

PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QUANT.	REMARKS
(P)	QUERCUS FALCATA	2 1/2" CAL. MIN.	36	18" A HEAVY HEADS
(M)	ACER RUBRUM 'SUNSET'	"	87	"

Notes:
 1. Contractor shall verify location of underground utilities prior to clearing.
 2. Final location of trees may be adjusted slightly to accommodate field conditions.
 3. Planting procedure shall comply with "Landscape Space for Baltimore-Washington Metropolitan Areas."
 4. Substitution of the approved 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 H.C. Subdivision Regulations.

- ### GENERAL NOTES
- All storm drain & paving shall be constructed in accordance with the latest edition and specifications of Howard County & MD SHA.
 - Types of storm drainage refer to the Standard Details of H.C. & MD SHA.
 - Protop compaction for storm drains within road or street right-of-way limits shall be in accordance with "H.C. Design Manual, Vol. III" (Class C Trench Bedding to be used for all storm drains, except where shown otherwise).
 - Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings, well in advance of construction.
 - All utility companies shall be notified 24 hrs. in advance of construction.
 - All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices", 1978 Edition.
 - Sign and Cross Vertical curves were designed in accordance with "H.C. Design Manual, Vol. II".
 - Provide Concrete side walk ramps, H.C. Std. Type A, R-4.0' where shown in plan. Zoning: R-12
 - Design Speed: 30 mph
 - The contractor or developer shall contact the construction inspection/survey Division 24 hrs. in advance of commencement of work. Phone: 772-7272.

No.	REVISION	DATE
2	Revised Top of Curb Grades on S.E. Fillet	12-16-86
1	Changed Street name Hanover Ct. to Fairbourne Court	11-24-86

APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Engineering: *[Signature]* Date: 6-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Chief, Division of Land Development and Zoning Administration: *[Signature]* Date: 6-20-86

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 ENGINEERS · PLANNERS · SURVEYORS

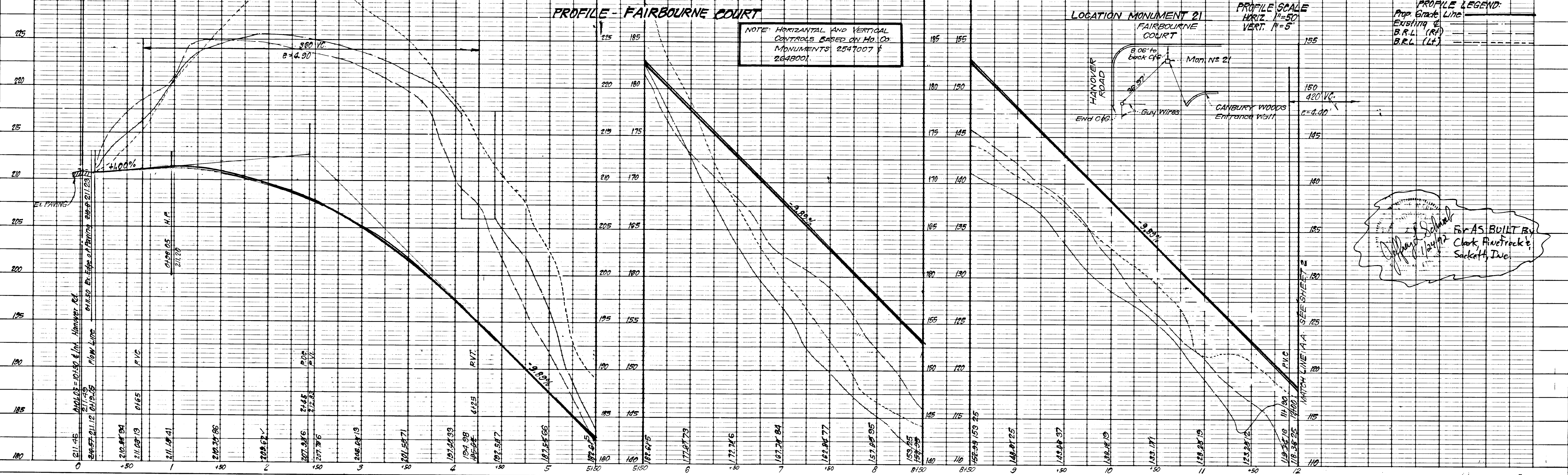
11315 LOCKWOOD DRIVE · SILVER SPRING MARYLAND 20904 · (301) 593-3400

DESIGNED	EP	SCALE	AS SHOWN
DRAWN	R/W	DRAWING	1 OF 8
CHECKED	E.P.	JOB NO.	84-044
DATE	1.3.86	FILE NO.	84-044-D

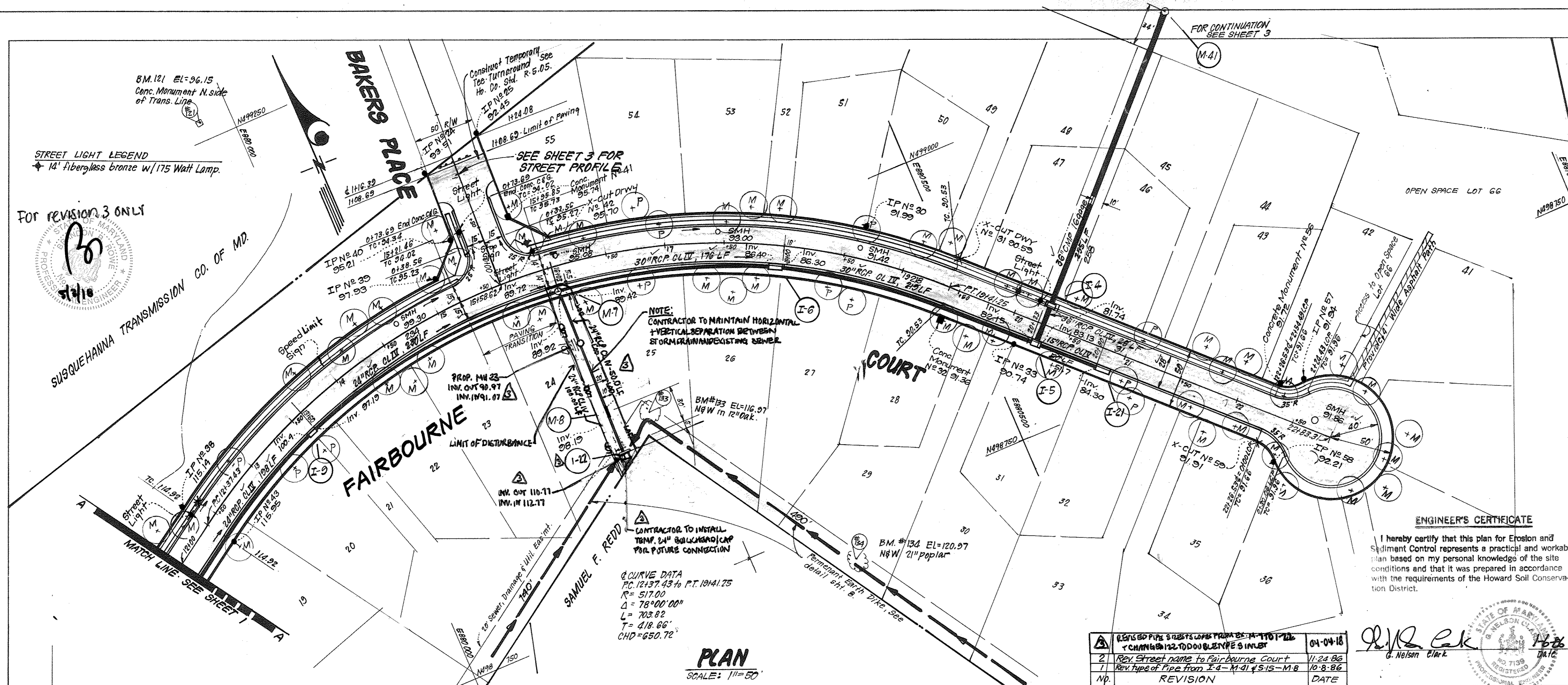
ROAD CONSTRUCTION PLANS
FAIRBOURNE COURT

CANBURY WOODS
 SECTION 1 AREA 1
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: BRANTLY DEVELOPMENT CORP.
 5501 Twin Knolls Road
 Columbia, MD 21045



[Handwritten Signature] FOR AS-BUILT BY
 Clark FineFrock & Sackett, Inc.



DEVELOPER'S/BUILDER'S CERTIFICATE

"I 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 Dept. 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: *Howard* Date: 1-16-86
 Signature: *John F. Sackett* Date: 6-19-86
 Signature: *Robert J. Sackett* Date: 6-19-86

Reviewed for: *Howard* S.C.D. Name and meets Technical Requirements Date: 6-19-86
 Signature: *John F. Sackett* Date: 6-19-86
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 Approved: *Robert J. Sackett* Date: 6-19-86

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Division of Engineering: *John F. Sackett* Date: 6-20-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Chief, Division of Land Development & Zoning Administration: *John F. Sackett* Date: 6-20-86

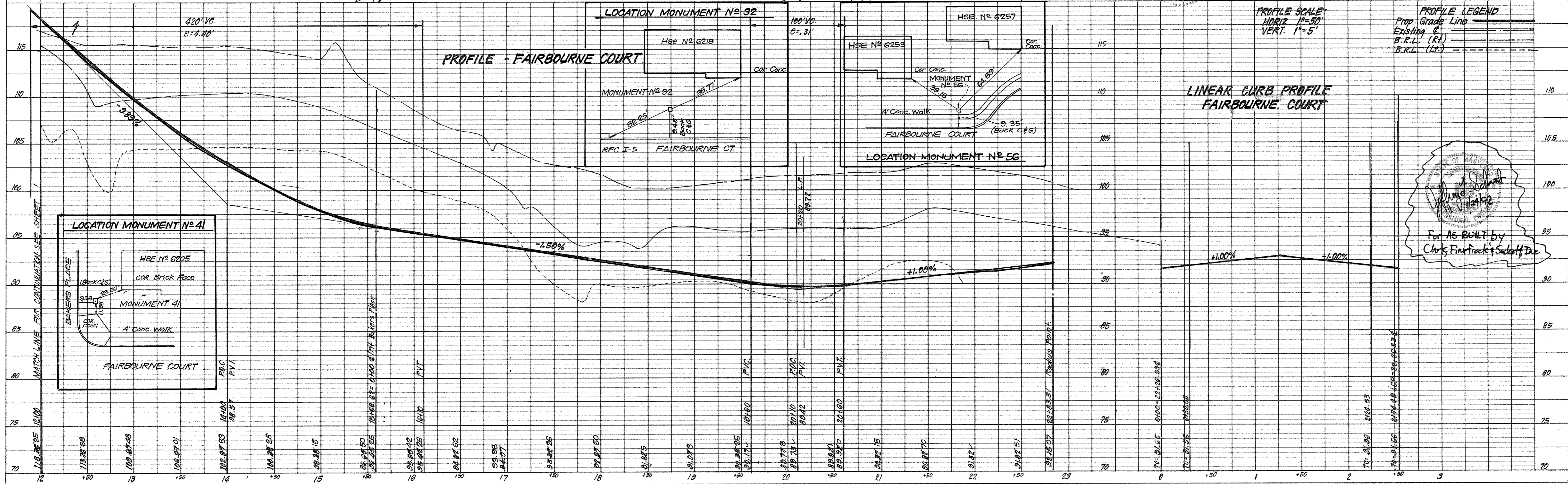
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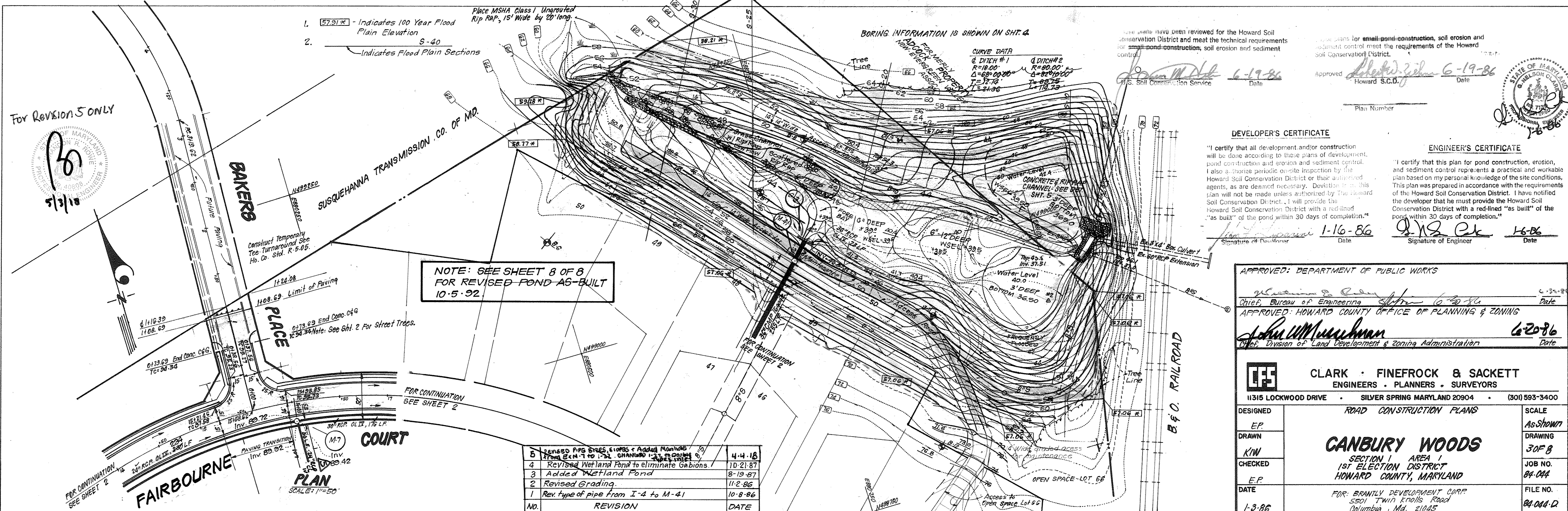
DESIGNED	ROAD CONSTRUCTION PLANS FAIRBOURNE COURT	SCALE	AS SHOWN
DRAWN	K.W.	DRAWING	2 OF 8
CHECKED	E.P.	JOB NO.	84-044
DATE	1-3-86	FILE NO.	84-044-D

CANBURY WOODS
 SECTION 1 AREA 1
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: BRANTLY DEVELOPMENT CORP.
 5501 TWINT KNOTS ROAD
 COLUMBIA, MD. 21045

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: *John F. Sackett* Date: 6-20-86
 Signature: *John F. Sackett* Date: 6-20-86





BORING INFORMATION IS SHOWN ON SHT. 4

CURVE DATA
 DITCH #1 R=100.00
 Δ=68.00
 T=37.72
 L=21.36

DITCH #2 R=60.00
 Δ=40.00
 T=23.75
 L=14.75

APPROVED: [Signature] 6-19-86
 Date
 U.S. Soil Conservation Service

APPROVED: [Signature] 6-19-86
 Date
 Howard S.C.D.

