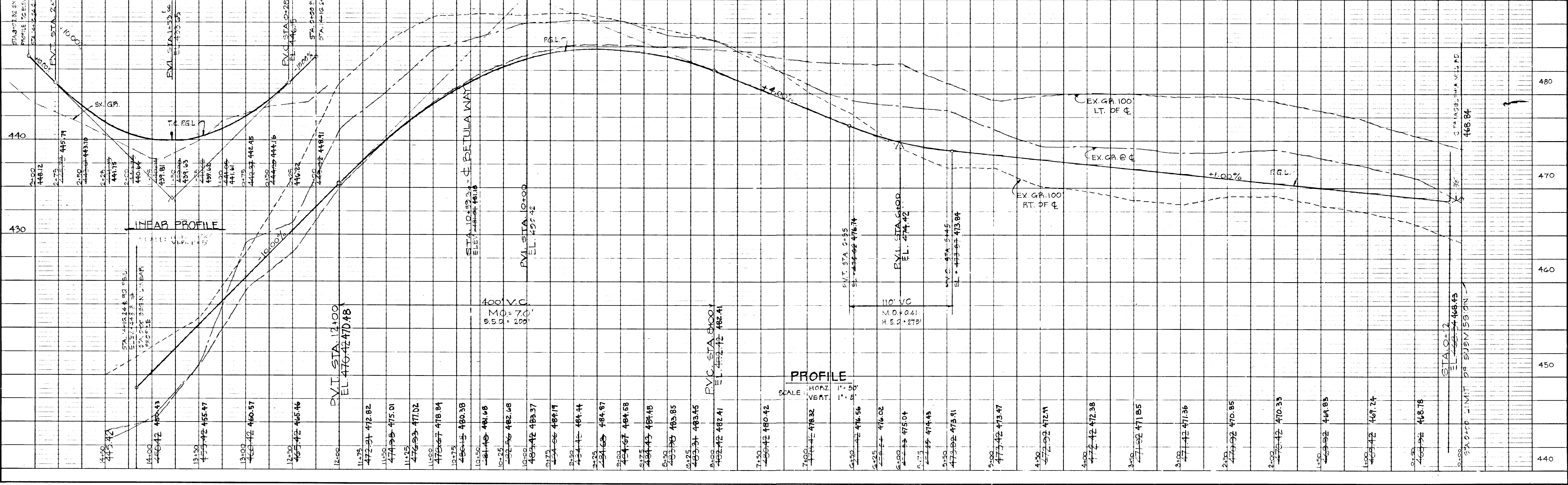
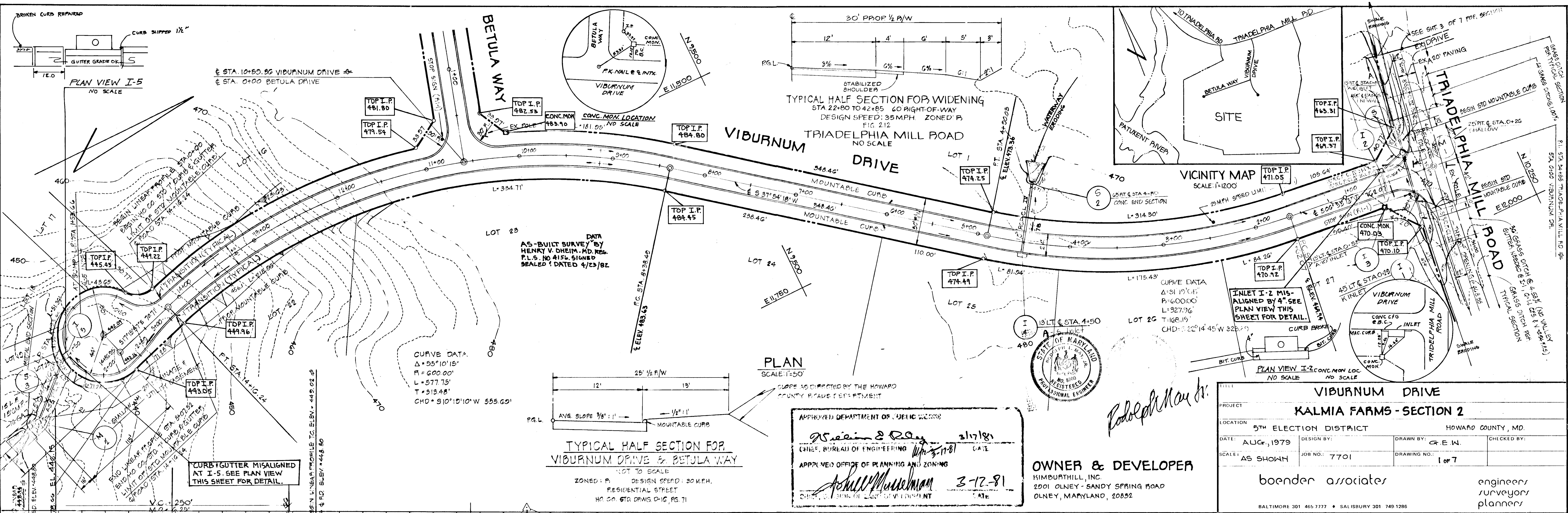


PLAN  
 SURVYD. NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 NO. \_\_\_\_\_

PROFILE  
 SURVYD. NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 NO. \_\_\_\_\_



APPROVED DEPARTMENT OF PUBLIC WORKS  
*William S. Reay* 3-17-81  
 CHIEF, BUREAU OF ENGINEERING  
 DATE: 3-17-81

APPROVED OFFICE OF PLANNING AND ZONING  
*Shelley M. ...* 3-12-81  
 CHIEF, OFFICE OF PLANNING AND ZONING

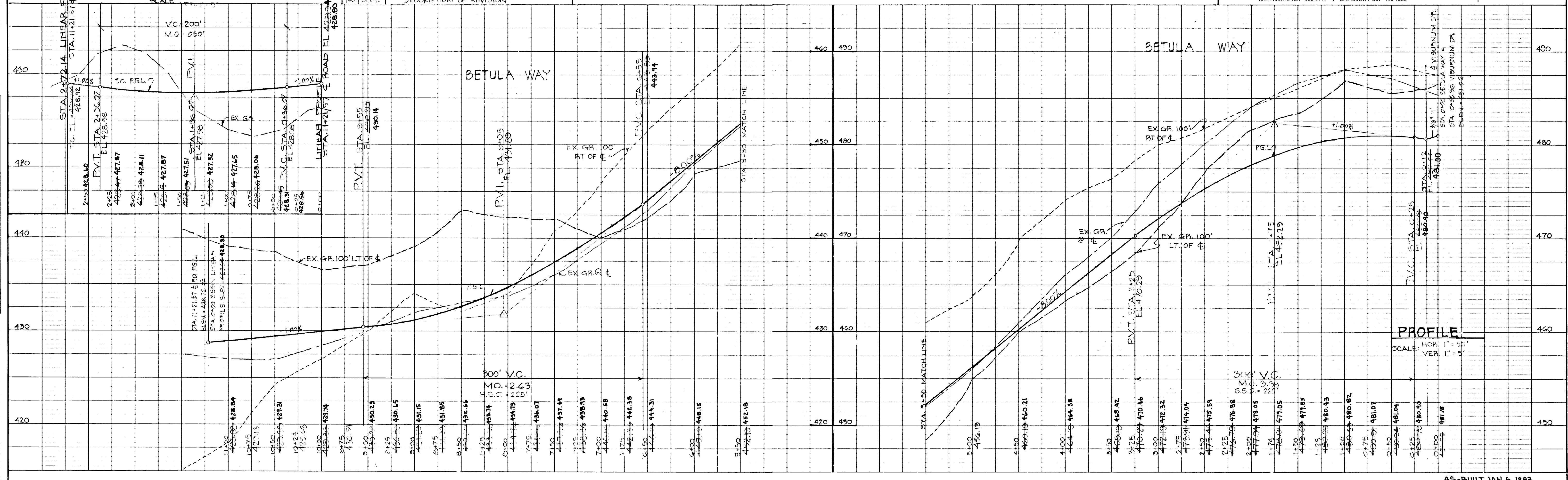
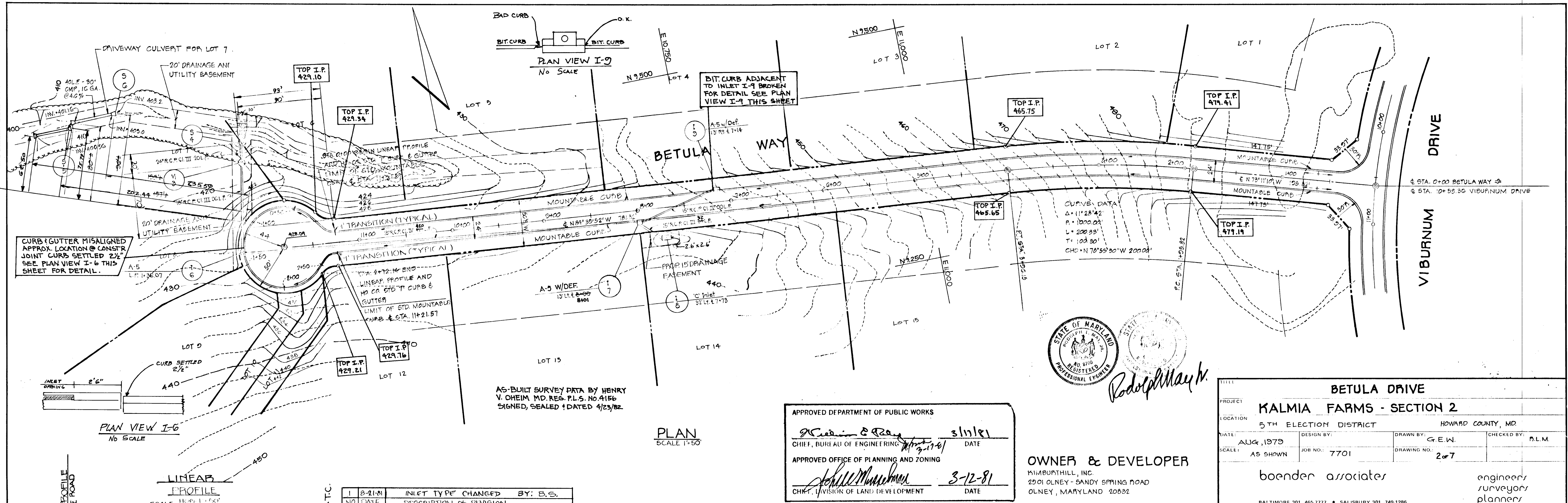
**OWNER & DEVELOPER**  
 KIMBURTHILL, INC.  
 2001 OLNEY - SANDY SPRING ROAD  
 OLNEY, MARYLAND, 20832

