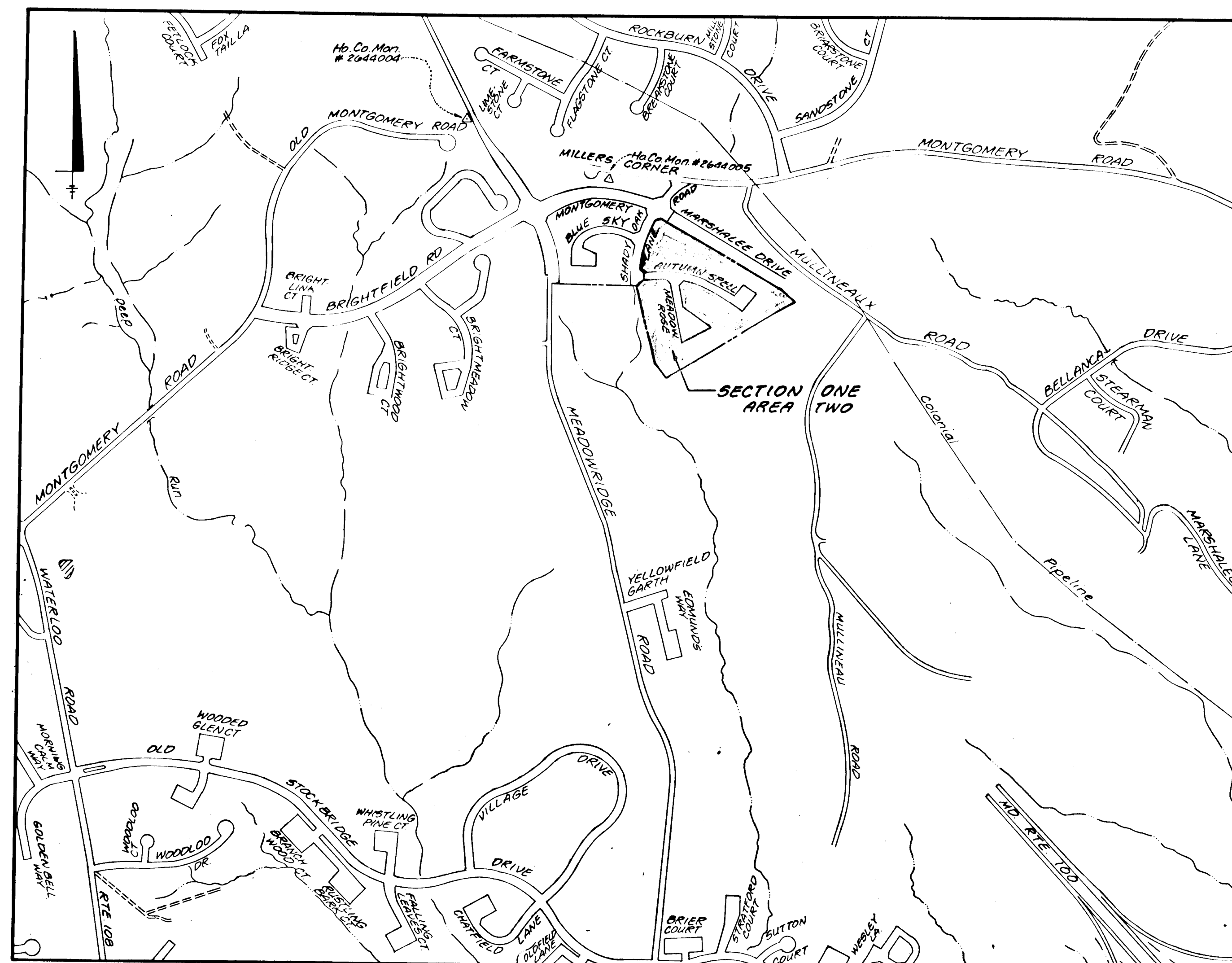


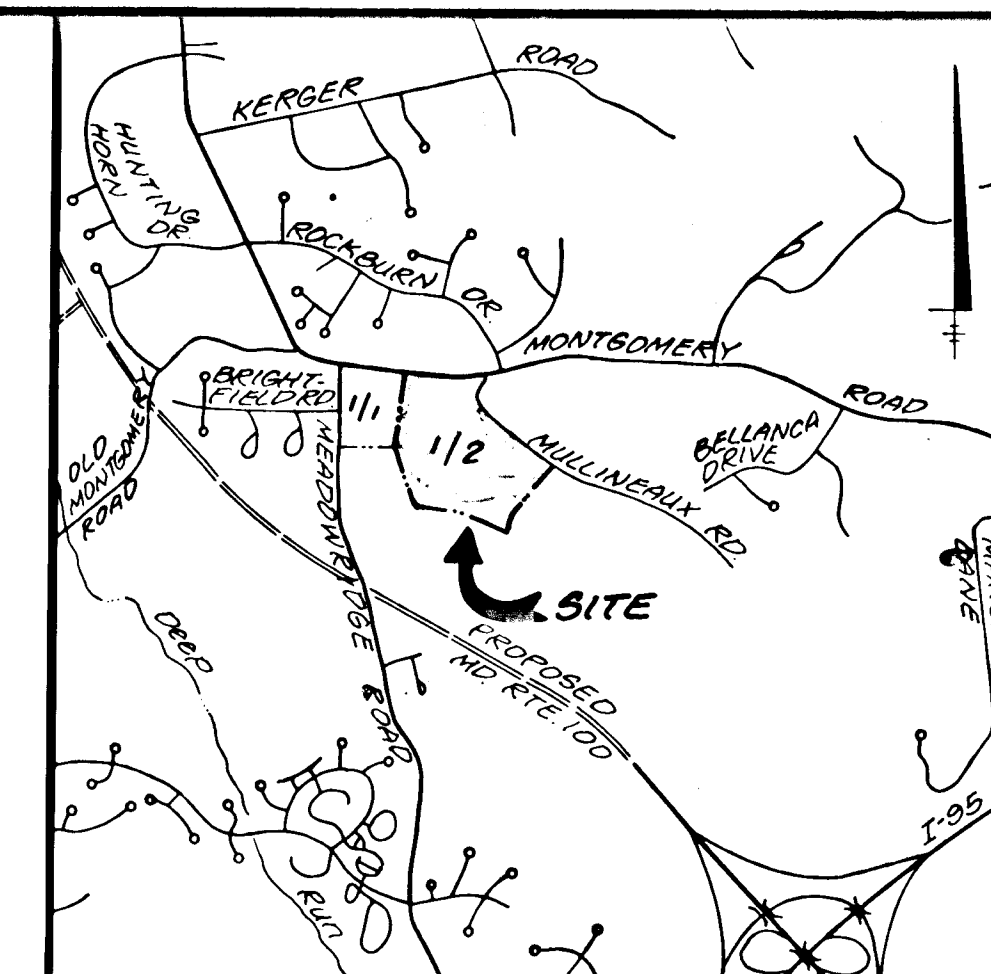
INDEX OF SHEETS	
SHEET NO.	TITLE
1	TITLE SHEET
2	PLAN AND PROFILE - AUTUMN SPELL
3	PLAN AND PROFILE - MEADOW ROSE
4	ROAD DETAILS
5	STORM DRAIN PROFILES/STRUCTURE SCHEDULE
6	DRAINAGE AREA MAP
7	GRADING AND SEDIMENT CONTROL PLAN
8	GRADING AND SEDIMENT CONTROL PLAN AND DETAILS
9	LANDSCAPE PLAN



LOCATION MAP  
Scale: 1" = 600'

**BENCH MARKS:**  
# 2644005 Elev. 416.881  
# 2644004 Elev. 402.135

**PARKING TABULATION:**  
(Single Family Attached - 112 Units)  
Parking Proposed: 257 Spaces  
A. Garage Units: 34x2 Spaces = 68 Spaces  
(1 Space in Garage, 1 Space in Driveway)  
B. Court Parking: 190 Spaces  
C. Parking Ratio (Spaces/Unit) 258/112 = 2.30



VICINITY MAP  
Scale: 1" = 2,000'

**GENERAL NOTES (Contd):**

- The proposed sidewalks and ramps design shall be in accordance with the ADA requirements.
- The sediment basin/pond reviewed and approved under SDP 93-105 is to be fully functional prior to commencement of work for this plan. (F34-98)
- The Final Road Construction Plans for Shady Oak 1/1 under F34-27 and Mass Grading Plan for Shady Oaks under SDP 93-105 must be approved prior to approval of this plan.
- 95% compaction in all fill areas shall be determined by AASHTO T 180.
- Permanent stormwater management to be provided by retention and to be privately maintained (F34-27). Pond conversion will be provided by Developer Agreement for F34-27.

**GENERAL NOTES:**

- All construction shall be in accordance with the latest standards and specifications of Howard County.
- The contractor shall notify the Department of Public Works/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least forty-eight (48) hours prior to any excavation work.
- Project Background:  
Location: Elkridge  
Zoning: RSC (Residential: Single Cluster)  
ZB/BA Ref: ZB 877 R&M, PD 284, RES 188  
Election District: 1st  
Section/Area: One/Two  
Total Tract Area: 49.85 Ac. plus/minus  
Section/Area: 14.06 Ac. plus/minus  
Number of Proposed Lots: 114 (112 SFA, 2 OS)  
Previous Submittals: WP91-33, F91-125, S93-02, P93-11, SDP93-105, WP93-29, WP93-86, F94-26, F94-27, F94-28
- Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Light poles and fixtures for street lights shall be in accordance with the latest Howard County Design Manual, Volume III, Roads and Bridges.
- Storm drain trenches within the public road right-of-way shall be backfilled and compacted in accordance with the Howard County Standard Specifications and Details - Design Manual Volume IV.
- Any damage to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be corrected at the contractor's expense.
- The existing utilities shown hereon are located from field surveys and construction drawings of record. The approximate location of existing utilities are shown for the contractor's information and convenience. The contractor shall locate existing utilities to his own satisfaction and well in advance of any construction activities. Additionally, the contractor shall take all necessary precautions to protect all existing utilities and maintain uninterrupted service.
- The topography shown herein is compiled from the Howard County photogrammetric aerial survey, supplemented with field run data prepared by Land Design Engineering, Inc., June, 1992.
- Horizontal and vertical datums are related to the Maryland State Plane Coordinate System as projected from Howard County control stations No. 2644004 and No. 2644005 (NAD 27).
- Public water and public sewer will be available to the site by means of future extensions.  
Water: Contract No. 14-3360-D  
Sewer: Contract No. 14-3360-D
- Temporary stormwater management will be provided by detention (SDP93-105). See Stormwater Management Computations for conversion to permanent facility included in SDP 93-105 (F94-27) and Wetland delineation by Exploration Research, Inc. dated 1992, approved by U.S.A.C.E. June, 1992.
- Noise study compiled by Land Design Engineering, Inc. as part of P93-11, approved December 31, 1992.
- Floodplain analyzed by Land Design Engineering, Inc. February, 1993 based on field run data from 1992 and 1993 (P93-11), approved December 31, 1992.
- Traffic study compiled by Lee Cunningham & Associates, Inc. dated November, 1992 as part of S93-02 approval.
- Geotechnical report compiled by Geo-Technical Associates, Inc. dated December 30, 1992 and May 3, 1993 as part of P93-11 and SDP 93-105.
- Existing grades shown on this plan reflect the post-graded condition in accordance with SDP 93-105.
- This plan is subject to WP91-33. The Planning Director granted approval on November 19, 1990 to waive Section 16.119(A), Sketch Plan Procedures, subject to conditions; subject to WP93-29 the Planning Director granted approval on December 23, 1992 to waive Section 116.113(C)(10) for roads to exceed 1200 feet; subject to WP93-86 the Planning Director granted approval on March 18, 1993 to waive Section 116.115(B)(2) to provide 20 feet minimum frontage for lot areas under 40,000 square feet, waive Section 16.115(B) to front lots on a public or private road not exceeding 200 feet, waive adjoining driveways, waive Section 16.116(C) to allow grading adjacent to wetlands, subject to conditions.

# ROAD & STORM DRAIN CONSTRUCTION PLANS

## SHADY OAKS

### SECTION ONE AREA TWO

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

BY	Revision	DATE

**DEVELOPER'S CERTIFICATE**

"I certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer: *WJA* Date: 10/27/94

**ENGINEER'S CERTIFICATE**

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer: *Bruce D. Burton* Date: 10/28/94  
Professional Engineer Seal: Bruce D. Burton, State of Maryland, License No. 10000

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Signature: *Patricia Engler* Date: 11/7/94  
U.S. Soil Conservation Service

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Signature: *John P. Reuter* Date: 11/7/94  
Howard Soil Conservation District

APPROVED: Department of Public Works for Storm Drainage Systems and Roads.

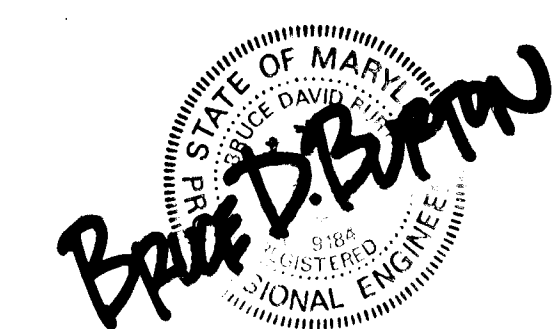
Signature: *Chad Dammann* Date: 11/10/94  
Chief, Land Development Division

Signature: *Paul Spon* Date: 11/10/94  
Chief, Bureau of Engineering

Signature: *Howard Shirk* Date: 11-11-94  
Chief, Bureau of Highways

APPROVED: Department of Planning and Zoning.

