

ROADS, STORM DRAIN & GRADING

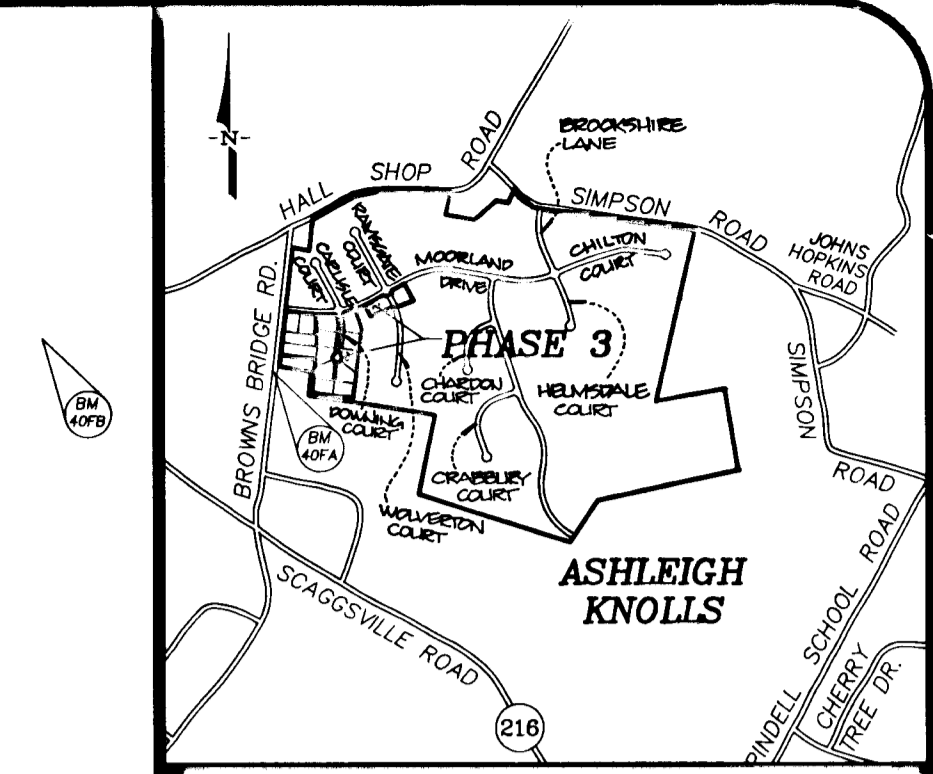
ASHLEIGH KNOLLS PHASE 3

ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

SHEET INDEX

- COVER SHEET
- DOWNING COURT PLAN & PROFILE
- WALVERTON COURT PLAN & PROFILE
- GRADING AND SEDIMENT CONTROL PLAN
- GRADING AND SEDIMENT CONTROL PLAN
- GRADING AND SEDIMENT CONTROL NOTES & DETAILS

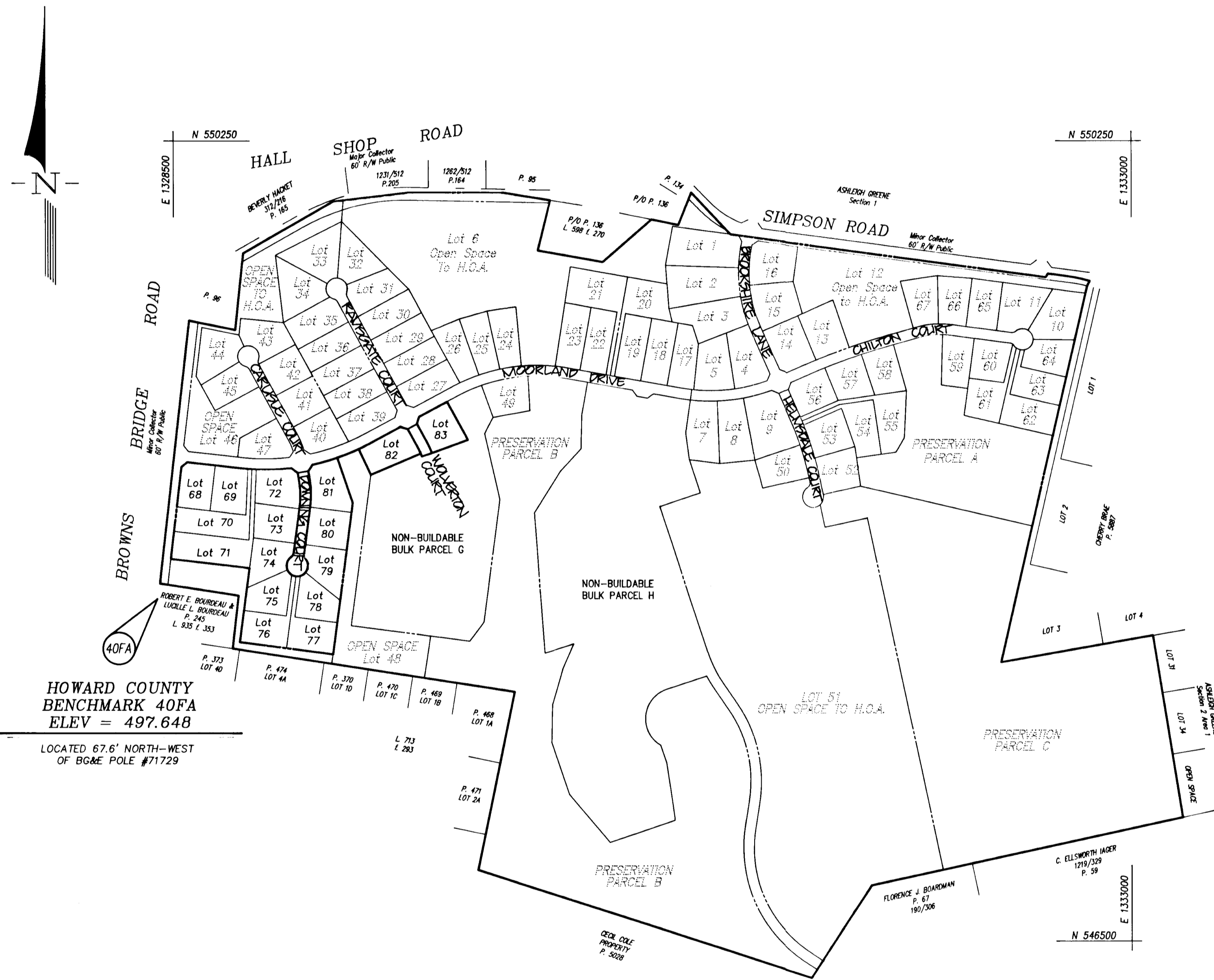
SEWER MAINS RIGHT-OF-WAY INFORMATION
DOWNING COURT 4+92.12.5 FT. SEWER MAIN LT. 500.00
DOWNING COURT 4+92.12.5 FT. SEWER VALVE 500.00



Vicinity Map
Scale: 1" = 2000'

GENERAL NOTES

- PROJECT BACKGROUND:
TAX MAP: 41 P/O PARCEL 137 AND 174
ZONING: R-R
ELECTION DISTRICT: 5th
TOTAL TRACT AREA: 382.95 AC±
PHASE 3 AREA: 14.19 AC±
NUMBER OF PROPOSED LOTS (PHASE 3): 16
PRELIMINARY EQUIVALENT SKETCH PLAN APPROVED MARCH 11, 1993 SP-93-04
- SUBJECT PROPERTY ZONED R-R PER 10/19/93 COMPREHENSIVE REZONING.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S S-88-80, P-89-025, SP-93-04, WP-93-68, F-93-11G, F-94-7D.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
MISS UTILITY 1-800-257-7777
BELL TELEPHONE SYSTEM 393-3649
LONG DISTANCE CABLE DIVISION 393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC CO. 539-8000
HOWARD COUNTY BUREAU OF UTILITIES 313-4900
HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (24 HOUR NOTICE PRIOR TO COMMENCEMENT OF WORK) 313-1880
COLONIAL PIPELINE 795-1390
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION. ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- DATA TAKEN FROM AERIAL SURVEY DATED 10/22/93 PREPARED BY MWGS AERIAL MAPPING.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIGURE 11.4 VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- THE PAVEMENT DETAILS SHOWN ON THESE PLANS REFLECT THE HOWARD COUNTY MINIMUM STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING, THE FINAL PAVING SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE. ANY PAVEMENT SECTIONS DETERMINED BY THE GEOTECHNICAL ENGINEER THAT IS LESS THAN THE HOWARD COUNTY MINIMUM STANDARD, SHALL FIRST BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. THE TESTING AND GEOTECHNICAL ENGINEER SHALL BE FURNISHED BY THE OWNER.
- FLOODPLAIN INFORMATION PREPARED BY MILDENBERG, MOCHI & ASSOCIATES, INC., NOVEMBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
- WETLAND INFORMATION PREPARED BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC., OCTOBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
- TRAFFIC STUDY PREPARED BY LEE CUNNINGHAM & ASSOCIATES, INC., DECEMBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
- WATER AND SEWER SERVICE SHALL BE PRIVATE WELL & PUBLIC SEPTIC EXCEPT LOTS 10 & 11 WHICH MAY BE SERVICED BY PRIVATE SEPTIC OR PUBLIC SEPTIC.
- THIS PROJECT CONFORMS TO THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT.
- ALL DRIVEWAYS SHALL HAVE A 12" CMP DRIVEWAY CULVERT PLACED AS SHOWN IN HOWARD COUNTY STANDARD DETAIL R6.06, UNLESS OTHERWISE INDICATED ON THE GRADING AND SEDIMENT CONTROL PLAN. (SEE NOTE 25)
- THE PAYMENT OF FEE-IN-LIEU OF PROVIDING STORMWATER MANAGEMENT FOR THE ROAD WAS APPROVED ON JULY 19, 1993. THE LOTS WERE DETERMINED TO BE EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENT.
- ROAD IMPROVEMENT FEE-IN-LIEU LETTER WAS APPROVED ON FEBRUARY 25, 1994.
- DRIVEWAY CULVERTS REFERENCED ON THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. DRIVEWAY CULVERTS ARE NOT TO BE CONSTRUCTED AS A PORTION OF THESE CONSTRUCTION PLANS.
- PARKING SHALL BE PROHIBITED ADJACENT TO 10 FT. WIDE ROADWAYS.
- WATER QUALITY MEASURES FOR STORMWATER MANAGEMENT FOR THE ROADWAYS TO BE CONSTRUCTED UNDER THIS PLAN WERE PREVIOUSLY CONSTRUCTED AS A PART OF THE ASHLEIGH KNOLLS, PHASE 2 PLAN, F-94-7D.



LOCATION MAP
SCALE 1" = 400'

LEGEND

- PLAN**
- Solid line: CENTERLINE ROADWAY
 - Dashed line: RIGHT-OF-WAY PROPERTY LINE
 - Thin solid line: BRL/EASEMENT
 - Thick solid line: PROPOSED STORM DRAIN
 - Thin solid line: EXISTING STORM DRAIN
 - Thin solid line: PROPOSED SPOT ELEVATION
 - Dashed line: LIMIT OF WETLANDS
 - Dashed line: 25' WETLAND BUFFER
 - Dashed line: CENTERLINE STREAM
 - Dashed line: 75' STREAM BUFFER
 - Dashed line: 100 YEAR FLOODPLAIN
 - Dashed line: PROPOSED CONTOUR
 - Dashed line: EXISTING CONTOUR
 - Solid line: EXISTING DIKE
 - Solid line: SILT FENCE
 - Solid line: LIMIT OF DISTURBANCE
 - Solid line: TEMPORARY SHALE
 - Solid line: DRAINAGE DITCH
 - Solid line: FENCE LINE
 - Solid line: SAFETY FENCE
 - Solid line: SEWER EASEMENT
- PROFILE**
- Solid line: EXISTING GROUND @ CENTERLINE
 - Solid line: EXISTING GROUND @ LEFT BRL
 - Solid line: EXISTING GROUND @ RIGHT BRL
 - Solid line: PROPOSED GRADE LINE

HOWARD COUNTY BENCHMARK 40FB
ELEV = 505.297

LOCATED 100± NORTH OF INTERSECTION OF MD. RT. 216 AND HALL SHOP ROAD. MONUMENT IS 10.5' TO EDGE OF PAVEMENT, 2" BELOW SURFACE.