VIBURNUM DRIVE			
PROJECT: <b>KALMIA FARMS - SECTION 2</b>			
LOCATION: 5TH ELECTION DISTRICT	HOWARD COUNTY, MD.		
DATE: AUG., 1979	DESIGN BY: G.E.W.	CHECKED BY:	
SCALE: AS SHOWN	JOB NO.: 7701	DRAWING NO.: 1 of 7	
boender associates		engineers/surveyors/planners	
BALTIMORE 301 465-7777 • SALISBURY 301 749-1286			



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

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



NO.	DATE	DESCRIPTION OF REVISION	BY
1	8-21-81	INLET TYPE CHANGED	B.S.

APPROVED DEPARTMENT OF PUBLIC WORKS  
*Richard C. Ray* 3/11/81  
 CHIEF, BUREAU OF ENGINEERING DATE

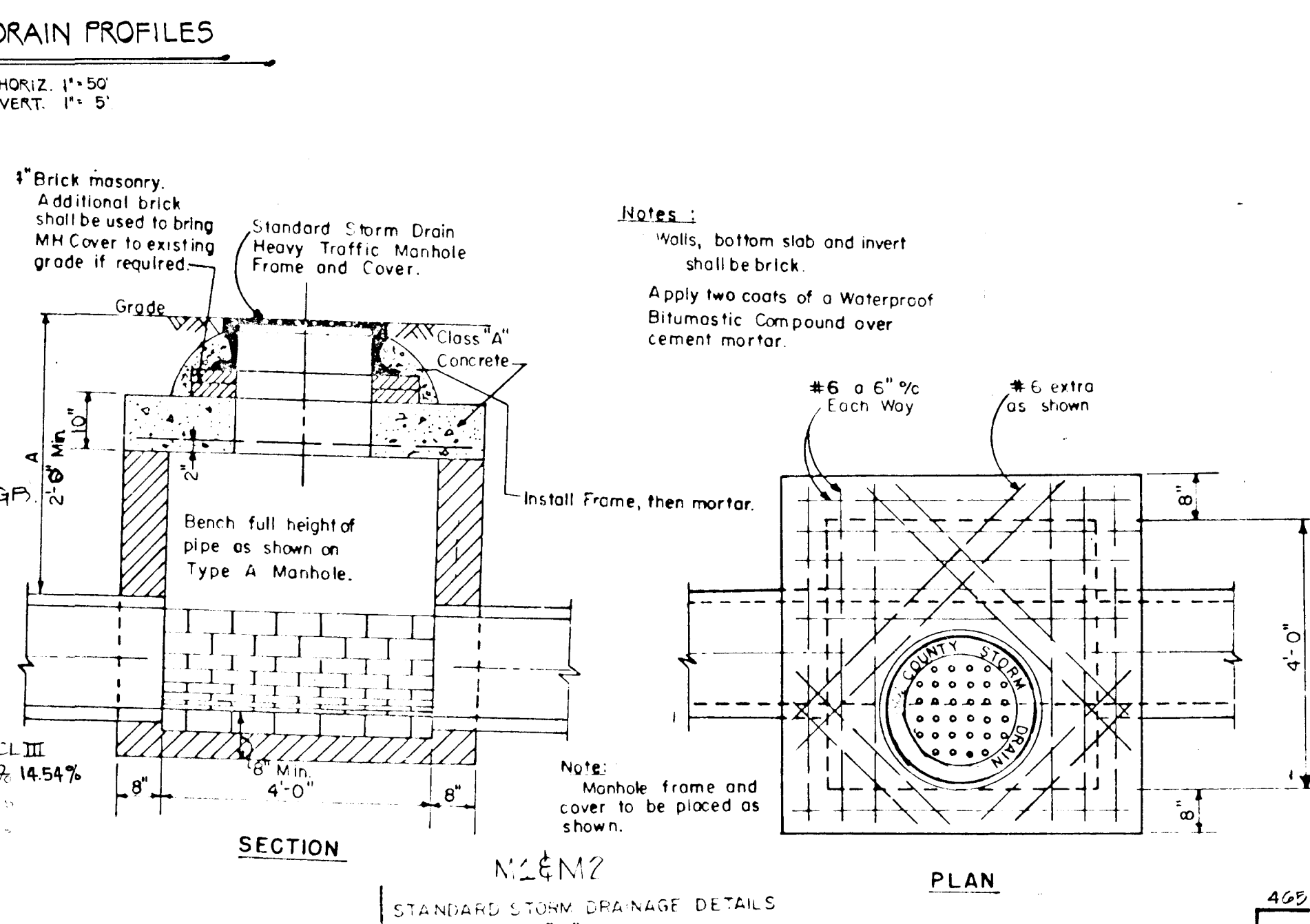
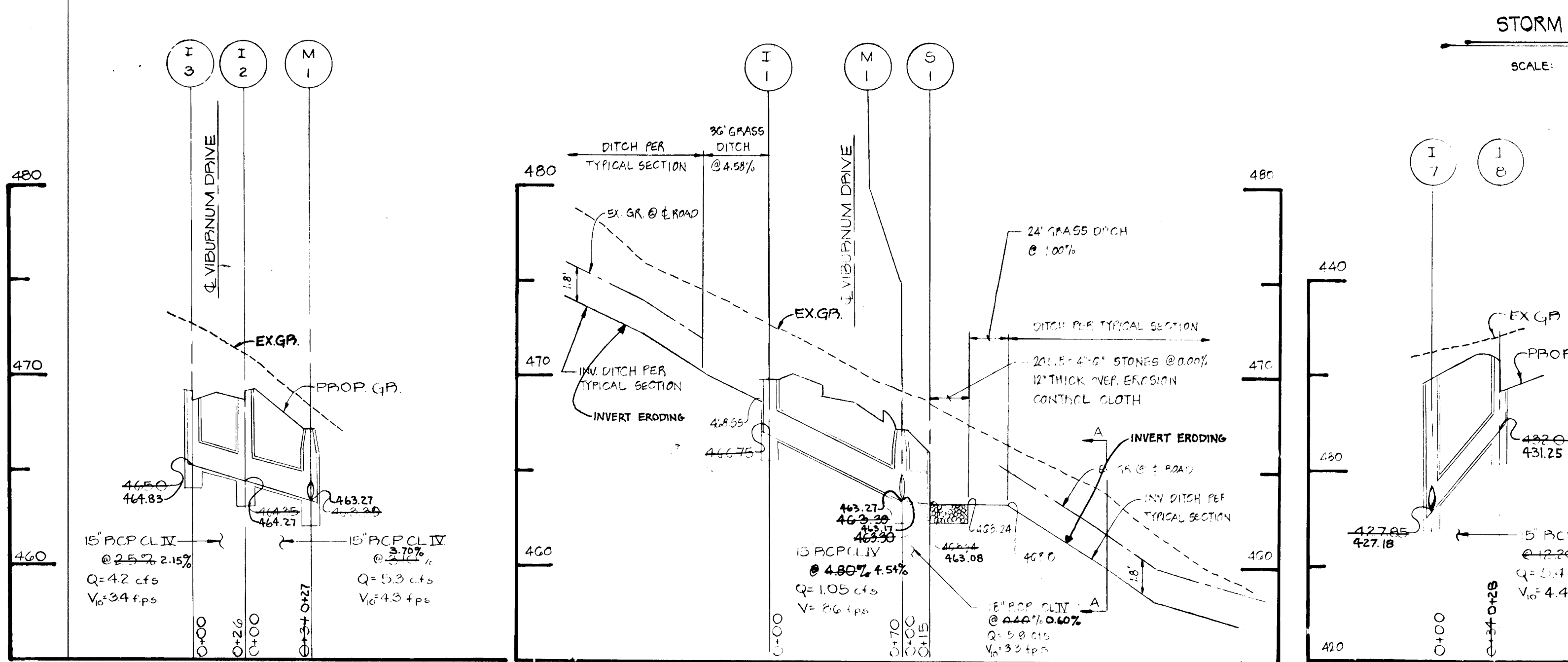
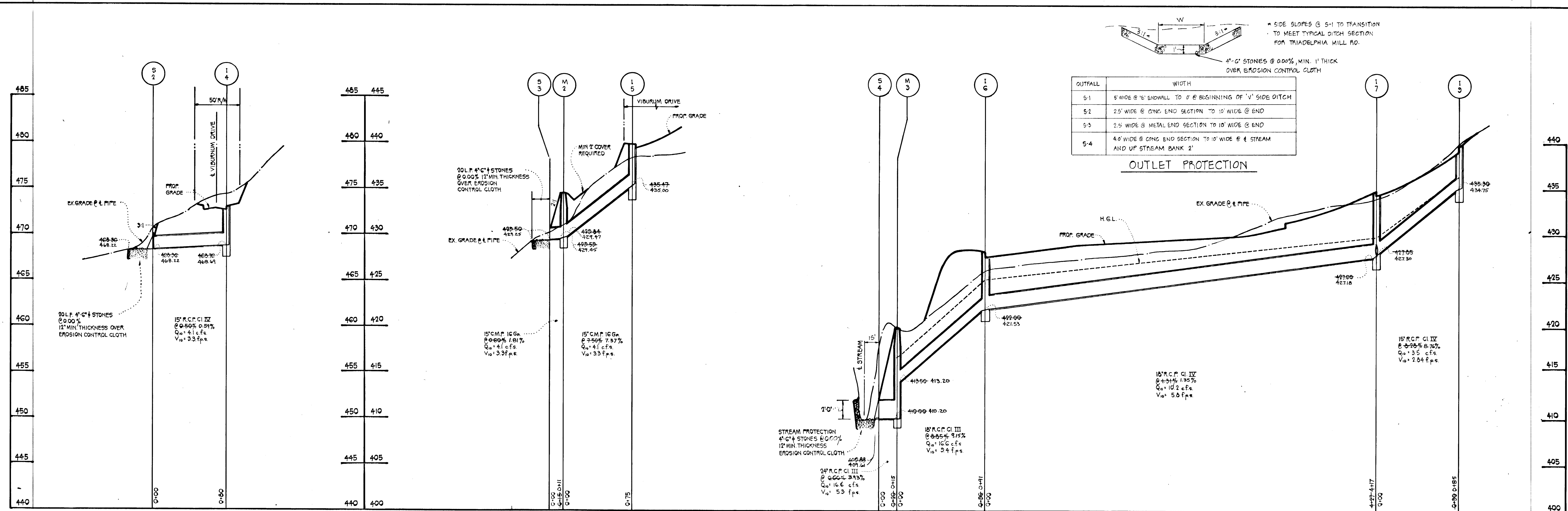
APPROVED OFFICE OF PLANNING AND ZONING  
*Richard M. ...* 3-12-81  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