Signature: *Aime Dammann* Date: 11/23/94  
Chief, Division of Land Development and Research



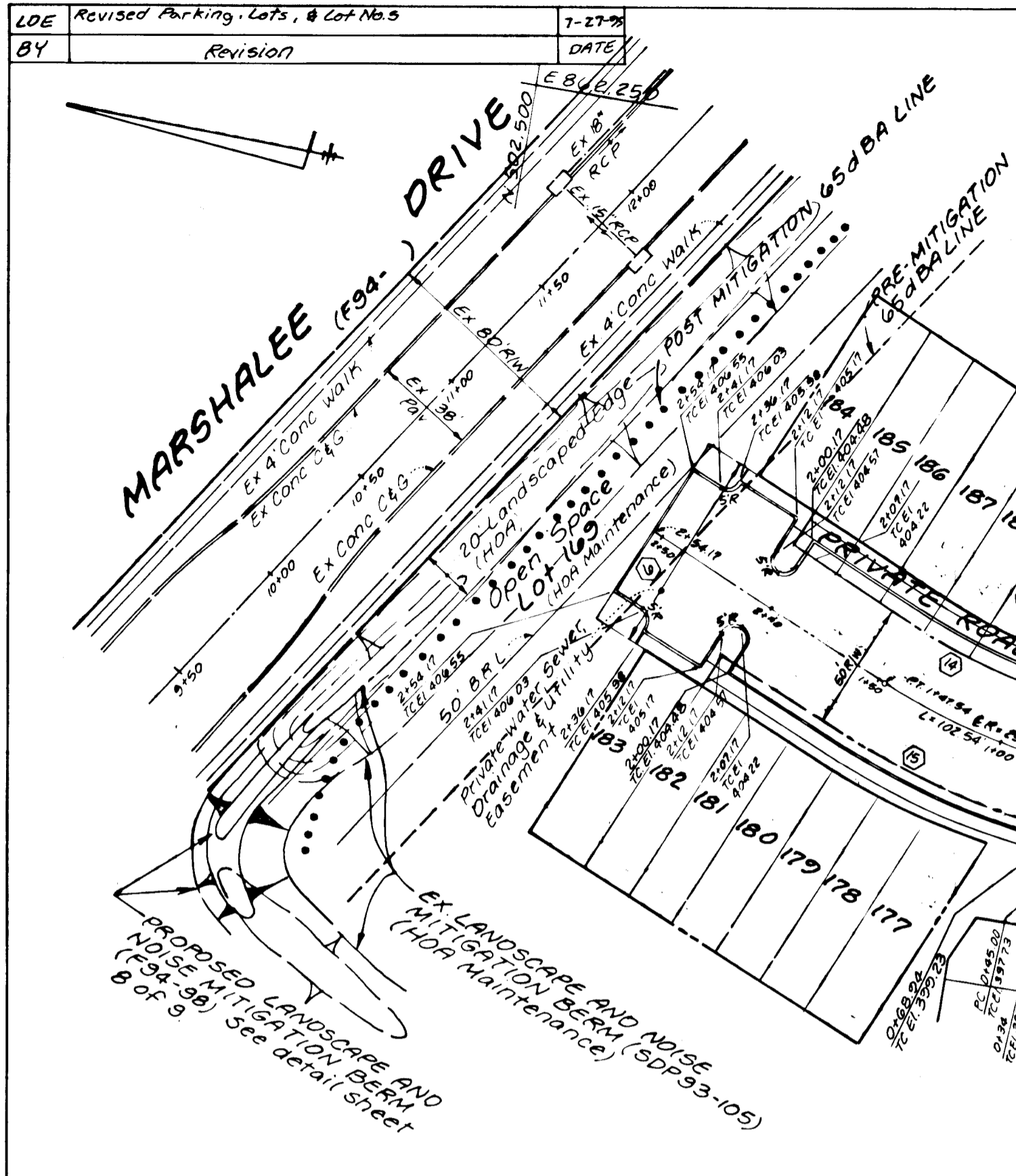
**LAND DESIGN ENGINEERING, INC.**

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045  
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

Designed: BDB	<b>TITLE SHEET</b> <b>SHADY OAKS</b> SECTION ONE AREA TWO LOT 57 THRU LOT 170 Tax Map 37 Part of Parcel G43 1st Election District Howard County, MD Previous Submittals: ZB877R&M, WP91-33, F91-125, RES188, F94-26, F94-27, F94-28 Owner: Developer <b>100 INVESTMENT LIMITED PARTNERSHIP</b> 8835 F. Columbia 100 Parkway Columbia, Maryland 21045 Phone: (410) 730-0810	Scale: As Shown
Drawn: KSW		Sheet 1 of 9
Checked: BDB		LDE Job No. 92-170-2
Date: 3/94		File No.

1707





NO.	RADIUS	LENGTH	DELTA	TAN.	LCB	CHORD
1	250.00	102.54	23°30'00"	52.00'	N11°34'18"E - 101.82'	
2	495.00	100.28	11°36'25"	50.31'	S05°58'54"E - 100.11'	

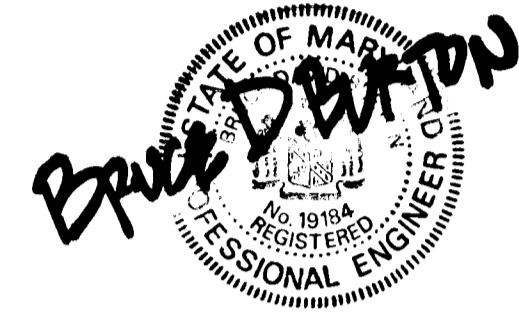
- NOTES:**
- For street tree locations, see sheet 9 of 9.
  - For storm drain profiles and structure schedule, see sheet 5 of 9. See Structure Schedule for storm drain locations.
  - Existing grades shown on this plan reflect the post-graded condition in accordance with SDP93-105.
  - All street lights shall be located 2 feet minimum to 4 feet maximum behind the curb. No trees shall be located within 20 feet of any street light. See detail sheet 4 of 9.
  - All footings of proposed units shall have a minimum of 2 feet of clearance from the drainage easement line.
  - For details of Noise Berm Construction, see sheet 8 of 9.
  - All Community Open Space Lots, Recreation Areas and Landscaped Edges shall be maintained by the Homeowners Association.
  - All street lights and/or street signs shall be located 5 feet minimum from proposed drainage and utility structures.

APPROVED: Department of Planning and Zoning  
 Gina Jurnomy 11/23/94  
 Chief, Division of Land Development and Research

APPROVED: Department of Public Works for Storm Drainage Systems and Roads  
 [Signature] 11/10/94  
 Chief, Land Development Division

[Signature] 11/10/94  
 Chief, Bureau of Engineering

[Signature] 11/10/94  
 Chief, Bureau of Highways



**LAND DESIGN ENGINEERING, INC.**  
 8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045  
 (410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

Designed: BDB  
 Drawn: KBW  
 Checked: BDB  
 Date: 3/94

**PLAN AND PROFILE**  
**MEADOW ROSE**  
 SECTION ONE AREA TWO  
 LOT 57 THRU LOT 170  
 Tax Map 37 Part of Parcel G43  
 1st Election District Howard County, MD  
 Previous Submittals: ZB 877 R4M, WP91-33, F91-125, RES 188, PB 284, F93-11, SDP 93-105, F94-27, F94-28

Scale: As Shown  
 Sheet: 3 of 9  
 LDE Job No: 92-170-2  
 File No: 100 INVESTMENT LIMITED PARTNERSHIP  
 8835 Columbia 100 Parkway  
 Columbia, MD 21045 Phone (410) 730-0810

**STREET LIGHT LOCATION TABLE**

SYMBOL	STREET NAME	STATION	OFFSET	TYPE
⊙	Autumn Speck	2+88	16' Right	100 watt HPS, traditional fixture on 4" x 4" x 4" fiberglass pole
⊙	Meadow Rose	3+10	18' Left	100 watt HPS, traditional fixture on 4" x 4" x 4" fiberglass pole

**STREET SIGN LOCATION TABLE**

SYMBOL	STREET NAME	STATION	OFFSET	TYPE
■	Autumn Speck (Private Road)	0+32	14' Right	R1-1 "STOP" SIGN 30" x 30" Octagon
■	Meadow Rose	0+32	16' Right	R1-1 "STOP" SIGN 30" x 30" Octagon