HOWARD COUNTY BENCHMARK 40FA
ELEV = 497.648

LOCATED 67.6' NORTH-WEST OF BG&E POLE #71729

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John P. ... 3/6/95
CHIEF, LAND DEVELOPMENT DIVISION DATE

David M. ... 3-1-95
CHIEF, BUREAU OF HIGHWAYS DATE

Paul ... 3/6/95
CHIEF, BUREAU OF ENGINEERING DATE

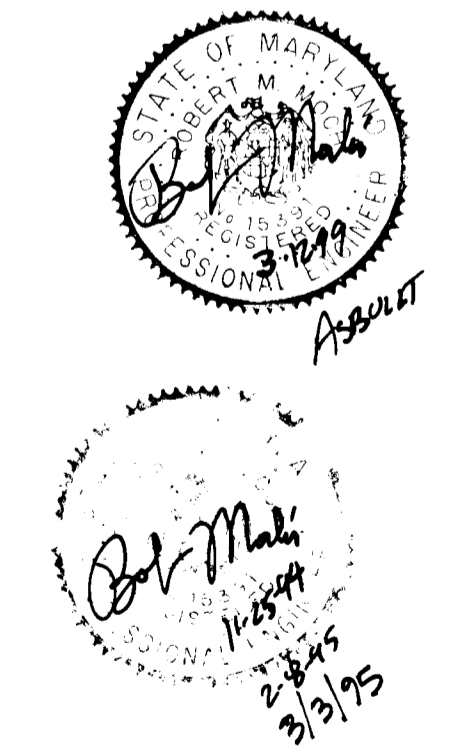
APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Jim ... 3/7/95
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

OWNER/DEVELOPER
WINCHESTER HOMES, INC.
6305 Ivy Lane, Suite 800
Greenbelt, Maryland 20770
(301)474-4411
Attn: Mr. Keith Kubista

ENGINEER
R.M. MOCHI GROUP, P.C.
3300 North Ridge Road, Suite 235
Ellicott City, Maryland 21043
(410)461-0079
Attn: Mr. Robert M. Mochi, P.E.

ROAD NAME	PAVING TYPE	ROAD CLASS	DESIGN SPEED	LIMITS
DOWNING COURT	P-2	CU-VE-SAC	30 MPH	0+49.70 TO 4+89.73
WALVERTON COURT	P-2	CU-VE-SAC	30 MPH	0+89.85 TO 1+24.92



6971

PROJECT NO. 94026.00
DATE 11/02/94
ILLUSTRATION LJC
SCALE 1" = 400'
REMOVED PER DRAWING COMMENTS 3/6/95
REMOVED PER SPEC 1/4/95 COMMENTS 2/10/95
1st SUBMITTAL TO HOWARD COUNTY DEP. 11/17/94
DESCRIPTION REVISIONS

PHASE 3
ASHLEIGH KNOLLS
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 5
COVER SHEET

R.M. MOCHI GROUP, P.C.
3300 N. Ridge Road, Suite 235
Ellicott City, MD 21043-3405
Fax: (410) 750-6340

1 OF 6
1-95-63

Project: 94026.00
 Illustration: LIG
 Date: 11/4/94
 Engineering: JUP
 Approval: RMH
 As shown: RMH

Reviewed by: [Signature]
 Date: 3/10/95
 Approved by: [Signature]
 Date: 3/10/95
 Description: 1st SUBMITTAL TO HOWARD COUNTY, DPZ
 Date: 11/17/94

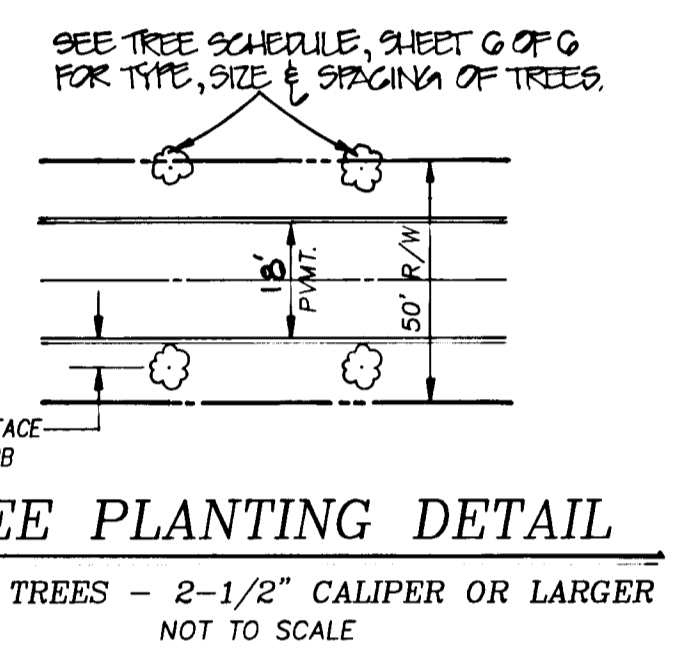
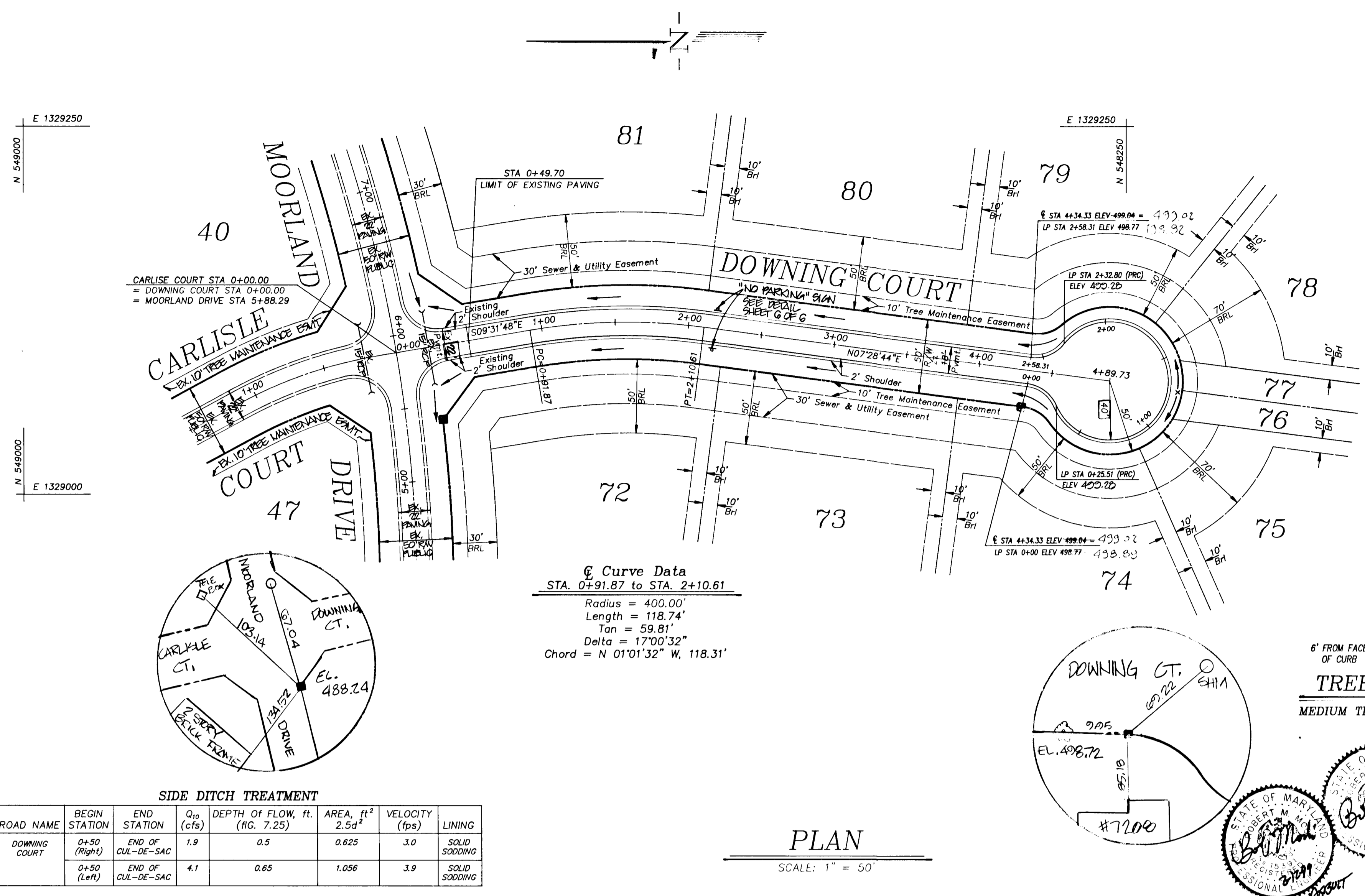
PHASE 3
 ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5
 DOWNING COURT PLAN & PROFILE (0+49.70 TO 4+89.73)

R.M. MOCHI GROUP, P.C.
 3300 N. Ridge Road, Suite 235
 Ellicott City, MD 21043-0505
 Tel: (410) 481-0079
 Fax: (410) 730-6340

CURVE DATA

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA
C-1	25.00'	21.03'	11.18'	20.41'	48°11'23"
C-2	50.00'	241.19'	44.72'	66.67'	276°22'46"
C-3	25.00'	21.03'	11.18'	20.41'	48°11'23"
C-4	25.00'	25.51'	13.99'	24.42'	58°27'40"
C-5	40.00'	207.29'	24.33'	41.83'	296°53'20"
C-6	25.00'	25.51'	13.99'	24.42'	58°27'40"

NOTES:
 1. THE MAXIMUM GRADE OF THE CIRCULAR AREA SHALL NOT EXCEED 6% IN ANY DIRECTION.
 2. LINEAR PROFILE PROVIDED RUNS ALONG EDGE OF PAVEMENT FROM POINT A TO POINT B.

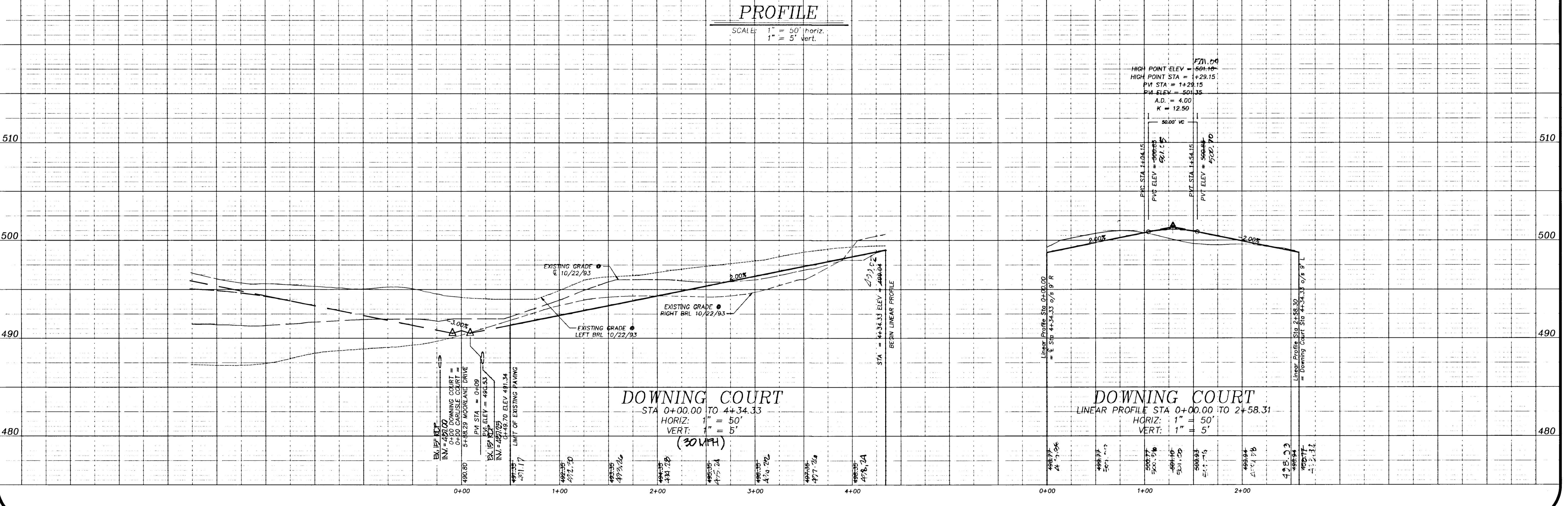


APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 3/10/95
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature] 3-1-95
 CHIEF, BUREAU OF HIGHWAYS
 [Signature] 3/6/95
 CHIEF, BUREAU OF ENGINEERING