Plan Number

DEVELOPER'S CERTIFICATE

"I certify that all development and/or construction will be done according to these plans of development, pond construction and erosion and sediment control. 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. I will provide the Howard Soil Conservation District with a red-lined "as built" of the pond within 30 days of completion."

Signature of Developer: [Signature] Date: 1-16-86

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 a red-lined "as built" of the pond within 30 days of completion."

Signature of Engineer: [Signature] Date: 1-16-86

APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Engineering: [Signature] Date: 6-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

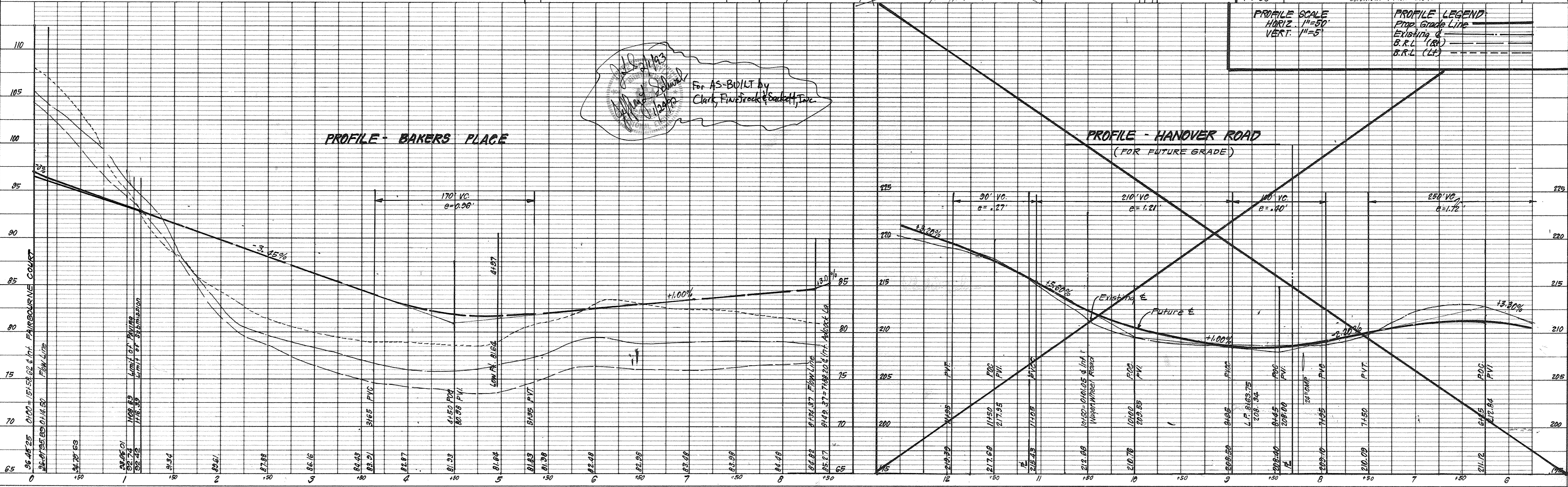
Chief, Division of Land Development & Zoning Administration: [Signature] Date: 6-20-86

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 11315 LOCKWOOD DRIVE · SILVER SPRING MARYLAND 20904 · (301) 593-3400

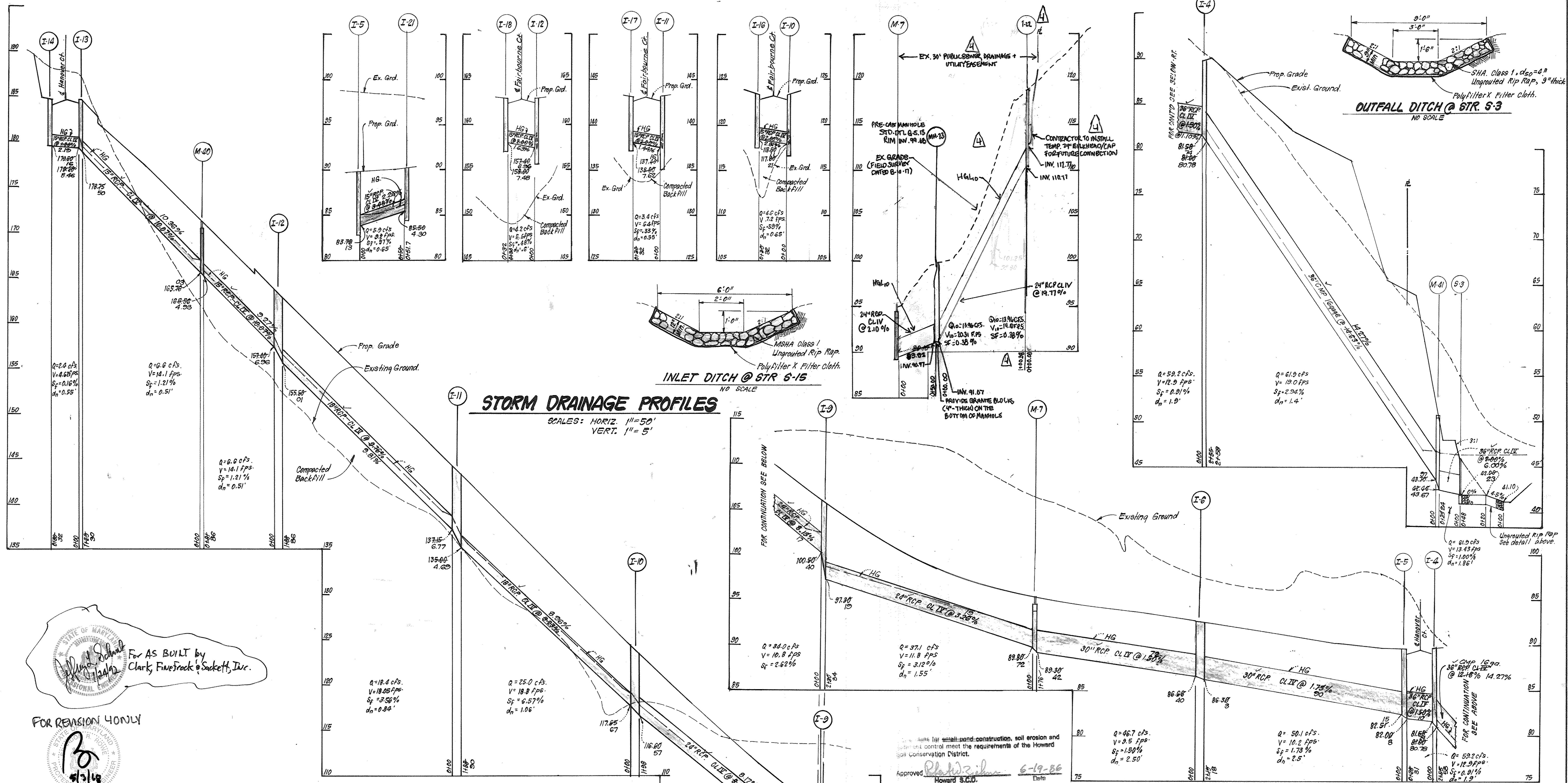
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DRAWN	KW		DRAWING	3 OF 8
CHECKED	E.P.		JOB NO.	84-044
DATE	1-3-86		FILE NO.	84-044-D

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

PROFILE LEGEND
 Prop. Grade Line
 Existing G.B.R.L. (R)
 B.R.L. (L)



F-86-115 AS-BUILT



FOR AS BUILT by
 Clark, Finefrock & Sackett, Inc.

FOR REVISION 4 ONLY

PIPE SCHEDULE

SIZE	TYPE	LENGTH
18"	RCP CL-IV	484 LF
18"	RCP CL-IV	376 LF
24"	RCP CL-IV	488 LF
30"	RCP CL-IV	385 LF
36"	RCP CL-IV	81 LF
15"	CMP 16ga. Bit-Coated	35 LF
36"	CMP 16ga. Bit-Coated	185 LF

STRUCTURE SCHEDULE

No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION UPPER	LOWER	REMARKS	LOCATION
I-4	A-5 Inlet	81.5874	81.0078	89.2824	89.2728	Ho. Co. Std. SD 4.01	See Plan.
I-5	A-5 Inlet	83.7818	82.008	89.7824	89.7728	" " " SD 4.01	" "
I-6	A-10 Inlet	86.2640	86.3873	92.7824	92.627	" " " SD 4.02	" "
I-7	A-5 Inlet w/deflectors	100.5400	97.8019	105.8625	105.4824	" " " SD 4.01 & SD 4.83	" "
I-8	A-10 Inlet w/deflectors	117.2567	116.6057	124.487	123.3647	" " " SD 4.02 & SD 4.83	" "
I-9	A-10 Inlet w/deflectors	131.4015	130.0461	144.1827	143.1128	" " " SD 4.02 & SD 4.83	" "
I-10	A-10 Inlet w/deflectors	155.5001	153.8743	162.5945	162.5945	" " " SD 4.02 & SD 4.83	" "
I-11	A-10 Inlet w/deflectors	178.7550	185.4918	184.3424	184.3424	" " " SD 4.02 & SD 4.83	" "
I-12	A-5 Inlet w/deflectors	179.5016	184.9461	184.3424	184.3424	" " " SD 4.01 & SD 4.83	" "
I-13	A-10 Inlet w/deflectors	118.6011	124.487	123.3647	123.3647	" " " SD 4.02 & SD 4.83	" "
I-14	A-5 Inlet w/deflectors	138.0076	143.6225	143.1127	143.1127	" " " SD 4.01 & SD 4.83	" "
I-15	A-10 Inlet w/deflectors	158.0076	163.673	162.5945	162.5945	" " " SD 4.02 & SD 4.83	" "
M-7	A-10 Inlet	72.8972	85.8020	90.286	90.2720	" " " SD 4.02	" "
M-8	Shallow Precast M.H.	89.8020	89.8020	95.7628	95.7628	" " " G 5.13	" "
M-9	Shallow Precast M.H.	104.2508	89.8020	104.9011	95	" " " G 5.05	" "
M-10	Shallow Precast M.H.	127.8923	127.8923	132.8923	132.8923	" " " G 5.21	" "
M-11	Shallow Precast M.H.	143.1127	110.774	110.774	110.774	" " " D-4.23	" "
M-12	Shallow Precast M.H.	165.2603	165.58	171.88	172.00	" " " G-5.13	" "
M-13	Shallow Precast M.H.	178.755	178.755	184.3424	184.3424	" " " G-5.13	" "

REVISION

NO.	DATE	DESCRIPTION
1	11-24-86	Revised Proposed Grade over I-4 to M-41 & P&E for M-21
2	11-24-86	Revised Type of pipe from I-4 to M-41 & S-15 to M-8
3	11-24-86	Revised Street name to Fairbourne Ct.

Approved: *Howard S.G.O.* 6-19-86
 Howard S.G.O. Date

DEVELOPER'S CERTIFICATE
 I certify that all development and/or construction will be done according to these plans of development, bond construction and erosion and sediment control. 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. I will provide the Howard Soil Conservation District with a red-lined "as built" of the pond within 30 days of completion.