OWNER & DEVELOPER  
 MIMBURNHILL, INC.  
 2201 OLNEY - SANDY SPRING ROAD  
 OLNEY, MARYLAND 20832

BETULA DRIVE			
PROJECT	KALMIA FARMS - SECTION 2		
LOCATION	5TH ELECTION DISTRICT	HOWARD COUNTY, MD.	
DATE	AUG, 1979	DESIGN BY:	GE.W.
SCALE	AS SHOWN	JOB NO.:	7701
		DRAWING NO.:	2 of 7
		CHECKED BY:	D.L.M.
			engineers surveyors planners

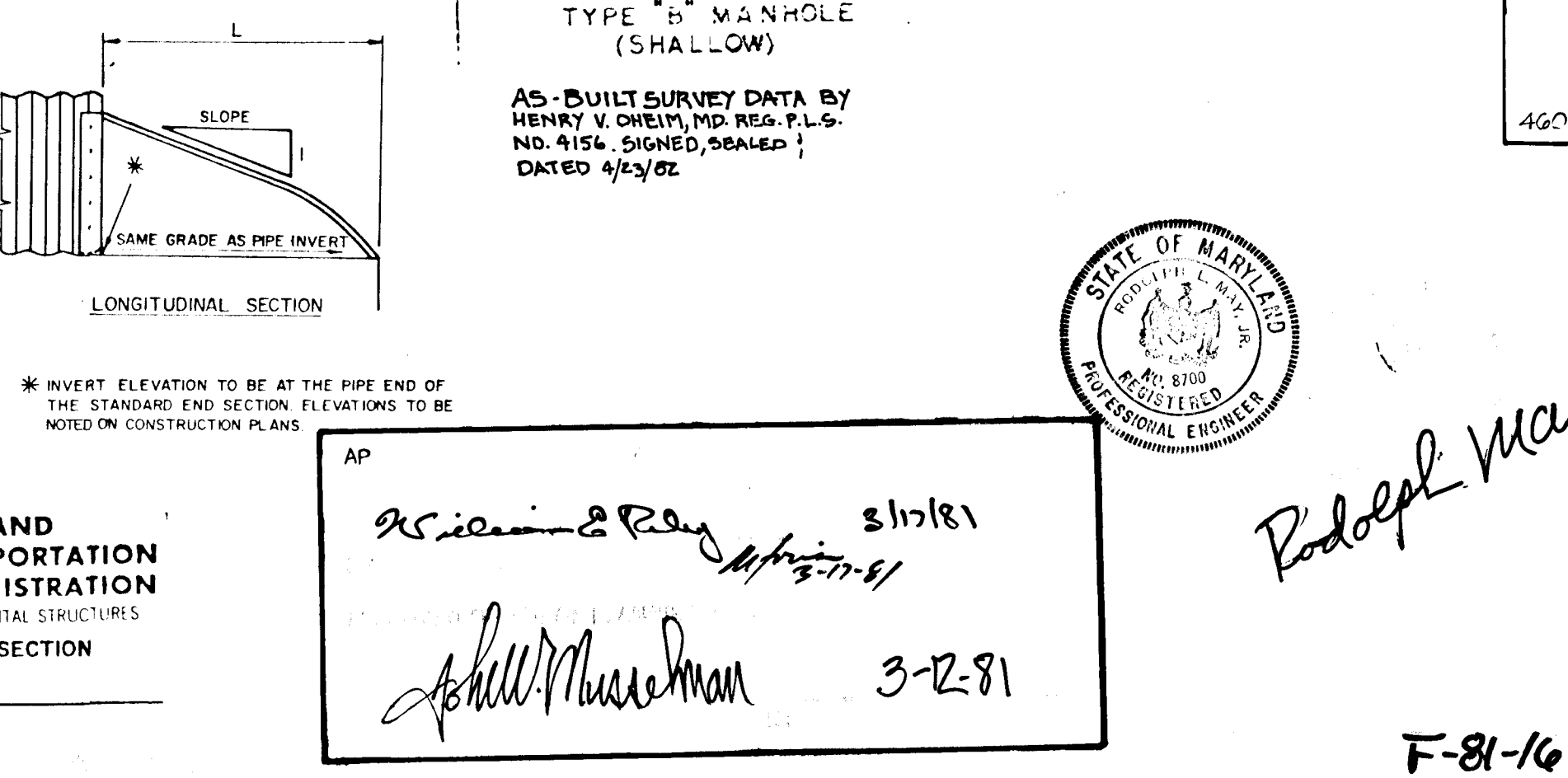
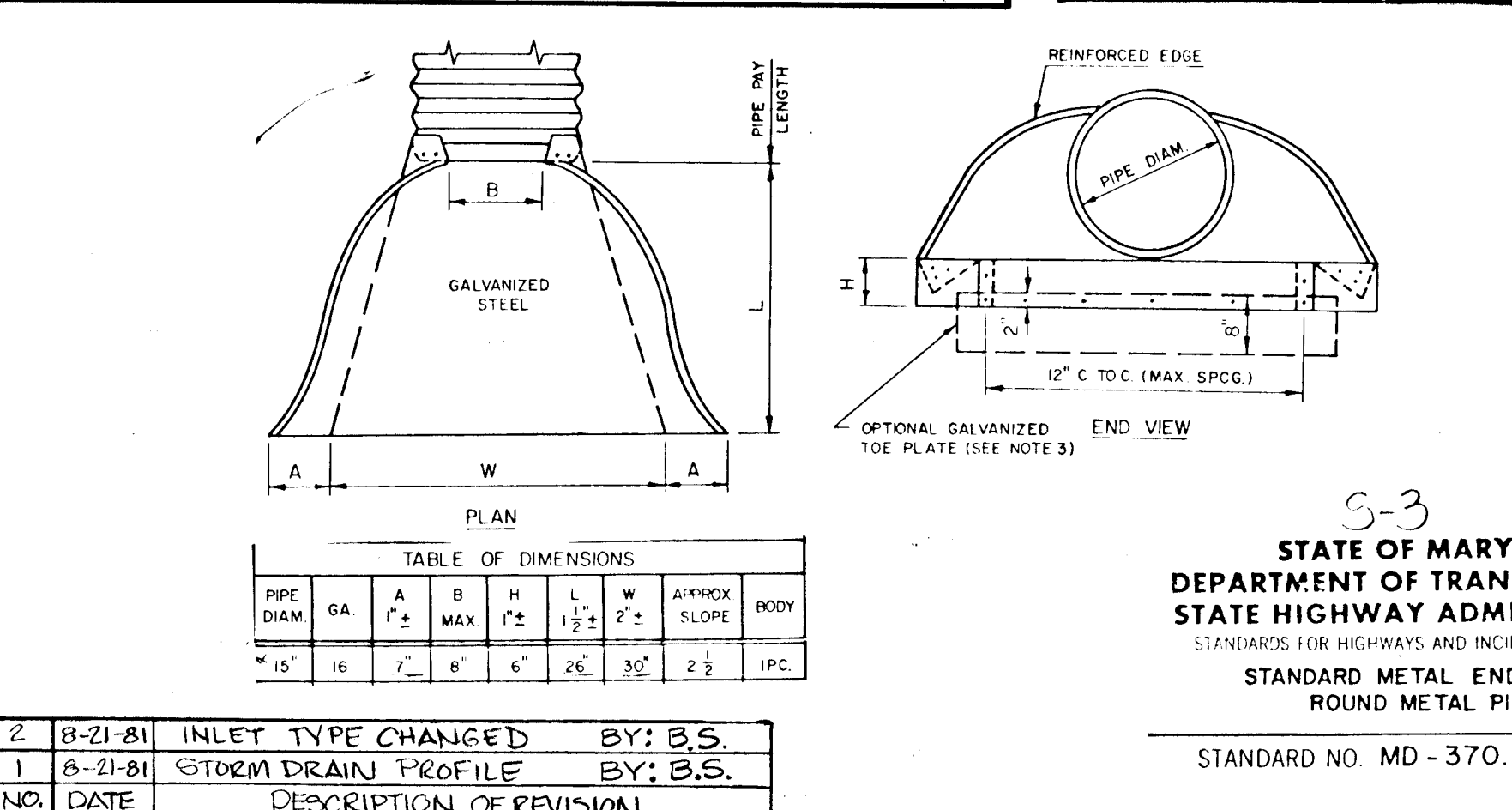
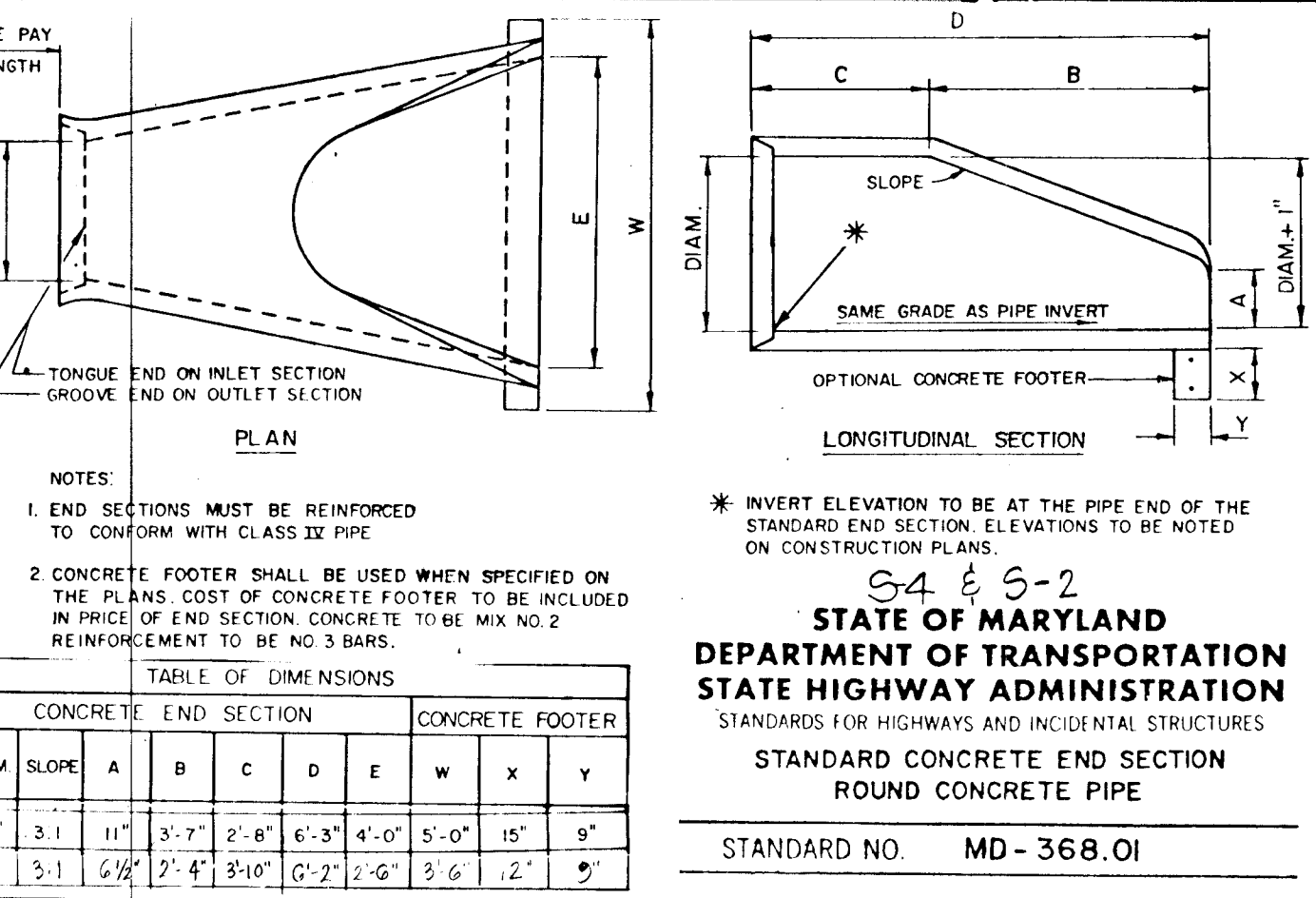






