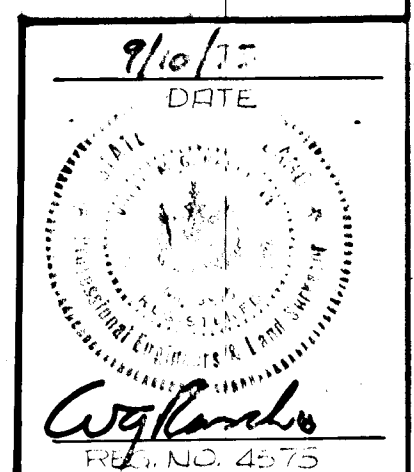
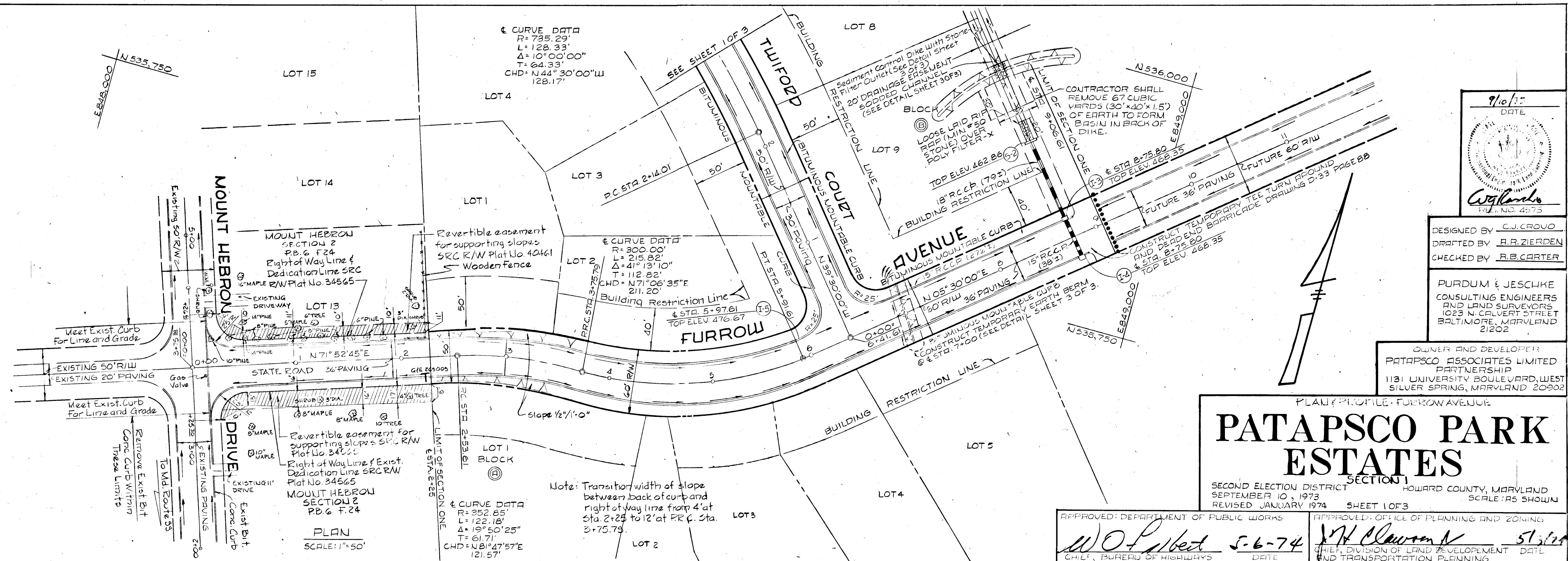


DATE	
BY	
NO.	
PLAN	
NO. BOOK	
NO. OF WAY CHECKED	
NO.	

DATE	
BY	
NO.	
PROFILE	
NO. BOOK	
NO. OF WAY CHECKED	
NO.	

