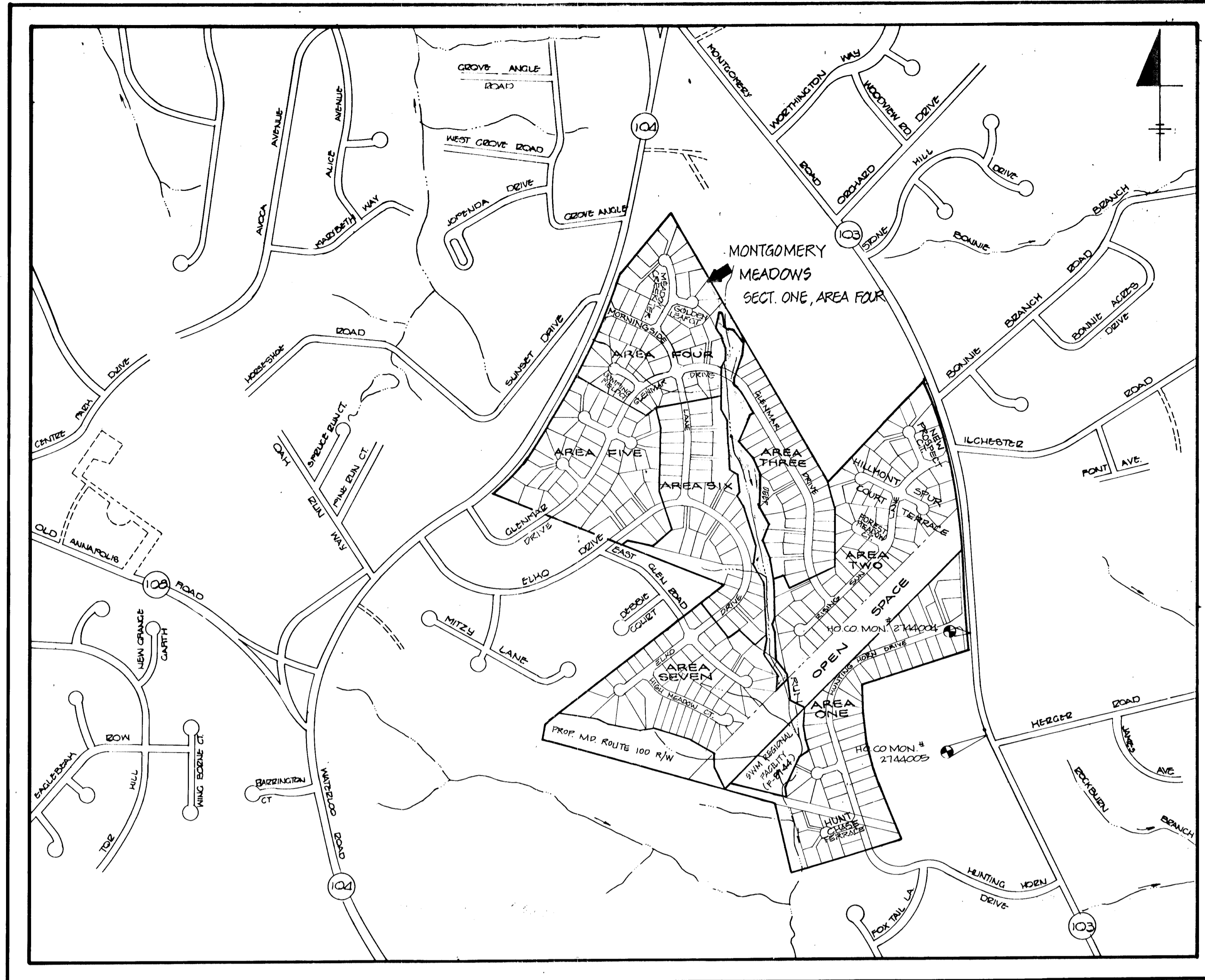
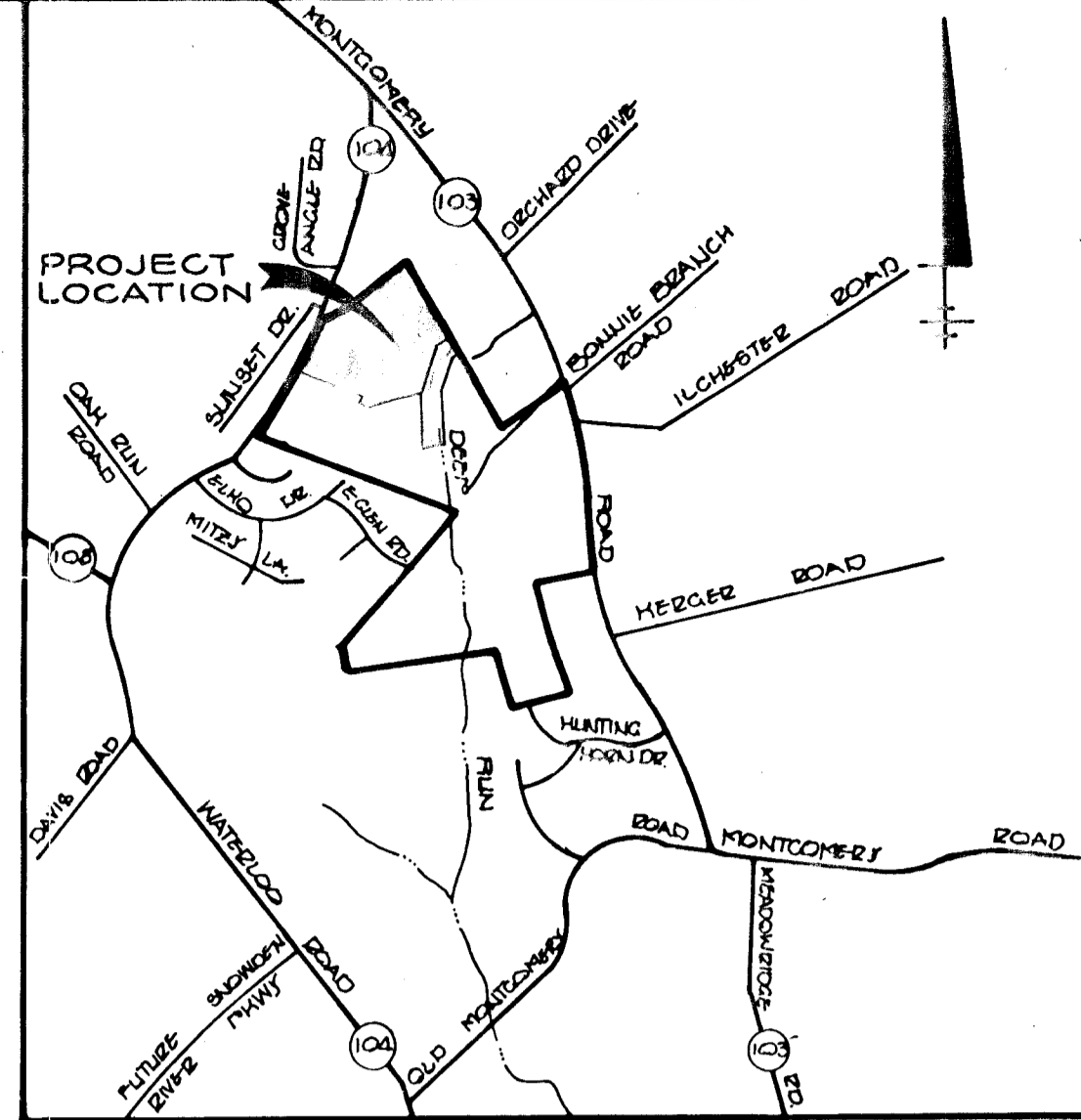


INDEX OF SHEETS	
SHEET NO.	TITLE
1	TITLE SHEET
2	PLAN AND PROFILE - MARYLAND ROUTE 104 (WATERLOO ROAD)
3	PLAN AND PROFILE - MORNINGSIDGE LANE
4	PLAN AND PROFILE - GLENMARK DRIVE
5	PLAN AND PROFILE - MEADOW CREEK TERRACE & GOLDEN LEAF COURT
6	PLAN AND PROFILE - JUMPING FIELDCOURT STREET SCHEDULE & DETAILS
7	STORM DRAIN PROFILES
8	GRADING AND SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP
9	GRADING AND SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP
10	GRADING AND SEDIMENT CONTROL PLAN, DRAINAGE AREA MAP
11	SEDIMENT CONTROL, DETAILS AND NOTES
12	SEMI-PERMANENT STORMWATER MANAGEMENT BASIN NO. 3 PROFILES & DETAILS
13	SEMI-PERMANENT STORMWATER MANAGEMENT BASIN NO. 1 & NO. 2 SECTIONS
14	OFFSITE DRAINAGE AREA MAP (EXISTING) (SEMI PERMANENT CONDITION)
15	OFFSITE DRAINAGE AREA MAP (PROPOSED CONDITION)



LOCATION MAP
SCALE: 1" = 600'



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HRS. IN ADVANCE OF ANY CONSTRUCTION.
- STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE: 792-7272.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S 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.
- ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1984 EDITION.
- STREET TREES TO BE PROVIDED AS REQUIRED BY SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- PERMANENT STORMWATER MANAGEMENT FACILITIES FOR THIS PROJECT WILL BE CONSTRUCTED UNDER F-88-84 SEMI-PERMANENT STORMWATER MANAGEMENT WILL BE PROVIDED FOR THIS SUBDIVISION. WITH THIS SUBMISSION.
- CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AS NOTED ON SHEET 2 OF 15. TEST PIT DENOTED \oplus .

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
[Signature] 2/22/89
 U.S. Soil Conservation Service Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
[Signature]
 Howard Soil Conservation District Date

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 certified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."
[Signature] 2/23/89
 T. L. WILEY, MD REG NO. 9279 DATE

DEVELOPER'S CERTIFICATE
 "I certify that all development and/or construction will be done according to these plans, 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 will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."
[Signature] 6/9/88
 KENNETH G. MALM, N.V. LAND, INC. DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
[Signature] 6/16/88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 6/17/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE
[Signature] 6/17/88
 CHIEF, BUREAU OF HIGHWAY DATE
[Signature] 6-8-88
 CHIEF, BUREAU OF ENGINEERING DATE

MONTGOMERY MEADOWS

SECTION ONE AREA FOUR

ROAD CONSTRUCTION DRAWINGS

1 ST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

LANDSCAPE TABULATION				
SYMBOL	NO.	NAME	SIZE	REMARKS
\oplus	147	ACER SACCHARUM (SUGAR MAPLE)	2 1/2" CAL. (MIN.)	BAISED & BURLAPPED
\oplus	36	CRATAEGUS PHAENOPYRUM (WASHINGTON HAWTHORN)	2 1/2" CAL. (MIN.)	BAISED & BURLAPPED

DESIGNED		DATE		BY		DESCRIPTION	
WE OWENS	2-8-88	5-10-88	JAU	PER HO. CO. COMMENTS DATED	4-19-88		
WE OWENS	2-8-88	8-1-88	JAU	PER HO. CO. COMMENTS DATED	6-17-88		
B.D. BURTON	2-8-88	10-14-88	809/JAU	PER HO. CO. COMMENTS DATED	10-6-88		
T.L. WILEY	2-8-88	1-30-89	809/JAU	PER HO. CO. COMMENTS DATED	1-12-89		

Dewberry & Davis
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS
 3300 N. RIDGE ROAD
 SUITE 100
 ELLICOTT CITY, MD. 21043
 (301) 461-7478

OWNER / DEVELOPER
 N.V. LAND, INC.
 6820 ELM STREET
 McLEAN, VA 22101
 (703) 734-9730

TITLE SHEET
MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 188 THRU LOT 245
 TAX MAP 31 PARCEL 423
 1st ELECTION DISTRICT HOWARD CO., MARYLAND
 SCALE: AS SHOWN PREVIOUS SUBMITTALS: S-87-81, P-87-71 F-88-32 FILE NO. SHEET 1 OF 15

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 Board of Soil Conservation District. I have notified the developer that he must provide the Board of Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Thomas L. Wiley 3/1/88
 THOMAS L. WILEY, MD. REG. NO. 9273 DATE

DEVELOPER'S CERTIFICATE
 I hereby certify that all development and/or construction will be done according to these plans, 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 will provide the Board of Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Board of Soil Conservation District.

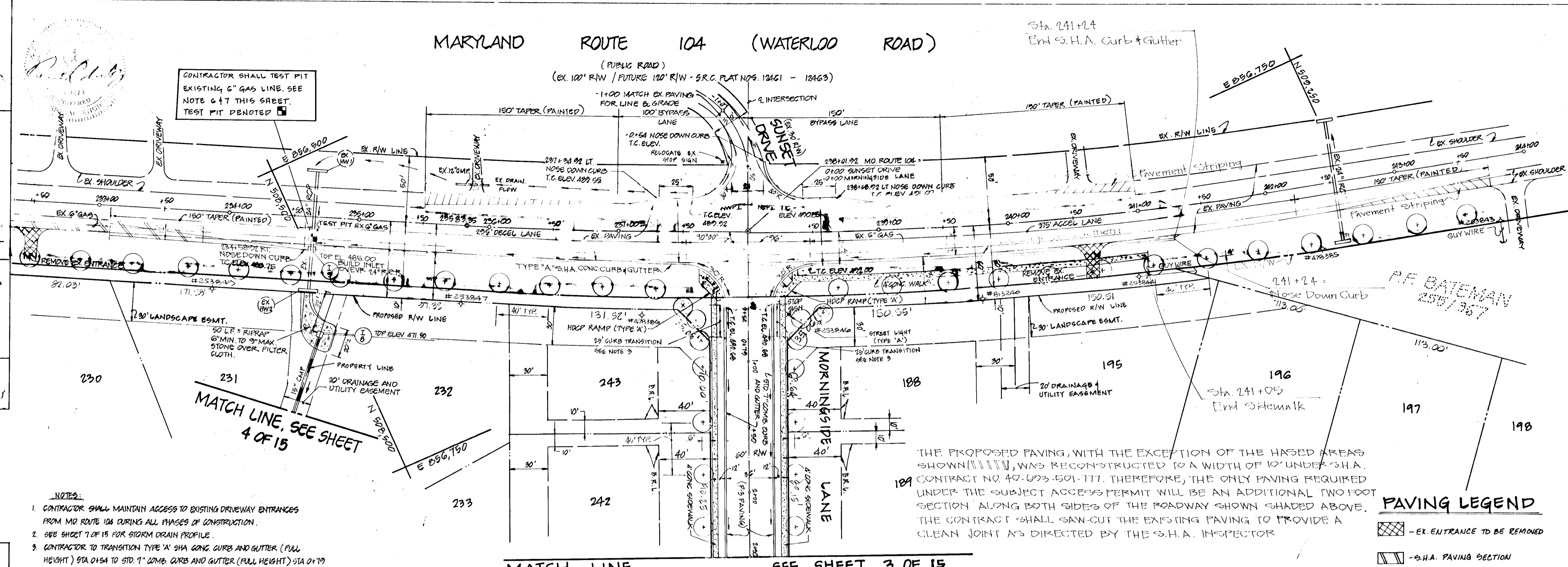
Kenneth G. Malm 2/17/88
 KENNETH G. MALM, N.V. LAND, INC. DATE

These plans have been reviewed for the Board of Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control under the requirements of the Board of Soil Conservation District.

U.S. SOIL CONSERVATION SERVICE DATE 2/22/88
 HOWARD SOIL CONSERVATION DISTRICT DATE 2/22/88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Mark S. ... 6/24/88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 CHIEF, LAND DEVELOPMENT DIVISION DATE
Francis M. ... 6/17/89
 CHIEF, BUREAU OF HIGHWAYS DATE
... 6/18/89
 CHIEF, BUREAU OF ENGINEERING DATE



LIGHTING LEGEND

- TYPE 'A' - 250 WATT MERCURY VAPOR LAMP MOUNTED ON A 30' HIGH GALVANIZED STEEL POLE
- TYPE 'B' - 175 WATT MERCURY VAPOR LAMP MOUNTED ON A 14' HIGH FIBERGLASS BRONZE POLE
- EXISTING POWER POLES

BENCHMARKS

HOWARD CO. MON. # 214404 - ELEV. 415.967
 3/4" REBAR, 0.8' BELOW SURFACE, 7' WEST OF MD. ROUTE 104 AND 100' SOUTH OF INTERSECTION OF ILCHESTER ROAD.

HOWARD CO. MON. # 214405 - ELEV. 419.625
 3/4" REBAR, 0.6' BELOW SURFACE, 10' WEST OF EDGE OF MD. ROUTE 104 AND 80' NORTH OF Q. OF KERGER ROAD. SEE SHEET 1 OF 15 FOR LOCATIONS.

MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOTS 188 THRU LOT 245
 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN AND PROFILE
 MD. ROUTE 104

OWNER / DEVELOPER
 N.V. LAND, INC.
 6820 ELM STREET
 McLEAN, VIRGINIA 22101
 (703) 734-9730

SCALE: AS SHOWN DATE: FEB. 8, 1988 DWG. 2 OF 15
 DES: B.D. BURTON DRN: J.A. UDICH CHK: B.D. BURTON

DEWBERRY & DAVIS
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD. 461-7478

- NOTES:**
- CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING DRIVEWAY ENTRANCES FROM MD. ROUTE 104 DURING ALL PHASES OF CONSTRUCTION.
 - SEE SHEET 7 OF 15 FOR STORM DRAIN PROFILE.
 - CONTRACTOR TO TRANSITION TYPE 'A' S.H.A. CONC. CURB AND GUTTER (FULL HEIGHT) VIA 0.154 TO 0.10" 1" CONC. CURB AND GUTTER (FULL HEIGHT) VIA 0.119 TO 0.054 TO START HOWARD COUNTY PAVING SECTION (P-3) AT STA. 0+54.
 - SEE SHEET 1 OF 15 FOR LANDSCAPE LEGEND.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES TO HIS OWN SATISFACTION PRIOR TO BEGINNING WORK.
 - CONTRACTOR SHALL TEST PIT EXISTING 6" GAS LINE PRIOR TO EXTENDING EXISTING 24" STORM DRAIN AND CONSTRUCTION OF INLET E-9. TEST PIT DENOTED.

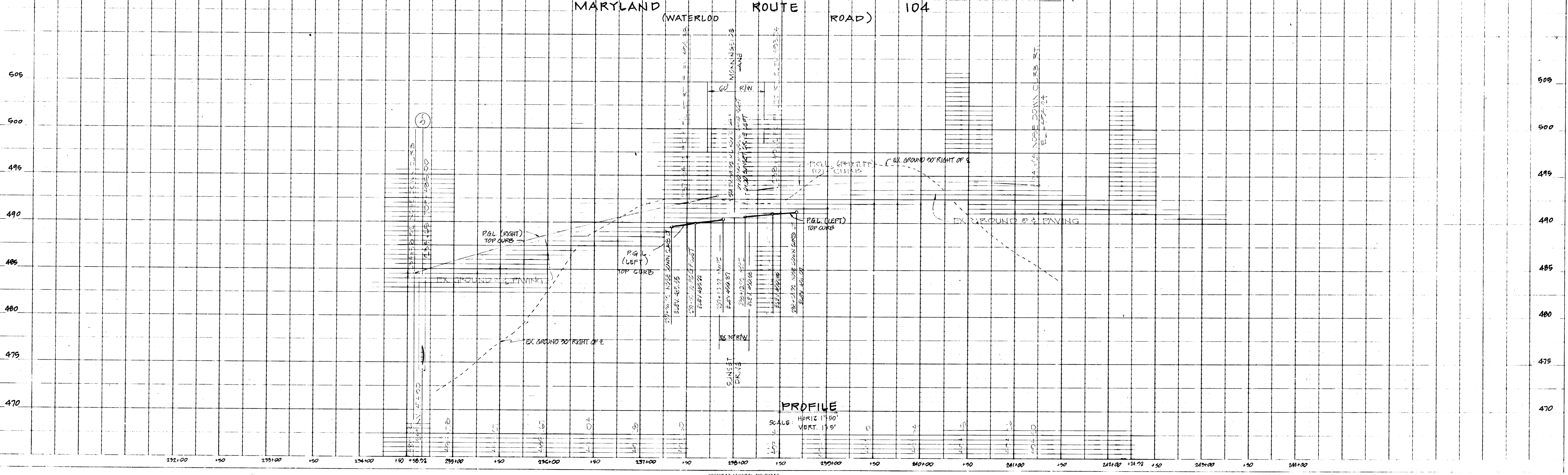
REVISIONS

DATE	BY	DESCRIPTION
5-10-88	JAU	PER HO. CO. COMMENTS DATED 4-13-88
8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88
10-18-88	BBB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
1-30-89	BBB/JAU	PER HO. CO. COMMENTS DATED 1-12-89
4-10-89	BBB	PER S.H.A. COMMENTS 4-20

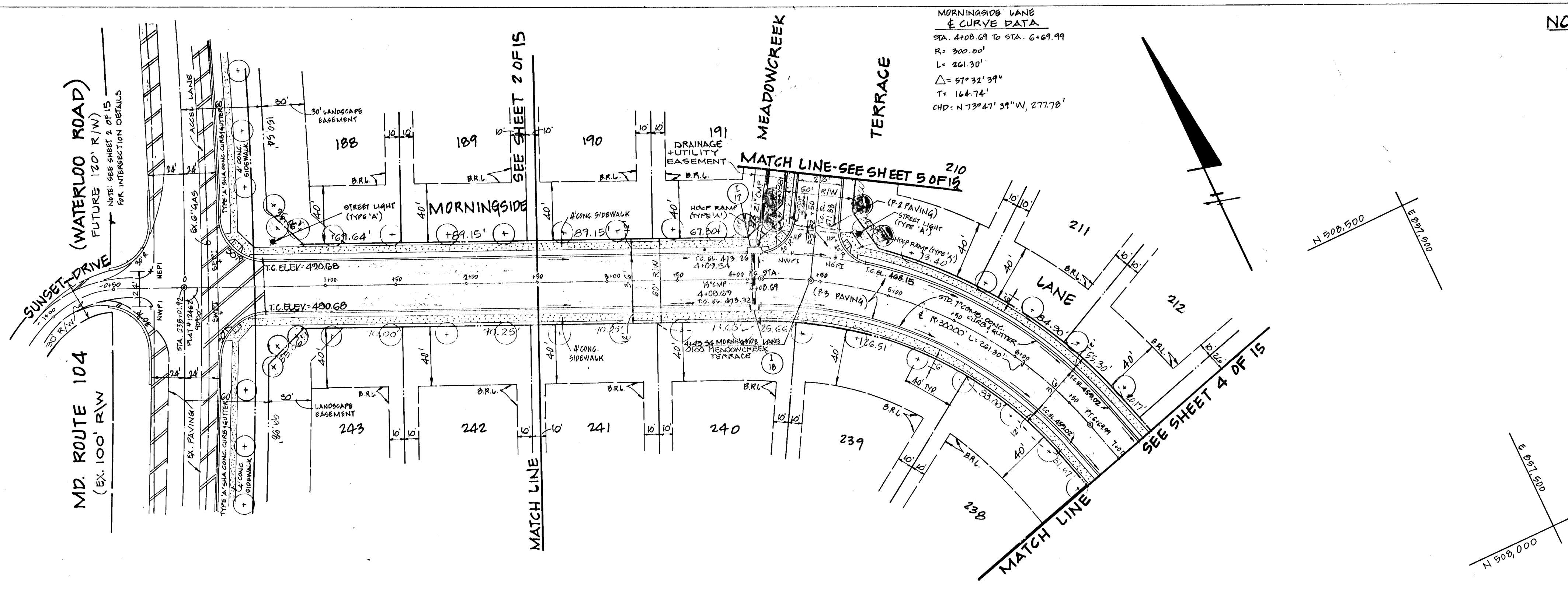
CHIEF, LAND DEVELOPMENT DIVISION DATE
 CHIEF, BUREAU OF HIGHWAYS DATE
 CHIEF, BUREAU OF ENGINEERING DATE

PLAN
 SUBMITTED BY: DATE
 CHECKED BY: DATE
 NOTE BOOK NO. CHECKED BY: DATE

PROFILE
 SUBMITTED BY: DATE
 CHECKED BY: DATE
 NOTE BOOK NO. CHECKED BY: DATE



REVISIONS		
DATE	BY	DESCRIPTION
5-10-88	JAU	PER HO. CO. COMMENTS DATED 4-13-88
8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88
10-14-88	BDB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
1-30-89	BDB/JAU	PER HO. CO. COMMENTS DATED 1-12-89



NOTE:
 1. FOR STORM DRAIN PROFILES SEE SHEET 7 OF 15.
 2. FOR LIGHTING LEGEND SEE SHEET 2 OF 15.
 3. FOR LANDSCAPING LEGEND SEE SHEET 10 OF 15.
 4. FOR PAVING SECTION DETAILS AND TYPICAL SECTIONS SEE SHEET 6 OF 15.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 J. A. ... DATE 2/20/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 ... DATE 6/1/89
 CHIEF, LAND DEVELOPMENT DIVISION

... DATE 6/8/89
 CHIEF, BUREAU OF HIGHWAYS

... DATE 6-8-89
 CHIEF, BUREAU OF ENGINEERING

MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 188 THRU LOT 245
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN AND PROFILE

MORNINGSIDE LANE & SUNSET DRIVE

OWNER/DEVELOPER
 N.V. LAND, INC.
 6820 ELM STREET
 MC LEAN, VIRGINIA 22101
 (703) 734-9730

SCALE: AS SHOWN DATE: FEB 8, 1988 DWG. 3 OF 15
 DES: B.D. BURTON DRN: J.A. UDICH CHK: B.D. BURTON

DEWBERRY & DAVIS
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD. 461-7478

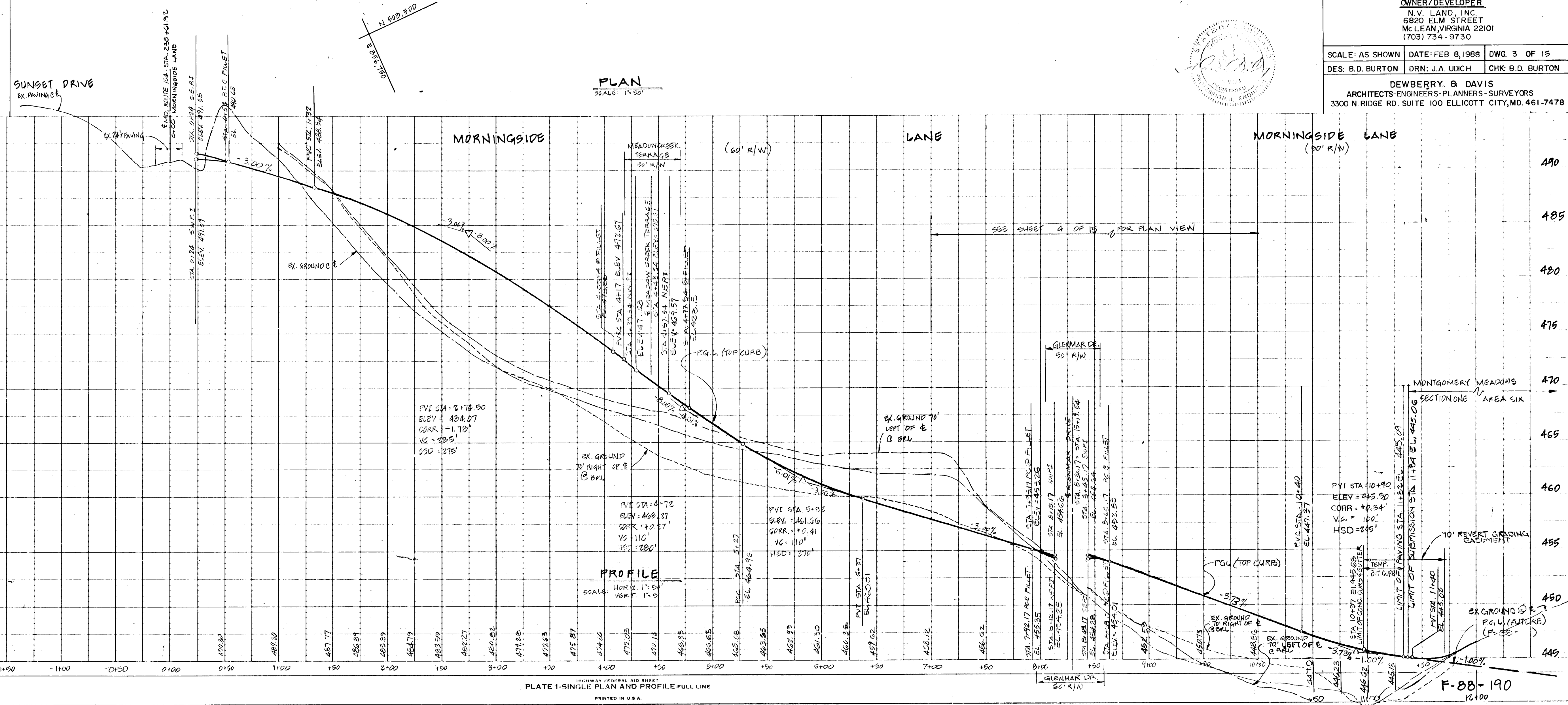
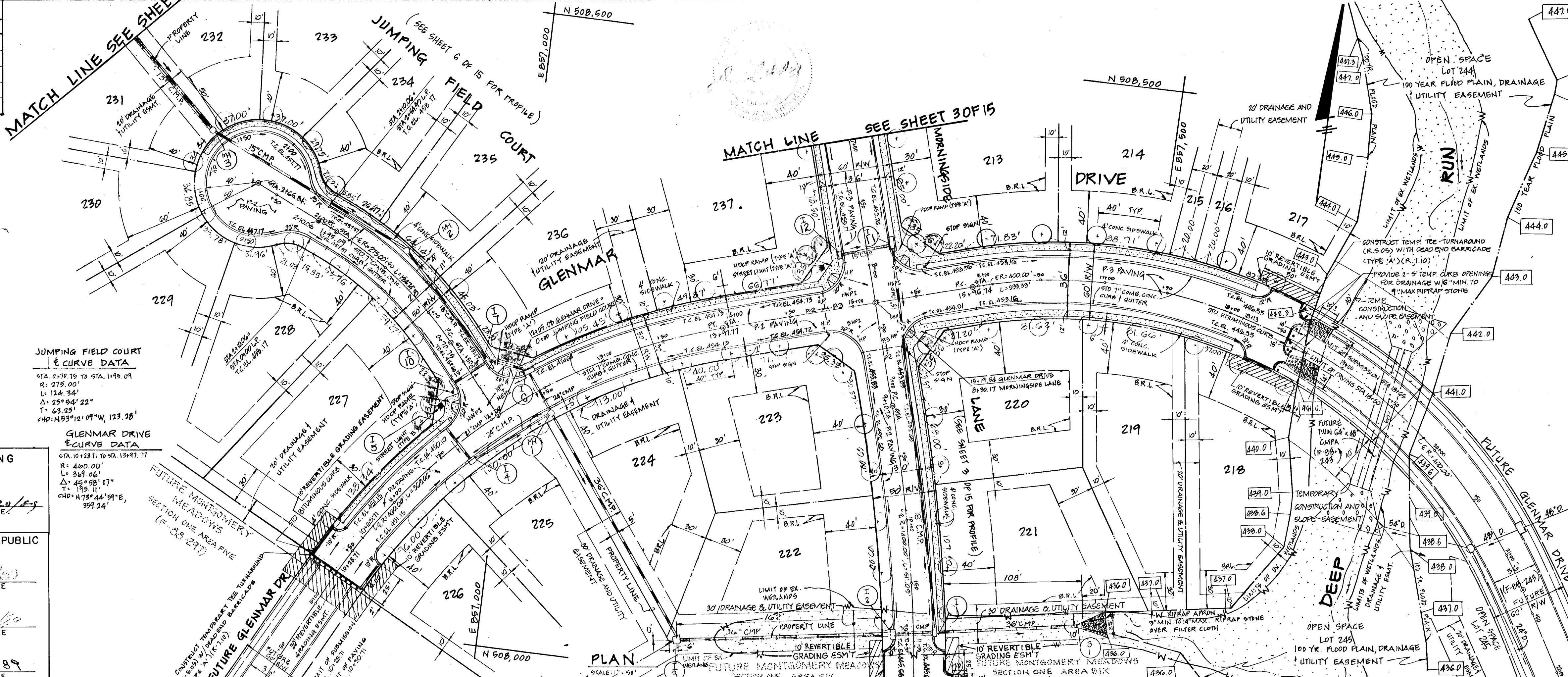


PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
 PRINTED IN U.S.A.

