

BRITTANY MANOR

HOWARD COUNTY, MARYLAND

FINAL ROAD CONSTRUCTION PLANS

INDEX OF SHEETS

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SUMMARY OF WAIVER PETITIONS

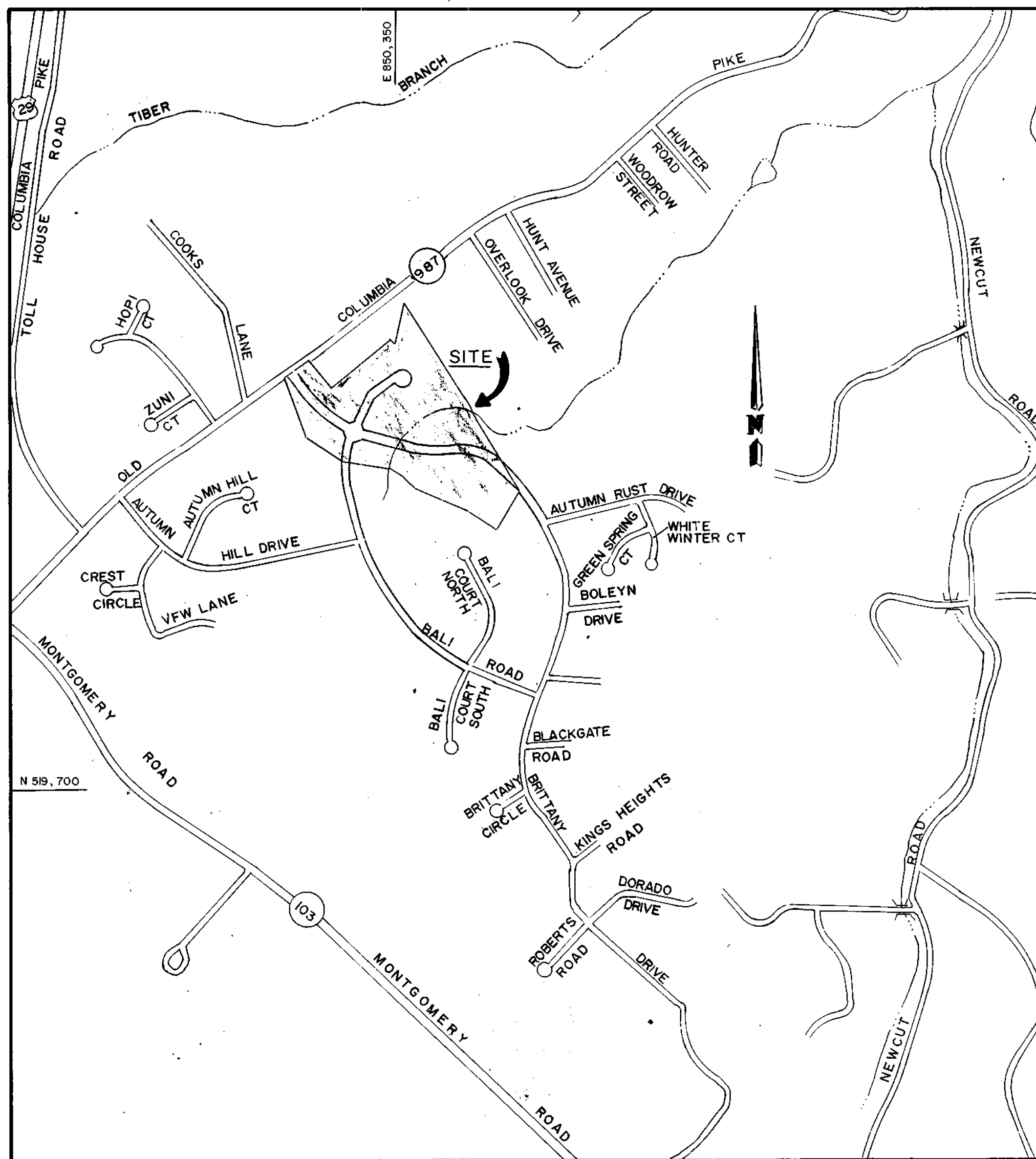
1. SECTION 10.3.1-4 HOWARD COUNTY DESIGN MANUAL VOLUME I, STORM DRAINAGE -STORMWATER MANAGEMENT QUANTITY CONTROL
2. SECTION 2.3.3 HOWARD COUNTY DESIGN MANUAL VOLUME III, ROADS AND BRIDGES -REDUCTION OF DESIGN SPEED FROM 35MPH TO 30MPH FROM STATION 14+50 TO STATION 18+49.27 BRITTANY DRIVE
3. SECTION 16.120 HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS -WAIVER OF PRELIMINARY PLAN SUBMISSION TO INCORPORATE THE DEVELOPMENT OF PARCEL 288 (S 88-105, PLANNING BOARD CASE #239) TO THE APPROVED PRELIMINARY PLAN (P 88-06) FOR PARCEL 651

APPROVAL DATE
11 / 24 / 87

12 / 8 / 87

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Charles C. ... 4/28/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE
... 7/11/89
 CHIEF, BUREAU OF HIGHWAYS DATE
... 4-28-89
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
Mark S. Dr. ... 5/3/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



VICINITY MAP
SCALE: 1" = 600'

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 HRS IN ADVANCE OF ANY CONSTRUCTION. CALL "MISS UTILITY" 48HRS IN ADVANCE OF CONSTRUCTION -1-800-257-7777
3. STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY STANDARD SPECIFICATIONS.
4. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
5. CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE # 792-7272
6. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION, CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1984 REVISED EDITION.
8. FOR LOCATION OF DRIVEWAY APRONS AND DEPRESSED CURBS, SEE SITE DEVELOPMENT PLANS.
9. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEAN, METHODS, PROCEDURES, TECHNIQUES, OR SEQUENCES OF CONSTRUCTION, NOR FOR SAFETY ON THE JOB SITE, NOR SHALL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.



JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK 8818 CENTRE PARK DRIVE SUITE 208
 COLUMBIA MARYLAND 21045 TELEPHONE (301) 740-5200

1442

BENCHMARK #1 - RAILROAD SPIKE SET IN 10' OAK. ELEV. 334.62

CURVE DATA - BRITTANY DR.
 STA 10+13.03 TO STA 12+22.60
 $\Delta = 20^{\circ}00'44"$
 $R = 600.00'$
 $T = 105.86'$
 $L = 209.57'$
 $CHD = S.83^{\circ}55'12" E. 208.50'$

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Mark S. Z. Campbell
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

5/2/89
 DATE

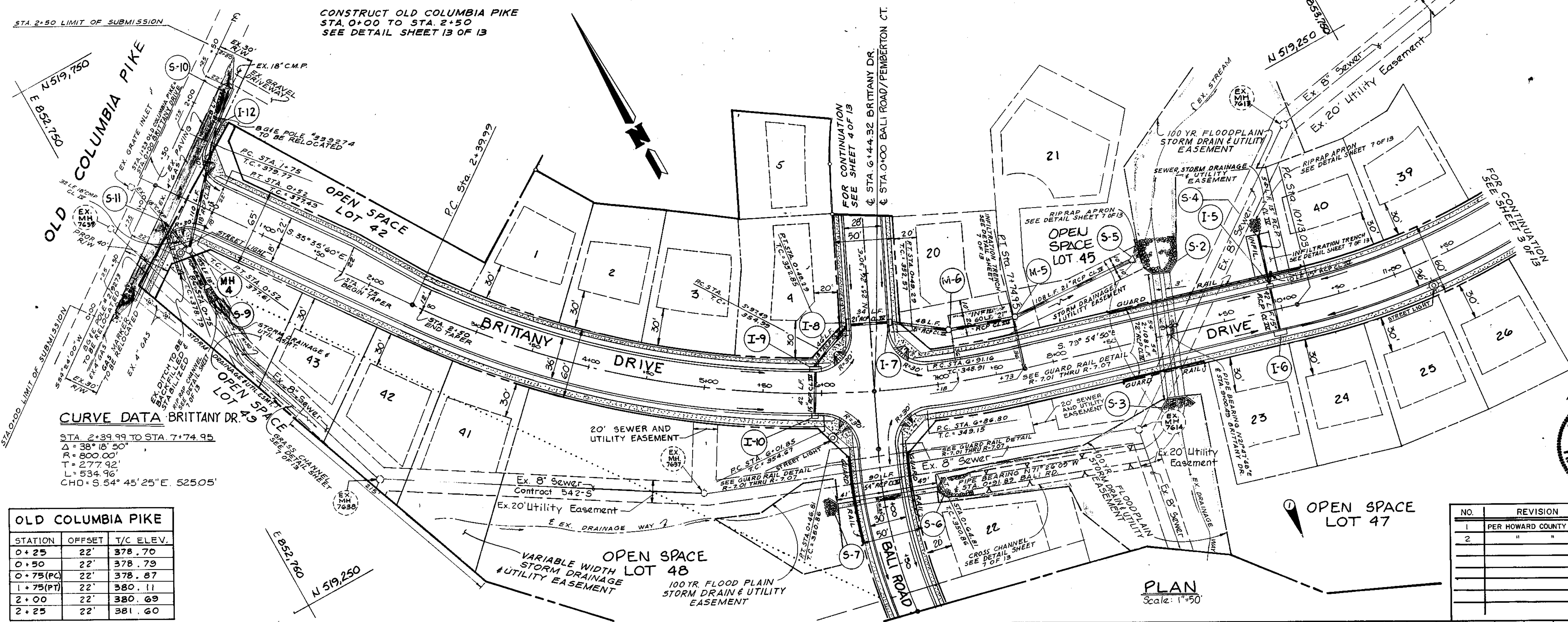
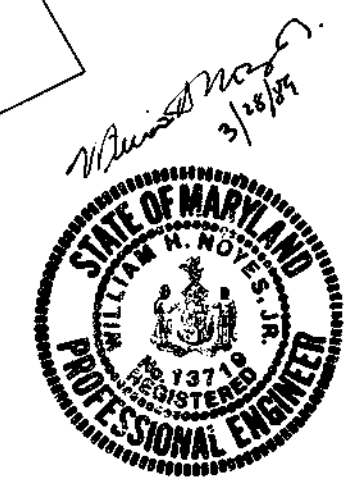
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James M. ... 4/21/89
 CHIEF, LAND DEVELOPMENT DIVISION
William M. ...
 CHIEF, BUREAU OF HIGHWAYS
...
 CHIEF, BUREAU OF ENGINEERING

BRITTANY MANOR
 LOTS 1-49
 TAX MAP NO. 24 PARCELS 651, 288
 (O.P.B.Z. REF. NO. P-88-06, S-88-105, S-88-99, WP-89-30)
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN & PROFILE

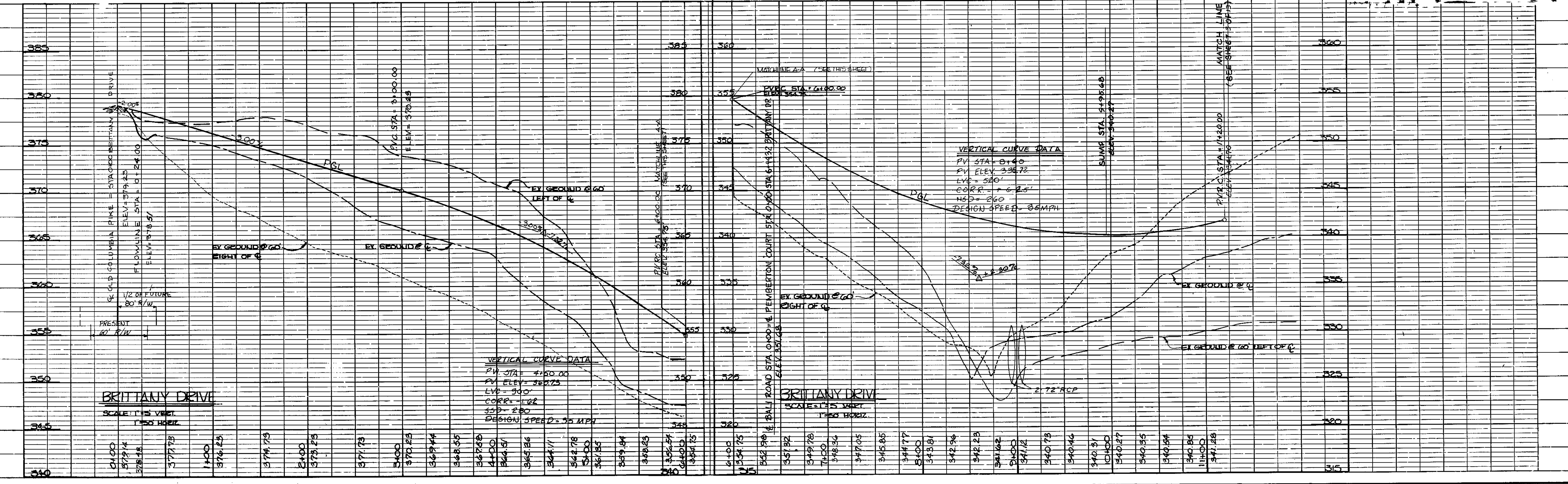
OWNER	N.V. LAND	DEVELOPER	N.V. LAND
6820 ELM STREET MCLEAN, VIRGINIA 22101			
SCALE AS SHOWN	DATE: OCT. 1988	SHEET 2 OF 13	
DES. TAB	DRN. JT	CHK. RHV	
JOHN E. HARMS JR. AND ASSOCIATES, INC. CONSULTING ENGINEERS - PLANNERS - SURVEYORS 2 CENTRE PARK 8818 CENTRE PARK DRIVE, SUITE 208 COLUMBIA, MARYLAND 21045 TELE (301) 740-5200			



OLD COLUMBIA PIKE

STATION	OFFSET	T/C ELEV.
0+25	22'	378.70
0+50	22'	378.79
0+75 (PC)	22'	378.87
1+75 (PT)	22'	380.11
2+00	22'	380.69
2+25	22'	381.60

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/BOH	
2	"	CAG	5/10/89



PLAN

DATE	
BY	
SURVEYED	
PLANNED	
NOTED	
STRUCTURE NOTATIONS CHD	

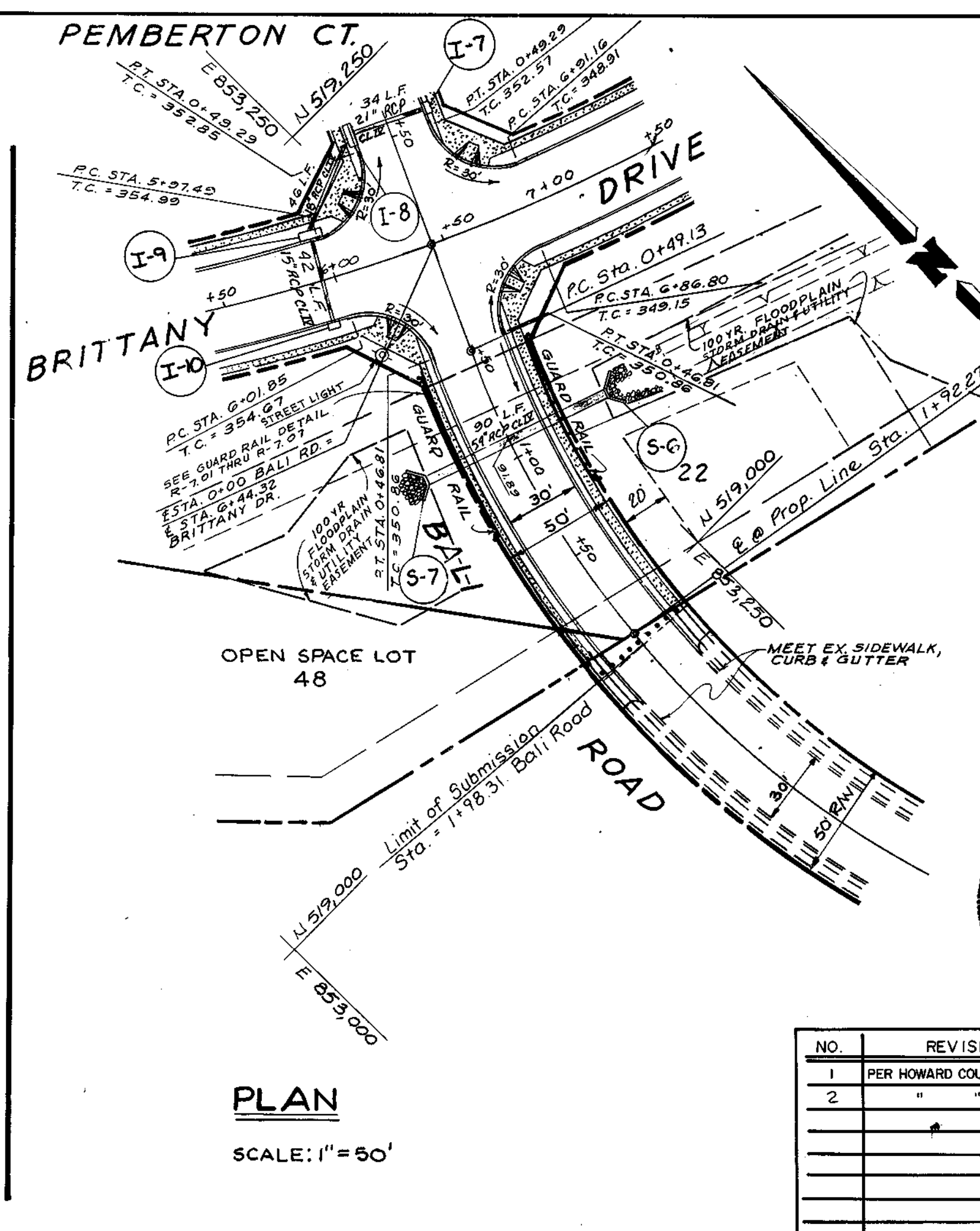
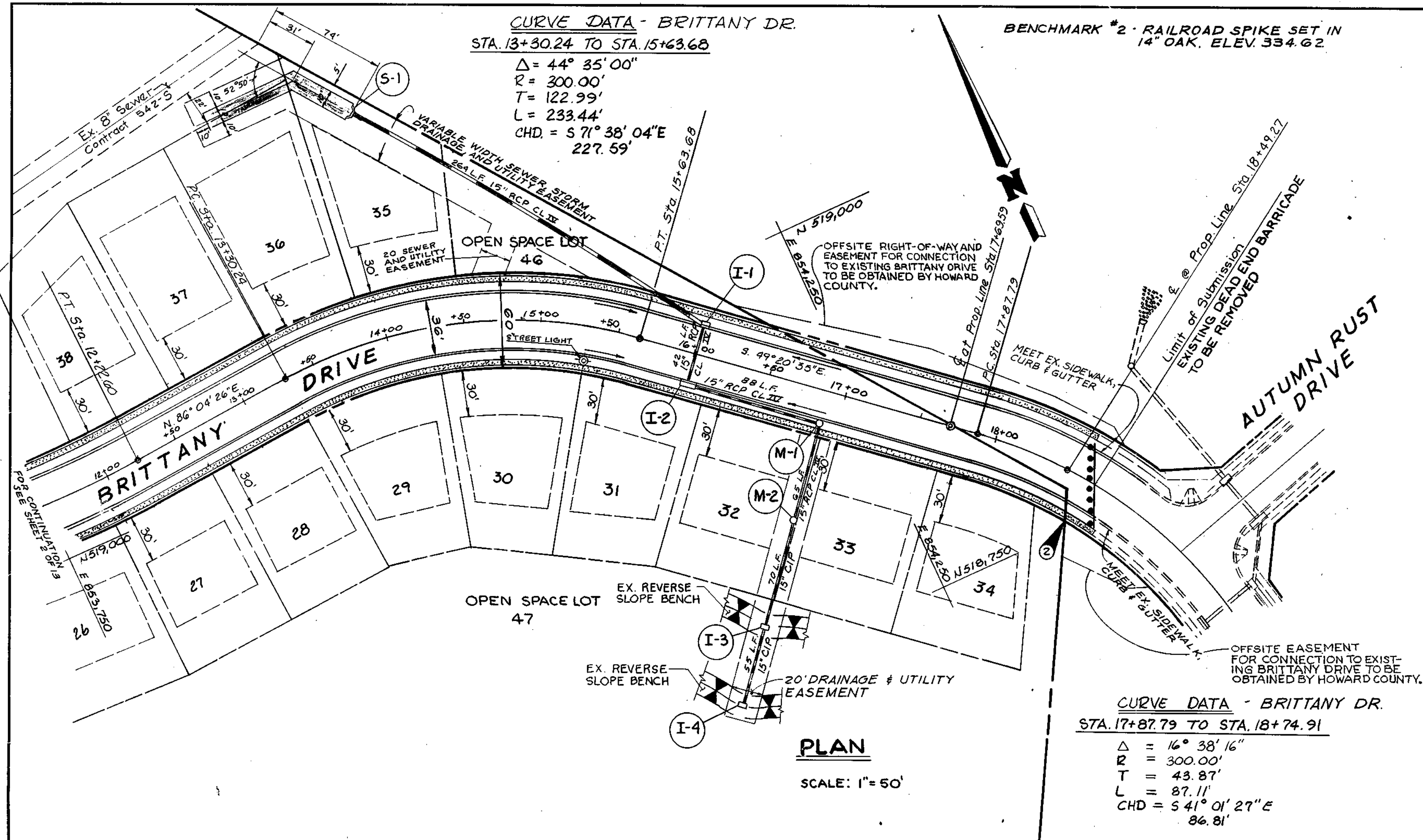
PROFILE