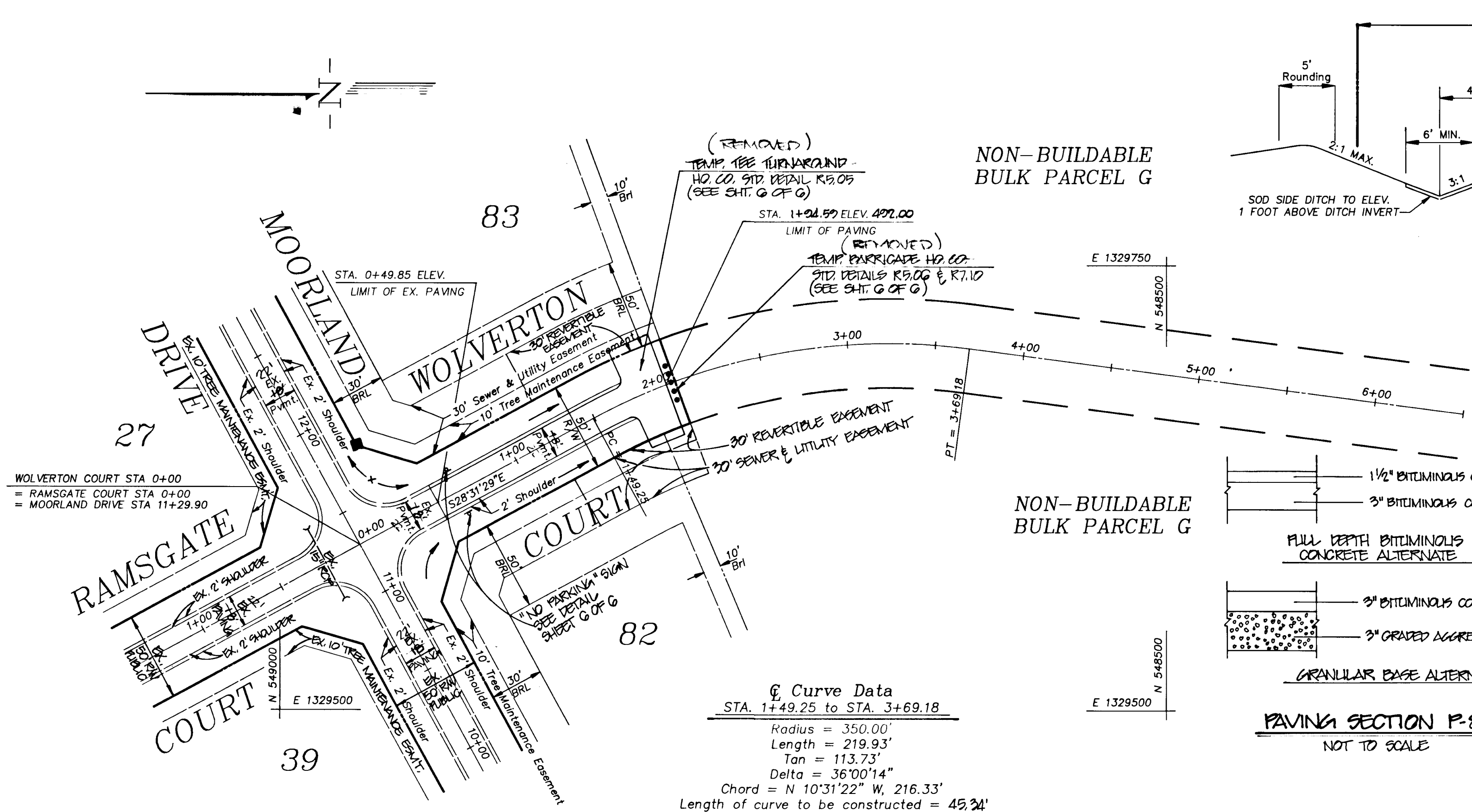
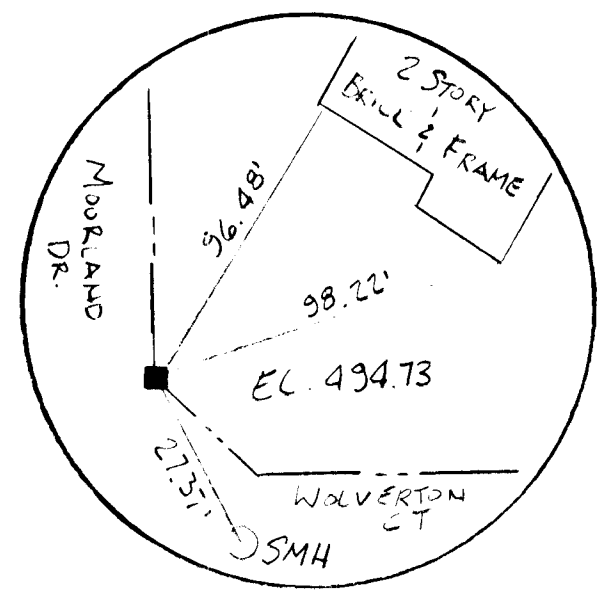
APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 3/7/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

SIDE DITCH TREATMENT

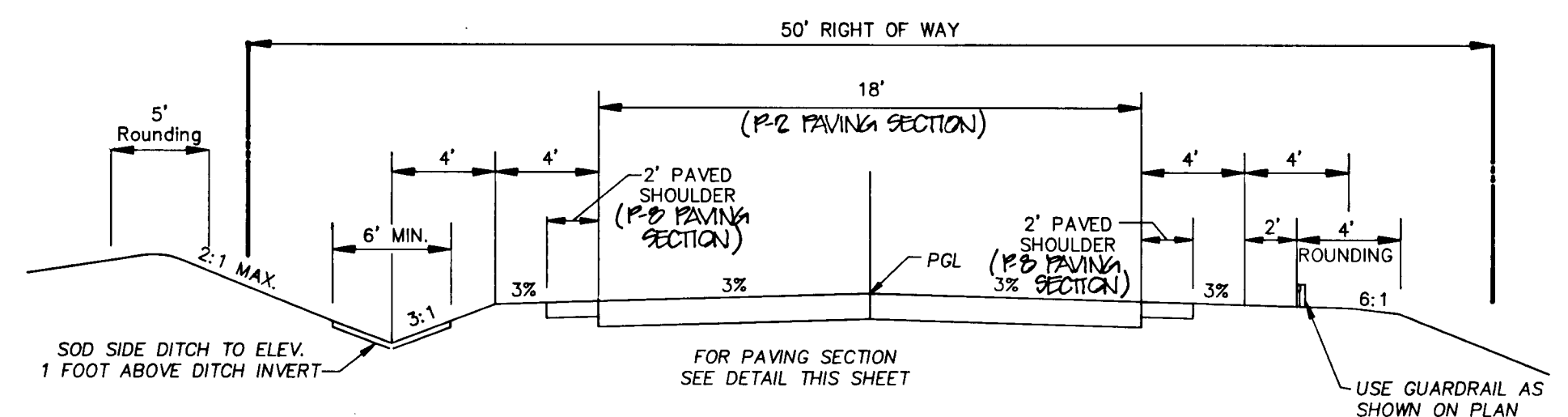
ROAD NAME	BEGIN STATION	END STATION	Q ₁₀ (cfs)	DEPTH OF FLOW, ft. (FIG. 7.25)	AREA, ft ²	VELOCITY (fps)	LINING
DOWNING COURT	0+50 (Right)	END OF CUL-DE-SAC	1.9	0.5	0.625	3.0	SOLID SOODING
	0+50 (Left)	END OF CUL-DE-SAC	4.1	0.65	1.056	3.9	SOLID SOODING



1669

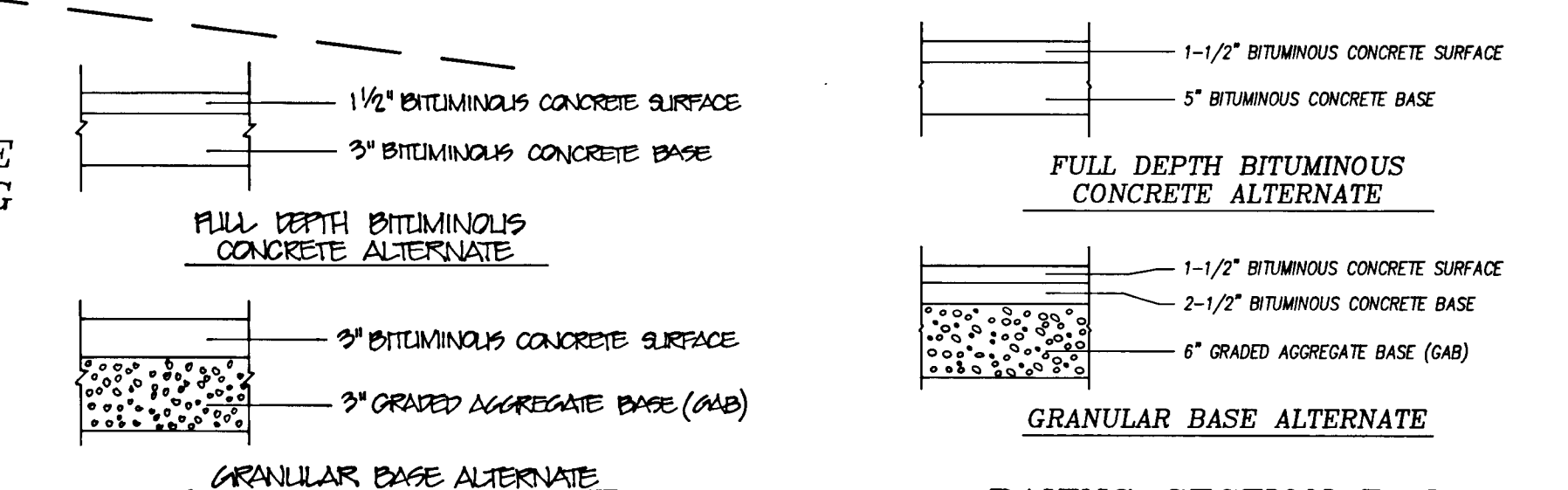


Curve Data
 STA. 14+49.25 TO STA. 3+69.18
 Radius = 350.00'
 Length = 219.93'
 Tan = 113.73'
 Delta = 36°00'14"
 Chord = N 10°31'22" W 216.33'
 Length of curve to be constructed = 45.34'



TYPICAL ROADWAY SECTION
 NOT TO SCALE

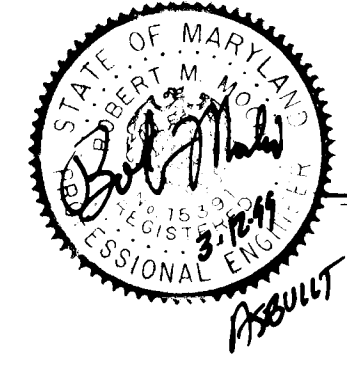
FOR STREETS: DOWNING COURT AND WOLVERTON COURT
 LOCAL STREET AND CUL-DE-SAC
 HOWARD COUNTY STANDARD FIGURE 2.11
 OPEN SECTION (RURAL) ("RR" ZONING DISTRICT)
 MINIMUM DESIGN SPEED - 30 MPH



PAVING SECTION P-2
 NOT TO SCALE

NOTE:
 AGGREGATE BASE PAVEMENT SECTION MUST BE USED WHERE MICACEOUS SOIL SUBGRADE EXISTS. FULL DEPTH ASPHALT SECTIONS MAY BE USED OVER MICACEOUS SOILS ONLY IF CERTIFIED BY A REGISTERED PROFESSIONAL GEO-TECHNICAL ENGINEER AND APPROVED IN ADVANCE BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Bob Mochi
 3/16/95



OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 800
 Greenbelt, Maryland 20770
 (301)474-4411
 ATTN: Mr. Keith Kubista

ENGINEER
 R.M. MOCHI GROUP, P.C.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410)461-0079
 ATTN: Mr. Robert Mochi, P.E.