4473

F-88-190
 16.100

REVISIONS		
DATE	BY	DESCRIPTION
5-10-88	JAU	PER HO. CO. COMMENTS DATED 4-13-88
8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88
10-14-88	BDB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
1-30-89	BDB/JAU	PER HO. CO. COMMENTS DATED 1-13-89



- NOTES
- FOR STORM DRAIN PROFILES, SEE SHEET 7 OF 15.
 - FOR LIGHTING LEGEND, SEE SHEET 2 OF 15.
 - FOR PROFILE OF JUMPING FIELD COURT, SEE SHEET 6 OF 15.
 - FOR LANDSCAPE LEGEND SEE SHEET 1 OF 15.
 - SHADDED AREAS INDICATE EXISTING WETLANDS LIMITS.
 - 100.0 - 100 YEAR FLOODPLAIN ELEVATION.
 - FOR PAVING SECTION DETAILS AND TYPICAL SECTIONS SEE SHEET 6 OF 15.
- FUTURE MONTGOMERY MEADOWS SECTION ONE AREA THREE (F-88-243)

JUMPING FIELD COURT & CURVE DATA
 STA 0+70.15 TO STA 1+99.09
 R = 275.00'
 L = 124.34'
 Δ = 29° 54' 22"
 T = 69.25'
 CHD = N 93° 12' 09" W, 123.25'

GLENMAR DRIVE & CURVE DATA
 STA 10+28.11 TO STA 13+97.17
 R = 400.00'
 L = 301.00'
 Δ = 45° 58' 07"
 T = 193.11'
 CHD = N 78° 44' 19" E, 291.24'

GLENMAR DRIVE & CURVE DATA
 STA 16+96.14 TO STA 1+190.14
 R = 400.00'
 L = 333.30'
 Δ = 76° 23' 23"
 T = 314.21'
 CHD = S 29° 51' 31" E, 494.47'

MORNINGSIDE LANE & CURVE DATA
 STA 9+10.74 TO STA 1+000.00
 R = 1400.00'
 L = 511.91'
 Δ = 2° 55' 00"
 T = 258.42'
 CHD = S 05° 47' 30" E, 508.26'

APPROVED: HOWARD COUNTY OFFICE PLANNING & ZONING

Howard County Office Planning & Zoning
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Howard County Department of Public Works
 CHIEF, LAND DEVELOPMENT DIVISION

Howard County Department of Public Works
 CHIEF, BUREAU OF HIGHWAYS

Howard County Department of Public Works
 CHIEF, BUREAU OF ENGINEERING

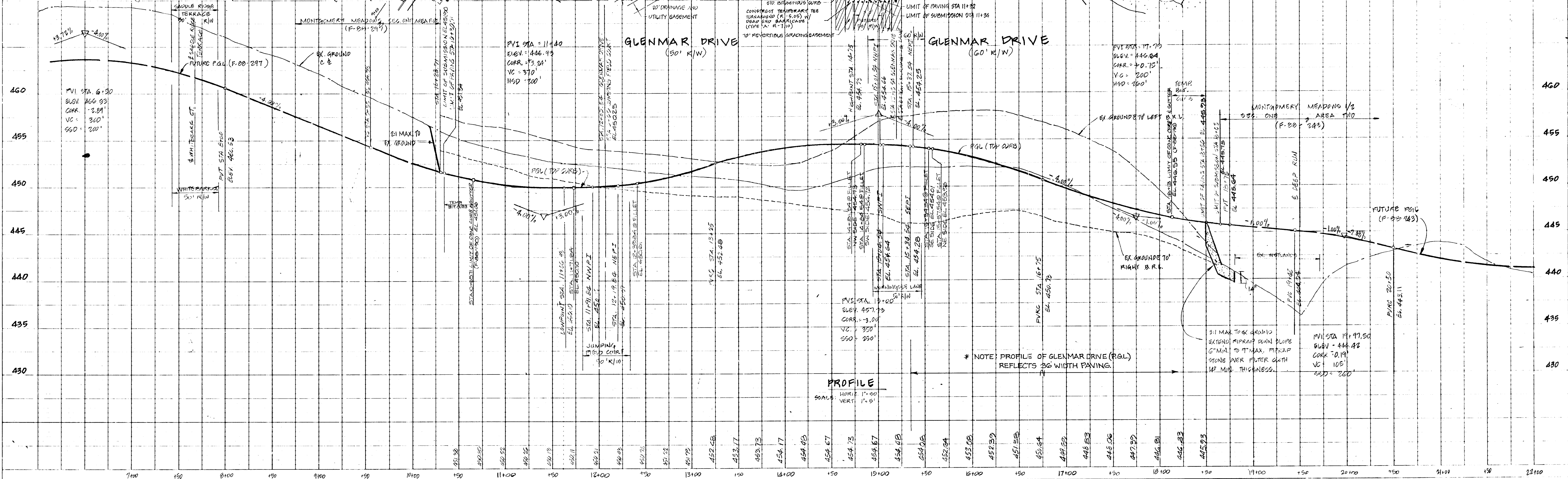
MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 188 THRU LOT 248
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN AND PROFILE
 GLENMAR DRIVE

OWNER / DEVELOPER
 N.V. LAND, INC.
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101

SCALE: AS SHOWN DATE: FEB. 8, 1988 DWG. 4 OF 15
 DES: B.D. BURTON DRN: J.A. UDCH CHK: B.D. BURTON

DEWBERRY & DAVIS
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD. 461-7478



1443

NOTE:

1. FOR STORM DRAIN PROFILES SEE SHEET 7 OF 15.
2. FOR LIGHTING LEGEND SEE SHEET 2 OF 15.
3. FOR LANDSCAPE LEGEND SEE SHEET 1 OF 15.
4. FOR PAVING SECTION DETAILS AND TYPICAL SECTIONS SEE SHEET 6 OF 15.
5. [Symbol] - DENOTES EXISTING WETLANDS LIMITS.
6. [Symbol] - 100 YEAR FLOODPLAIN ELEVATION.

MEADOWCREEK TERRACE & CURVE DATA

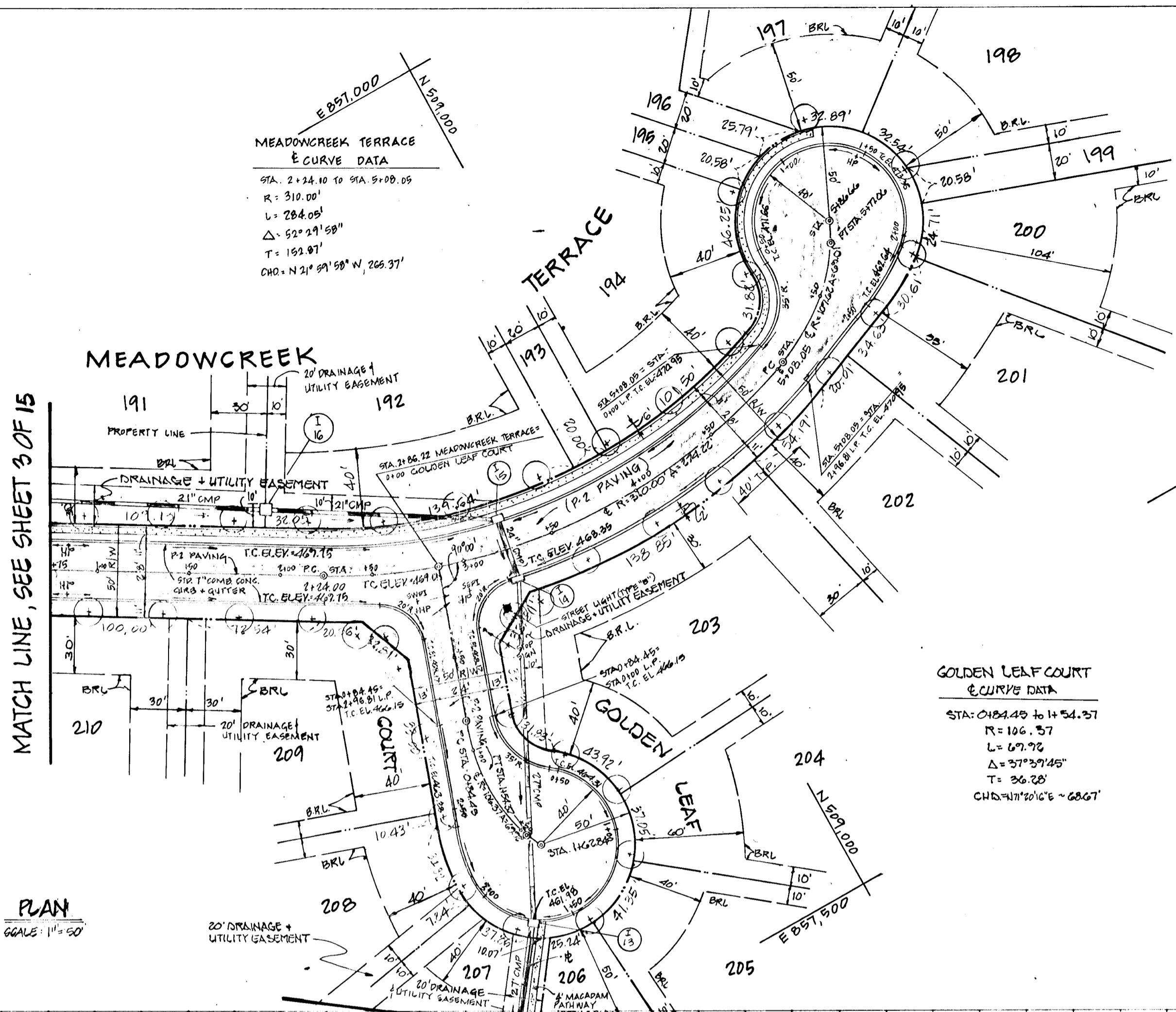
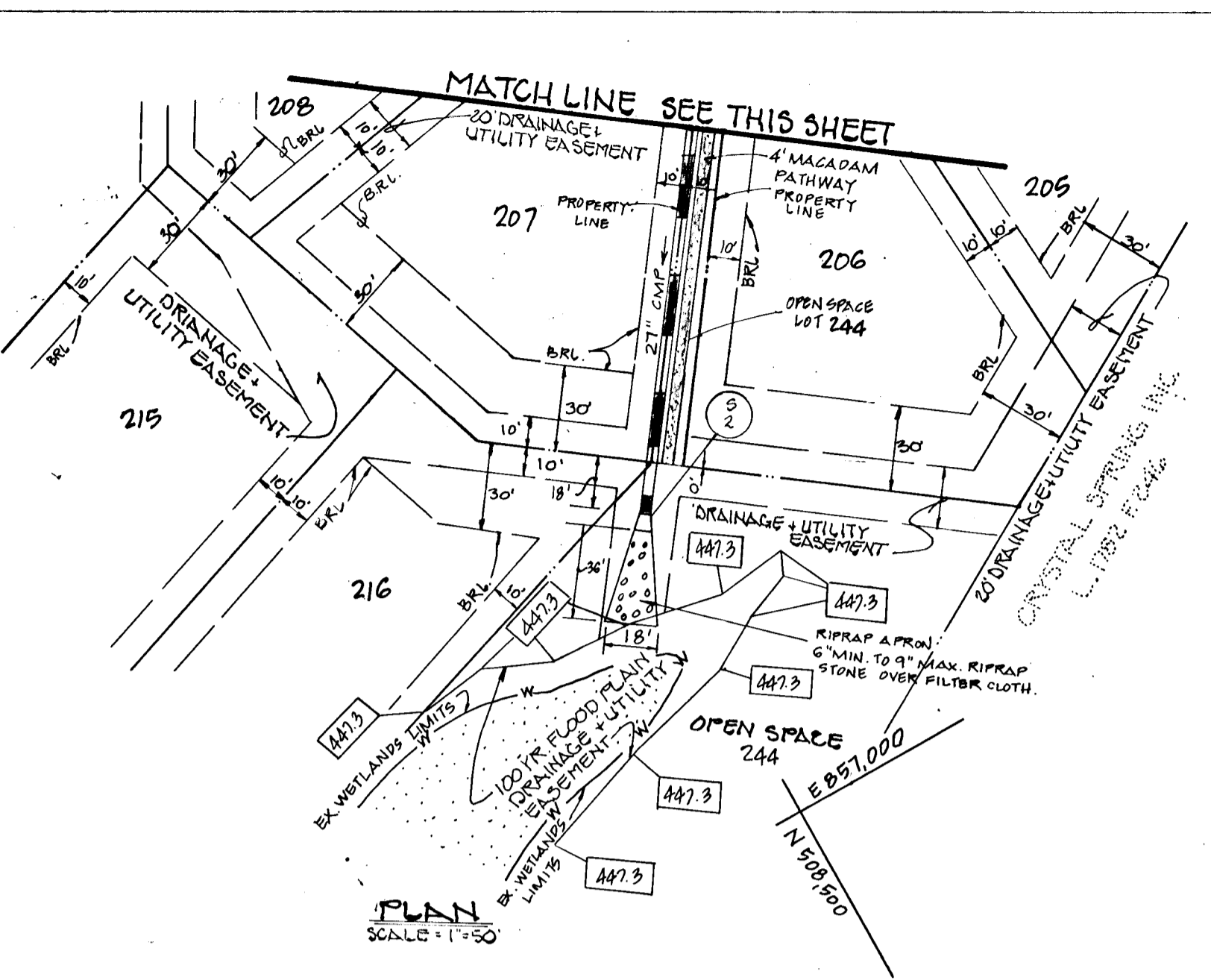
STA: 5408.00 to 5477.00
 R: 107.62
 L: 69.01
 Δ: 30°04'15"
 T: 35.64'
 CHS: 41°18'00" N, 61.88'

GOLDEN LEAF COURT & CURVE DATA

STA: 0184.45 to 1154.37
 R: 106.57
 L: 67.92
 Δ: 27°37'45"
 T: 36.28'
 CHS: 41°18'00" N, 62.67'

MEADOWCREEK TERRACE & CURVE DATA

STA: 2124.10 to 914.57
 R: 310.05'
 L: 284.05'
 Δ: 52°29'58"
 T: 152.87'
 CHS: 41°18'00" N, 265.37'



REVISIONS		
DATE	BY	DESCRIPTION
5-10-88	JAU	PER HO. CO. COMMENTS DATED 4-13-88
8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88
10-14-88	BDB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
1-30-89	BDB/JAU	PER HO. CO. COMMENTS DATED 1-12-89

MONTGOMERY MEADOWS

SECTION ONE, AREA FOUR
 LOT 108 THRU LOT 245
 107 ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN AND PROFILE
 MEADOWCREEK TERRACE &
 GOLDEN LEAF COURT

OWNER / DEVELOPER
 N.V. LAND, INC.
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101
 (703) 734-9730

SCALE: AS SHOWN DATE: FEB 8, 1988 DWG. 5 OF 15
 DES. B.D. BURTON DRN. J.A. UDICH CHK. B.D. BURTON

DEWBERRY & DAVIS
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS
 3300 N. RIDGE RD. SUITE 100 ELLICOTT CITY, MD. 461-7478

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

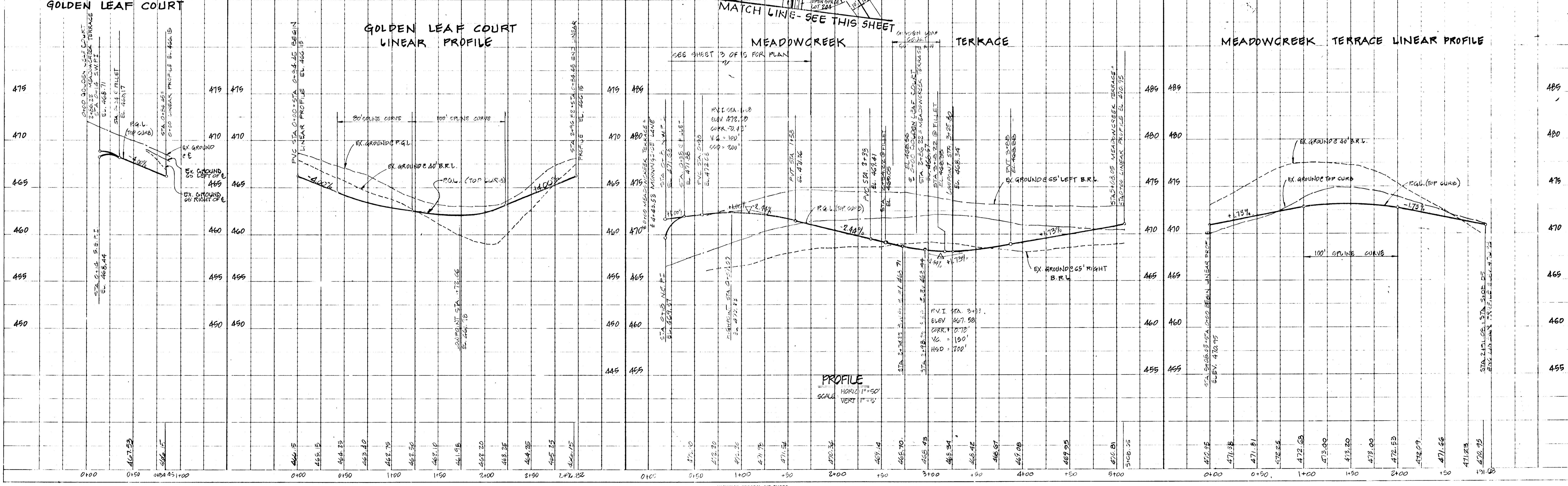
Debra S. Toth 6/12/88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

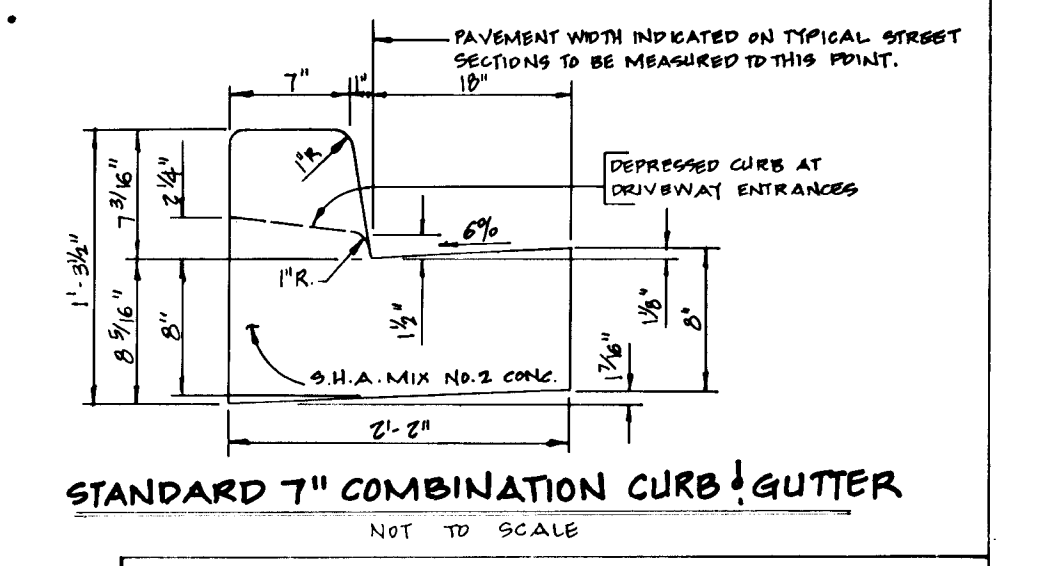
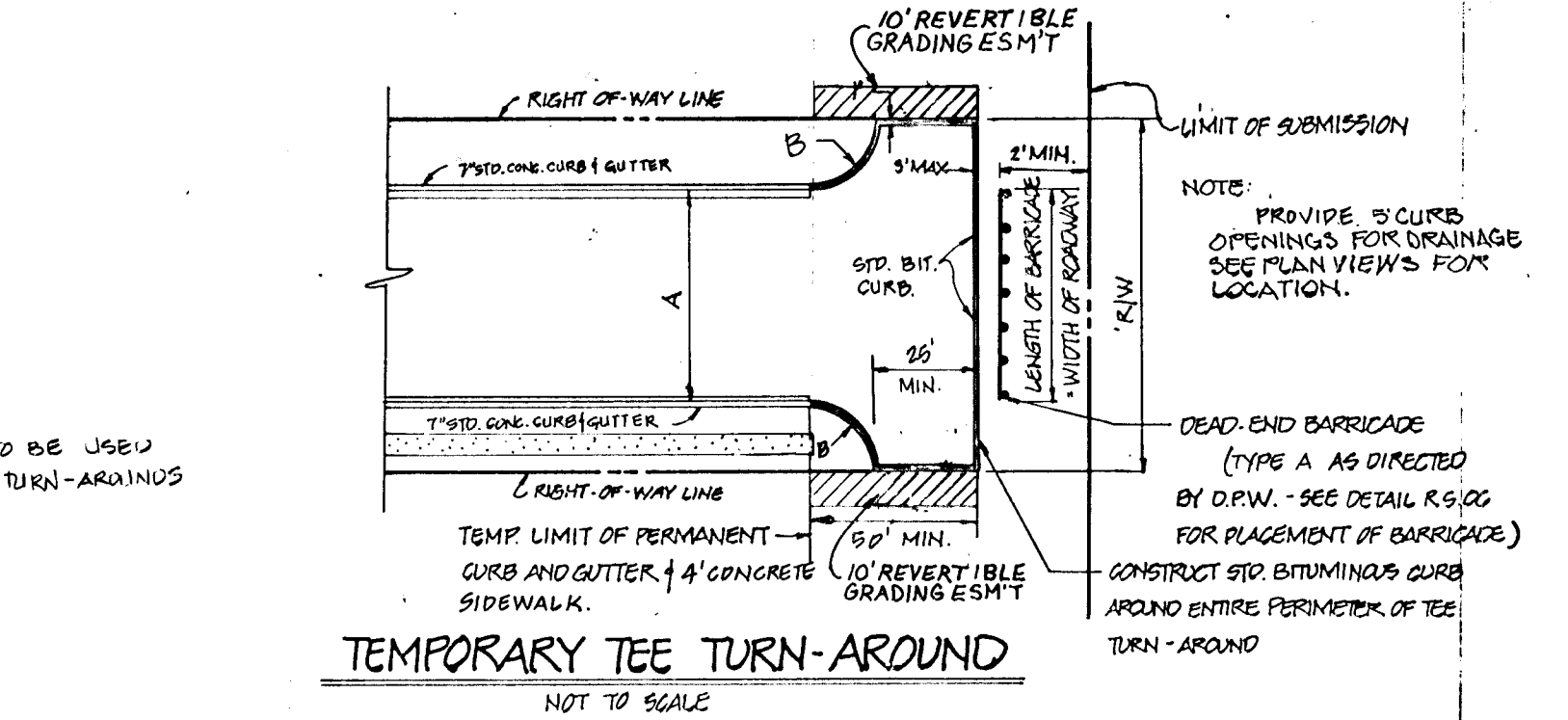
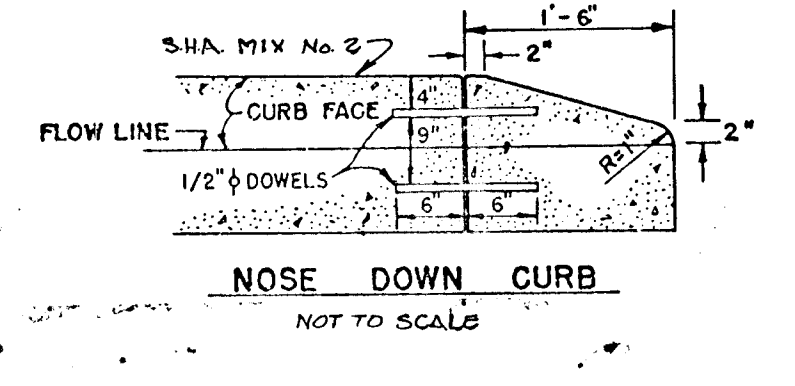
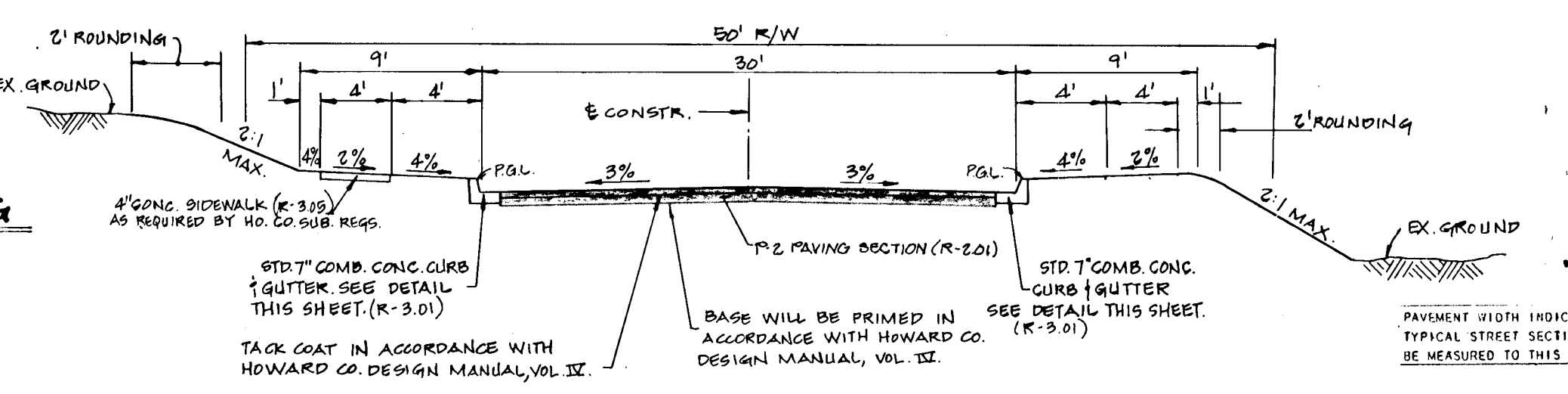
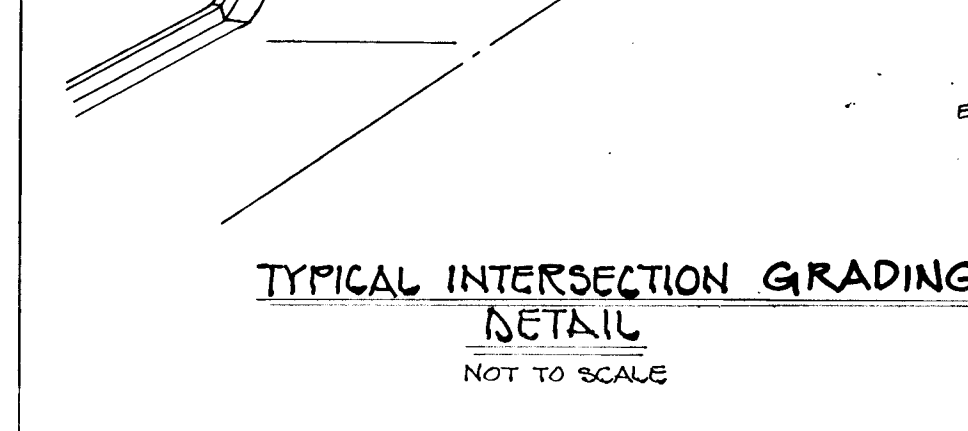
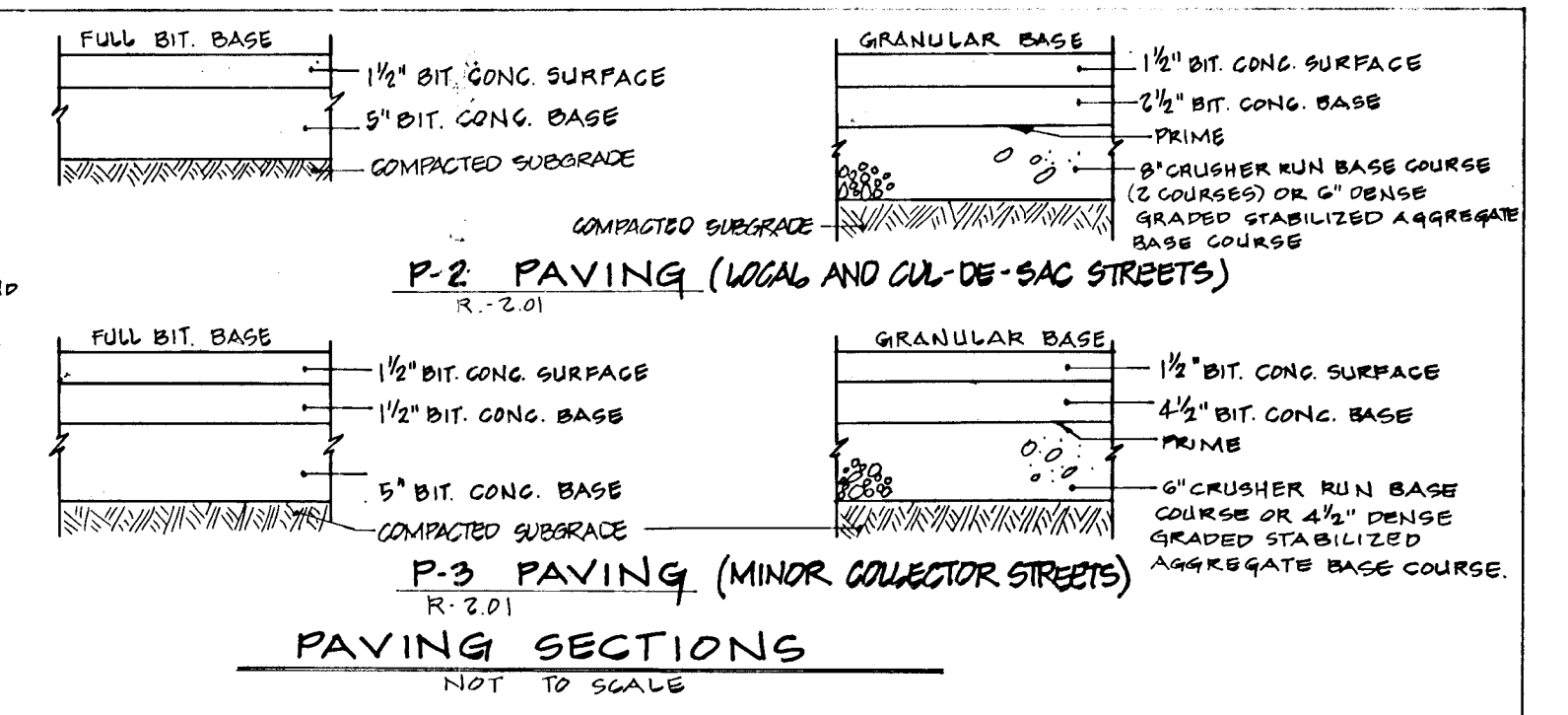
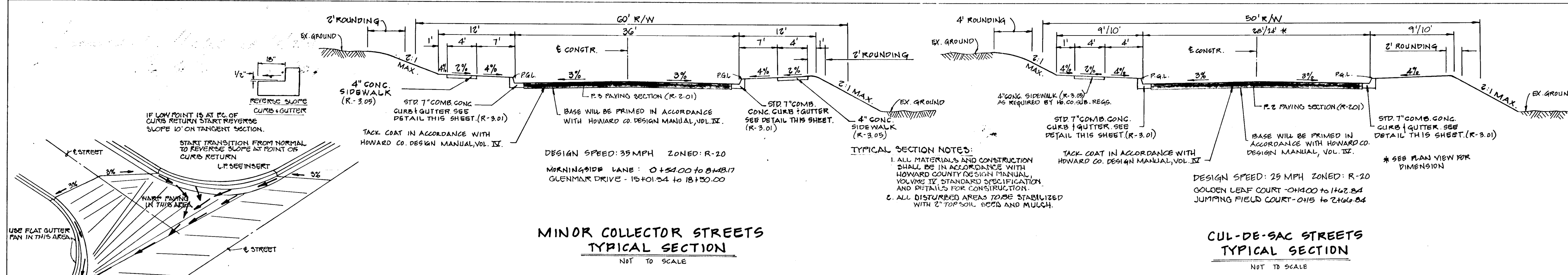
William M. Williams 6/12/88
 CHIEF, LAND DEVELOPMENT DIVISION