DATE	
BY	
SURVEYED	
PLANNED	
NOTED	
STRUCTURE NOTATIONS CHD	

14742

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	DATE
	CHECKED	BY
	BY	DATE
	NO. OF	
	NOTES	
	CHECKED	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	DATE
	CHECKED	BY
	BY	DATE
	NO. OF	
	NOTES	
	CHECKED	
	BY	
	DATE	



APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Mark J. ... 5/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION 4/21/89
James W. ... DATE
 CHIEF BUREAU OF HIGHWAYS 4/11/89
James W. ... DATE
 CHIEF BUREAU OF ENGINEERING 4/22/89
James W. ... DATE

BRITANNY MANOR
 LOTS 1-49
 TAX MAP NO. 24 PARCELS 651, 288
 (O.P.Z. REF. NO. P-88-06, S-88-105, S-88-99, WP-89-30)
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN & PROFILE

OWNER: N.V. LAND
 DEVELOPER: N.V. LAND

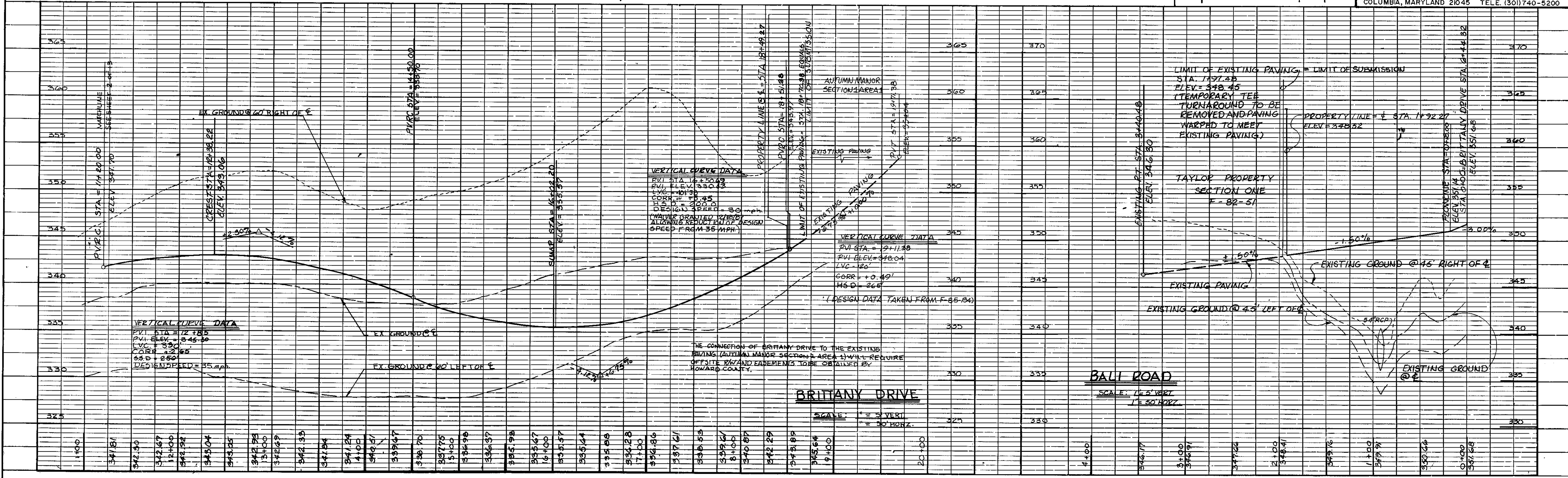
6820 ELM STREET
 McLEAN, VIRGINIA 22101

SCALE AS SHOWN DATE: OCT. 1988 SHEET 3 OF 13

DES. TAB DRN. MB CHK. RHV

JOHN E. HARMS JR. AND ASSOCIATES, INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK 8818 CENTRE PARK DRIVE SUITE 208
 COLUMBIA, MARYLAND 21045 TELE. (301) 740-5200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/OSH	
2	" " " "	CAG	3/10/89



1442

1442

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	NOTED		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	NOTED		

CURVE DATA - PEMBERTON COURT

STA. 1+95.13 TO 3+02.23
 $\Delta = 30^\circ 40' 58"$
 $R = 200.00'$
 $T = 54.87'$
 $L = 107.10'$
 $CHD = N. 40^\circ 46' 59" E. 105.83'$

CURVE DATA - PEMBERTON COURT

STA. 4+08.48 TO 4+78.12
 $\Delta = 36^\circ 36' 17"$
 $R = 109.00'$
 $T = 36.05'$
 $L = 69.64'$
 $CHD = N. 74^\circ 25' 36" E. 68.46'$

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Mark J. McLaughlin
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE: 5/2/89

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul D. ...
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE: 4/21/89
...
 CHIEF, BUREAU OF HIGHWAYS
 DATE: ...
...
 CHIEF, BUREAU OF ENGINEERING
 DATE: 4/28/89

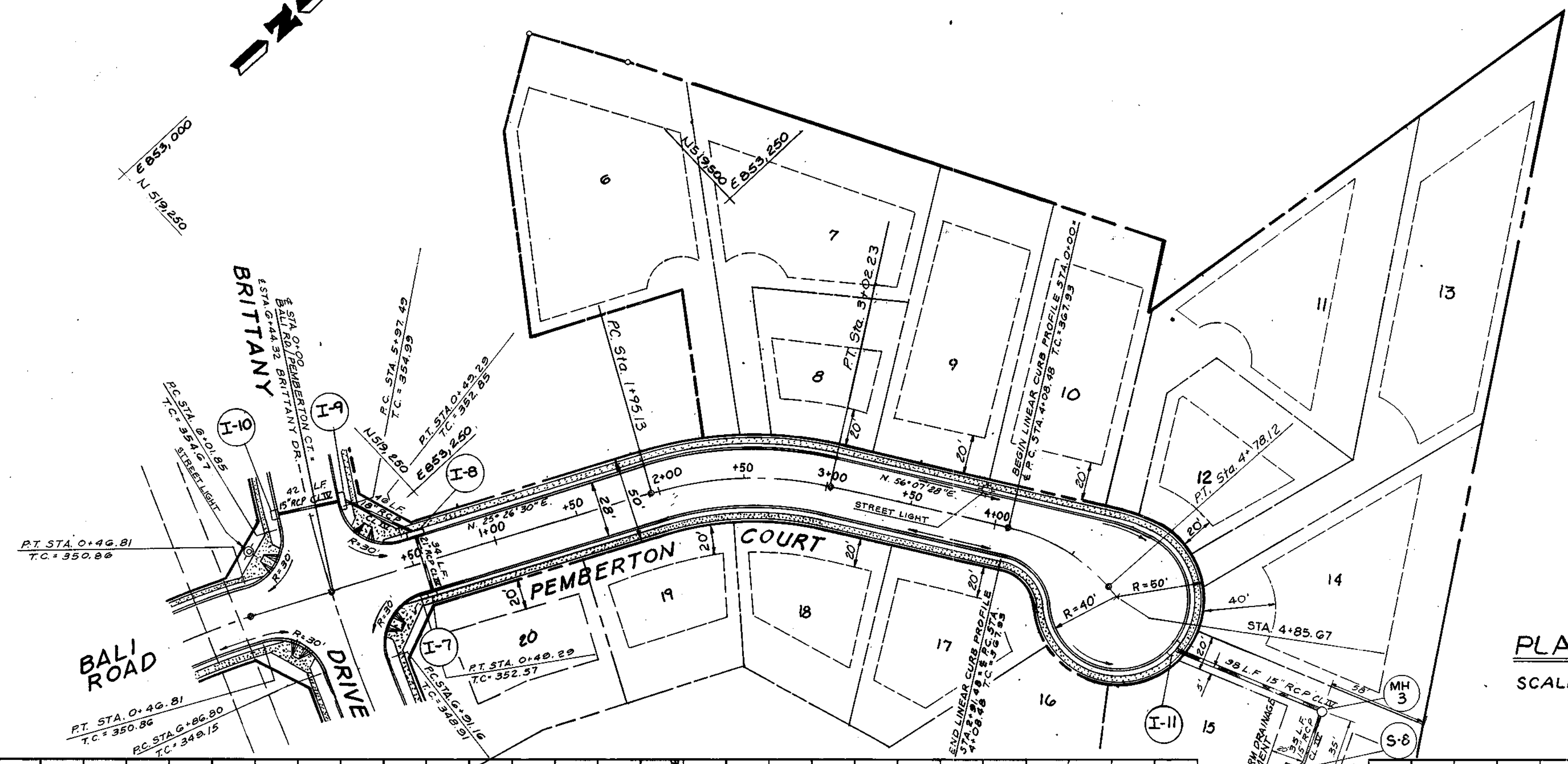


BRITTANY MANOR
 LOTS 1-49
 TAX MAP NO 24 PARCELS 651, 288
 (O.P. & Z. REF. NO. P-88-06, S-88-105, S-86-99, WP-89-30)
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

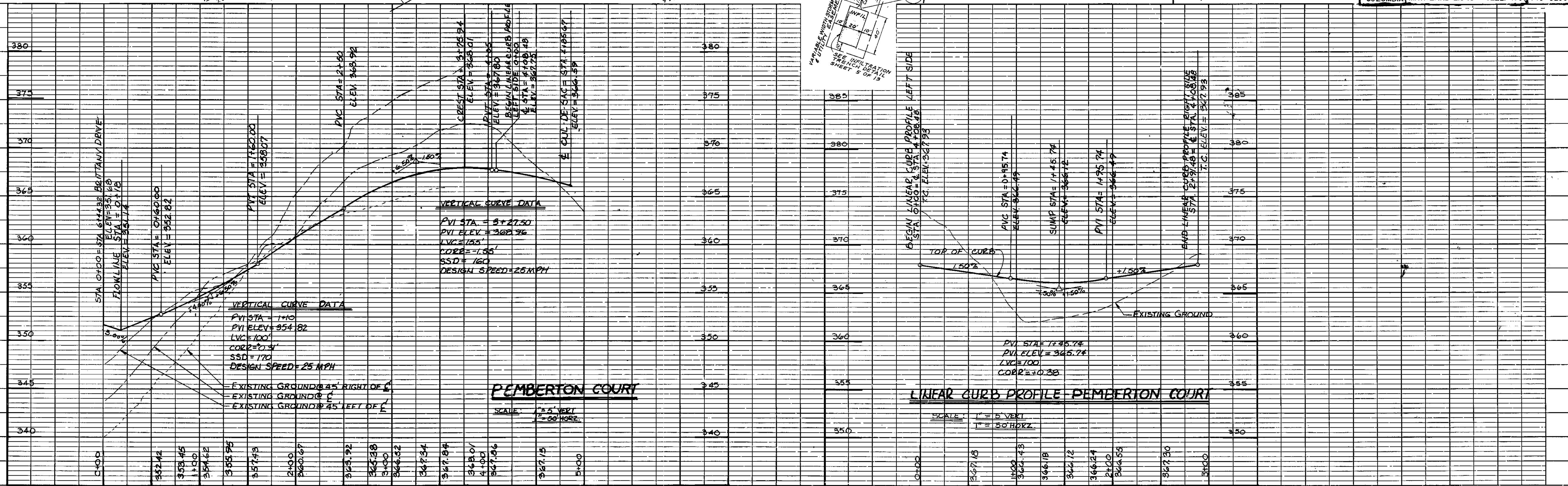
PLAN & PROFILE

OWNER	N.V. LAND	DEVELOPER	N.V. LAND
NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/DAH	
2		CAG	3/10/89

6820 ELM STREET
 McLEAN, VIRGINIA 22101
 SCALE AS SHOWN DATE: OCT. 1988 SHEET 4 OF 13
 DES. TAB DRN. J.T. CHK. R.H.V.
JOHN E. HARMS JR. AND ASSOCIATES, INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK 8818 CENTRE PARK DRIVE SUITE 238
 COLUMBIA, MARYLAND 21045 TELE. (301) 740-5200



PLAN
 SCALE: 1" = 50'

