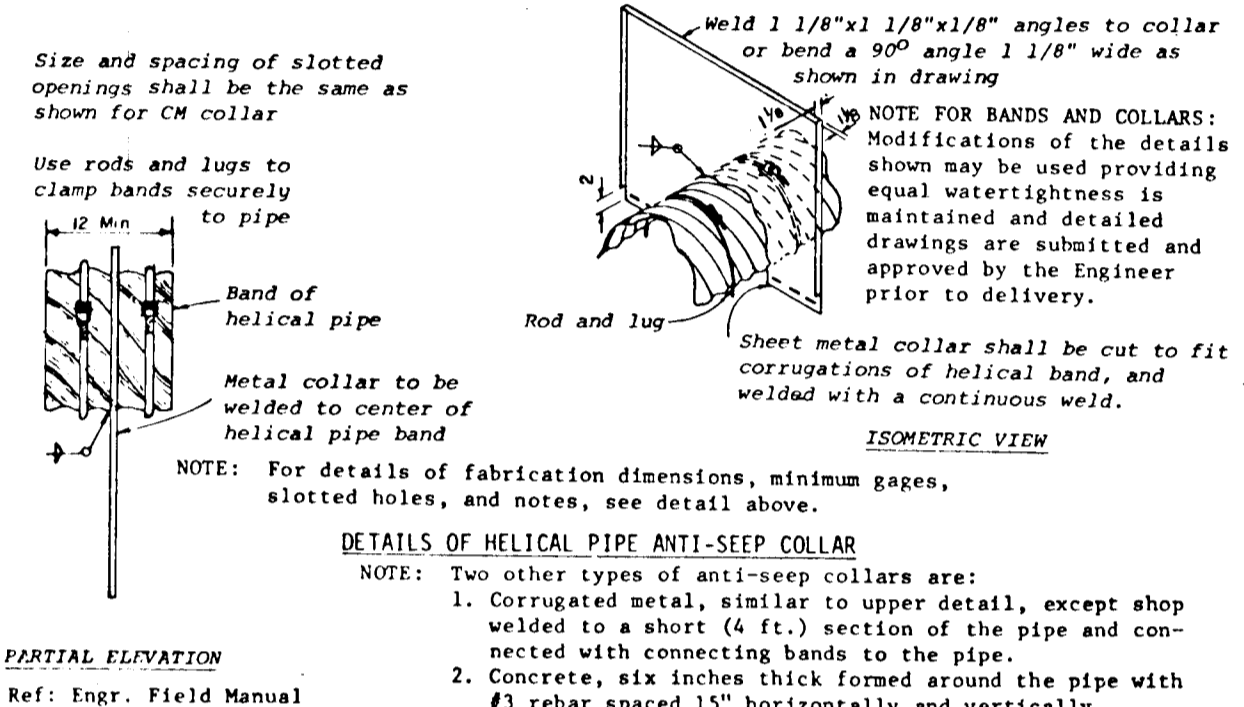
CONSTRUCTION SEQUENCE

- OBTAIN GRADING PERMIT.
- CONSTRUCT STONE CONSTRUCTION ENTRANCE.
- CONSTRUCT TEMPORARY SEDIMENT BASIN AT S-2.
- CONSTRUCT DIVERSION DIKES.
- CONSTRUCT SEDIMENT TRAP AT S-1 AND LIMIT OF HORIZON LANE.
- STABILIZE BASIN, TRAP, AND DIVERSION DIKES USING TEMPORARY SEEDING. (SEE SEDIMENT CONTROL NOTES)
- PLACE SUNSET VALLEY DRIVE AND HORIZON LANE TO SUBGRADE.
- CONSTRUCT STORM DRAIN SYSTEM AND RIP RAP CHANNEL @ S-1 AND BACK OF CURB.
- LAY BASE COURSE.
- GRADE SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB.
- UPON STABILIZATION OF GRADED AREAS, INLETS SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT REMOVED FROM STORM DRAIN SYSTEM.
- DURING CONSTRUCTION SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN THE CLEAN OUT ELEVATION HAS BEEN REACHED.
- DURING CONSTRUCTION THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
- CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE, LAY SURFACE COURSE AND BITUMINOUS CONCRETE CURB AND STABILIZE SHOULDERS.
- THE SEDIMENT BASIN SHALL BE DEWATERED AS SHOWN ON THE DETAIL THIS SHEET.
- THE SEDIMENT FROM THE BASIN, DIVERSION DIKES AND SEDIMENT BASIN DAM SHALL BE SPREAD ON LOT 11 AND STABILIZED IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS IN THE SEDIMENT CONTROL NOTES.
- INSTALL RIP RAP CHANNEL @ S-2.
- ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.