Robert S. Reay 6/18/88
 CHIEF, BUREAU OF HIGHWAYS

Robert S. Reay 6/18/88
 CHIEF, BUREAU OF ENGINEERING



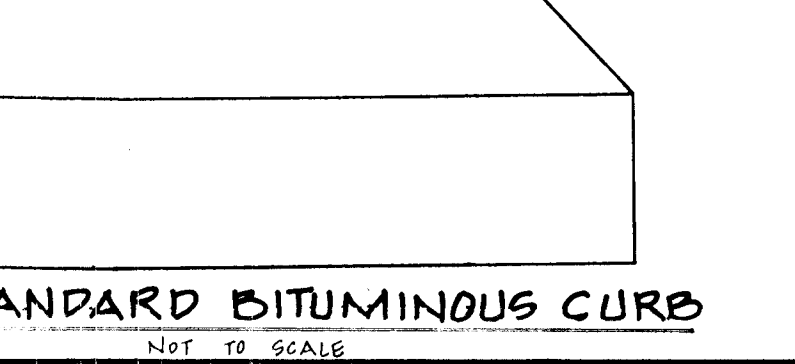
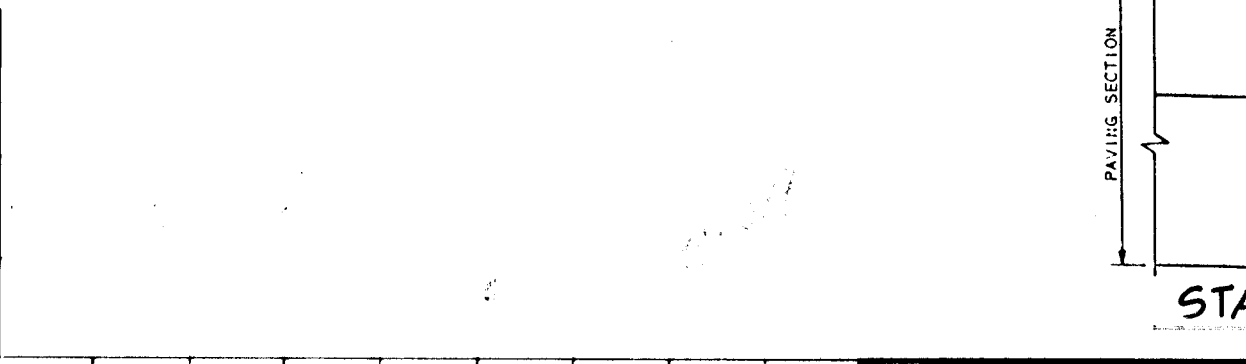
PLAN
 CHECKED BY: [Signature]
 DATE: 6/2/89
 NOTE BOOK: [Blank]
 NO. OF WAY CHECKED: [Blank]



APPROVED: [Signature]
 DATE: 6/2/89
 COMMUNITY PLANNING AND LAND DEVELOPMENT

REVISIONS

DATE	BY	DESCRIPTION
5-10-88	JAU	PER HO. CO. COMMENTS DATED 4-13-88
8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88
10-14-88	BB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
1-30-89	BB/JAU	PER HO. CO. COMMENTS DATED 1-12-89



R/W WIDTH	PAVING WIDTH (A)	RADIUS (B)
60'	36'	12'
50'	30'	10'

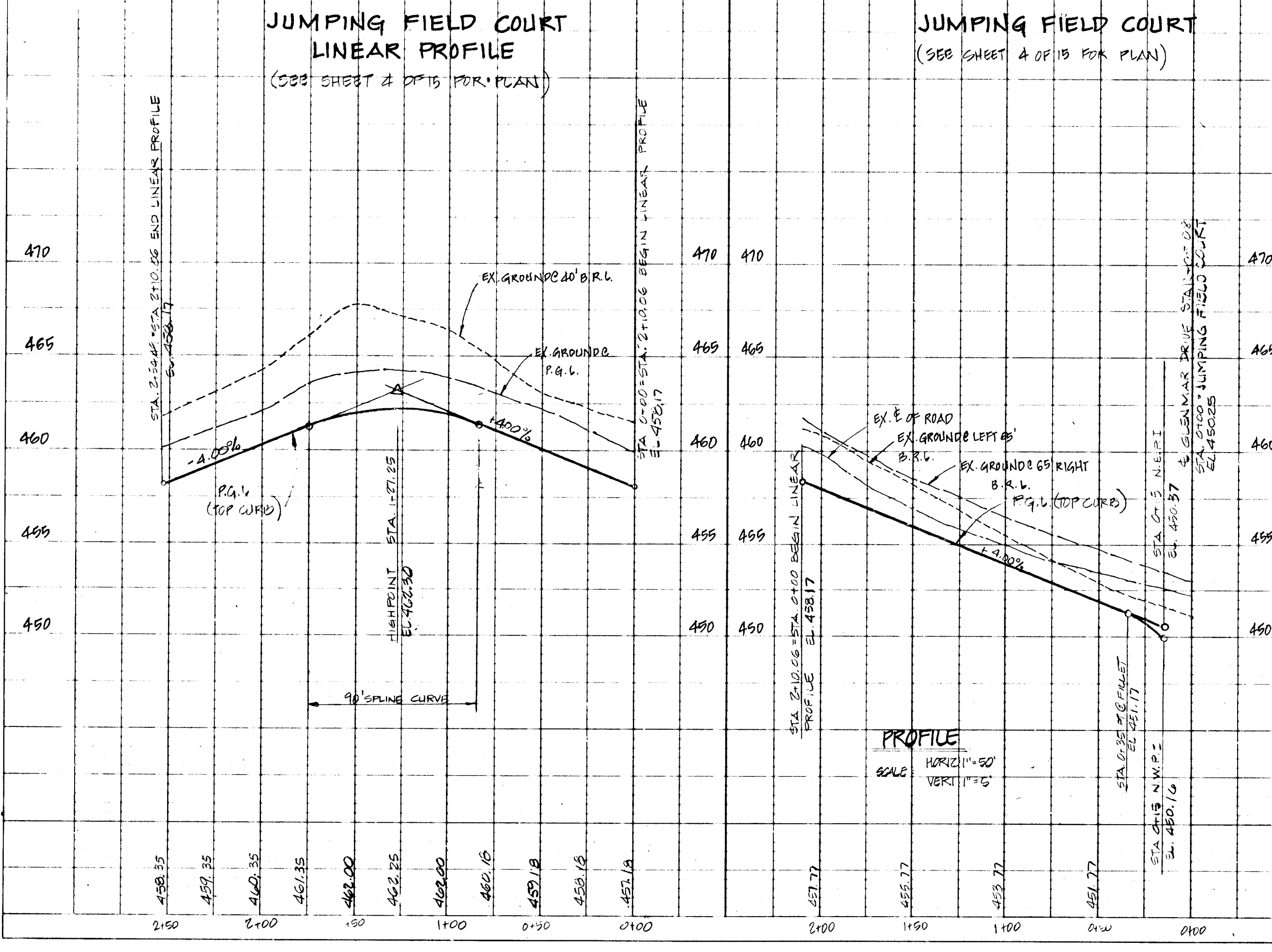
MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 188 THRU LOT 245
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PLAN AND PROFILE ROAD SECTIONS, DETAILS AND STORM DRAIN PROFILES

OWNER / DEVELOPER
 WYLAND, INC.
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101
 (703) 734-9730

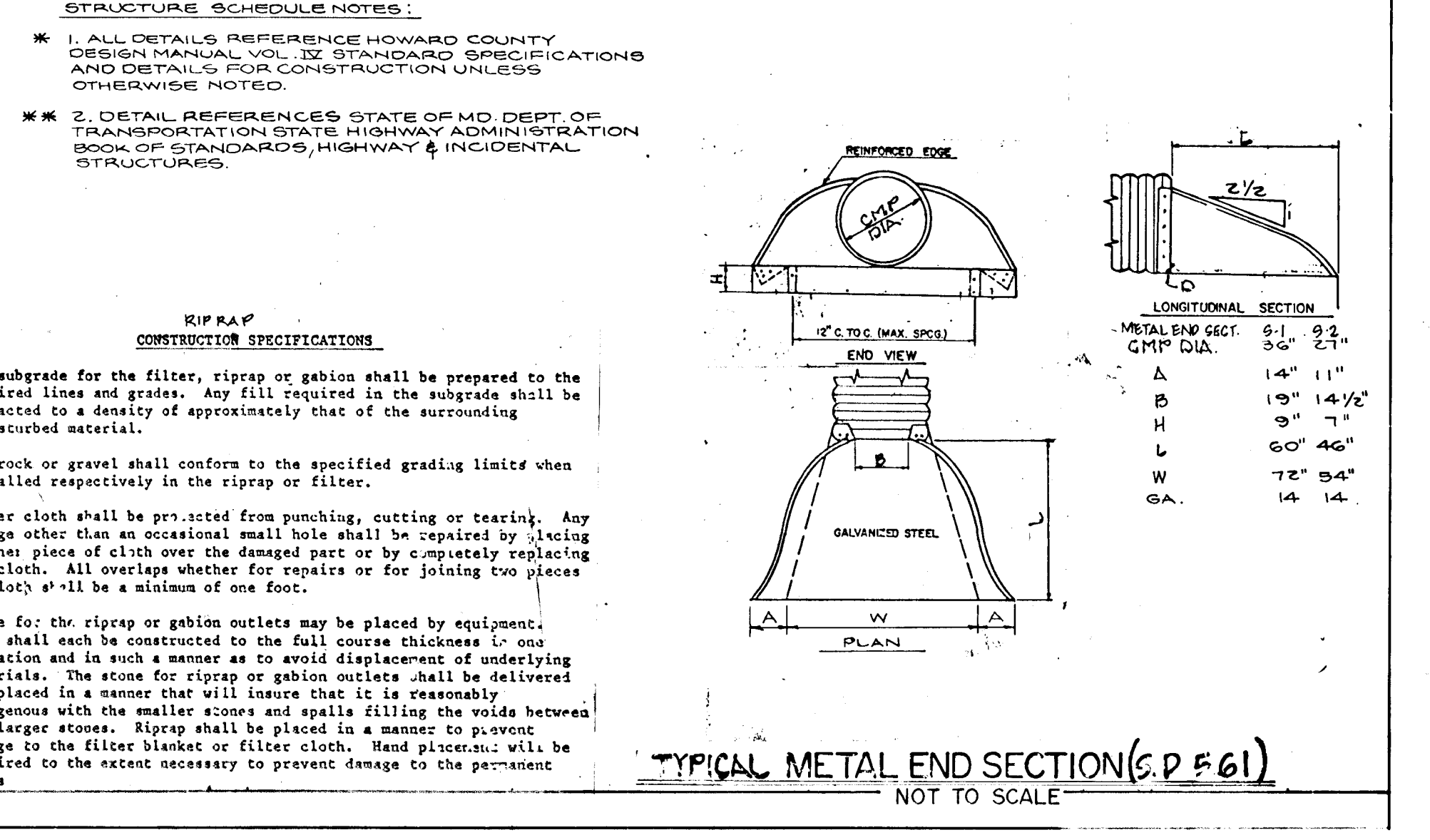
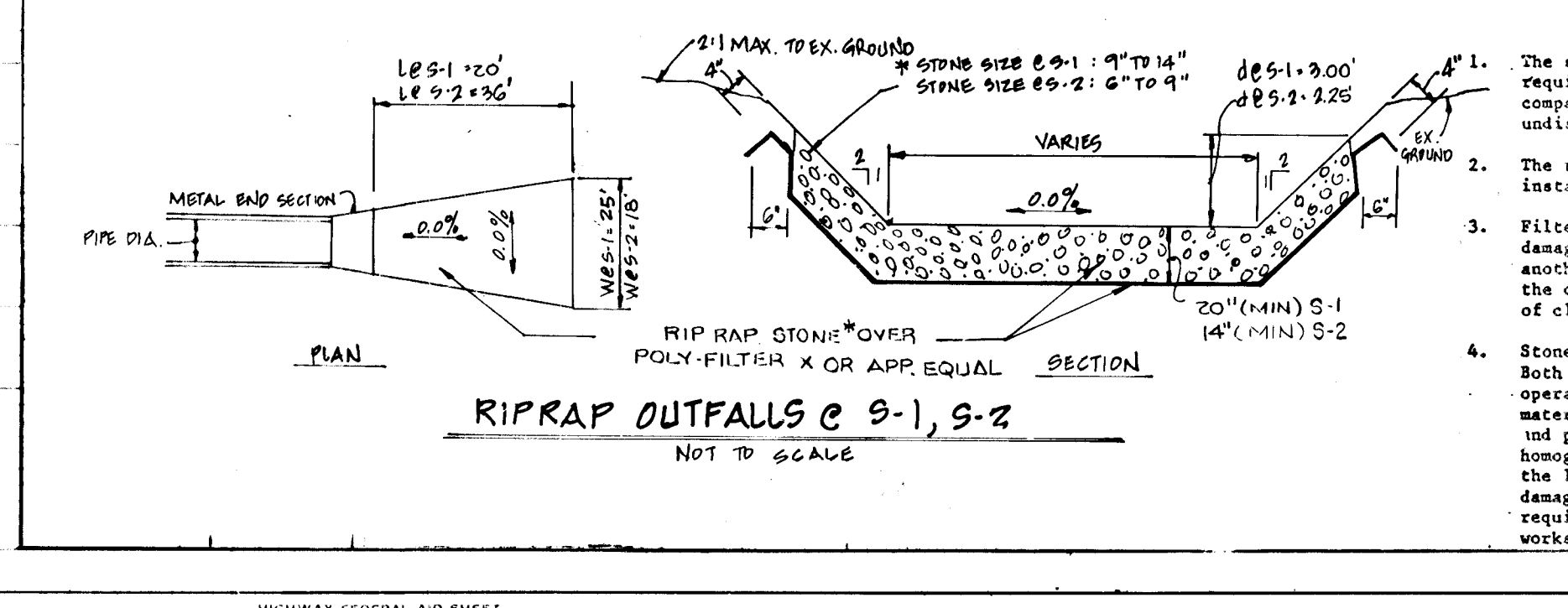
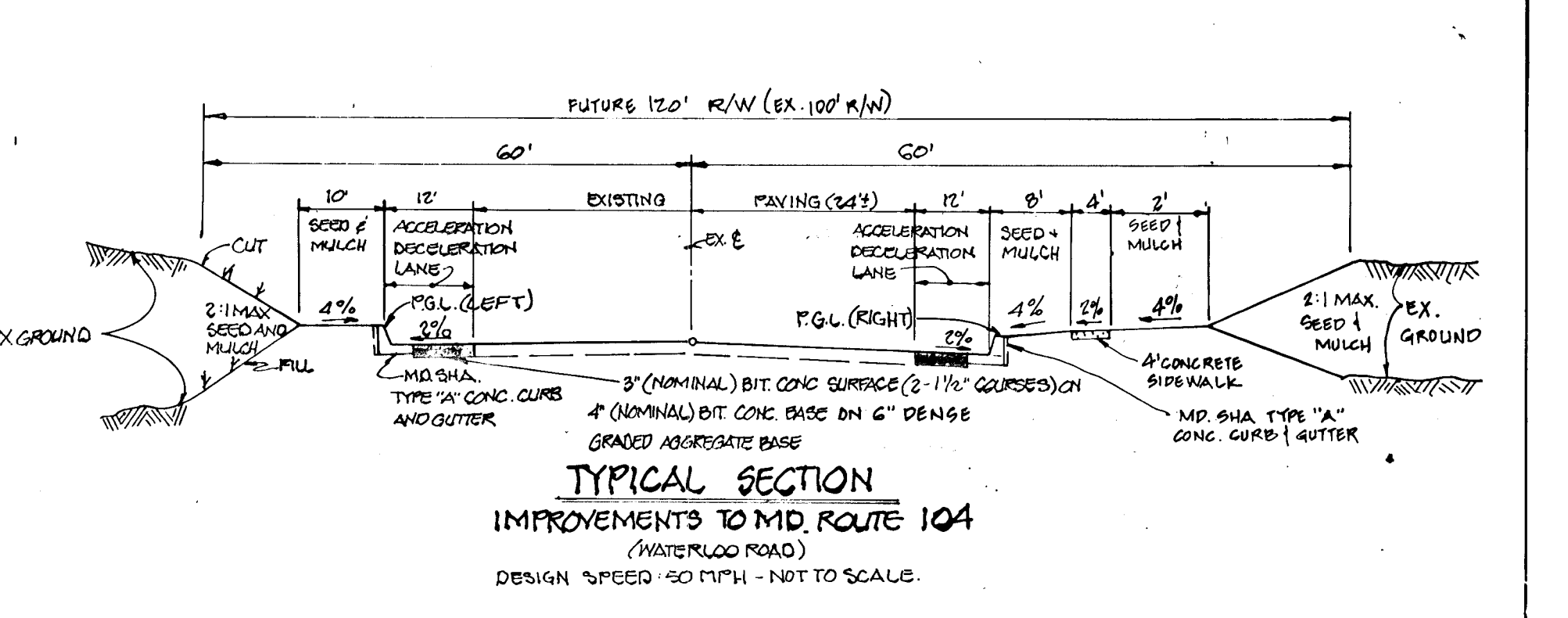
SCALE AS SHOWN DATE FEB 8, 1988 SHEET 6 OF 15
 DESIGNED BY S.D. BURTON DRAWN BY J.A. UDICH CHECKED BY D. BURTON

DEWBERRY & DAVIS
 ENGINEERS ARCHITECTS PLANNERS SURVEYORS
 3500 NORTH RIDGE ROAD
 ELLICOTT CITY, MARYLAND 20438
 (301) 461-7478



STRUCTURE SCHEDULE

STRUCTURE NO.	TYPE	TOP E.L.	INV. OUT	INV. IN	REMARKS *	STATIONING
I-1	A-5 W/ DEFLECTORS	445.84	438.23	438.48	S.D. 4.01 & S.D. 4.83	MORNINGSBLE LANE STA. 10+40
I-2	A-5 W/ DEFLECTORS	445.84	438.78	439.03	S.D. 4.01 & S.D. 4.83	"
I-3	"D" (OPEN 3 SIDES 6" OPENING)	450.83	440.49	440.74	S.D. 4.11	"
I-4	A-5	450.10	443.79	444.04	S.D. 4.01	GLENNMAR DRIVE STA. 11+60.43
I-5	A-10	450.10	444.40	---	S.D. 4.02	GLENNMAR DRIVE STA. 11+60.43
I-6	A-10 W/ DEFLECTORS	450.70	443.87	444.13	S.D. 4.02 & S.D. 4.83	GLENNMAR DRIVE STA. 11+60.43
I-7	A-10 W/ DEFLECTORS	451.45	444.99	445.24	S.D. 4.02 & S.D. 4.83	JUMPING FIELD COURT STA. 12+49.84
I-8	"D" (OPEN 3 SIDES 6" OPENING)	471.50	469.70	---	S.D. 4.11	"
I-9	NR (STANDARD)	483.91	---	474.90	MD 374.04 **	STA. 234+05.102
I-10	A-5 W/ DEFLECTORS	451.45	445.77	---	S.D. 4.01 & S.D. 4.83	JUMPING FIELD CT. STA. 12+49.84
I-11	A-10 W/ DEFLECTORS	455.63	449.35	449.60	S.D. 4.02 & S.D. 4.83	MORNINGSBLE LANE STA. 11+88
I-12	A-5 W/ DEFLECTORS	459.63	450.00	---	S.D. 4.01 & S.D. 4.83	"
I-13	A-5	461.98	459.75	456.00	S.D. 4.01	GOLDEN LEAF COURT STA. 111+06 LINEAR PROFILE
I-14	A-5	468.34	461.75	462.00	S.D. 4.01	MEADOWCREEK TERRACE STA. 3122.20
I-15	A-5	468.34	462.54	462.79	S.D. 4.01	"
I-16	"D" (OPEN 3 SIDES 6" OPENING)	472.83	464.92	465.17	S.D. 4.11	"
S-1	METAL END SECTION	438.26	---	435.26	S.D. 5.61	"
S-2	METAL END SECTION	450.02	---	447.77	S.D. 5.61	"
MH-1	MANHOLE (STANDARD)	450.90	442.09	443.09	S-5.02	GLENNMAR DRIVE STA. 11+48.54
MH-2	MANHOLE (STANDARD)	459.89	447.08	447.33	S-5.01	JUMPING FIELD CT. STA. 11+48
MH-3	MANHOLE (STANDARD)	464.00	455.00	457.80	S-5.01	JUMPING FIELD CT. STA. 11+48
I-17	A-10 W/ DEFLECTORS	473.80	468.15	468.65	S.D. 4.02 & S.D. 4.83	MORNINGSBLE LANE STA. 11+88.54
I-18	A-5 W/ DEFLECTORS	473.80	469.33	---	S.D. 4.01 & S.D. 4.83	"



1443

ENGINEER'S CERTIFICATE
I certify that this plan for pond construction, erosion and sediment control, drainage, 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 an "as-built" plan of the pond within 30 days of completion.

THOMAS L. WILBY, MD. REG. NO. 9273
DATE 3-1-88

DEVELOPER'S CERTIFICATE
I hereby certify that all construction and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Accreditation as a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

ANNETTE S. MALM, N.L. LAND, INC.
DATE 2/17/88

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. SOIL CONSERVATION SERVICE
DATE 3/22/88

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

HOWARD SOIL CONSERVATION DISTRICT
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION
DATE

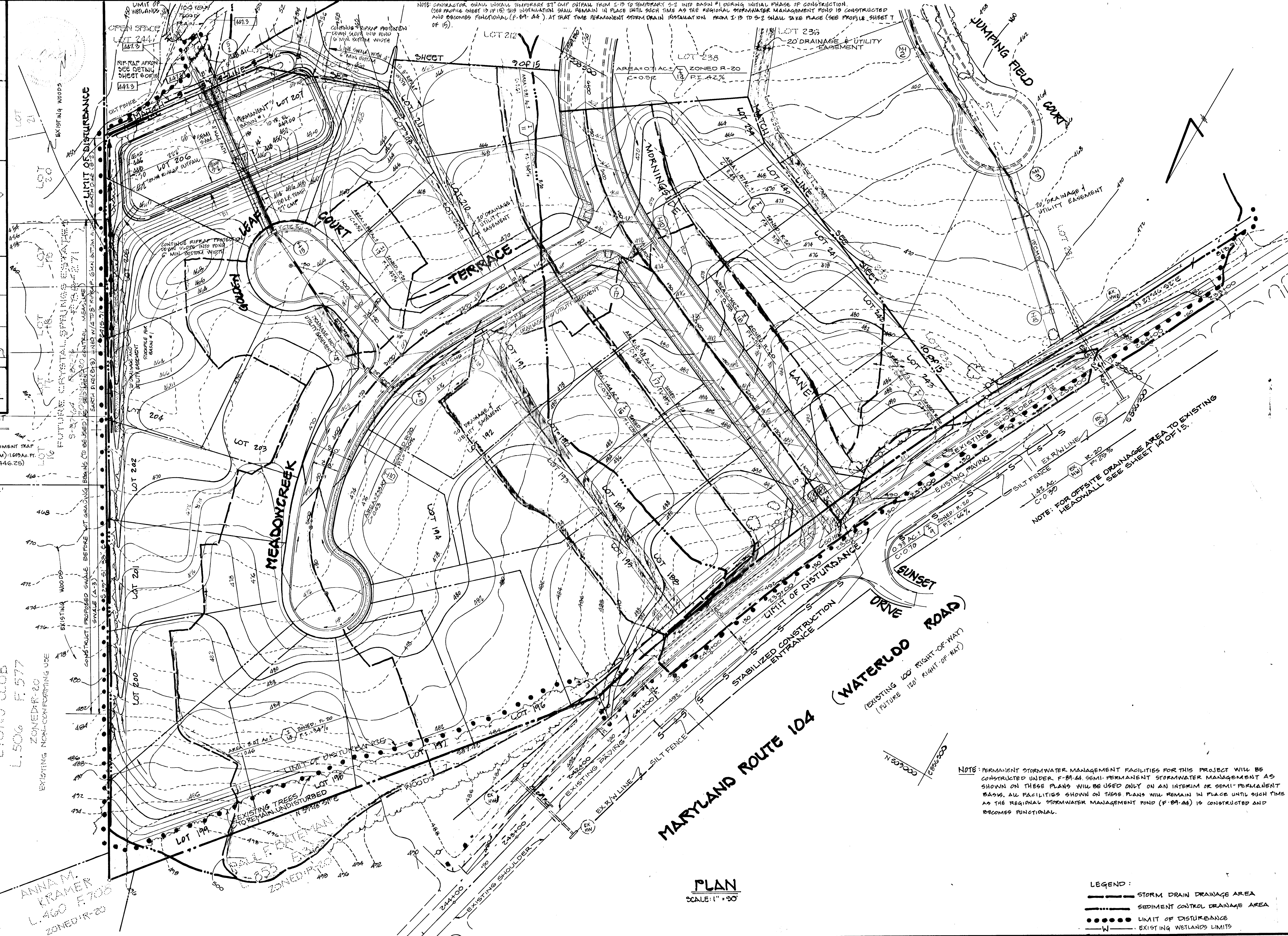
CHIEF, BUREAU OF HIGHWAY
DATE

CHIEF, BUREAU OF ENGINEERING
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE

- SEMI-PERMANENT STORMWATER MANAGEMENT BASIN / SEDIMENT TRAP NO. 1
- DRAINAGE AREA TO TRAP - 11.00 AC. ±
 - TYPE OF TRAP: MODIFIED RRMAP OUTLET SEDIMENT TRAP
 - VOLUME REQUIRED (COMBINED SEDIMENT/SWM): 1603 AC. FT.
 - SEDIMENT STORAGE: 0.497 AC. FT. (EL. 446.25)
 - SWM STORAGE: 1.146 AC. FT.
 - VOLUME PROVIDED: 1.603 AC. FT.
 - BASIN SIZE (BOTTOM DIMENSIONS): 68' x 232'
 - BASIN DEPTH: 4.0'
 - BOTTOM EL.: 445.00
 - CREST EL.: 448.41
 - CLEANOUT EL.: 445.50
 - WEIR WIDTH: 14.0'
 - SIDE SLOPES: 2:1 MAX
 - TOP EMBANKMENT EL.: 452.41
 - 10 YR. STORAGE EL.: 449.00
 - HAZARD CLASS: 'A'



LIONS CLUB
L 506 F 577
EXISTING NON-CONFORMING USE

ANNA M. KRAMER
L 460 F 705
ZONED R-20

PLAN
SCALE: 1" = 30'

NOTE: PERMANENT STORMWATER MANAGEMENT FACILITIES FOR THIS PROJECT WILL BE CONSTRUCTED UNDER F-84-44. SEMI-PERMANENT STORMWATER MANAGEMENT AS SHOWN ON THESE PLANS WILL BE USED ONLY ON AN INTERIM OR SEMI-PERMANENT BASIS. ALL FACILITIES SHOWN ON THESE PLANS WILL REMAIN IN PLACE UNTIL SUCH TIME AS THE REGIONAL STORMWATER MANAGEMENT POND (F-84-44) IS CONSTRUCTED AND BECOMES FUNCTIONAL.

LEGEND:
 - - - - - STORM DRAIN DRAINAGE AREA
 - - - - - SEDIMENT CONTROL DRAINAGE AREA
 ●●●●● LIMIT OF DISTURBANCE
 W - - - - - EXISTING WETLANDS LIMITS

DESIGNED		DATE		BY		DESCRIPTION	
I. CHANG	2/10/88	5-3-88	WJ/JAU	PER HOWARD COUNTY COMMENTS DATED 4/3/88			
J.R. GILSON	2/18/88	6-16-88	BOB/JAU	SEMI-PERMANENT SWM			
B.D. BURTON	6/18/88	8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88			
T.L. WILBY	3/1/88	10-18-88	BOB/JAU	PER HO. CO. COMMENTS DATED 10-2-88			
		1-30-89	BOB/JAU	PER HO. CO. COMMENTS DATED 1-12-89			
		2-16-90	WJ	PER HO. CO. COMMENTS DATED 12-14-89			

Dewberry & Davis
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS
 3300 N. RIDGE ROAD, SUITE 100
 ELLICOTT CITY, MD. 21043
 (301) 461-7478

OWNER & DEVELOPER:
 NV LAND, INC.
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101
 PHONE: (703) 734-9130

DRAINAGE AREA MAP, SEMI-PERMANENT SWM PLAN | GRADING AND SEDIMENT CONTROL PLAN
MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 100 TO LOT 245
 TAX MAP #31 PARCEL 423 BLOCKS 13, 14, 19 AND 20
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN FEBRUARY 1988

SCALE: AS SHOWN CONTRACT NO. FILE NO. SHEET 8 OF 15

1473

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 an "as-built" plan of the pond within 30 days of completion.

Signature of Engineer: *T. Wang* DATE: 3/1/88

DEVELOPER'S CERTIFICATE
I/We certify that all development and/or construction will be done according to these plans, 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 will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic office inspections by the Howard Soil Conservation District.