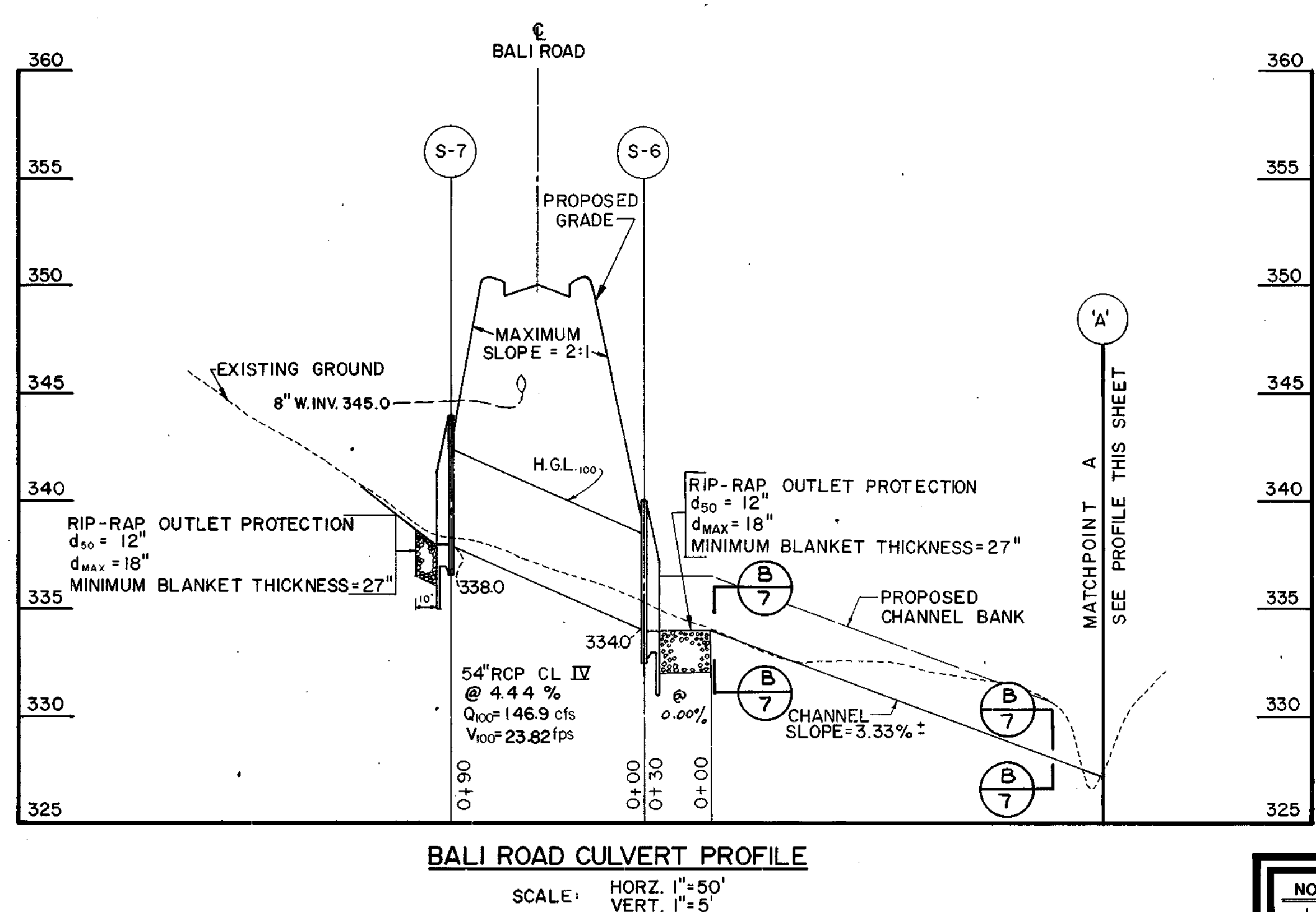
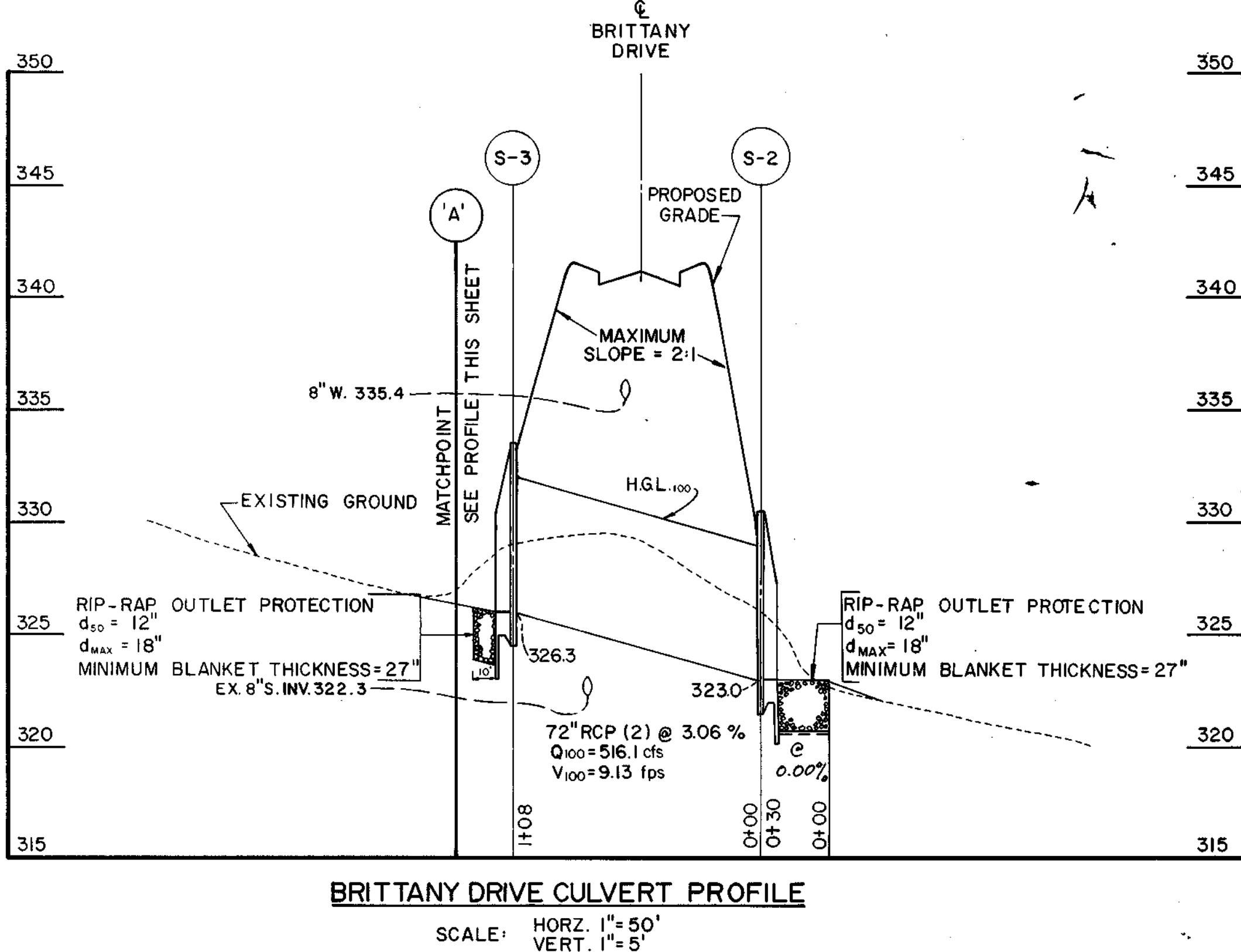
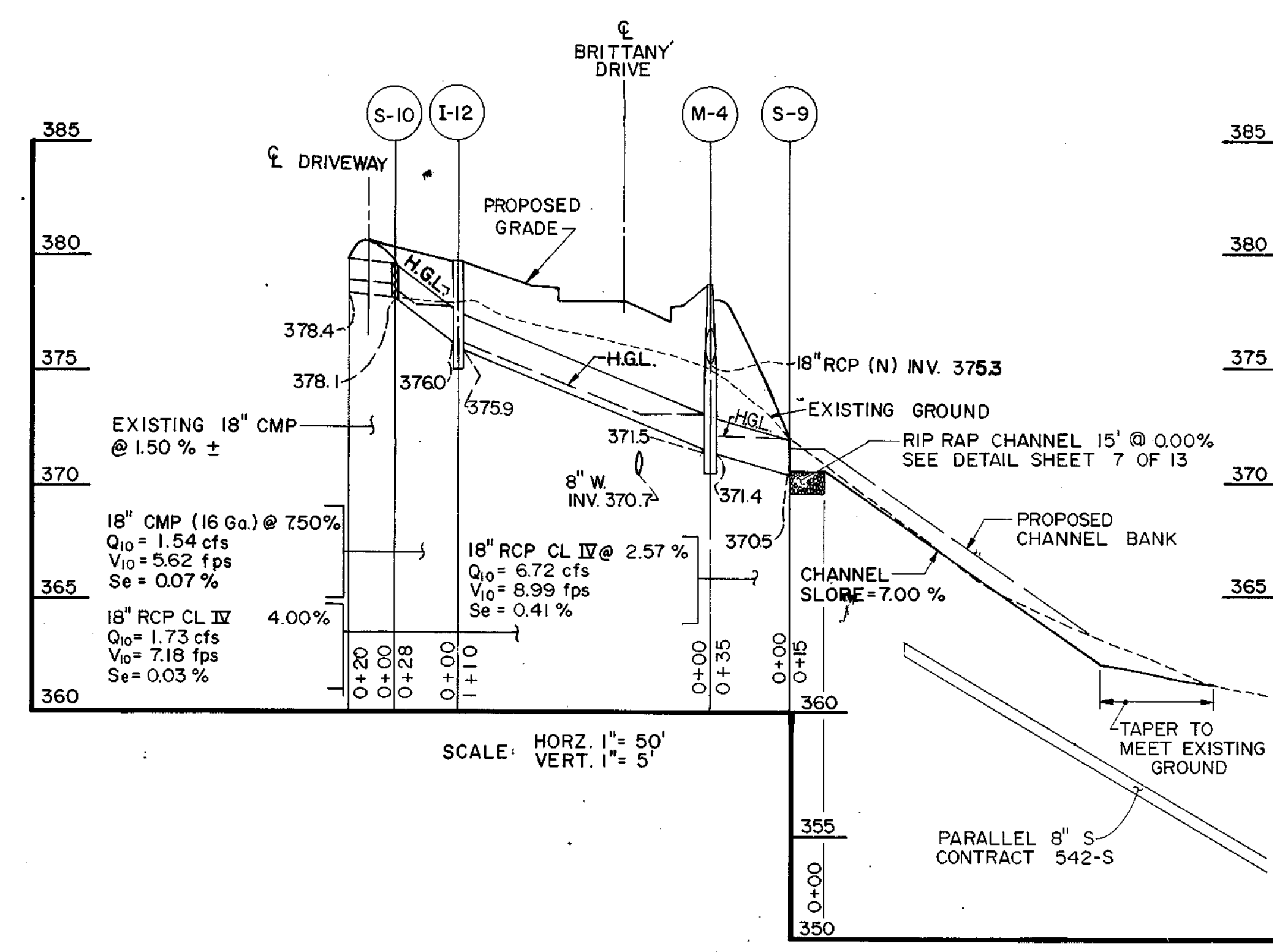
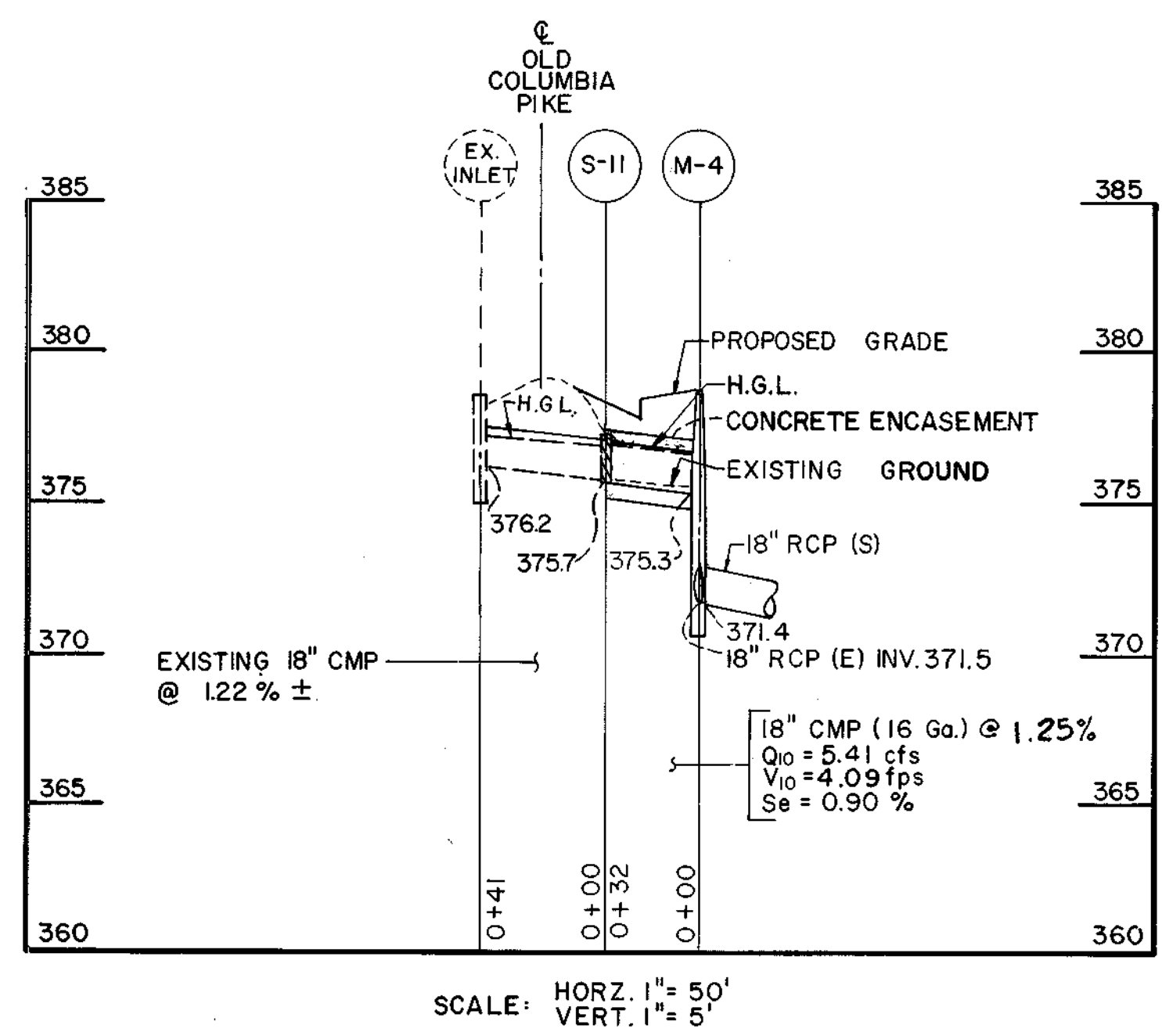


PEMBERTON COURT

LINEAR CURB PROFILE PEMBERTON COURT

STRUCTURE SCHEDULE						
NUMBER	TYPE	TOP ELEVATION	ROADWAY SLOPE	CROSS SLOPE	LOCATION	REMARKS
I-1	A-5 INLET (DEPRESSED)	335.63	SUMP	3.00%	CL STA. 16+02 BRITTANY DRIVE; 18' LEFT	S.D. 4.01
I-2	A-10 INLET (DEPRESSED)	335.63	SUMP	3.00%	CL STA. 16+02 BRITTANY DRIVE; 18' RIGHT	S.D. 4.02
I-3	YARD INLET	355.00	N/A	N/A	CL STA. 16+90 BRITTANY DRIVE; 157' RIGHT	S.D. 4.14
I-4	TYPE 'K' INLET	373.00	N/A	N/A	CL STA. 16+90 BRITTANY DRIVE; 212' RIGHT	S.D. 4.12
I-5	A-5 INLET (DEPRESSED)	340.33	SUMP	3.00%	CL STA. 9+96 BRITTANY DRIVE; 18' LEFT	S.D. 4.01
I-6	A-10 INLET (DEPRESSED)	340.33	SUMP	3.00%	CL STA. 9+96 BRITTANY DRIVE; 18' RIGHT	S.D. 4.02
I-7	A-5 INLET W/DEFLECTORS	352.76	4.00%	3.00%	CL STA. 0+54 PEMBERTON COURT; 14' RIGHT	S.D. 4.01/S.D. 4.83
I-8	A-10 INLET (DEPRESSED)	352.86	SUMP	3.00%	CL STA. 0+54 PEMBERTON COURT; 14' LEFT	S.D. 4.02
I-9	A-10 INLET	355.39	7.25%	3.00%	CL STA. 5+92 BRITTANY DRIVE; 18' LEFT	S.D. 4.02
I-10	A-5 INLET W/DEFLECTORS	355.17	7.25%	3.00%	CL STA. 5+95 BRITTANY DRIVE; 18' RIGHT	S.D. 4.01/S.D. 4.83
I-11	A-10 INLET (DEPRESSED)	366.12	N/A	N/A	STA. 1+49 LINEAR CURB PROFILE PEMBERTON CT.	S.D. 4.02
I-12	A-5 INLET	380.40	1.40%	2.00%	CL STA. 1+91 OLD COLUMBIA PIKE; 24' RIGHT	S.D. 4.01
† TOP ELEVATIONS FOR CURB OPENING INLETS ARE GIVEN AS TOP OF INLET AT CURB LINE						
M-1	STANDARD MANHOLE	333.61	N/A	2.00%	CL STA. 16+86 BRITTANY DRIVE; 22' RIGHT	G 5.01
M-2	STANDARD MANHOLE	341.0		N/A	CL STA. 16+86 BRITTANY DRIVE; 87' RIGHT	G 5.01
M-3	DROP MANHOLE	355.0			SEE PLAN	
M-4	SHALLOW MANHOLE	378.9			CL STA. 0+49 BRITTANY DRIVE 38' RIGHT	G 5.05
M-5	SHALLOW MANHOLE	345.5			SEE PLAN	G 5.05
M-6	STANDARD MANHOLE	350.5	N/A	N/A	SEE PLAN	G 5.01
S-1	TYPE 'A' HEADWALL	N/A	N/A	N/A	SEE PLAN	S.D. 5.11
S-2	MODIFIED TYPE 'A' HEADWALL				SEE PLAN	SEE DETAIL SHEET 7
S-3	TYPE 'A' HEADWALL				SEE PLAN	
S-4	15" RCP END SECTION				CL STA. 9+96 BRITTANY DRIVE 75' LEFT	S.D. 5.51/S.D. 5.52
S-5	18" RCP END SECTION				SEE PLAN	S.D. 5.51/S.D. 5.52
S-6	TYPE 'A' HEADWALL				SEE PLAN	S.D. 5.11
S-7	TYPE 'A' HEADWALL				SEE PLAN	S.D. 5.11
S-8	15" RCP END SECTION				SEE PLAN	S.D. 5.51/S.D. 5.52
S-9	18" RCP END SECTION				CL STA. 0+77 BRITTANY DRIVE 60' RIGHT	S.D. 5.51/S.D. 5.52
S-10	18" CMP SLEEVE + BEND				CL STA. 0+96 OLD COLUMBIA PIKE 12' RIGHT	VERIFY LOCATION IN FIELD
S-11	18" CMP SLEEVE + BEND	N/A	N/A	N/A	CL STA. 2+19 OLD COLUMBIA PIKE 23' RIGHT	" "
G-1	3'X3'X6' GABION BASKET	328.0	N/A	N/A	SEE PLAN	FILL WITH 6"
G-2	3'X3'X6' GABION BASKET	342.7	N/A	N/A	SEE PLAN	RIP-RAP

CLASS C PIPE BEDDING CLASS SHALL BE UTILIZED AS PERMITTED BY FIELD CONDITIONS.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 4/21/89
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature] 4/1/89
 CHIEF, BUREAU OF HIGHWAYS
 [Signature] 4/28/89
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 [Signature] 5/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

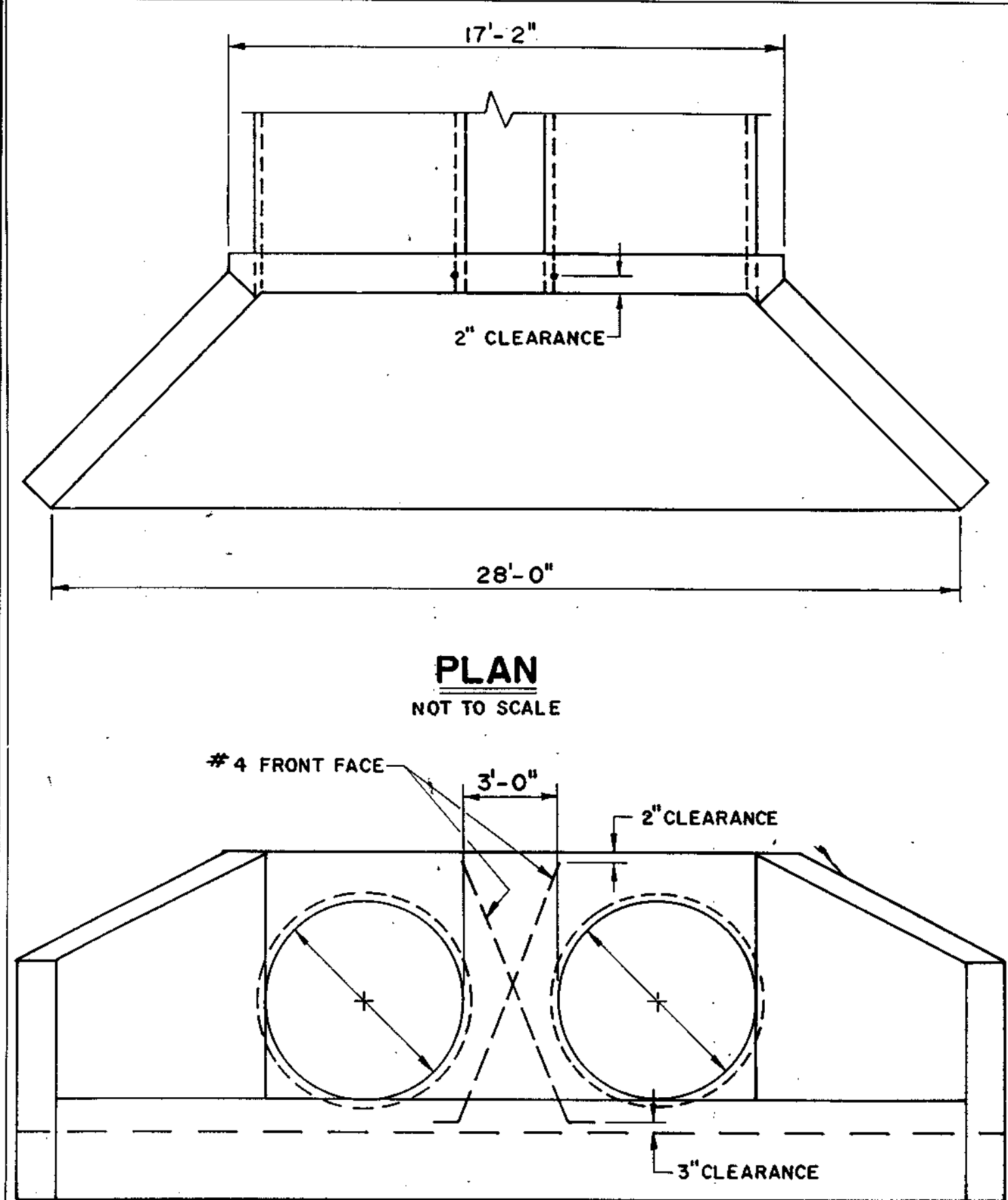
STORM DRAIN PROFILES
BRITTANY MANOR
 LOTS 1-49
 (O.P. & Z. REF. NO. P-88-06, S-88-105, S-86-99, WP-89-30)
 TAX MAP 24 PARCEL 288 (1879/490) PARCEL 65 (1755/213-216)
 2nd ELECTION DISTRICT HOWARD COUNTY, MD

OWNER / DEVELOPER
JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 8818 CENTRE PARK DRIVE SUITE 208
 COLUMBIA, MARYLAND 21045 TELEPHONE 13011 740-5200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/DGR	
2	" " "	CAG	3/10/89