Signature of Developer: *[Signature]* Date: 6-19-86

ENGINEER'S CERTIFICATE
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Signature of Engineer: *[Signature]* Date: 6-19-86

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Division of Engineering: *[Signature]* Date: 6-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Chief, Division of Land Development & Zoning Administration: *[Signature]* Date: 6-20-86

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CANBURY WOODS
 SECTION 1 AREA 1
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

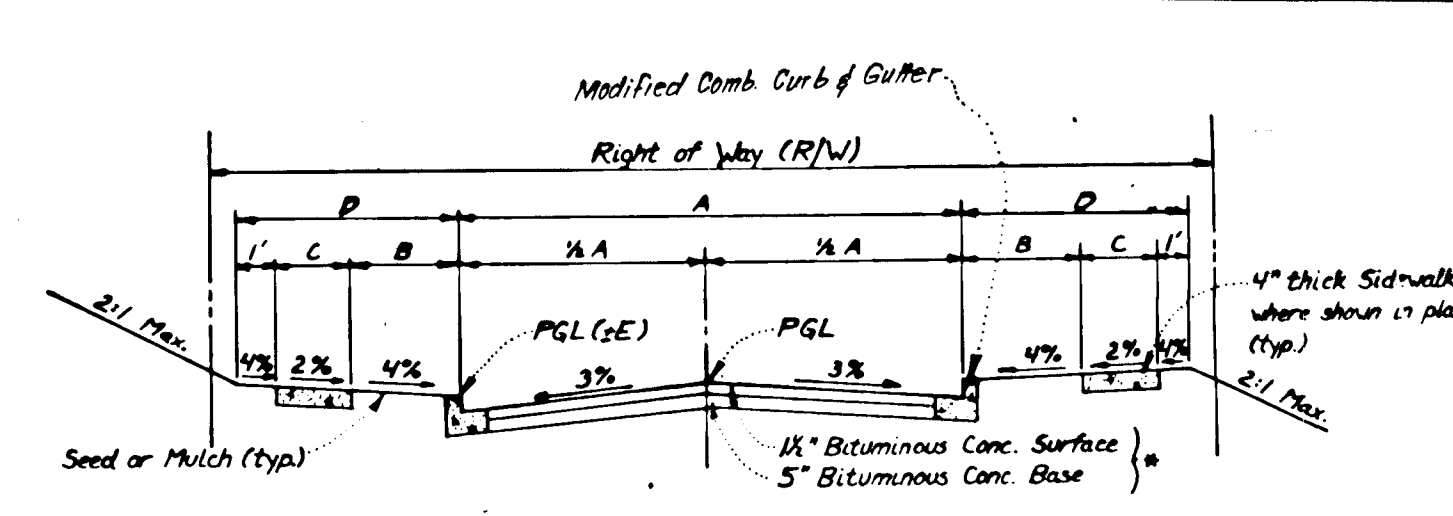
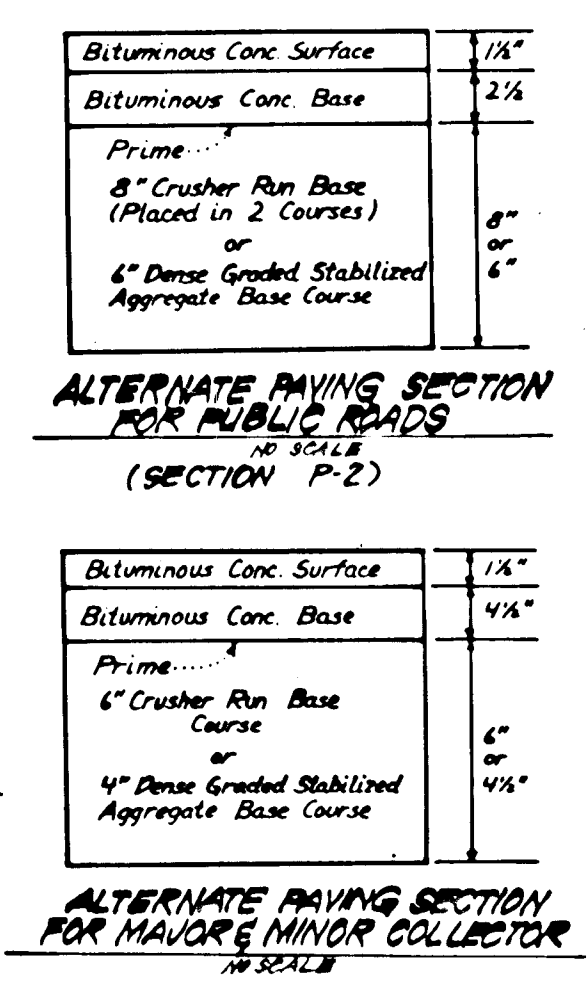
DESIGNED: EP
 DRAWN: KIW
 CHECKED: E.P.
 DATE: 1-3-86