Signature of Developer: *W. M. Malm* DATE: 2/17/88

U.S. SOIL CONSERVATION SERVICE DATE: 2/23/87

HOWARD SOIL CONSERVATION DISTRICT DATE: 2/23/87

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

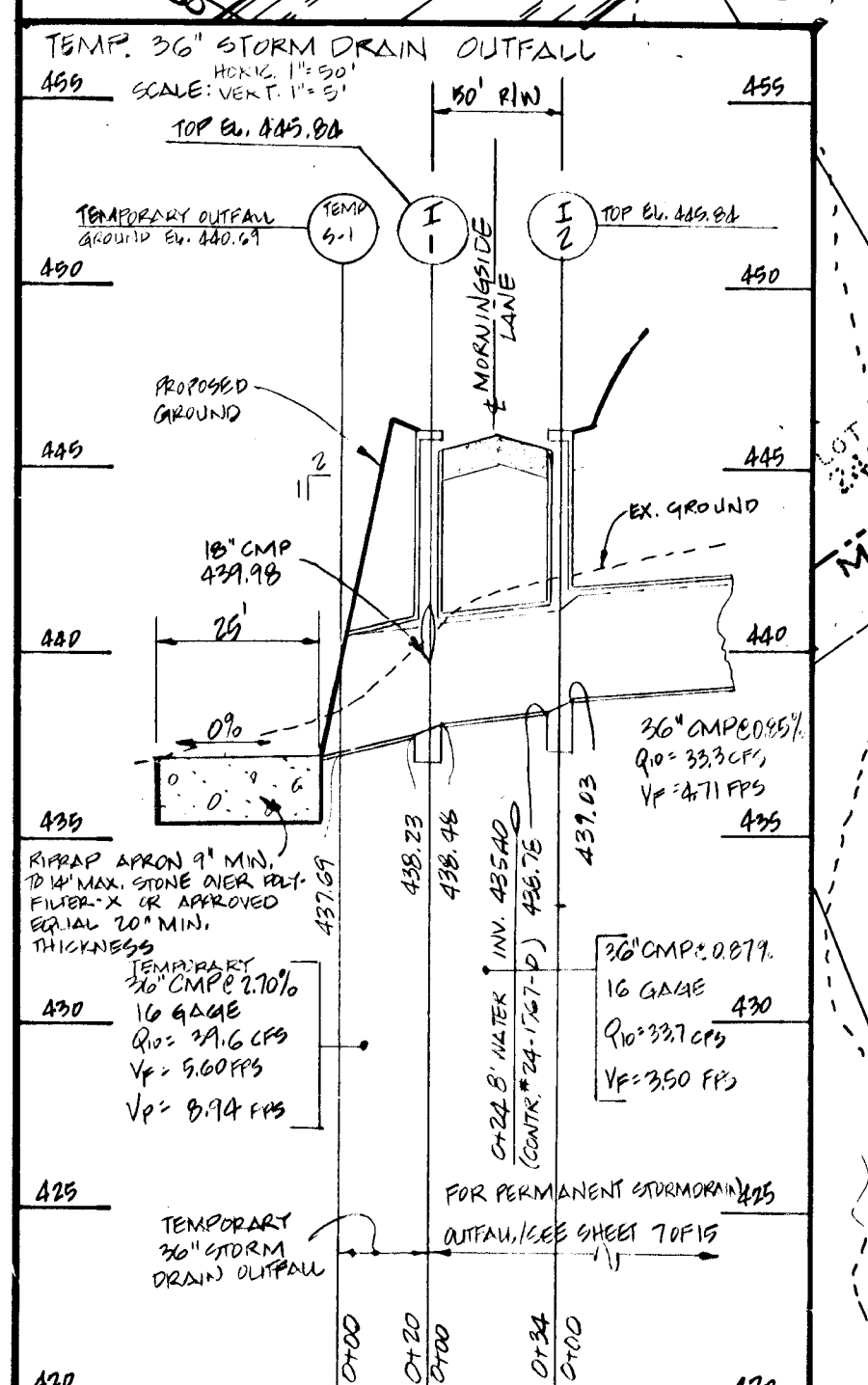
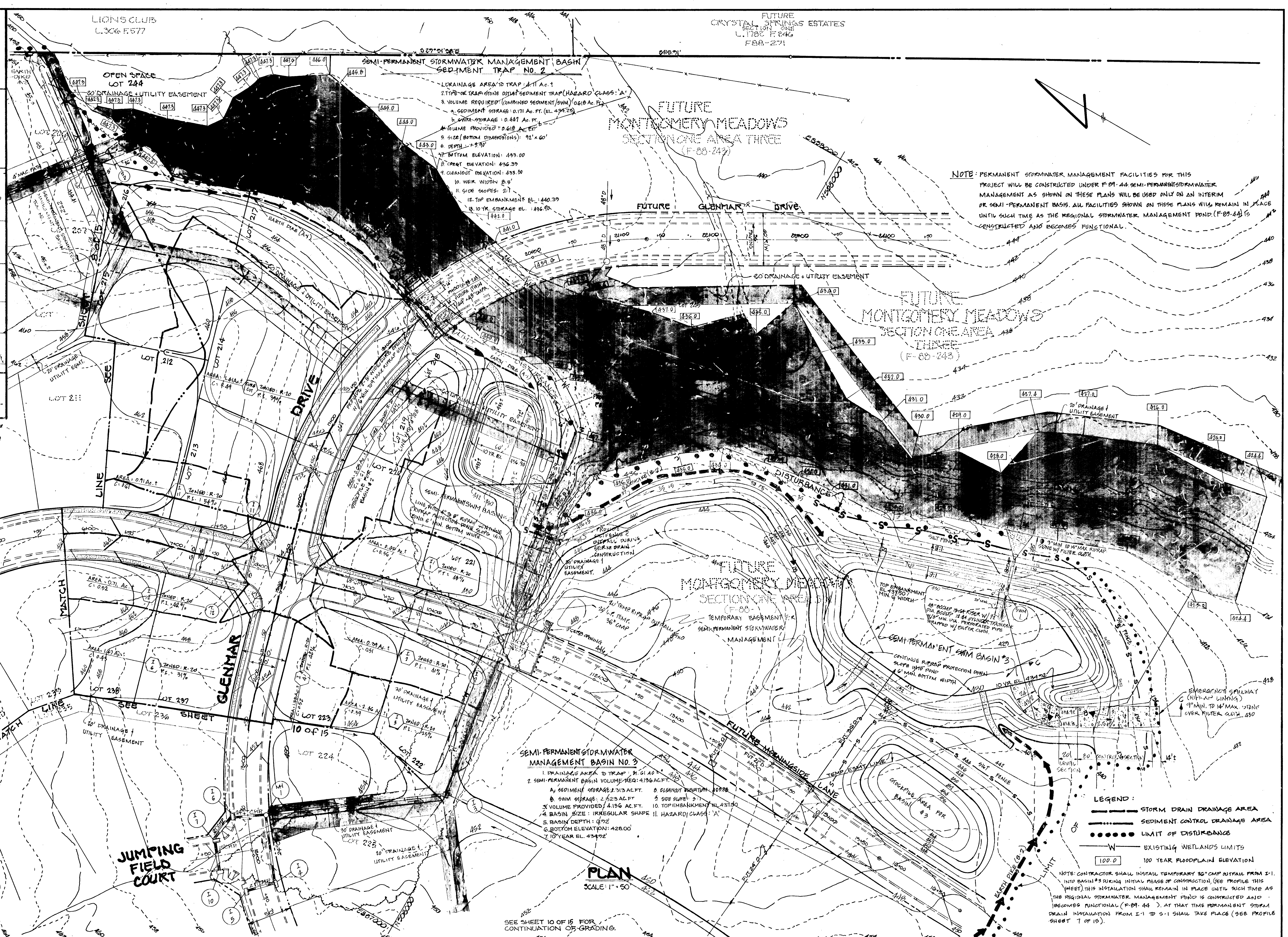
CHIEF, LAND DEVELOPMENT DIVISION DATE: 2/23/87

CHIEF, BUREAU OF HIGHWAY DATE: 2/23/87

CHIEF, BUREAU OF ENGINEERING DATE: 2/23/87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING DATE: 2/23/87

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



DESIGNED		DATE		BY		DESCRIPTION	
I. CHANG		2/18/88		S.B.		PER HOWARD COUNTY COMMENTS DATED 4/13/88	
DRAWN		2/18/88		J.P.		TEMPORARY SWM	
CHECKED		2/18/88		J.A.U.		PER HO. CO. COMMENTS DATED 6-17-88	
APPROVED		2/18/88		S.B.		PER HO. CO. COMMENTS DATED 10-6-88	
T.L. WILEY		2/18/88		S.B.		PER HO. CO. COMMENTS DATED 1-12-89	

Dewberry & Davis
ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS
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ELLCOTT CITY, MD. 21043
(301) 461-7478

OWNER & DEVELOPER
NY LAND, INC.
6820 ELM STREET
MCLEAN, VIRGINIA 22101
PHONE: (703) 734-9730

DRAINAGE AREA MAP, SEMI-PERMANENT SWM PLAN & GRADING AND SEDIMENT CONTROL PLAN
MONTGOMERY MEADOWS
SECTION ONE LOT 245
AREA FOUR
BLOCKS 13, 14, 19 AND 20
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN
FEBRUARY 1988

SCALE: AS SHOWN CONTRACT NO. FILE NO. SHEET 7 OF 15

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 "as-built" plan of the pond within 30 days of completion."

Signature: *[Signature]* DATE: 3-1-88

DEVELOPER'S CERTIFICATE
 "I/we certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Acceptance as a Department of Natural Resources Approved Existing Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with a "as-built" plan of the pond within 30 days of completion. I also authorize periodic periodic inspections by the Howard Soil Conservation District."

Signature: *[Signature]* DATE: 2/17/88

OWNER/DEVELOPER
 Signature: *[Signature]* DATE: 2/22/87

U.S. SOIL CONSERVATION SERVICE
 Signature: *[Signature]* DATE: 2/22/87

HOWARD SOIL CONSERVATION DISTRICT
 Signature: *[Signature]* DATE: 2/22/87

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* DATE: 2/22/87

CHIEF, LAND DEVELOPMENT DIVISION
 Signature: *[Signature]* DATE: 2/22/87

CHIEF, BUREAU OF HIGHWAY
 Signature: *[Signature]* DATE: 2/22/87

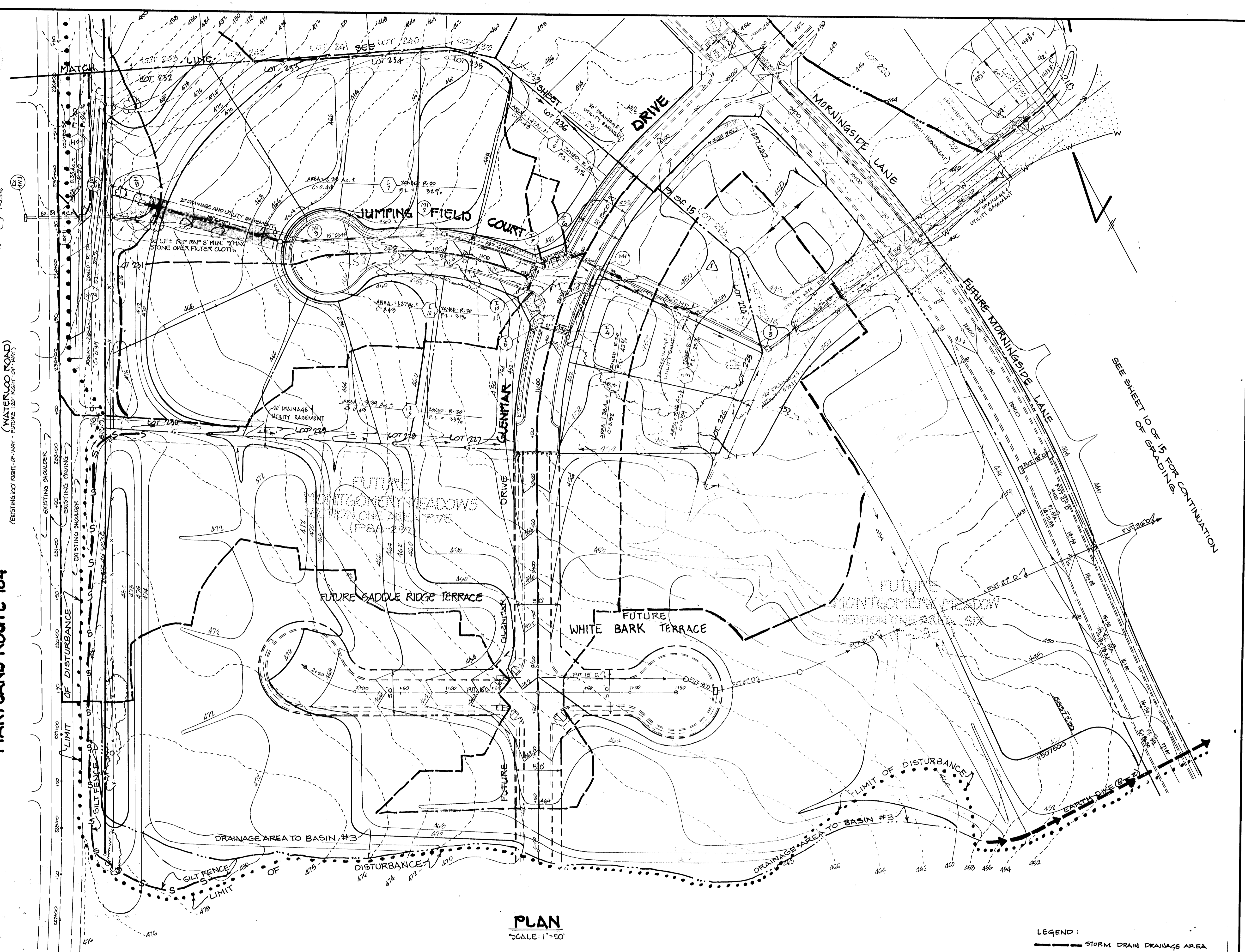
CHIEF, BUREAU OF ENGINEERING
 Signature: *[Signature]* DATE: 2/22/87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 Signature: *[Signature]* DATE: 2/22/87

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 Signature: *[Signature]* DATE: 2/22/87

NOTE: FOR OFFSITE DRAINAGE AREA TO EXISTING HEADWALL SEE SHEET 14 OF 15.

MARYLAND ROUTE 104



PLAN
 SCALE: 1" = 50'

LEGEND:
 - - - - - STORM DRAIN DRAINAGE AREA
 - - - - - SEDIMENT CONTROL DRAINAGE AREA
 - - - - - LIMIT OF DISTURBANCE
 - - - - - EXISTING WETLANDS LIMITS

NOTE: PERMANENT STORMWATER MANAGEMENT FACILITIES FOR THIS PROJECT WILL BE CONSTRUCTED UNDER F-81-44 SEMI-PERMANENT STORMWATER MANAGEMENT AS SHOWN ON THESE PLANS WILL BE USED ONLY ON AN INTERIM OR SEMI-PERMANENT BASIS. ALL FACILITIES SHOWN ON THESE PLANS WILL REMAIN IN PLACE UNTIL SUCH TIME AS THE REGIONAL STORMWATER MANAGEMENT PLAN (F-81-44) IS CONSTRUCTED AND BECOMES FUNCTIONAL.