DESIGNED BY: TAB
 DRAWN BY: GG
 CHECKED BY: RHV
 DATE: 10-17-88
 SCALE: AS SHOWN
 W.D. NO. 44-87-010A

F-89-C9

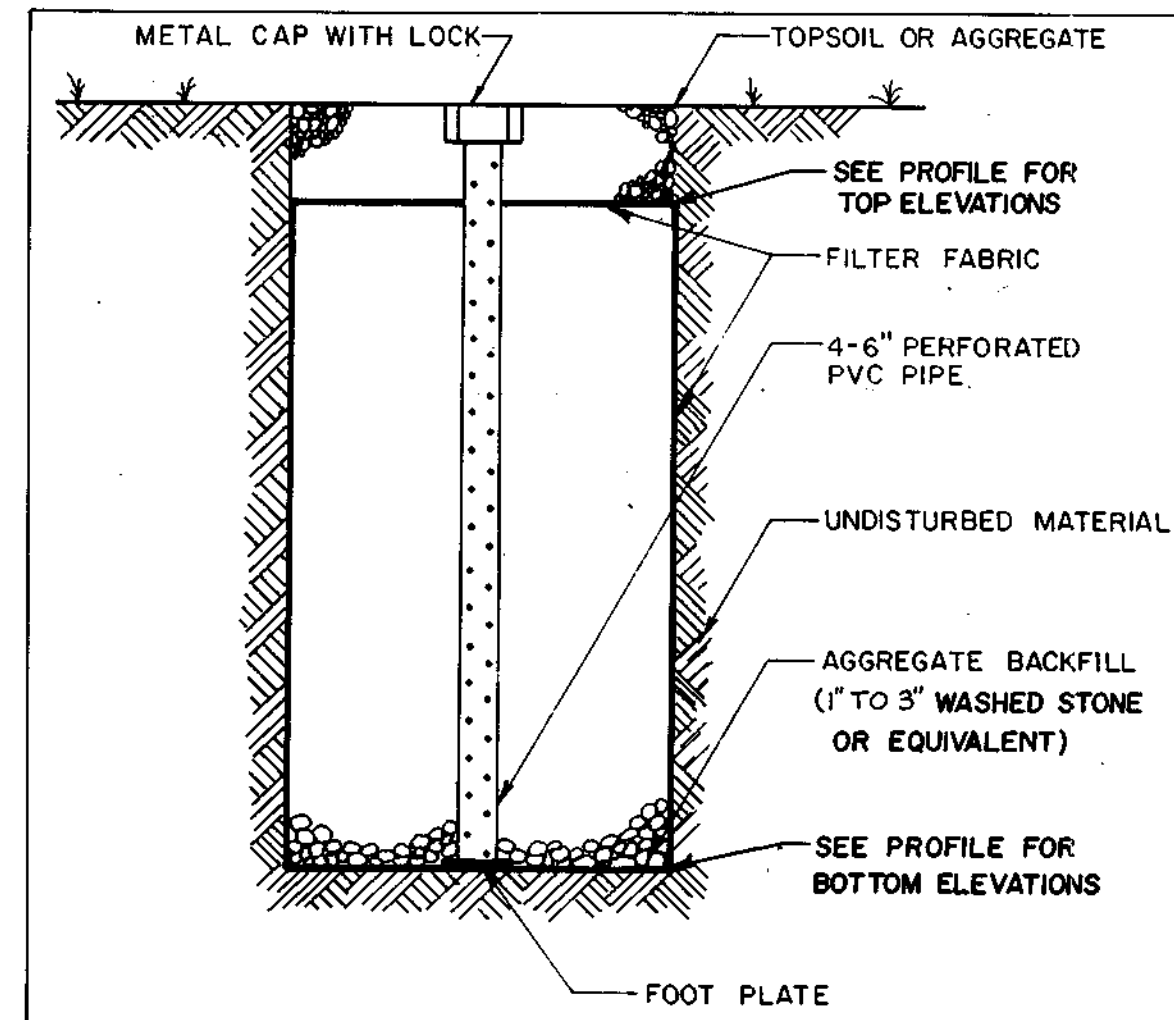


PLAN
NOT TO SCALE

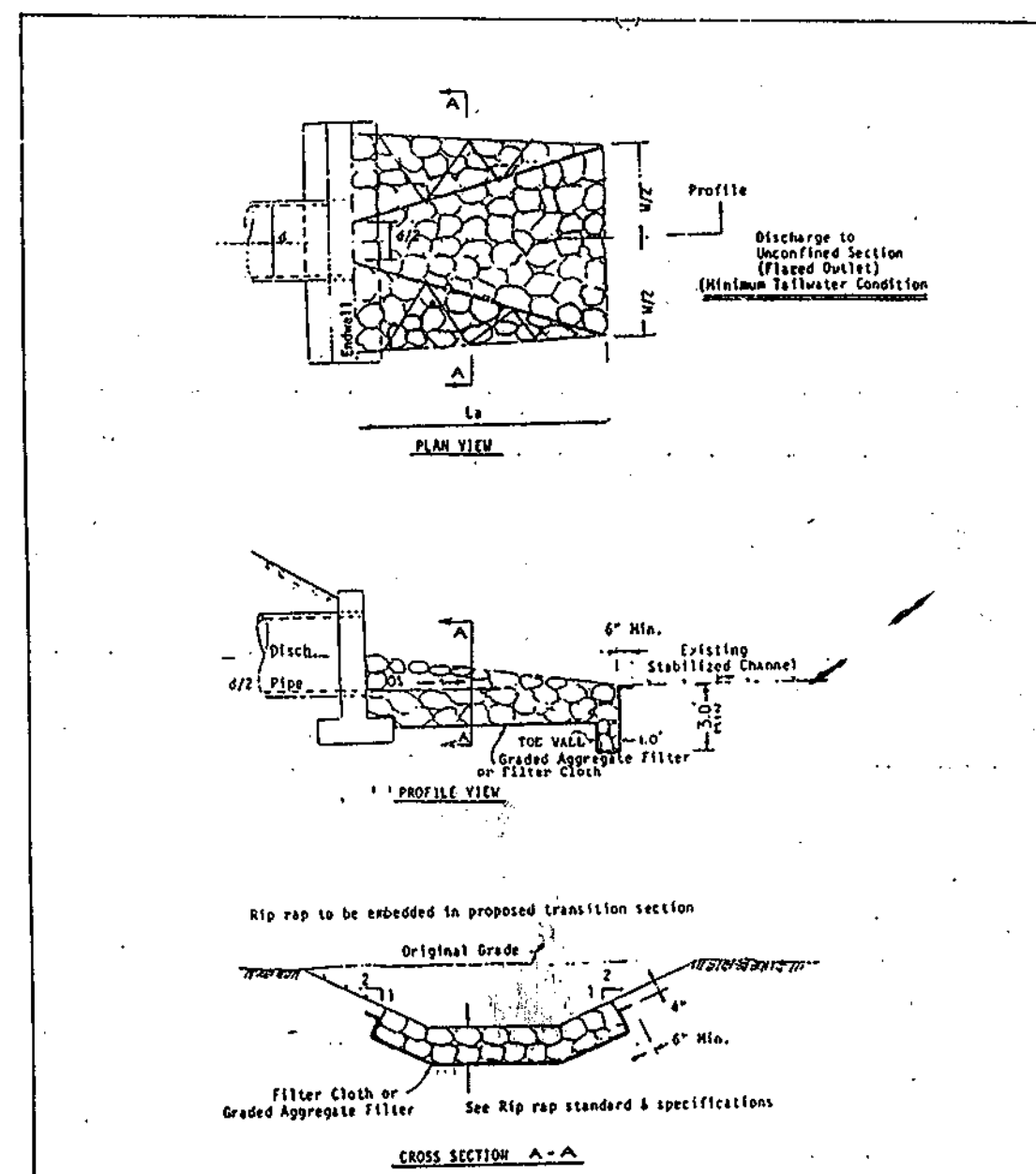
FRONT ELEVATION
NOT TO SCALE

MODIFICATION TO TYPE 'A' HEADWALL

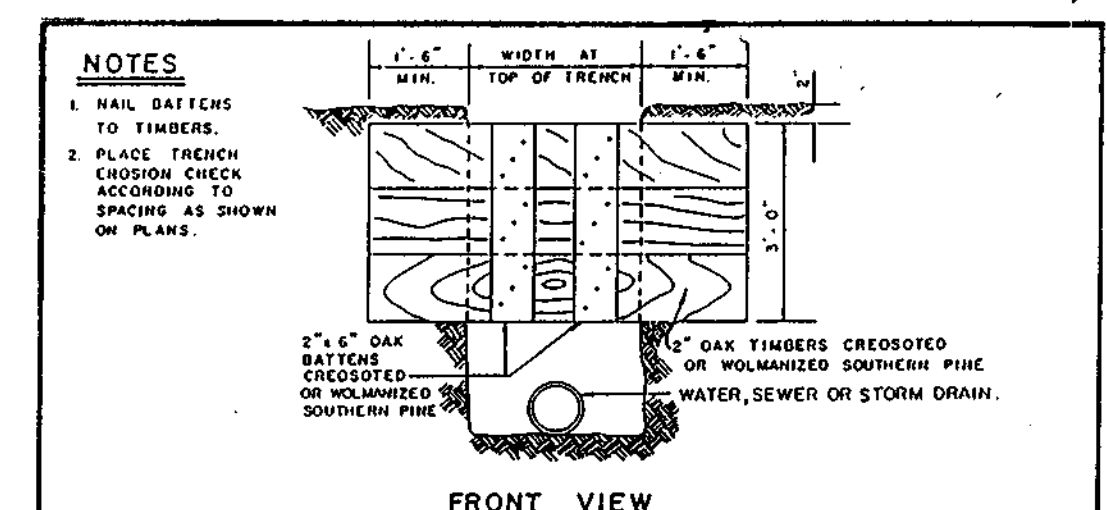
NOTE: THIS DETAIL IS PROVIDED SOLELY TO SHOW MODIFICATIONS TO THE TYPE A HEADWALL FOR CIRCULAR CONDUITS, FOR ALL OTHER CONSTRUCTION DETAILS THE CONTRACTOR SHALL REFERENCE STANDARD DETAIL 5.11 OF THE HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.



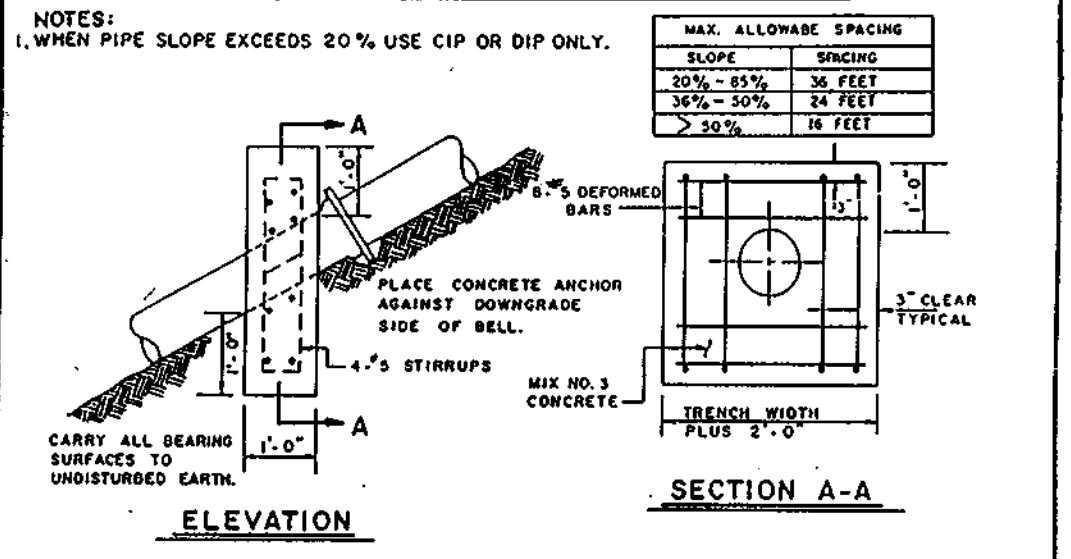
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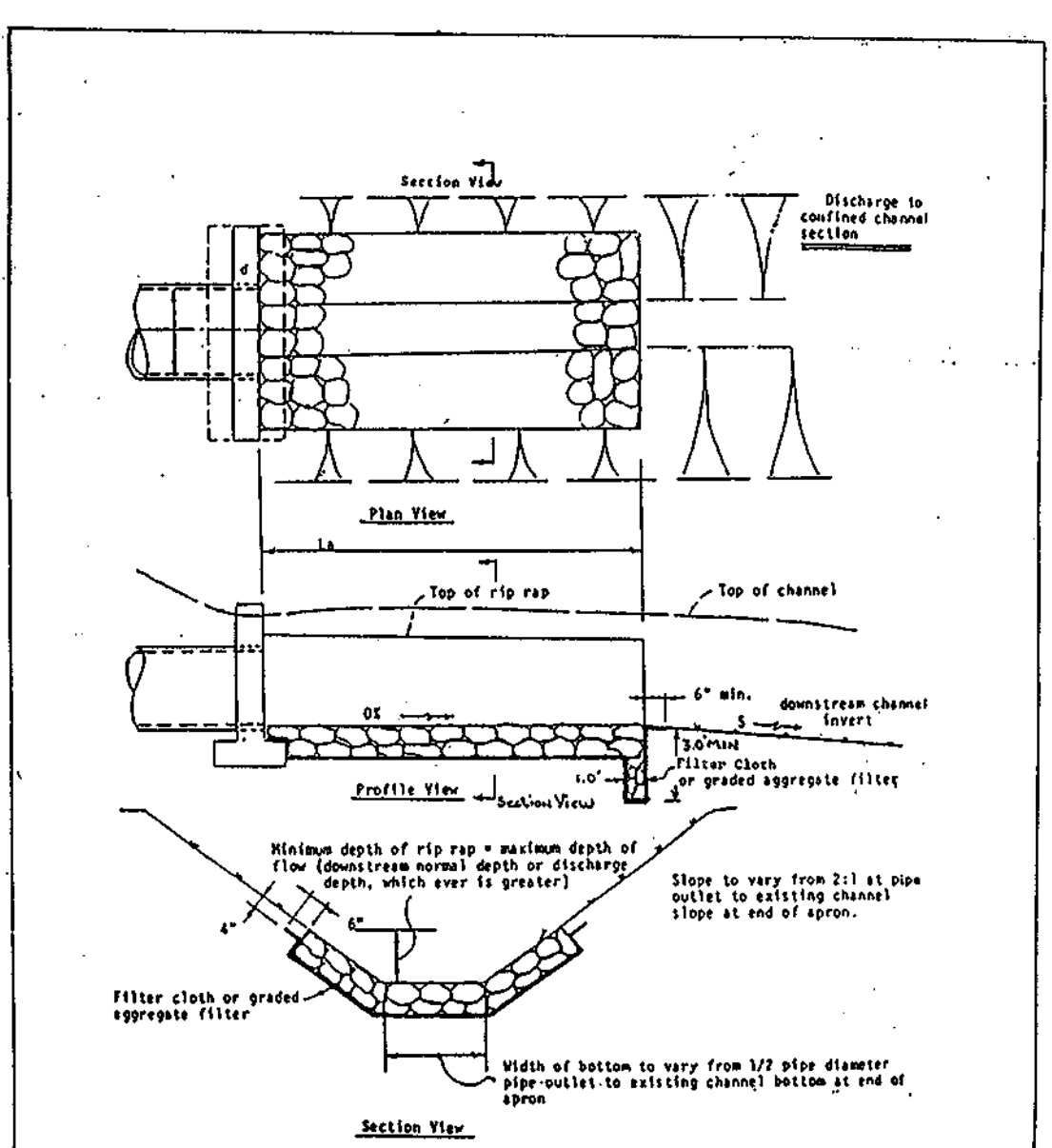
U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND
RIPRAP OUTLET PROTECTION-I
STANDARD DRAWING
ROP-I



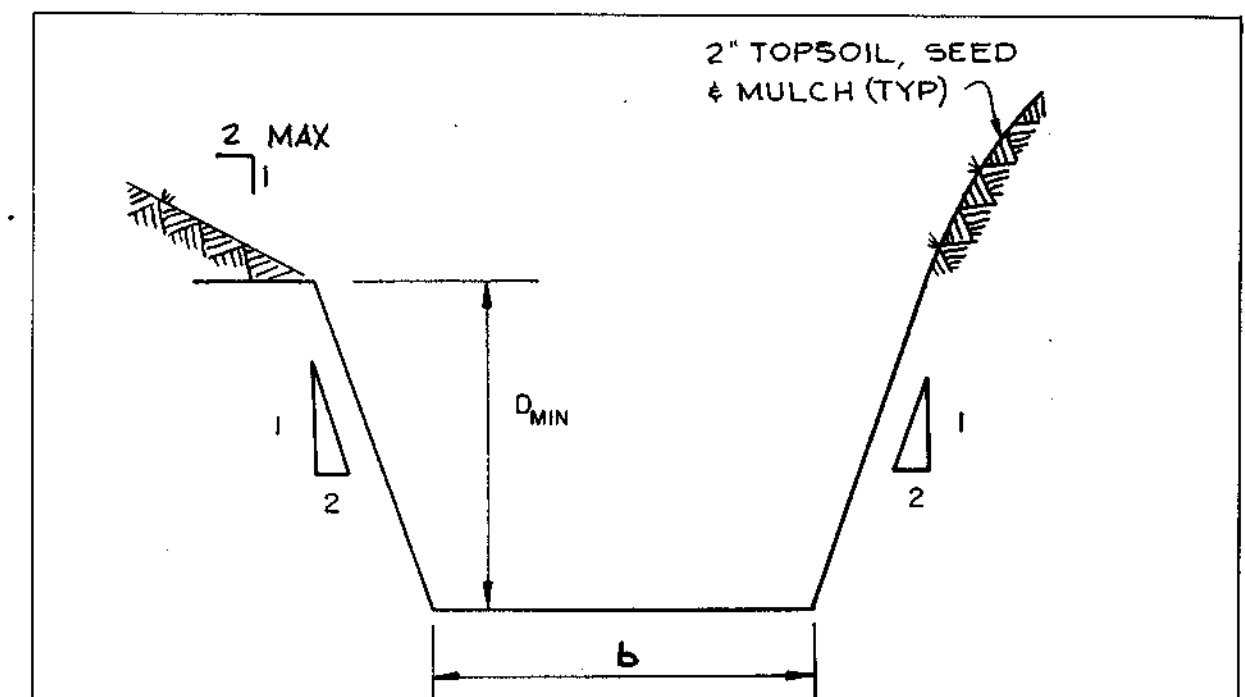
TRENCH EROSION CHECK (FOR USE IN GRANULAR SOILS)



CONCRETE ANCHOR (FOR USE WHEN PIPE SLOPES EXCEED 20%)
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved: [Signature] Chief-Bureau of Engineering
TRENCH EROSION CHECK AND CONCRETE ANCHOR
DRAWN BY: [Signature]
CHECKED BY: [Signature]
SCALE: 1/8\"/>