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chad Parsons 2/6/95
 CHIEF, LAND DEVELOPMENT DIVISION
Andrew M. Douck 3-1-95
 CHIEF, BUREAU OF HIGHWAYS
Donald Sisson 3/6/95
 CHIEF, BUREAU OF ENGINEERING

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Anna Aronowicz 3/7/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

SIDE DITCH TREATMENT

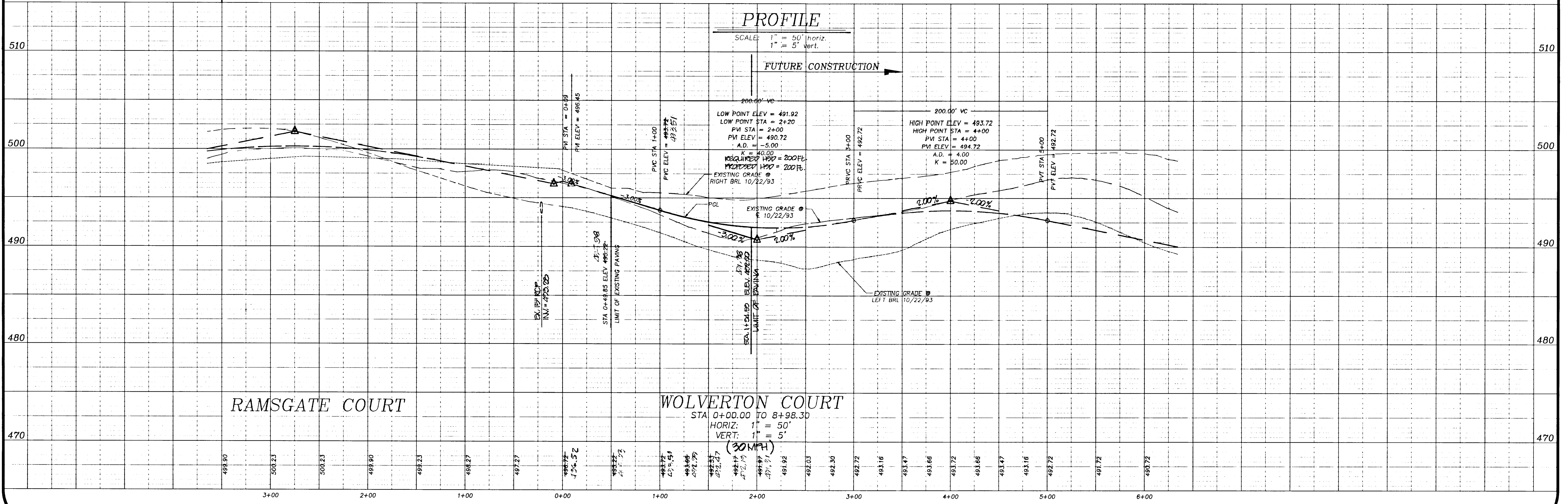
ROAD NAME	BEGIN STATION	END STATION	Q ₁₀ (cfs)	DEPTH OF FLOW, ft. (HG. 7.25)	AREA, ft ² 2.5d ²	VELOCITY (fps)	LINING
WOLVERTON COURT	0+50 (Left)	2+00	1.2	0.38	0.361	3.3	SOLID SODDING
	0+50 (Right)	2+00	0.7	0.31	0.240	2.9	SOLID SODDING

PLAN

SCALE: 1" = 50'

PROFILE

SCALE: 1" = 50' horiz.
 1" = 5' vert.



RAMSGATE COURT

WOLVERTON COURT
 STA. 0+00.00 TO 8+98.30
 HORIZ: 1" = 50'
 VERT: 1" = 5'

1669

Project	94026.00	Date	11/7/94
Illustration	LIG	Engineering	TJP
Scale	as shown	Approval	RM

Revised	3/2/95	Date	3/2/95
1	REMOVED PER BUREAU OF HIGHWAYS COMMENTS	Revisions	2/6/95
0	REMOVED PER SEC. 14.05 COMMENTS	description	11/7/94
	1st SUBMITTAL TO HOWARD COUNTY DPZ		

PHASE 3
ASHLEIGH KNOLLS
 ELECTION DISTRICT No. 5
 WOLVERTON COURT PLAN & PROFILE (0+49.85 TO 1+24.50)
 HOWARD COUNTY, MARYLAND

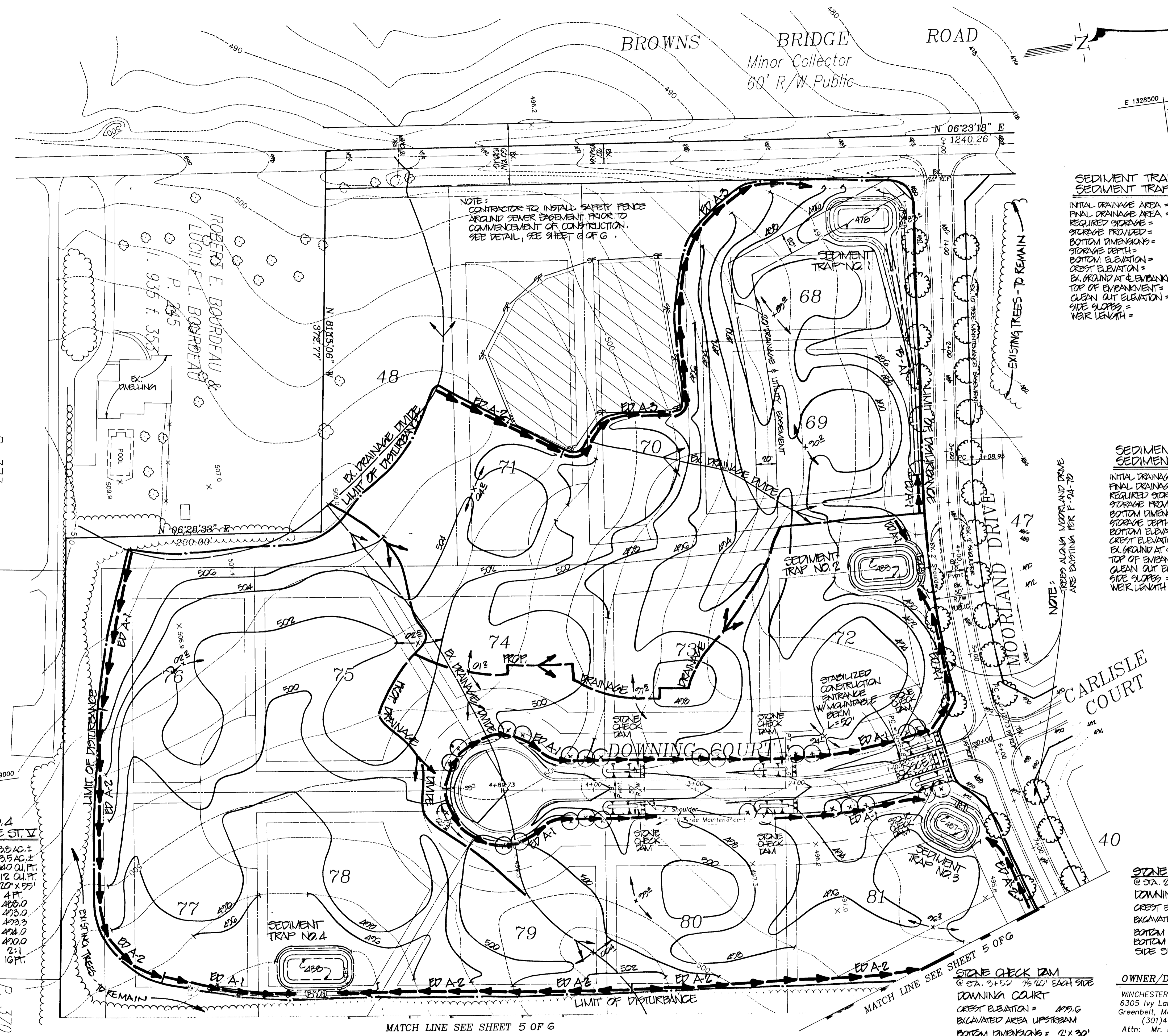
R.M. MOCHI GROUP, P.C.
 3300 N. Ridge Road, Suite 235
 Ellicott City, MD 21043-3305
 (410) 461-0079
 Fax: (410) 750-6340

Project	94026.00	date	10/18/94
Illustration	LIG/BLP	engineering	TIP
scale	1" = 50'	approval	RMM

REVISION	DATE	DESCRIPTION
1	11/17/94	REVISED PER HWY BUREAU OF HIGHWAYS COMMENTS
2	1/17/95	REVISED PER SPD 14/05 COMMENTS
3	1/17/95	1st SUBMITTAL TO HOWARD COUNTY CPZ

PHASE 3
ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5
 GRADING AND SEDIMENT CONTROL PLAN

R.M. MOCHI GROUP, P.C.
 ENGINEER
 3300 N. Ridge Road, Suite 235
 Ellicott City, MD 21043-3305
 (410) 461-0079
 Fax: (410) 750-6340



SEDIMENT TRAP NO. 1
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 1.7 AC. ±
 FINAL DRAINAGE AREA = 3.7 AC. ±
 REQUIRED STORAGE = 6600 CU. FT.
 STORAGE PROVIDED = 6792 CU. FT.
 BOTTOM DIMENSIONS = 20' x 50'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 478.0
 CREST ELEVATION = 483.0
 EX. GROUND AT EMBANKMENT = 484.0
 TOP OF EMBANKMENT = 484.0
 CLEAN OUT ELEVATION = 480.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 16 FT.

SEDIMENT TRAP NO. 2
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 3.4 AC. ±
 FINAL DRAINAGE AREA = 1.6 AC. ±
 REQUIRED STORAGE = 6120 CU. FT.
 STORAGE PROVIDED = 6192 CU. FT.
 BOTTOM DIMENSIONS = 20' x 45'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 489.0
 CREST ELEVATION = 490.0
 EX. GROUND AT EMBANKMENT = 490.0
 TOP OF EMBANKMENT = 489.0
 CLEAN OUT ELEVATION = 489.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 16 FT.

SEDIMENT TRAP NO. 3
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 1.8 AC. ±
 FINAL DRAINAGE AREA = 1.8 AC. ±
 REQUIRED STORAGE = 3240 CU. FT.
 STORAGE PROVIDED = 3792 CU. FT.
 BOTTOM DIMENSIONS = 15' x 30'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 487.0
 CREST ELEVATION = 492.0
 EX. GROUND AT EMBANKMENT = 492.0
 TOP OF EMBANKMENT = 493.0
 CLEAN OUT ELEVATION = 489.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 8 FT.

SEDIMENT TRAP NO. 4
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 3.5 AC. ±
 FINAL DRAINAGE AREA = 3.5 AC. ±
 REQUIRED STORAGE = 6840 CU. FT.
 STORAGE PROVIDED = 7312 CU. FT.
 BOTTOM DIMENSIONS = 20' x 55'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 486.0
 CREST ELEVATION = 493.0
 EX. GROUND AT EMBANKMENT = 493.0
 TOP OF EMBANKMENT = 494.0
 CLEAN OUT ELEVATION = 490.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 16 FT.