SCALE: HOR. 1"=50'
 VERT. 1"=5'
 DRAWING: 4 OF 8
 JOB NO.: 84-044
 FILE NO.: 84-044-D

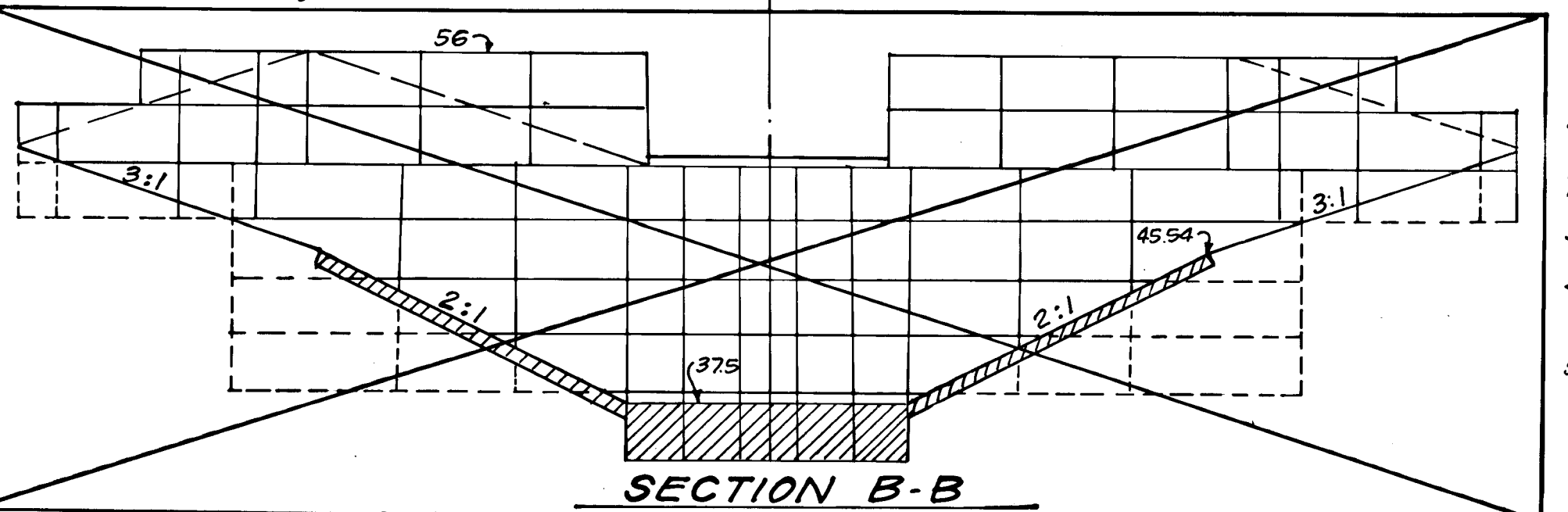
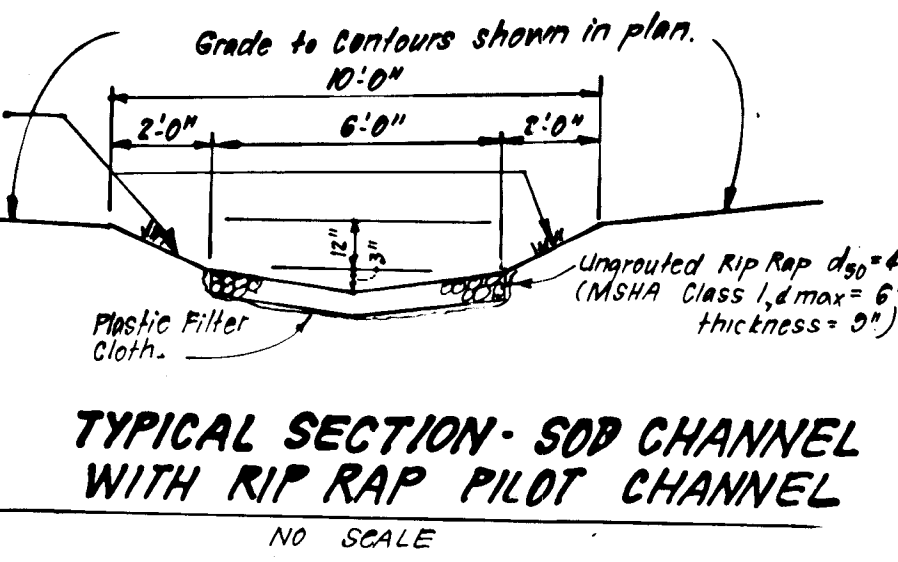
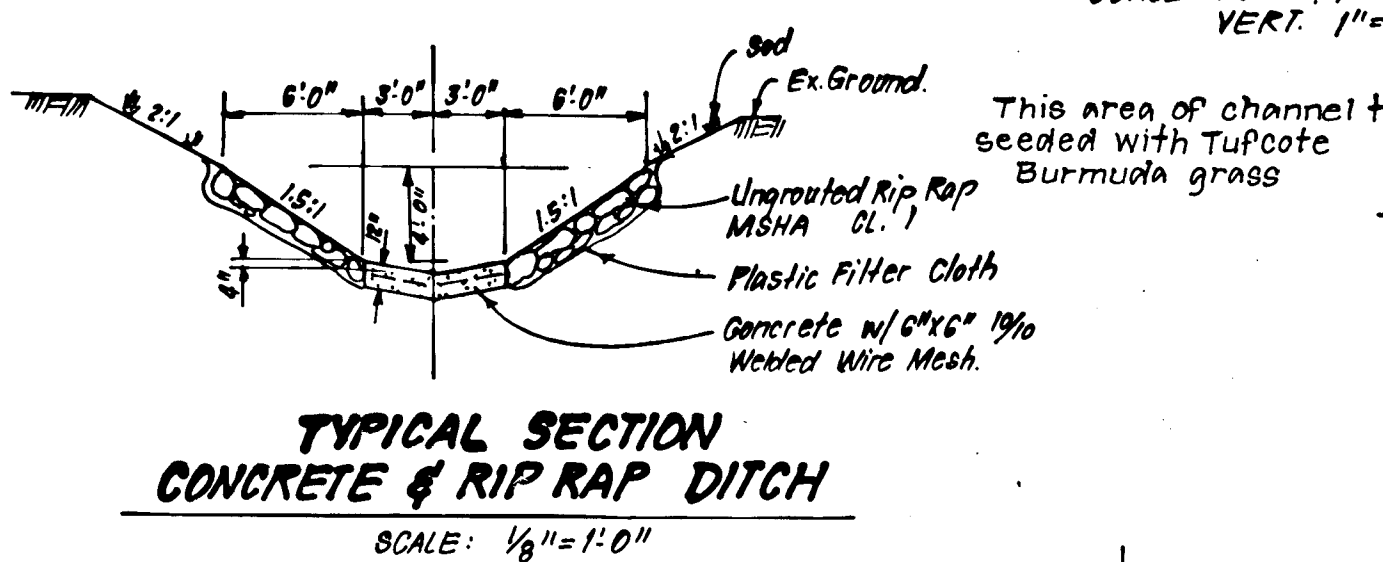
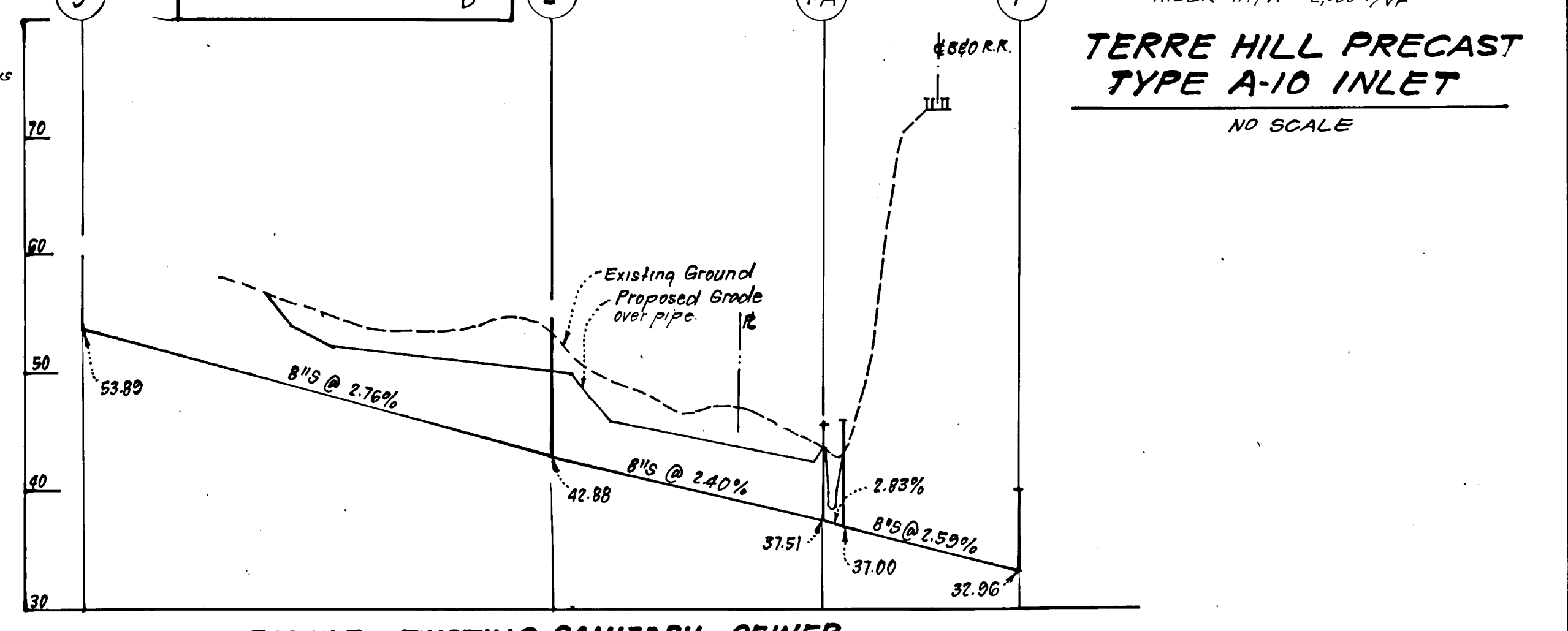
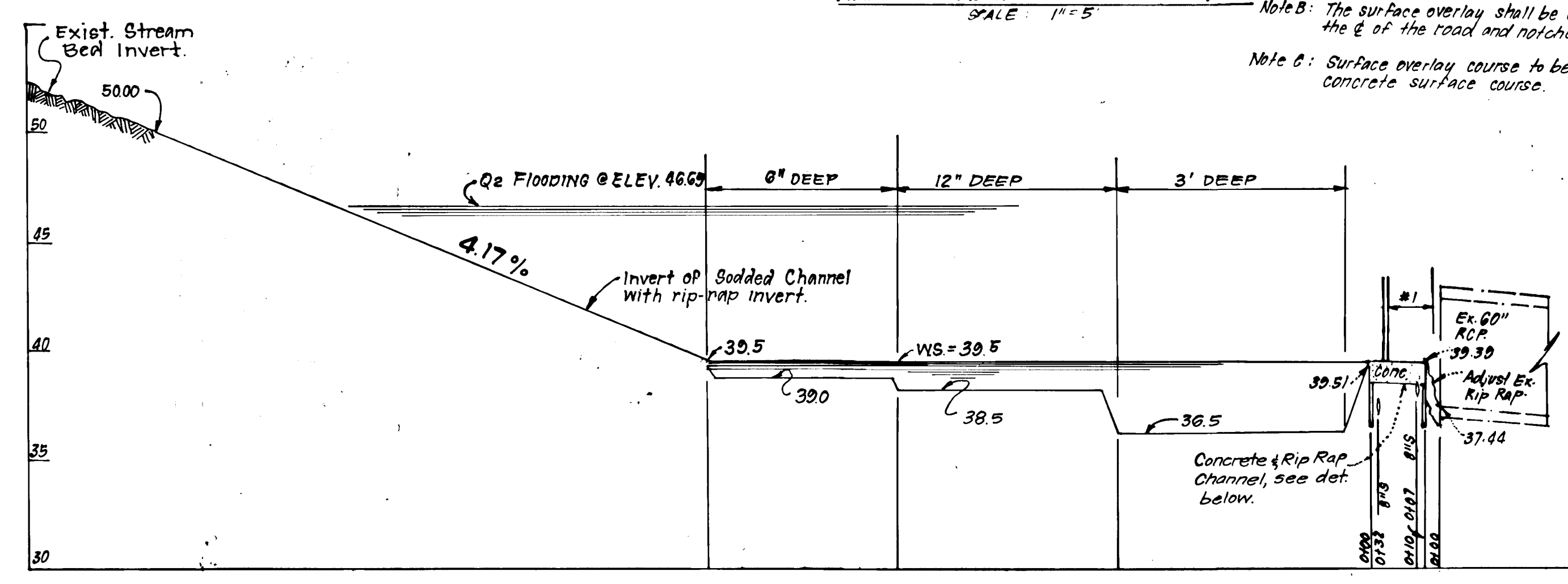
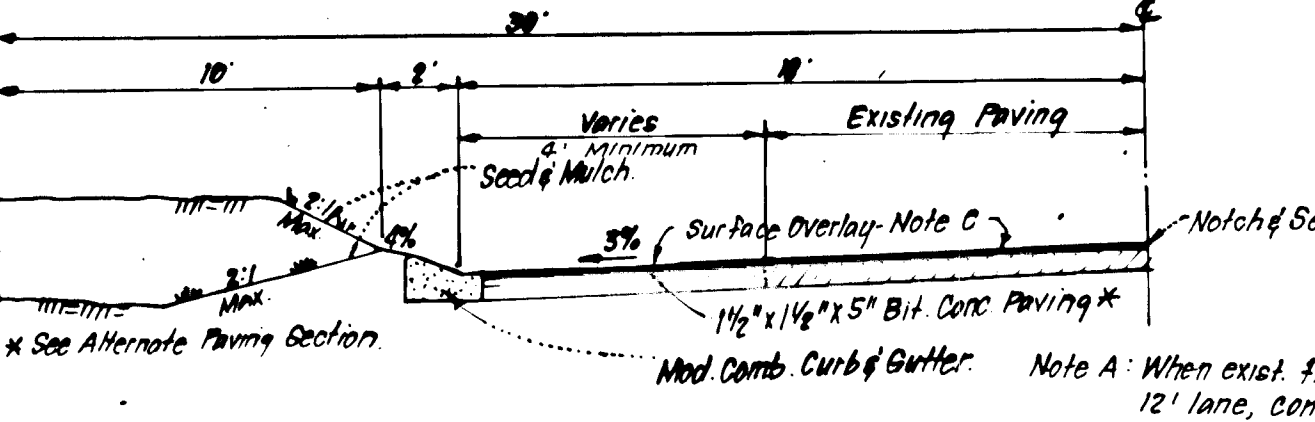
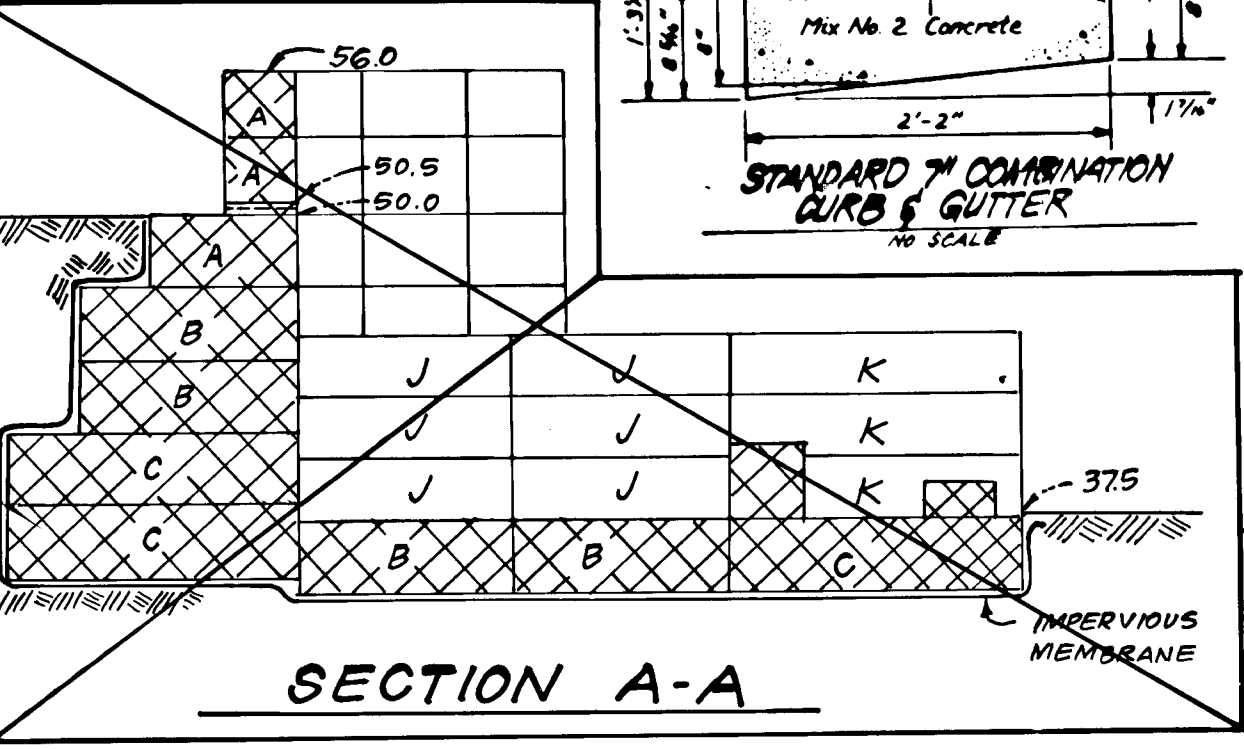
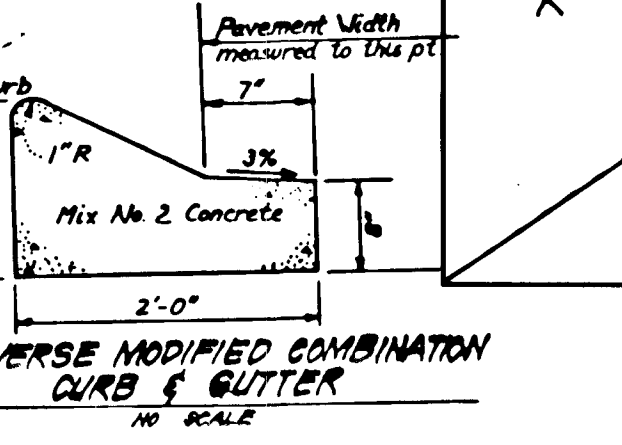
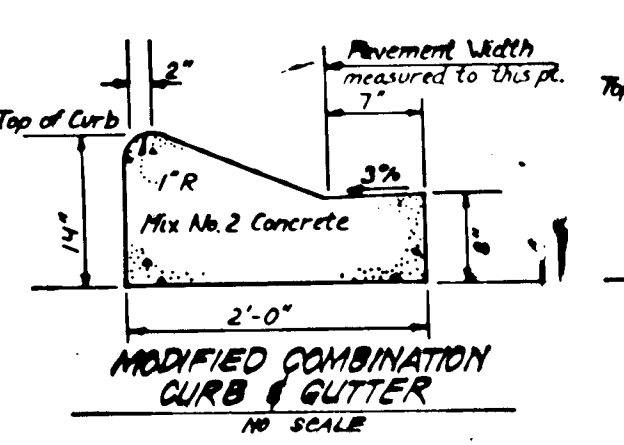
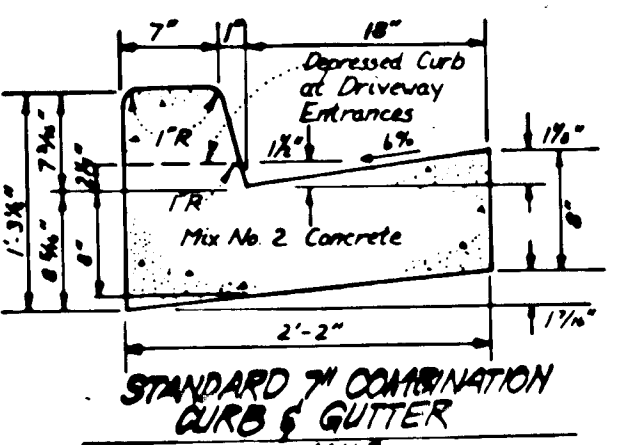
FOR: BRANTLY DEVELOPMENT CORP
 5501 TWIN KNOLLS ROAD
 COLUMBIA, MD. 21045

SOIL BORING DESCRIPTIONS

BORING #	SOIL DESCRIPTION	DEPTH (ft)	BORING & SAMPLING NOTES
#6	Brown, moist, loose to medium dense, sandy CLAY with trace of fine to medium gravel	11"	Topsoil at surface
	(CL)	4.0	Water encountered at 4.0'
#7	Brown, red, moist, very dense, fine to coarse clayey SAND and GRAVEL with trace of clay (SC)	6.5	Hand auger refusal at 6.0'
	(SC)	1.5	4" Topsoil at surface
#8	Brown, moist, loose clayey silty SAND with trace of gravel (SC)	5.5	No water encountered
	Red, brown, moist, medium dense to very dense, fine to coarse clayey SAND with some fine to medium gravel (SP-SC)	2.0	Hand auger refusal at 5.5'
#9	Brown, moist, very soft SILT with trace of root mat (SM)	4.0	Water encountered at 7.5'
	Multi-colored, moist, very stiff SILT (CL)	20.0	*Water at 16.0' Caved at 16.0'
#10	Brown, black, moist, very loose micaceous silty SAND (SM)	2.0	Water encountered at 5.5'
	Brown, moist, very stiff sandy SILT with trace of gravel (sandy LOAM) (SM)	6.5	
#11	Brown, red, moist, very stiff silty CLAY (ML)	11.5	
	Gray, moist, hard micaceous SILT with trace of sand (ML)	20.0	BOTTOM OF TEST HOLE @ 20.0'
#12	Brown, moist, loose, fine to medium silty SAND and GRAVEL with trace of rootmat (SAND) (SC)	6.5	Water encountered at 5.0'
	Multi-colored, moist, very stiff SILT with trace of sand (SICL)	16.5	
#13	Gray, moist, hard clayey SILT (SICL)	20.0	*Caved at 15.0' Wet BOTTOM OF TEST HOLE @ 20.0'
	Brown, moist, fine to medium, loose silty SAND with trace of fine to medium gravel	15	6" Topsoil at surface
#14	Multi-colored, moist, very stiff CLAY (CL)	30.0	No water encountered
	(silty clay LOAM) (CL)	10.0'	*Caved at Dry
#15	Brown, moist, medium dense, fine to coarse, loose sandy CLAY with fine to medium gravel (LOAM) (SC)	4.0	No water encountered
	Red, gray, moist, hard CLAY (CL)	6.5	Hand auger refusal at 5.0'
#16	Red, gray, moist, hard CLAY (CL)	6.5	Offset 3 attempts
		6.5	Encountered auger refusal at 5.0'