**CURB LEGEND**  
 — 7" Std Curb and Gutter  
 — Modified Curb and Gutter

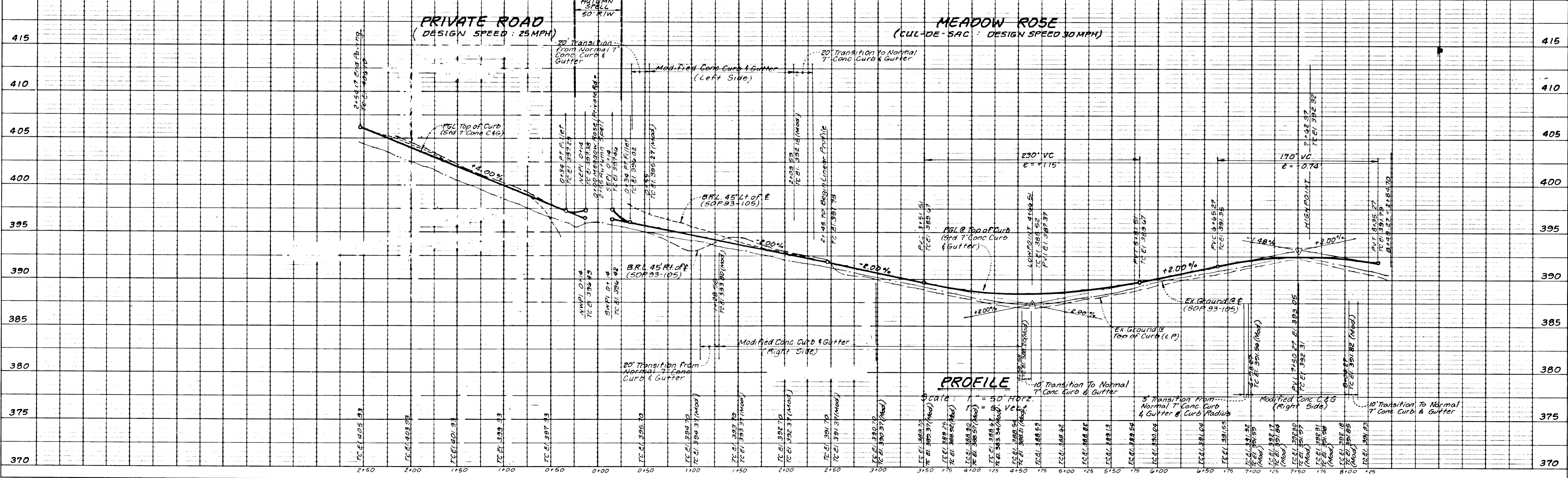
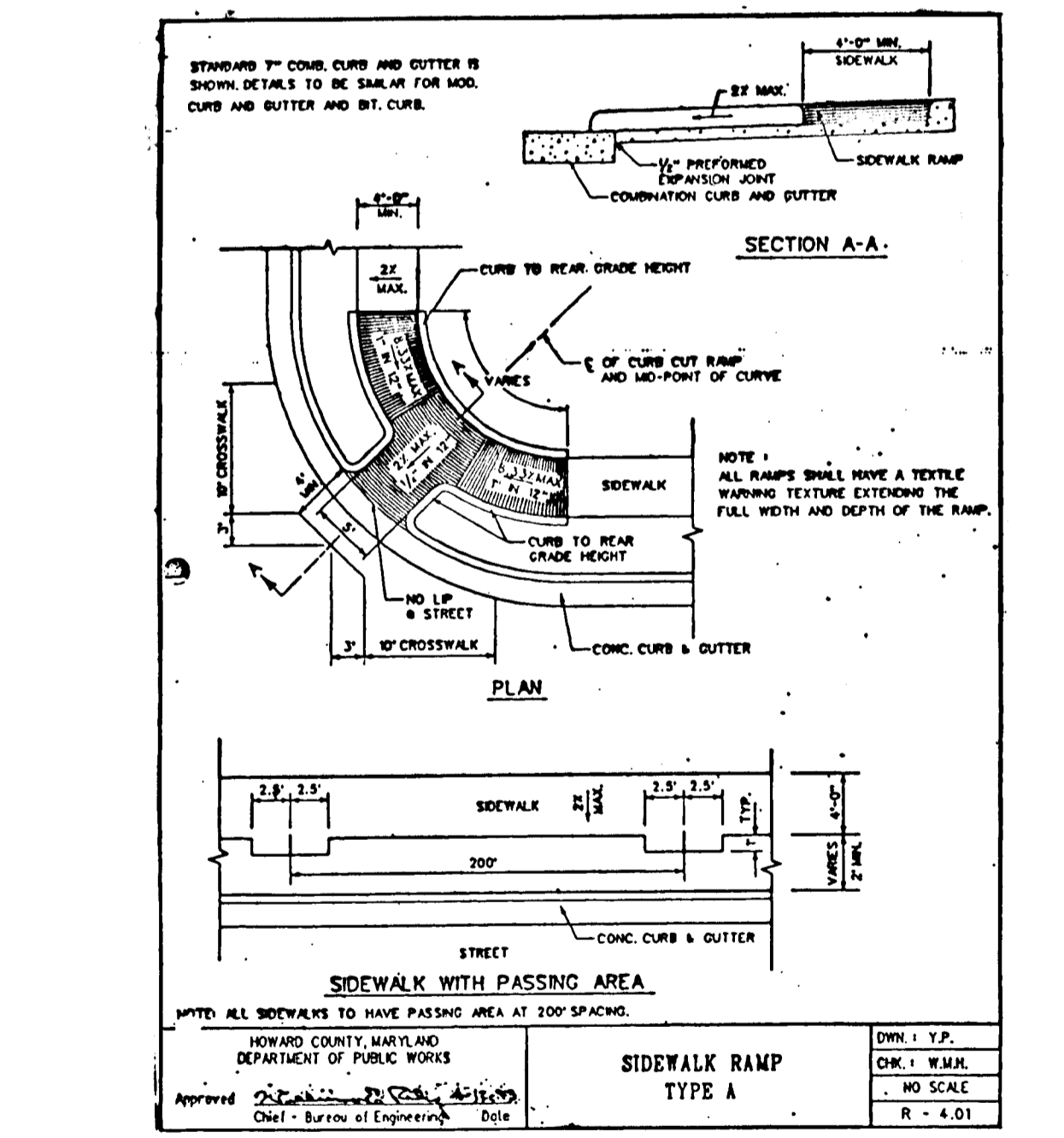
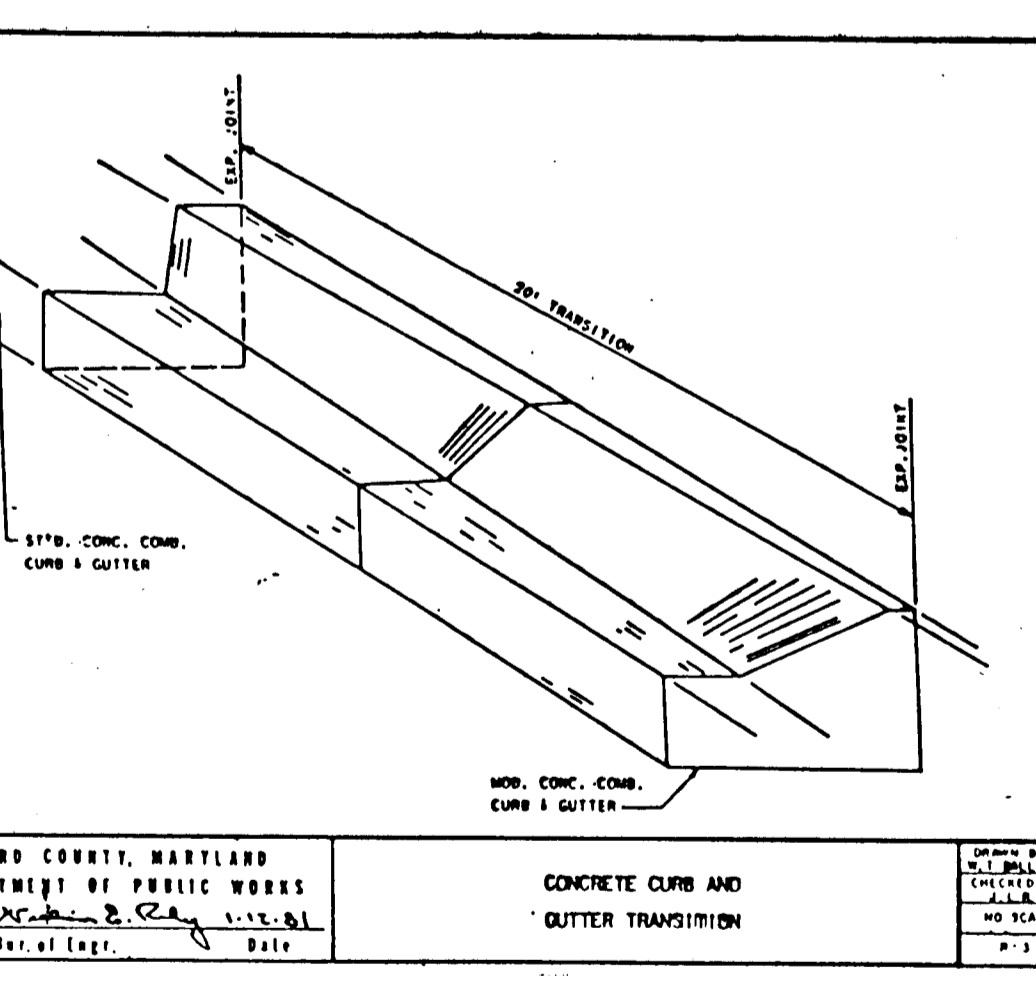
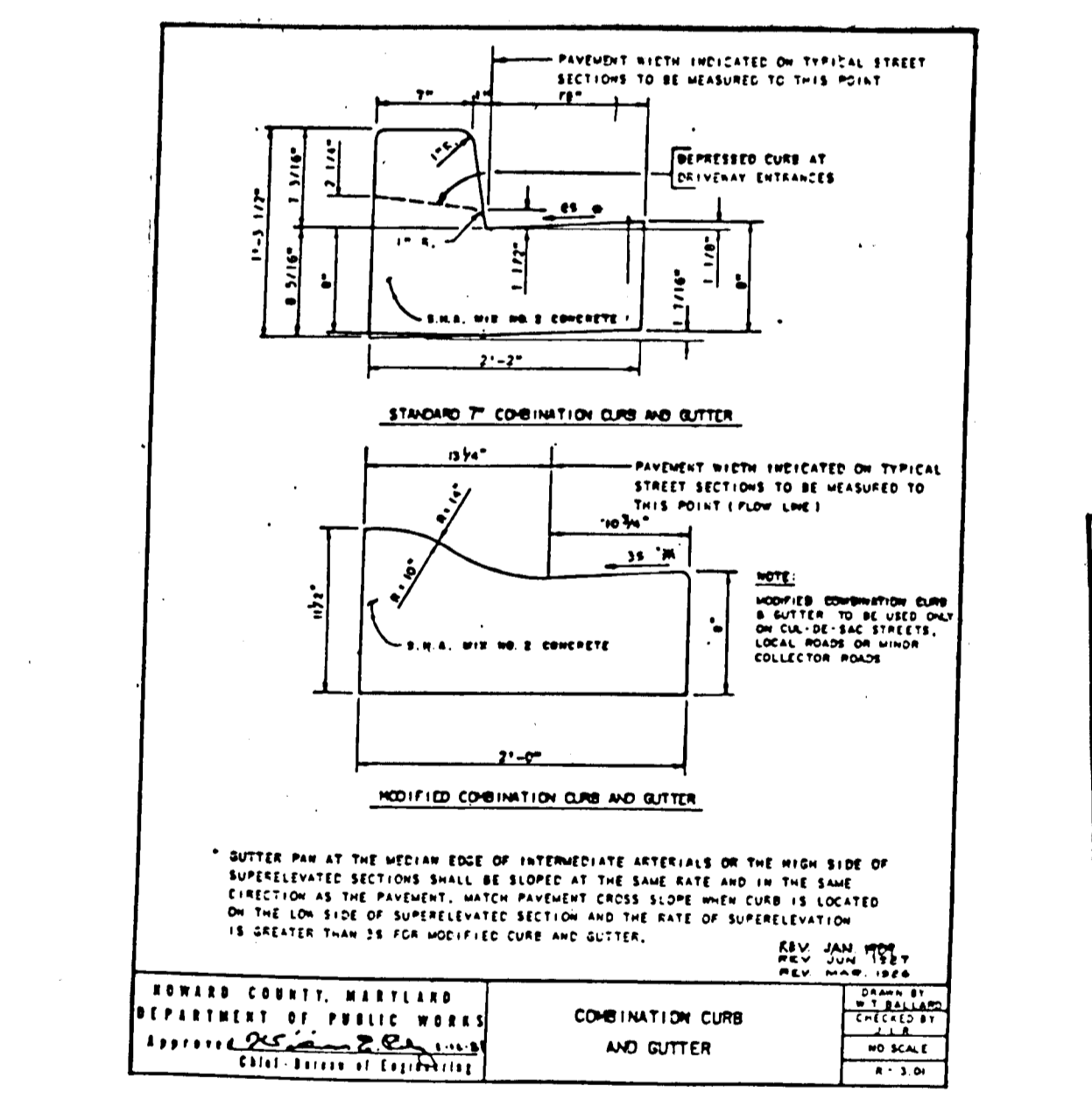
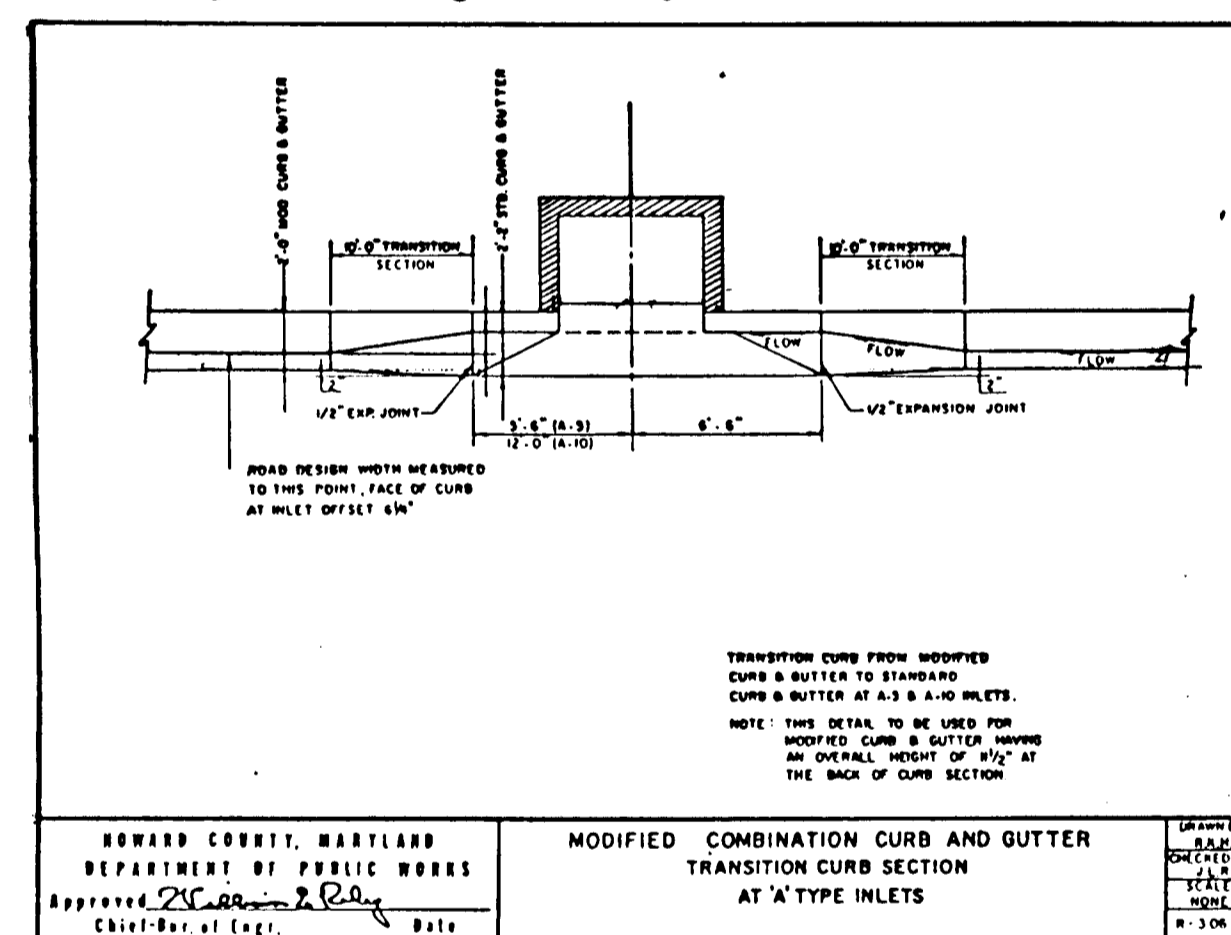
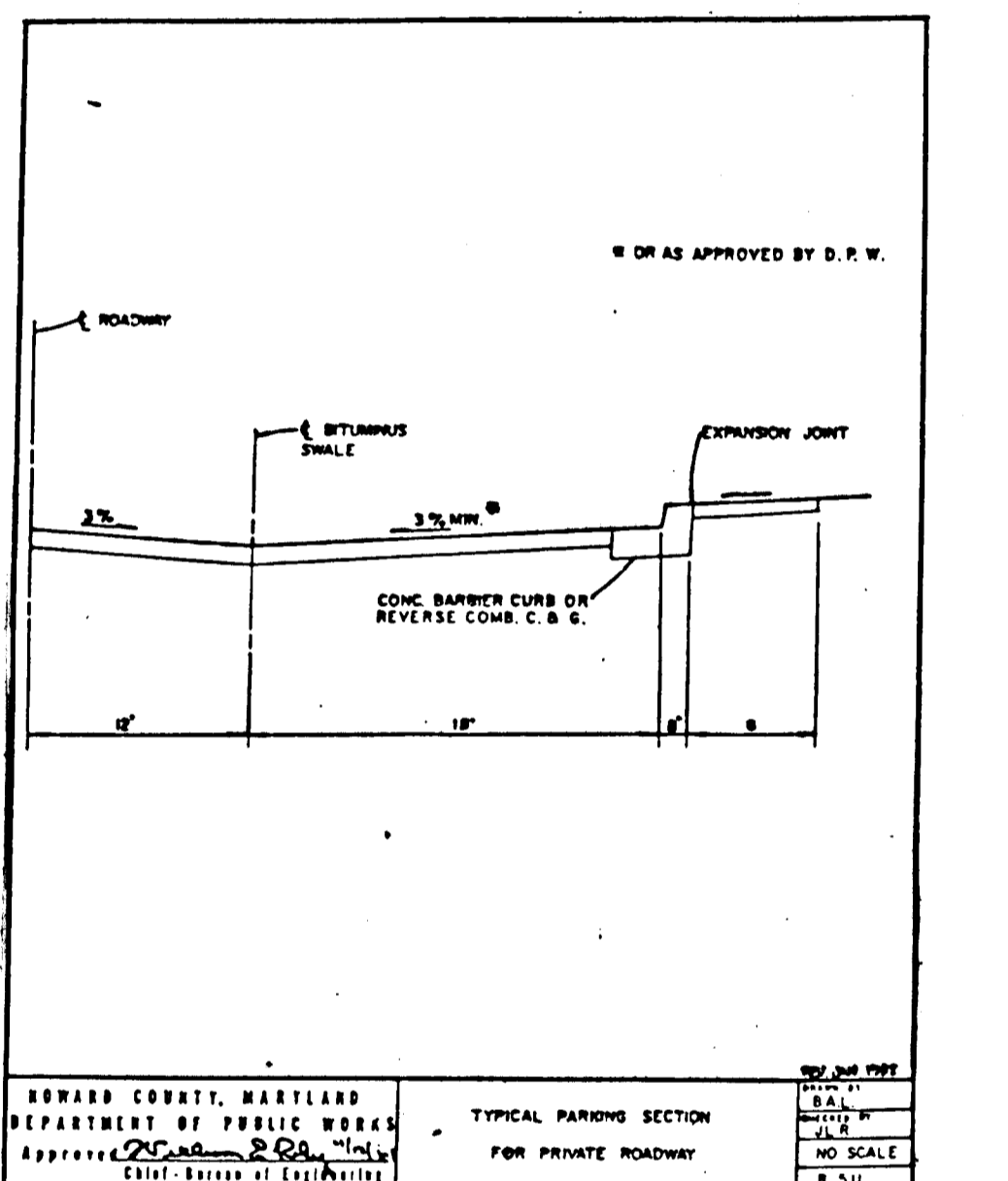