STONE CHECK DAM
 @ STA. 2+00 95' W/ EACH SIDE
DOWNING COURT
 CREST ELEVATION = 492.6
 EXCAVATED AREA UPSTREAM
 BOTTOM DIMENSIONS = 2' x 30'
 BOTTOM ELEVATION = 490.6
 SIDE SLOPE = 2:1

STONE CHECK DAM
 @ STA. 0+50 95' W/ EACH SIDE
DOWNING COURT
 CREST ELEVATION = 489.6
 EXCAVATED AREA UPSTREAM
 BOTTOM DIMENSIONS = 2' x 30'
 BOTTOM ELEVATION = 487.6
 SIDE SLOPE = 2:1

OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 800
 Greenbelt, Maryland 20770
 (301) 474-4411
 Attn: Mr. Keith Kubista

ENGINEER
 R.M. MOCHI GROUP, P.C.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410) 461-0079
 Attn: Mr. Robert M. Mochi, P.E.

STONE CHECK DAM
 @ STA. 3+00 95' W/ EACH SIDE
DOWNING COURT
 CREST ELEVATION = 495.6
 EXCAVATED AREA UPSTREAM
 BOTTOM DIMENSIONS = 2' x 30'
 BOTTOM ELEVATION = 493.6
 SIDE SLOPE = 2:1

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
 Signature of Developer: *Kel Kent* Date: 11-16-94

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 County Soil Conservation District.
 Signature of Engineer: *Bob Mochi* Date: 11-25-94

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. ... 6/6/95
 CHIEF, LAND-USE DEVELOPMENT DIVISION
Andrew M. ... 3-1-95
 CHIEF, BUREAU OF HIGHWAYS
Paul ... 3/6/95
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Olga ... 3/1/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
... 2/15/95
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Patricia Engler, P.E. 2/16/95
 U. S. SOIL CONSERVATION SERVICE

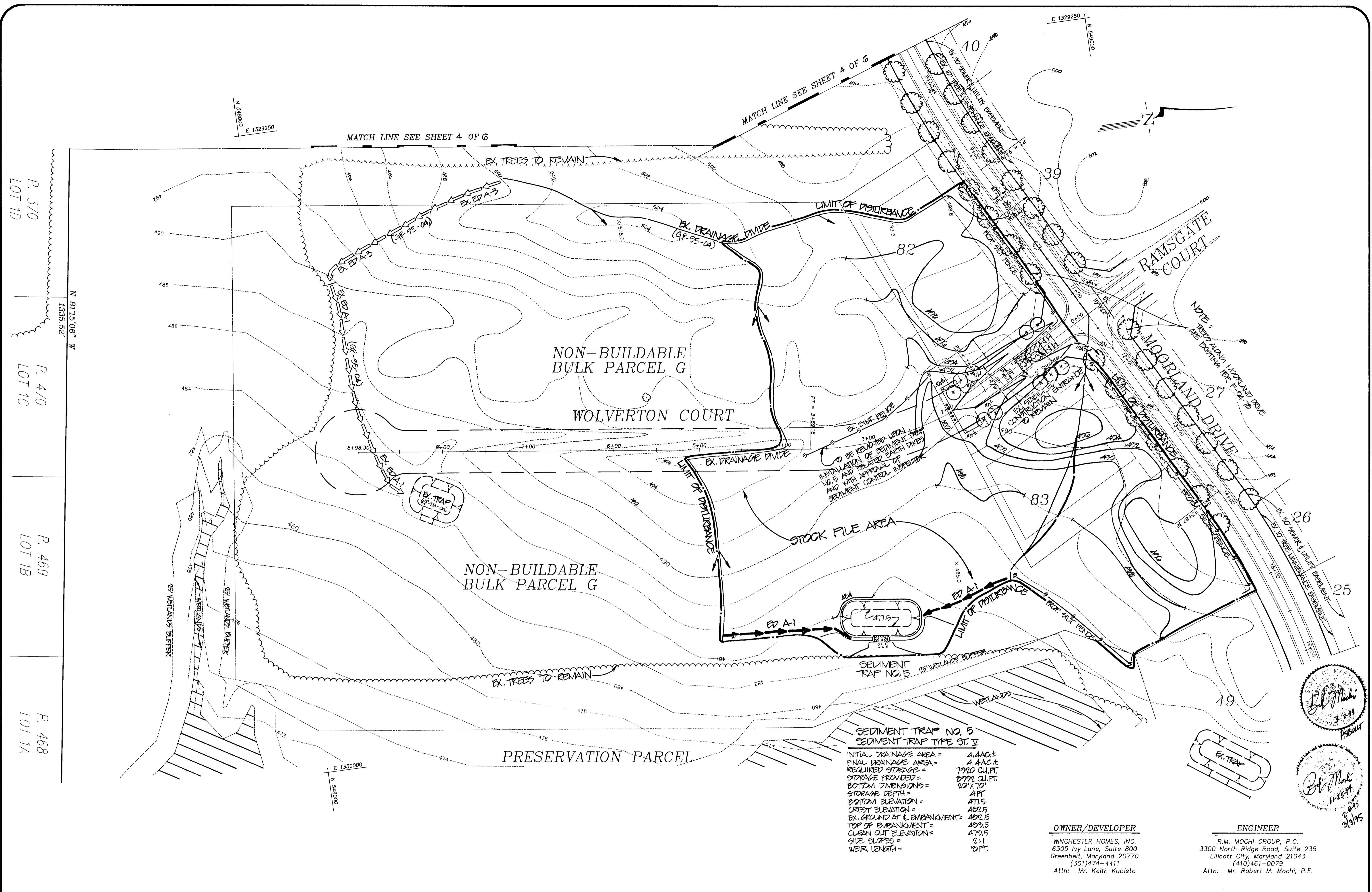
1669

project	84026.00	date	10/16/94
illustration	LJC/BLP	engineering	TJP
scale	1"=50'	approval	RAM

no.	description	date	revisions
2	REVISED PER PRV BUREAU OF HIGHWAYS COMMENTS	3/10/95	
1	REVISED PER SEC 1/4/95 COMMENTS	2/6/95	
0	1st SUBMITTAL TO HOWARD COUNTY DPZ	11/17/94	

PHASE 3
ASHLEIGH KNOLLS
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND
 GRADING AND SEDIMENT CONTROL PLAN

R.M. MOCHI GROUP, P.C.
 ENGINEERS
 3300 N. Ridge Road, Suite 235
 Ellicott City, MD 21043-3305
 (410) 461-0079
 Fax: (410) 756-6340



SEDIMENT TRAP NO. 5
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA =	1.44AC ±
FINAL DRAINAGE AREA =	1.44AC ±
REQUIRED STORAGE =	7000 CU.FT.
STORAGE PROVIDED =	8772 CU.FT.
BOTTOM DIMENSIONS =	10' X 10'
STORAGE DEPTH =	4 FT.
BOTTOM ELEVATION =	471.5
CREST ELEVATION =	482.5
EX. GROUND AT E. EMBANKMENT =	482.5
TOP OF EMBANKMENT =	483.5
CLEAN OUT ELEVATION =	479.5
SIDE SLOPES =	2:1
WEIR LENGTH =	10 FT.

OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 800
 Greenbelt, Maryland 20770
 (301) 474-4411
 Attn: Mr. Keith Kubista

ENGINEER
 R.M. MOCHI GROUP, P.C.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410) 461-0079
 Attn: Mr. Robert M. Mochi, P.E.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John J. ... 3/6/95
 CHIEF, LAND DEVELOPMENT DIVISION
Andrew M. ... 3-1-95
 CHIEF, BUREAU OF HIGHWAYS
Paul ... 3/6/95
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Uma ... 3/1/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
 CAH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John W. ... 2/15/95
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Patricia ... 2/15/95
 U. S. SOIL CONSERVATION SERVICE