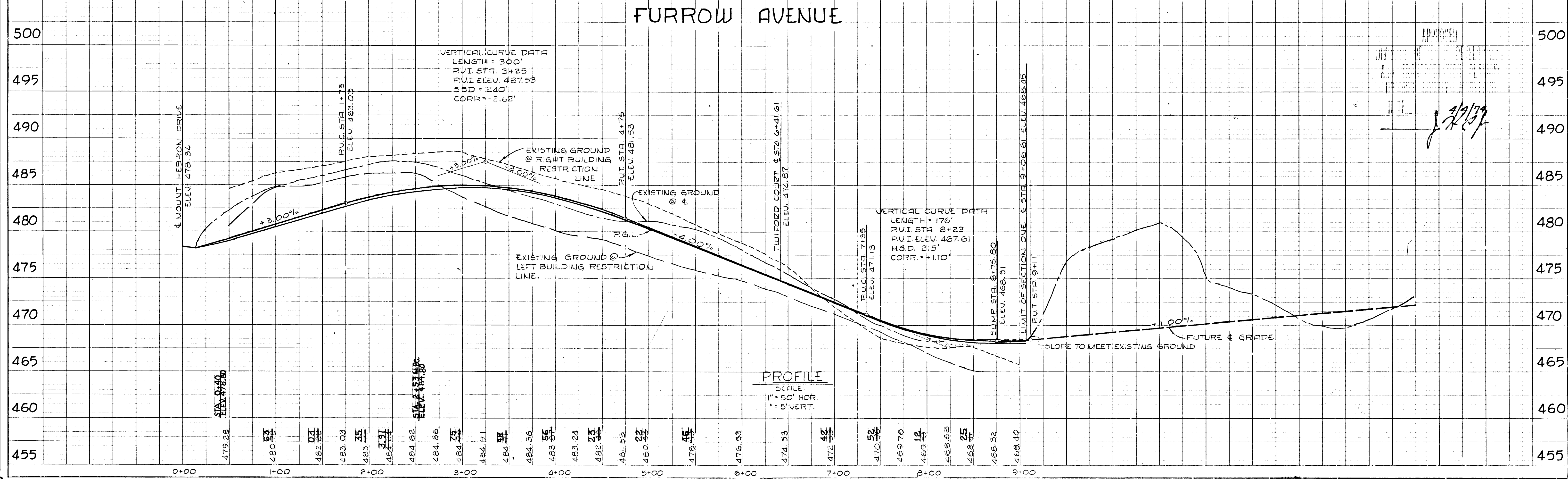


DESIGNED BY C.J. CROVO  
 DRAFTED BY A.R. ZIERDEN  
 CHECKED BY R.B. CARTER

PURDUM & JESCHKE  
 CONSULTING ENGINEERS  
 AND LAND SURVEYORS  
 1023 N. CALVERT STREET  
 BALTIMORE, MARYLAND  
 21202

OWNER AND DEVELOPER  
 PATAPSCO ASSOCIATES LIMITED  
 PARTNERSHIP  
 1131 UNIVERSITY BOULEVARD, WEST  
 SILVER SPRING, MARYLAND 20902