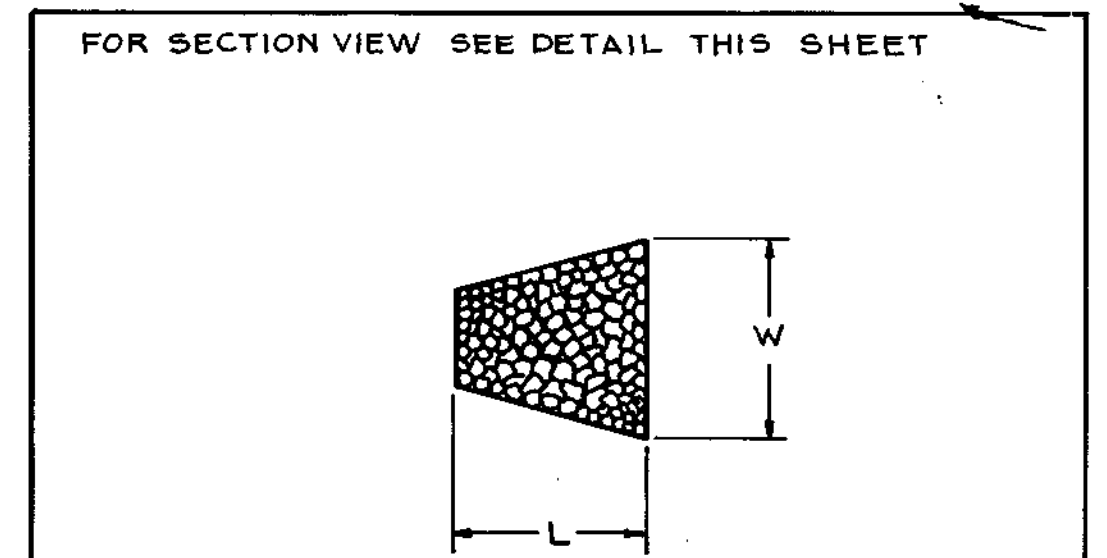


U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND
RIPRAP OUTLET PROTECTION-II
STANDARD DRAWING
ROP-II



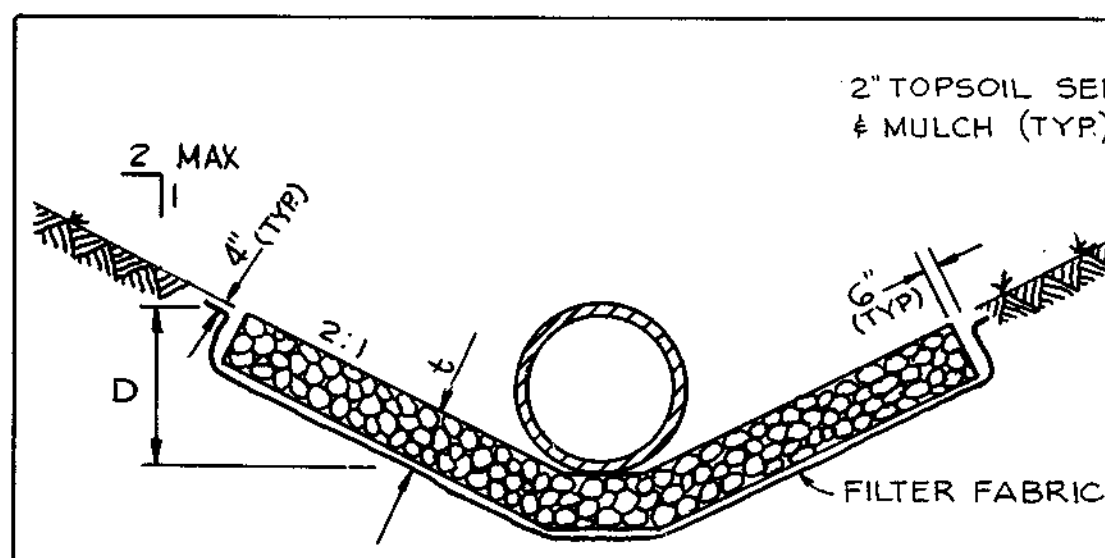
	b	D _{MIN.}	Q	V	STABILIZATION
A	5'	1.0'	6.7 cfs	2.5 fps	GRASS-LUGTUM MIXTURE
B	10'	2.5'	14.7 cfs	4.3 fps	REED CANARYGRASS TALL FESCUE KENTUCKY BLUEGRASS

TYPICAL CHANNEL CROSS-SECTION
NOT TO SCALE



RIP-RAP OUTLET PROTECTION-I

STRUCTURE	W (ft)	L (ft)	d ₅₀ (in)	d _{MAX.} (in)	MIN. BLANKET THICKNESS (in)
S-2	42	30	12	18	27
S-4	12	10	4	6	9
S-5	18	15	9	14	20



RIP-RAP OUTLET PROTECTION-II

STRUCTURE	D (ft)	t (in)	L (ft)	d ₅₀ (in)	d _{MAX.} (in)	MIN. BLANKET THICKNESS (in)
S-6	2.5	27	30	12	18	27
S-9	0.5	14	15	4	9	14

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 4/21/89
CHIEF, LAND DEVELOPMENT DIVISION
[Signature] 4/17/89
CHIEF, BUREAU OF HIGHWAYS
[Signature] 4/22/89
CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] 5/2/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

OWNER / DEVELOPER
NV LAND
6820 ELM STREET
MCLEAN, VIRGINIA 22101
(703) 734-9730

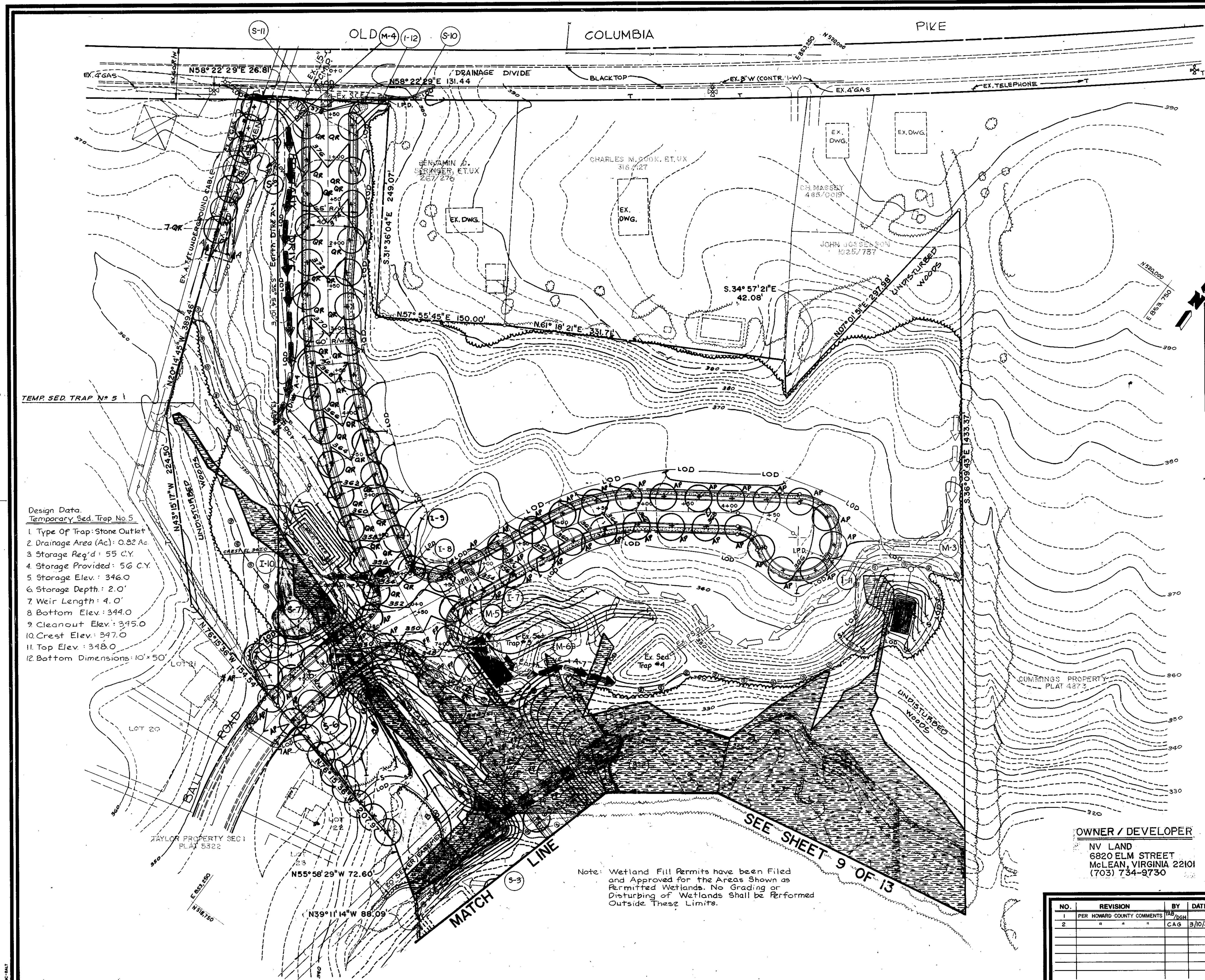
STORM DRAIN DETAIL SHEET
BRITTANY MANOR
LOTS 1-49
(O.P. & Z. REF. NO. P-88-06, S-88-105, S-86-99, WP-89-30)
TAX MAP 24 PARCEL 288 (1879/490) PARCEL 651 (1756/213-216)
2nd ELECTION DISTRICT HOWARD COUNTY, MD.

JOHN E. HARMS JR. AND ASSOCIATES INC.
CONSULTING ENGINEERS - PLANNERS - SURVEYORS
2 CENTRE PARK COLUMBIA, MARYLAND 21045 8918 CENTRE PARK DRIVE SUITE 208 TELEPHONE (301) 740-8200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/DGH	
2	"	CAO	3/10/89

DESIGNED BY: TAB
DRAWN BY: R.M.
CHECKED BY: R.H.V.
DATE: 10/17/88
SCALE: NONE
W.O. NO. 44-87-010A
7 SHEET OF 13

1442



LEGEND

- Infiltration Area
- Proposed Earth Dike
- Existing Earth Dike
- Proposed Silt Fence
- Existing Silt Fence
- Limit of Disturbance
- Wetlands To Remain Undisturbed
- Permitted Wetlands
- Inlet Protection Device

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James M. Taylor 4/21/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Drayville W. Helms 4/7/89
 CHIEF, BUREAU OF HIGHWAYS DATE

John R. Patten 4/28/89
 CHIEF, BUREAU OF ENGINEERING DATE

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

James M. Taylor 4/13/89
 SOIL CONSERVATION SERVICE DATE

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

APPROVED: *John R. Patten* 4/28/89
 DISTRICT SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT *J.B.* DATE

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, 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 also authorize periodic on-site inspection by the Howard Soil Conservation District."

Kenneth G. Helms 3/24/89
 Signature of Developer AUTHORIZED AGENT Date

ENGINEERING 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 County Soil Conservation District."

William J. Hines 3/28/89
 Signature of Engineer Date
 P.E. No. 13719

STREET TREE GRADING AND SEDIMENT CONTROL PLAN

BRITTANY MANOR
 LOTS 1-49

(O.P.B.Z. REF. NO. P-88-06-S-88-105-S-86-99-WP-89-30)
 TAX MAP 24 PARCEL 288 (879/490) PARCEL 651 (1755/213-216)
 2nd ELECTION DISTRICT HOWARD COUNTY, MD.

OWNER / DEVELOPER

NV LAND
 6820 ELM STREET
 McLEAN, VIRGINIA 22101
 (703) 734-9730

JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS

2 CENTRE PARK COLUMBIA, MARYLAND 21045 8818 CENTRE PARK DRIVE SUITE 208 TELEPHONE 1301 740-5200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	JAB/2GH	3/10/89
2	" " " "	CAG	3/10/89

DESIGNED BY: TAB/GM
 DRAWN BY: R.M.
 CHECKED BY: RHV
 DATE: 10/88
 SCALE: 1" = 50'
 W.D. NO. 44-87-010A

John Eric Miller
 3/28/89

8 SHEET **13**
 OF

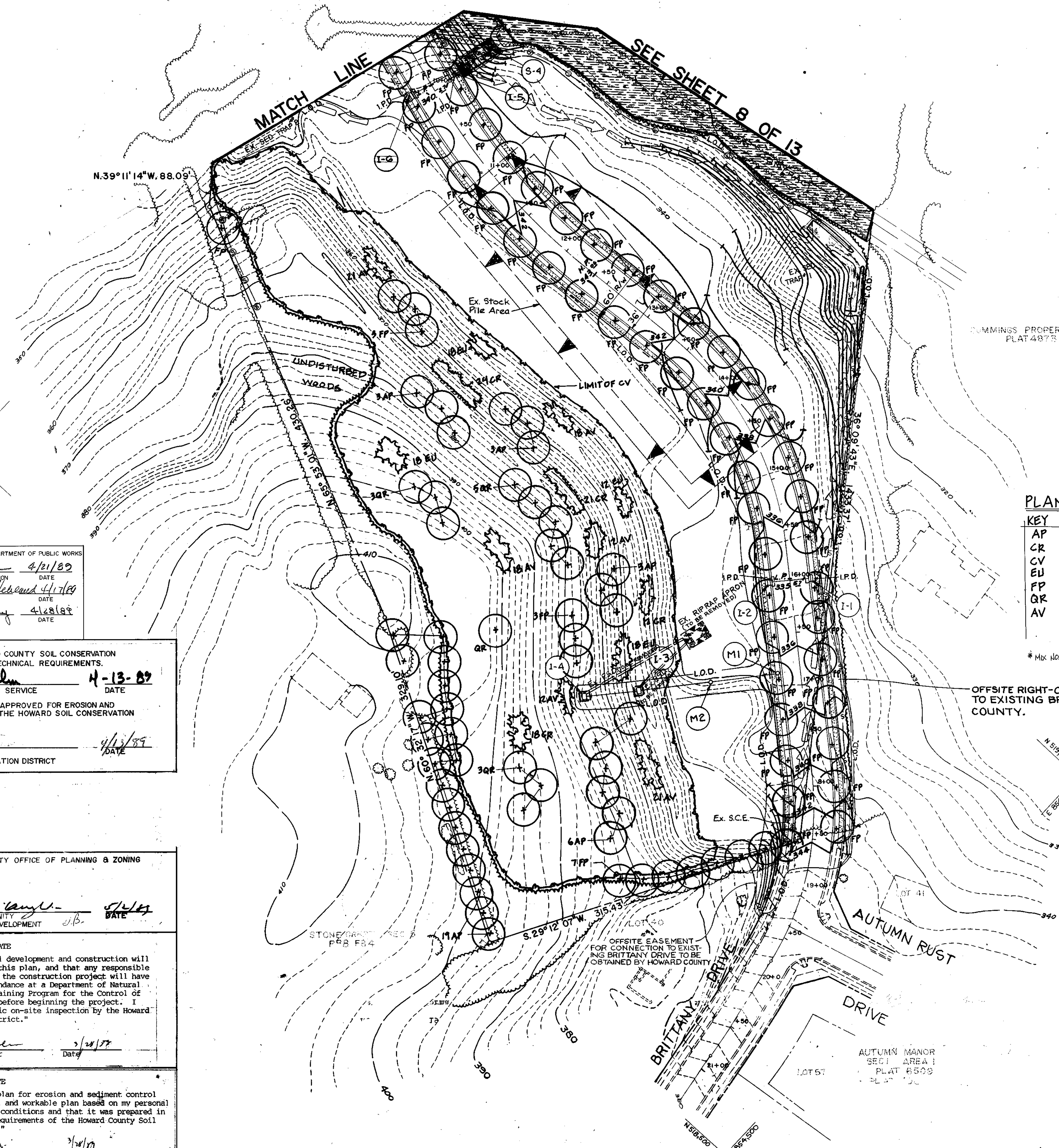
- Design Data
 Temporary Sed. Trap No 5
1. Type Of Trap: Stone Outlet
 2. Drainage Area (Ac): 0.82 Ac
 3. Storage Req'd: 55 C.Y.
 4. Storage Provided: 56 C.Y.
 5. Storage Elev.: 346.0
 6. Storage Depth: 2.0'
 7. Weir Length: 4.0'
 8. Bottom Elev.: 344.0
 9. Cleanout Elev.: 345.0
 10. Crest Elev.: 347.0
 11. Top Elev.: 348.0
 12. Bottom Dimensions: 10' x 50'

Note: Wetland Fill Permits have been Filed and Approved for the Areas Shown as Permitted Wetlands. No Grading or Disturbing of Wetlands Shall be Performed Outside These Limits.

1442

LEGEND

	Infiltration Area
	Proposed Earth Dike
	Existing Earth Dike
	Proposed Silt Fence
	Existing Silt Fence
	Limit of Disturbance
	Wetlands To Remain Undisturbed
	Permitted Wetlands
	Inlet Protection Device



PLANT LIST

KEY	QUAN.	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	REMARKS
AP	82	ACER PLATANOIDES / NORWAY MAPLE	2 1/2" CAL.	BIB	
CR	75	CORNUS RACEMOSA / GRAY DOGWOOD	3'-4' HT.	BIB	PLANT AT 4' O.C.
CV	-	CORONILLA VARIA / CROWN VETCH	-	-	HYDROSEED*
EU	66	ELEAGNUS UMBELLATA / AUTUMN OLIVE	3'-4' HT.	BIB	PLANT AT 5' O.C.
FP	74	FRAXINUS LANCEOLATA 'NEWPORT' / NEWPORT ASH	2 1/2" CAL.	BIB	
QR	48	QUERCUS RUBRA / RED OAK	2 1/2" CAL.	BIB	
AV	102	VIBURNUM DENTATUM / ARROWWOOD VIBURNUM	3'-4' HT.	BIB	PLANT AT 5' O.C.

* MIX NO. 6, TABLE 51-1 OF 1983 MD STD'S & SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

OFFSITE RIGHT-OF-WAY AND EASEMENT FOR CONNECTION TO EXISTING BRITTANY DRIVE TO BE OBTAINED BY HOWARD COUNTY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE: 4/21/89
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE: 4/16/89
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 4/28/89
 CHIEF, BUREAU OF ENGINEERING

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS.
 DATE: 4-13-89
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: DATE: 4/13/89
 DISTRICT: HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE: 5/14/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

DEVELOPER'S CERTIFICATE
 "I/we certify that all development and construction will be done according to this plan, 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 also authorize periodic on-site inspection by the Howard Soil Conservation District."
 Signature of Developer: Date: 3/28/89

ENGINEERING 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 County Soil Conservation District."
 Signature of Engineer: Date: 3/28/89
 MD PR. 15714

OWNER / DEVELOPER

NV LAND
 6820 ELM STREET
 McLEAN, VIRGINIA 22101
 (703) 734-9730

STREET TREE GRADING AND SEDIMENT CONTROL PLAN
BRITTANY MANOR
 LOTS 1-49
 (O.P. & Z. REF. NO. P-88-06, S-88-105, S-86-99, WP-89-30)
 TAX MAP 24 PARCEL 288 (1879/490) PARCEL 65 (1755/213-216)
 2nd ELECTION DISTRICT HOWARD COUNTY, MD.

JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK COLUMBIA, MARYLAND 21045 8818 CENTRE PARK DRIVE SUITE 208 TELEPHONE (301) 740-8200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/DSH	
2	"	CAG	3/10/89

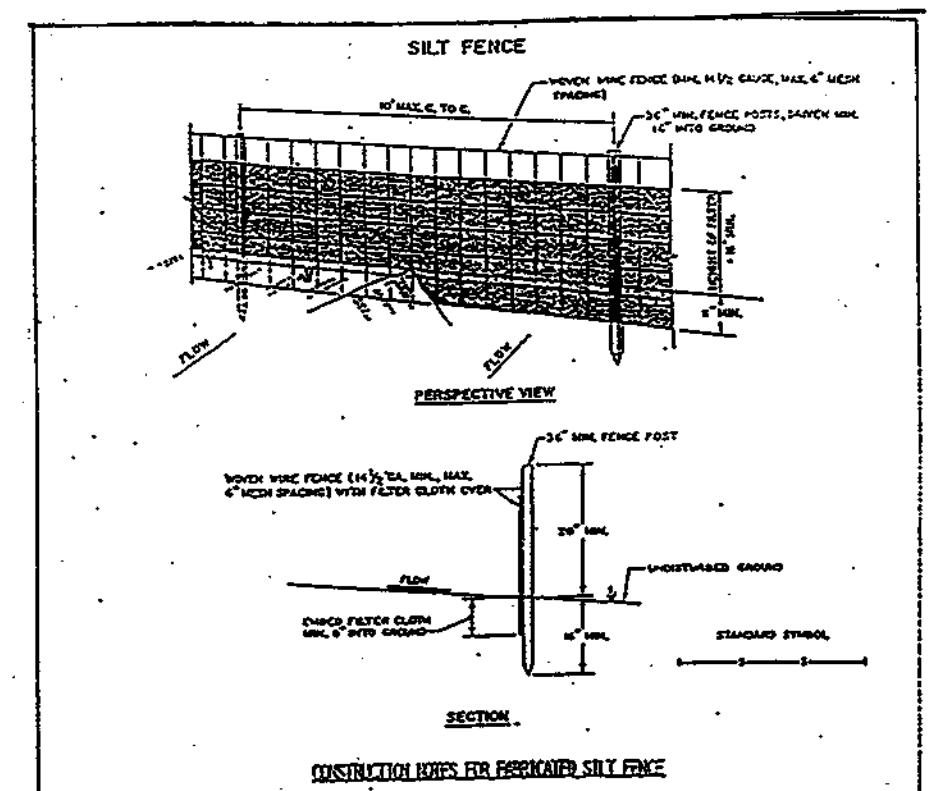
DESIGNED BY: TAB/GM
 DRAWN BY: R.M.
 CHECKED BY: R.H.V.
 DATE: 10/17/88
 SCALE: 1" = 50'
 W.O. NO. 44-87-010A
 SHEET 9 OF 13

1442

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 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.
- Following initial soil disturbance or redistribution, 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 for all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs placed around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 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) and (Sec. 52), temporary seedings (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding rates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:

Total Area of Site	21.9 Acres
Area Disturbed	8.4 Acres
Area to be roofed or paved	2.5 Acres
Area to be vegetatively stabilized	12.0 Acres
Total Cut	3,500 Cu. Yds
Total Fill	38,000 Cu. Yds
Office waste/borrow area location:	ON SITE
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.



1. WIRE MESH FENCE TO BE INSTALLED TO FACE SLOPE WITH THE STAKE OR STAPLE TO FACE SLOPE. FENCE TO BE PLACED TO FACE SLOPE WITH THE STAKE OR STAPLE TO FACE SLOPE. FENCE TO BE PLACED TO FACE SLOPE WITH THE STAKE OR STAPLE TO FACE SLOPE.

2. FILTER CLOTH TO BE PLACED TO FACE SLOPE WITH THE STAKE OR STAPLE TO FACE SLOPE. FENCE TO BE PLACED TO FACE SLOPE WITH THE STAKE OR STAPLE TO FACE SLOPE.

3. WHEN NO SECTION OF FILTER CLOTH IS SHOWN OTHER THAN THAT SHOWN BY SIX INCHES AND FOLDED.

4. MAINTENANCE SHALL BE PERFORMED AS PER THE STANDARD DRAWING FOR SILT FENCE.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND

SILT FENCE

STANDARD DRAWING
SP-1

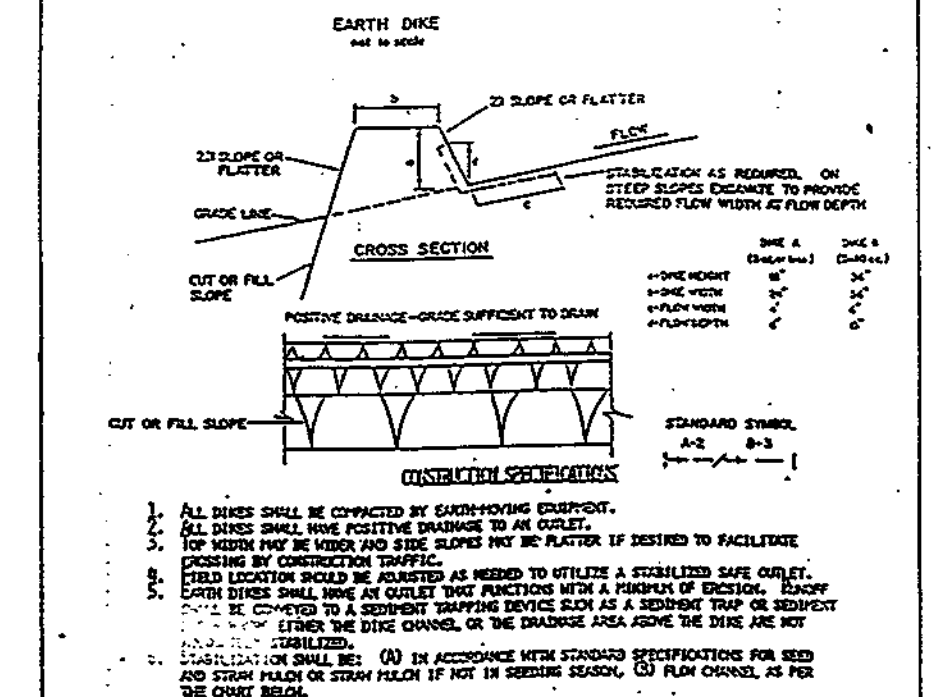
PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded Preparations: 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 schedules.

- 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 acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- 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.



1. ALL DIKES SHALL BE CONSTRUCTED BY CONCRETE OR EARTHWORK. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CONSTRUCTION OF UTILITY.

2. EARTH DIKES SHALL BE CONSTRUCTED WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES.

3. EARTH DIKES SHALL BE CONSTRUCTED WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES.

4. EARTH DIKES SHALL BE CONSTRUCTED WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF 2 FEET TOP WIDTH AND 2 FEET SIDE SLOPES.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND

EARTH DIKE

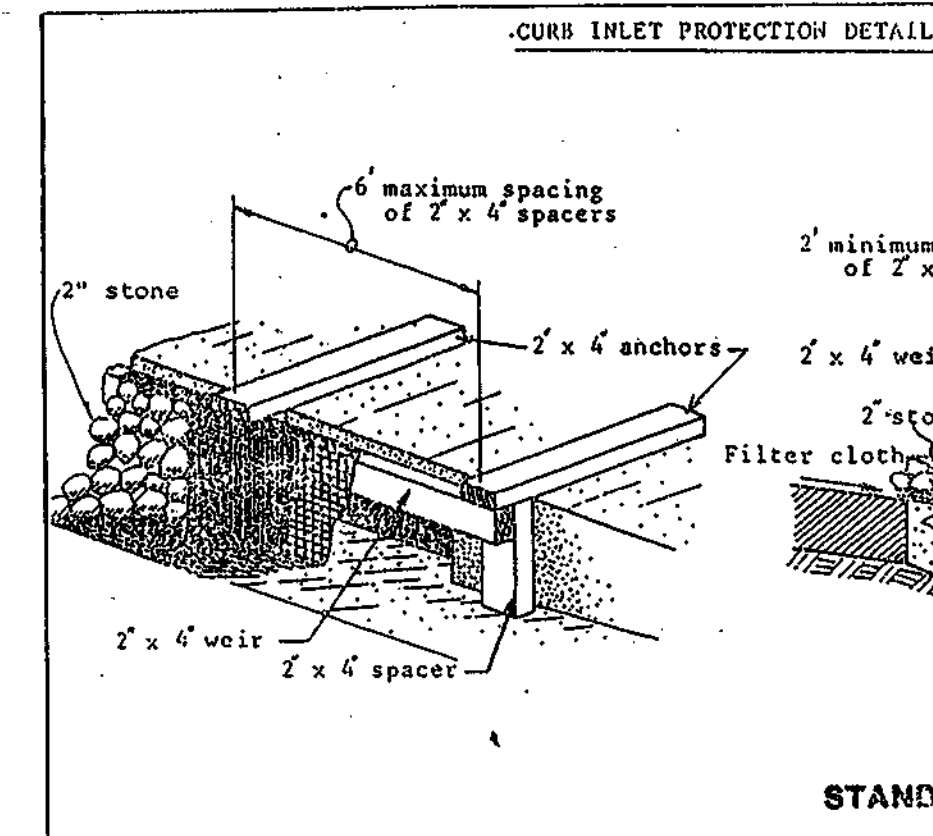
STANDARD DRAWING
ED-1

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seeded Preparations: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).



U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND

INLET PROTECTION DETAIL

STANDARD DRAWING
IPD-1

ENGINEERING 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 County Soil Conservation District."

Signature of Engineer: *[Signature]* Date: 3/28/89

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, 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 also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer: *[Signature]* Date: 3/28/89

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

Signature: *[Signature]* Date: 4/13/89

Signature: *[Signature]* Date: 4/13/89

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Signature: *[Signature]* Date: 4/21/89

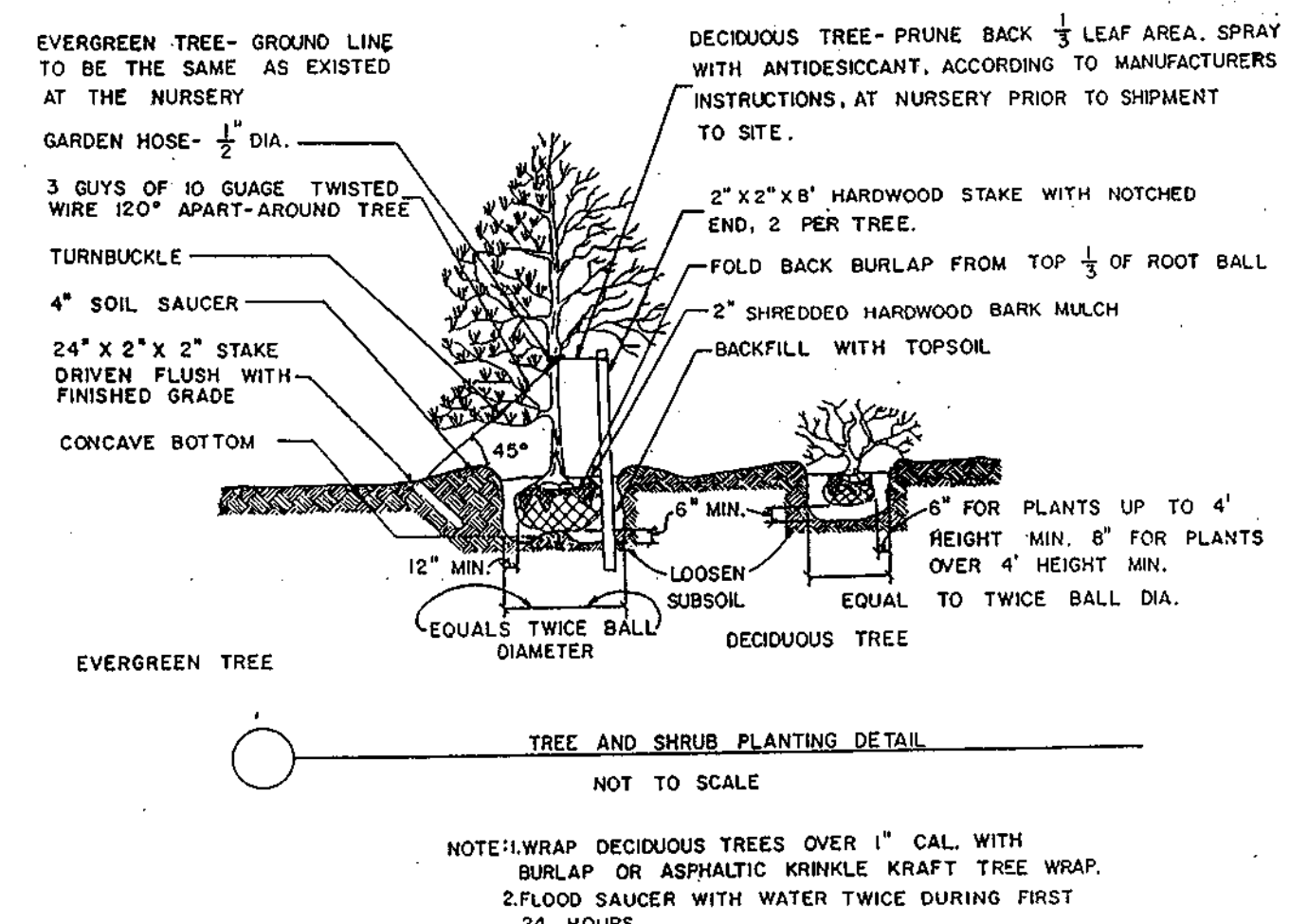
Signature: *[Signature]* Date: 4/17/89

Signature: *[Signature]* Date: 4/28/89

Sequence of Construction

- Obtain grading permit.
- Notify Howard County, Bureau of Inspections and Permits (992-2437) at least 24 hours before starting work.
- Reconstruct/refurbish stabilized construction entrances if necessary.
- Inspect and provide necessary maintenance to temporary sediment control measures constructed and/or installed under GP 48-50.
- Construct temporary sediment trap #5 and proposed earth dike on west side of Brittany Drive, including diversion dike or proposed location of I-10.
- Install silt fence at locations specified on plan.
- Plant crownvetch and trees on slope west of Brittany as shown on sheet 9.
- Construct structures S-2 and S-3, S-6 and S-7, and their respective culverts. Backfill the culverts.
- Construct the water and sewer.
- Construct all storm drain systems except from S-5 to I-10 and S-4 to I-5 (inspect and maintain diversion dike from I-10 to sediment trap #5).
- Install inlet protection devices on the specified inlets.
- Construct infiltration trenches with associated perimeter sediment control measures.
- Construct the storm drain systems from S-5 to I-10 and S-4 to I-5. Provide temporary pipe from I-10 to temporary sediment trap no. 5 (To be removed upon stabilization of contributing drainage area).
- Install inlet protection devices on the specified inlets.
- Construct curb and lay base course.
- During construction and after each rainfall, the contractor shall inspect and provide necessary maintenance to the sediment and erosion control measures shown on this plan.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, weaves, ditch perimeter slopes and all slopes greater than 3:1; b) 14 days for all disturbed or graded areas on the project site.
- Upon stabilization of graded areas, inlets shall be opened and all accumulated sediment shall be removed from the storm drain system.

John E. Harms Jr.
3/28/89



EVERGREEN TREE - GROUND LINE TO BE THE SAME AS EXISTED AT THE NURSERY

DECIDUOUS TREE - PRUNE BACK 1/2 LEAF AREA. SPRAY WITH ANTIDESICCANT, ACCORDING TO MANUFACTURERS INSTRUCTIONS, AT NURSERY PRIOR TO SHIPMENT TO SITE.

3 GUYS OF 10 GAUGE TWISTED WIRE 12' APART AROUND TREE

TURNBUCKLE

4" SOIL SAUCER

2 4" x 2" x 2" STAKE DRIVEN FLUSH WITH FINISHED GRADE

CONCAVE BOTTOM

2" x 2" x 8" HARDWOOD STAKE WITH NOTCHED END, 2 PER TREE.

FOLD BACK BURLAP FROM TOP 1/3 OF ROOT BALL

2" SHREDDED HARDWOOD BARK MULCH

BACKFILL WITH TOPSOIL.

6" FOR PLANTS UP TO 4' HEIGHT MIN. 8" OVER 4' HEIGHT MIN.

12" MIN. LOOSE SOIL EQUAL TO TWICE BALL DIA.

EVERGREEN TREE

DECIDUOUS TREE

TREE AND SHRUB PLANTING DETAIL

NOT TO SCALE

NOTE: WRAP DECIDUOUS TREES OVER 1" CAL WITH BURLAP OR ASPHALT WRINKLE KRAFT TREE WRAP. 2 FLOOD SAUCER WITH WATER TWICE DURING FIRST 24 HOURS.

SEDIMENT CONTROL AND PLANTING DETAIL SHEET

BRITTANY MANOR

LOTS 1-49

(O.P. & Z. REF. NO. P-86-06, S-88-105, S-86-99, WP-89-30)

TAX MAP 24 PARCEL 288(879/490) PARCEL 651(755/213-216)

2nd ELECTION DISTRICT HOWARD COUNTY, MD.

JOHN E. HARMS JR. AND ASSOCIATES INC.