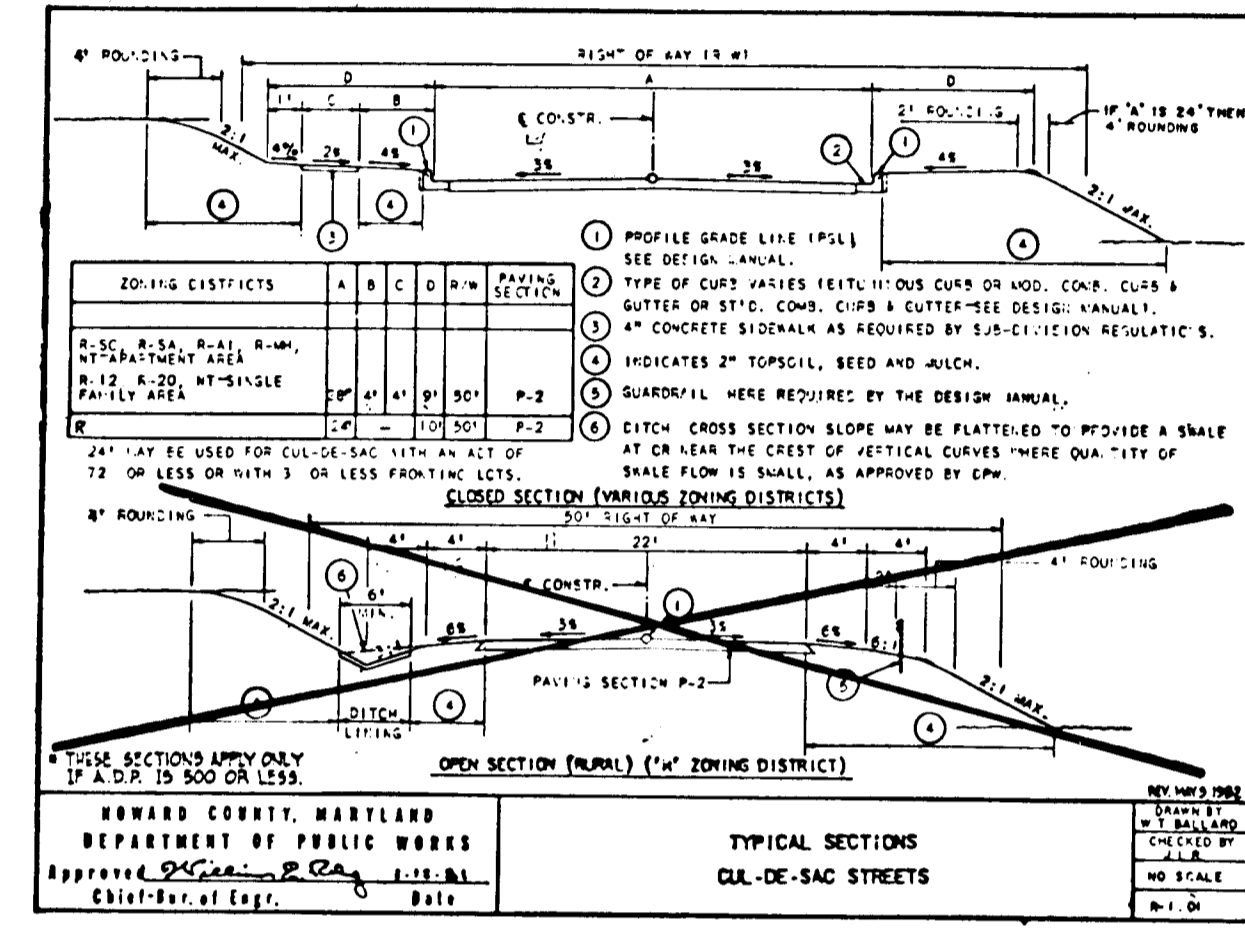
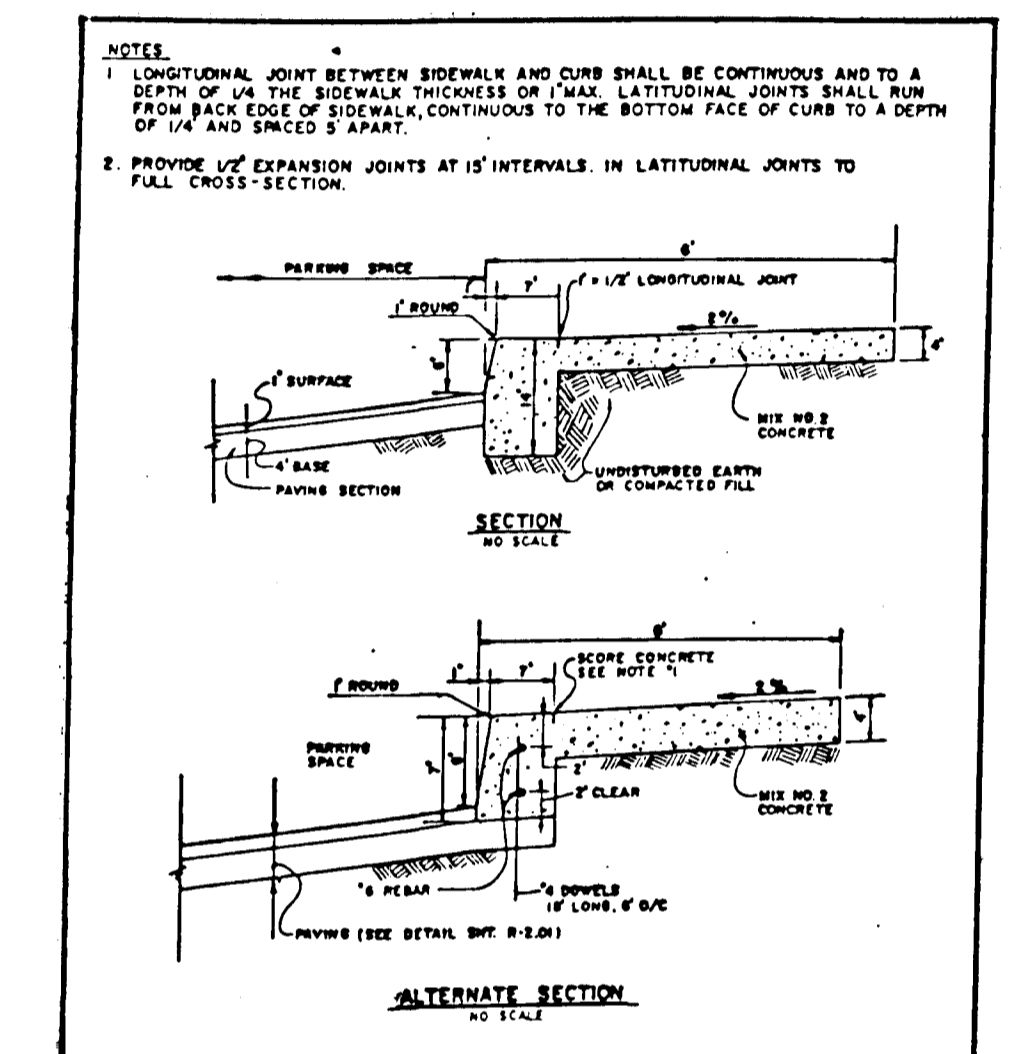
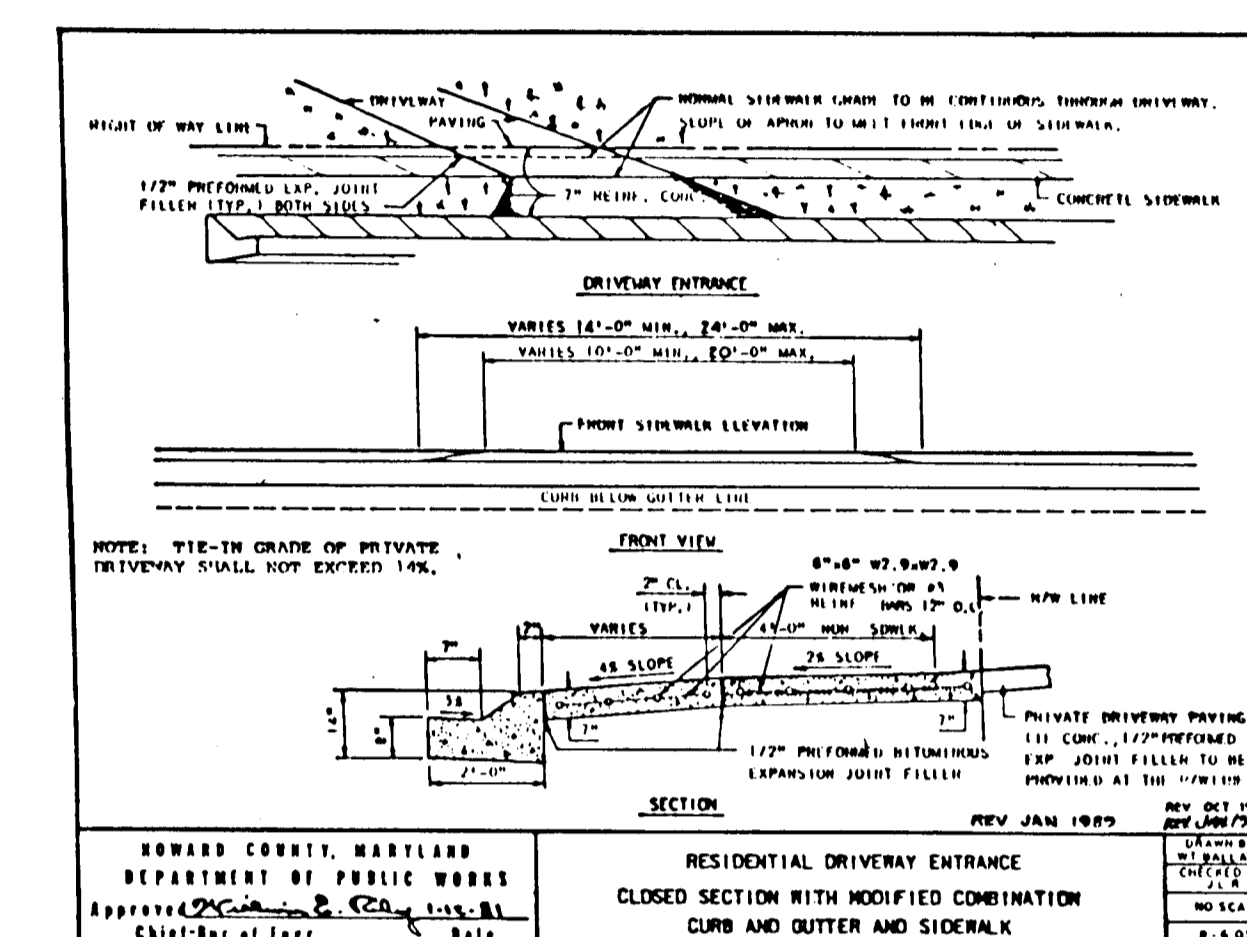
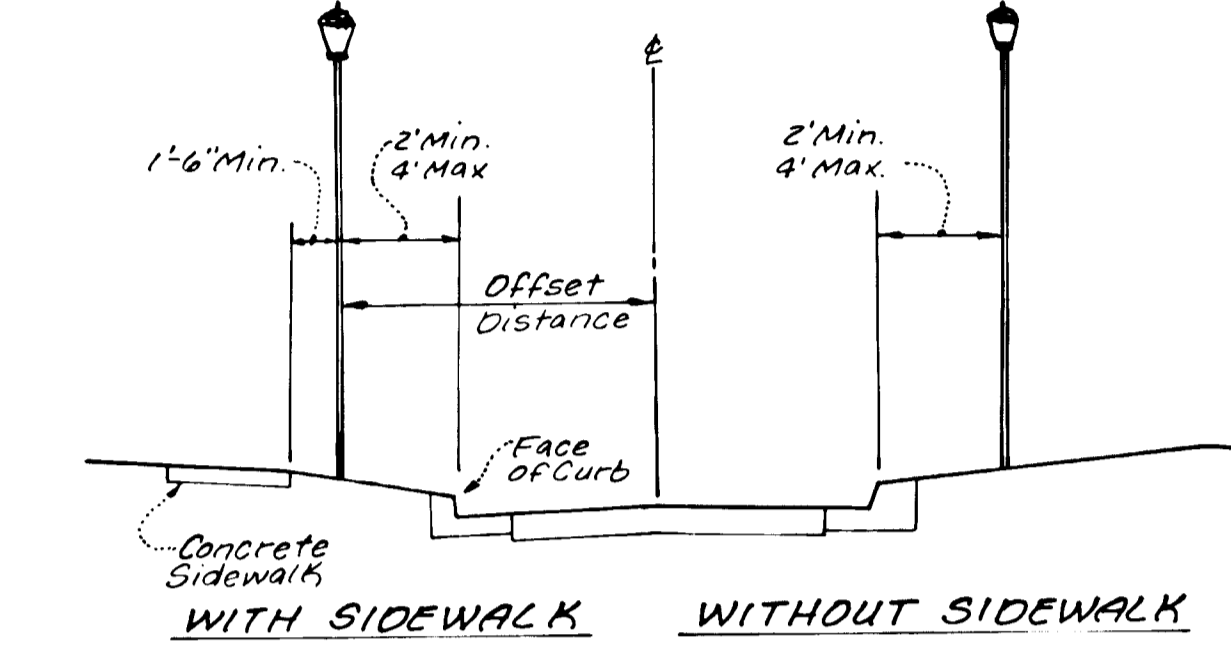
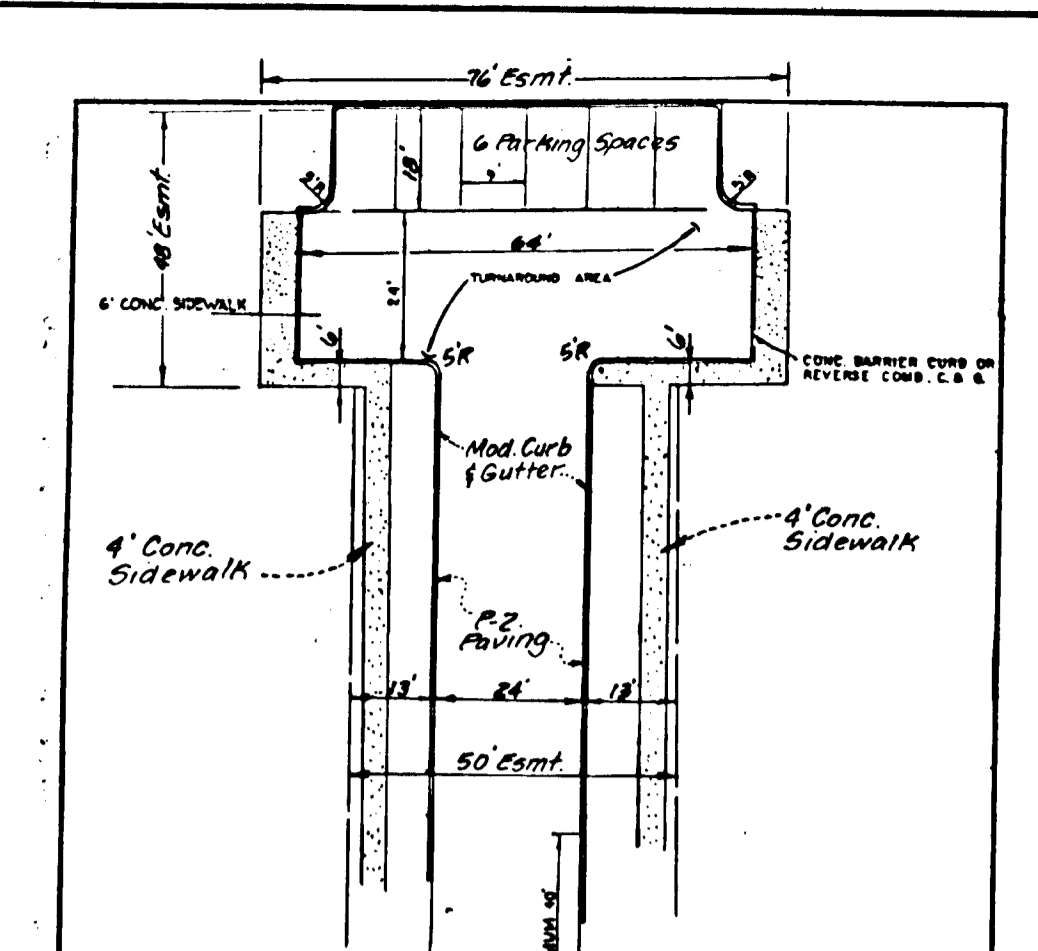
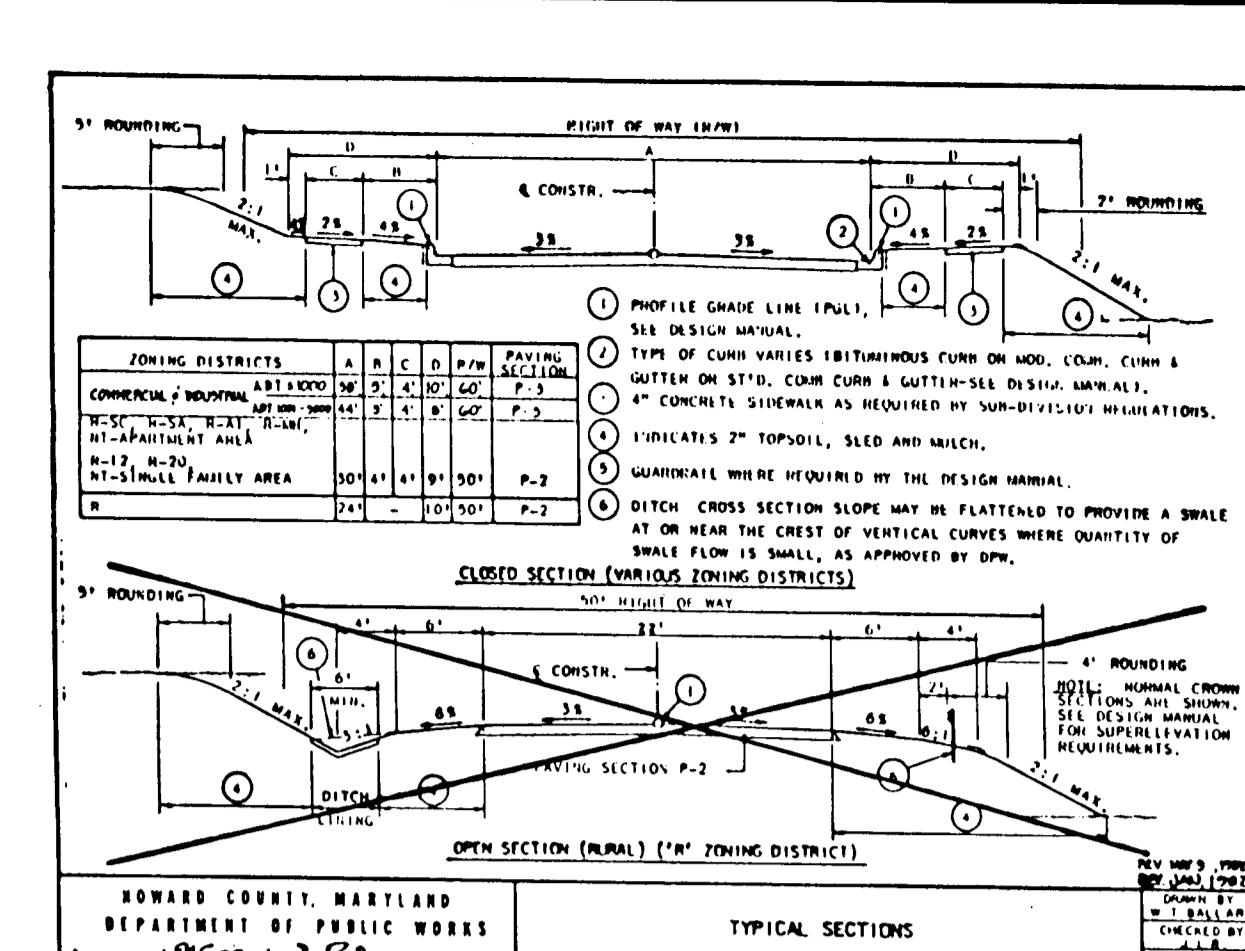
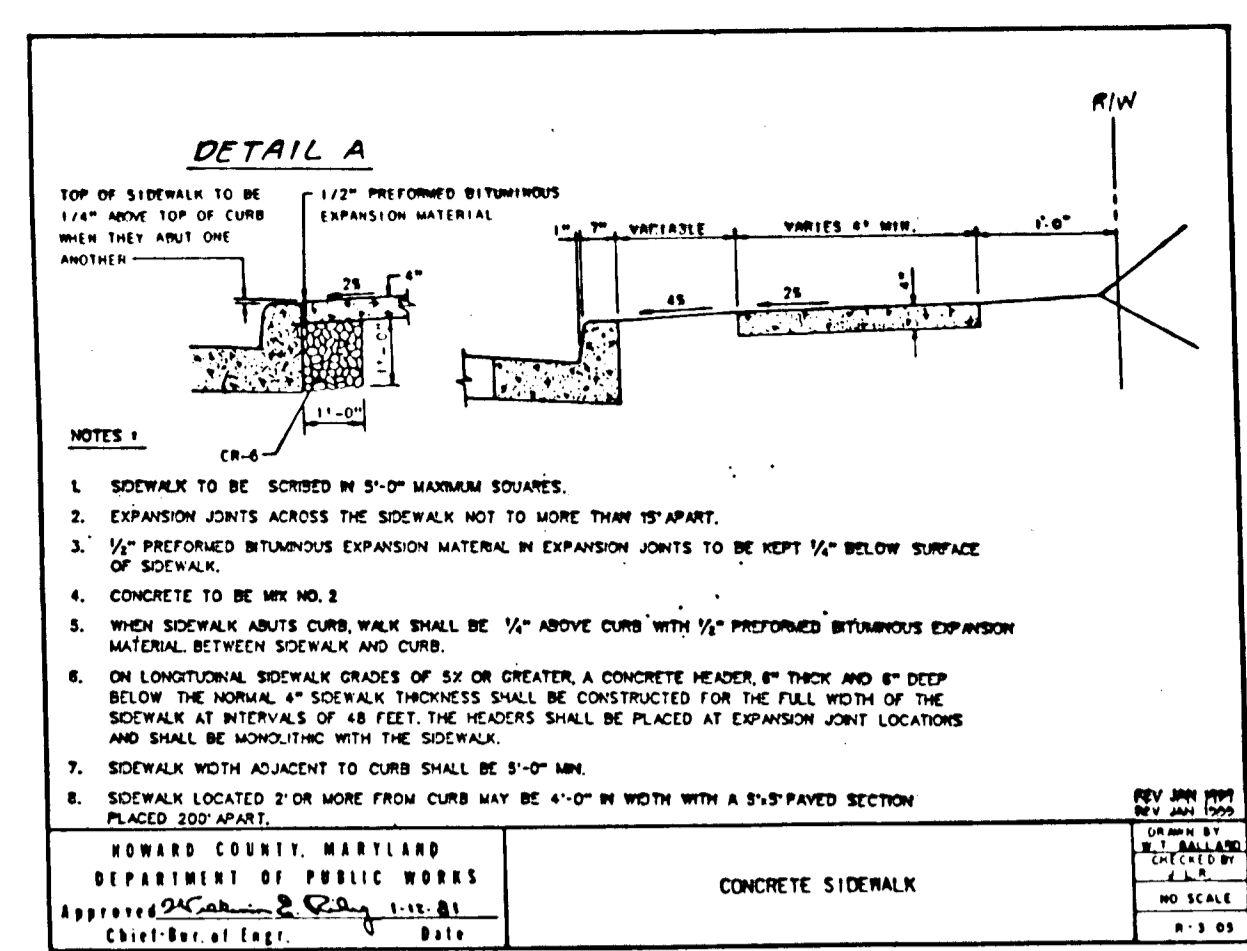


PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE  
 PRINTED IN U.S.A.

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SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS	CONCRETE SIDEWALK ALTERNATES
P-1	PARKING, BUS APARTMENTS AND COMMERCIAL INDUSTRIAL ZONES WITH NO HEAVY TRUCKS	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE
P-2	HISTORICAL ZONES LOCAL CUL-DE-SAC STS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL APARTMENTS AND COMMERCIAL INDUSTRIAL ZONES WITH NO HEAVY TRUCKS	1 1/2" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 4" BIT. CONC. BASE
P-3	RESIDENTIAL ZONES	1 1/2" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 4" BIT. CONC. BASE
P-4	TRAVELWAYS	1 1/2" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 4" BIT. CONC. BASE



ROAD NAME	STA. TO STA.	CLASS.	R/W	DES. SPD.	PAV. SECT.	ZONE	A	B	C	D
AUTUMN SPELL	0+33 to 2+21	LOCAL	50'	30 MPH	P-2	RSC	30'	4'	4'	9'
AUTUMN SPELL	2+21 to 10+06.12	CUL-DE-SAC	50'	30 MPH	P-2	RSC	28'	4'	4'	9'
AUTUMN SPELL	0+14 to 2+54.17	PRIVATE	—	25 MPH	P-2	RSC	24'	4'	4'	9'
MEADOW ROSE	0+14 to 8+49.21	CUL-DE-SAC	50'	30 MPH	P-2	RSC	28'	4'	4'	9'

**DEVELOPER'S CERTIFICATE**  
I certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: *W. J. P.* Date: 10/25/90

**ENGINEER'S CERTIFICATE**  
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer: *PAUL D. BURTON* Date: 10/28/90

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

U.S. Soil Conservation Service Date: \_\_\_\_\_

Howard Soil Conservation District Date: \_\_\_\_\_

APPROVED Department of Public Works for Storm Drainage Systems and Roads

*Chad Dorman* 11/18/90  
Chief, Storm Drainage Division

*Paul D. Burton* 11/18/90  
Professional Engineer

APPROVED Department of Planning and Zoning

*Quinn J. J. J.* 11/23/90  
Chief, Planning and Zoning

STATE OF MARYLAND  
PAUL D. BURTON  
PROFESSIONAL ENGINEER

**LAND DESIGN ENGINEERING, INC.**  
8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045  
(410) 715-1070 (Balt.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

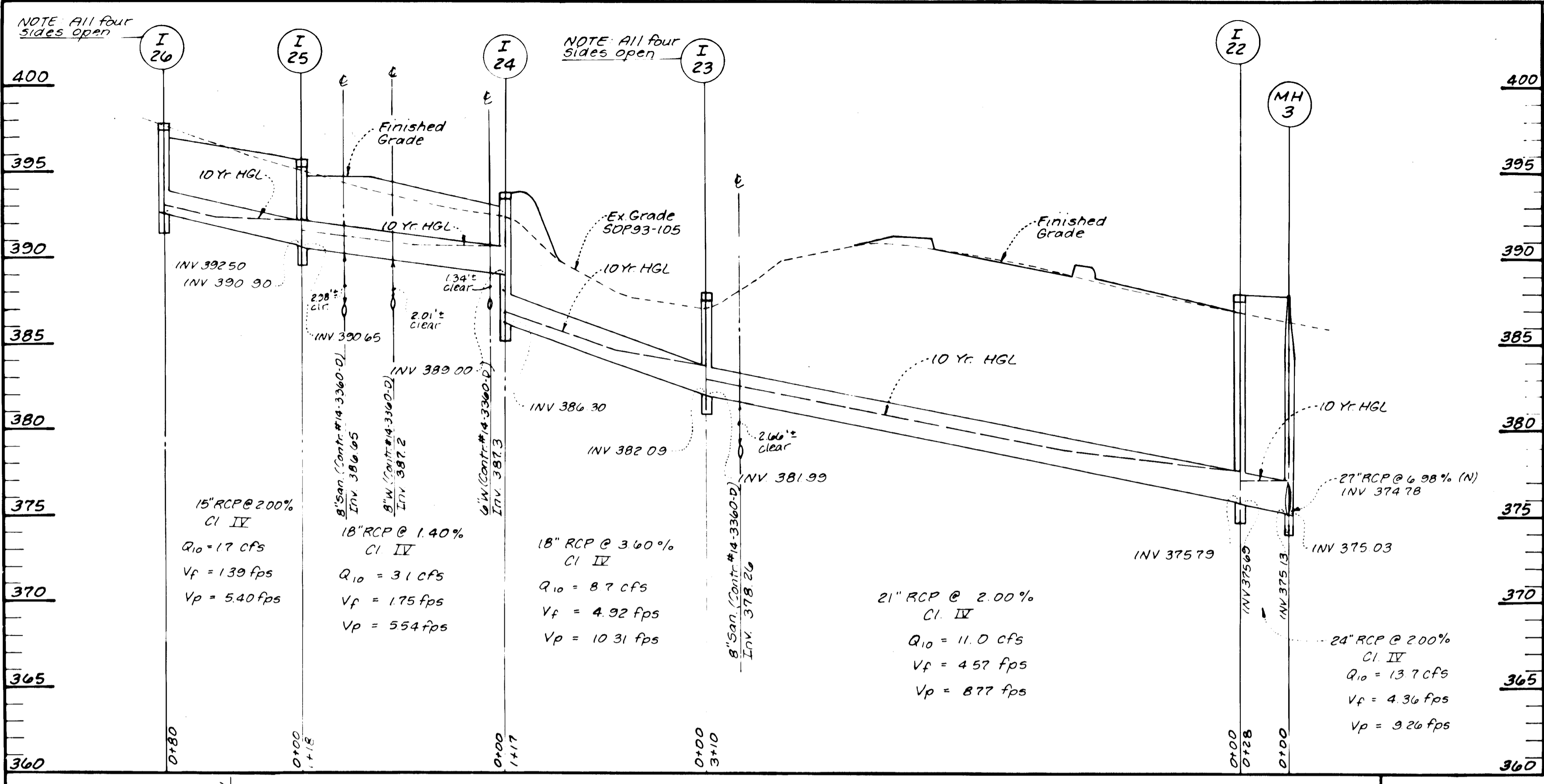
Designed: BDB  
Drawn: KBW  
Checked: BDB  
Date: 3/84

**ROAD DETAILS SHADY OAKS**  
SECTION ONE AREA TWO  
LOT 57 THRU LOT 170  
Tax Map 37 Part of Parcel 643  
1st Election District Howard County, MD  
Previous Submittals: 28-8774-14, WPA-33, P-31-125, RSC-188, PB-884, P-33-11, SDP-93-105, P-34-27, F-94-28