*STREET NAME & STATION	TYPE OF TRAFFIC	A	B	C	D	R/W	ZONING	DESIGN SPEED	E
Fairbourne Ct. 0+00 to 15+25.85	LOCAL	30'	4'	4'	9'	50'	R-12	30 mph	35
Fairbourne Ct. 15+25.85 to 22+26.53	CUL-DE-SAC	28'	4'	4'	9'	50'	R-12	30 mph	30
Bakers Place 0+00 to 8+68	LOCAL	30'	4'	4'	9'	50'	R-12	30 mph	35

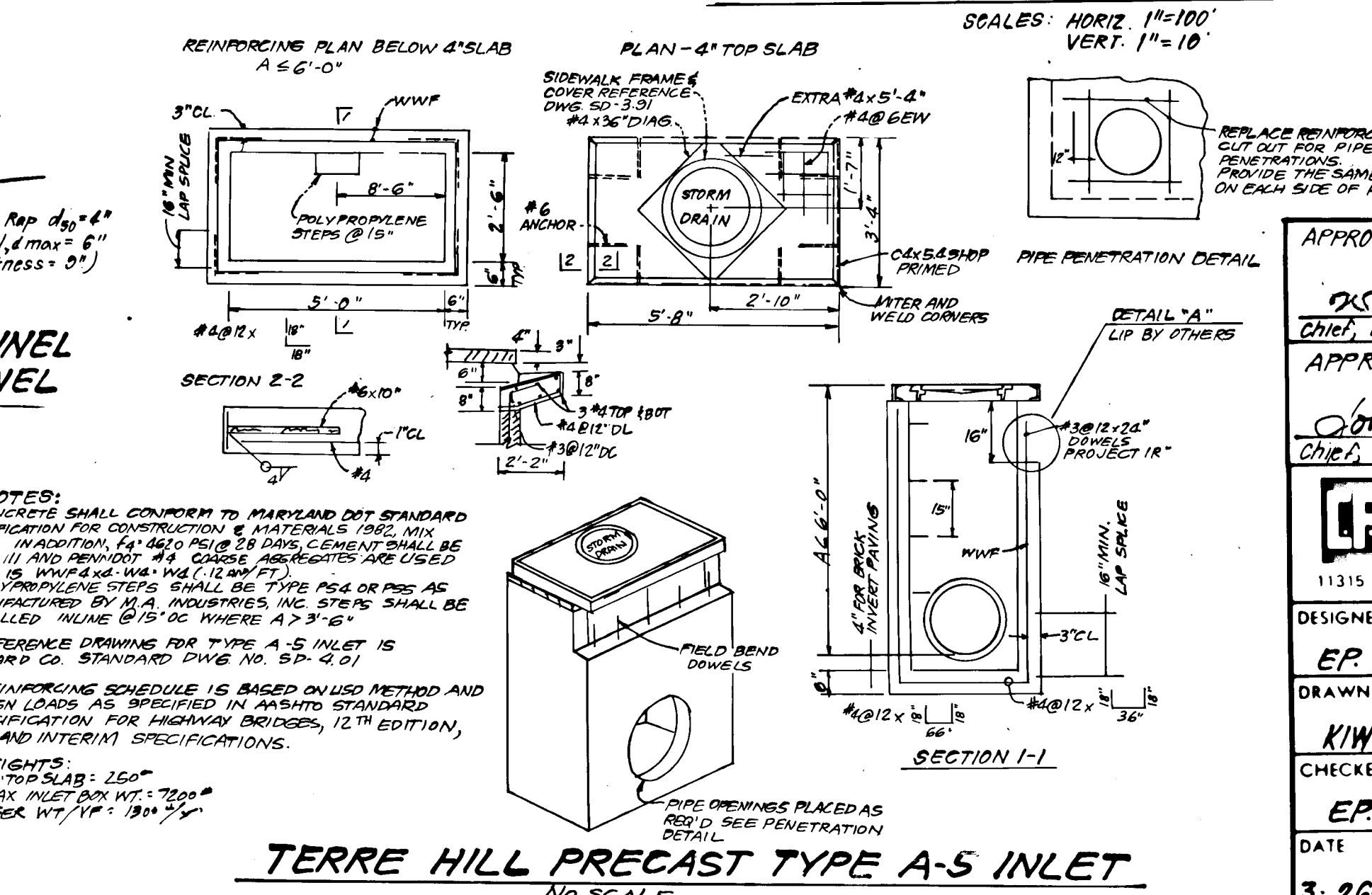
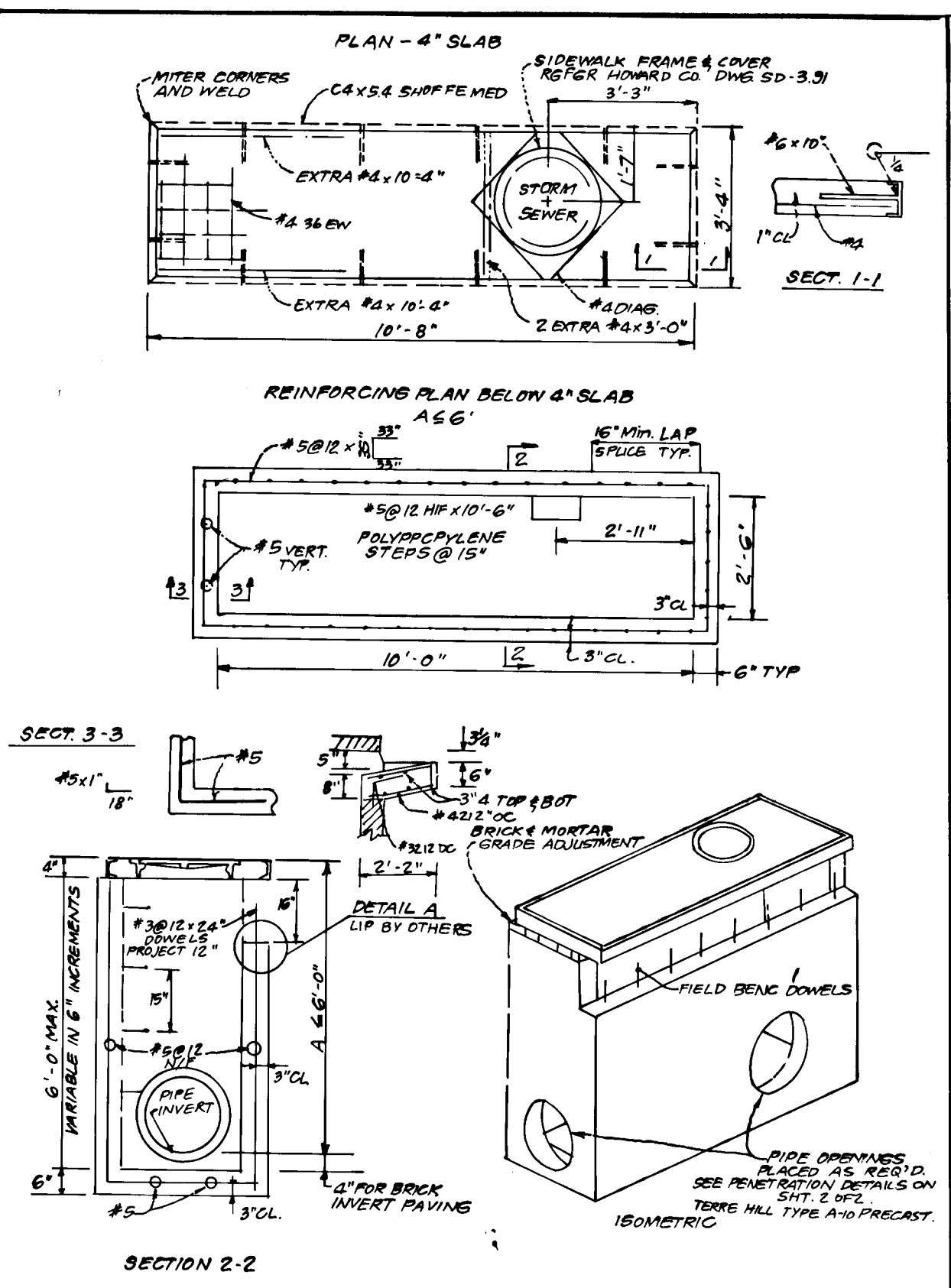
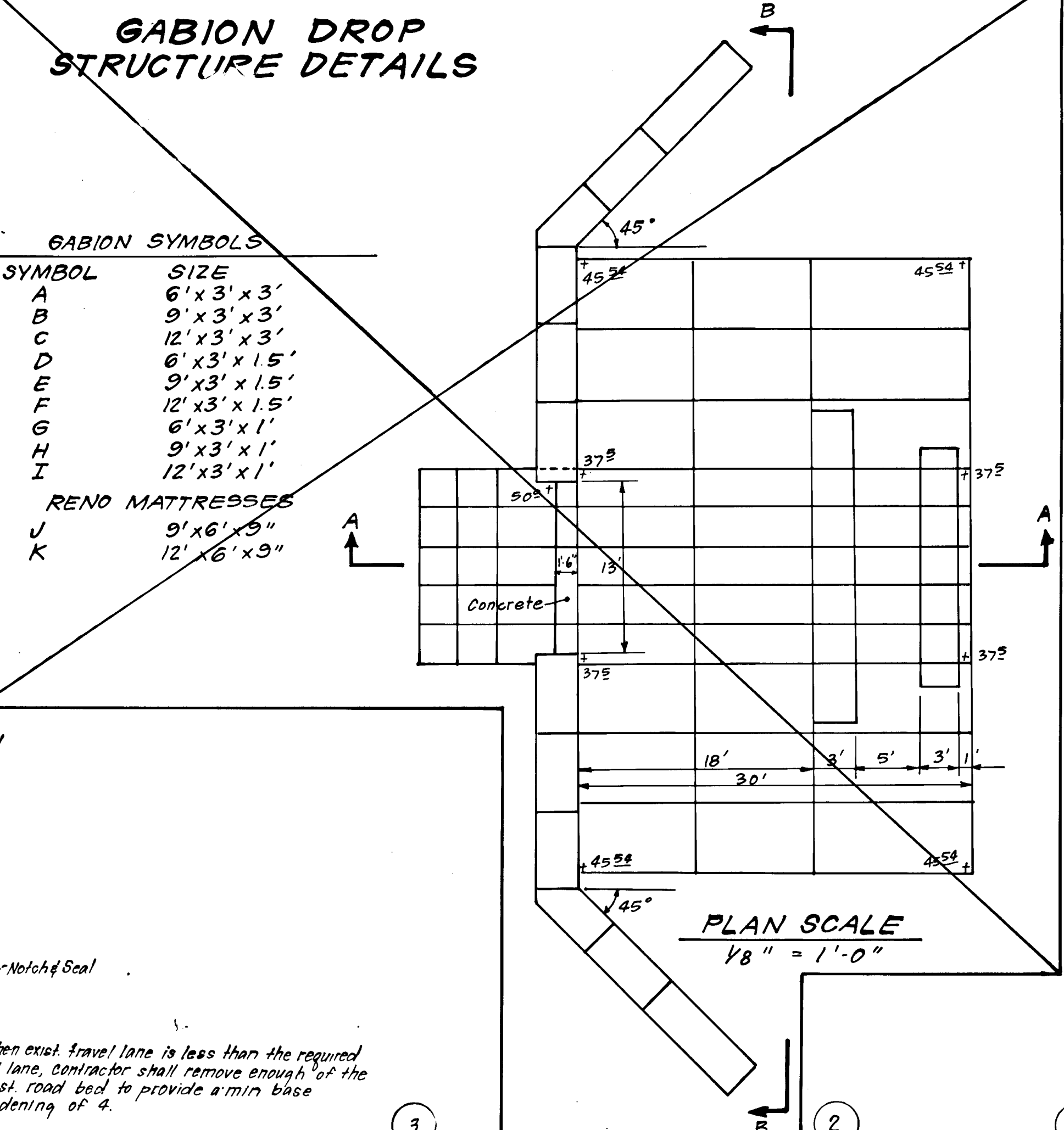


GABION SYMBOLS

SYMBOL	SIZE
A	6' x 3' x 3'
B	9' x 3' x 3'
C	12' x 3' x 3'
D	6' x 3' x 1.5'
E	9' x 3' x 1.5'
F	12' x 3' x 1.5'
G	6' x 3' x 1'
H	9' x 3' x 1'
I	12' x 3' x 1'
J	9' x 6' x 5"
K	12' x 6' x 9"

RENO MATRESSES

SYMBOL	SIZE
J	9' x 6' x 5"
K	12' x 6' x 9"



NOTES:

- CONCRETE SHALL CONFORM TO MARYLAND DOT STANDARD SPECIFICATION FOR CONSTRUCTION & MATERIALS 1982, MIX NO. 6. IN ADDITION, FC=4500 PSI @ 28 DAYS. CEMENT SHALL BE TYPE III AND PORTLAND CEMENT ADMIXTURE SHALL BE USED.
- POLYPROPYLENE STEPS SHALL BE TYPE PS 4 OR PS 5 AS MANUFACTURED BY M.A. INDUSTRIES, INC. STEPS SHALL BE INSTALLED IN LINE WHERE AT 3'-6".
- REFERENCE DRAWINGS FOR TYPE A-10 INLET IS HOWARD COUNTY STANDARD DRAWING NO. SD-4.02.
- REINFORCING SCHEDULE IS BASED ON USD METHOD AND DESIGN LOADS AS SPECIFIED IN AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, 12TH EDITION, 1977 AND INTERIM SPECIFICATIONS.
- WEIGHTS:
 - 4" TOP SLAB WT. = 2,000
 - MAX. INLET BOX WT. = 24,000 (10' HEIGHT, 10')
 - RISER WT/VF = 2,000 #/VF