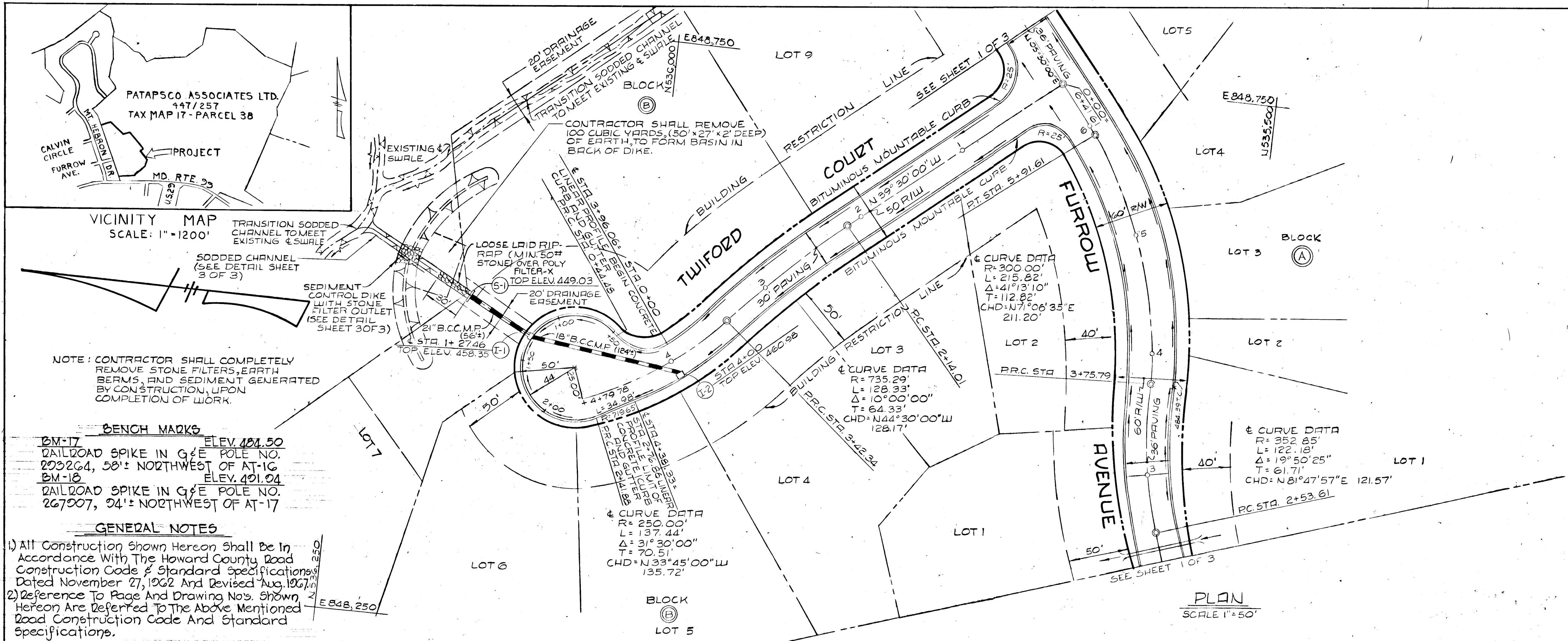
PLAN & PROFILE - FURROW AVENUE  
**PATAPSCO PARK ESTATES**  
 SECTION 1  
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SEPTEMBER 10, 1973  
 REVISED JANUARY 1974 SHEET 1 OF 3  
 SCALE: AS SHOWN





DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_



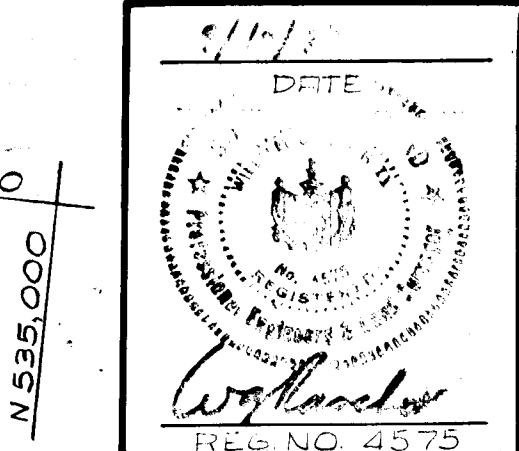
**VICINITY MAP**  
 SCALE: 1"=1200'

**NOTE:** CONTRACTOR SHALL COMPLETELY REMOVE STONE FILTERS, EARTH BERMS, AND SEDIMENT GENERATED BY CONSTRUCTION, UPON COMPLETION OF WORK.

**BENCH MARKS**  
 BM-17 ELEV. 401.50  
 RAILROAD SPIKE IN G&E POLE NO. 203264, 58' NORTHWEST OF AT-1C  
 BM-18 ELEV. 401.04  
 RAILROAD SPIKE IN G&E POLE NO. 267007, 94' NORTHWEST OF AT-17

**GENERAL NOTES**  
 1) All Construction Shown Hereon Shall Be In Accordance With The Howard County Road Construction Code & Standard Specifications Dated November 27, 1962 And Revised Aug. 1967.  
 2) Reference To Page And Drawing Nos. Shown Hereon Are Referred To The Above Mentioned Road Construction Code And Standard Specifications.