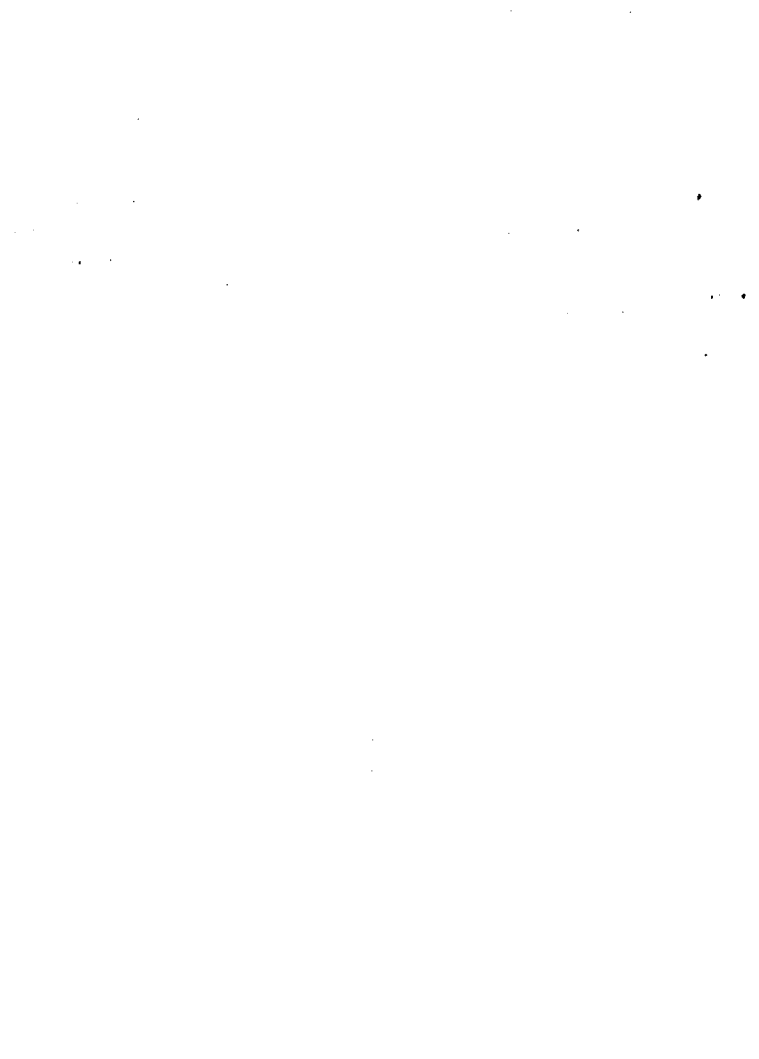
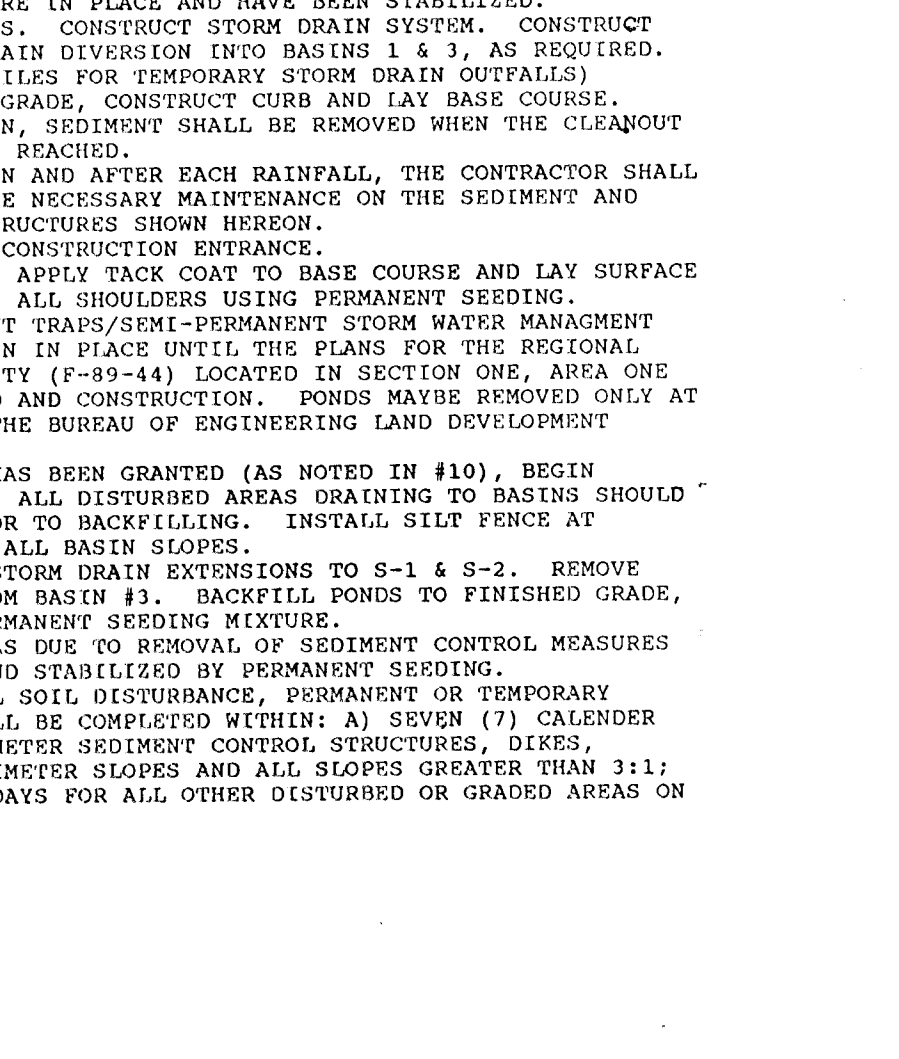
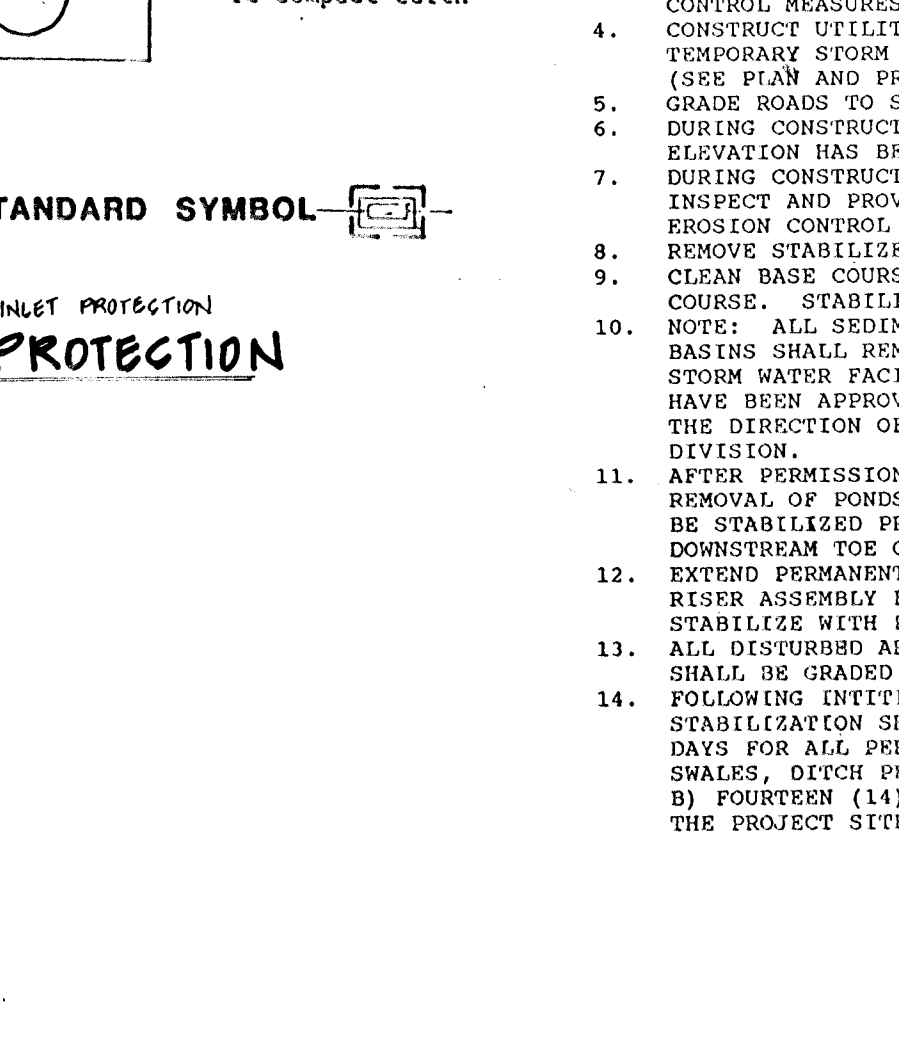
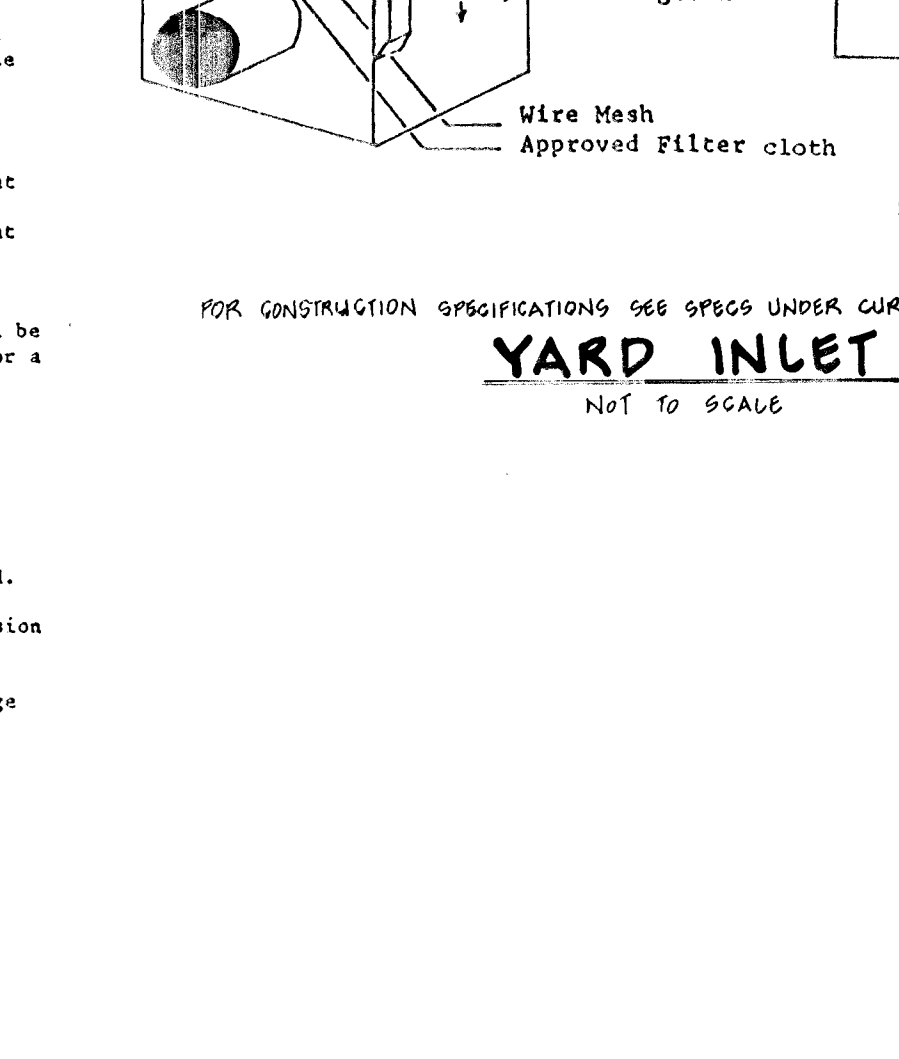
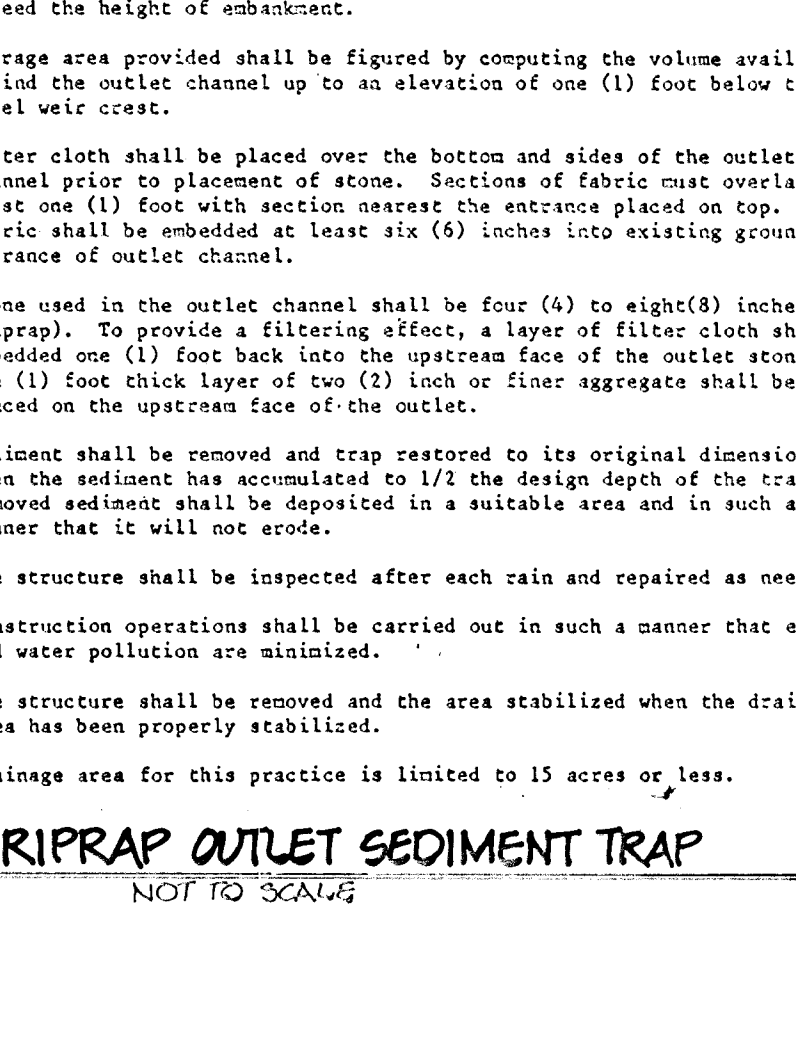
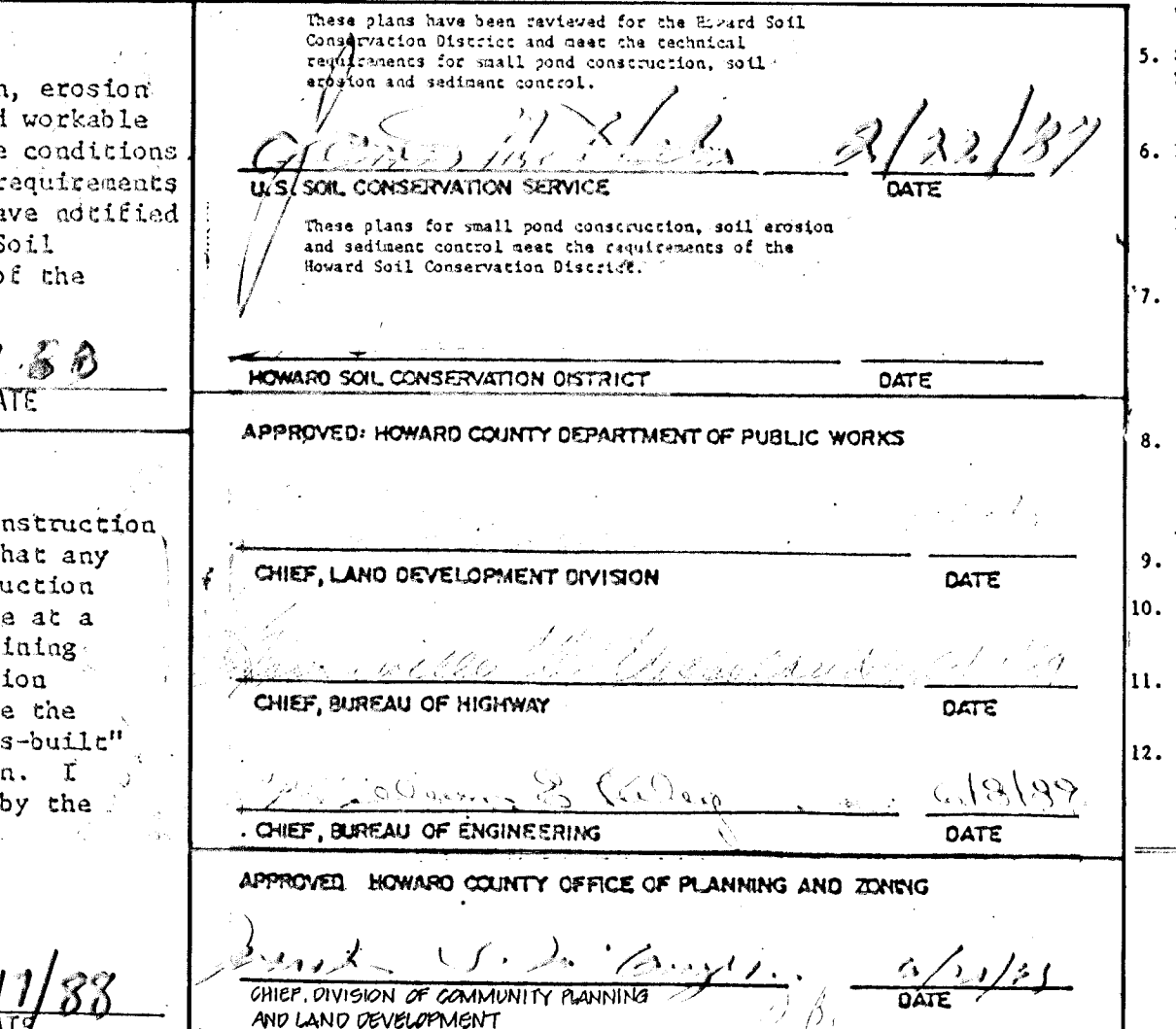
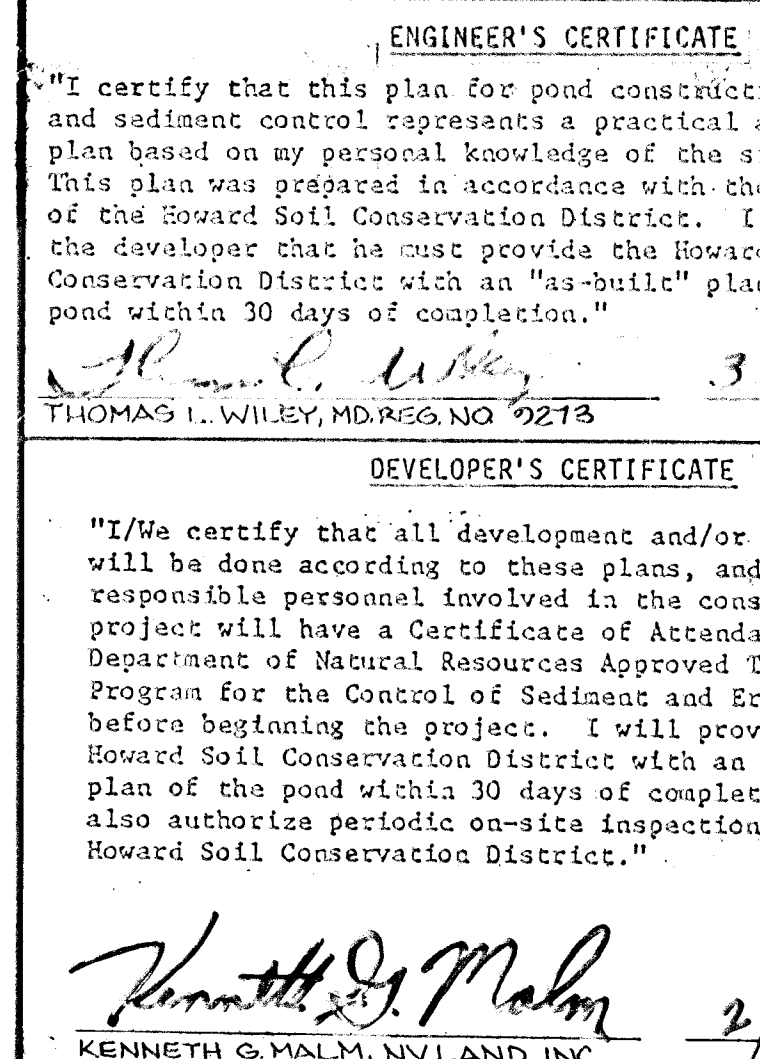
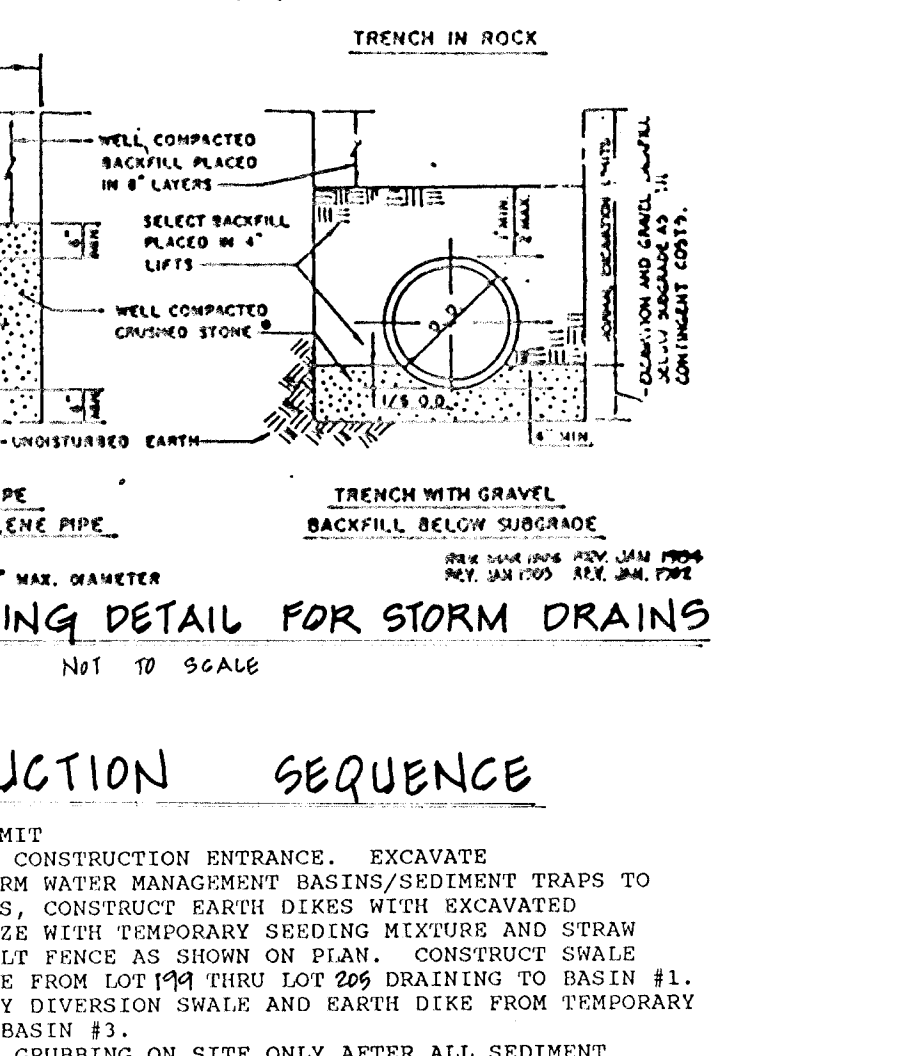
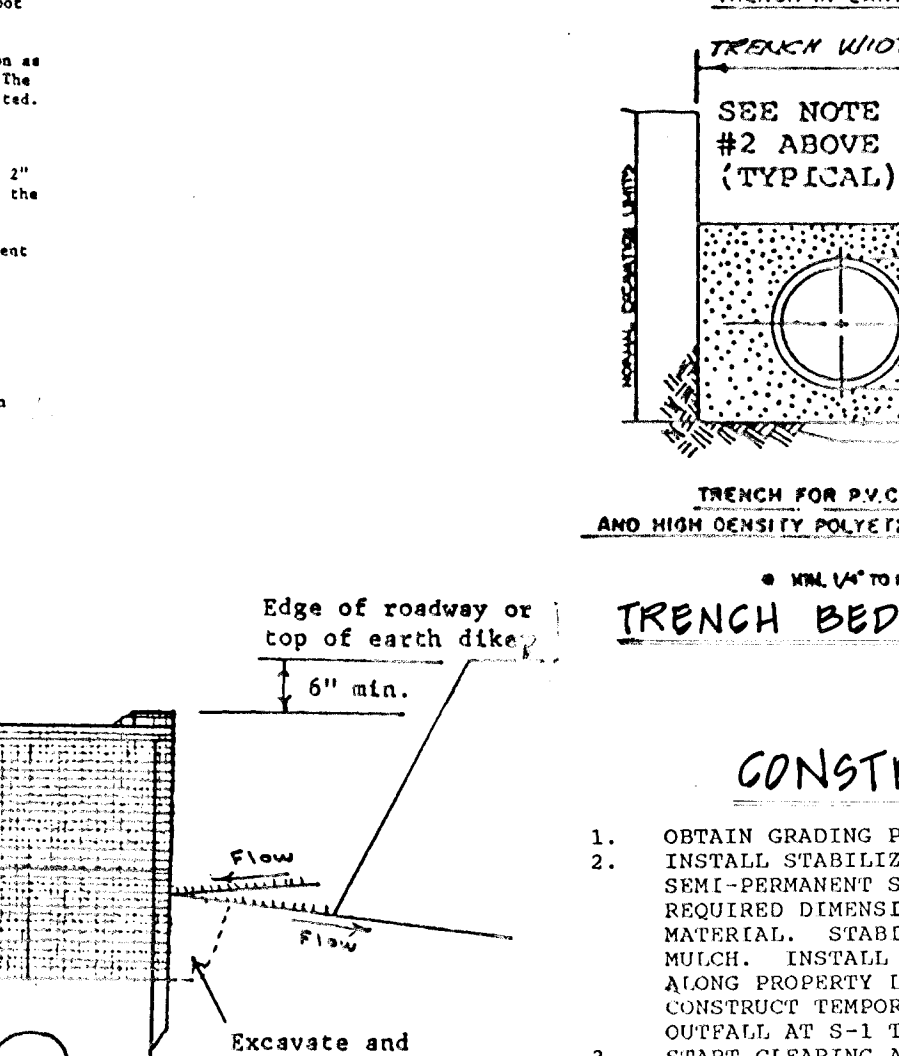
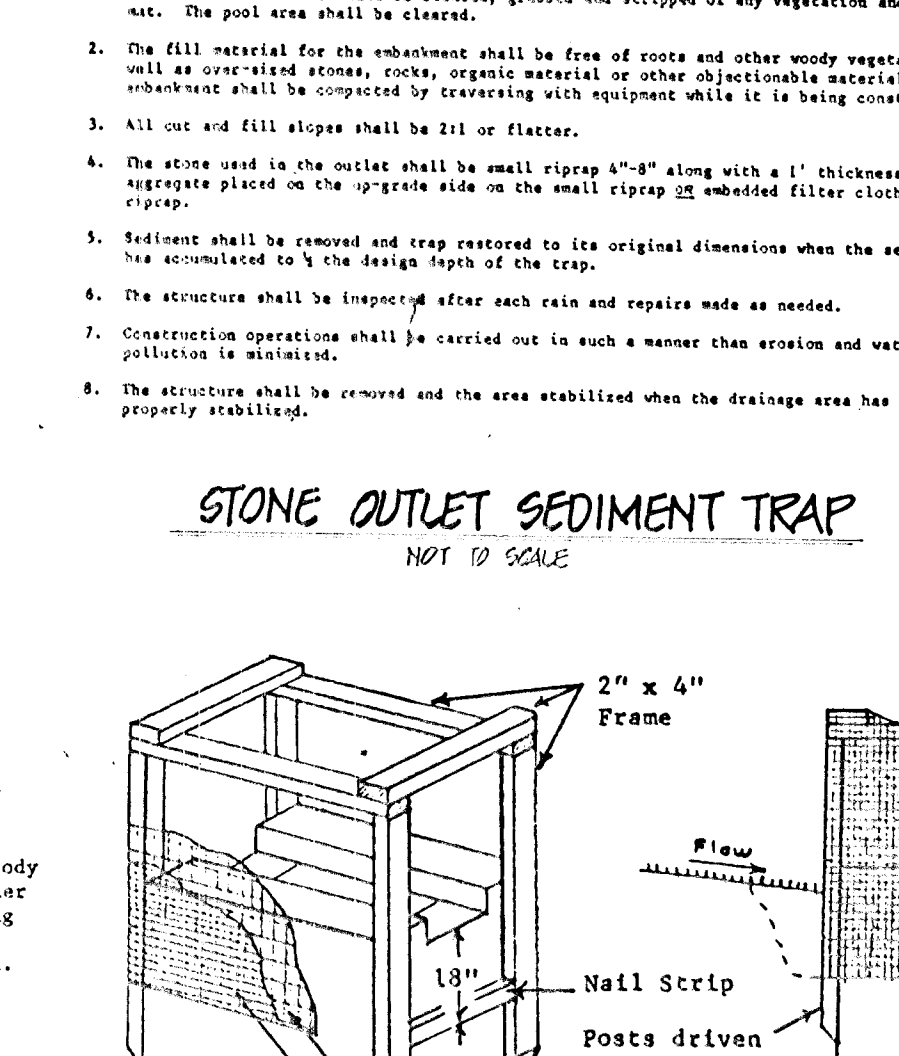
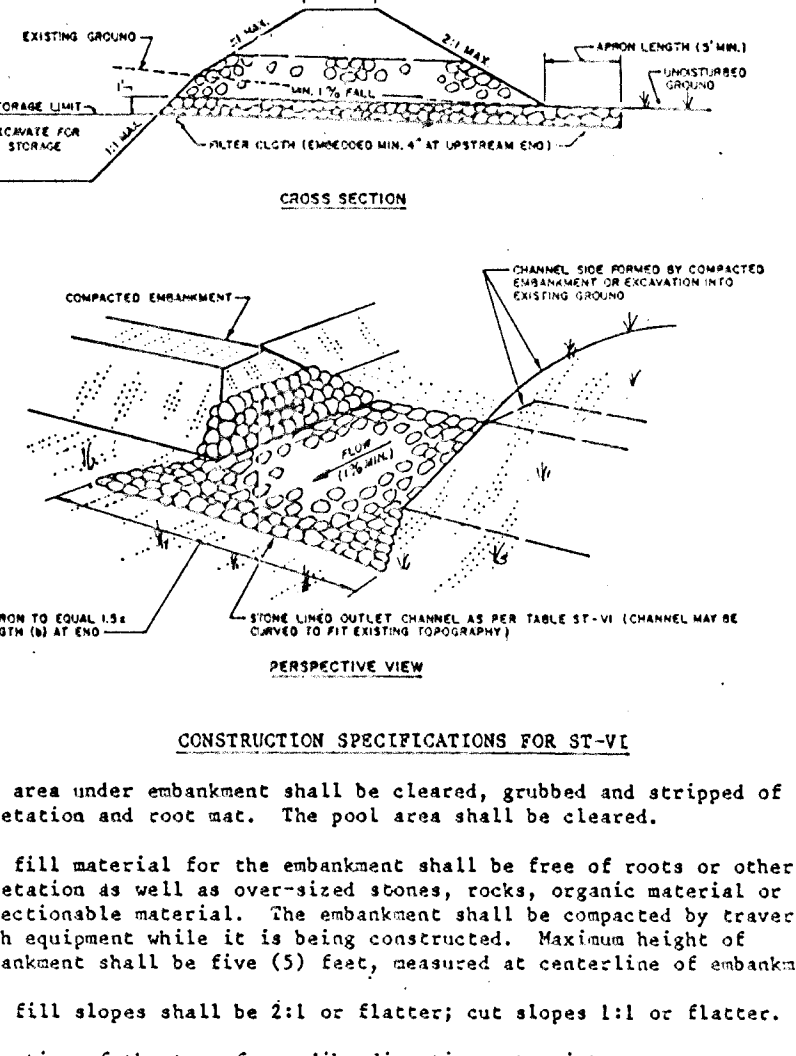
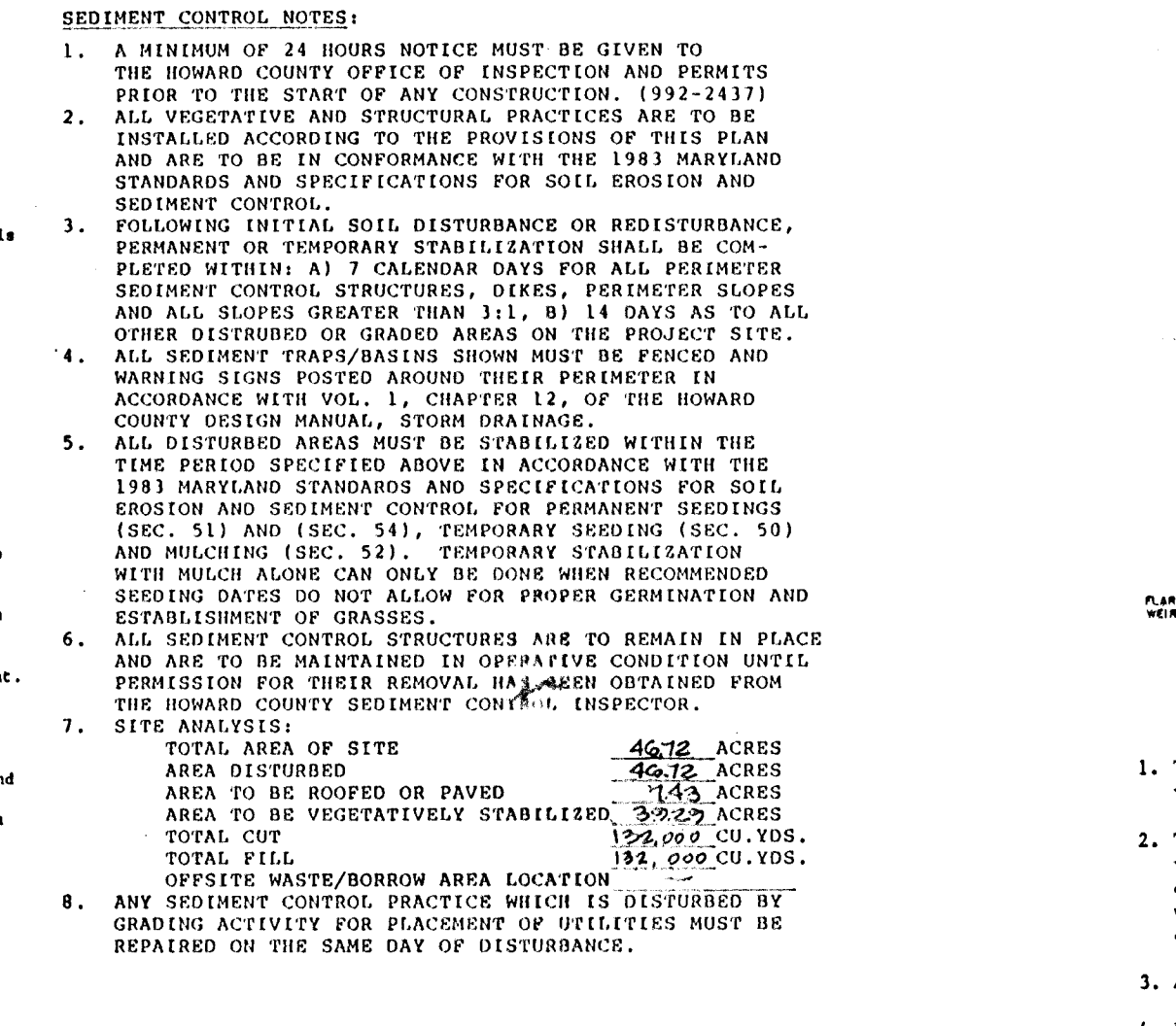
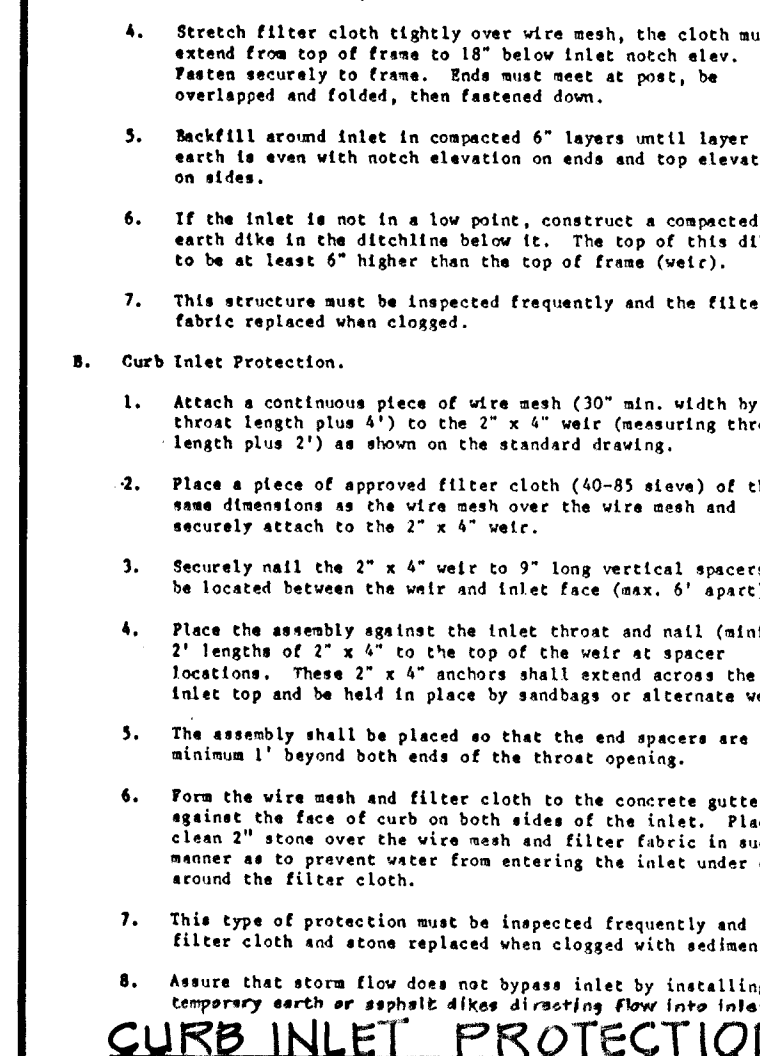
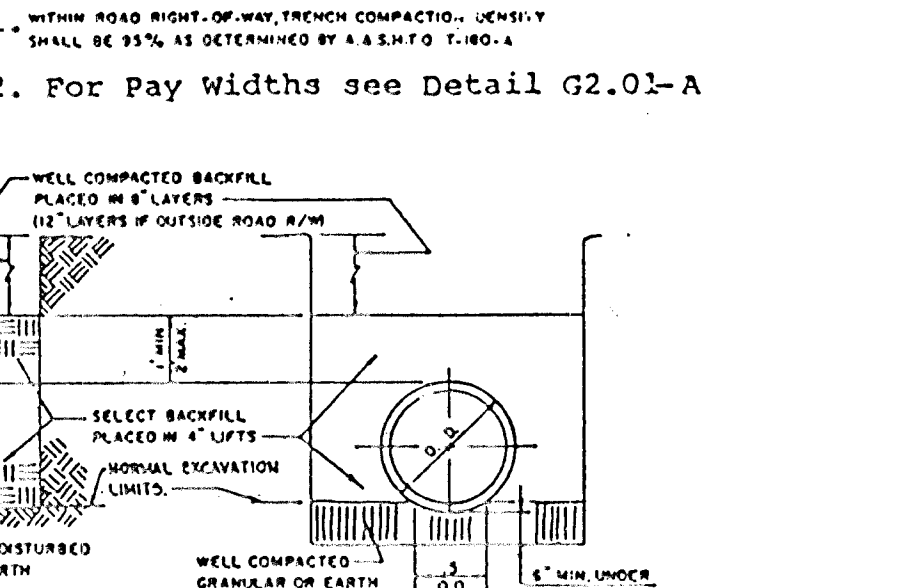
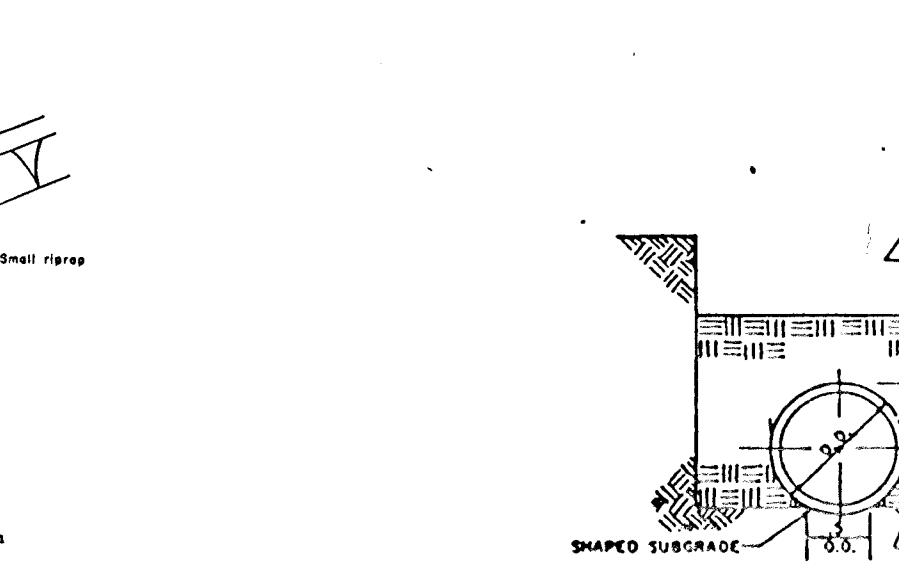
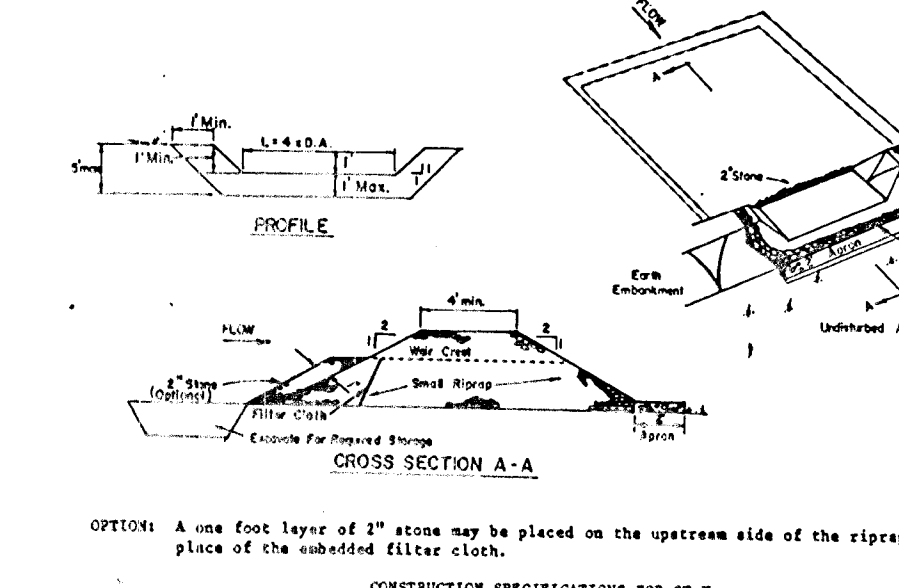
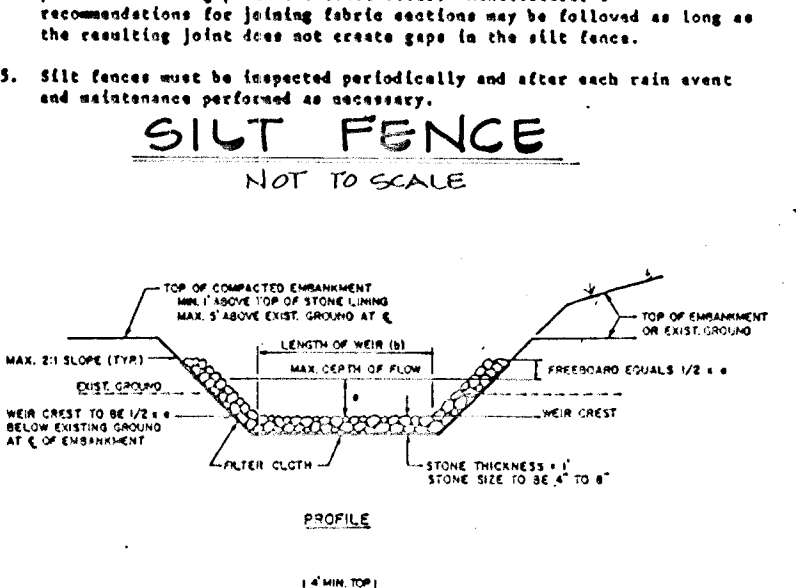
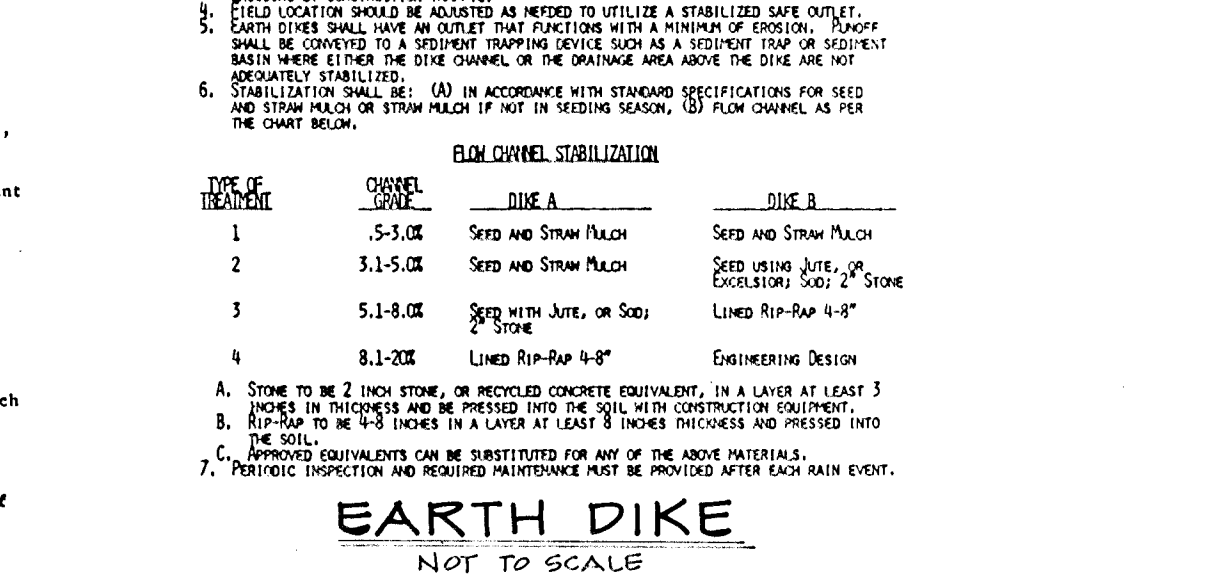
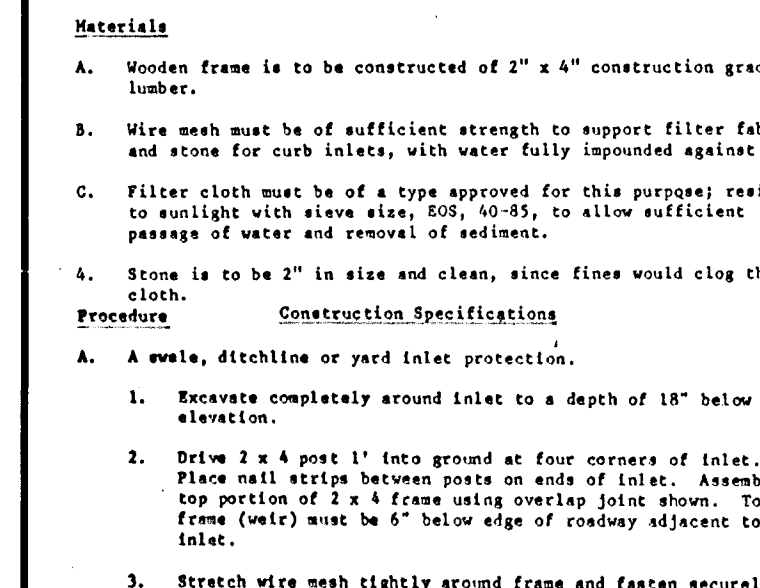
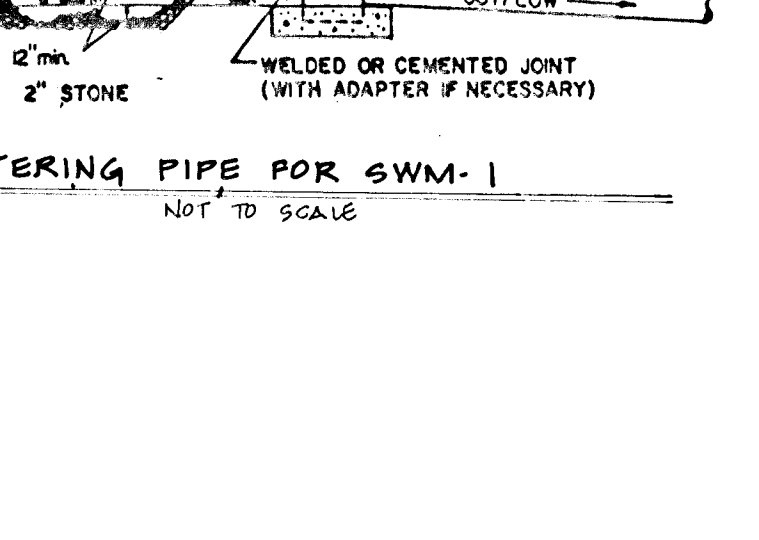
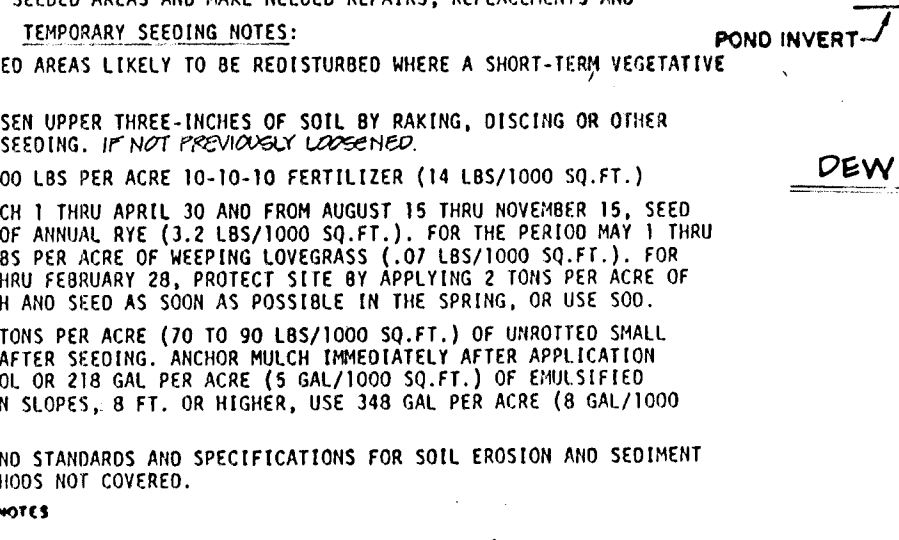
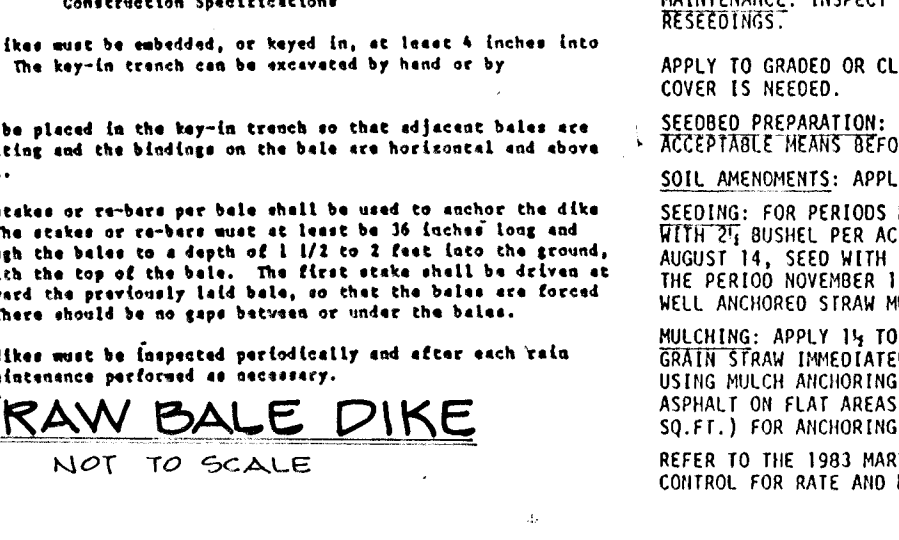
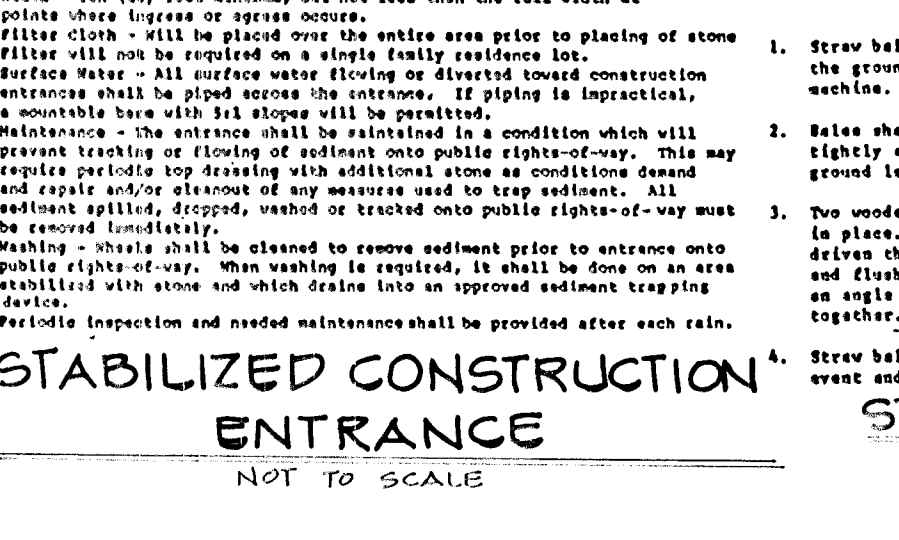
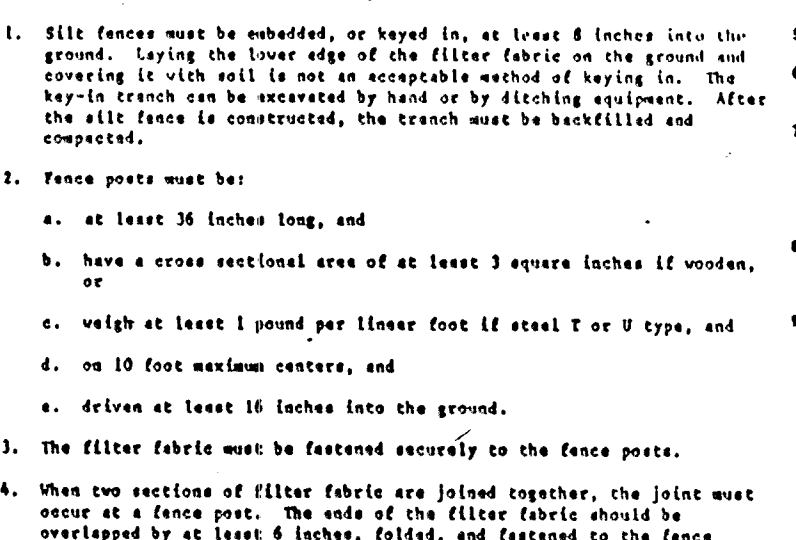
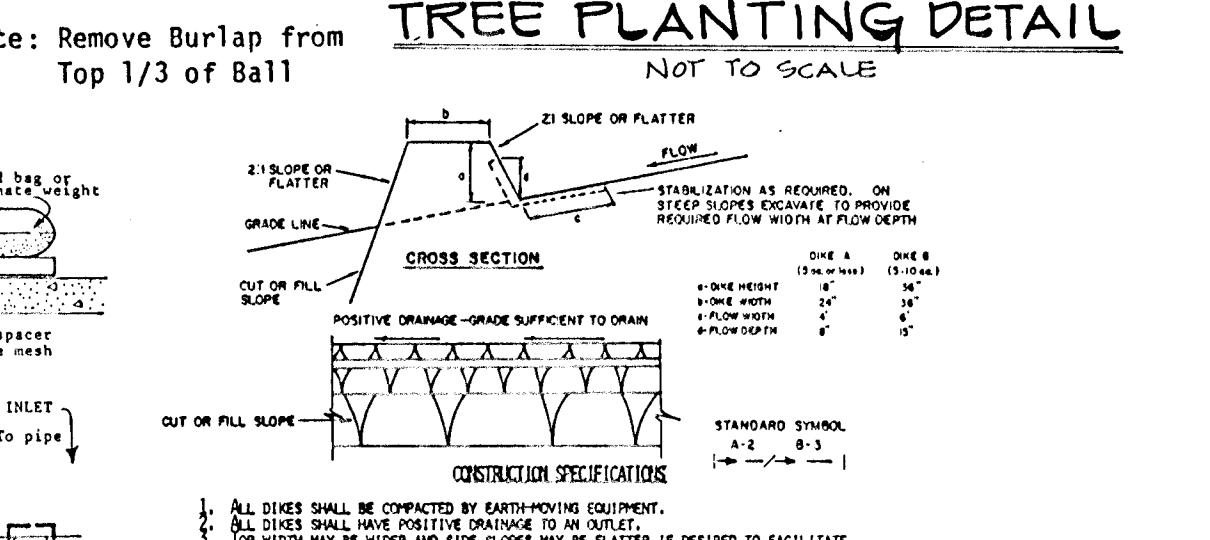
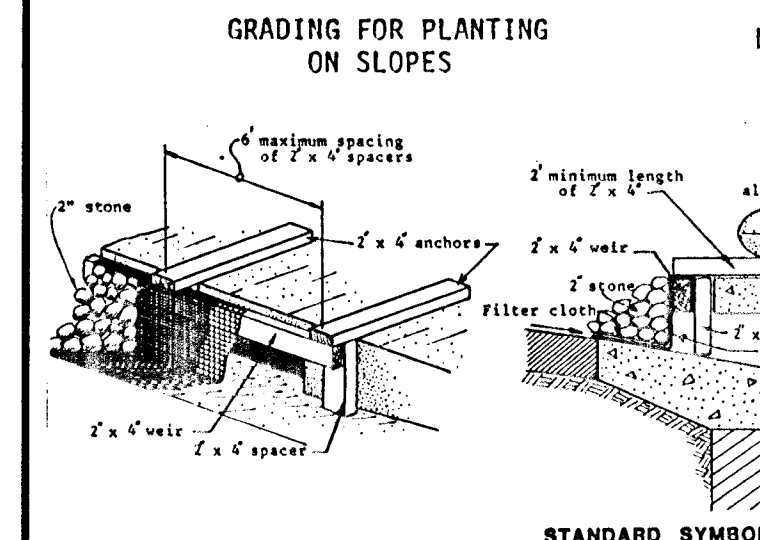
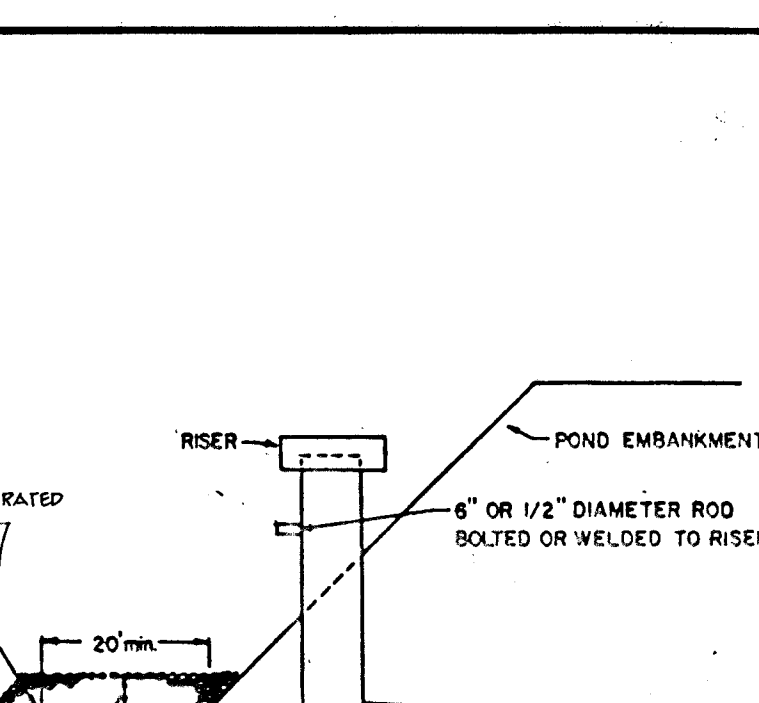
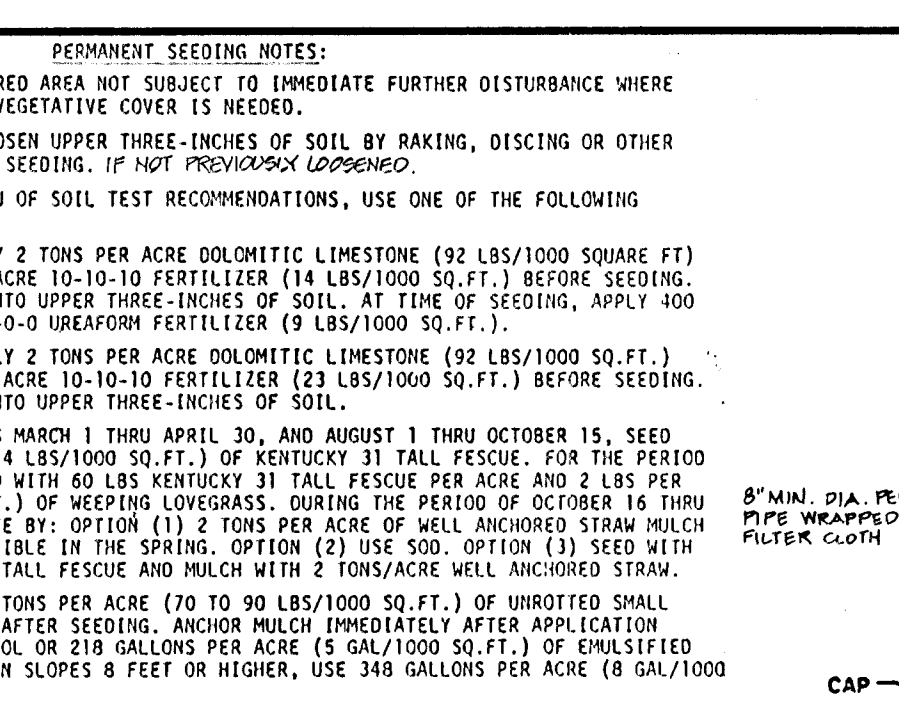
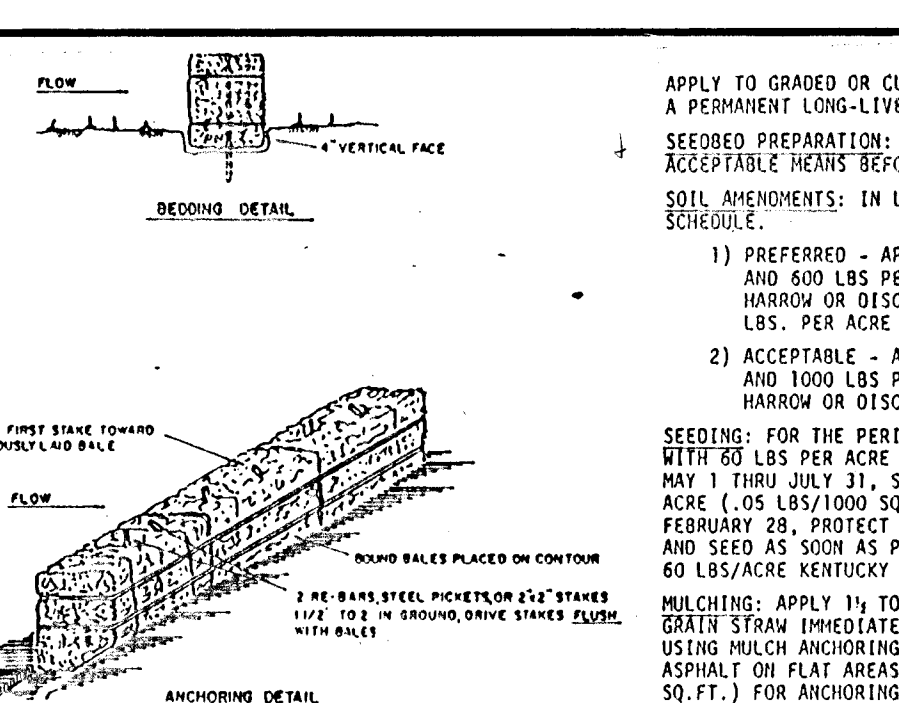
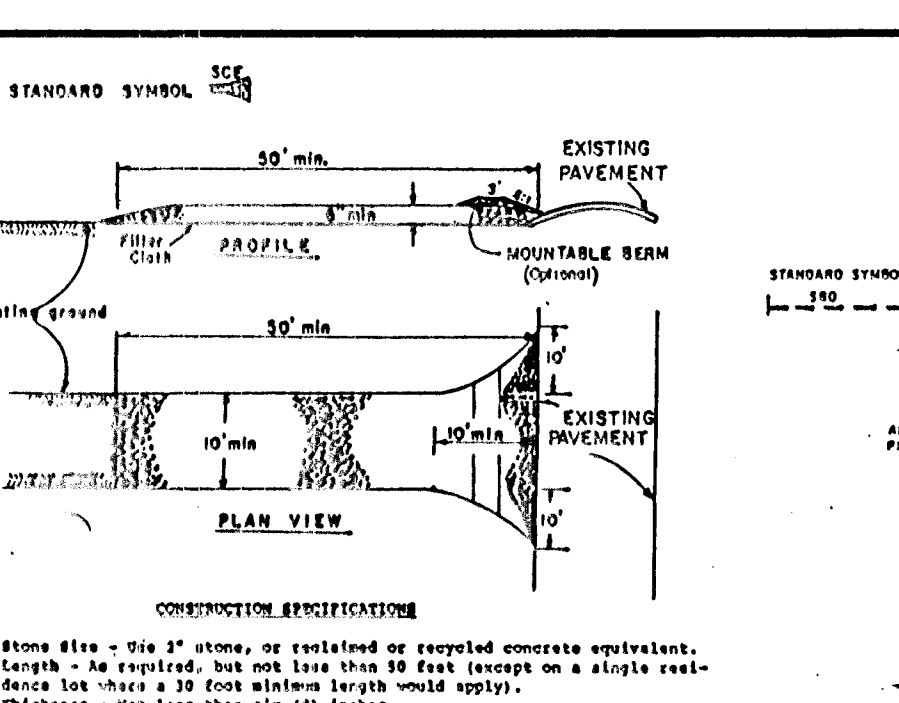
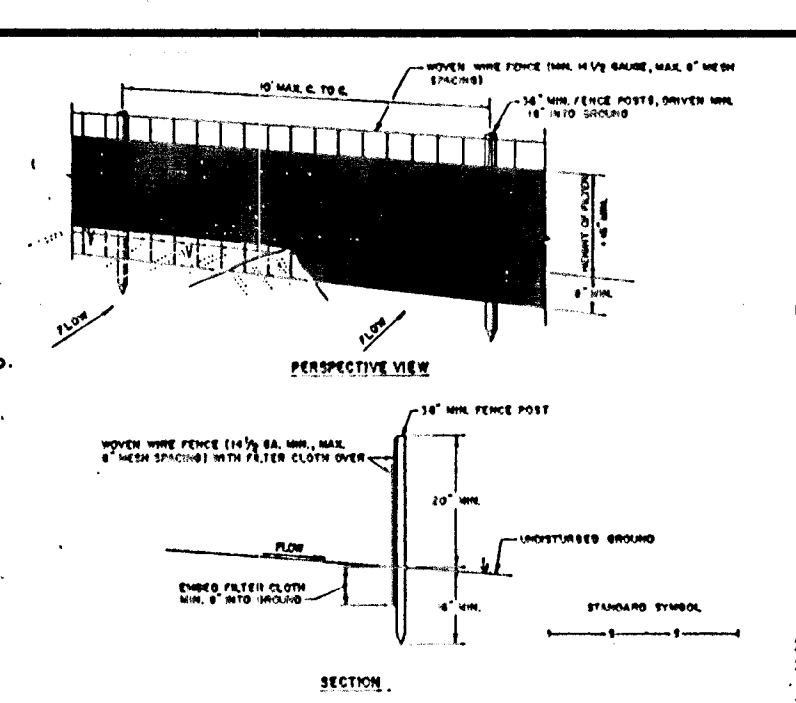
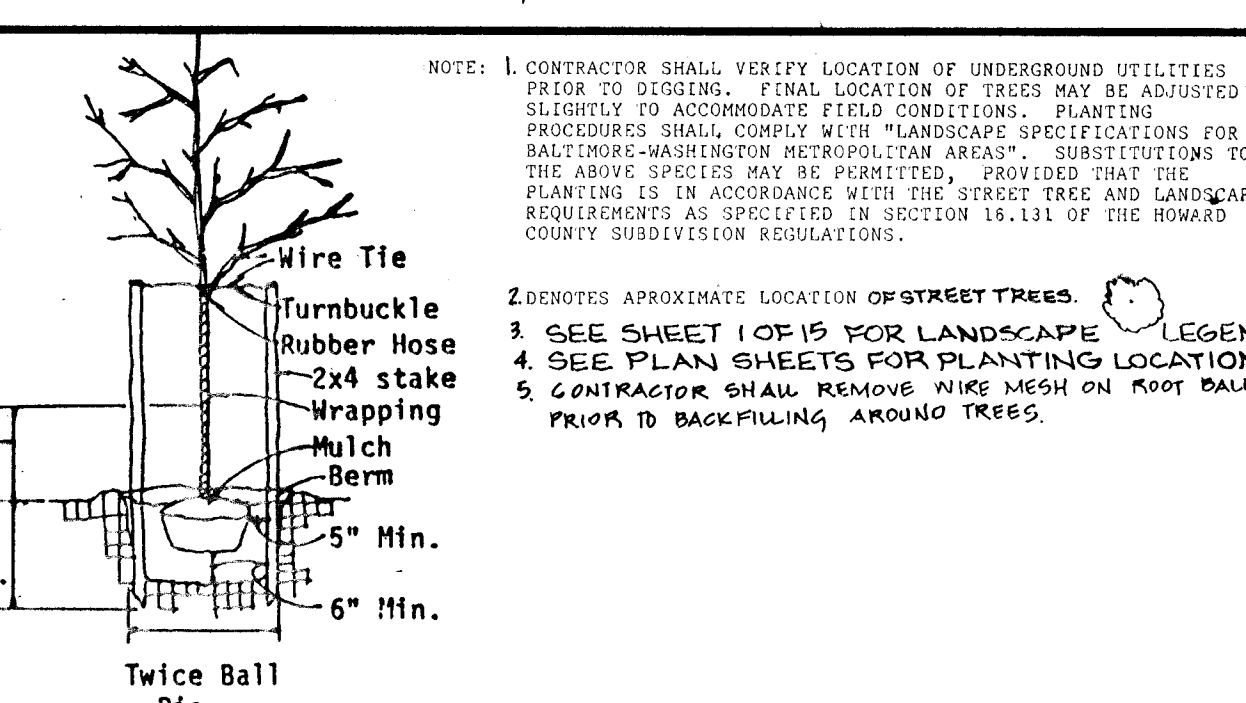
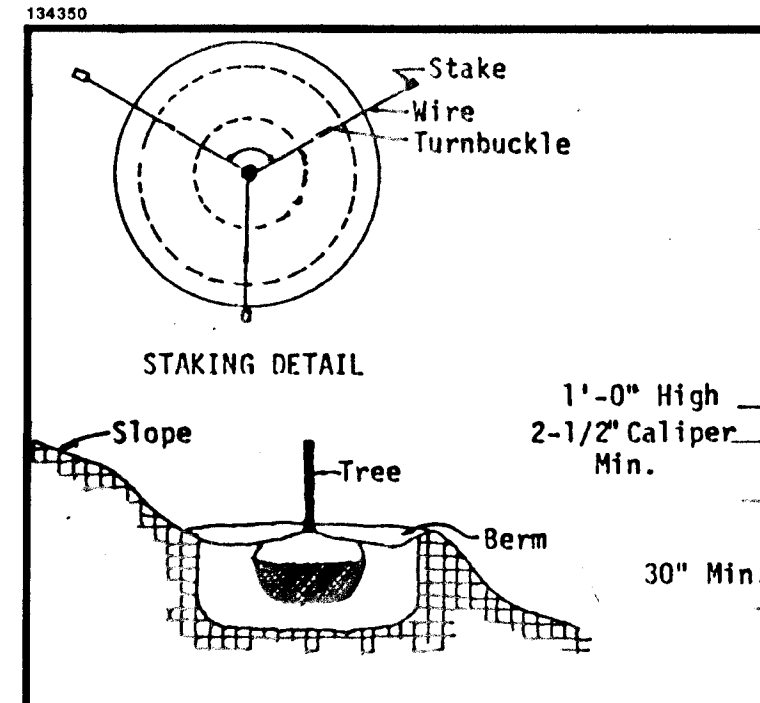
1743