**PROPOSED STRUCTURE SCHEDULE**

NO.	TYPE	IN V.	IN OUT	TOP EL.	REMARKS
11	K YARD INLET *	447.33	447.33	447.33	HO CO ST D DPWG D-93 PG 148
12	'A-5' INLET	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
13	'A-10' INLET	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
14	'A-5' INLET	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
15	'A-5' INLET	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
16	'A-5' INLET	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
17	'A-5' INLET W/DEFLECTOR	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
18	C INLET	447.33	447.33	447.33	HO CO ST D DPWG 64C PG 119-C
19	'A-5' INLET W/ DEFLECTOR	447.33	447.33	447.33	HO CO ST D DPWG 64A PG 119-A
21	SHALLOW STORM DRAIN MH	447.33	447.33	447.33	(SEE DETAIL THIS SHEET)
22	SHALLOW STORM DRAIN MH	447.33	447.33	447.33	(SEE DETAIL THIS SHEET)
23	DROP STORM DRAIN MH	447.33	447.33	447.33	HO CO ST D DPWG D-103 PG 158
51	STD TYPED ENDWALL	447.33	447.33	447.33	HO CO ST D DPWG D-54 PG 109
52	STD CONC END SECTION	447.33	447.33	447.33	HO CO ST D DPWG D-46 PG 101 (15' D)
53	METAL END SECTION	447.33	447.33	447.33	(SEE DETAIL THIS SHEET)
54	STD CONCRETE END SECTION	447.33	447.33	447.33	(SEE DETAIL THIS SHEET)
55	METAL END SECTION	447.33	447.33	447.33	SEE DETAIL THIS SHEET (FOR DRIVEWAY COLLECTOR)
56	METAL END SECTION	447.33	447.33	447.33	SEE DETAIL THIS SHEET (FOR DRIVEWAY COLLECTOR)



**SECTION A-A**

**OWNER & DEVELOPER**  
 HENRY V. CHEM, MD. REG. P.L.S. NO. 4156, SIGNED, SEALED, DATED 4/23/82

**TITLE: STORM DRAIN PROFILES & DETAILS**  
**PROJECT: KALMIA FARMS-SECTION 2**  
**LOCATION: 5TH FLECTION DISTRICT, HOWARD COUNTY, MD.**

**DATE: JULY, 1980** **DESIGN BY: BDB/GEM** **DRAWN BY: H.L.M.** **CHECKED BY: H.L.M.**

**SCALE: AS SHOWN** **JOB NO.: 7701** **DRAWING NO.: 3 OF 7**

**boender associates**  
 SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING  
 ELLICOTT CITY, MARYLAND 21113  
 BALTIMORE 301-463-7777 SALISBURY 301-749-1286