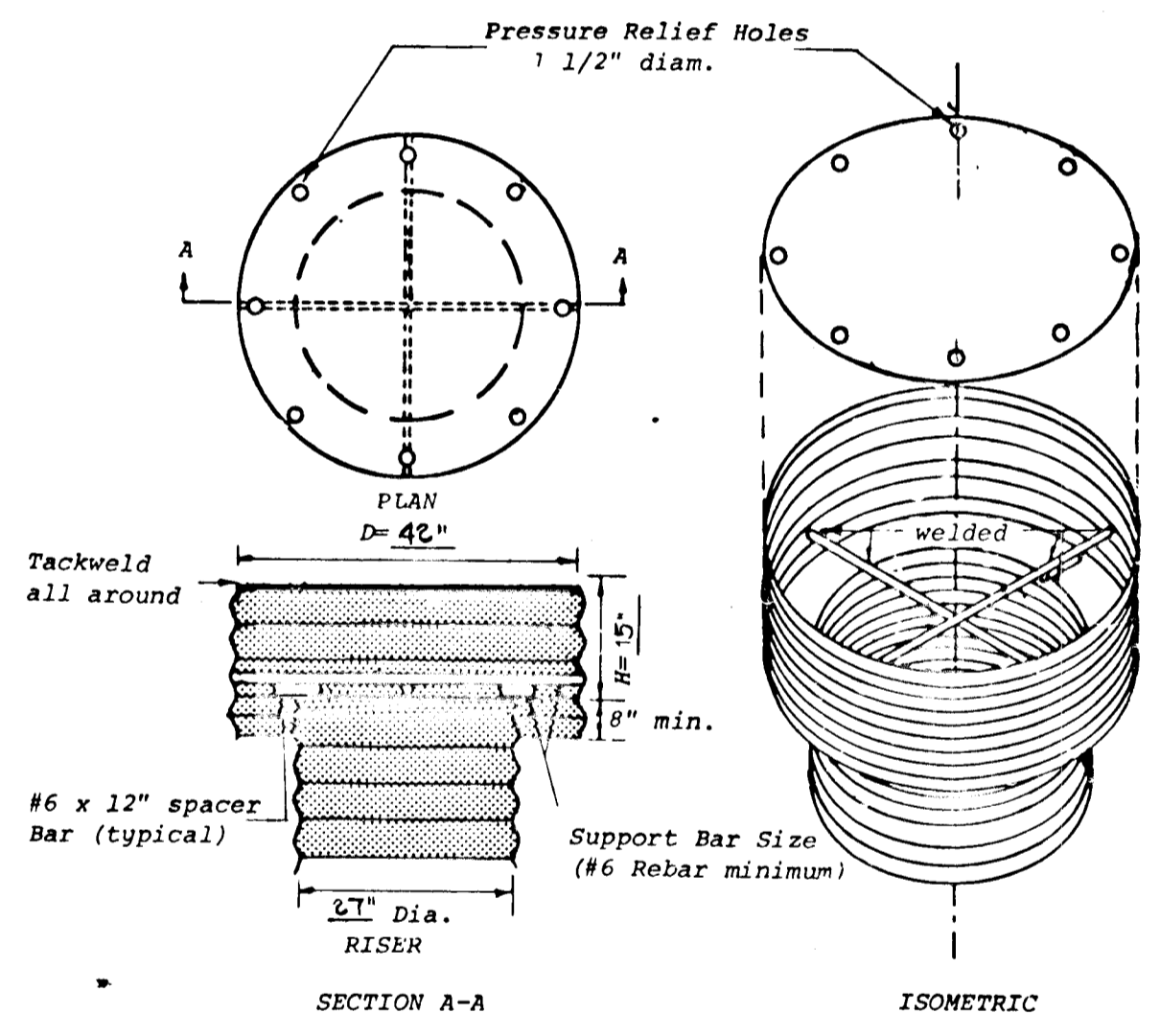
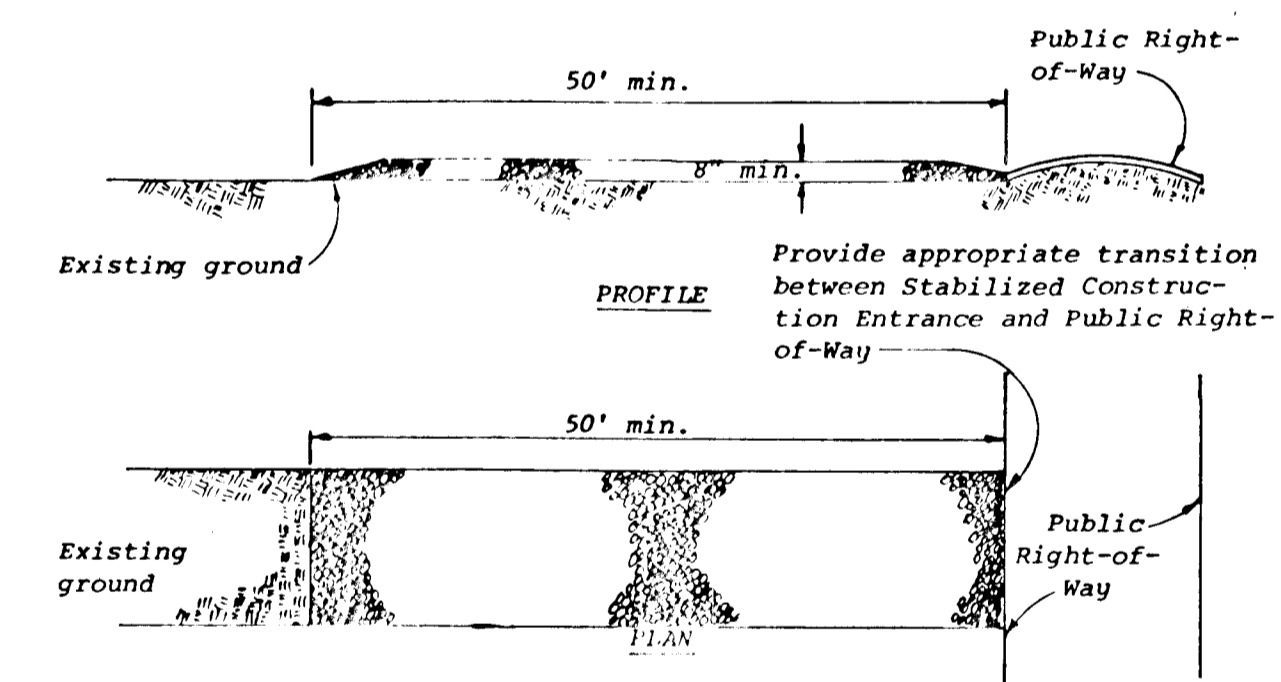