NO.	REVISION	DATE
4	Rev'd Stormwater Management Profile to eliminate Gabion	10-21-87
3	Added Stormwater Management profile & Gabion Detail	8-20-87
2	Revised Street name to Fairbourne Court	11-20-86
1	Added TH Precast A-5/A-10 Inlet Details	10-8-86

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

CLARK • FINEFROCK & SACKETT
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11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-1400

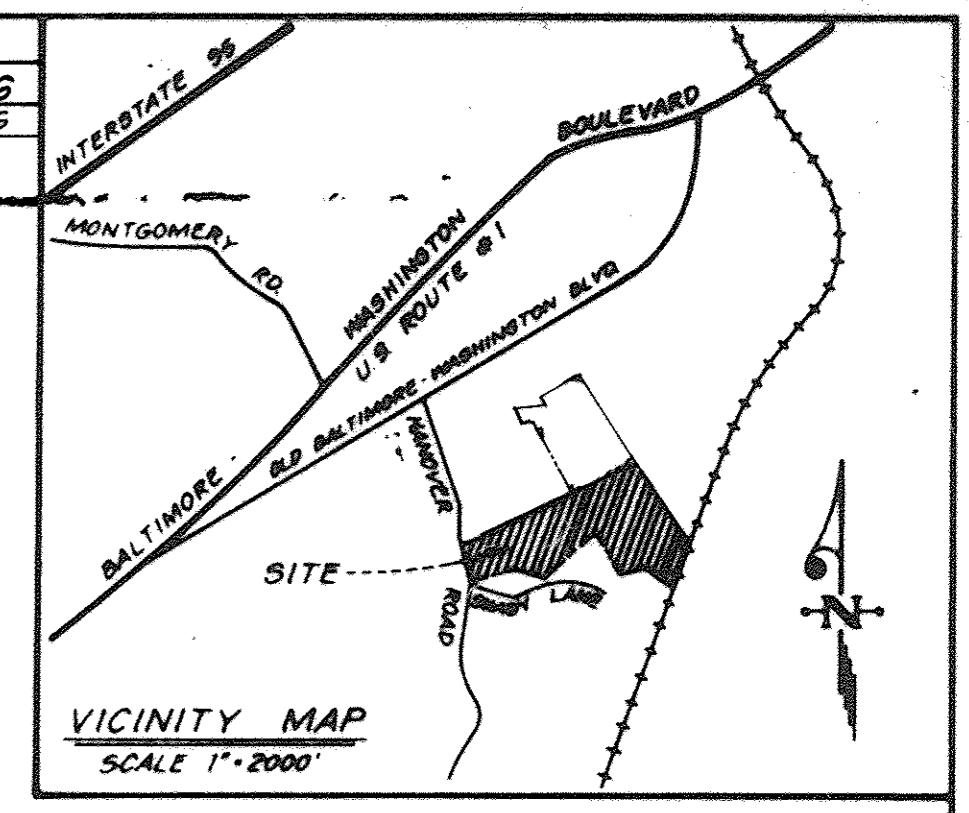
DESIGNED: EP
DRAWN: K/W
CHECKED: EP
DATE: 3-26-86

SCALE: AS SHOWN
DRAWING: 5 OF 8
JOB NO.: 84-044
FILE NO.: 84-044-D

CANBURY WOODS
SECTION 1 AREA 1
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: BRANTLY DEVELOPMENT CORP
5501 TWIN KNOTS ROAD
COLUMBIA, MD 21045

NO.	REVISION	DATE
1	Revised Section Elevations	6-30-86
2	Revised Street name to Fairbourne Court	11-24-86
3	Revised Pipe Sizes, Slopes + Added Manhole From Ex. M. 7 to 1-22 + CHANGED 1-22 to Double Type S Inlet	11-4-86



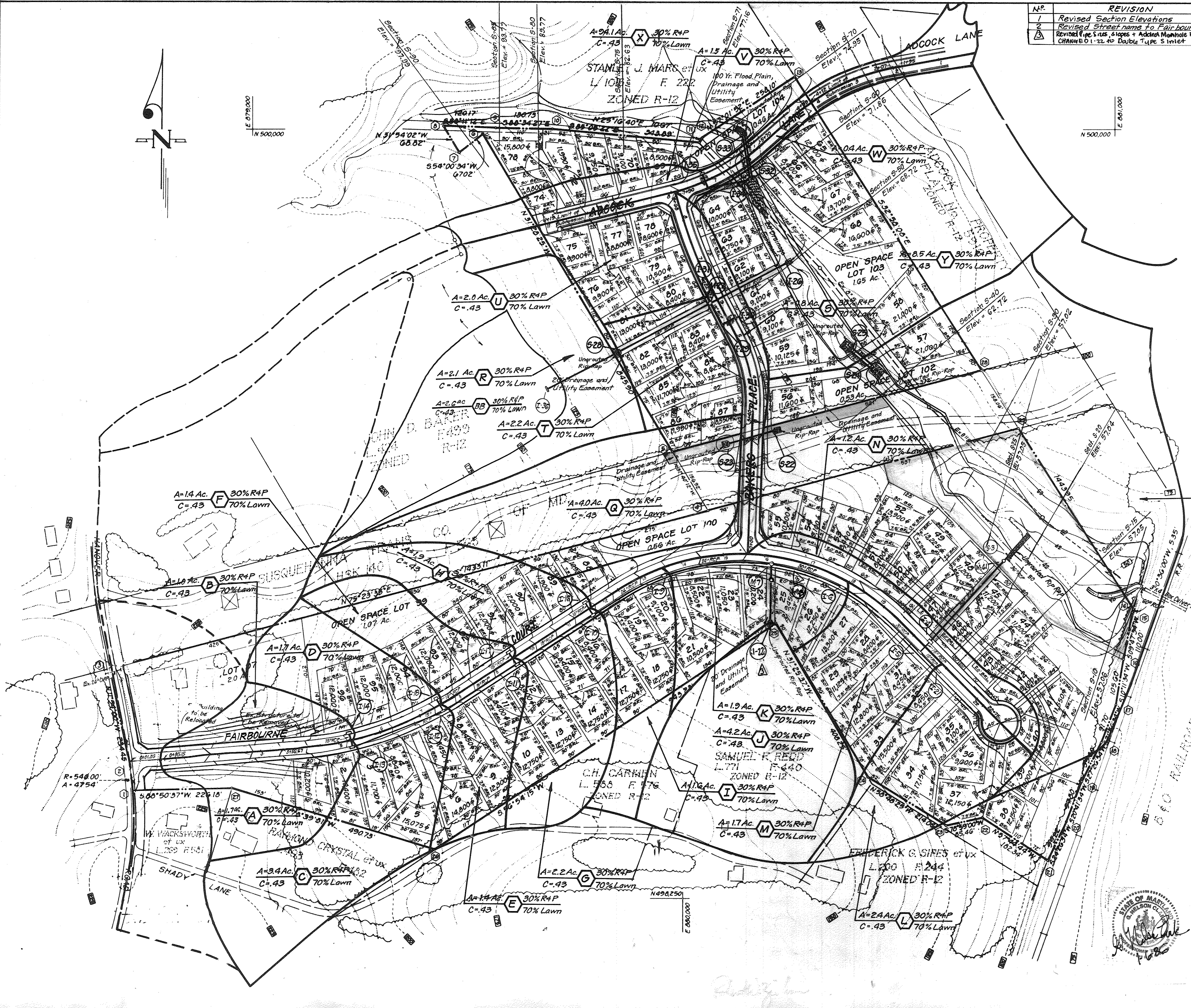
LEGEND

Contour Interval	5 Ft.
Existing Contour	---
Building Restriction Line	B.R.L.
Proposed Storm Drain	— 15" RCP
100 Year Flood Plain Elevation	74.6'

FOR REVISION 3 ONLY



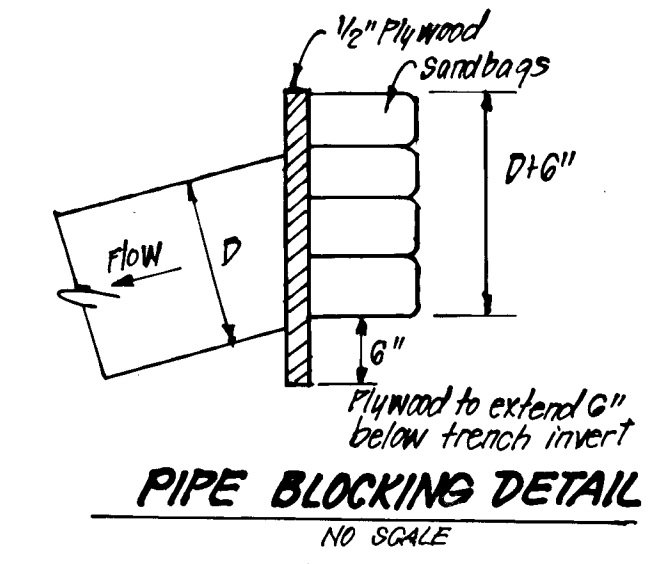
DRAINAGE AREA NOTE
 THE EXISTING DRAINAGE AREA TO INLET 1-22 (FORMERLY S-15) INDICATE A 10-YEAR FLOW OF 14 TO CFS. WITH THE IMPLEMENTATION OF BIODEGRADATION FACILITIES (SEWAGE PLANT 1800) TO CDM TREATMENTS AND DRAINAGE AREAS, THE PROPOSED DRAINAGE AREA TO INLET 1-22 INDICATE A 10-YEAR FLOW OF 12.45 CFS.



APPROVED: DEPARTMENT OF PUBLIC WORKS		
<i>John W. Muschman</i>		6-30-86
Chief, Bureau of Engineering		
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		
<i>John W. Muschman</i>		6-20-86
Chief, Division of Land Development & Zoning Administration		
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS		
11315 LOKWOOD DR. VE SILVER SPRING, MARYLAND 20904 (301) 583-1400		
DESIGNED	ROAD CONSTRUCTION PLANS DRAINAGE AREA MAP	SCALE 1" = 100'
DRAWN	CANBURY WOODS	DRAWING 6008
CHECKED	SECTION 1 AREA 1	JOB NO. 84-044
E.P.	1st ELECTION DISTRICT	FILE NO. 84-044-D
DATE	FOR BRANTLY DEVELOPMENT CORP 5901 Twin Knolls Road Columbia, Maryland 21045	AS-BUILT F-86-115

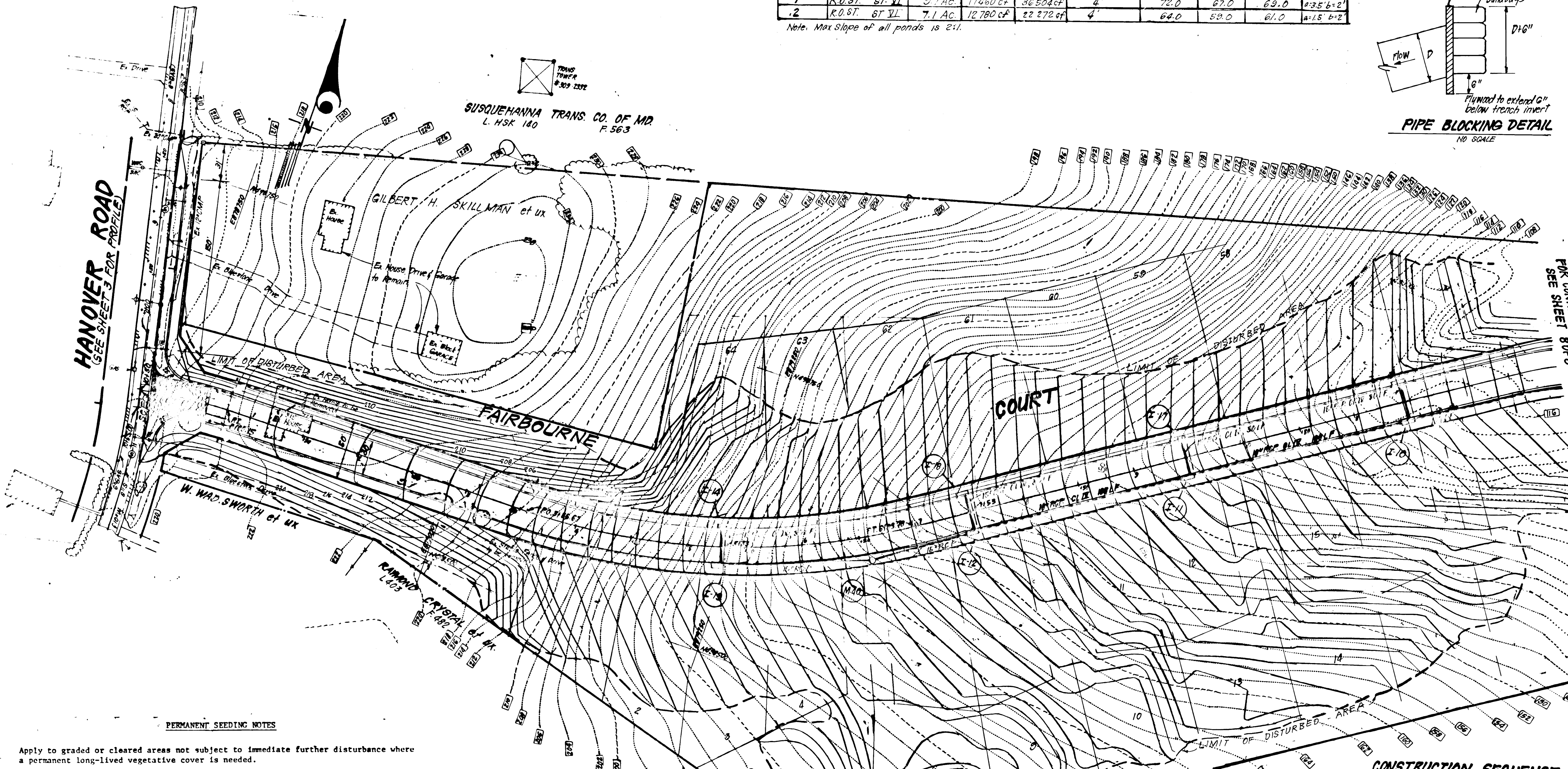
SEDIMENT TRAP TABLE									
TRAP No.	TYPE OF TRAP	DRAINAGE AREA	STORAGE REQUIRED	STORAGE PROVIDED	STORAGE DEFICIT BELOW OUTLET	TOP CREST ELEV.	BOTTOM ELEV.	CLEANOUT ELEV.	OUTLET LENGTH
1	R.O. ST. ST. VI	2.7 AC.	11,460 CF	36,504 CF	4'	72.0	67.0	69.0	13.5' x 2'
2	R.O. ST. ST. VI	7.1 AC.	12,780 CF	22,272 CF	4'	64.0	59.0	61.0	11.5' x 2'

Note: Max Slope of all ponds is 2:1.