**engineers surveyors planners**

AS-BUILT JAN 6, 1983



**CONSTRUCTION SEQUENCE**

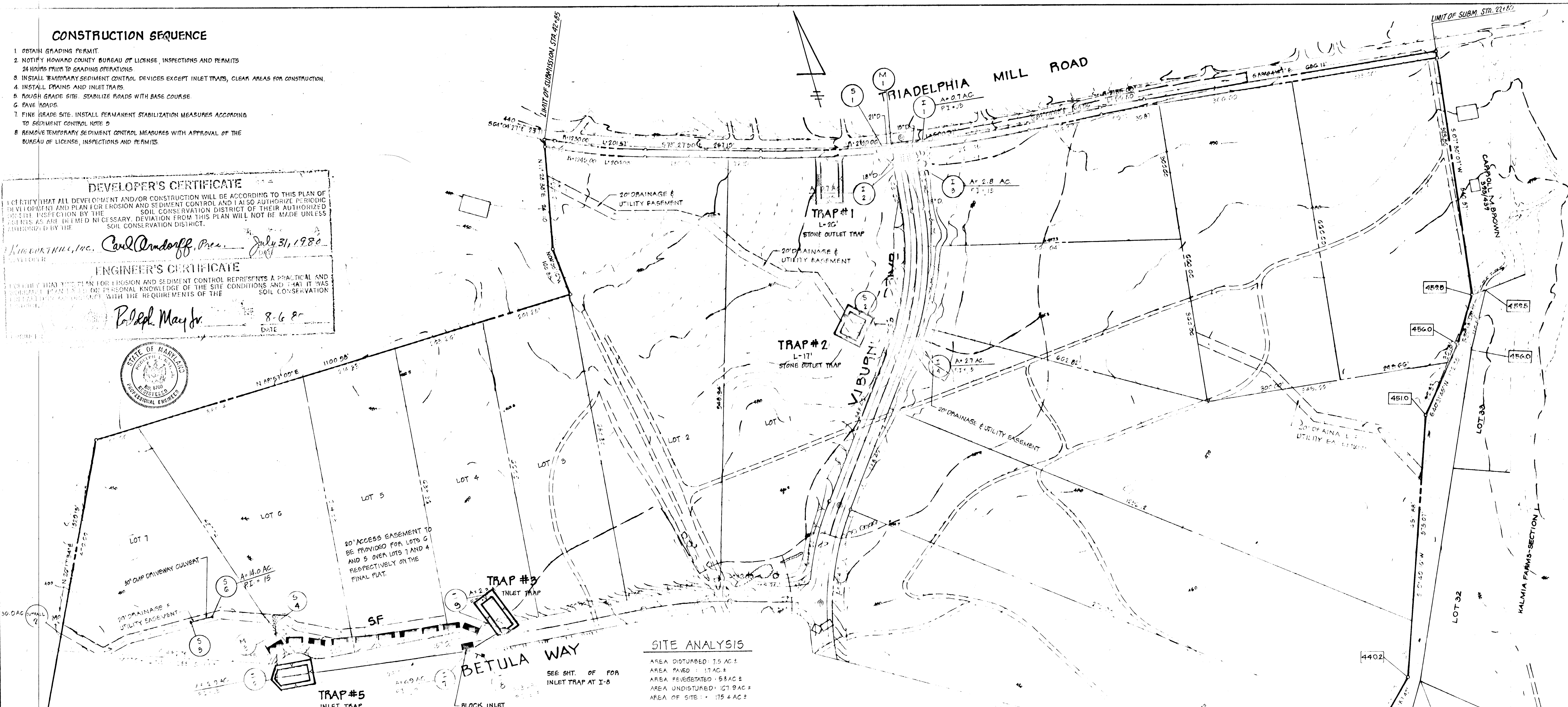
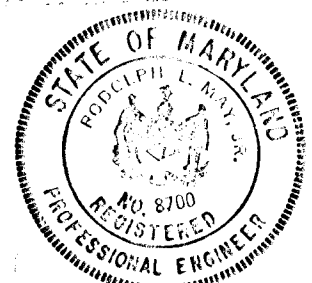
1. OBTAIN GRADING PERMIT.
2. NOTIFY HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS 24 HOURS PRIOR TO GRADING OPERATIONS.
3. INSTALL TEMPORARY SEDIMENT CONTROL DEVICES EXCEPT INLET TRAPS, CLEAR AREAS FOR CONSTRUCTION.
4. INSTALL DRAINS AND INLET TRAPS.
5. ROUGH GRADE SITE. STABILIZE ROADS WITH BASE COURSE.
6. PAVE ROADS.
7. FINE GRADE SITE. INSTALL PERMANENT STABILIZATION MEASURES ACCORDING TO SEDIMENT CONTROL NOTE 9.
8. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

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

*Kimbert Hill, Inc. Carl O. Oroszoff, Pres. July 31, 1980*

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOIL CONSERVATION DISTRICT.

*Ralph May Jr. 8-6-80*



**SITE ANALYSIS**

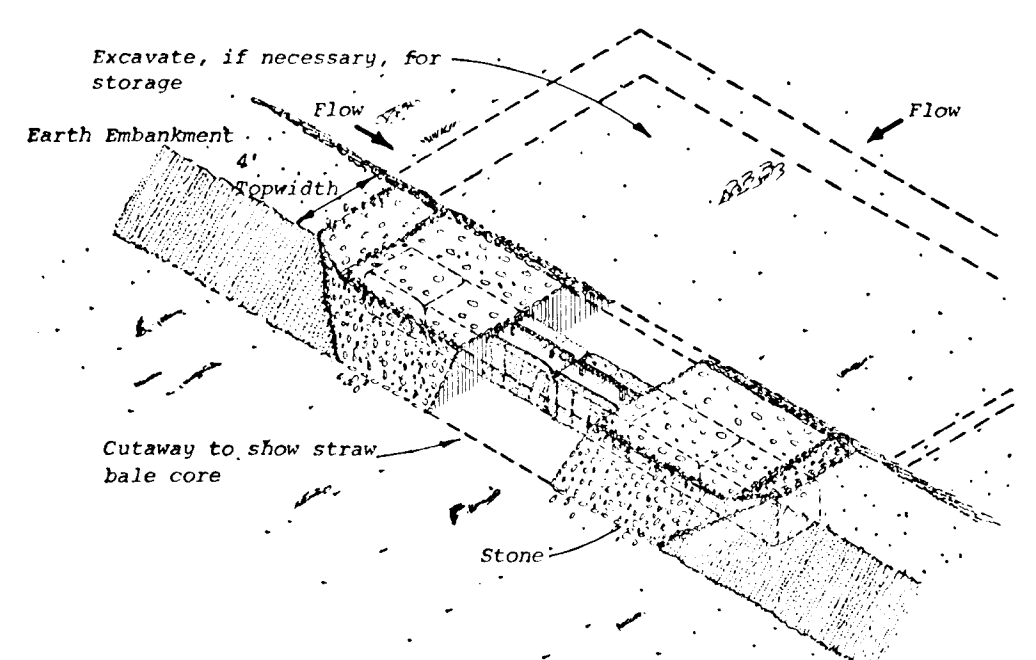
AREA DISTURBED: 7.5 AC ±  
 AREA PAVED: 1.1 AC ±  
 AREA REVEGETATED: 5.8 AC ±  
 AREA UNDISTURBED: 167.9 AC ±  
 AREA OF SITE: 175.4 AC ±

**SEDIMENT CONTROL NOTES**

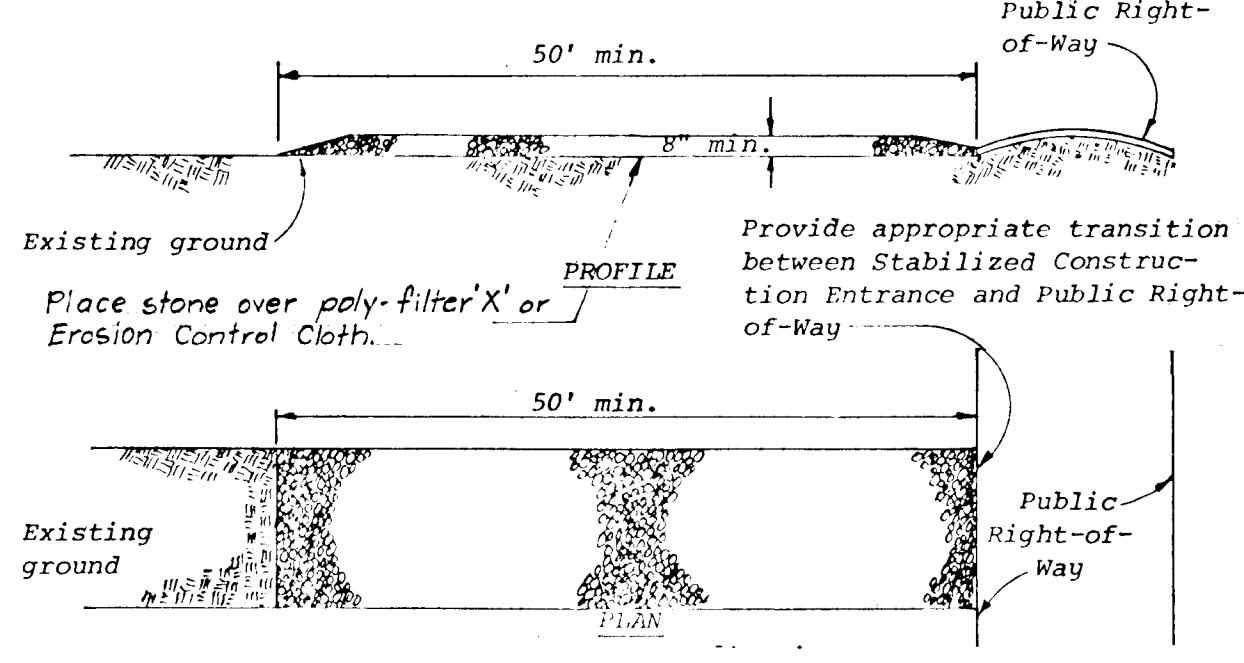
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE.
2. APPLY FOR GRADING PERMIT.
3. NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.
4. CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
5. CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM.
6. ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.
7. ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
8. SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
9. STABILIZATION MEASURES:  
 TEMPORARY STABILIZATION:  
 APPLY 2000 LBS./AC. OR 461 LBS. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER. PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.  
 PERMANENT STABILIZATION:  
 APPLY: 4000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OF 10-10-10 FERTILIZER.  
 SEED:  
 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE.  
 40 LBS./AC. OF KENTUCKY BLUE GRASS.  
 25 LBS./AC. OF ANNUAL RYEGRASS.  
 NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. 1 ONLY.  
 MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.