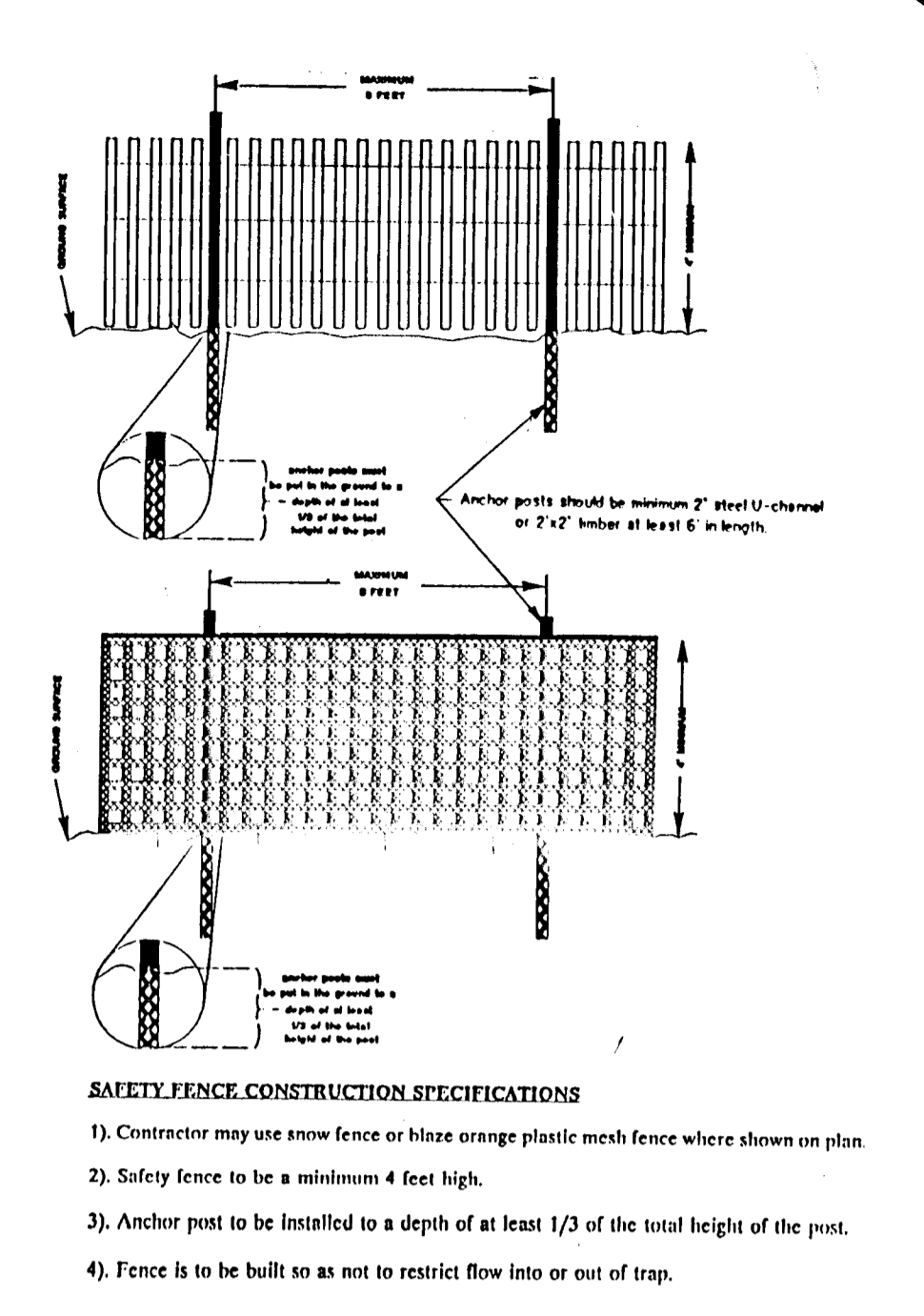
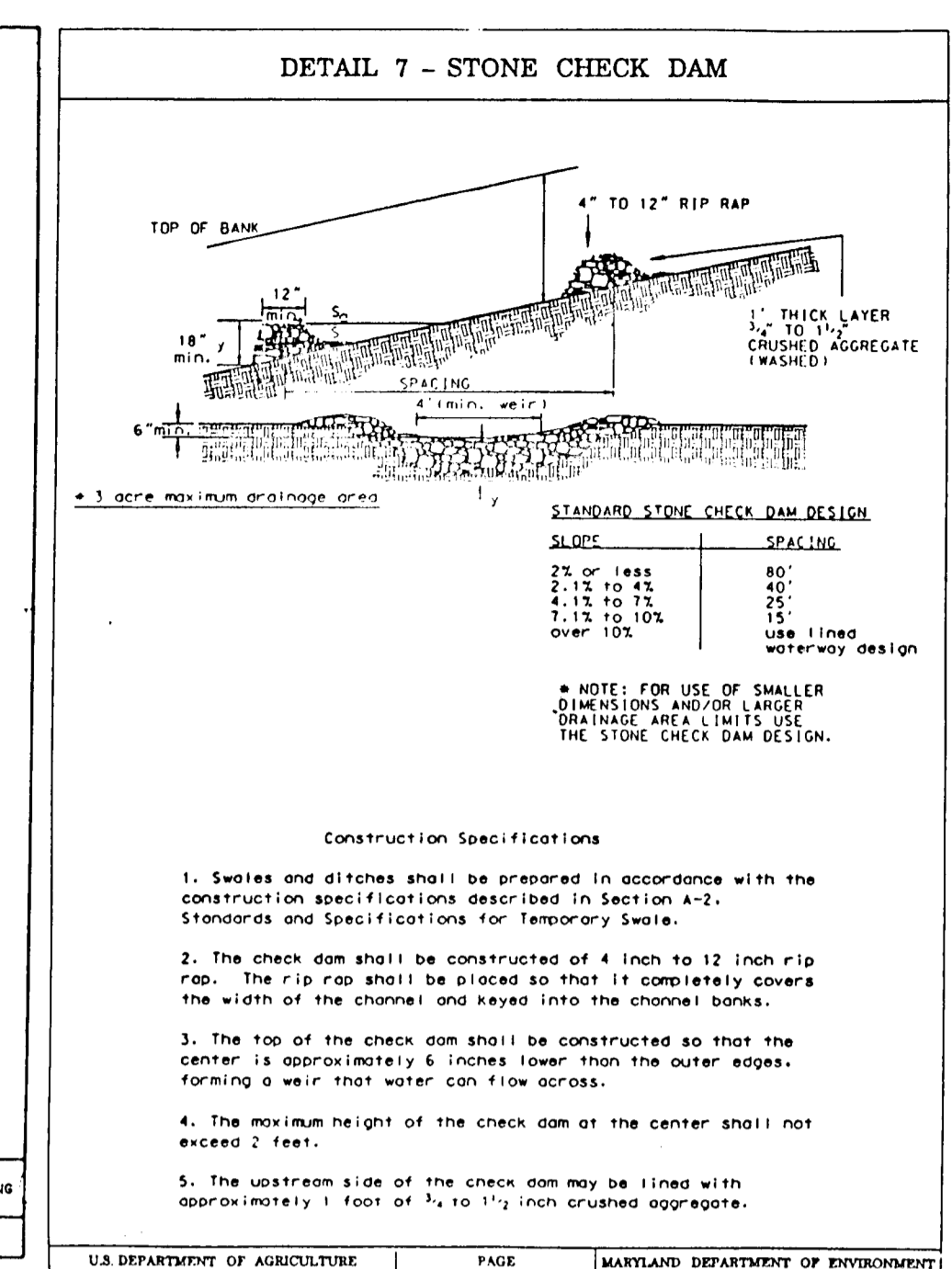
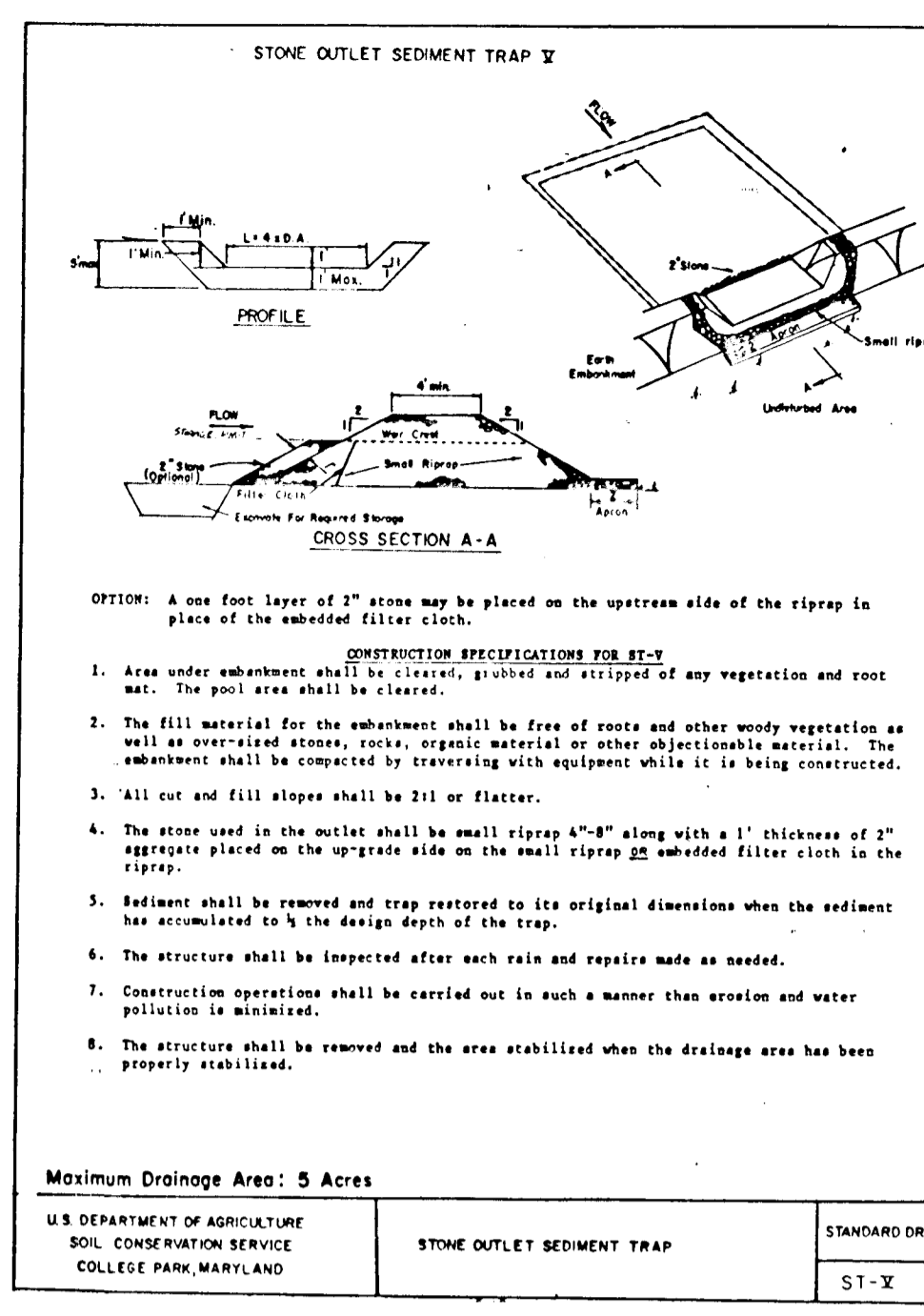
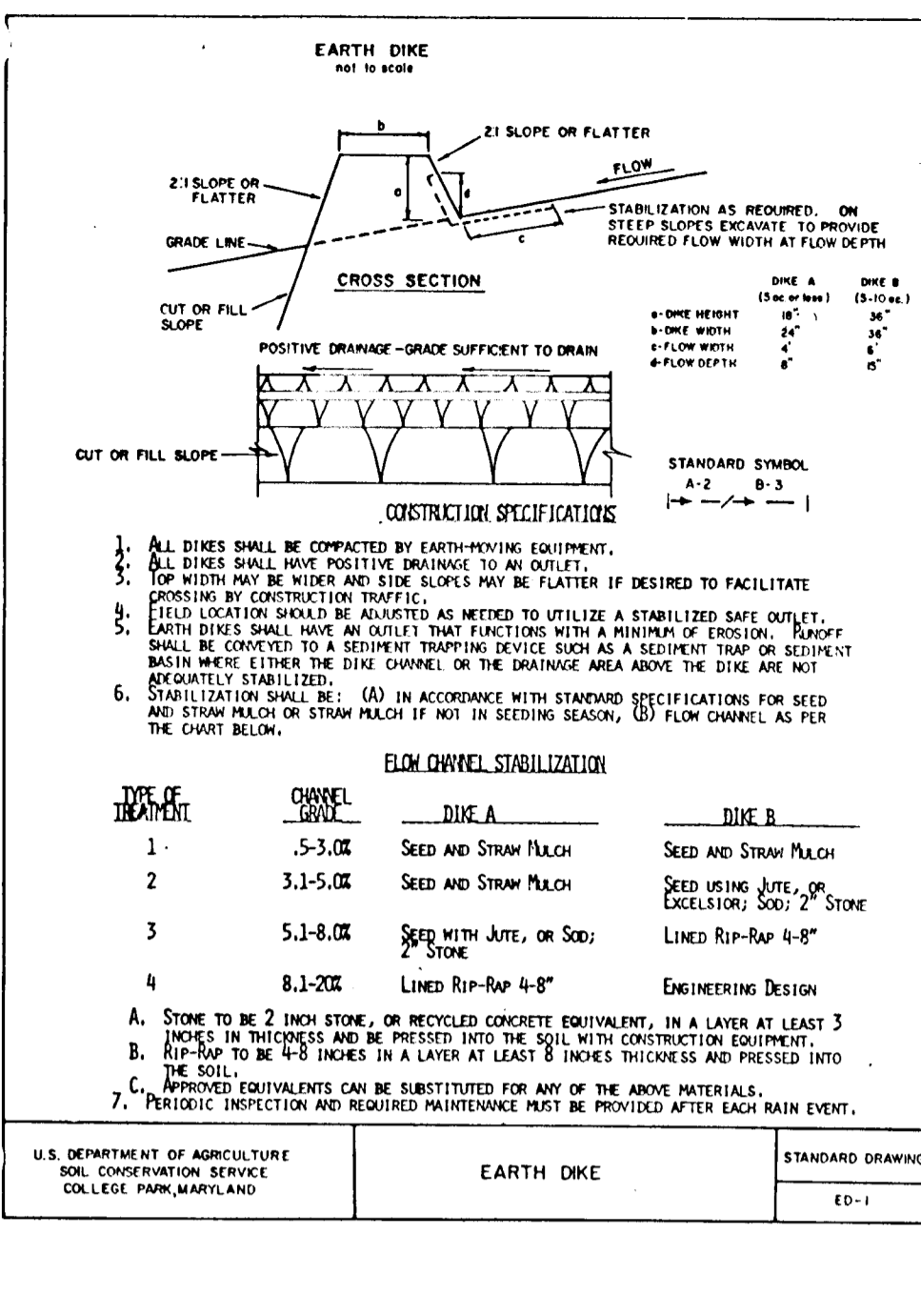
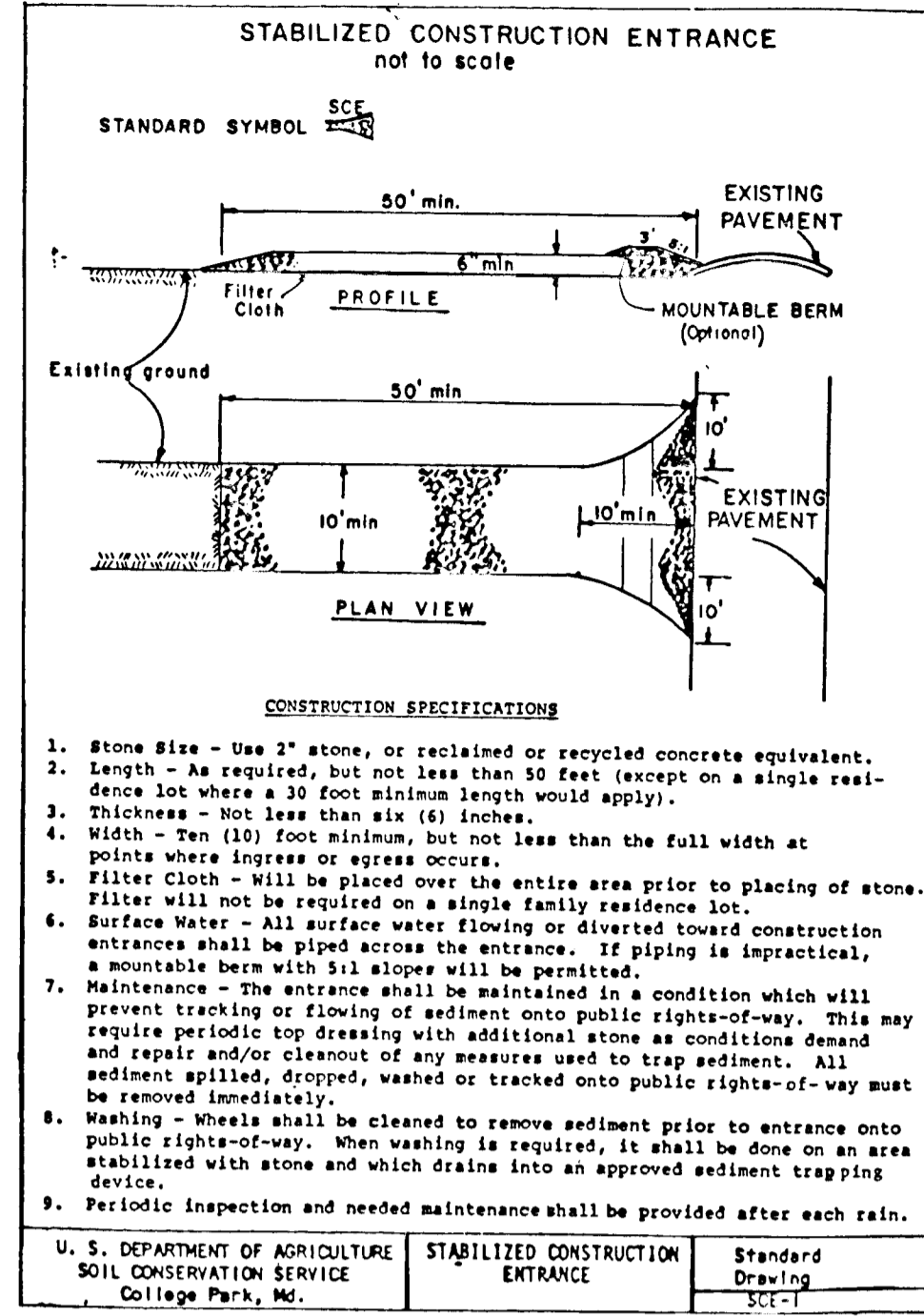
DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
Keith Kubista 11-16-94
 Signature of Developer 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 County Soil Conservation District.
Robert M. Mochi 11-25-94
 Robert M. Mochi, P.E. Date