DESIGNED		DATE		BY		DESCRIPTION	
J. CHANG	2/10/88	5-3-88	JPH/JAU	PER HOWARD COUNTY COMMENTS DATED 4-13-88			
J.R. GILSON	2/10/88	6-16-88	806/JAU	TEMPORARY SWM			
B.D. BURTON	2/10/88	8-1-88	JAU	PER HO. CO. COMMENTS DATED 6-17-88			
J.L. WILEY	2/10/88	10-16-88	806/JAU	PER HO. CO. COMMENTS DATED 10-6-88			
J.L. WILEY	2/10/88	1-30-89	806/JAU	PER HO. CO. COMMENTS DATED 1-12-89			
J.L. WILEY	2/10/88	1-13-90	JAU	PER HO. CO. COMMENTS DATED 1-13-90			

Dewberry & Davis
 ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS
 3300 N. RIDGE ROAD, SUITE 100
 ELLICOTT CITY, MD. 21043
 (301) 461-7478

OWNER & DEVELOPER:
 NY LAND, INC.
 6820 ELM STREET
 MCLEAN, VIRGINIA 22101
 PHONE: (703) 734-9730

DRAINAGE AREA MAP, SEMI-PERMANENT SWM PLAN & GRADING AND SEDIMENT CONTROL PLAN
MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 188 TO LOT 245
 BLOCKS 13, 14, 19 AND 20
 19th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN
 FEBRUARY 1988



DESIGNED	DATE
B.D. BURTON	2-8-88
J.A. UDICH	2-8-88
B.D. BURTON	2-8-88
T.L. WILEY	2-8-88

DATE	BY	DESCRIPTION
5-3-88	JAU	PER HO.CO COMMENTS DATED 4/19/88
8-1-88	JAU	PER HO.CO COMMENTS DATED 6/17/88
10-14-88	JAU	PER HO.CO COMMENTS DATED 10-6-88
1-22-89	JAU	PER HO.CO COMMENTS DATED 1-12-89

Dewberry & Davis

ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS

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6820 ELM STREET
MCLEAN, VIRGINIA 22101
PHONE: (703) 794-4750

SEDIMENT CONTROL DETAILS

MONTGOMERY MEADOWS
SECTION ONE, AREA FOUR
LOT 1081 THRU LOT 246

TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' FEBRUARY, 1988

SCALE: AS SHOWN CONTRACT NO. FILE NO. SHEET 11 OF 12

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 certified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

THOMAS L. WILEY, M.D., REG. NO. 9273 DATE 3/1/88

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. SOIL CONSERVATION SERVICE DATE 2/22/87

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

HOWARD SOIL CONSERVATION DISTRICT DATE

DEVELOPER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to these plans, 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 will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Kenneth G. Malm, NV LAND INC. DATE 2/11/88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION DATE

CHIEF, BUREAU OF HIGHWAY DATE

CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

CONSTRUCTION SPECIFICATIONS FOR ST-1

- The area under embankment shall be cleared, grubbed and stripped of any vegetation and rock mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be constructed by traversing with equipment while it is being constructed. Maximum height of embankment shall be five (5) feet, measured at centerline of embankment.
- All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
- Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
- Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
- Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
- Stone used in the outlet channel shall be four (4) to eight (8) inches (ciprap). To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
- 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. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected after each rain and repaired as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
- Drainage area for this practice is limited to 15 acres or less.

CONSTRUCTION SEQUENCE

- OBTAIN GRADING PERMIT
- INSTALL STABILIZED CONSTRUCTION ENTRANCE. EXCAVATE SEMI-PERMANENT STORM WATER MANAGEMENT BASINS/SEDIMENT TRAPS TO REQUIRED DIMENSIONS. CONSTRUCT EARTH DIKES WITH EXCAVATED MATERIAL. STABILIZE WITH TEMPORARY SEEDING MIXTURE AND STRAW MULCH. INSTALL SILT FENCE AS SHOWN ON PLAN. CONSTRUCT SINGLE STORM WATER DIVERSION FROM LOT #1 THRU LOT #25 DRAINING TO BASIN #1. CONSTRUCT TEMPORARY DIVERSION SWALE AND EARTH DIKE FROM TEMPORARY OUTFALL AT S-1 TO BASIN #3.
- START CLEARING AND GRUBBING ON SITE ONLY AFTER ALL SEDIMENT CONTROL MEASURES ARE IN PLACE AND HAVE BEEN STABILIZED.
- CONSTRUCT TEMPORARY STORM DRAIN DIVERSION FROM BASIN #4 TO BASIN #3. (SEE PLAN AND PROFILES FOR TEMPORARY STORM DRAIN OUTFALLS)
- GRADE ROADS TO SUBGRADE, CONSTRUCT CURB AND LAY BASE COURSE.
- DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
- DURING CONSTRUCTION AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND REPAIR NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
- REMOVE STABILIZED CONSTRUCTION ENTRANCE.
- CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE. STABILIZE ALL SLOPES USING PERMANENT SEEDING.
- NOTE: ALL SEDIMENT TRAPS/SEMI-PERMANENT STORM WATER MANAGEMENT BASINS SHALL REMAIN IN PLACE UNTIL THE PLANS FOR THE REGIONAL STORM WATER FACILITY (P-83-84) LOCATED IN SECTION ONE, AREA ONE HAVE BEEN APPROVED AND CONSTRUCTION. PONDS MAY BE REMOVED ONLY AT THE DIRECTION OF THE BUREAU OF ENGINEERING LAND DEVELOPMENT DIVISION.
- AFTER PERMISSION HAS BEEN GRANTED (AS NOTED IN #10), BEGIN REMOVAL OF PONDS. ALL DISTURBED AREAS DRAINING TO BASINS SHOULD BE STABILIZED PRIOR TO BACKFILLING. INSTALL SILT FENCE AT DOWNSTREAM TOE OF ALL BASIN SLOPES.
- EXTEND PERMANENT STORM DRAIN EXTENSIONS TO S-1 & S-2 REMOVE RESTER ASSEMBLY FROM BASIN #3. BACKFILL AND FINISH TO FINISHED GRADE, STABILIZE WITH PERMANENT SEEDING MIXTURE.
- ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADDED AND STABILIZED BY PERMANENT SEEDING.
- FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) SEVEN (7) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) FOURTEEN (14) DAYS FOR ALL OTHER DISTURBED OR GRADDED AREAS ON THE PROJECT SITE.

SEDIMENT CONTROL DETAILS

MONTGOMERY MEADOWS
SECTION ONE, AREA FOUR
LOT 1081 THRU LOT 246

TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' FEBRUARY, 1988

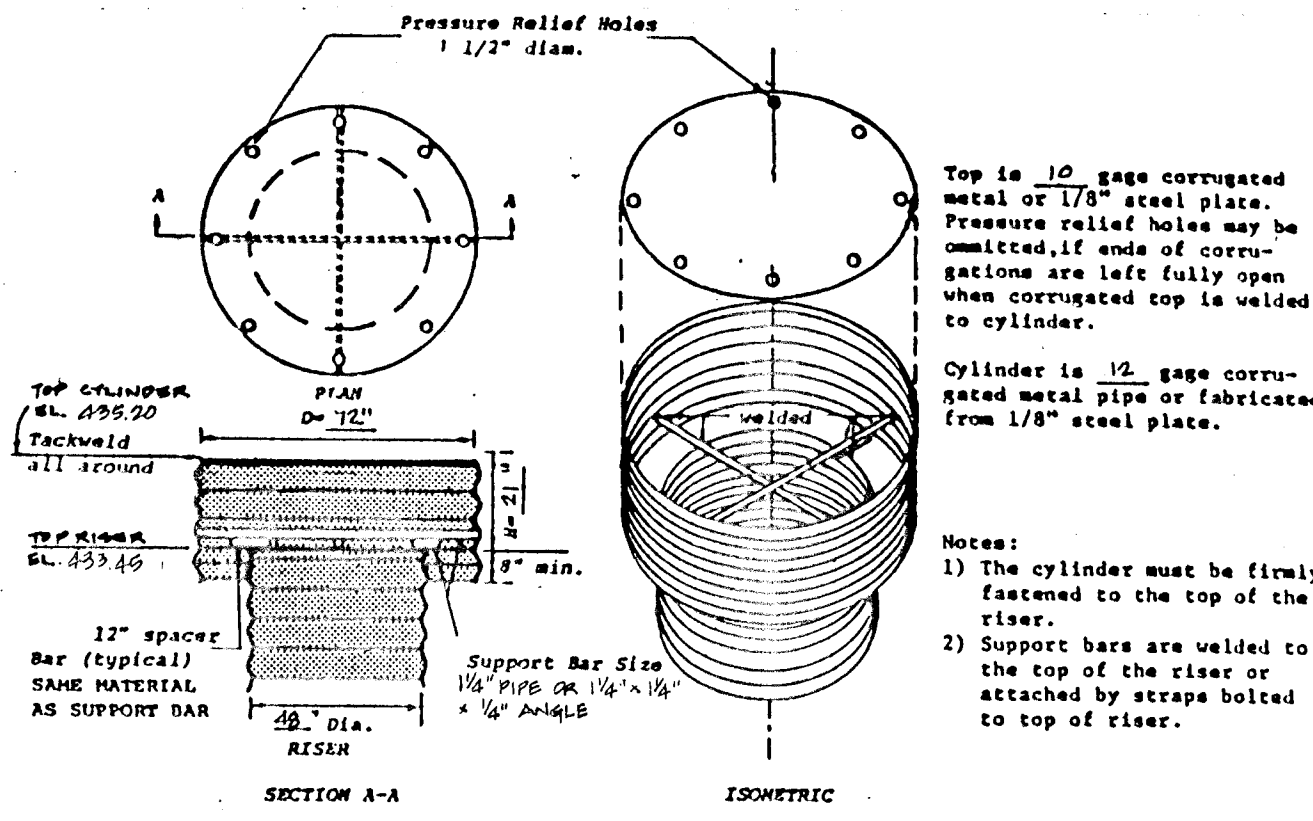
OWNER & DEVELOPER:

NY LAND, INC.
6820 ELM STREET
MCLEAN, VIRGINIA 22101
PHONE: (703) 794-4750

SEDIMENT CONTROL DETAILS

MONTGOMERY MEADOWS
SECTION ONE, AREA FOUR
LOT 1081 THRU LOT 246

TAX MAP 31 PARCEL 423 BLOCKS 13, 14, 19 AND 20
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' FEBRUARY, 1988



CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS FOR SEMI-PERMANENT SWM BASIN

These specifications are appropriate to ponds within the scope of the Standard for Practice 378.

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and it is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height shall be the length of the embankment shall be increased above the design elevation (including forward) as shown on the plans.

Placement

Areas on which fill is to be placed shall be certified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

1. **Materials - (Steel Pipe)** - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of ASTM Specification A-136 Type A with water-tight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

2. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

3. **Laying pipe** - The pipe shall be placed with longitudinal circumferential laps pointing downstream and with the lap joints at the sides.

4. **Backfilling** shall conform to structural backfill as shown above.

5. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

B. Reinforced Concrete Pipe

1. **Materials** - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-301. An approved equivalent is AWA Specification C-301.

2. **Bedding** - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a

minimum thickness of 3", or as shown on the drawings.

3. **Laying pipe** - Bell and spigot pipe shall be placed with the bell and upstream. Joints shall be made in accordance with the recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. **Backfilling** shall conform to structural backfill as shown above.

5. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

C. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. **Materials**

a. **Cement** - Normal Portland cement shall conform to the latest ASTM Specification C-150.

b. **Water** - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.

c. **Sand** - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a number 20 sieve. Limestone and shell shall not be used.

d. **Coarse Aggregate** - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.

e. **Reinforcing Steel** - The reinforcing steel shall be deformed bars of intermediate grade steel or rail steel conforming to ASTM Specification A-615.

2. **Design Mix** - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6-1/2. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregate may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. **Mixing** - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the

speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, and following the mixer-charging operation. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given herein.