**SEDIMENT TRAP SCHEDULE**

TRAP NO.	DRAINAGE AREA	VOLUME	BOTTOM SIZE	BOTTOM ELEV.	SPILLWAY ELEV.
1	4.2 AC	8000 CF / 7500 CF	40" x 80" x 2.5'	459.5	422.0 L-26"
2	2.7 AC	5000 CF / 4800 CF	40" x 50" x 2.5'	465.5	428.0 L-17"
3	2.3 AC	4500 CF / 4140 CF	30" x 75" x 2.5'	436.7	438.7
4	3.6 AC	7000 CF / 6480 CF	40" x 70" x 2.5'	439.0	435.5
5	2.9 AC	5287 CF / 5220 CF	35" x 65" x 2.5'	424.7	427.2
6	2.7 AC	5000 CF / 4800 CF	40" x 50" x 2.5'	422.0	428.5 L-17"



**STONE OUTLET TRAP**  
NOT TO SCALE



**STONE CONSTRUCTION ENTRANCE**  
NOT TO SCALE

AS-BUILT SURVEY DATA BY HENRY Y. OHEIM, MD REG. P.L.S. NO. 4156, SIGNED, SEALED & DATED 4/23/82

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

*Joseph R. Rubin* 3-11-81  
 U.S. SOIL CONSERVATION SERVICE DATE

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

*William J. Rine* 3-11-81  
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED DEPARTMENT OF PUBLIC WORKS

*William J. Rine* 3-11-81  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING

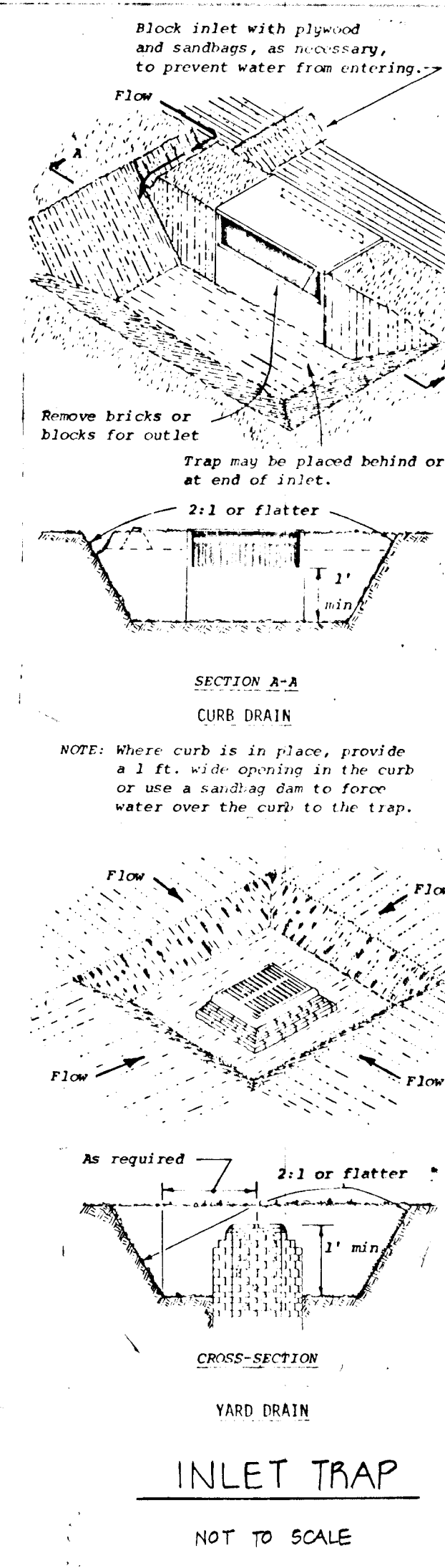
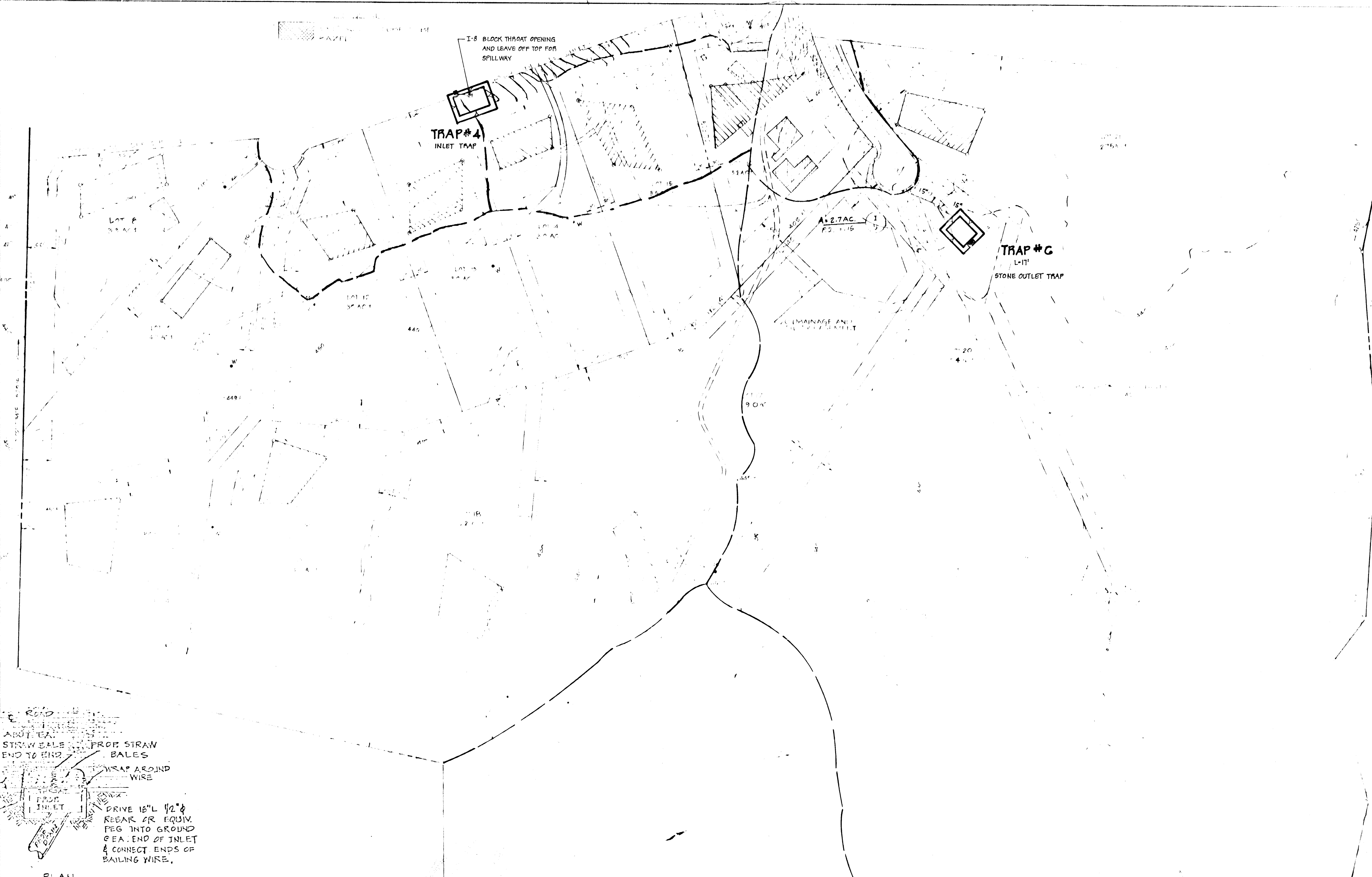
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**SEDIMENT CONTROL PLAN**  
**KALMIA FARMS - SECTION 2**