PLAN & PROFILE: TWIFORD COURT  
**PATAPSCO PARK ESTATES**  
 SECTION I  
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SEPTEMBER 10, 1973  
 REVISED JANUARY 1974 SHEET 2 OF 3  
 SCALE: AS SHOWN

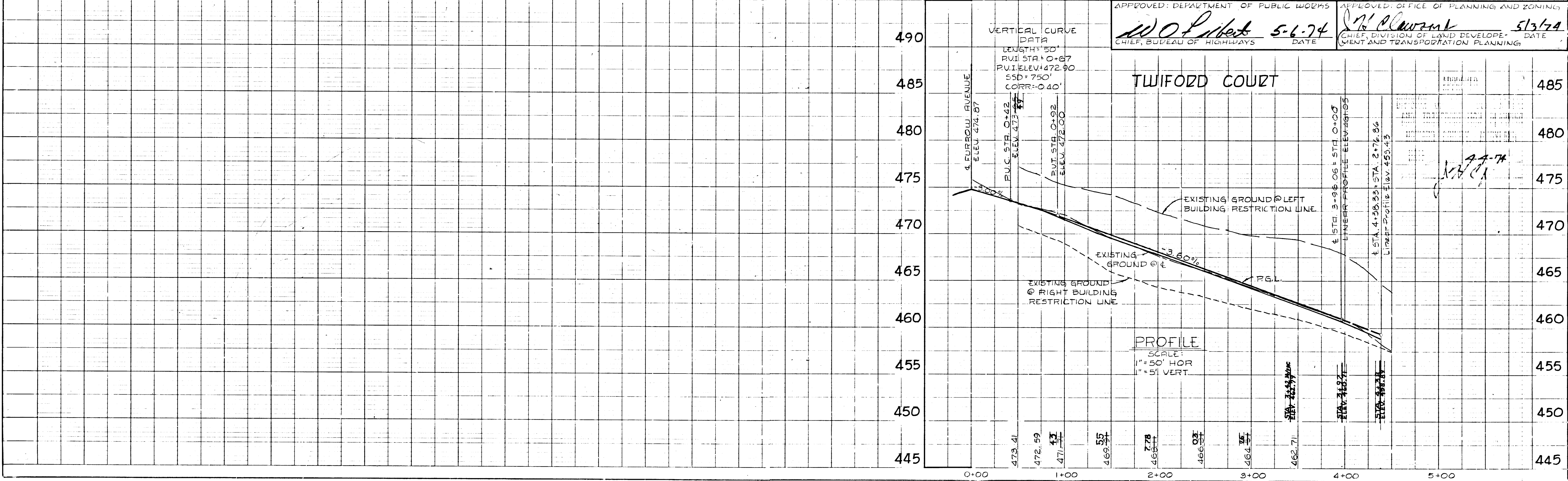


DESIGNED BY: C.J. CROVO  
 DRAFTED BY: R.R. ZIERDEN  
 CHECKED BY: R.B. CARTER

PURDUM & JESCHKE  
 CONSULTING ENGINEERS  
 AND LAND SURVEYORS  
 1023 N. CALVERT STREET  
 BALTIMORE, MARYLAND  
 21202

OWNER AND DEVELOPER  
 PATAPSCO ASSOCIATES LIMITED  
 PARTNERSHIP  
 1131 UNIVERSITY BOULEVARD, WEST  
 SILVER SPRING, MARYLAND 20902

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 APPROVED: OFFICE OF PLANNING AND ZONING  
 W. J. Crovo 5-6-74 J. H. Clavum 5/3/74  
 CHIEF, BUREAU OF HIGHWAYS DATE CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING 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.

*PatapSCO Associates, by Susan Rozumby* 9/15/73  
 Date

**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.

*W. J. Zickler* 9/15/73  
 Date

Reviewed for Howard County Soil Conservation District and meets Technical Requirements.