- SEDIMENT CONTROL NOTES**
- 1) 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)
 - 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	25.9 Acres
Area to be roofed or paved	10.88 Acres
Area to be vegetatively stabilized	15.1 Acres
Total Cut	34000 Cu. yds
Total Fill	31000 Cu. yds
Offsite waste/borrow area location	N/A
 - 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 control must be provided, if deemed necessary by the Howard County DPM 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.
 - 11) If houses are to be constructed on an "As-Sold" basis, at random, single lot Sediment Control as shown below shall be implemented. N/A
 - 12) All pipes to be blocked at the end of each day (see detail above).
 - 13) The total amount of straw bale dikes/silt fence equals 1740' L.F.



Apply to graded or cleared areas not subject to immediate further disturbance 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.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square 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).
- 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 50 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) of 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 higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeds.

TEMPORARY SEEDING NOTES

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

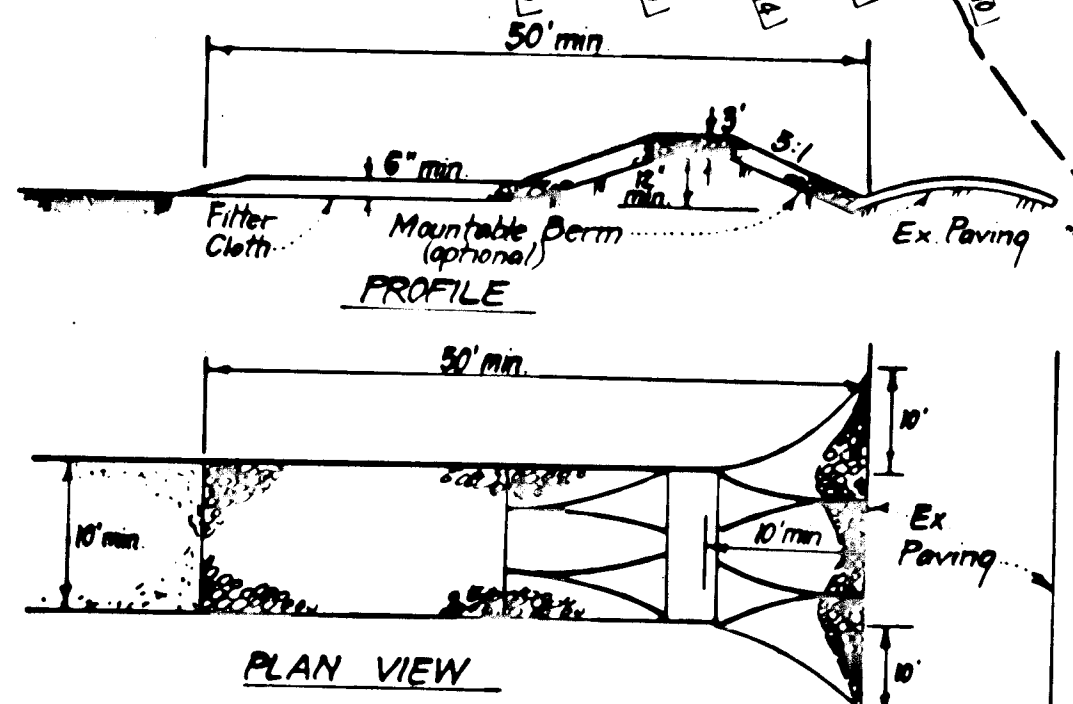
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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.



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, be conditionally cleaned and repair and/or cleanout of any measures used to trap sediment. All sediment applied, drained, 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.

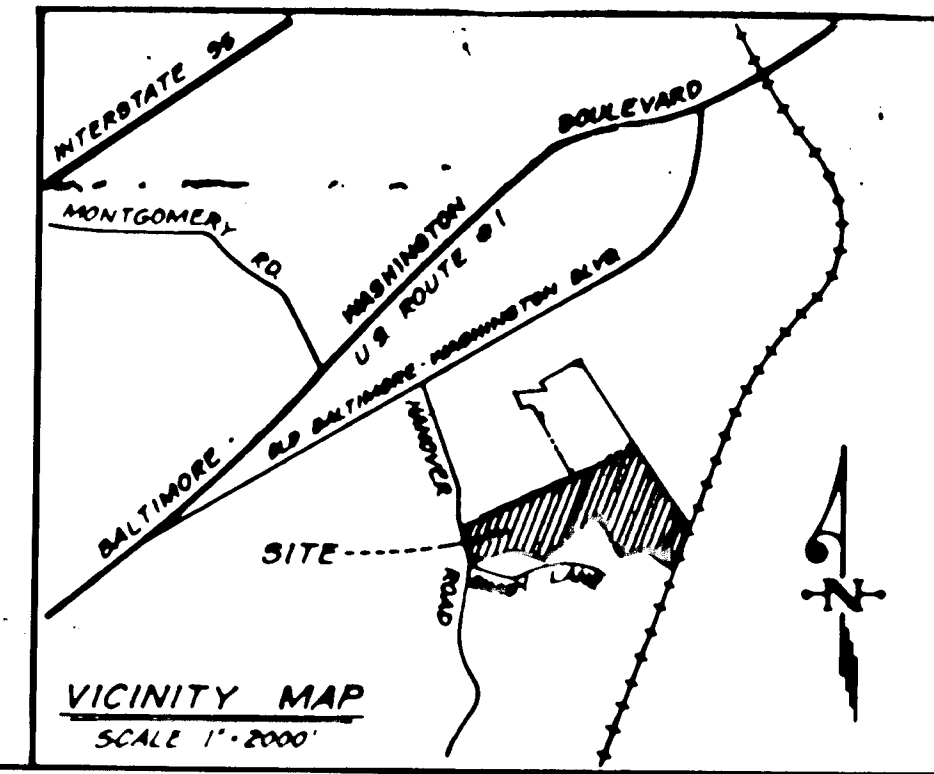
STABILIZED CONSTRUCTION ENTRANCE (SCE)

LEGEND:

1. Existing Contour
2. Proposed Contour
3. Earth Dike
4. Straw Bale Dike or Silt Fence
5. Stabilized Construction Entrance

CONSTRUCTION SEQUENCE:

1. Obtain Grading Permit.
 2. Install sediment control devices outside areas to be graded.
 3. Clear & Grub Site, excluding SWM area.
 4. Rough Grade Site, excluding SWM area grading.
 5. Install storm drain systems and temporarily divert to Sediment Traps where shown.
 6. Install curb & gutter, sidewalks and paving.
 7. Stabilize all disturbed areas.
 8. Remove Trap # 2 then Clear and grub SWM area.
 9. Rough grade SWM area.
 10. Stabilize SWM area.
 11. Flush storm drain system to remove any accumulated sediment.
 12. Remove the sediment control devices.
 13. Restore areas that were under sediment control devices to original grades and stabilize with vegetative measures.
- * All controls shown on GP-86-39 must be in place prior to any grading.



DEVELOPER'S/BUILDER'S CERTIFICATE

"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 Dept. 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] 1-16-86
Date

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] 1-16-86
Date

Reviewed for Howard County, S.C.D. Name: *[Signature]* Date: 6-19-86
Signature: *[Signature]* Date: 6-19-86
U.S. Soil Conservation Service

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

[Signature] 6-19-86
Approved Date

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 6-20-86
Chief, Bureau of Engineering

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] 6-20-86
Chief, Division of Land Development & Zoning Administration

CLARK • FINEROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
13315 LINDWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 583-3400

DESIGNED EP	ROAD CONSTRUCTION PLANS	SCALE 1"=50'
DRAWN K/W LA	SEDIMENT & EROSION CONTROL PLAN	DRAWINGS 7 OF 8
CHECKED EP	CANBURY WOODS	JOB NO 04-044
DATE 1-3-86	SECTION 1 AREA 1	FILE NO. AS-BUILT 84-044-D
	1st ELECTION DISTRICT	
	HOWARD COUNTY, MARYLAND	
	FOR DRANTLY DEVELOPMENT CORP	
	5901 Twin Knolls Road	
	Columbia, Maryland 21045	

1222

REVISED AS-BUILT
FOR SWM POND
10-5-82

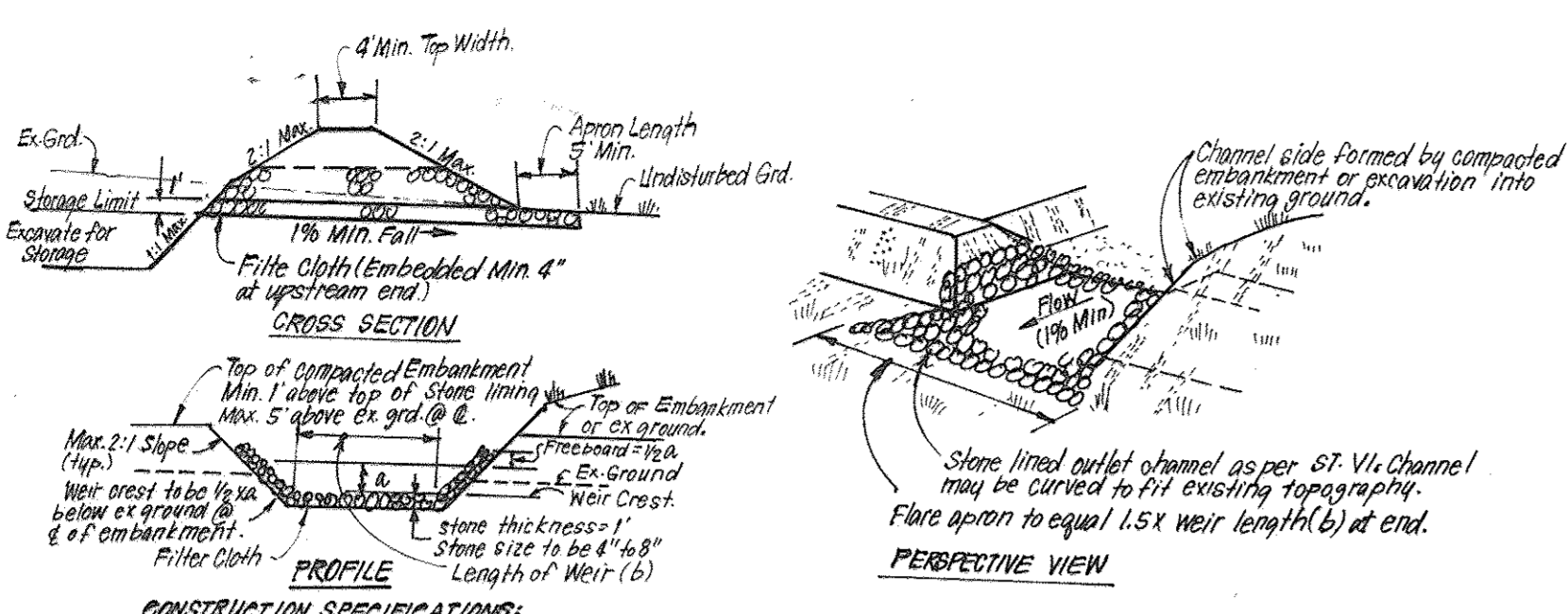
Note: Area below Trap #2 to remain undisturbed until area above Trap #2 is stabilized and Trap #2 is removed. See construction sequence.