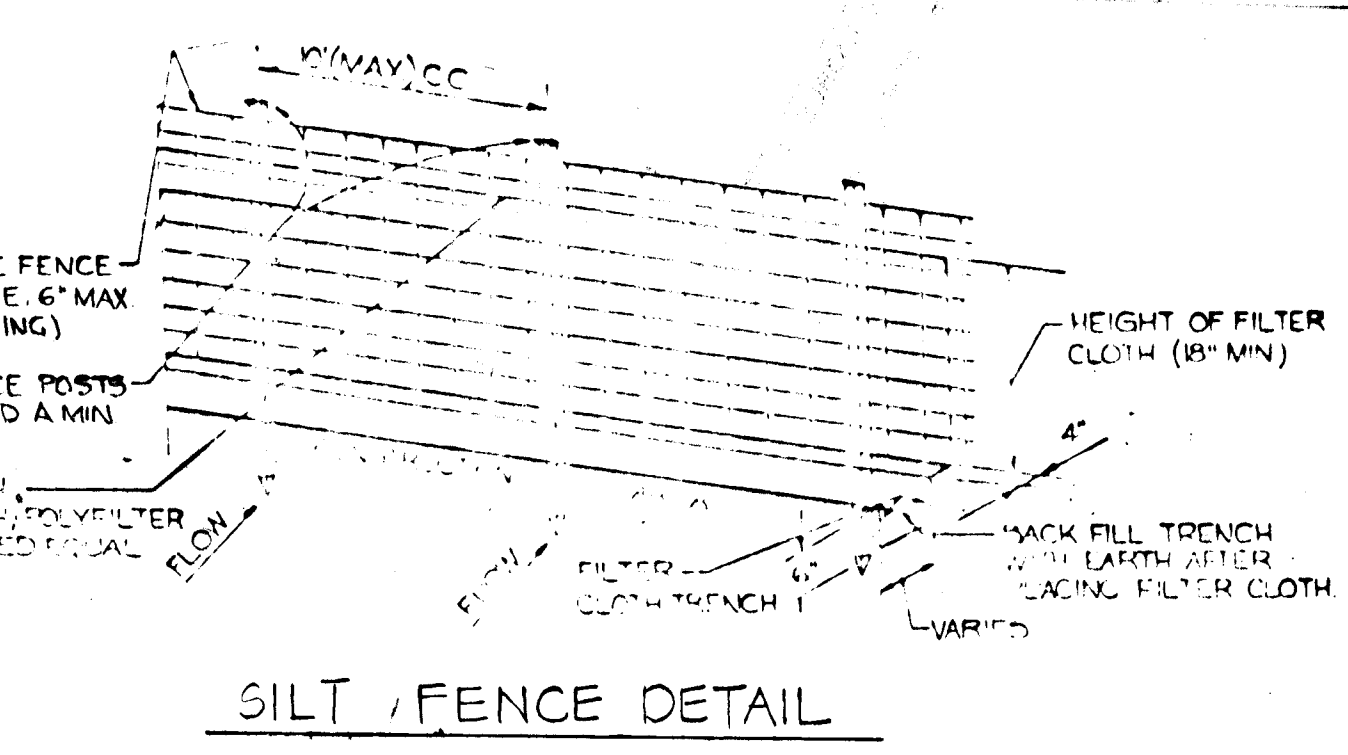
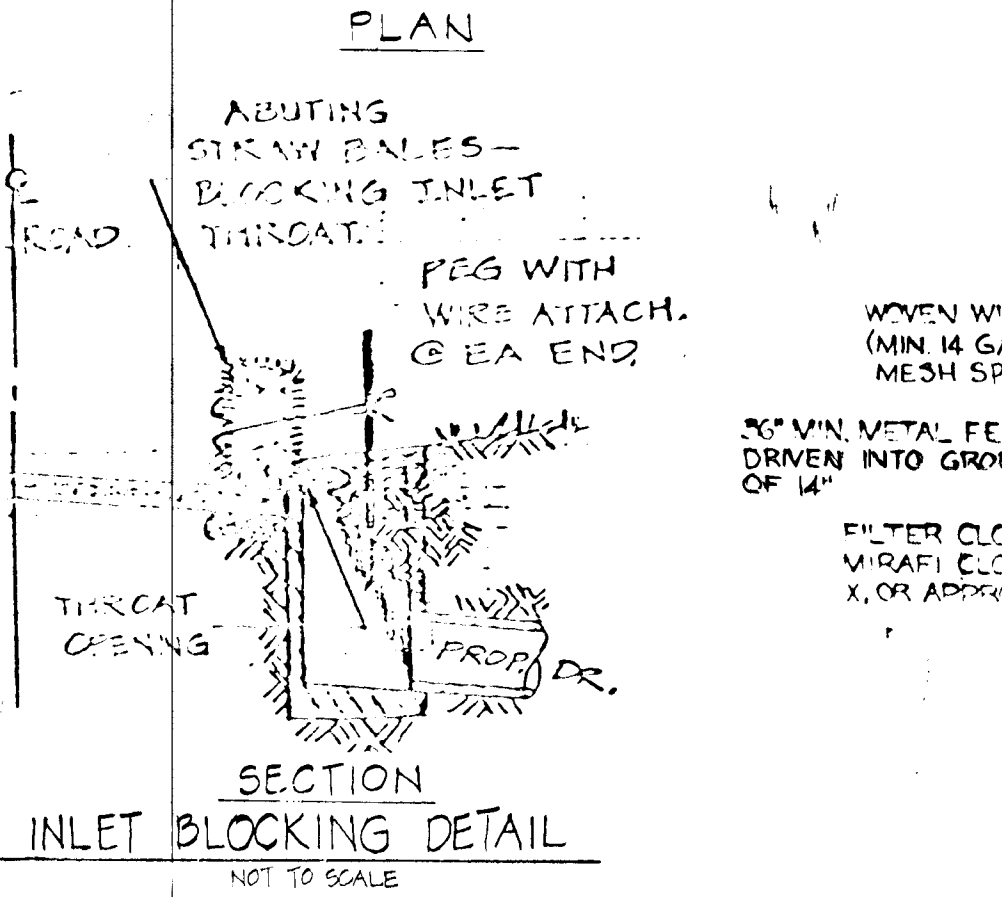
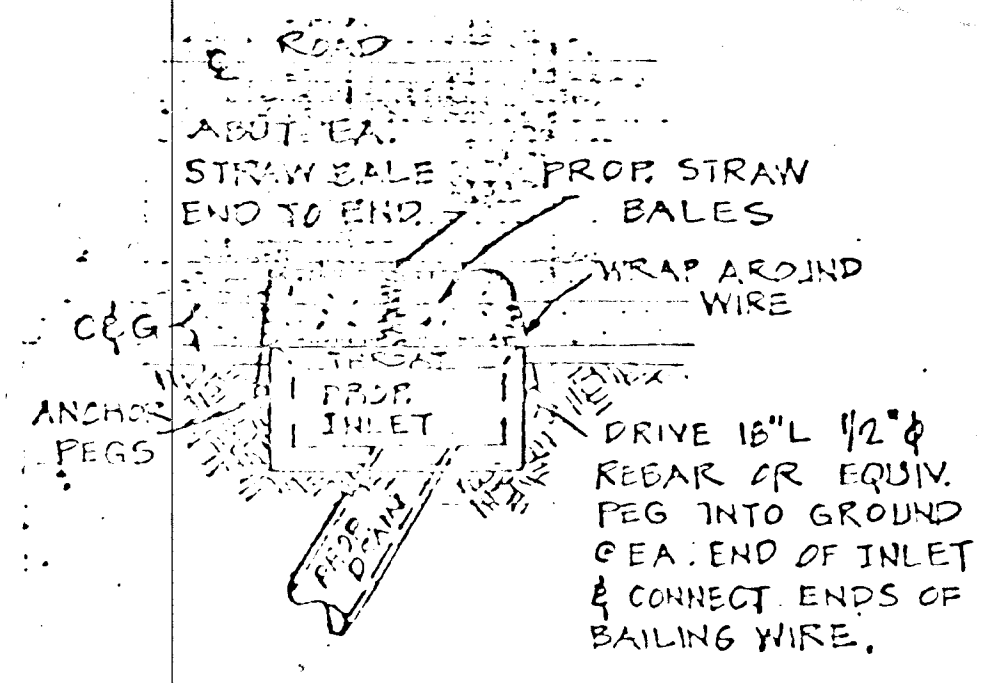
PROJECT: KALMIA FARMS - SECTION 2  
 LOCATION: 2901 OLNEY SANDY SPRING RD, OLNEY, MARYLAND 20832  
 DATE: JULY, 1980  
 DRAWN BY: boender Associates  
 CHECKED BY: M.L.M.  
 SHEET NO. 4 OF 7  
 ENGINEERS/SURVEYORS/PLANNERS



**OWNER & DEVELOPER**  
 KIMBERT HILL, INC.  
 2901 OLNEY SANDY SPRING RD  
 OLNEY, MARYLAND 20832



APPROVED DEPARTMENT OF PUBLIC WORKS  
*William E. Roper* 2/20/81  
 CHIEF, BUREAU OF ENGINEERING DATE  
 APPROVED OFFICE OF PLANNING AND ZONING  
*Bill Mendenhall* 5-12-81  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.  
*Jerry R. Baker* 3-11-81  
 U.S. SOIL CONSERVATION SERVICE DATE  
 THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*William J. Rame* 3-11-81  
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEVELOPER'S CERTIFICATE  
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE SOIL CONSERVATION DISTRICT OF THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE SOIL CONSERVATION DISTRICT.  
 KIMBORTHILL, INC. *Carl Oendorf* 3/1/82  
 DEVELOPER DATE  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOIL CONSERVATION DISTRICT.  
*Rudolph May Jr.* 8-6-80  
 ENGINEER DATE



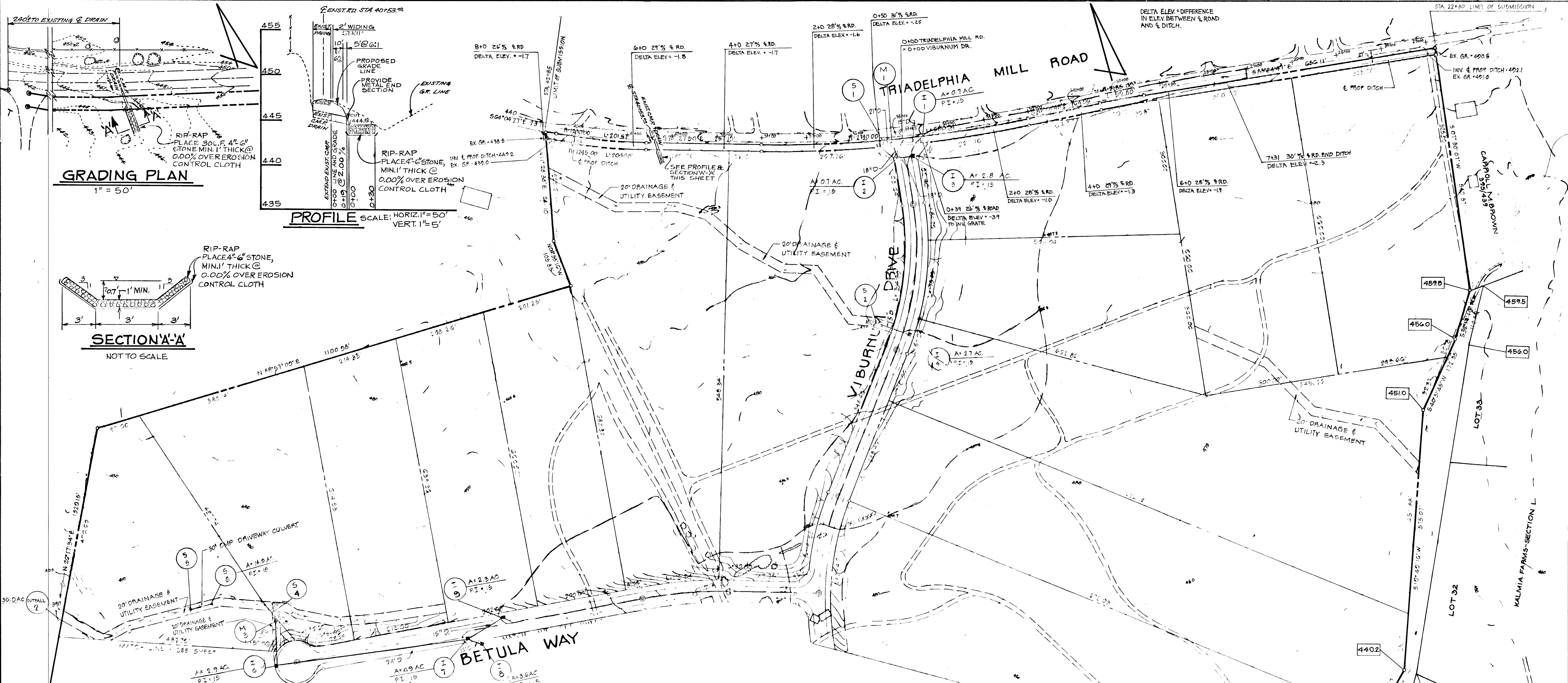
AS-BUILT SURVEY DATA BY HENRY V. CHEIM, MD REG. P.L.S. NO. 4166, SIGNED, SEALED & DATED 4/23/82  
 OWNER & DEVELOPER  
 KIMBORTHILL, INC.  
 2901 OLNEY SANDY SPRING RD.  
 OLNEY, MARYLAND 20832