*Lester M. Neils* 4-30-74  
 Date

This development plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

*Robert W. Zickler* 4-30-74  
 Date

District Coordinator  
 Howard Soil Conservation District

**SEDIMENT CONTROL NOTES**

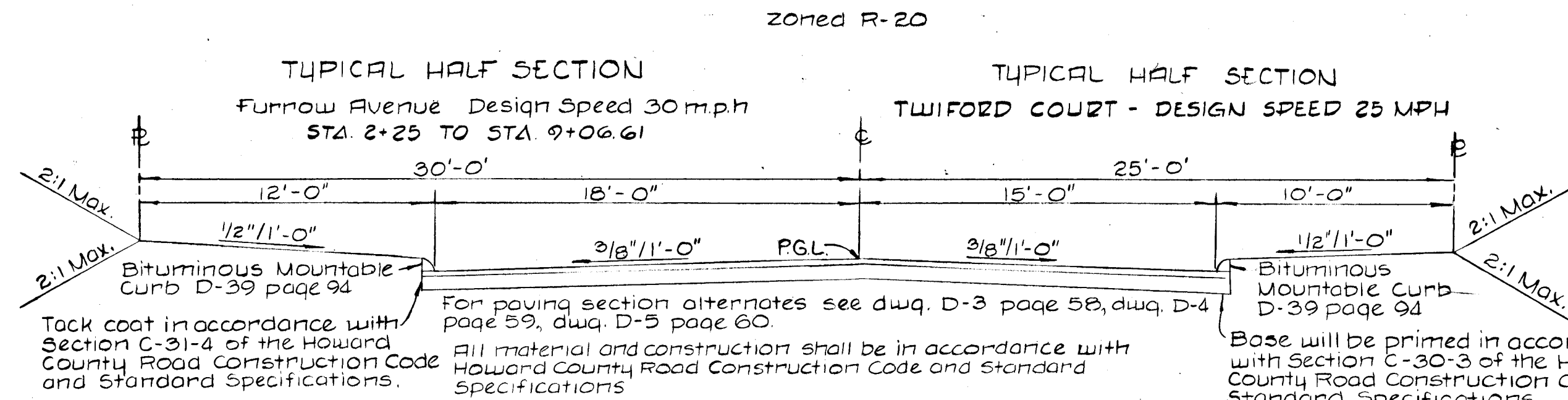
- The developer shall notify the Howard County Soil Conservation District at least 24 hours prior to beginning any construction shown hereon (465-3180).
- Berms, sediment traps, etc., to be constructed prior to any on-site grading or disturbance to any existing surface material, and are to be stabilized as soon as constructed.
- All sediment control structures to remain in place until permission for their removal has been obtained from the Howard County Soil Conservation District (465-3180 or 465-5000 Ext. 291)
- 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 at the specified rate, to a depth of 3".
      - Pulverized limestone at 1 1/2 tons/acre.
      - Commercial fertilizer 5-10-10 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.
      - 20% Annual Rye Grass
      - 80% Kentucky 31 Fescue
    - The seeded area shall then be raked with a York Rake (a minimum of two passes), covered and compacted with Cultipacker or other approved method.
  - Mulching:
    - Seeded areas shall be uniformly mulched immediately after seeding with underweathered small grain straw at the rate of 1 1/2 tons to 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 retting.

**CHANNEL DESIGN DATA @ S-1**

$A = 2.18'$   $S = 3.80\%$   
 $P = 6.74'$   $S^{1/2} = 0.1949$   
 $R^{2/3} = 0.468$   $M = 0.03$   
 $L = 6.60'$   $d = 0.66'$   
 $U = 1.485/M \times R^{2/3} \times S^{1/2}$   
 $U = 49.50 \times 0.468 \times 0.1949$   
 $U = 4.5$  fps  
 $Q = A \times U$   
 $Q = 2.18 \times 4.5$   
 $Q = 9.8$  cfs