CONSTRUCTION SPECIFICATIONS FOR EARTH DIKE

- All dikes shall be constructed by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
- Final location should be adjusted as needed to utilize a stabilized safe outlet.
- Earth dikes shall have an outlet that functions with a min. of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
- Stabilization shall be: (A) in accordance with standard specs for seed and straw/mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

TYPE OF TREATMENT	CHANNEL GRADE	FLOW CHANNEL STABILIZATION	
		DIKE A	DIKE B
1	0.5 - 3.0%	Seed & Straw Mulch	Seed/Straw Mulch
2	3.1 - 5.0%	Seed & Straw Mulch	Seed/Straw Mulch
3	5.1 - 8.0%	Seed/White or Oak, 2" Stone	Seed/White or Excelsior, 2" Stone
4	8.1 - 20.0%	Limed Rap Rap, 4" Stone	Engineering Design

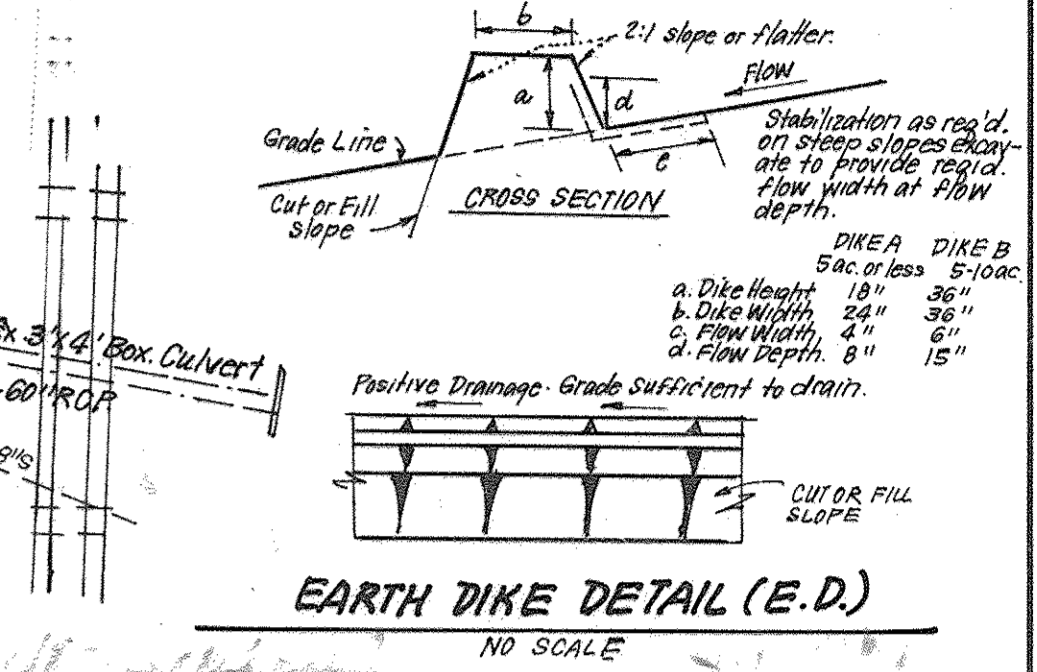
AS-100 to be 2" Stone, or recycled conc. equiv. in a layer at least 3" thick and be pressed into soil with construction equipment.
B. Rap Rap to be 4" in the layer of flow of dike, pressed into soil.
C. Approved equivalents can be substituted for any of the above materials.
7. Periodic inspection & Required Maintenance must be provided after each rain.



CONSTRUCTION SPECIFICATIONS:

- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil shall be compacted.
- The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
- All cut and fill slopes shall be 2:1 or flatter.
- The stone used in the outlet shall be small rip rap 4" to 6" in size with a thickness of 2" appropriate placed on the up-drain side on the small rip rap or crushed filter cloth in the rip rap.
- Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

RIP RAP OUTLET SEDIMENT TRAP (R.O.S.T.) DETAIL
NO SCALE



EARTH DIKE DETAIL (E.D.)
NO SCALE

For Revision 30 ONLY

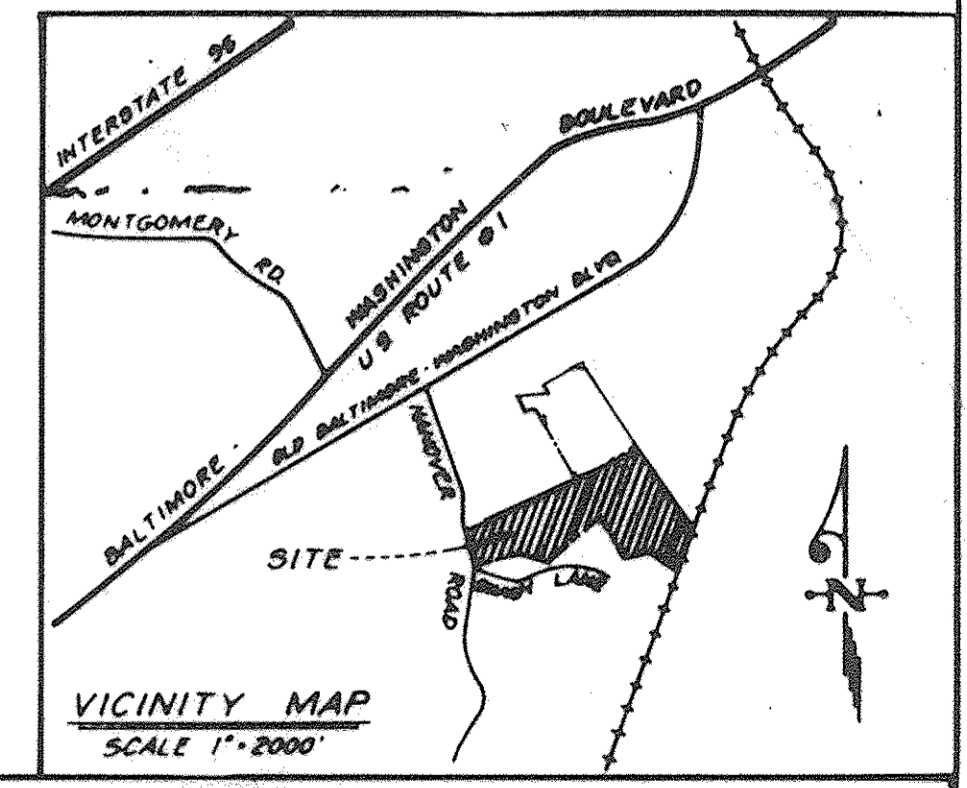


For Revised AS-BUILT by Clark, Finck & Sackett, Inc.

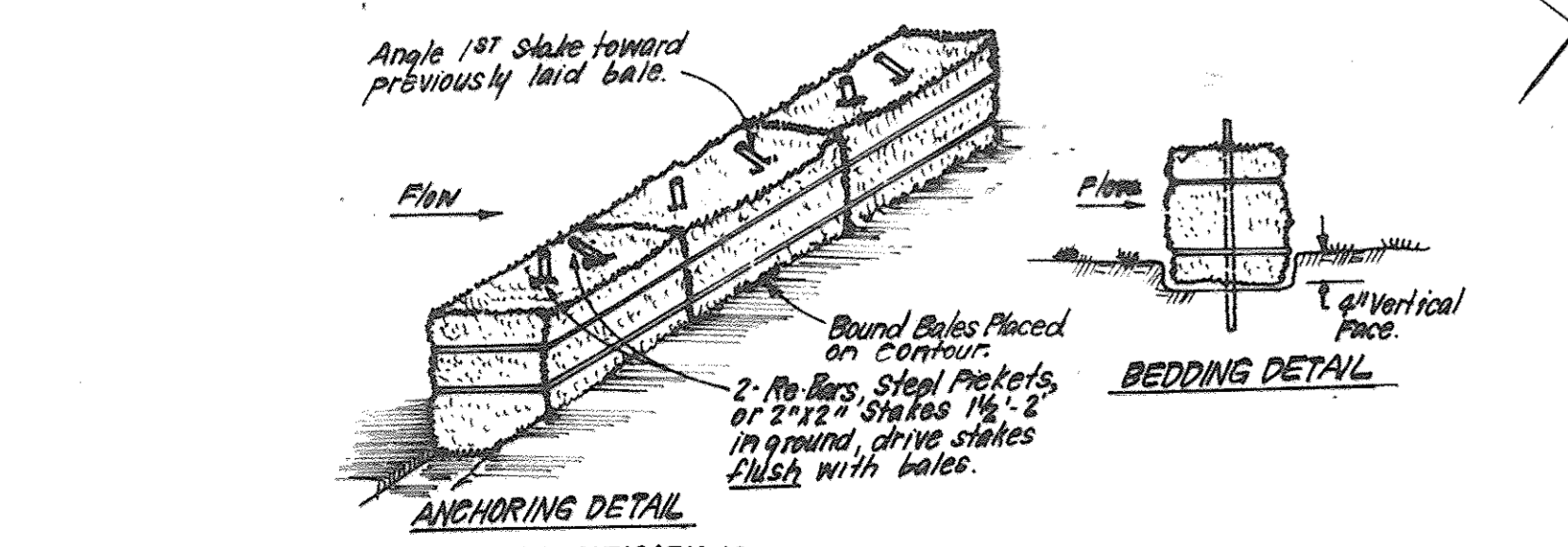
DEVELOPER'S/BUILDER'S CERTIFICATE

"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 Dept. 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."

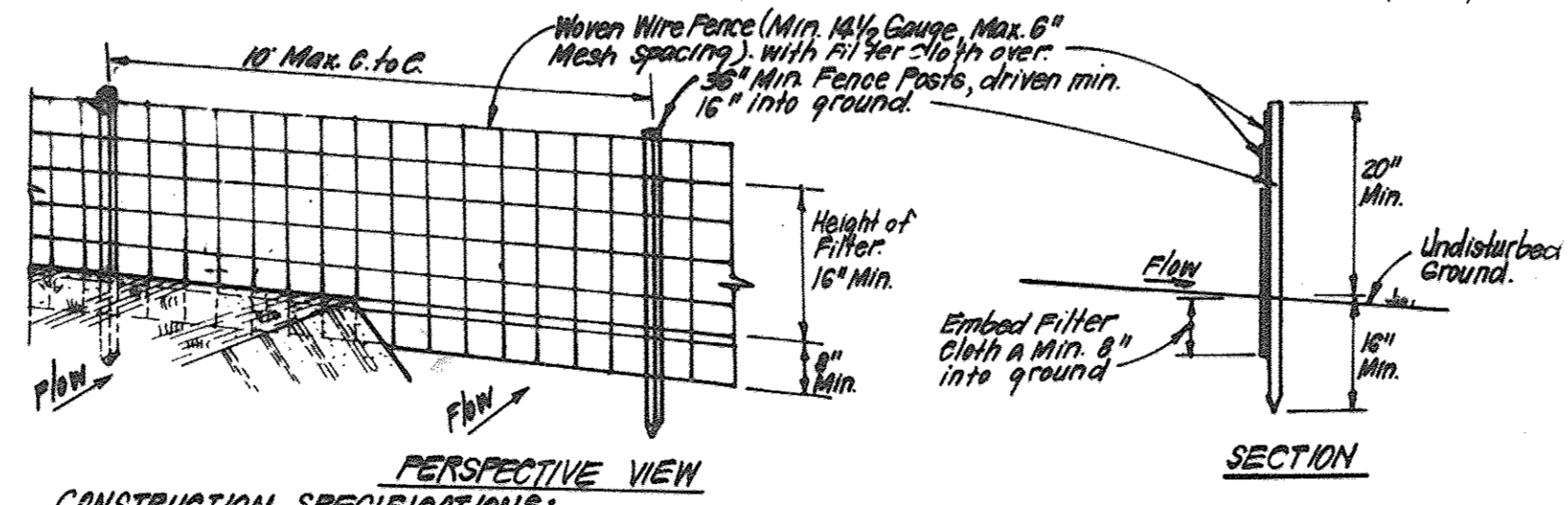
Signature of Developer/Builder: _____ Date: 1-16-86



VICINITY MAP
SCALE 1" = 2000'



STRAW BALE DIKE DETAIL (SBD)
NO SCALE



SILT FENCE DETAIL (S)
NO SCALE

CONSTRUCTION SPECIFICATIONS:

- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
- When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and fastened.
- Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.

POSTS: Steel either T or U Type or 2" Hardwood
FENCE: Woven Wire, 1 1/2" Gauge, 6" Max. Mesh Opening
FILTER CLOTH: Filter Cloth, Miraflex, Miraflex Max, Stabilink, T140N or Approved equiv.
PREFABRICATED UNITS: Geotextiles, Environment, or Approved equiv.

NO.	REVISION	DATE
1	CHANGED S45 TO 1-2 (DOUBLE TYPES IN USE) + ADDED MH-23	4-4-82
2	Revised Street name to Fairbourne Court	11-22-82
3	Revised Grading in South side of Storm Water Mgmt. Area.	11-2-82
NO.	REVISION	DATE

Reviewed for Howard S.C.D. Name and meets Technical Requirements
Signature: _____ Date: 6-19-86
U.S. Soil Conservation Service

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

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: _____ Date: 1-6-86
G. Nelson Clark

APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Engineering: _____ Date: 6-20-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
John W. Wasserman, Chief, Division of Land Development & Zoning Administration, Date: 6-20-86

CLARK • FINEPROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
1315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 583-1400

DESIGNED	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN	SCALE
E.P.		1" = 50'
DRAWN		DRAWINGS
KIWL		8 OF 8
LAI		04-044
CHECKED		JOB NO.
E.P.		04-044
DATE	FOR	FILE NO.
1-3-86	BRANTLY DEVELOPMENT CORP. 5301 Twin Knolls Road Columbia, Maryland 21045	AS-BUILT T-86-113 84-044-D