VI. FINISHES AND SEEDING CONTROL

All borrow areas shall be graded to provide proper drainage and left in a slightly concave condition. All exposed surfaces of the embankment, spillway, apron and borrow areas, and areas shall be stabilized by seeding, mowing, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

Construction operations will be carried out in such a manner that erosion will be controlled and water and soil pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

Finishing - Defective concrete, honeycombed areas, voids left by the removal of the form, edges on all concrete surfaces, shall be repaired immediately after the removal of forms. All voids shall be reseed and completely filled with dry-patching mortar.

Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

Placing Temperature - Concrete may not be placed at temperatures below 32° F with the temperature falling, or 50° with the temperature rising.

Emergency Spillway Design Datum

Q SWAY = 19A CFS

V = 6.5 FPS

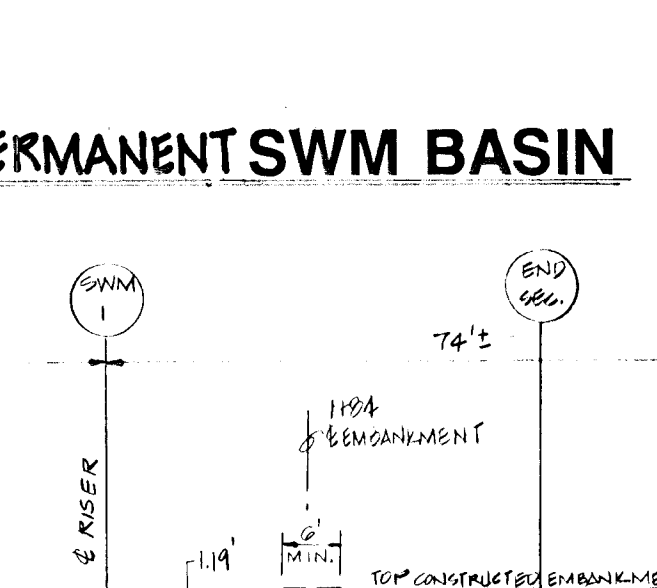
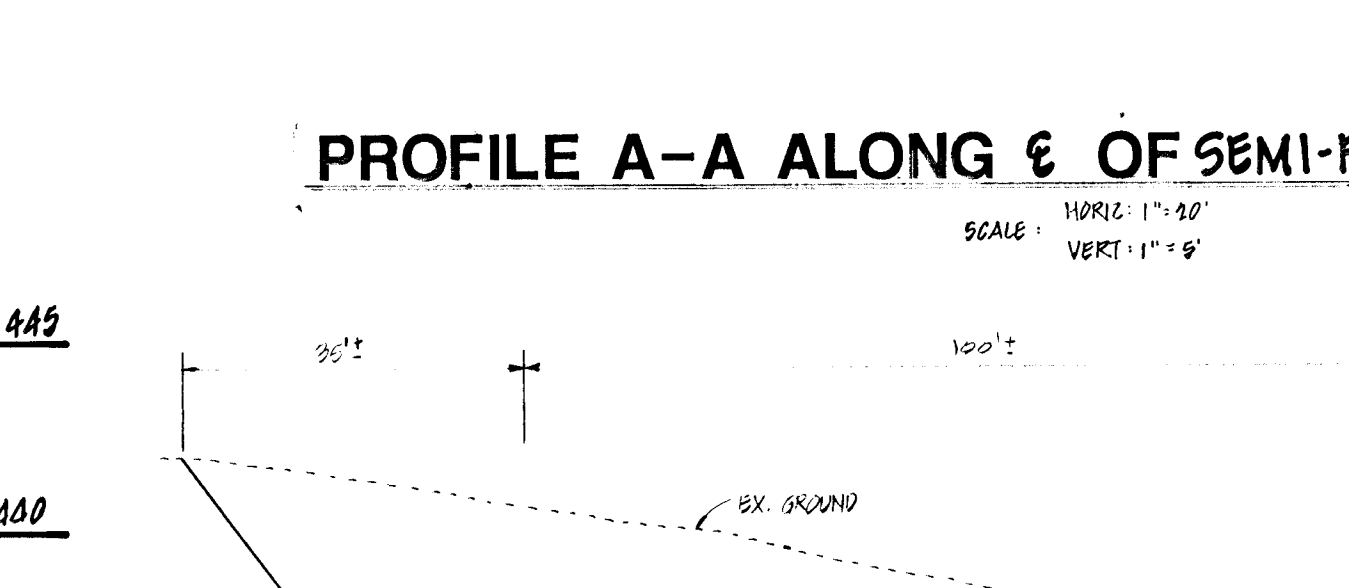
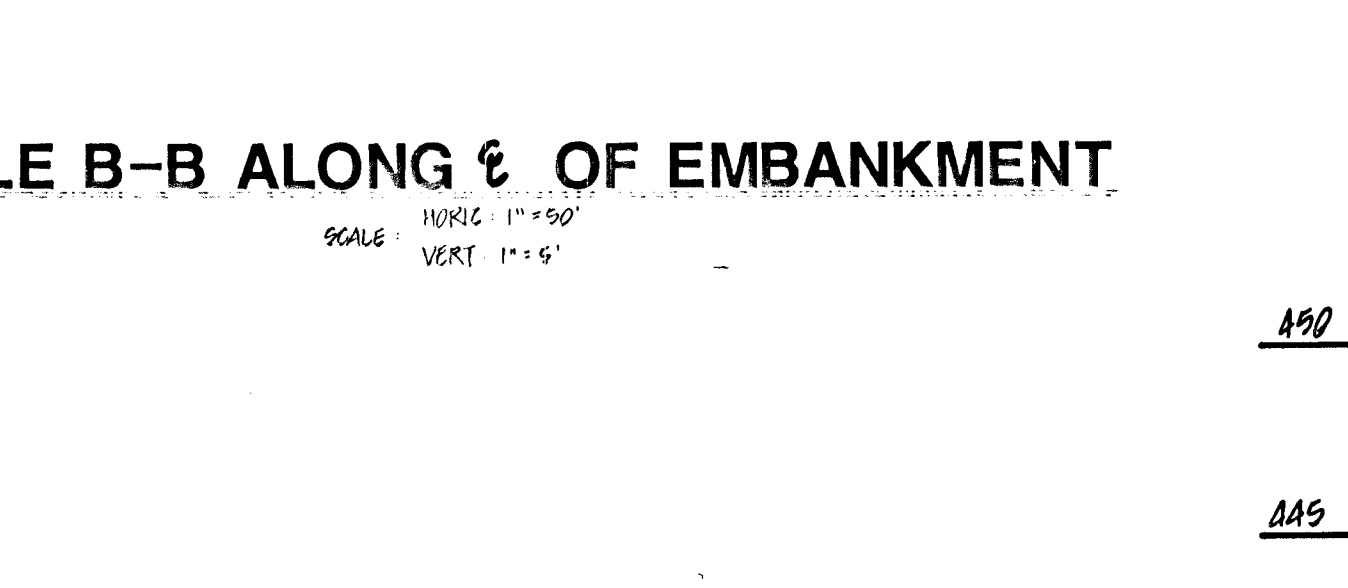
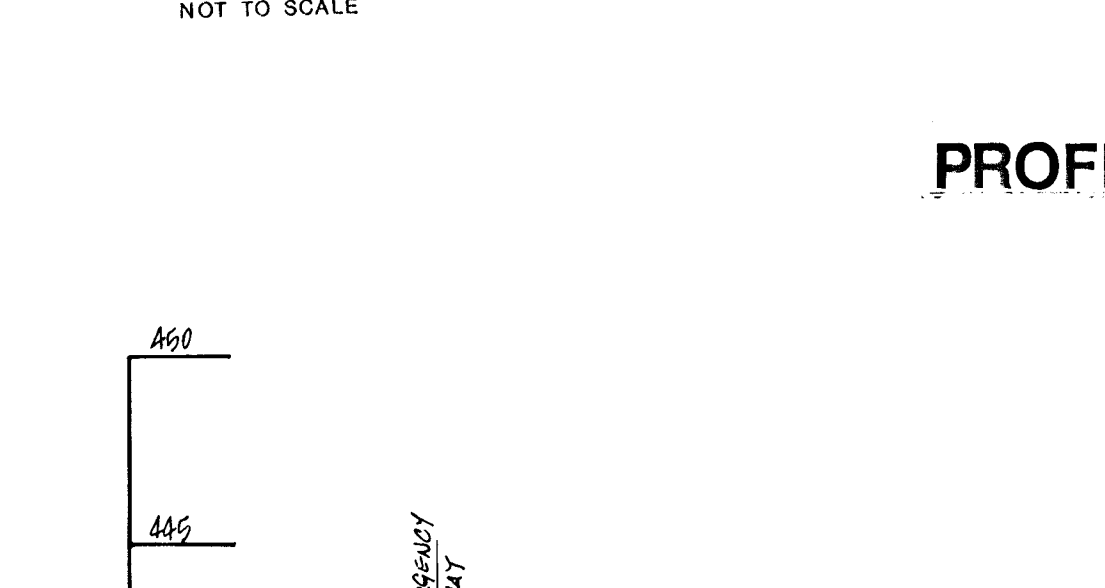
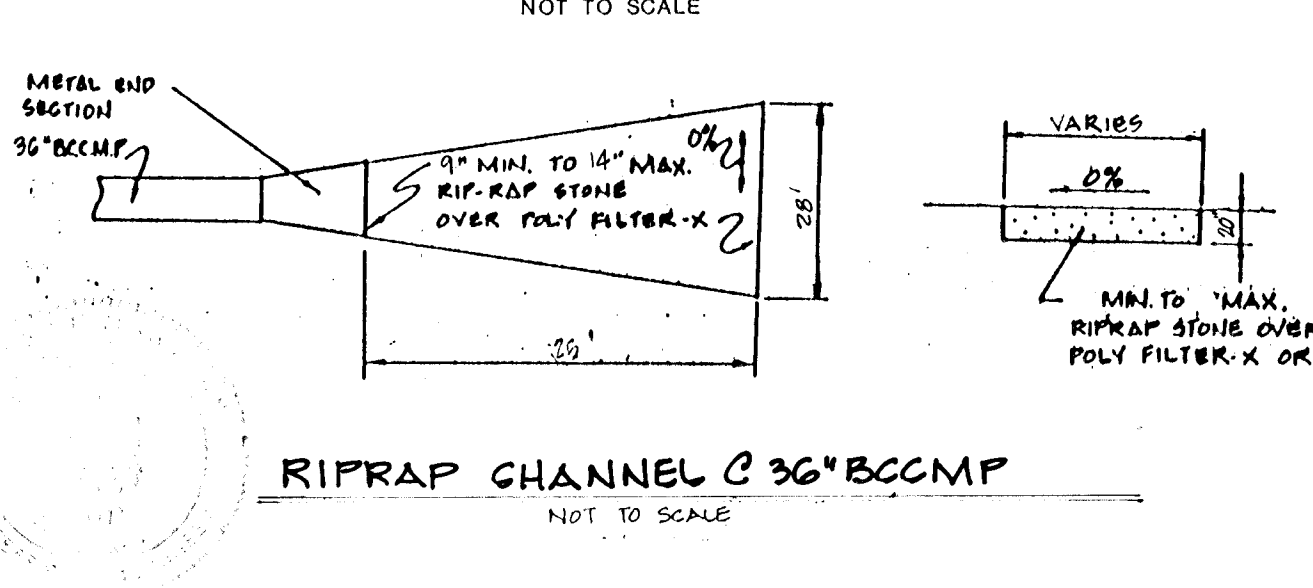
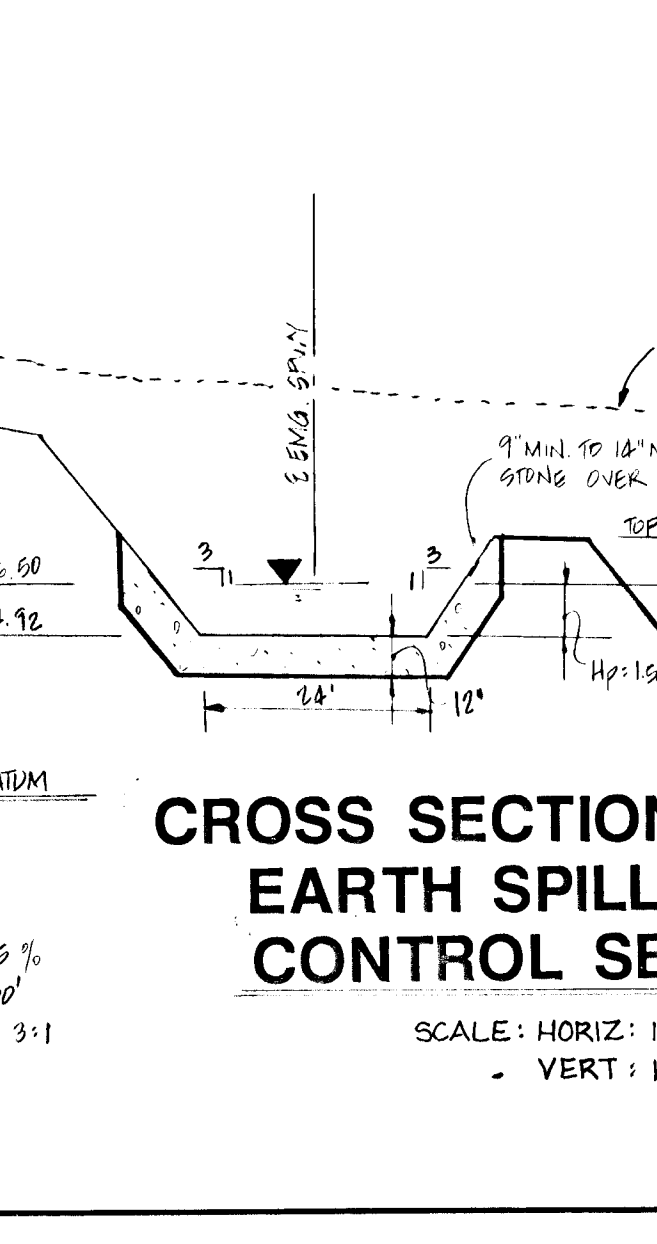
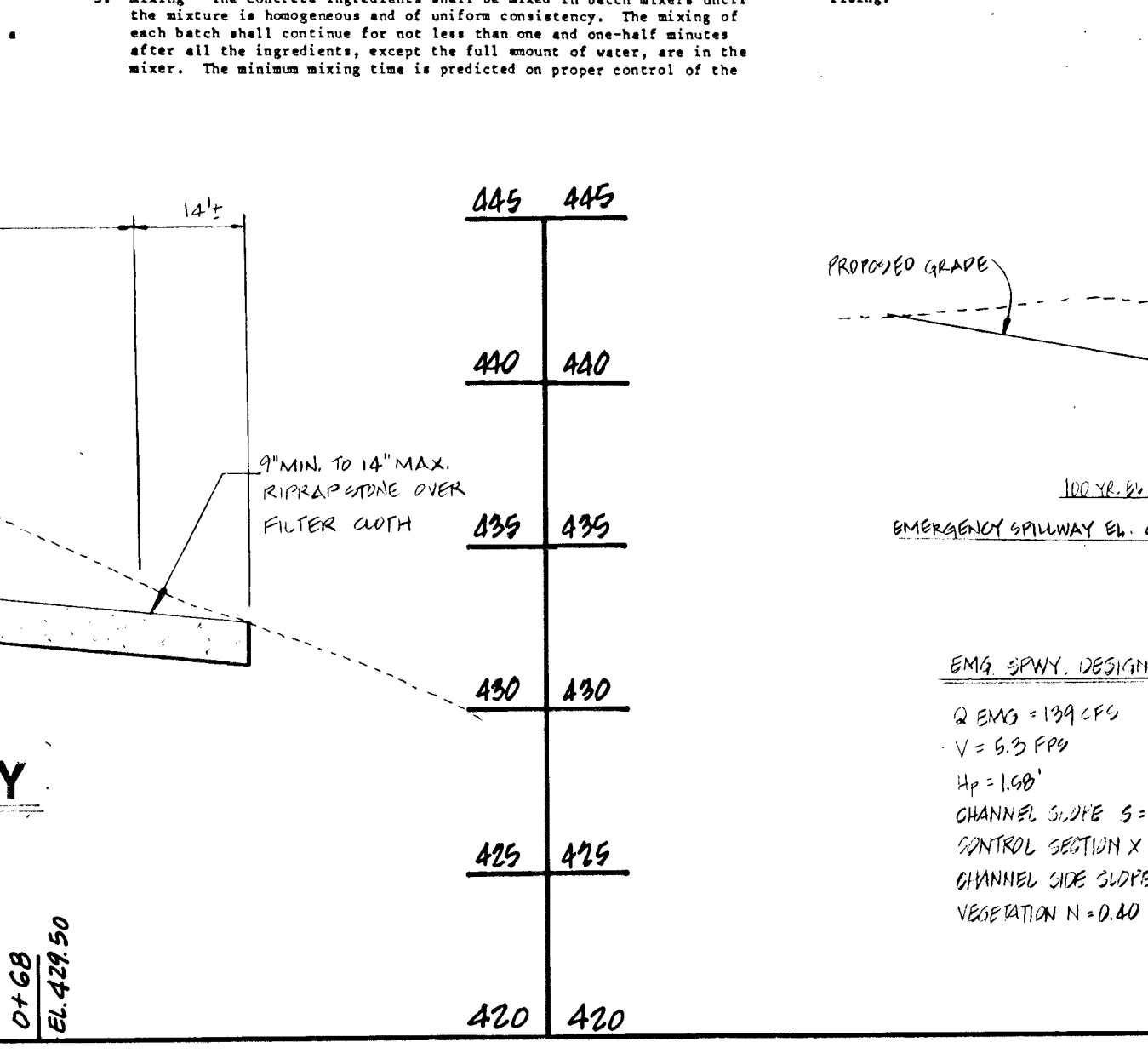
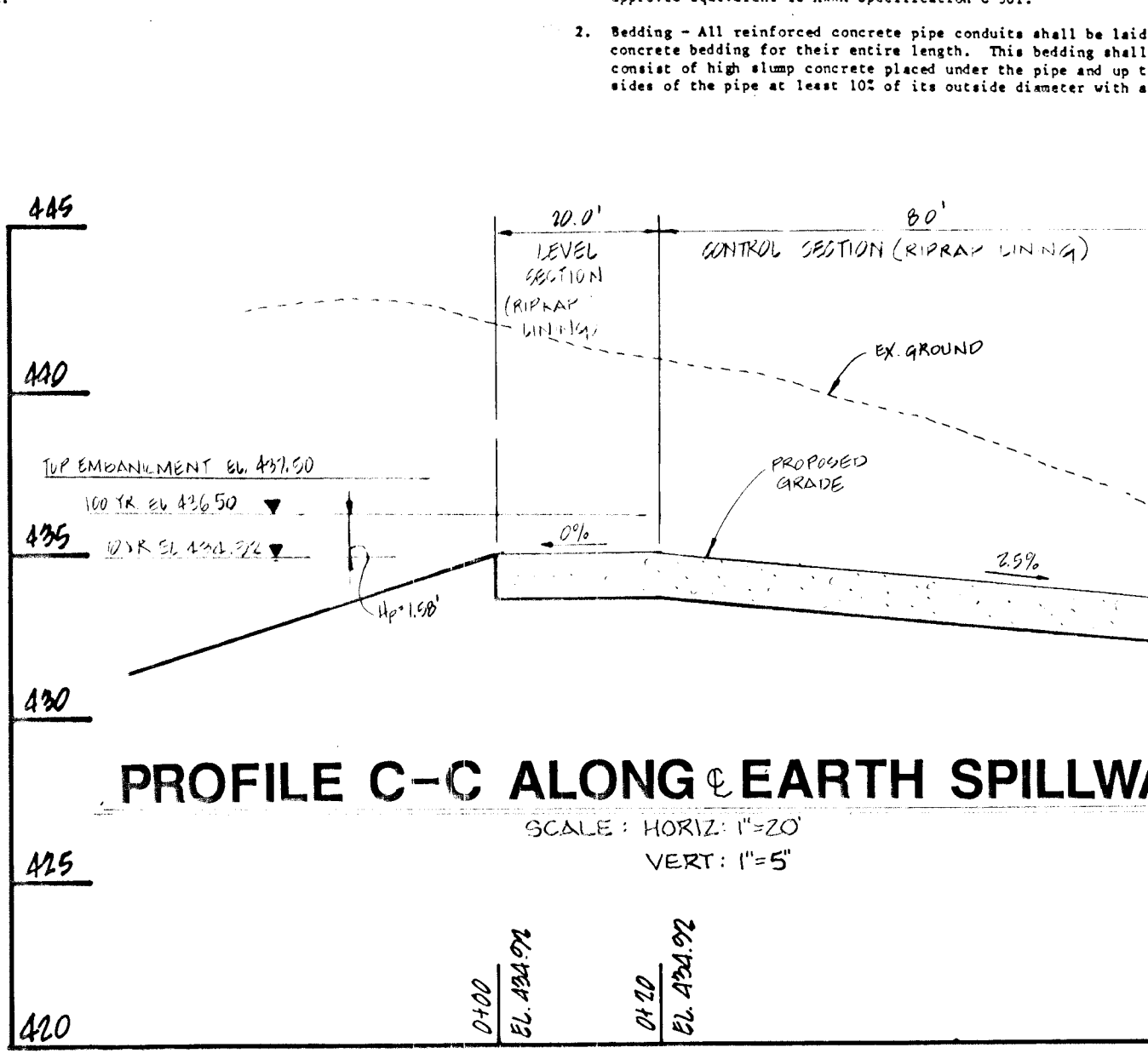
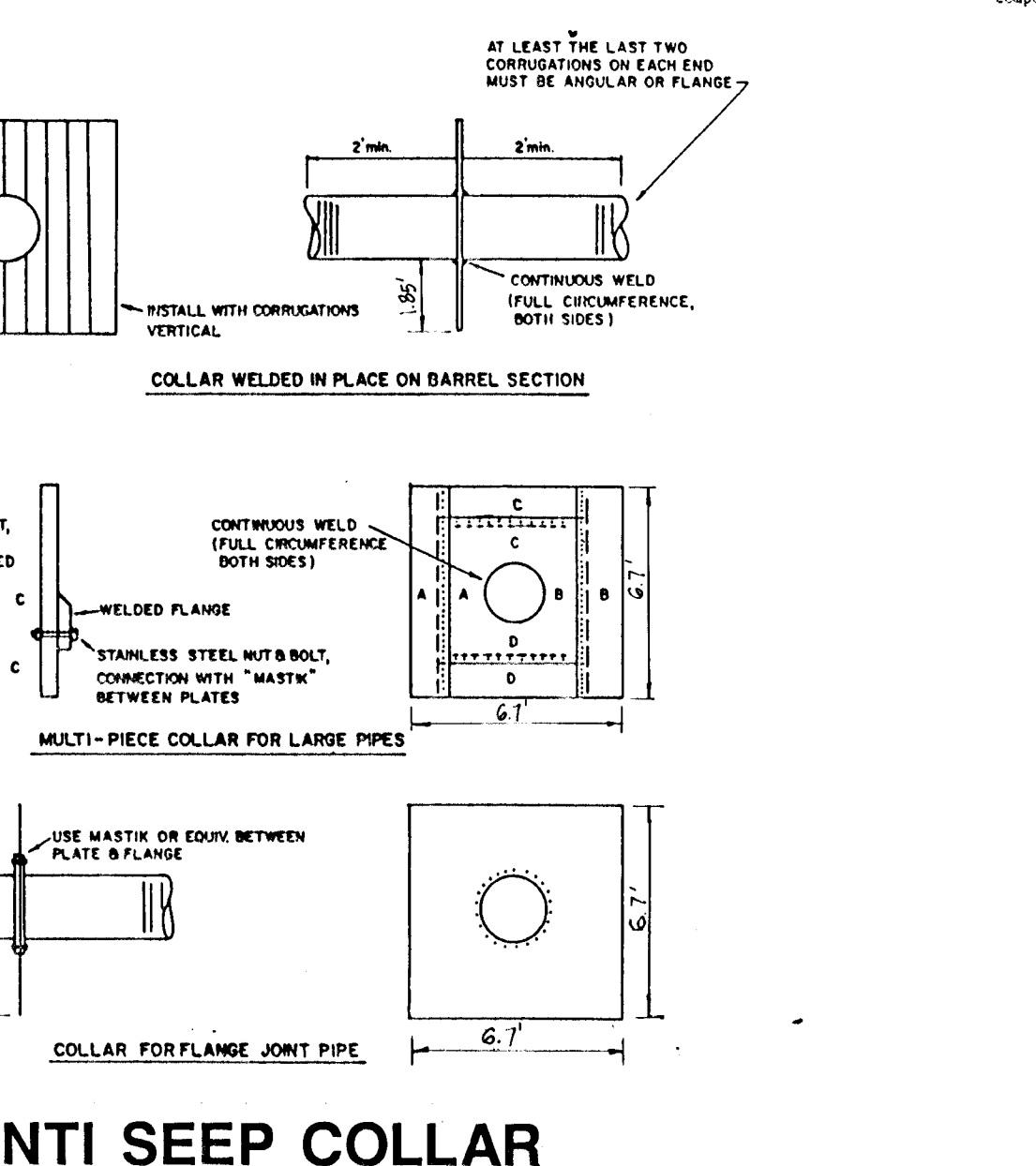
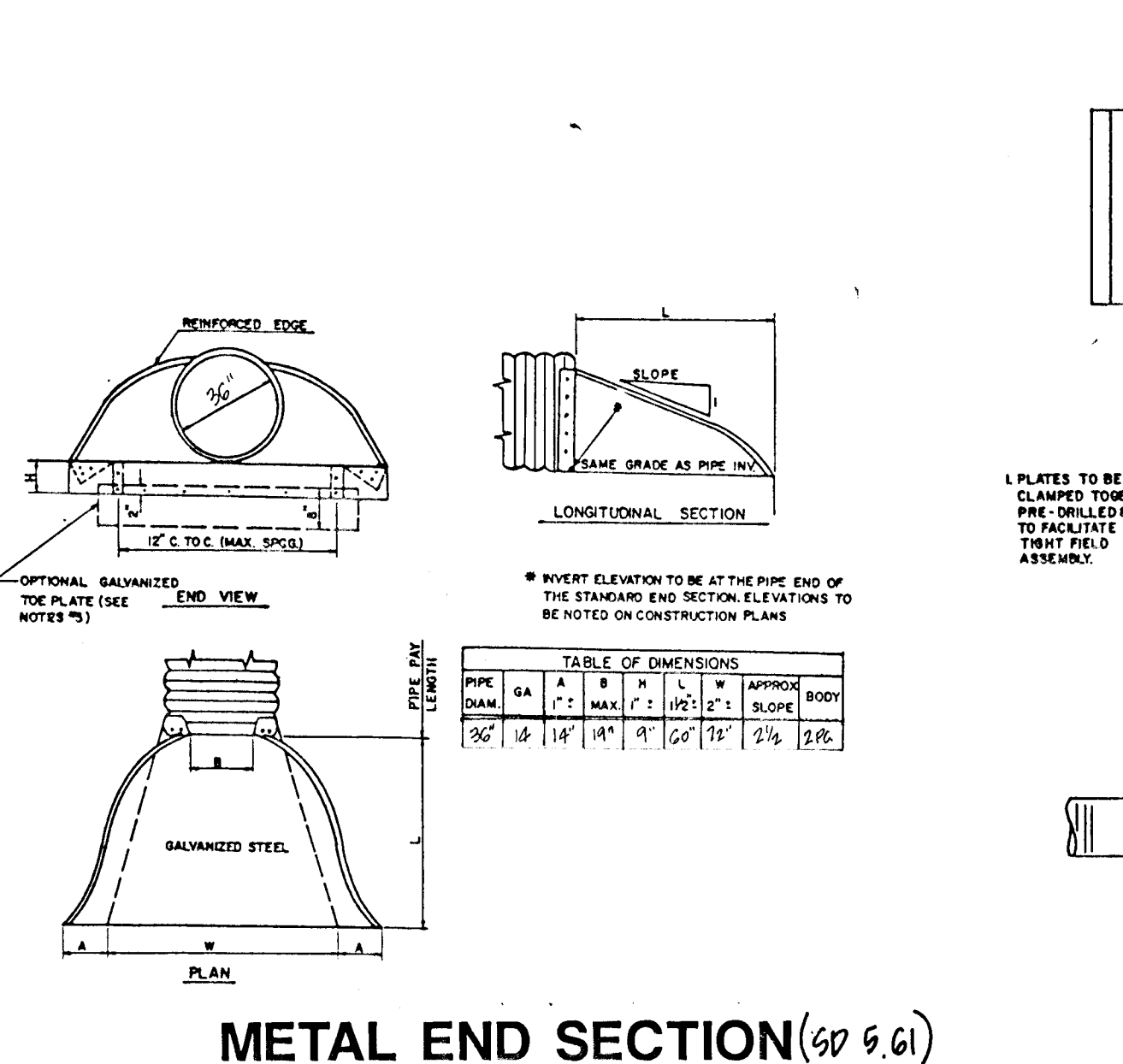
H₁ = 1.08'

CHANNEL SLOPE 5:3 (S:R)

CONTROL SECTION X = 8.0'

CHANNEL SIDE SLOPES 3:1

VEGETATION N = 0.80



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 an "as-built" plan of the pond within 30 days of completion."