NOTES FOR COLLARS:

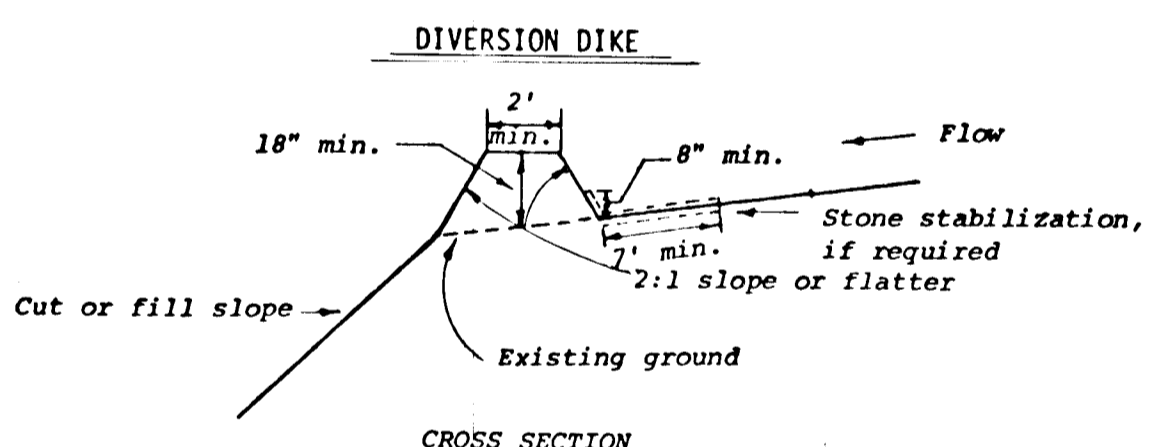
- All materials to be in accordance with construction and construction material specifications.
- When specified on the plans, coating of collars shall be in accordance with construction and construction material specifications.
- Unassembled collars shall be marked by painting or tagging to identify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