SEDIMENT CONTROL PLAN  
 KALMIA FARMS - SECTION 2  
 5TH ELECTION DISTRICT HOWARD COUNTY, MD.

3/81  
 1"=100'  
 5 of 7  
 F-81-16

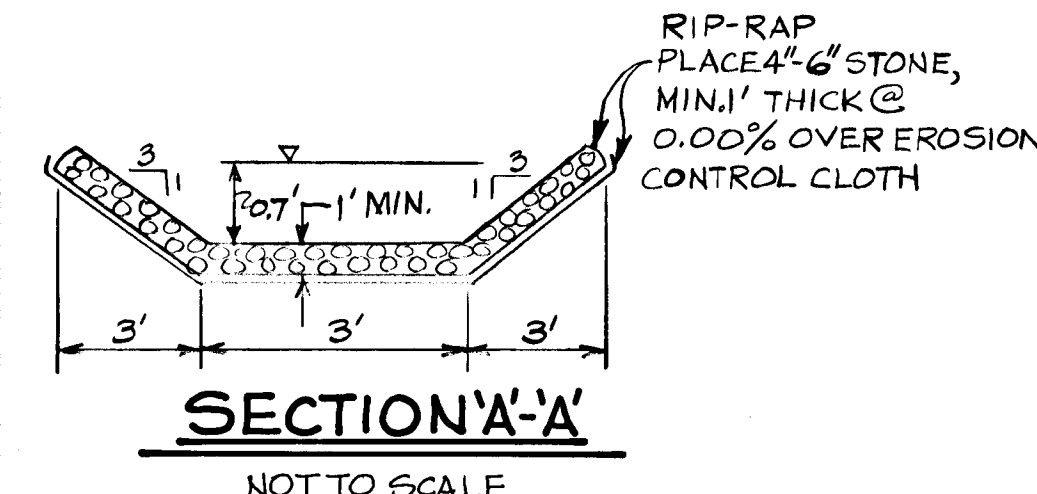
AS-BUILT JAN. 12, 1983





**GRADING PLAN**  
1" = 50'

**PROFILE** SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

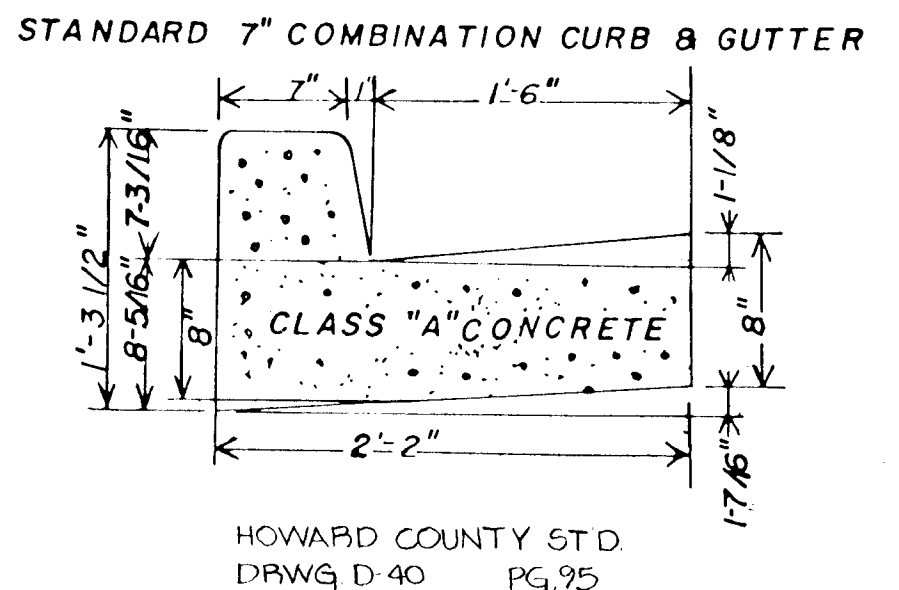
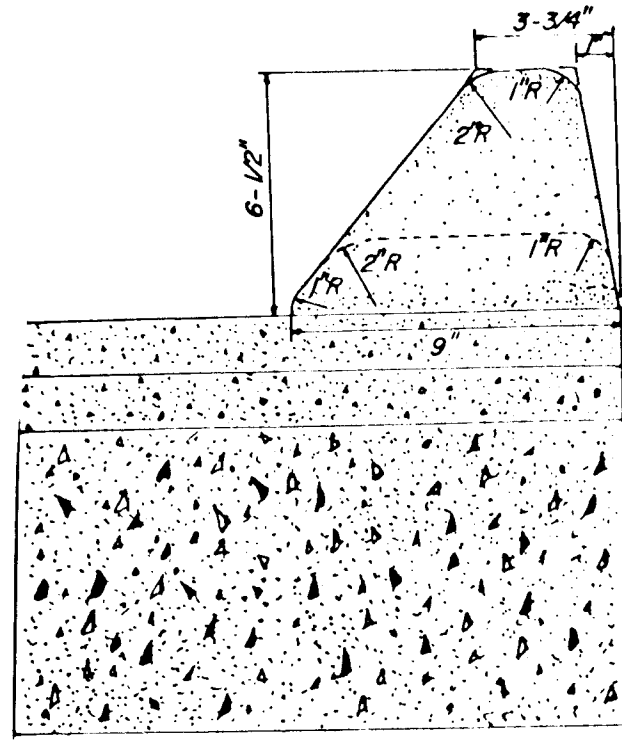


**NOTES:**

1. ALL CONSTRUCTION TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS, 1961.
2. THE BASE SHALL BE PAVED IN ACCORDANCE WITH SECTION C-30-3 AS PROVIDED IN THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
3. A TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-2-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATION.
4. TRIADELPHIA MILL RD. IS AN EXISTING RT.
5. CLASS C BEDDING IS TO BE USED FOR STORM DRAIN PIPES.

BITUMINOUS CONCRETE SURFACE	1 1/2"
BITUMINOUS CONCRETE BASE	4 1/2"
CRUSHER RUN BASE	6" (GRAVEL MIX)

AS-BUILT SURVEY DATA BY HENRY V. OHEIM, M.D. REG. P.L.S. NO. 4156, SIGNED, SEALED & DATED 4/23/82.



BITUMINOUS CONCRETE SURFACE	1 1/2"
BITUMINOUS CONCRETE BASE	2 1/4"
CRUSHER RUN BASE	8" (GRAVEL MIX)

**STD. MOUNTABLE CURB**  
HOWARD COUNTY STD. DRAWG. D-39 PG. 94.

HOWARD COUNTY STD. DRAWG. D-40 PG. 95.

**NOT TO SCALE**  
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.  
HOWARD COUNTY STD. DRAWG. R-2-01

**P-2 PAVING SECTION FOR STREETS**

**NOT TO SCALE**  
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.  
HOWARD COUNTY STD. DRAWG. R-2-01

**P-3 TRIADELPHIA MILL ROAD PAVING SECTION**

APPROVED BY: *Richard E. Ray* 3/17/81  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED BY: *William M. ...* 3-12-81  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**OWNER & DEVELOPER**  
KIMBARTHILL, INC.  
2201 OLNEY SANDY SPRING RD.  
OLNEY, MARYLAND 20832

PROJECT: **DRAINAGE AREA MAP**  
KALMIA FARMS - SECTION 2

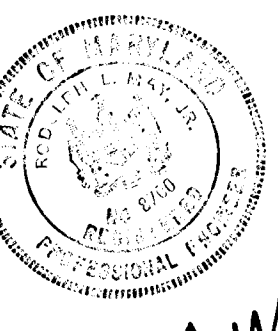
LOCATION: 5TH ELECTION DISTRICT HOWARD COUNTY, MD.

DATE: 4/23/82 DESIGN BY: J.J.B. DRAWN BY: J.J.B. CHECKED BY: R.L.M.

SCALE: 1" = 100' JOB NO. DRAWING NO. **6 OF 7**

boender associates  
SUIITE 102 107 TOWN & COUNTRY PROFESSIONAL BUILDING  
ELLCOTT CITY, MARYLAND 21043  
BALTIMORE 301.448.7737 SALES/RENTAL 301.748.1286

engineers  
surveyors  
planners



F-81-16