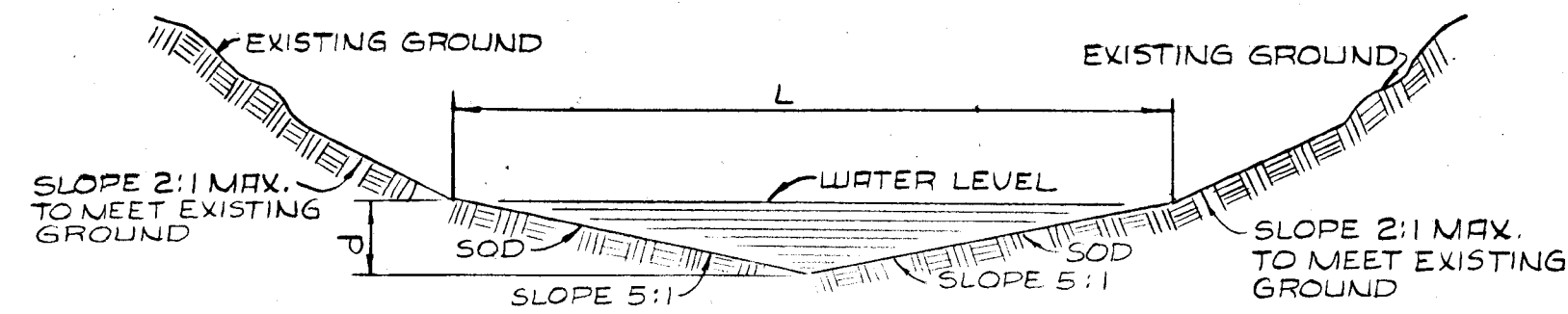
**CHANNEL DESIGN DATA @ S-2**

$A = 3.04'$   $S = 2.80\%$   
 $P = 7.96'$   $S^{1/2} = 0.1673$   
 $R^{2/3} = 0.525$   $M = 0.03$   
 $L = 7.80'$   $d = 0.78'$   
 $U = 1.485/M \times R^{2/3} \times S^{1/2}$   
 $U = 49.50 \times 0.525 \times 0.1673$   
 $U = 4.4$  fps  
 $Q = A \times U$   
 $Q = 3.04 \times 4.4$   
 $Q = 13.4$  cfs