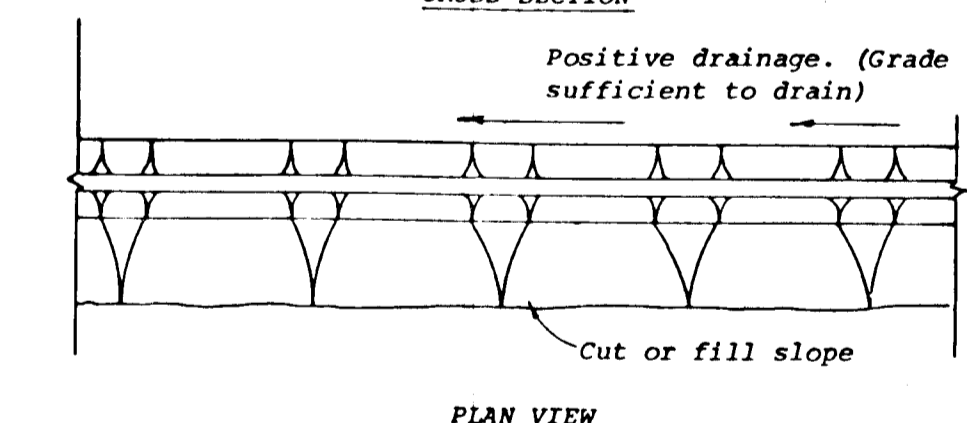
STABILIZED CONSTRUCTION ENTRANCE
(not to scale)



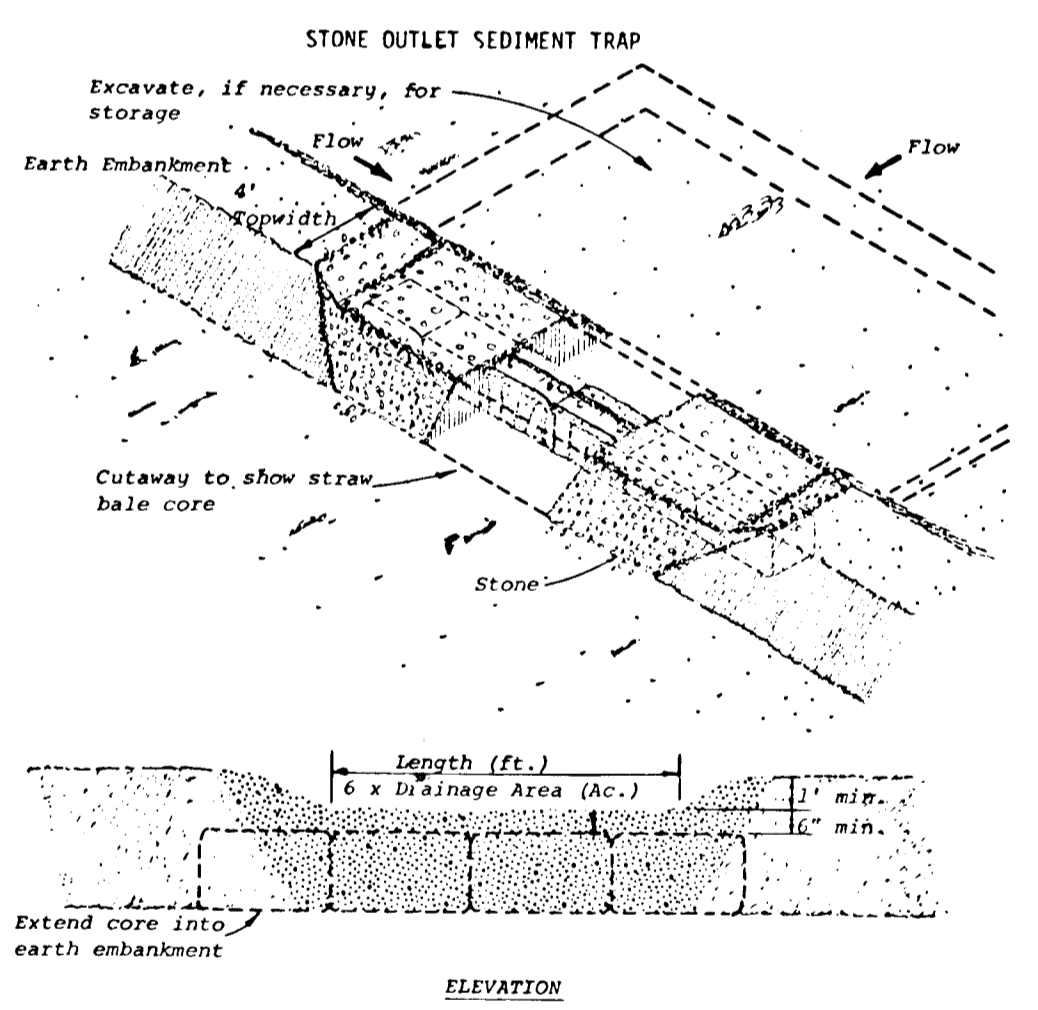
CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE
(not to scale)