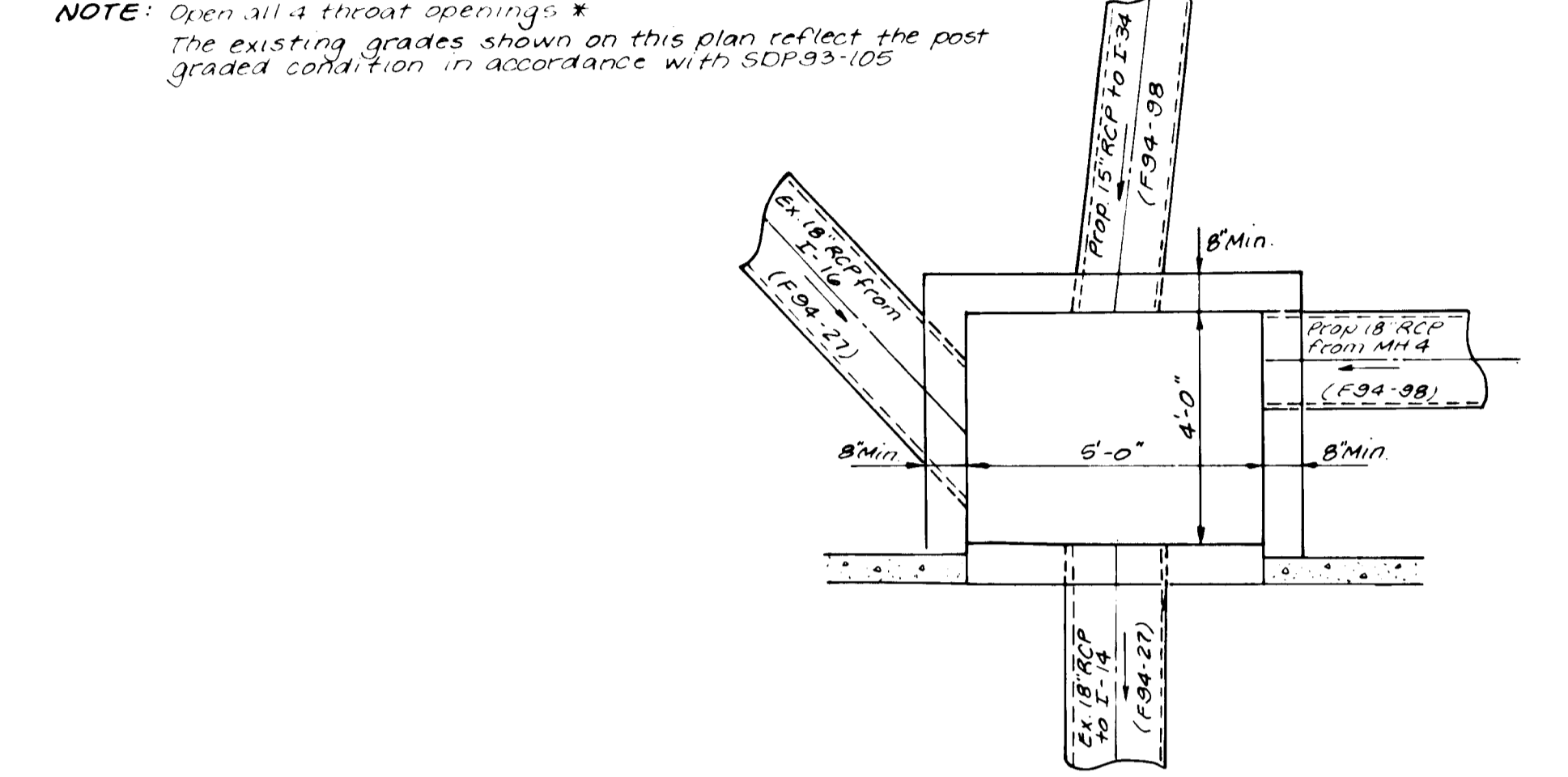
100 INVESTMENT LIMITED PARTNERSHIP  
8835 - P Columbia 100 Parkway  
Columbia, Maryland 21045  
Phone: (410) 730-0810

Scale: N/A  
Sheet: 4 of 9  
LDE Job No: 92-170.2  
File No: \_\_\_\_\_

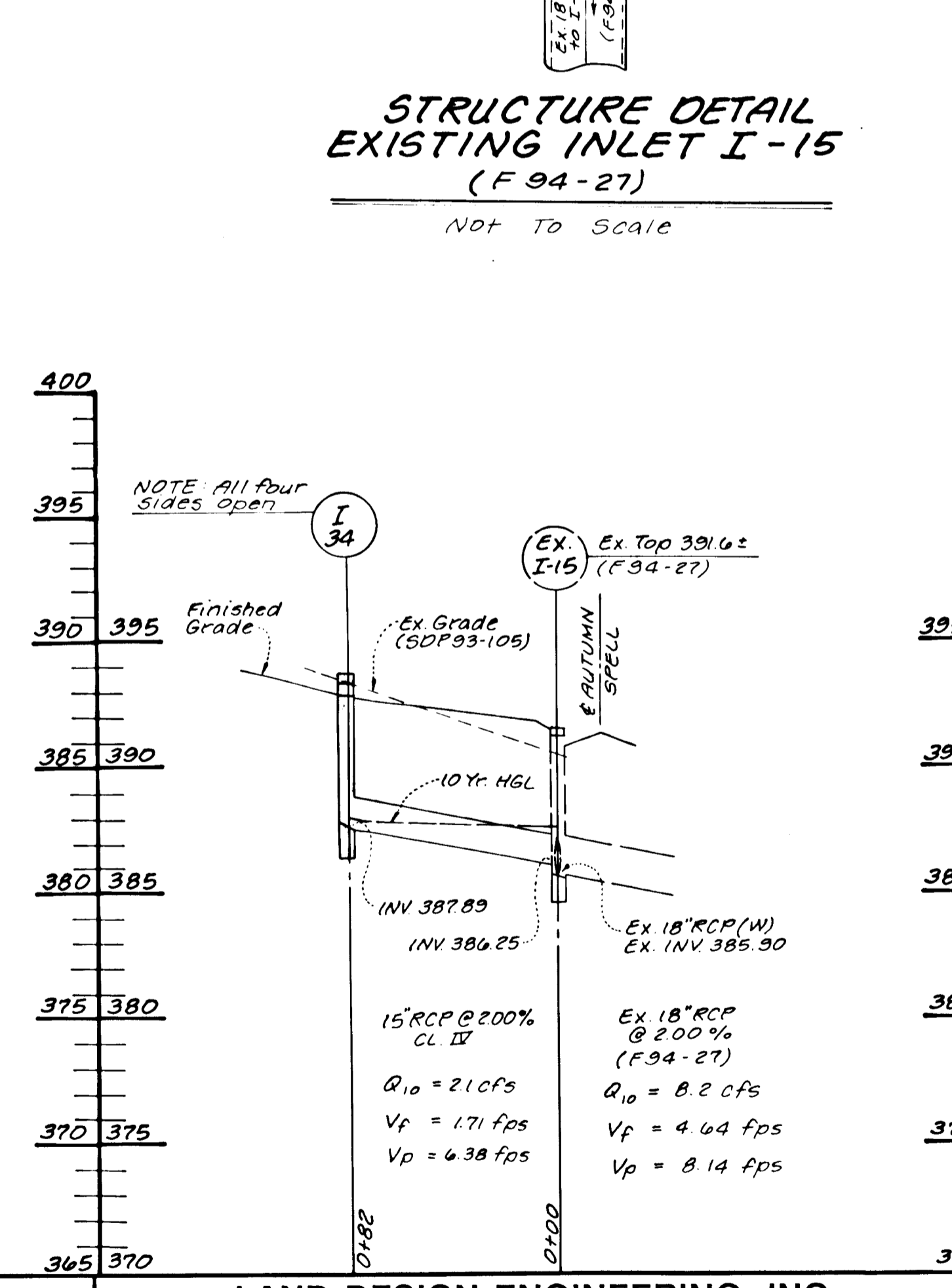
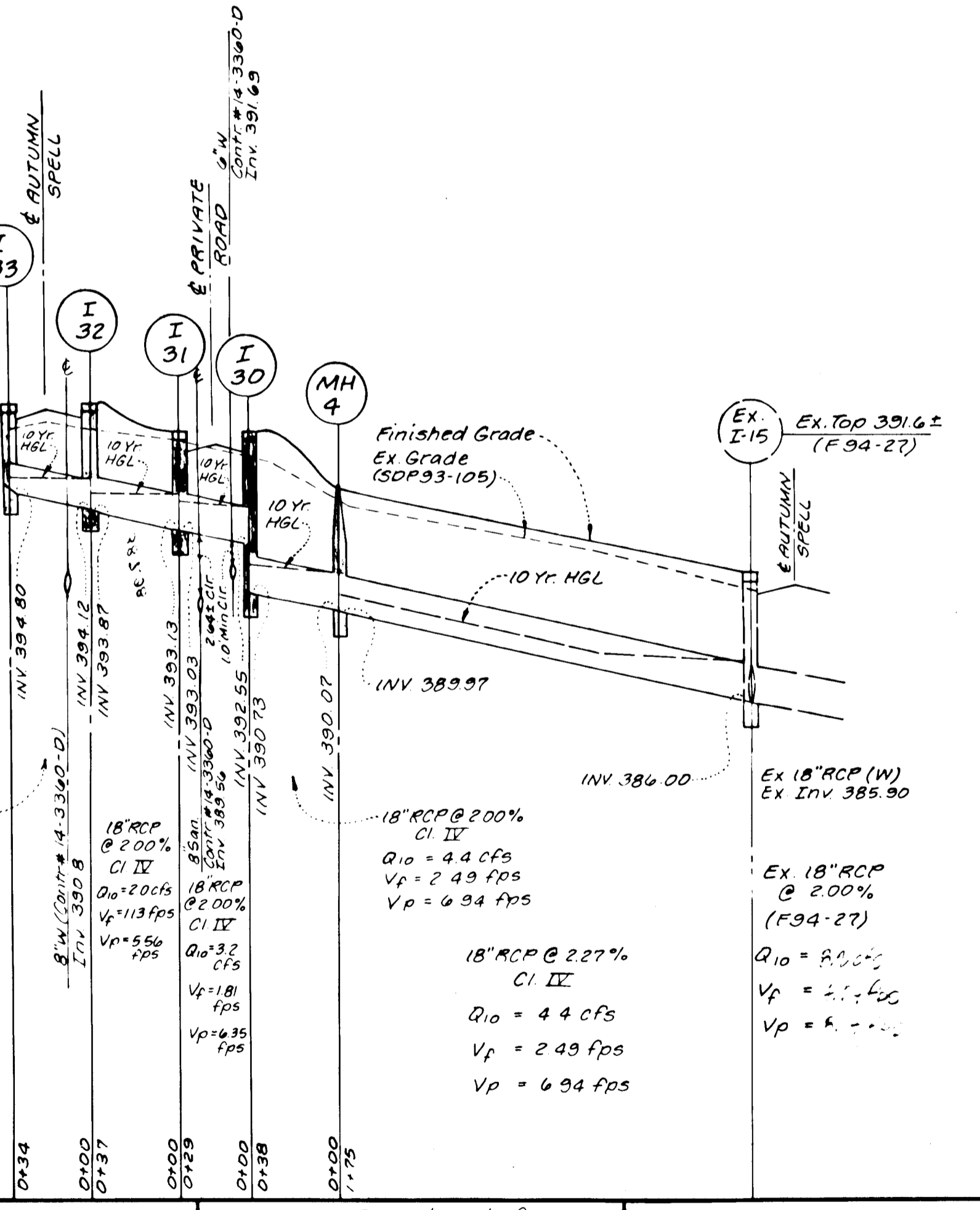
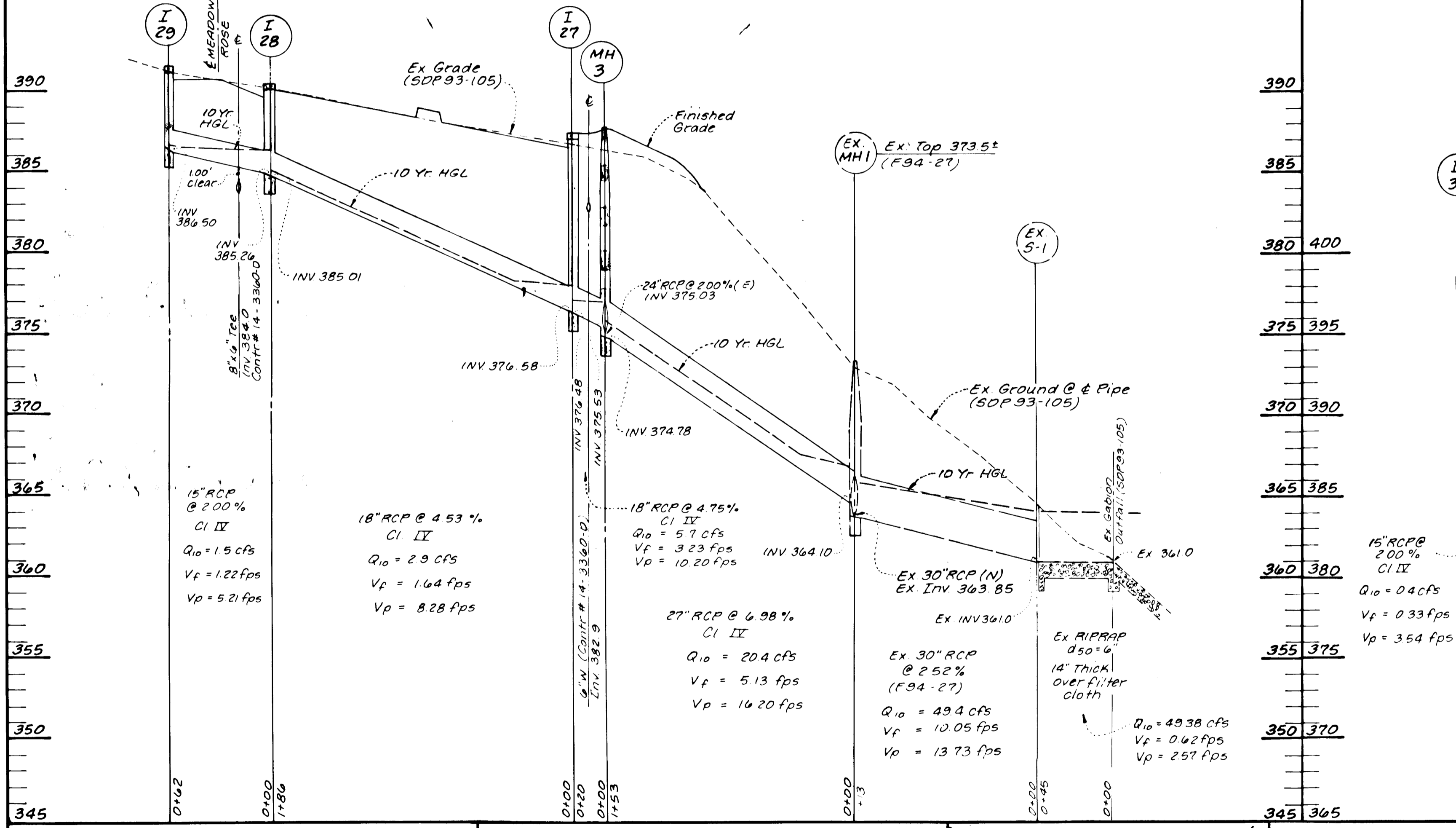
1707



STRUCTURE SCHEDULE									
No.	Type	Inv. In	Inv. Out	Top Upper	Elev. Lower	Remarks	Location	Additional	Remarks
I-22	A-5	375.79	375.69		387.98	SUMP	SEE PLAN (N501.69955 E862.120.36)		
I-23	D	382.09	381.99		387.83	*OPEN ALL SIDES	SEE PLAN (N501.86450 E862.384.07)		
I-24	A-5	383.00	386.30		393.83	SUMP	SEE PLAN (N501.935.64 E862.477.49)		
I-25	A-5	390.90	390.65	395.84	395.68		6+77.75 14' LT AUTUMN SPELL		
I-26	D				397.83	*OPEN ALL SIDES	6+16.11 65' LT AUTUMN SPELL		
I-27	A-5	376.58	376.48		387.98	SUMP	SEE PLAN (N501.708.44 E862.092.57)		
I-28	A-5	385.24	385.01	390.91	390.79		2+92.58 14' RT MEADOW ROSE		
I-29	A-5		386.50	391.97	391.85		2+39.70 14' LT MEADOW ROSE		
I-30	A-10	390.83	390.73	397.89	397.45		0+43.51 12' LT PRIVATE ROAD		
I-31	A-10	391.51	391.41	397.89	397.45		0+43.51 12' RT PRIVATE ROAD		
I-32	A-5	392.50	392.25	398.48	398.27		2+93.00 14' RT AUTUMN SPELL		
I-33	A-5		393.18	398.48	398.27		2+93.00 14' RT AUTUMN SPELL		
I-34	J				394.00	*OPEN ALL SIDES	0+53.00 37' LT AUTUMN SPELL		
MH 3	STANDARD	375.8	375.58	375.83	375.76		387.80		SEE PLAN (N501.686.36 E862.097.18)
MH 4	STANDARD	390.07	389.97		395.41		395.41		2+11.00 15' LT AUTUMN SPELL