16691

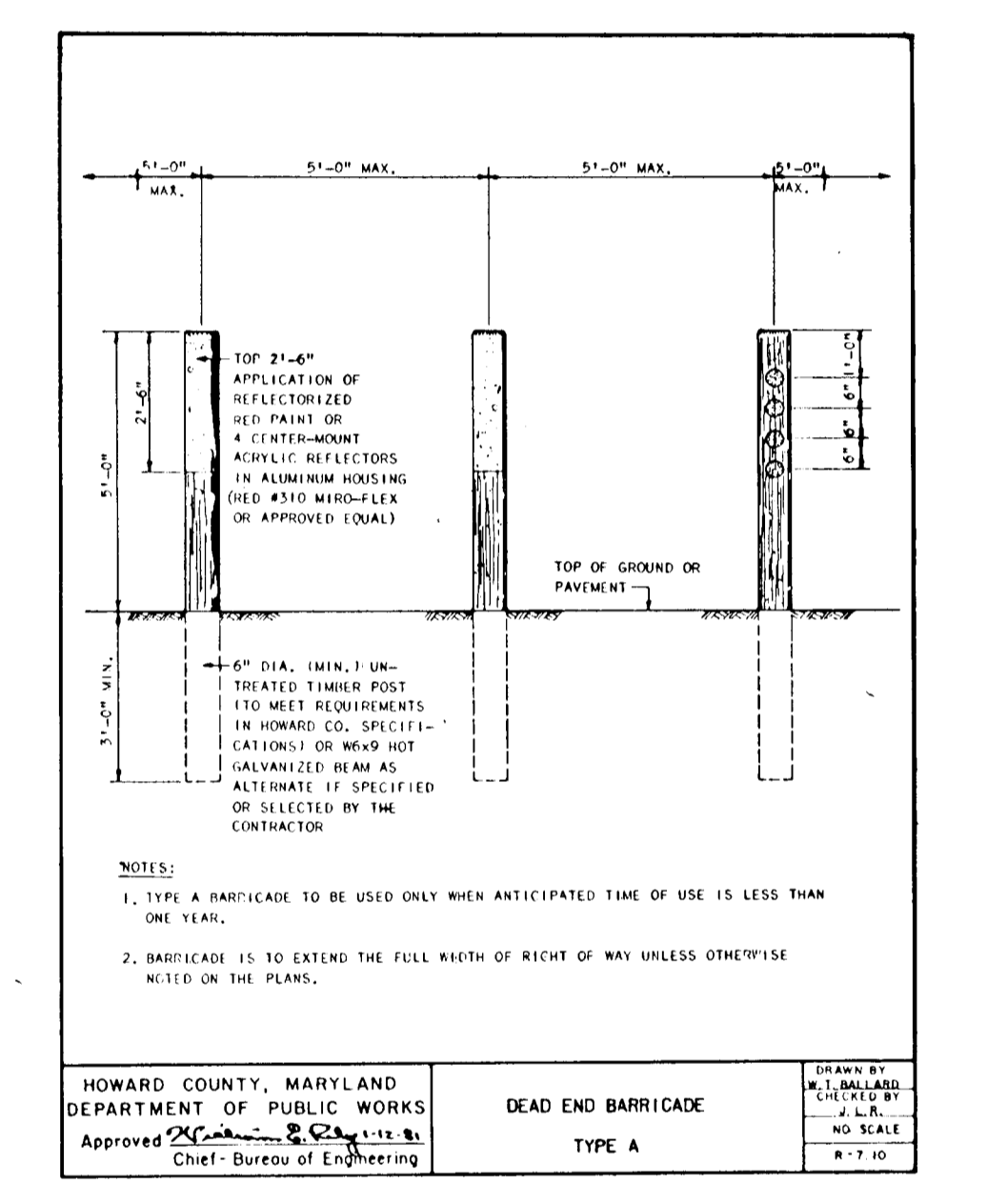
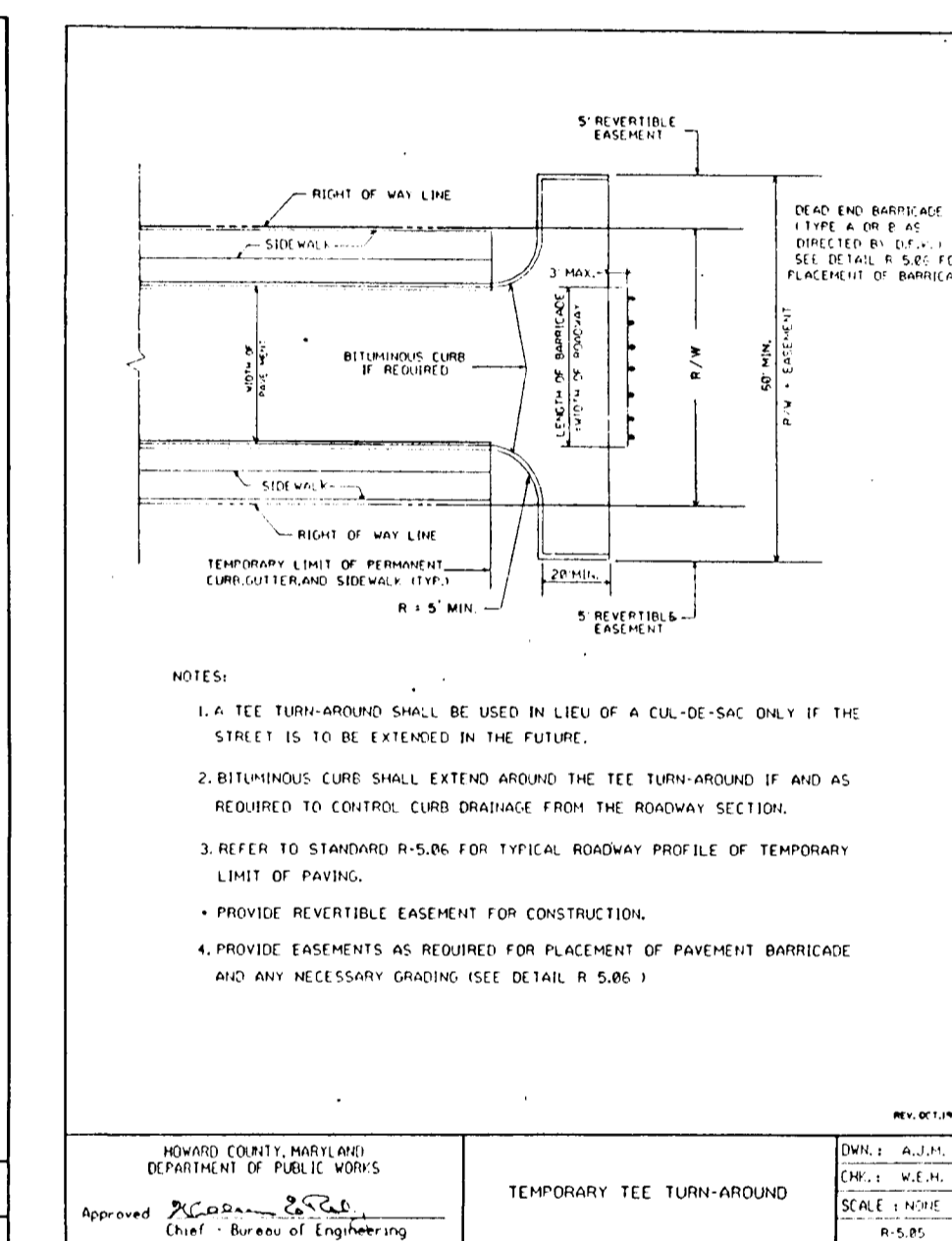
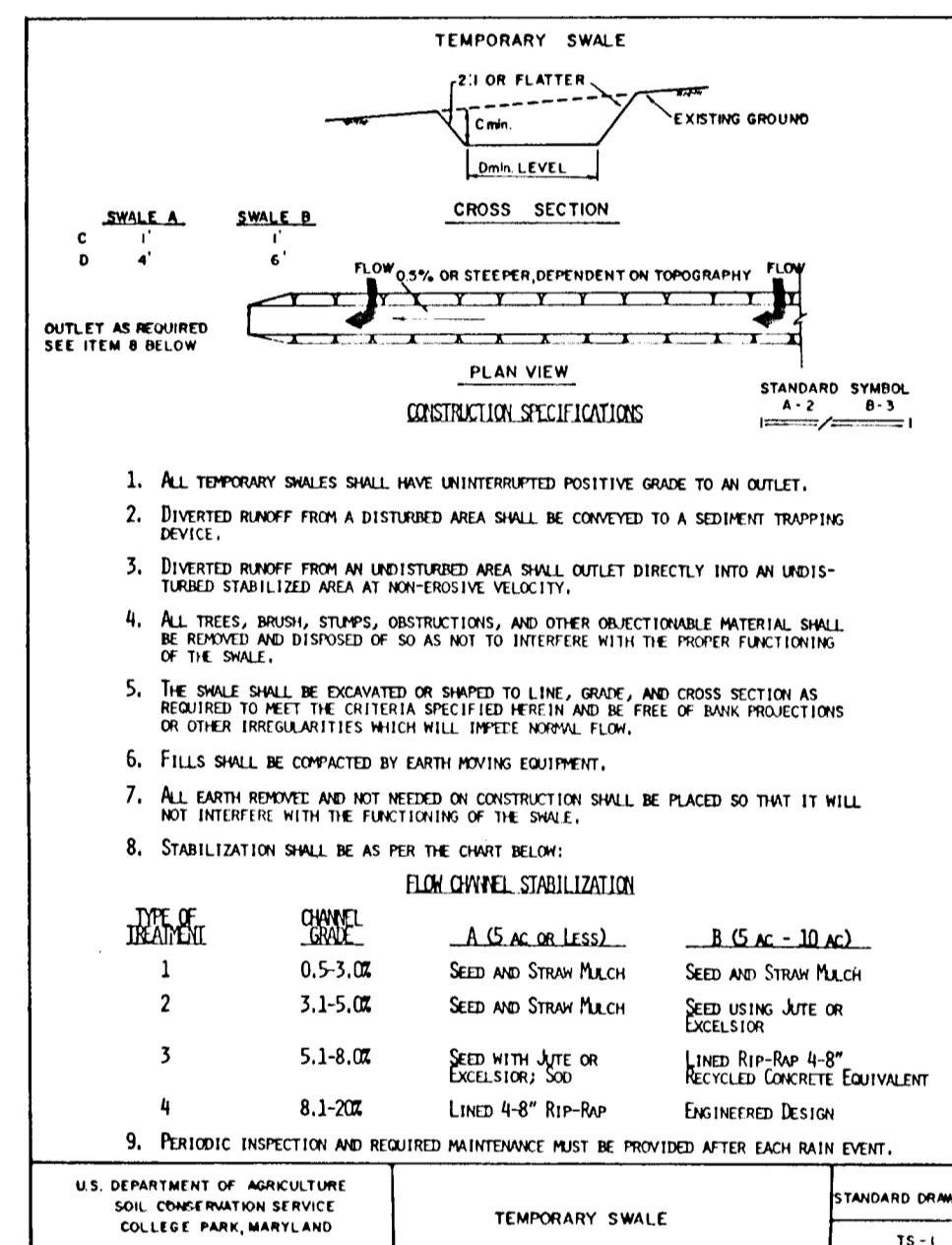
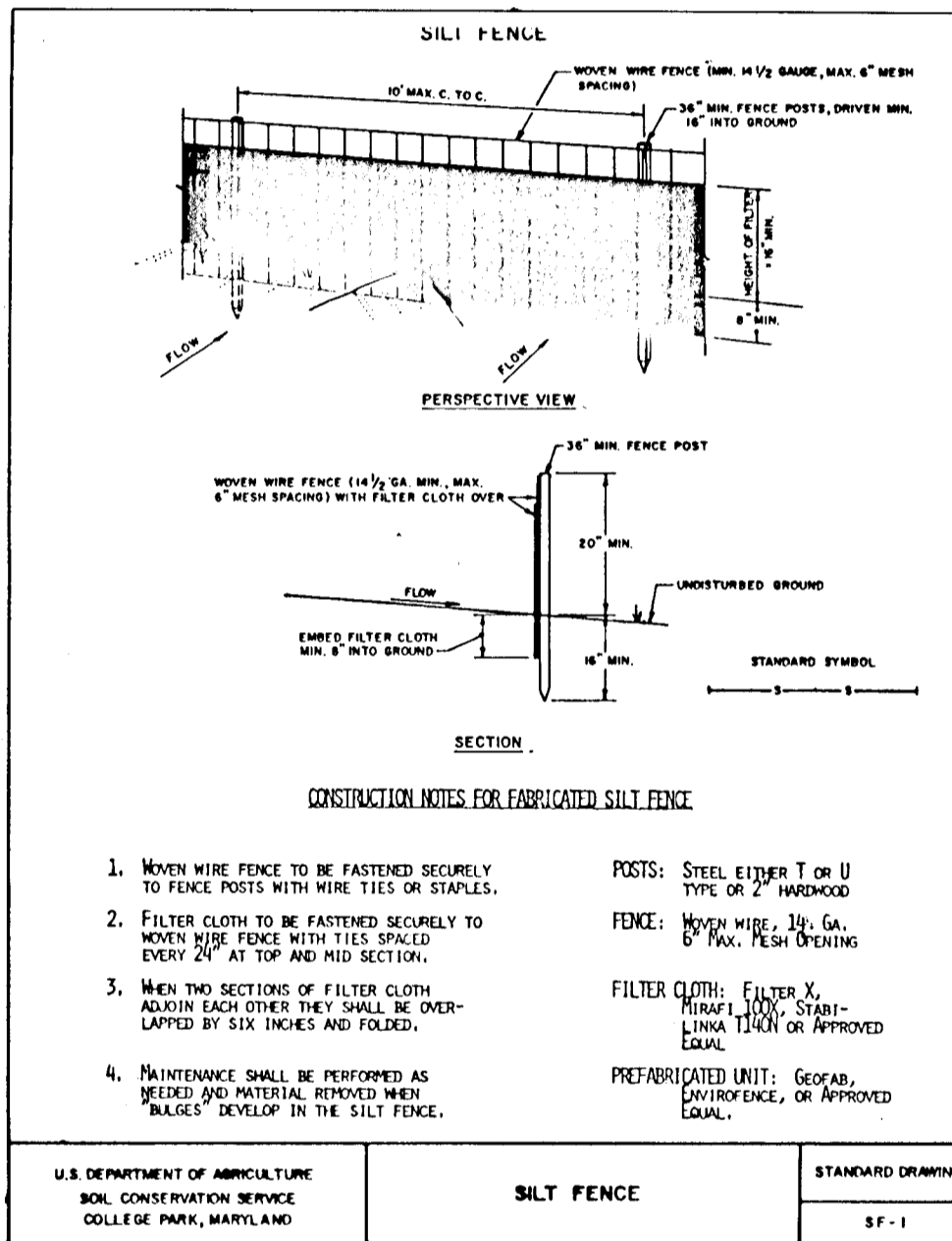
SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction. (313-1855)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- Following initial soil disturbances or redistribution, permanent or temporary stabilization shall be completed within: a) 72 hours for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 5 calendar days as to all other disturbed or graded areas on the project site.
- 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 Seeding (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.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 - Total Area of Site: 15.1AC ±
 - Area to be Disturbed: 15.1AC ±
 - Area to be roofed or paved: 0.3AC ±
 - Area to be vegetatively stabilized: 14.8AC ±
 - Total Out: 15.075 AC ±
 - Total Fill: 1,000 C.Y.
 - Offsite Waste/Borrow Area Location: N/A (ON SITE STOCK PILE)
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance. Additional sediment controls must be provided, if deemed necessary by the Howard County DILP Sediment Control Inspector.
- Quantities and estimates shown are for sediment control purposes only. Contractor shall prepare his/her own quantity estimates to his/her satisfaction.