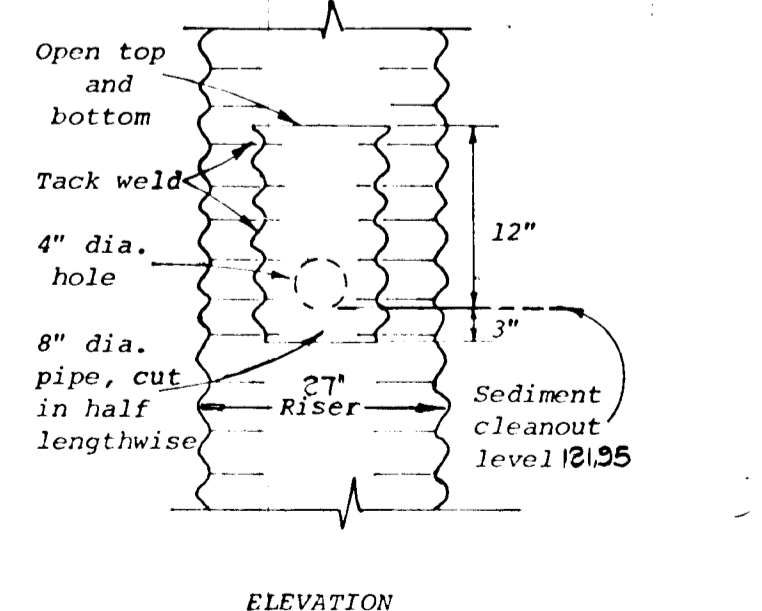
CROSS SECTION



PLAN VIEW

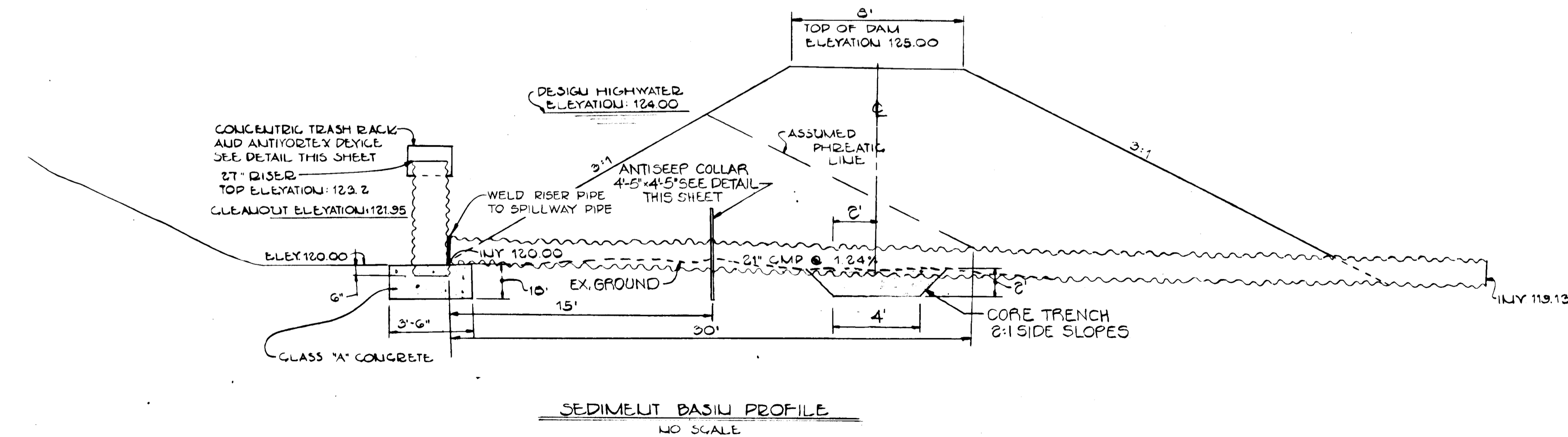


ELEVATION



ELEVATION

SEDIMENT BASIN DEWATERING DETAIL
No Scale



SEDIMENT BASIN PROFILE
NO SCALE

SECTION 1
SUNSET VALLEY
3RD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL DETAILS

OWNER AND DEVELOPER
C. J. KARFONTA
21 CHRYSLER PLACE
CATONSVILLE, MD. 21228

SCALE: AS SHOWN DATE: 12/7/79 DWG. LOG OF G
DES. C.C. DES. M.G. CHK. R.C.

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURTYARD BULLGOTT CITY, MARYLAND 21043