STRUCTURE DETAIL  
EXISTING INLET I-15  
(F94-27)  
NOT TO SCALE



**DEVELOPER'S CERTIFICATE**  
"I certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
Signature of Developer: *W. J. P.* Date: 10/27/94

**ENGINEER'S CERTIFICATE**  
"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."  
Signature of Engineer: *Bruce D. Burton* Date: 10/28/94

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.  
U.S. Soil Conservation Service Date: \_\_\_\_\_  
This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
Howard Soil Conservation District Date: \_\_\_\_\_

APPROVED: Department of Public Works for Storm Drainage Systems and Roads.  
*[Signature]* 11/18/94  
Chief, Division of Land Development and Research

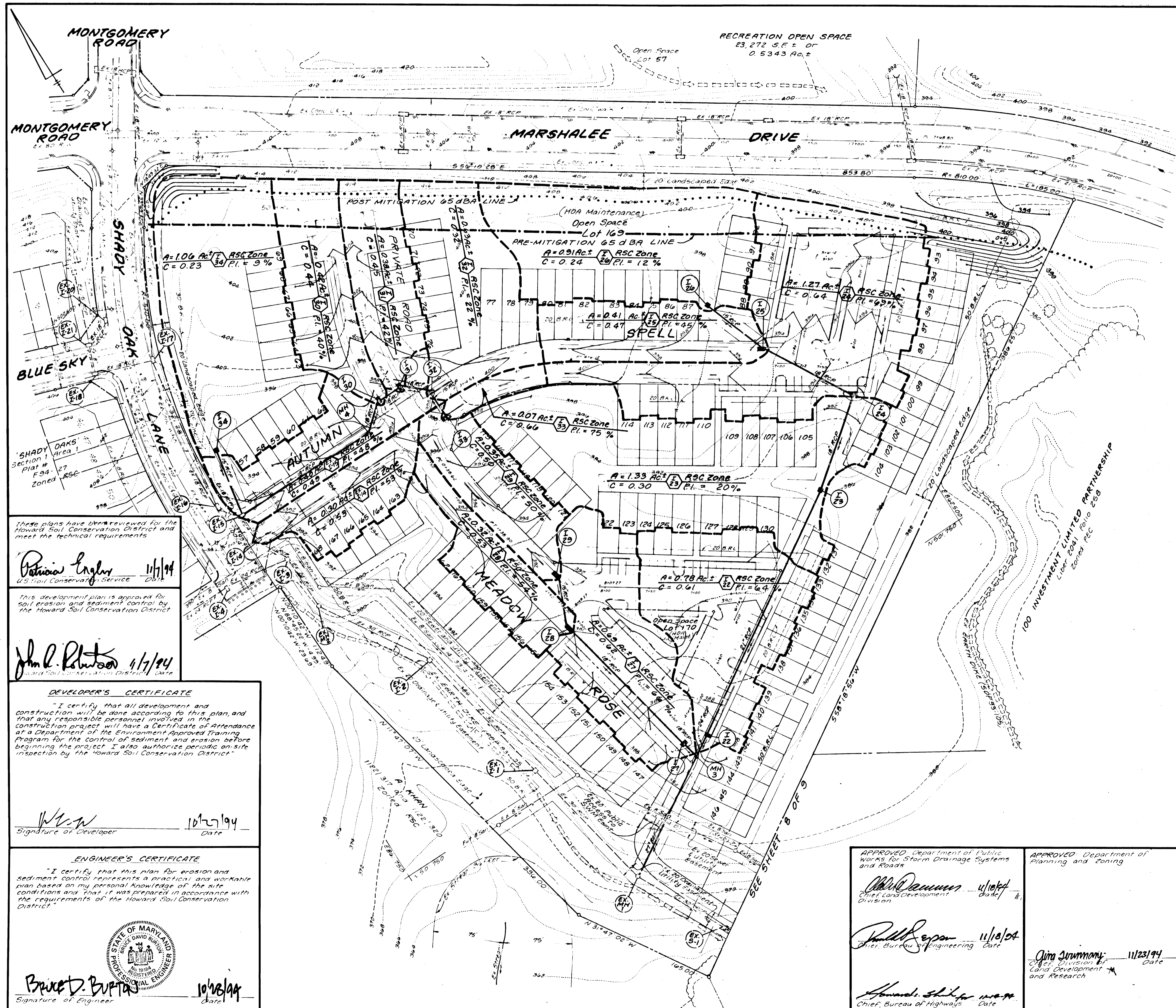
APPROVED: Department of Planning and Zoning.  
*[Signature]* 11/23/94  
Chief, Division of Land Development and Research

**BRUCE D. BURTON**  
Professional Engineer  
No. 19784  
State of Maryland  
Professional Seal

**LAND DESIGN ENGINEERING, INC.**  
8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045  
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)  
Designed: BDB  
Drawn: KBW  
Checked: BDB  
Date: 3/94  
STORM DRAIN PROFILES  
**SHADY OAKS**  
SECTION ONE AREA TWO  
LOT 57 THRU LOT 170  
Tax Map 37 Part of Parcel 643  
15th Election District Howard County, MD  
Previous Submittals: ZB877R IN MRS: 33, F9125, RES188, PB284, P93-11, SDP93-105 F94-27, F94-28  
Owner/Developer:  
100 INVESTMENT LIMITED PARTNERSHIP  
8835 Columbia 100 Parkway  
Columbia, Maryland 21045  
Phone (410) 730-0810  
Scale: 1"=50' Hor, 1"=5' Vert.  
Sheet 5 of 9  
LDE Job No. 92-176.2  
File No.

1701

**NOTE:**  
 The existing grades shown on this plan reflect the post-graded condition in accordance with SDP 93-105.  
 ..... Denotes Post Mitigation dBA Line  
 ——— Denotes Pre-Mitigation dBA Line



These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements

*Patricia Engler* 1/17/94  
 US Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District

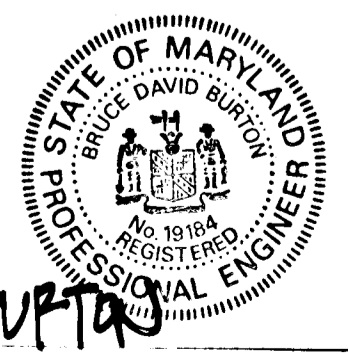
*John L. Robertson* 1/17/94  
 Howard Soil Conservation District Date

**DEVELOPER'S CERTIFICATE**  
 I certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

*W.C.W.* 10/27/94  
 Signature of Developer Date

**ENGINEER'S CERTIFICATE**  
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

*Bruce D. Burton* 10/28/94  
 Signature of Engineer Date



APPROVED Department of Public Works for Storm Drainage Systems and Roads  
*Mr. Dammun* 11/16/94  
 Chief Land Development Division Date

*Paul Roper* 11/18/94  
 Chief Bureau of Engineering Date

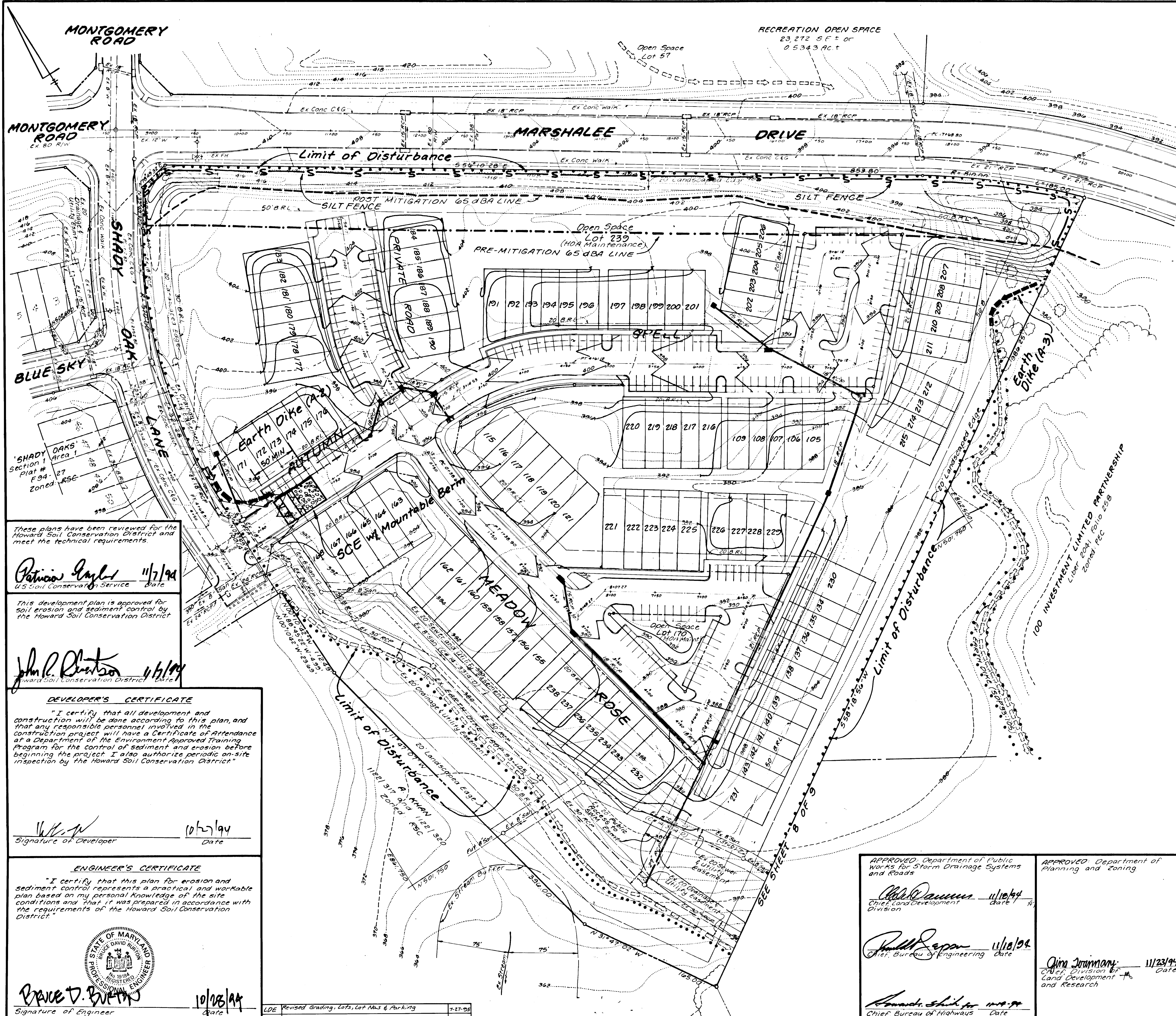
*Howard S. Hays* 11/23/94  
 Chief, Bureau of Highways Date

APPROVED Department of Planning and Zoning

*Jim Strumony* 11/23/94  
 Chief, Division of Land Development and Research Date

LAND DESIGN ENGINEERING, INC.		
8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045 (410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)		
Designed BDB	DRAINAGE AREA MAP <b>SHADY OAKS</b> SECTION ONE AREA TWO LOT 57 THRU LOT 170 Tax Map 37 Part of Parcel G43 1st Election District Howard County, MD Previous Submittals ZB87744M, WPA-33, F94-125, RES-188, PA284, P93-11, SDP93-105, F94-27, F94-28	Scale 1"=50'
Drawn MBW		Sheet 6 of 9
Checked BDB	100 INVESTMENT LIMITED PARTNERSHIP 8835 F. Columbia, 100 Parkway Columbia, Maryland 21045 Phone (410) 730-0810	File No
Date 3/94		

1707



**NOTE:**  
 The existing grades shown on this plan reflect the post-graded condition in accordance with SDP 93-105  
 - - - - - Denotes Post Mitigation 65 dBA Line  
 - - - - - Denotes Pre-Mitigation 65 dBA Line

**CONSTRUCTION SEQUENCE**

1. Obtain grading permit.
2. Inspect controls installed under SDP-93-105 and make any necessary repairs or maintenance prior to beginning any work shown hereon.
3. Install silt fence at limit of disturbance where shown hereon or as directed by sediment control inspector.
4. Grade site to subgrade elevation.
5. Install utilities.
6. Repair diversion dikes damaged by utility installation and stabilize with permanent seeding mixture and straw mulch.
7. Sediment shall be removed from the sediment basin when the cleanout elevation has been reached.
8. The contractor shall inspect and provide necessary maintenance on the sediment and erosion control structures shown hereon after each rainfall and on a daily basis.
9. The sediment basin shall be dewatered by pumping. The accumulated sediment from the basin shall be placed up grade from the basin in such a manner as not to interfere with construction operations or cause erosion down grade from the basin.
10. Remove sediment from roadways and dress stabilized construction entrance as required.
11. Install gravel base course and install concrete curb and gutter. Apply prime coat to gravel base course and lay bituminous paving courses.
12. Fine grade site and stabilize with permanent seeding mixture and straw mulch. Install driveway aprons and sidewalks.
13. After all upgrade areas from the sediment basin have been stabilized and permission has been given by the sediment control inspector, begin conversion of temporary sediment basin to permanent stormwater management facility. (F-94-27)
14. After permission has been given by sediment control inspector, remove silt fence and stabilize disturbed areas with permanent seeding mixture and straw mulch.

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

*Patricia Taylor* 11/7/94  
 U.S. Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District

*John R. Roston* 1/6/94  
 Howard Soil Conservation District Date

**DEVELOPER'S CERTIFICATE**

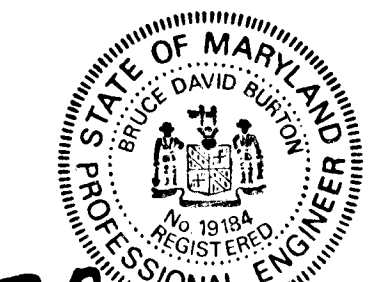
"I certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

*W.K.N.* 10/2/94  
 Signature of Developer Date

**ENGINEER'S CERTIFICATE**

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

*Brace D. Burton* 10/08/94  
 Signature of Engineer Date



APPROVED: Department of Public Works for Storm Drainage Systems and Roads  
*Chad Dammus* 11/10/94  
 Chief, Land Development Division Date

*Paul J. Egan* 11/10/94  
 Chief, Bureau of Engineering Date

APPROVED: Department of Planning and Zoning  
*Jim Jaramany* 11/23/94  
 Chief, Division of Land Development and Research Date

*Howard Shickler* 11/9/94  
 Chief, Bureau of Highways Date

**LAND DESIGN ENGINEERING, INC.**

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045  
 (410) 715-1070 (Balt.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

Designed BOB	<b>SEDIMENT AND EROSION CONTROL &amp; GRADING PLAN</b> <b>SHADY OAKS</b> <b>SECTION ONE AREA TWO</b> <b>LOT 57 THRU LOT 170</b> Tax Map 37 Part of Parcel G43 15th Election District Howard County, MD Previous Submittals: 2887744.M, W93-33, F93-125, RES188, F93-284, F93-11, SDP 93-105, F94-27, F94-28 PROJECT DEVELOPER: <b>100 INVESTMENT LIMITED PARTNERSHIP</b> 8835 P. Columbia 100 Parkway Columbia, Maryland 21045 Phone (410) 730-0810	Scale 1"=50'
Drawn MBW		Sheet 7 of 9
Checked BOB		LDE Job No 32-174.2
Date 3/94		File No







NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.