CONSULTING ENGINEERS - PLANNERS - SURVEYORS

2 CENTRE PARK COLUMBIA, MARYLAND 21045

8818 CENTRE PARK DRIVE SUITE 208 COLUMBIA, MARYLAND 21045

TELEPHONE (301) 740-5200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/OSH	
2	" " " "	CAG	3/10/89

DESIGNED BY: **TAB/GM**

DRAWN BY: **R.M.**

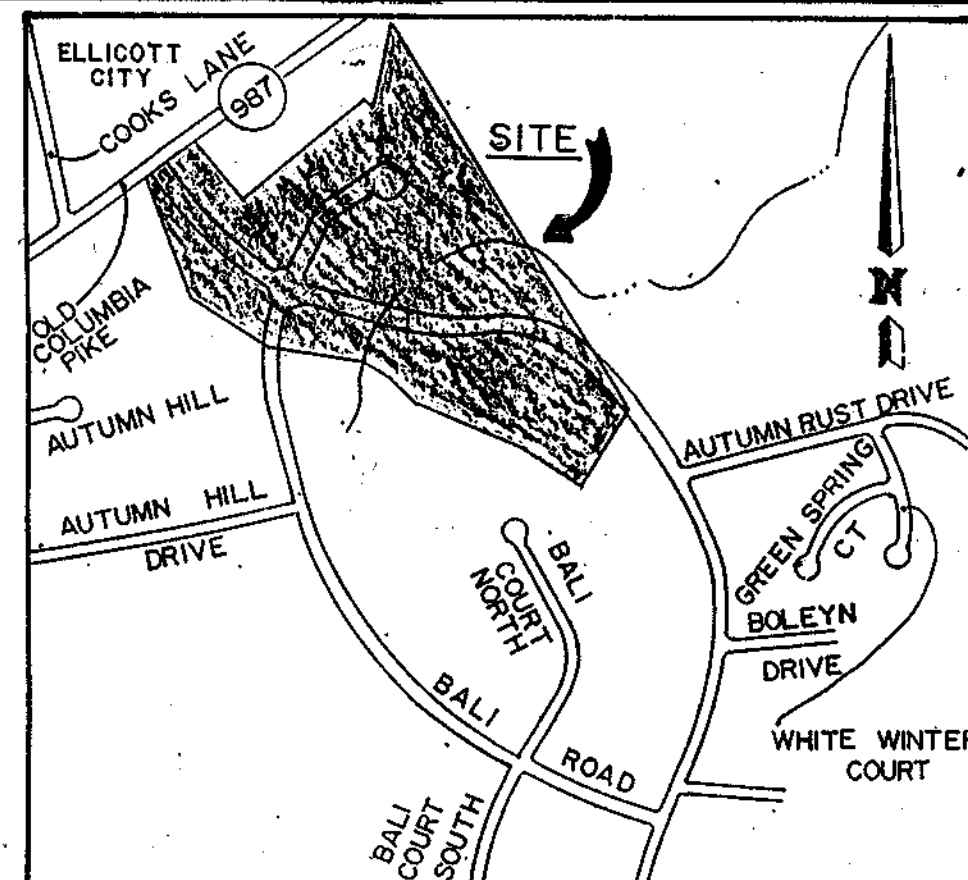
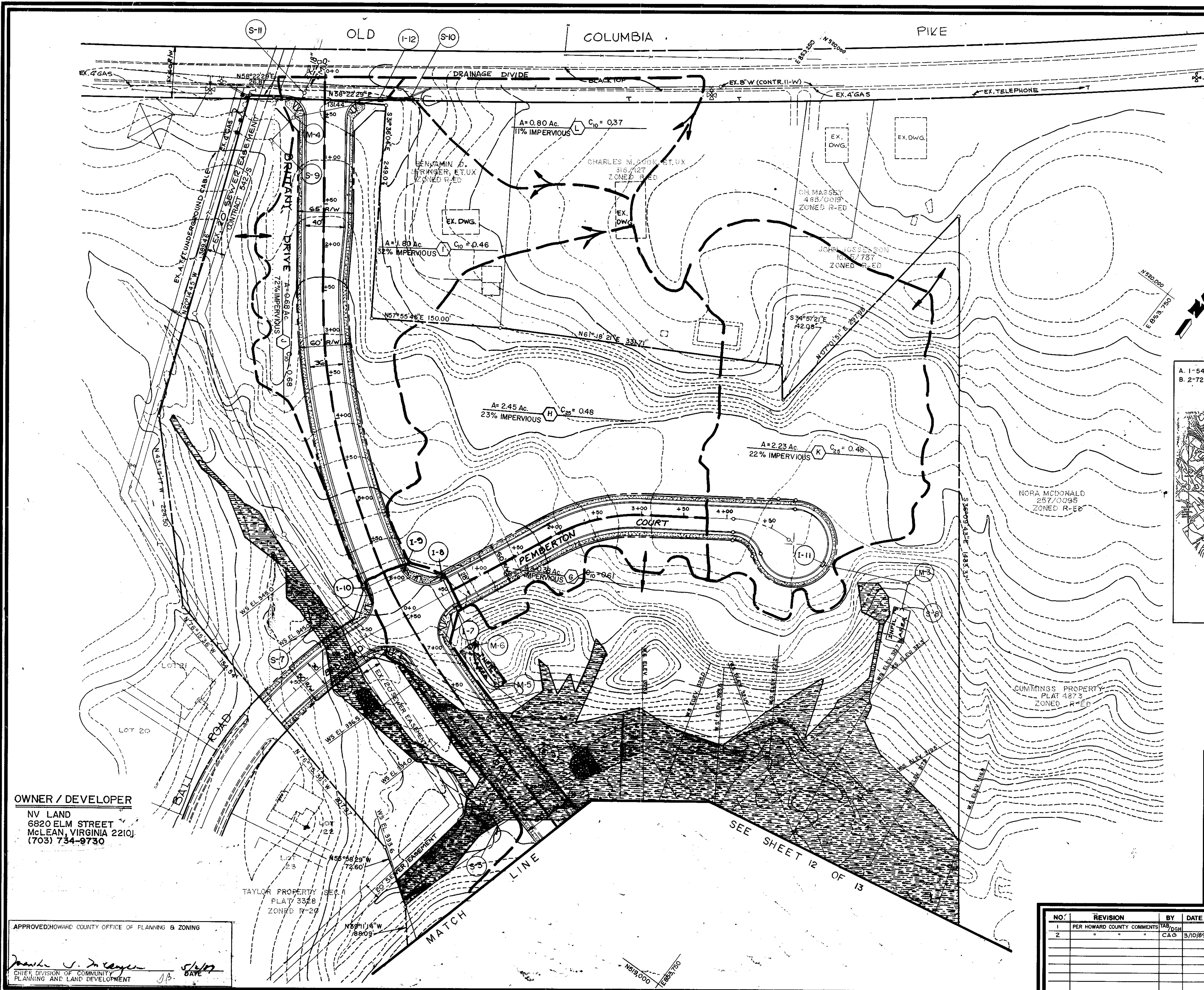
CHECKED BY: **RHV**

DATE: **10-17-88**

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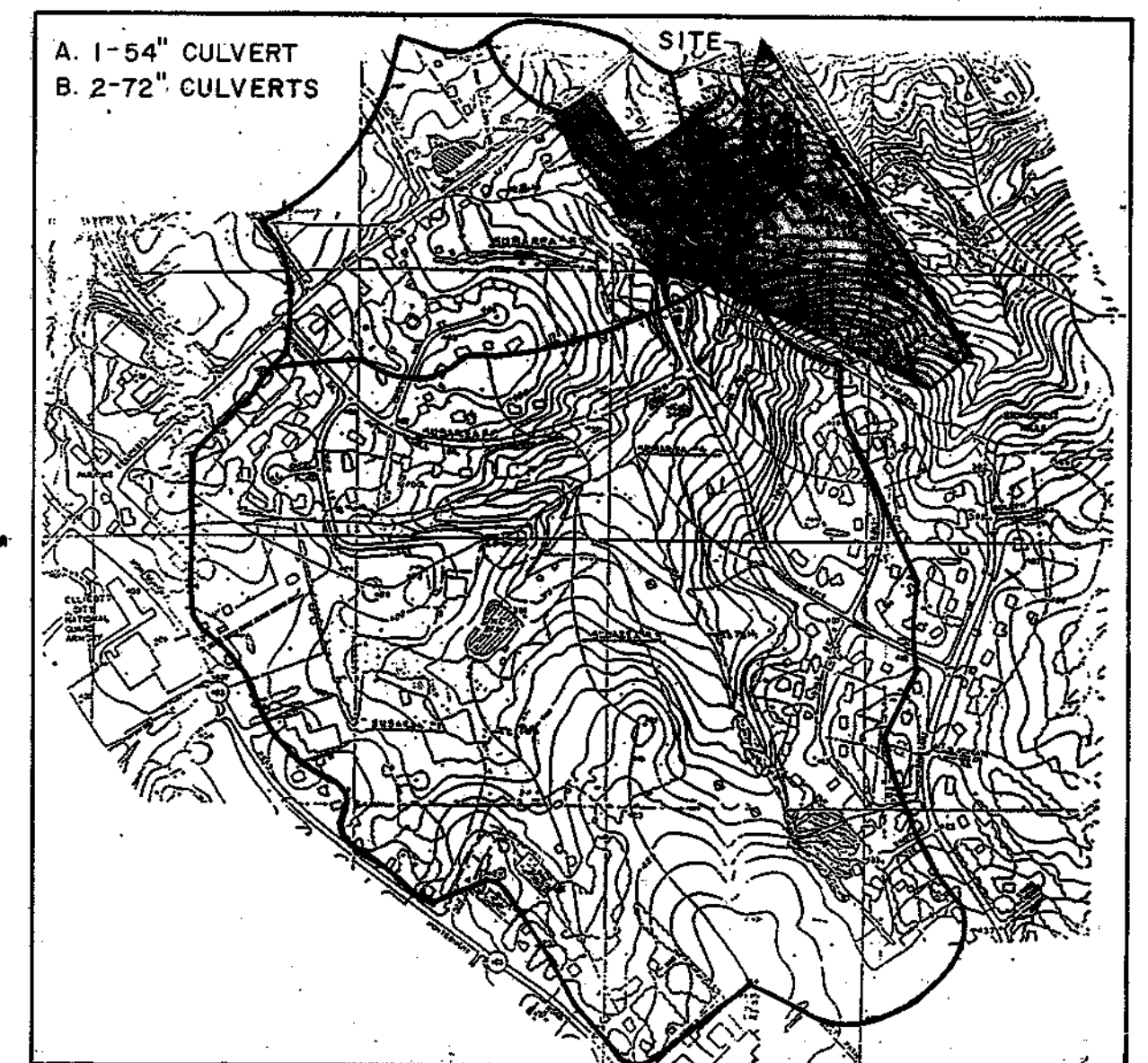
W.O. NO. **44-87-010A**

10 SHEET OF **13**



VICINITY MAP
SCALE: 1" = 600'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division DATE 4/21/89
 Chief, Bureau of Highways DATE 4/17/89
 Chief, Bureau of Engineering DATE 4/28/89



DRAINAGE AREA TO CULVERTS
SCALE: 1" = 660'

- LEGEND
- WETLANDS
 - DRAINAGE DIVIDE
 - SUBSURFACE INFILTRATION AREA
 - 100 YEAR FLOODPLAIN
 - RIP RAP OUTLET PROTECTION

OWNER / DEVELOPER
 NV LAND
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101
 (703) 734-9730

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Chief, Division of Community Planning and Land Development
 DATE 5/1/89

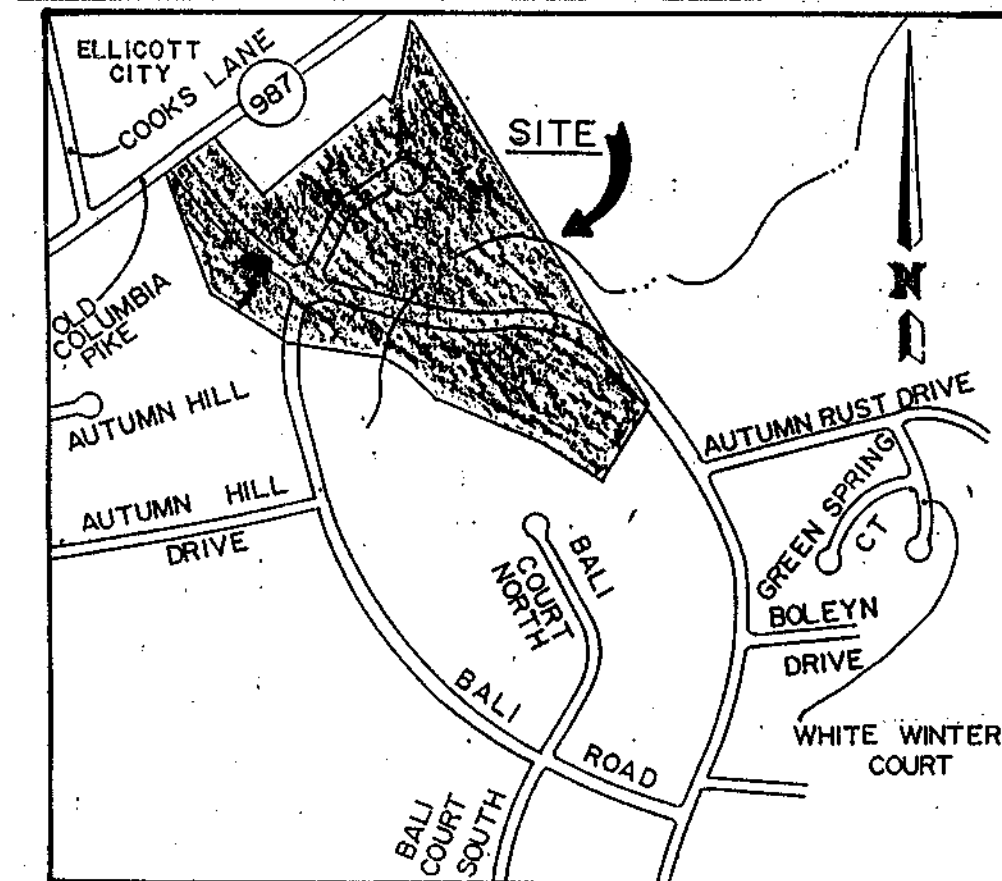
DRAINAGE AREA MAP
BRITTANY MANOR
 LOTS 1-49
 (OP & Z REF NO. P 88-06, S 88-105, S 86-99, WP 89-30)
 TAX MAP 24 PARCEL 288 (879/490) PARCEL 651 (1755/213-216)
 2nd ELECTION DISTRICT HOWARD COUNTY, MD.

JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK COLUMBIA, MARYLAND 21045 8 818 CENTRE PARK DRIVE SUITE 208 COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

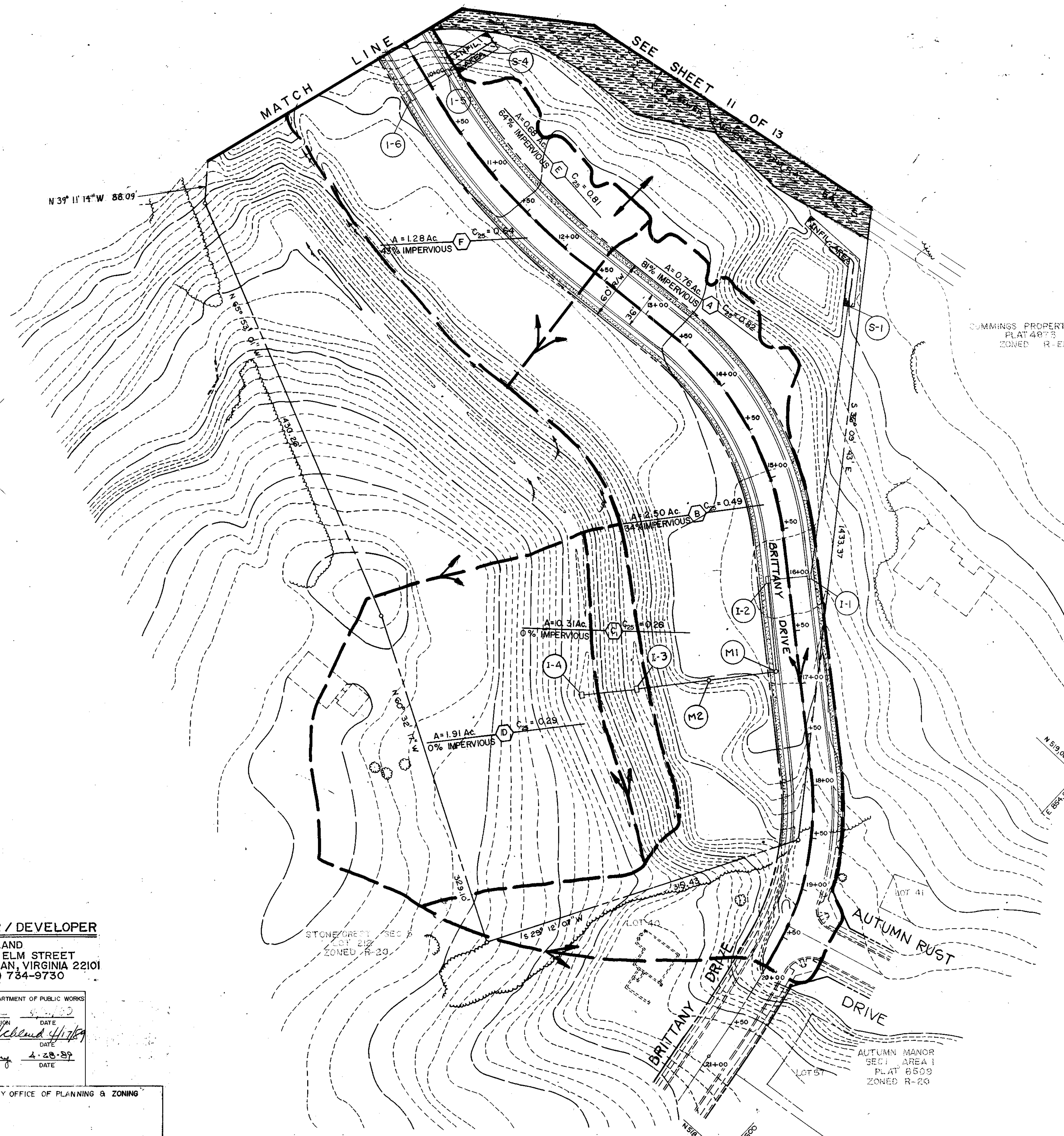
NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB	3/10/89
2		CAO	

DESIGNED BY: T.A.B.
 DRAWN BY: R.M./R.P.E.
 CHECKED BY: R.H.V.
 DATE: 10/88
 SCALE: 1" = 50'
 W.O. NO. 44-87-010AX

1442



VICINITY MAP
SCALE: 1"=600'



- LEGEND
- WETLANDS
 - DRAINAGE DIVIDE
 - SUBSURFACE INFILTRATION AREA
 - 100 YEAR FLOODPLAIN

OWNER / DEVELOPER
 NV LAND
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101
 (703) 734-9730

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE 4/1/89
 CHIEF, BUREAU OF HIGHWAYS
 DATE 4-20-89
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE 4/1/89

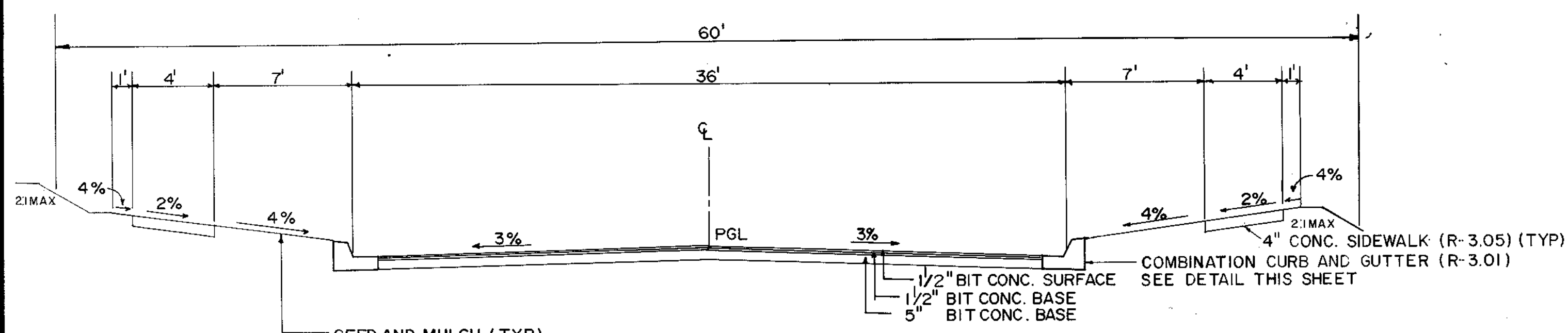
DRAINAGE AREA MAP
BRITTANY MANOR
 LOTS 1-49
 (OP & Z REF NO. P 88-06, S 88-105, S 86-99, WP 89-30)
 TAX MAP 24 PARCEL 288 (079/490) PARCEL 651 (1755/213-216)
 2nd ELECTION DISTRICT HOWARD COUNTY, MD.

JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK 8818 CENTRE PARK DRIVE SUITE 208
 COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

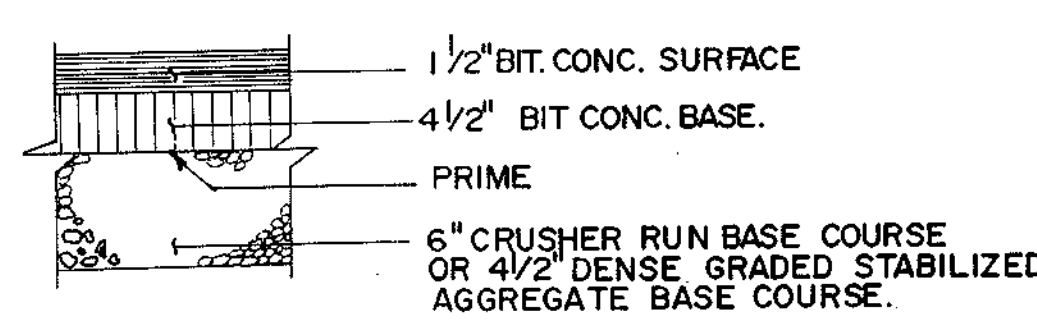
NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/DGH	
2	" " " "	CAG	3/10/89

DESIGNED BY: T.A.B.
 DRAWN BY: R.M./R.P.E.
 CHECKED BY: R.H.V.
 DATE: 10-17-88
 SCALE: 1"=50'
 W.O. NO. 44-87-010AX

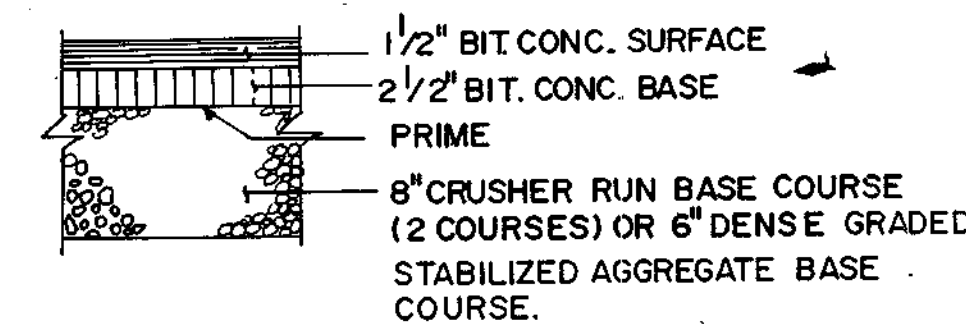
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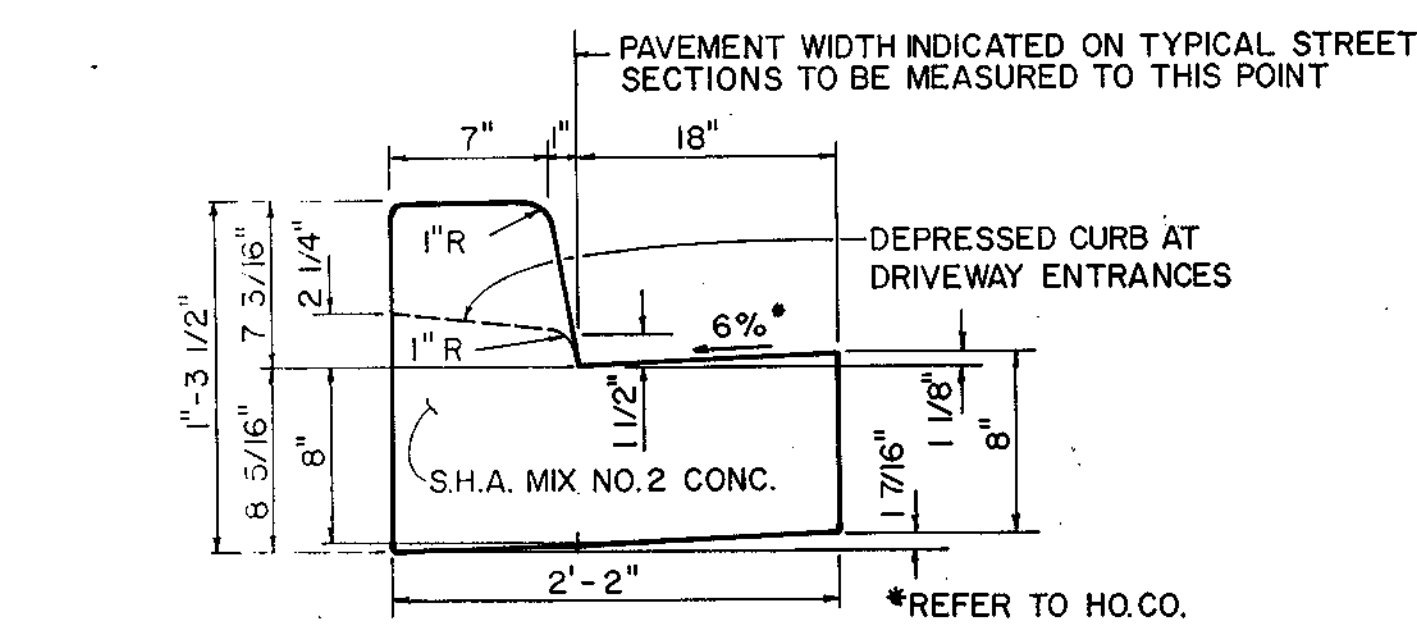
**BRITTANY DRIVE (MINOR COLLECTOR)
TYPICAL PAVING SECTION**
DESIGN SPEED 35 M.P.H. NO SCALE
STA. 0+00 - STA. 14+50 DESIGN SPEED = 35 M.P.H.
STA. 14+50 - STA. 18+49.27 DESIGN SPEED = 30 M.P.H.



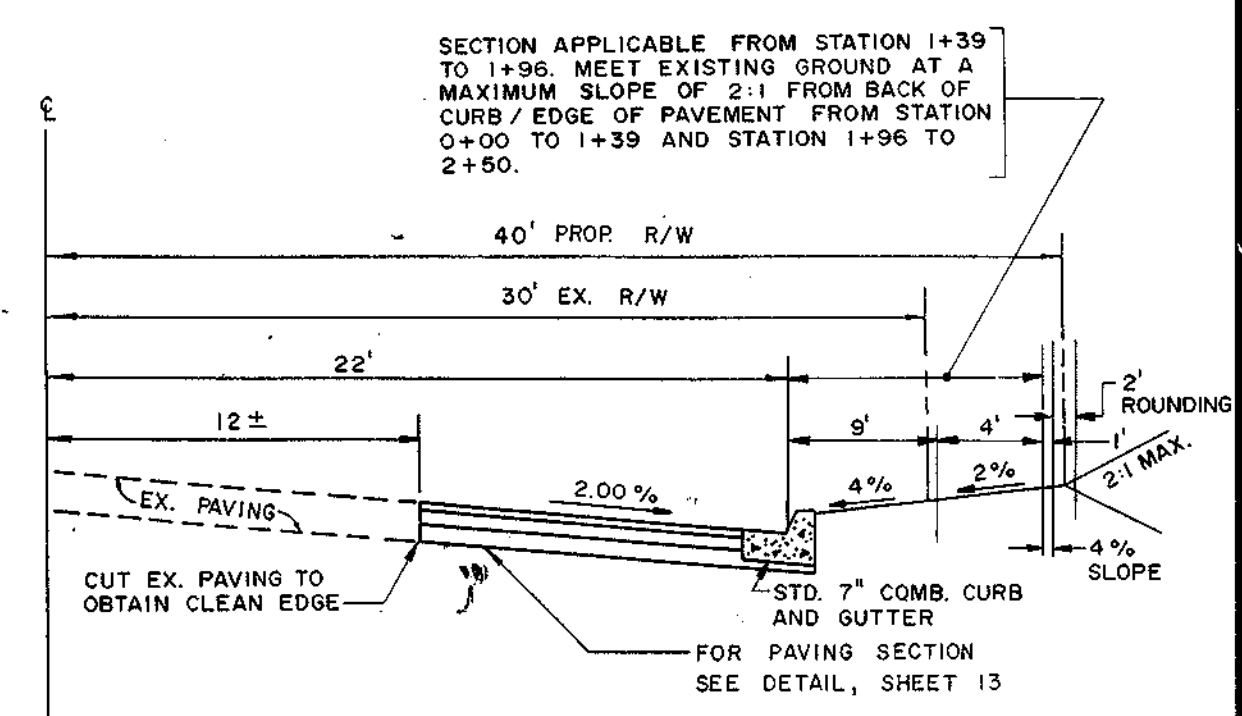
**BRITTANY DRIVE
ALTERNATE PAVING SECTION P-3**
NO SCALE



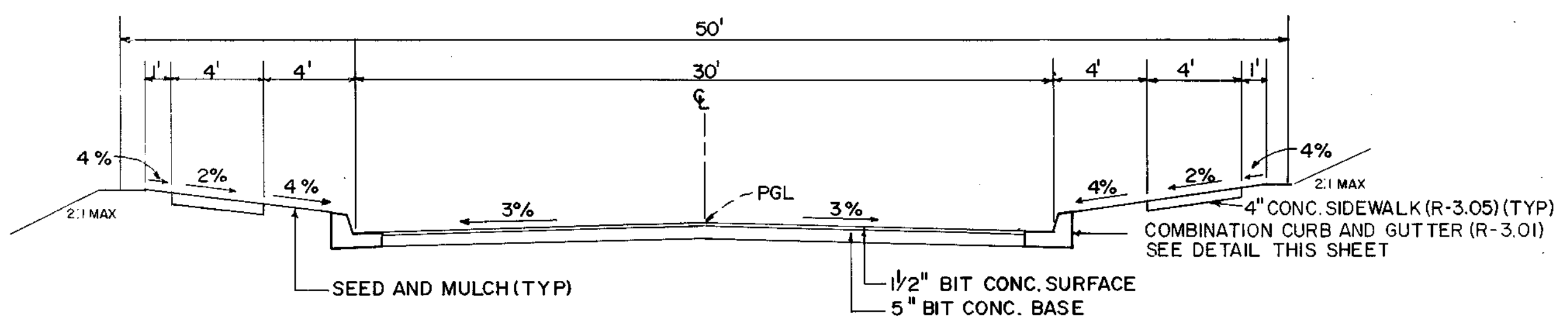
**BALI ROAD
ALTERNATE PAVING SECTION P-2**
NO SCALE



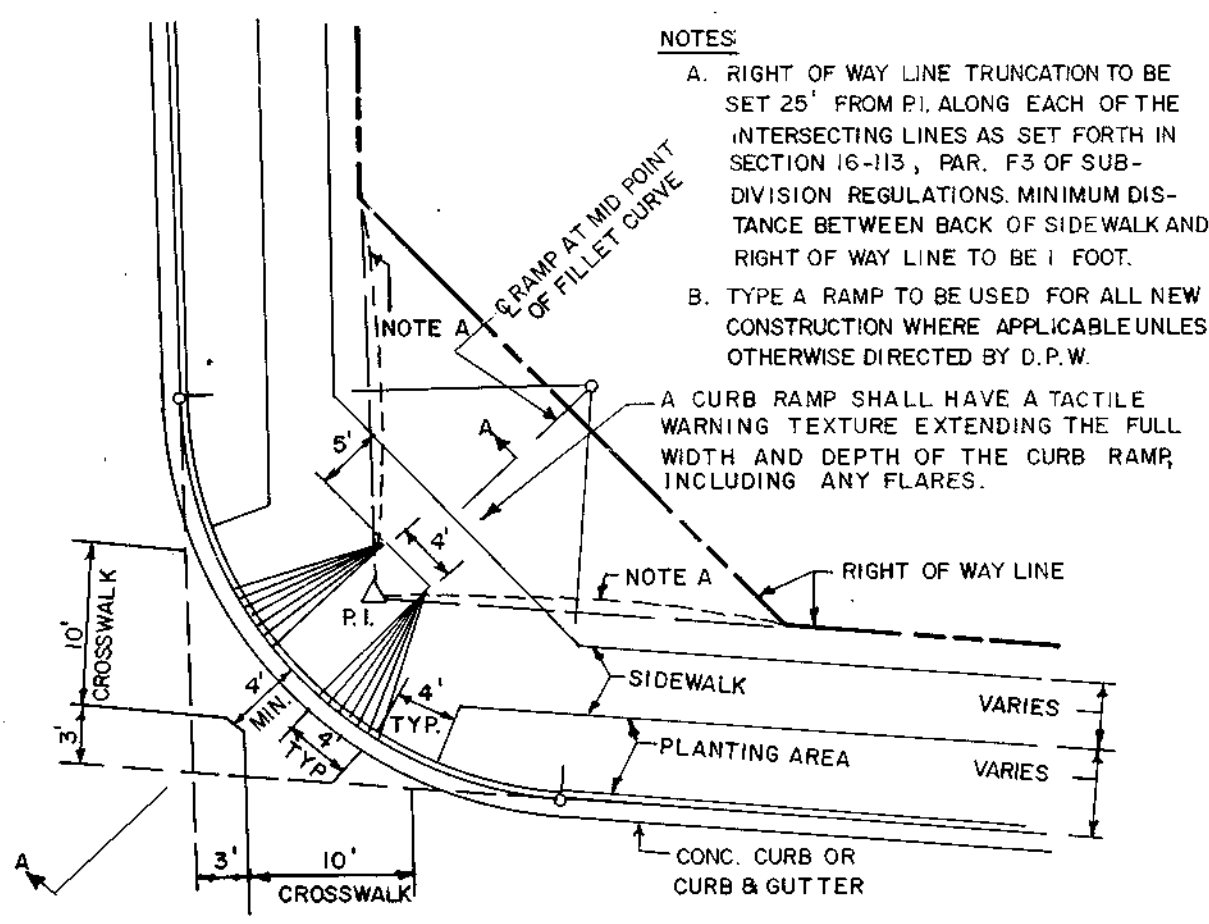
STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE



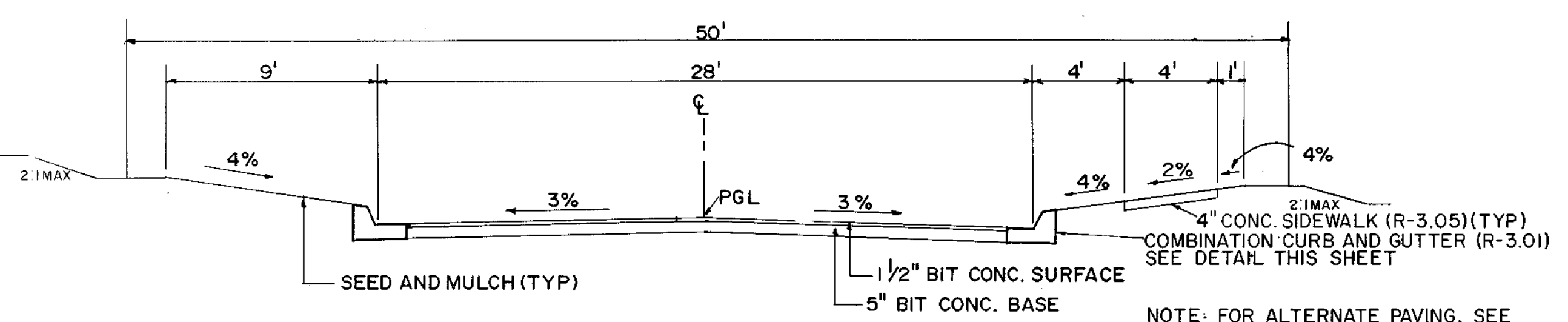
TYPICAL SECTION
NOTE: PLACE HOT LIQUID ASPHALT SEALER AE-5 (OR EQUIVALENT) ALONG VERTICAL FACE OF EXISTING PAVING PRIOR TO PLACING NEW MATERIAL TO INSURE CONTINUOUS BOND. UPON COMPLETION OF NEW PAVING, EXCESS LIQUID ASPHALT SHALL BE BRUSHED INTO THE JOINT BETWEEN OLD AND NEW PAVING SURFACES TO PREVENT EXCESS LIQUID ASPHALT FROM BEING TRACKED BY TRAFFIC.
**WIDENING OLD COLUMBIA PIKE
(MAJOR COLLECTOR)**
NO SCALE



**BALI ROAD (LOCAL ROAD)
TYPICAL PAVING SECTION**
DESIGN SPEED 35 M.P.H. NO SCALE



HANDICAPPED RAMP
NO SCALE



**PEMBERTON COURT (CUL-DE-SAC STREET)
TYPICAL PAVING SECTION**
DESIGN SPEED 30MPH NO SCALE

NOTE: FOR ALTERNATE PAVING, SEE SECTION P-2 THIS SHEET

NOTES
A. RIGHT OF WAY LINE TRUNCATION TO BE SET 25' FROM P.I. ALONG EACH OF THE INTERSECTING LINES AS SET FORTH IN SECTION 16-115, PAR. F3 OF SUB-DIVISION REGULATIONS. MINIMUM DISTANCE BETWEEN BACK OF SIDEWALK AND RIGHT OF WAY LINE TO BE 1 FOOT.
B. TYPE A RAMP TO BE USED FOR ALL NEW CONSTRUCTION WHERE APPLICABLE UNLESS OTHERWISE DIRECTED BY D.P.W.
A CURB RAMP SHALL HAVE A TACTILE WARNING TEXTURE EXTENDING THE FULL WIDTH AND DEPTH OF THE CURB RAMP, INCLUDING ANY FLARES.

- STREET LIGHT SCHEDULE**
- 200-WATT HIGH PRESSURE SODIUM VAPOR LAMP PENDANT MOUNTED FIXTURES ON A 25' GALVANIZED POLE LOCATED NO LESS THAN 6' FROM THE EDGE OF PAVEMENT
 - LOCATED AT NORTHEAST SIDE OF OLD COLUMBIA PIKE AND BRITTANY DRIVE INTERSECTION.
 - LOCATED ON SOUTH SIDE OF BRITTANY DRIVE AT APPROXIMATE CENTERLINE STATION 11+30.
 - LOCATED AT SOUTHWEST SIDE OF BRITTANY DRIVE AND BALI ROAD INTERSECTION.
 - LOCATED ON NORTH SIDE OF BRITTANY DRIVE AT APPROXIMATE CENTERLINE STATION 15+35.
 - 150-WATT HIGH PRESSURE SODIUM VAPOR LAMP POST TOP FIXTURES ON A 14' GREY FIBERGLASS POLE LOCATED 2'-10" FROM BACK OF CURBS
 - LOCATED AT NORTHWEST SIDE OF PEMBERTON COURT AT APPROXIMATE CENTERLINE STATION 3+90.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James H. Egan 4/21/89 DATE
 CHIEF, LAND DEVELOPMENT DIVISION
Richard L. Egan 4/12/89 DATE
 CHIEF, BUREAU OF HIGHWAYS
John E. Harms Jr. 4/22/89 DATE
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Frank W. DeLoach 5/1/89 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

OWNER / DEVELOPER
 NV LAND
 6820 ELM STREET
 McLEAN, VIRGINIA 22101
 (703) 734-9730

DETAIL SHEET
BRITTANY MANOR
 LOTS 1-49
 (O.P. & Z. REF. NO. P-88-06, S-88-105, S-86-99, WP-89-30)
 TAX MAP 24 PARCELS 651 (1755/213-216) 288 (1879/490)
 2nd ELECTION DISTRICT HOWARD COUNTY, MD.

JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - PLANNERS - SURVEYORS
 2 CENTRE PARK 8816 CENTRE PARK DRIVE SUITE 208
 COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

NO.	REVISION	BY	DATE
1	PER HOWARD COUNTY COMMENTS	TAB/OGH	
2	" " " "	CAG	5/10/89

DESIGNED BY: K.B.C.
 DRAWN BY: D.E.W.
 CHECKED BY: R.H.V.
 DATE: 10-17-88
 SCALE: AS SHOWN
 W.O. NO. 44-87-010A



1442