PERMANENT SEEDING NOTES

- Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)
- Soil Amendments: In lieu of soil test recommendations, use on the following schedules.
- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 urea fertilizer (9 lbs/1000 sf).
 - Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil.
- Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (14 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through 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 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.
- Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

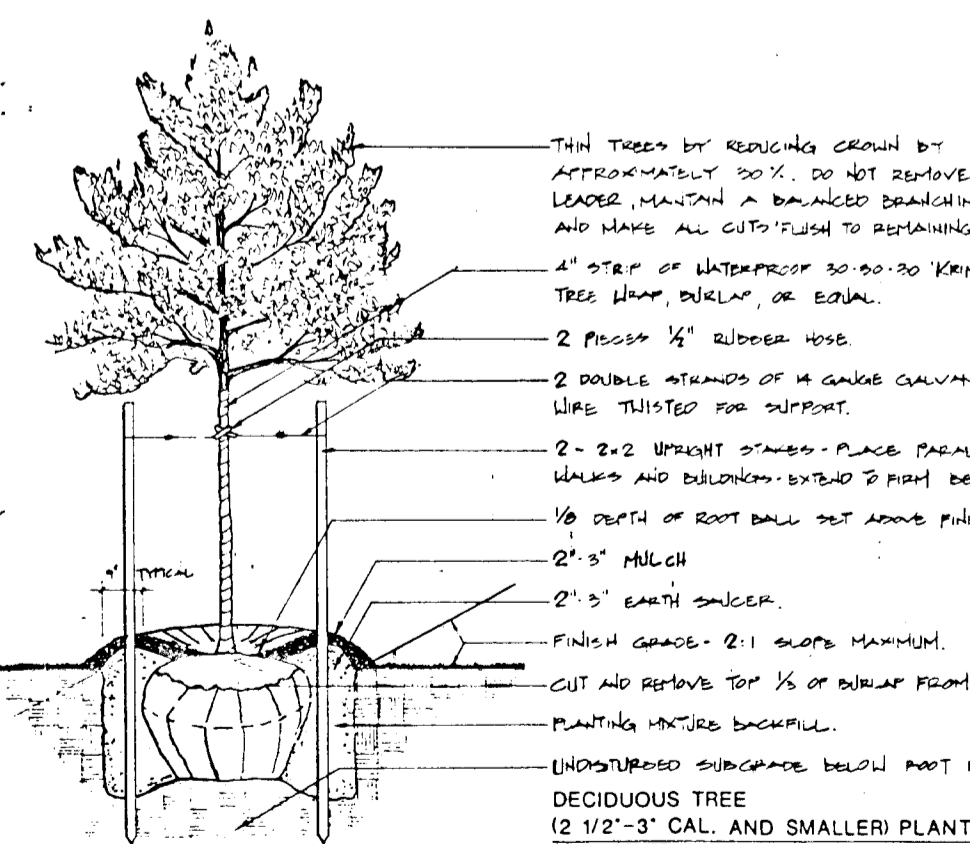


SEQUENCE OF CONSTRUCTION:

- Obtain grading permit. (one week)
- Install safety fence around septic easements on lots 70 & 71 as shown on sediment control plan. See detail #115 of sheet. (one day)
- Construct Stabilized Construction Entrance. (one day)
- Begin construction of Downing Court at existing termination from Phase 2 construction.
- Excavate side ditches for Downing Court beginning at approximately Sta 0+50 and proceed toward the end of the cul-de-sac. Place stone check dams as indicated on plan as soon as feasible. (one week)
- Excavate Sediment Traps 1, 2, 3 & 4 at locations shown on plan. (one week)
- Construct earth dikes as shown on plan. (one week)
- Construct remaining site per approved plans. (six weeks)
- Sediments from sediment traps must be removed when sediment has accumulated to one-half of the storage volume of the traps. All removed sediments must be deposited upstream of approved sediment control devices. (as required)
- All sediment control devices are to be inspected daily and after each rainfall. Repair sediment devices as required. (as required)
- Following initial soil disturbances or redistribution, permanent or temporary stabilization shall be completed within seven (7) calendar days for all perimeter slopes and all slopes greater than 3:1 or within fourteen (14) days for all other disturbed areas on the project site. (as required)
- When all contributing area to a sediment control device has been stabilized, and with the permission of the Sediment Control Inspector, the device may be removed and/or backfilled and the area brought to design grades and stabilized. (as required)
- Notify Howard County Office of Inspections and Permits for final inspection at end of project.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
- Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)
- Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).
- Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through 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 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.
- Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.



TREE SCHEDULE					
STREET NAME	TREE SIZE	SPACING	TYPE	SYMBOL	QUANTITY
DOWNING COURT	2 1/2\"/>				



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature]
 DATE: 5/6/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature]
 DATE: 3/1/95

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 [Signature]
 DATE: 2/15/95

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature]
 DATE: 2/15/95

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
 [Signature]
 DATE: 1/16/94

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 County Soil Conservation District.
 [Signature]
 DATE: 2-9-95

16609

PROJECT: 94067.00
 DATE: 11/10/94
 DRAWING: LUG/BLP
 SCALE: AS NOTED
 APPROVAL: RMM

REMOVED PER PW DEPT. OF INSPECTIONS AND PERMITS
 DATE: 2/10/95
 BY: JTP
 REASON: [unclear]
 DATE: 11/17/94

PHASE 3
 ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5
 GRADING AND SEDIMENT CONTROL NOTES & DETAILS

R.M. MOCHI GROUP, P.C.
 ENGINEER
 3300 N. Ridge Road, Suite 235
 Ellicott City, MD 21043-3305
 (410) 461-0079
 Fax: (410) 750-6340