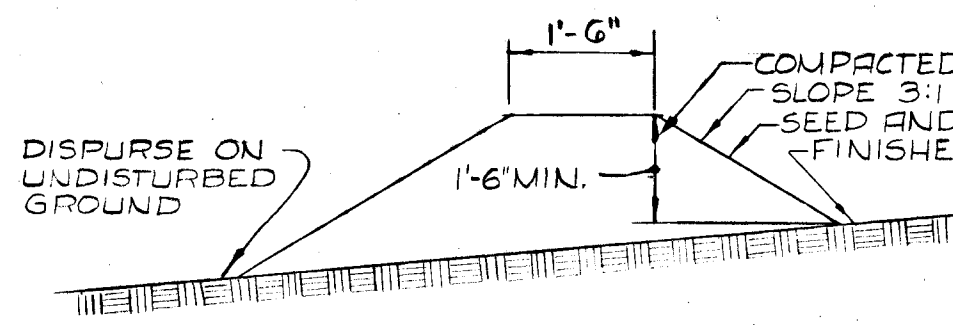
**TYPICAL SECTION**

NO SCALE



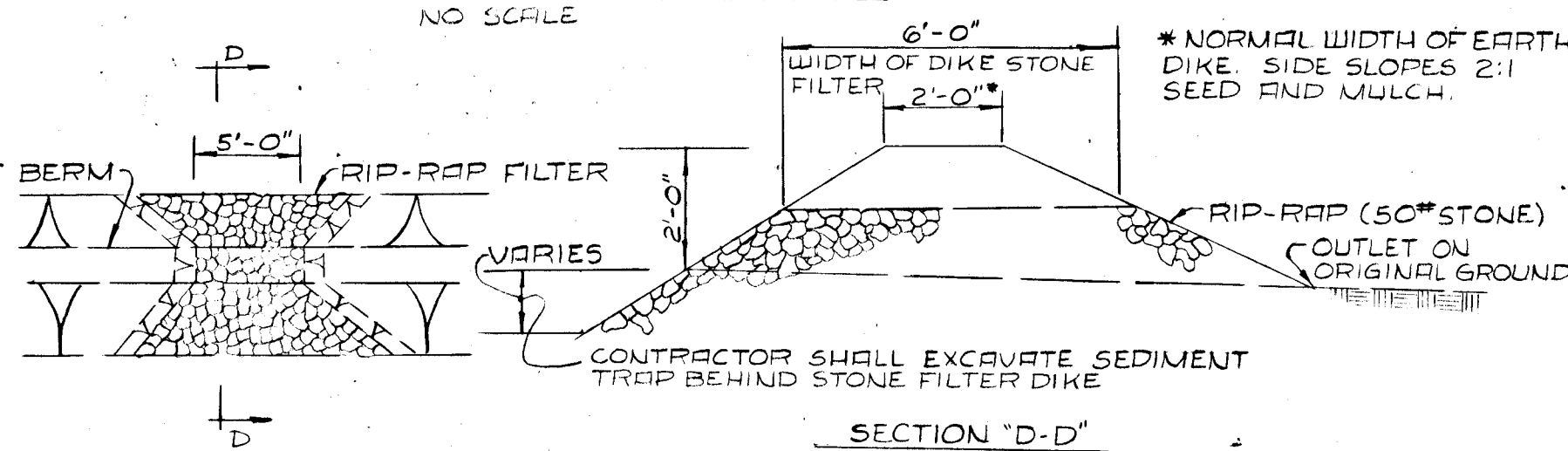
**SODDED CHANNEL DETAIL**

NO SCALE



**TEMPORARY EARTH BERM**

NO SCALE

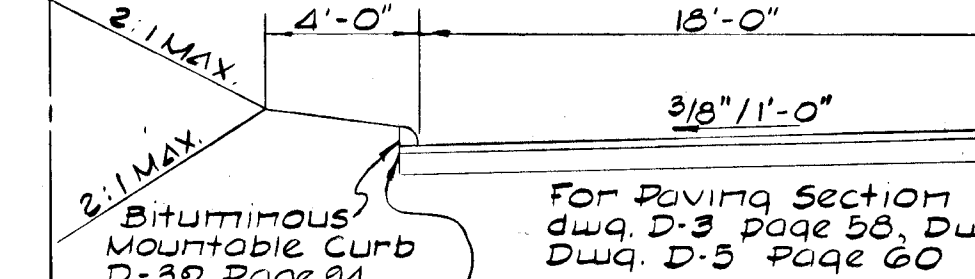


**SEDIMENT CONTROL DIKE WITH STONE FILTER OUTLET**

NO SCALE

**TYPICAL HALF SECTION**

FURROW AVENUE DESIGN SPEED 30 MPH  
 STA. 0+00 TO STA. 2+25



Tack Coat in accordance with Section C-31-4 of the Howard County Road Construction Code and Standard Specifications.

All materials and construction shall be in accordance with Howard County Road Construction Code and Standard Specifications.

**PATAPSCO PARK ESTATES**

SECTION I  
 HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 DATE: 5-6-74

APPROVED: OFFICE OF PLANNING AND ZONING  
 DATE: 5/13/74

**STRUCTURE SCHEDULE**

STRUCTURE NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.	STD. DETAIL
I-1	D-5	452.10	451.85	456.35	DWG. D-4A P.10A
I-2	LINE 12' CORR.		456.98	460.98	
I-3	A-5	464.20	463.95	468.35	DWG. D-6A P.119-A
I-4	B-5		464.60	468.35	DWG. D-6A P.119-A
S-1	TYPE-C		446.28	449.03	DWG. D-52 P.107
S-2	TYPE-C		460.61	462.86	DWG. D-52 P.107

**TWIFORD COURT LINEAR PROFILE**

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