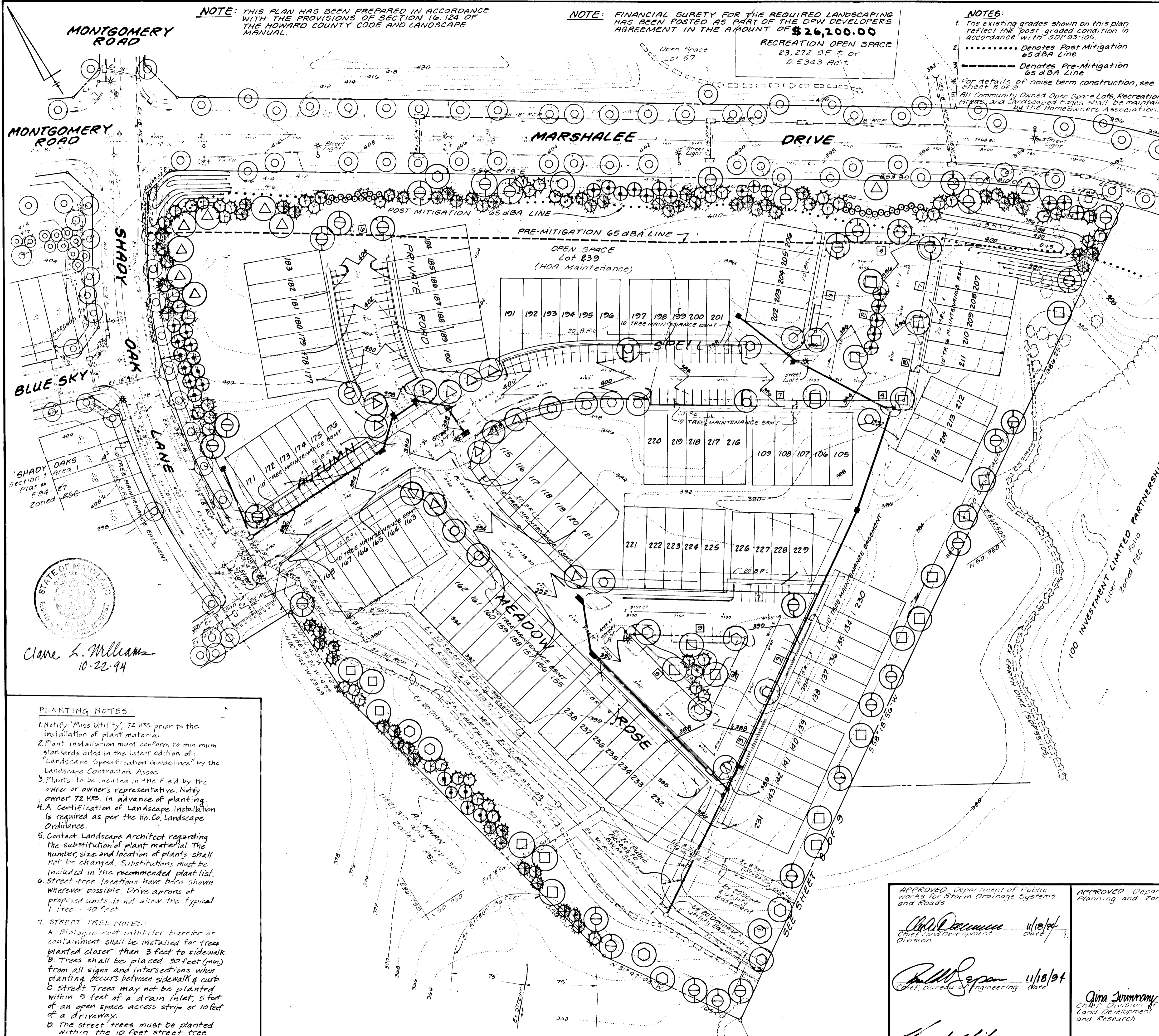
NOTE: FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$26,200.00

NOTES:  
 1. The existing grades shown on this plan reflect the post-graded condition in accordance with 9209.93-105.  
 2. ..... Denotes Post Mitigation 65 dBA Line  
 3. - - - - - Denotes Pre-Mitigation 65 dBA Line  
 4. For details of noise berm construction, see Sheet B 07 B  
 5. All Community Owned Open Space Lots, Recreation Areas, and Landscaped Edges shall be maintained by the Homeowners Association.

**PLANT LIST:**  
 INCLUDES: STREET TREES, PARKING LOT INTERNAL, PERIMETER LANDSCAPE

No	KEY	QUAN	PLANT NAMES	SIZE	COND	REMARKS
1	⊕	18	MAGNOLIA STELLATA STAR MAGNOLIA	6'-8' HT.	B#B	18'-15' O.C. MULTI-STEM
2	⊗	55	PICEA ORIENTALIS ORIENTAL SPRUCE	6'-8' HT.	B#B	12'-15' O.C.
3	⊙	63	FINUS RESINOSA RED PINE	6'-8' HT.	B#B	12'-15' O.C.
4	⊕	24	PLATANUS X ACERIFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANE	2 1/2'-3' CAL.	B#B	40' O.C. or 25 shown
5	⊕	16	PRUNUS BERRULATA 'KWANZAN' KWANZAN CHERRY	2 1/2' CAL.	B#B	15'-20' O.C. FULL
6	⊕	22	PYRUS CALLERYANA 'RED SPIRE' RED SPIRE PEAR	2 1/2' CAL.	B#B	40' O.C. or 25 shown
7	⊕	24	SOPHORA JAPONICA 'REGENT' REGENT JAPANESE PAGODA TREE	2 1/2' CAL.	B#B	40' O.C. or 25 shown
8	⊕	40	QUERCUS PALUSTRIS PIN OAK	2 1/2'-3' HT.	B#B	40' O.C. or 25 shown
9	⊕	30	VIBURNUM PRUNIFOLIUM BLACKHAW	2 1/2'-3' HT.	B#B	4' O.C.

⊕ DESIGNATES STREET TREES FROM EARLIER SUBMISSIONS (F94-27 AND F94-28)



**SCHEDULE A**  
 PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Linear Feet of Roadway Frontage/Perimeter	1508.04'	647.18'
Credit for Existing Vegetation (Yes, No, Linear Feet)	NO	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	NO	NO
Number of Plants Required	30 Shade Trees 75 Evergreen Trees	17 Shade Trees 16 Evergreen Trees
Number of Plants Provided	24 Shade Trees 78 Evergreen Trees	15 Shade Trees 30 Evergreen Trees

Comments: 24 Ornamentals = 12 trees, 30 Shrubs = 30 Trees  
 24 Shade Evergreens = 1 Tree + 23 Shade Trees = 41  
 Trees. Note: Trees from Edge A Credit toward Edge B  
 \* Landscaping to be completed under F94-98 by Developer (HOA Maintenance)

**SCHEDULE B**  
 PARKING LOT INTERNAL LANDSCAPING

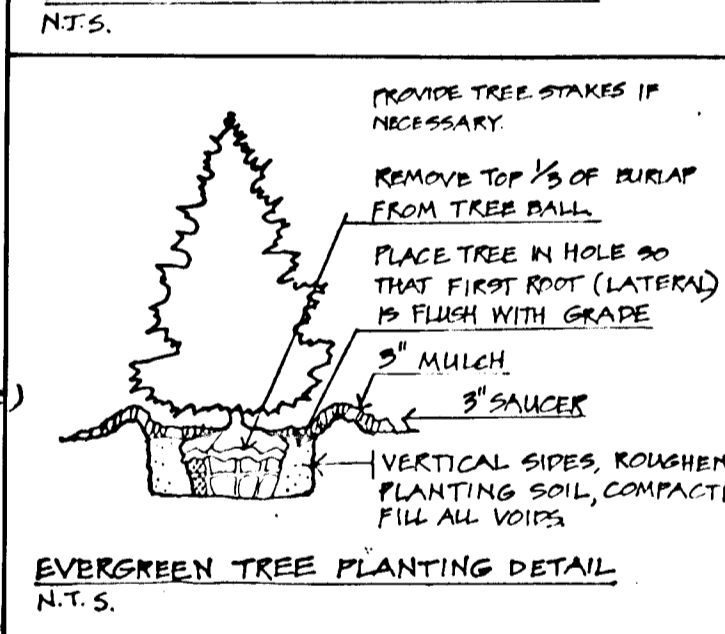
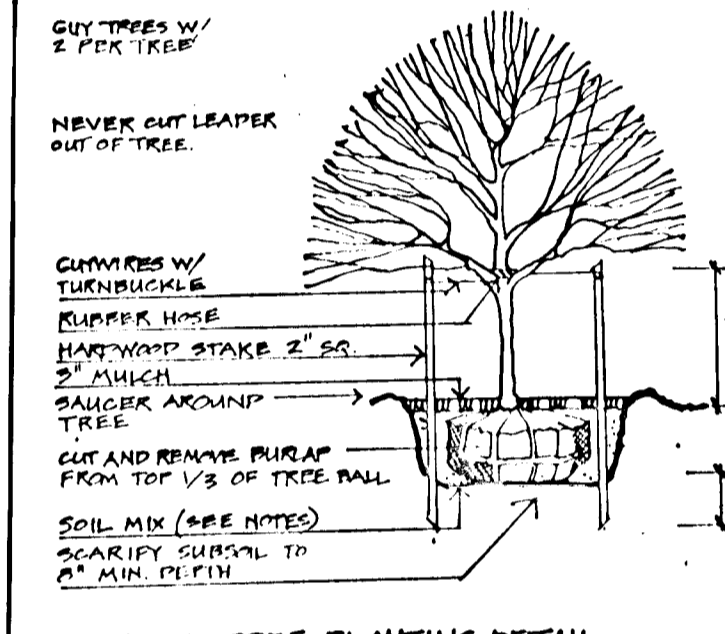
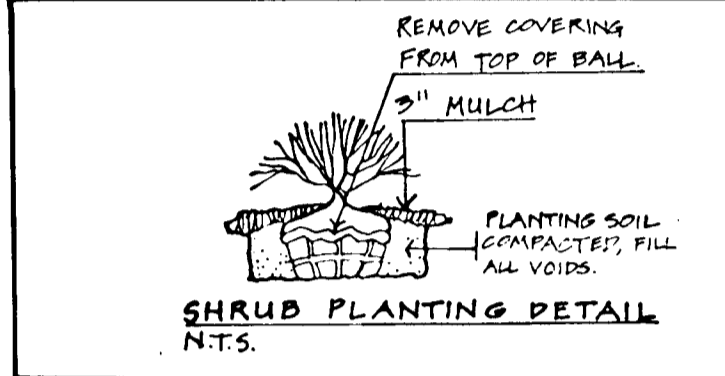
Number of Parking Spaces	137 Spaces
Number of Trees Required	14 Shade Trees
Number of Trees Provided	9 Shade Trees 5 Ornamental + 5 Evergreen

**SCHEDULE C**  
 RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

Number of Dwelling Units	TO BE COMPLETED
Number of Trees Required (1:1.50 SEE 16.124(A)(1)(PT5))	ON THE SITE
Number of Trees Provided	PLAN

**SCHEDULE D**  
 STORMWATER MANAGEMENT AREA LANDSCAPING

Linear Feet of Perimeter	1,495 LF
Number of Trees Required 1/Perimeter	30
Number of Trees Provided	37
Credit for Existing Vegetation (No, Yes and %)	Yes (85%)
Credit for Other Landscaping (No, Yes and %)	No (0%)
Number of Trees Provided 230 LF	5



**PLANTING NOTES:**  
 1. Notify 'Miss Utility', 72 HRS prior to the installation of plant material.  
 2. Plant installation must conform to minimum standards cited in the latest edition of "Landscape Specification Guidelines" by the Landscape Contractors Assoc.  
 3. Plants to be located in the field by the owner or owner's representative. Notify owner 72 HRS in advance of planting.  
 4. A Certification of Landscape Installation is required as per the Ho. Co. Landscape Ordinance.  
 5. Contact Landscape Architect regarding the substitution of plant material. The number, size and location of plants shall not be changed. Substitutions must be included in the recommended plant list.  
 6. Street tree locations have been shown wherever possible. Drive aprons of proposed units is not allow the typical 1 tree = 40 feet.  
 7. STREET TREE NOTES:  
 A. Biologic root inhibitor barrier or containment shall be installed for trees planted closer than 3 feet to sidewalk.  
 B. Trees shall be placed 30 feet (min) from all signs and intersections when planting occurs between sidewalk & curb.  
 C. Street Trees may not be planted within 5 feet of a drain inlet, 5 feet of an open space access strip or 10 feet of a driveway.  
 D. The street trees must be planted within the 10 foot street tree easement.  
 E. Street trees may not be placed within 20 ft. of any street light.

APPROVED: Department of Public Works for Storm Drainage Systems and Roads  
 Chief, Land Development Division  
 11/18/94  
 APPROVED: Department of Planning and Zoning  
 Chief, Bureau of Engineering  
 11/18/94  
 APPROVED: Department of Planning and Zoning  
 Chief, Division of Land Development and Research  
 11/23/94

**LAND DESIGN ENGINEERING, INC.**  
 8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045  
 (410) 715-1070 (Ballo.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)  
 Designed: C.W.  
 Drawn: KAN  
 Checked: BDB  
 Date: 3/94  
**LANDSCAPE AND STREET TREE PLAN**  
**SHADY OAKS**  
 SECTION ONE AREA TWO  
 LOT 57 THRU LOT 170  
 Tax Map 37 Part of Parcel G43  
 15<sup>th</sup> Election District Howard County, MD  
 Previous Submittals: 28877R4M WPA-33 F94-125, RES18A PA284 F94-11, SDP 93-105, F94-27, F94-28  
 100 INVESTMENT LIMITED PARTNERSHIP  
 8835 Columbia 100 Parkway  
 Columbia, Maryland 21045  
 Phone: 410.730-0810  
 Scale: 1"=50'  
 Sheet: 30 of 9  
 Date: 02-20-94  
 File No: 92-174-2

STATE OF MARYLAND  
 BRUCE D. BURTON  
 PROFESSIONAL LANDSCAPE ARCHITECT  
 No. 10000

1702