THOMAS L. WILEY, MD. REG. NO. 9273

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. SOIL CONSERVATION SERVICE DATE

HOWARD SOIL CONSERVATION DISTRICT DATE

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KENNETH G. MALM, NVLAND INC. DATE 3/11/88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION DATE

CHIEF, BUREAU OF HIGHWAY DATE

CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

OWNER / DEVELOPER

N V LAND, INC
6820 ELM STREET
MCLEAN, VA 22101
(703) 734-9730

SEMI-PERMANENT STORMWATER MANAGEMENT BASIN PROFILES & DETAILS

MONTGOMERY MEADOWS

SECTION ONE AREA FOUR
LOT 180 TO LOT 248
TAX MAP 31-PARCEL 423-BLOCKS 13, 14, 19 B 20
1ST ELECTION DISTRICT - HOWARD CO, MARYLAND
FEBRUARY, 1988

DESIGNED	H. SHEIH	6/30/88	DATE	BY	DESCRIPTION
DRAWN	D. PETERS	6/30/88	10-16-88	BOB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
CHECKED	B. BURTON	6/30/88	1-30-89	BOB/JAU	PER HO. CO. COMMENTS DATED 1-12-89
APPROVED	T. WILEY	6/30/88			

DATE	BY	DESCRIPTION
10-16-88	BOB/JAU	PER HO. CO. COMMENTS DATED 10-6-88
1-30-89	BOB/JAU	PER HO. CO. COMMENTS DATED 1-12-89

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APPROVED	T. WILEY	6/30/88			

Dewberry & Davis

ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS

3300 N. RIDGE ROAD, SUITE 100
ELLCOTT CITY, MD. 21043
(301) 461-7478

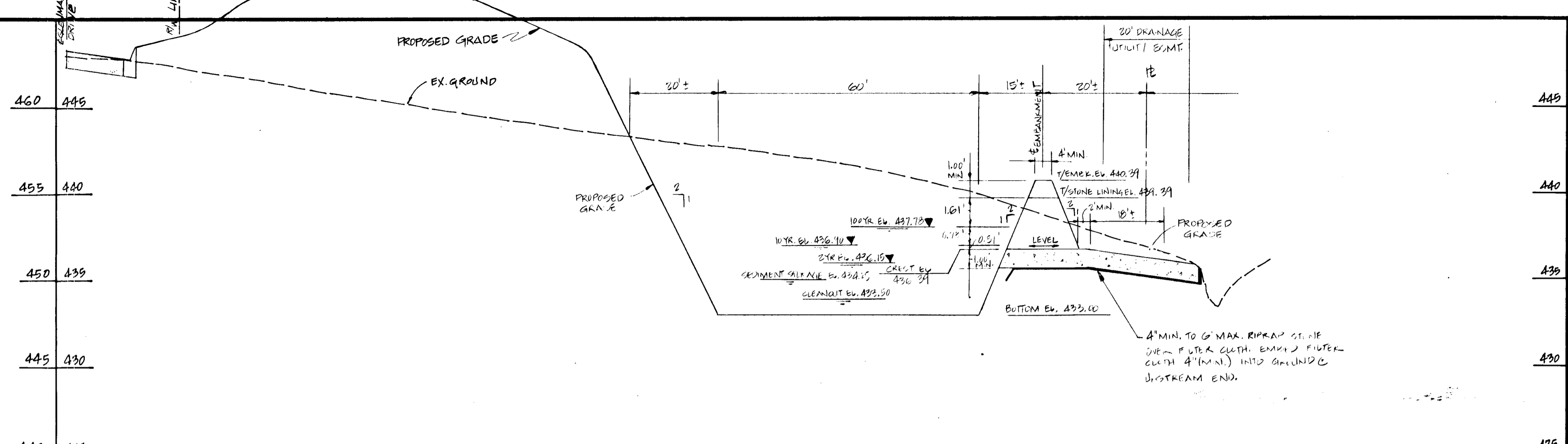
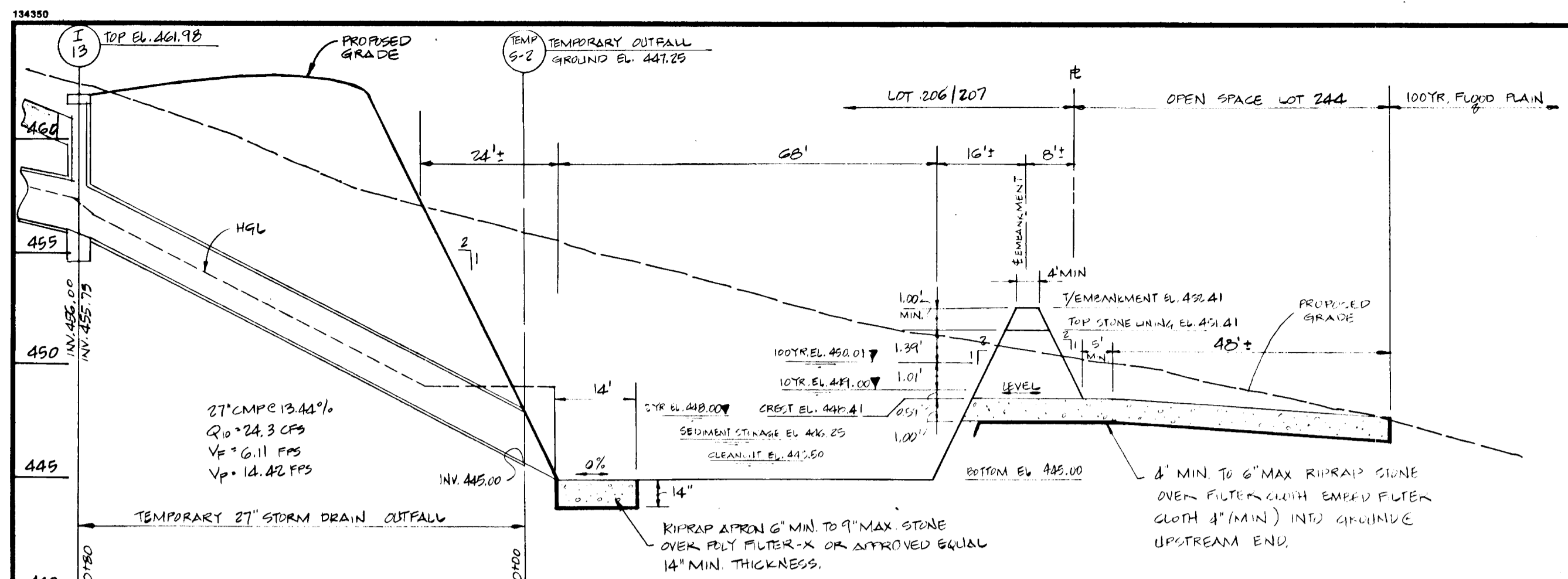
OWNER / DEVELOPER

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(703) 734-9730

SEMI-PERMANENT STORMWATER MANAGEMENT BASIN PROFILES & DETAILS

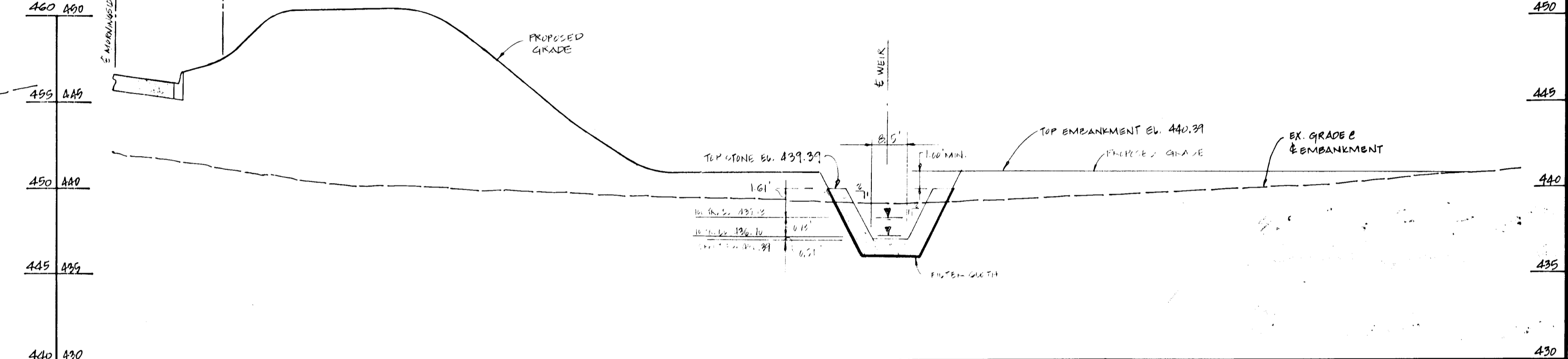
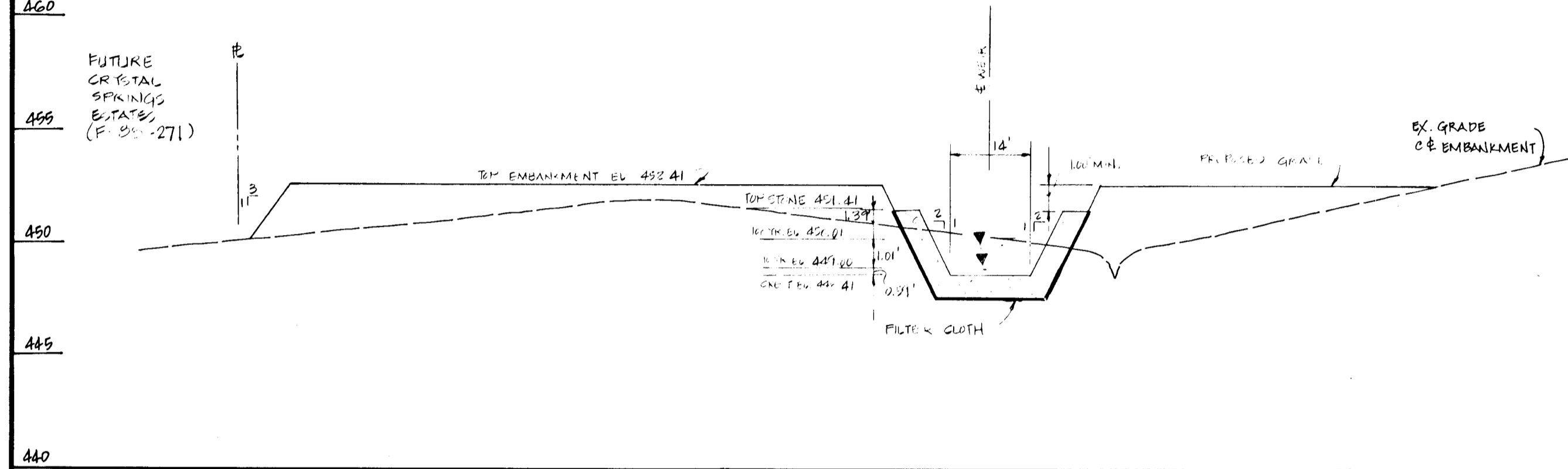
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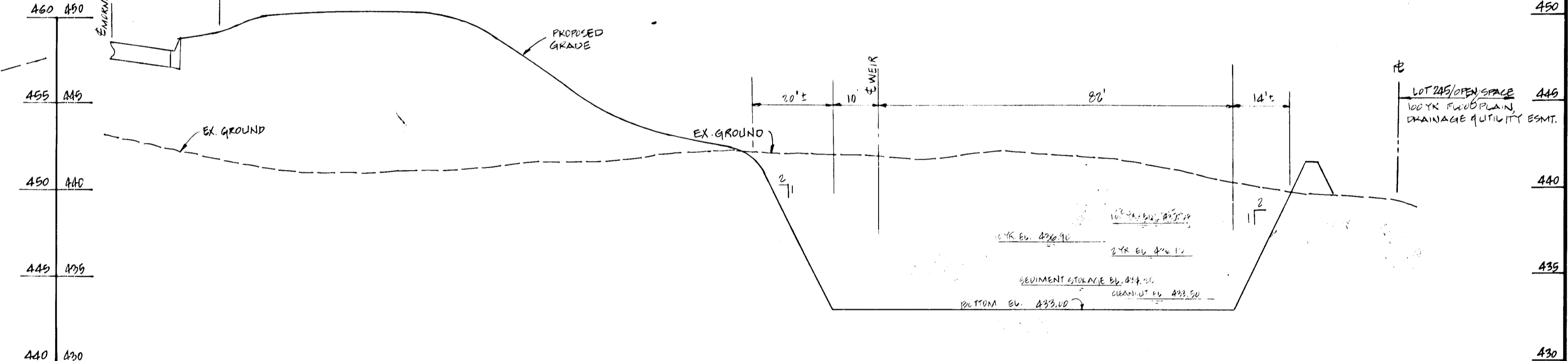
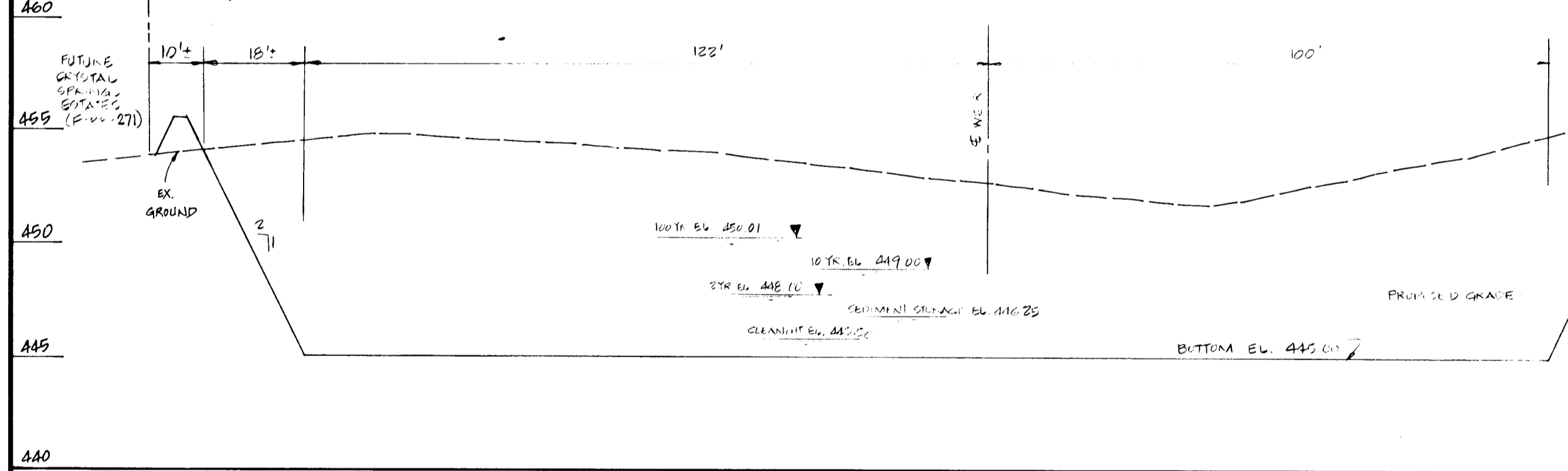
SECTION THRU WEIR
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

SECTION THRU WEIR
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'



SECTION ALONG EMBANKMENT
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

SECTION ALONG EMBANKMENT
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'



SECTION THRU BASIN
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

SECTION THRU BASIN
SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

SEMI-PERMANENT STORMWATER MANAGEMENT BASIN/TRAP NO. 1
SCALE: AS NOTED

SEMI-PERMANENT STORMWATER MANAGEMENT BASIN/TRAP NO. 2
SCALE: AS NOTED

ENGINEER'S CERTIFICATE
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THOMAS L. WILEY, MD REG. NO. 3278 DATE

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Kenneth G. Malm DATE 3/11/89
KENNETH G. MALM, N.V. LAND INC.

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. SOIL CONSERVATION SERVICE DATE 2/22/89

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION DATE

CHIEF, BUREAU OF HIGHWAY DATE 6/1/89

CHIEF, BUREAU OF ENGINEERING DATE 6/19/89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE 6/16/89

NOTE: PERMANENT STORMWATER MANAGEMENT FACILITIES FOR THIS PROJECT WILL BE CONSTRUCTED UNDER F-0944 SEMI-PERMANENT STORMWATER MANAGEMENT AS SHOWN ON THESE PLANS WILL BE USED ONLY ON AN INTERIM OR SEMI-PERMANENT BASIS. ALL FACILITIES SHOWN ON THESE PLANS WILL REMAIN IN PLACE UNTIL SUCH TIME AS THE REGIONAL STORMWATER MANAGEMENT POND (F-09-44) IS CONSTRUCTED AND BECOMES FUNCTIONAL.

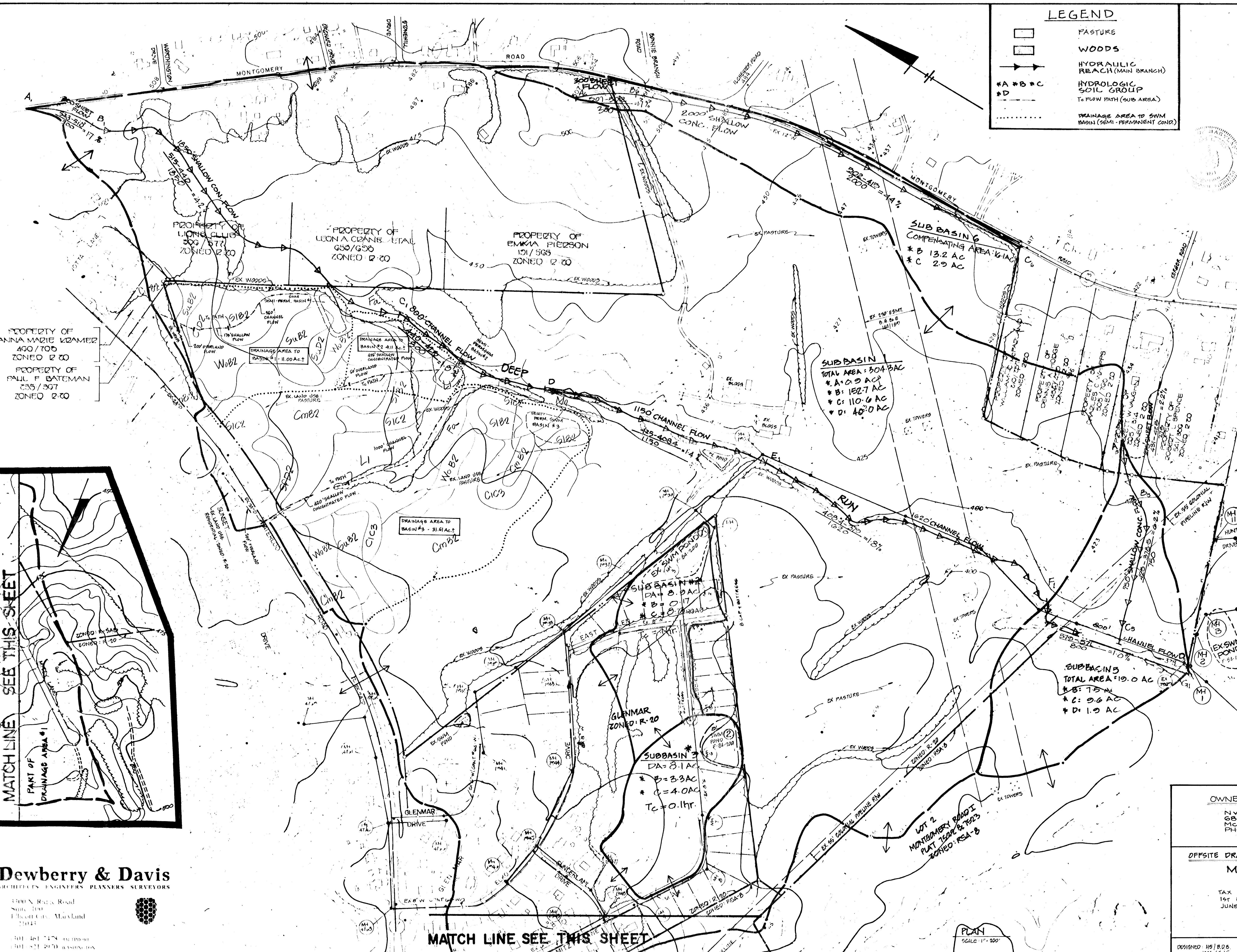
REVISIONS			
DESIGNED	DATE	BY	DESCRIPTION
B.P. BURTON	6/24/88		
J.A. UDICH	6/24/88		
B.D. BURTON	6/24/88		
T.L. WILEY	6/24/88		

Dewberry & Davis
ENGINEERS — ARCHITECTS — PLANNERS — SURVEYORS
3300 N. RIDGE ROAD, SUITE 100
ELLCOTT CITY, MD. 21043
(301) 461-7478

OWNER & DEVELOPER
N.V. LAND, INC.
6020 ELM STREET
MCLEAN, VIRGINIA 22101
PHONE: (703) 734-9730

SEMI-PERMANENT STORMWATER MANAGEMENT BASIN NO. 1 AND 2 SECTIONS
MONTGOMERY MEADOWS
SECTION ONE AREA FOUR
LOT 100 TO LOT 245
TAX MAP #31 PARCEL 423 BLOCKS 13, 14, 19 AND 20
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN FEBRUARY 1988

1-4-1



LEGEND

- PASTURE
- WOODS
- HYDRAULIC REACH (MAIN BRANCH)
- HYDROLOGIC SOIL GROUP
- TO FLOW PATH (SUB AREA)
- DRAINAGE AREA TO SWM BASIN (SEMI-PERMANENT COND)

DEVELOPER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to these plans, 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 will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Thomas L. Wiley 2/2/89
 KENNETH G. MALM, NV LAND, INC. Date

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 an "as-built" plan of the pond within 30 days of completion."

Thomas L. Wiley 2/2/89
 THOMAS L. WILEY MD. REG. NO. 9273 Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

Thomas L. Wiley 2/2/89
 U.S. Soil Conservation Service Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Thomas L. Wiley 2/2/89
 Howard Soil Conservation District Date

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas L. Wiley 2/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Thomas L. Wiley 2/2/89
 CHIEF, LAND DEVELOPMENT DIVISION
Thomas L. Wiley 2/2/89
 CHIEF, BUREAU OF HIGHWAYS
Thomas L. Wiley 2/2/89
 CHIEF, BUREAU OF ENGINEERING

*NOTE: HYDROLOGIC SOIL GROUPS ARE INDICATED AS A, B, C, D

REVISIONS		
DATE	BY	DESCRIPTION
1-20-89	BOB/JAK	PER 10.00 COMMENTS DATED 1-12-89

LAND USE NOTE: THE SEMI-PERMANENT CONDITION USED WITHIN THE DISTURBED LIMITS WILL BE NEWLY GRADED EARTH.

SOILS LEGEND

SYMBOL	NAME
Cm2	Chillum silt loam, 1 to 5% slopes, mod. eroded
C1C2	Chillum gravelly loam, 5 to 15% slopes, severely eroded
C1D2	Chillum gravelly loam, 10 to 15% slopes, mod. eroded
Cm2	Chillum-Fairfax loam, 1 to 5% slopes, mod. eroded
Fa	Fairfax loam
Fa	Fairfax loam
H1	Hamstead silt loam
H1	Hamstead silt loam
S1D2	Sassafras gravelly sandy loam, 10 to 15% slopes, mod. eroded
S1D2	Sassafras loam, 1 to 5% slopes, mod. eroded
S1C2	Sassafras loam, 5 to 10% slopes, mod. eroded
Su2	Sunnyside fine sandy loam, 1 to 5% slopes, mod. eroded
Su2	Sunnyside fine sandy loam, 5 to 15% slopes, mod. eroded
Wu2	Woodstown sandy loam, 1 to 5% slopes, mod. eroded

SEE U.S.D.A. SOILS MAP NOS. 20 & 25

OWNER AND DEVELOPER

NV LAND INC.
 6820 ELM STREET
 MCLEAN, VA 22101
 PHONE (703) 734-9730

OFFSITE DRAINAGE AREA MAP (EXISTING SEMI-PERMANENT CONDITION)

MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 199 TO LOT 248
 TAX MAP NO. 31 PARCEL 423
 194 ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 JUNE 6, 1988 SCALE: 1" = 200'

SHEET 14 OF 15

DESIGNED: H.S./B.B. DRAWN: W.L.F./D.M.P. CHECKED: B.B.B. APPROVED: T.L.W.
 JMC/LSJF DAT 1/23/89

PROPERTY OF ANITA MARIE KRAMER 400/700 ZONED R-20
 PROPERTY OF PAUL F. BATEMAN 235/397 ZONED R-20

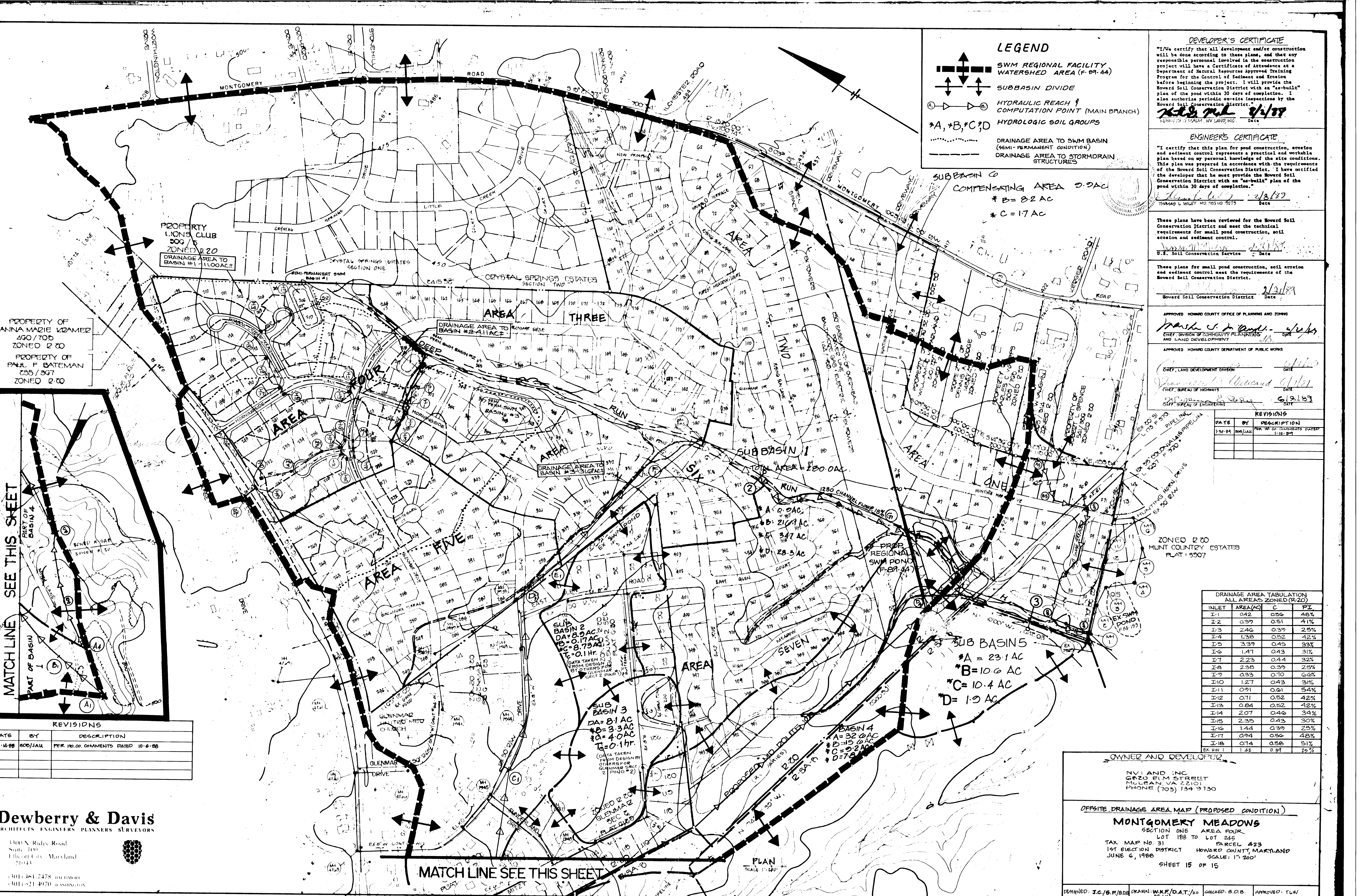
MATCH LINE SEE THIS SHEET

MATCH LINE SEE THIS SHEET

Dewberry & Davis
 ARCHITECTS ENGINEERS PLANNERS SURVEYORS

3300 N. Rte. 4 Road
 Suite 100
 Ellicott City, Maryland
 21043

301-481-7154
 301-571-9970



LEGEND

- SWM REGIONAL FACILITY WATERSHED AREA (F-89-44)
- SUBBASIN DIVIDE
- HYDRAULIC REACH & COMPUTATION POINT (MAIN BRANCH)
- *A, *B, *C, *D
- DRAINAGE AREA TO SWM BASIN (95% - PERMANENT CONDITION)
- DRAINAGE AREA TO STORM DRAIN STRUCTURES

DEVELOPER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to these plans, 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 will provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Thomas L. Wiley 2/2/89
 THOMAS L. WILEY MD 20510 9275 Date

ENGINEER'S CERTIFICATE

"I certify that this plan for pond construction, erosion and sediment control meets the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

Thomas L. Wiley 2/2/89
 THOMAS L. WILEY MD 20510 9275 Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

Thomas L. Wiley 2/2/89
 U.S. Soil Conservation Service Date

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Thomas L. Wiley 2/2/89
 Howard Soil Conservation District Date

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Mark S. J. Smith 2/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Thomas L. Wiley 2/2/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Thomas L. Wiley 2/2/89
 CHIEF, BUREAU OF HIGHWAYS DATE

Thomas L. Wiley 2/2/89
 CHIEF, BUREAU OF ENGINEERING DATE

REVISIONS

DATE	BY	DESCRIPTION
1-27-84	PHS/JAM	FOR 10-00 COMMENTS DATED 1-12-84

DRAINAGE AREA TABULATION
 ALL AREAS ZONED (R-20)

INLET	AREA (AC)	C	PI
I-1	0.42	0.56	48%
I-2	0.39	0.51	41%
I-3	2.46	0.39	25%
I-4	1.38	0.52	42%
I-5	3.39	0.45	33%
I-6	1.47	0.43	31%
I-7	2.23	0.44	32%
I-8	2.38	0.39	25%
I-9	0.83	0.70	62%
I-10	1.27	0.43	31%
I-11	0.91	0.61	54%
I-12	0.71	0.62	42%
I-13	0.84	0.52	42%
I-14	2.07	0.46	34%
I-15	2.35	0.43	30%
I-16	1.44	0.39	25%
I-17	0.94	0.56	48%
I-18	0.74	0.58	51%
EX. HW 1	1.42	0.37	22%

PROPERTY OF ANNA MAZIE KRAMER 460/700 ZONED R-20

PROPERTY OF PAUL F. BATEMAN 255/367 ZONED R-20

PROPERTY LIONS CLUB 300/5 ZONED R-20
 DRAINAGE AREA TO BASIN #1 11.100 AC

DRAINAGE AREA TO BASIN #2 4.11 AC

DRAINAGE AREA TO BASIN #3 3.73 AC

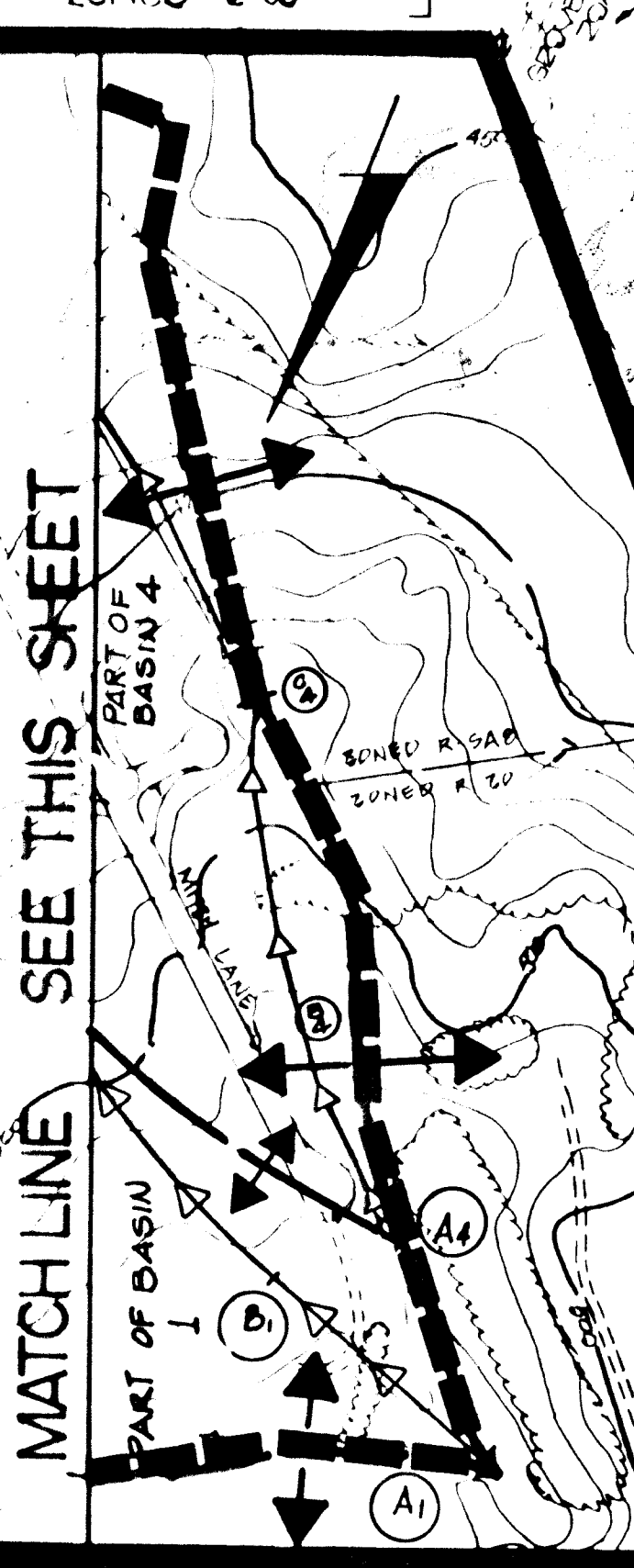
SUB BASIN 2
 DA = 8.9 AC
 A = 0.17 AC
 B = 8.73 AC
 C = 0.1 HR

SUB BASIN 3
 DA = 8.1 AC
 A = 3.3 AC
 B = 4.0 AC
 C = 0.1 HR

SUB BASIN 1
 AREA 1280.0 AC
 A = 0.9 AC
 B = 21.6 AC
 C = 34.7 AC
 D = 28.3 AC

SUB BASIN 5
 A = 23.1 AC
 B = 10.6 AC
 C = 10.4 AC
 D = 1.9 AC

BASIN 4
 A = 32.6 AC
 B = 15.6 AC
 C = 9.2 AC
 D = 7.6 AC



REVISIONS

DATE	BY	DESCRIPTION
1-4-88	ROD/JAM	FOR 10-00 COMMENTS DATED 10-6-88

Dewberry & Davis
 ARCHITECTS ENGINEERS PLANNERS SURVEYORS

3300 N. Riden Road
 Suite 100
 Ellicott City, Maryland
 21043

(301) 481-7478 BALTIMORE
 (301) 821-4970 WASHINGTON

OWNER AND DEVELOPER

NV LAND, INC.
 6820 ELM STREET
 MCLAN, VA 22101
 PHONE (703) 134-9130

OFFSITE DRAINAGE AREA MAP (PROPOSED CONDITION)

MONTGOMERY MEADOWS
 SECTION ONE AREA FOUR
 LOT 188 TO LOT 245
 TAX MAP NO. 31 PARCEL 423
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 JUNE 6, 1988 SCALE: 1" = 200'

SHEET 15 OF 15

DESIGNED: J.C./B.F./BDB DRAWN: W.K.F./D.A.T./DD CHECKED: B.C.B. APPROVED: T.L.W.
 PLAN SCALE: 1" = 200'