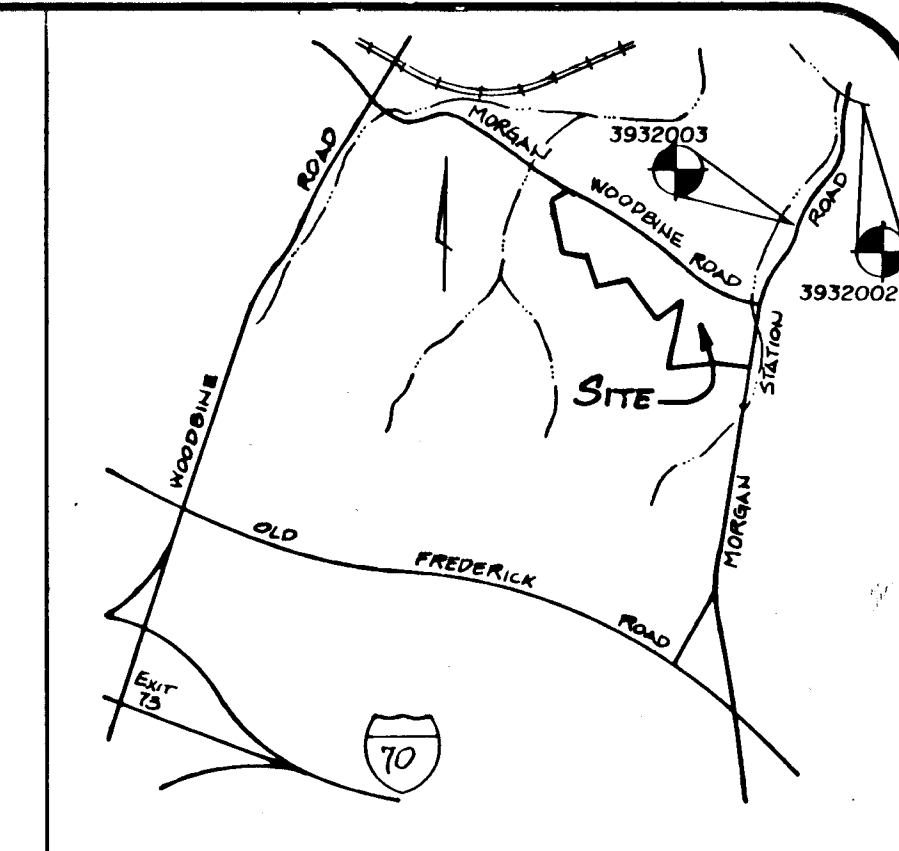
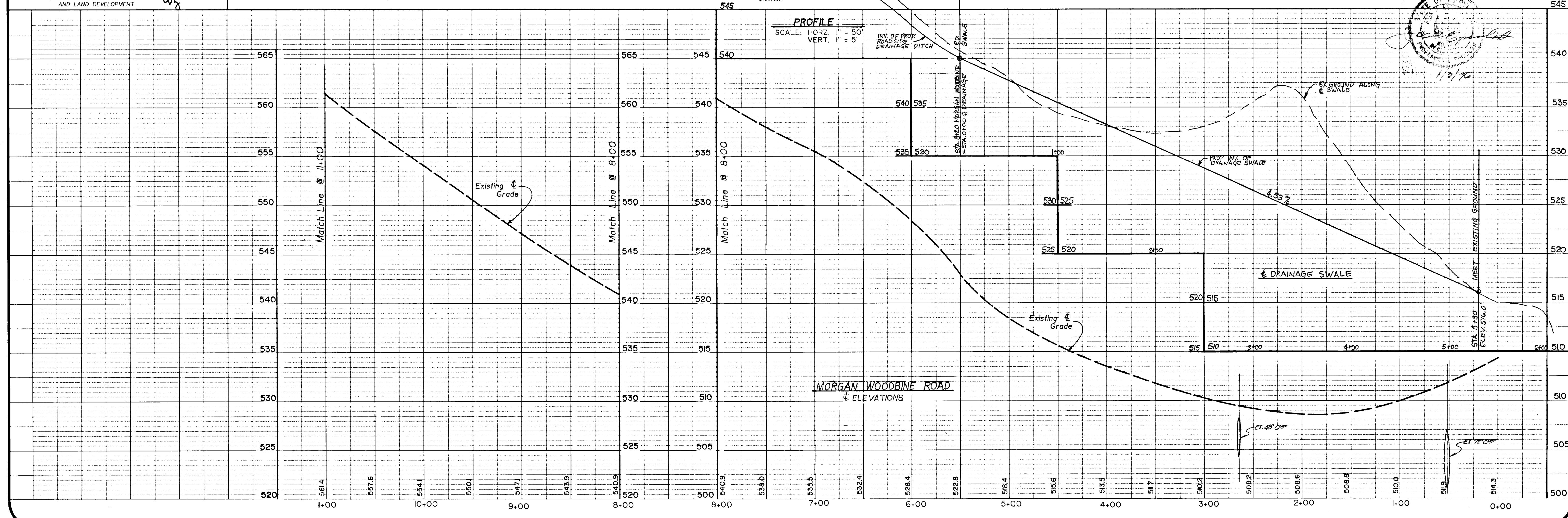
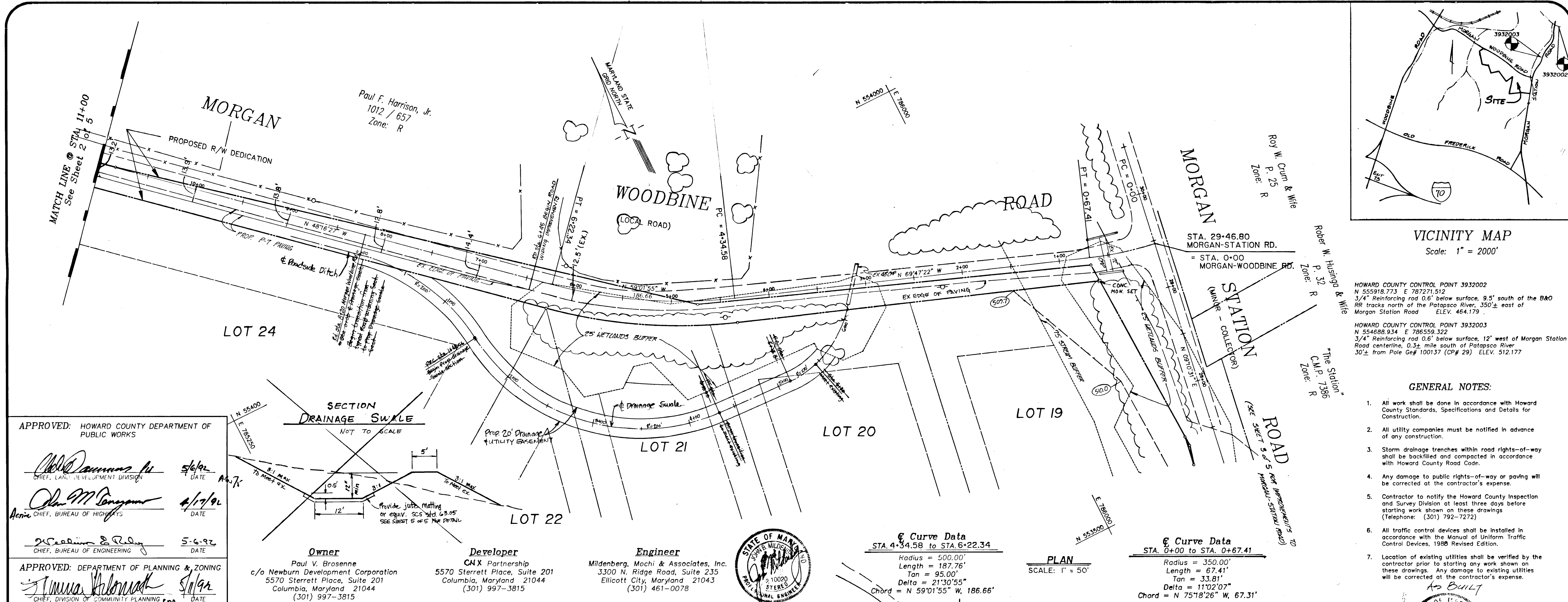


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GENERAL NOTES:

- All work shall be done in accordance with Howard County Standards, Specifications and Details for Construction.
- All utility companies must be notified in advance of any construction.
- Storm drainage trenches within road rights-of-way shall be backfilled and compacted in accordance with Howard County Road Code.
- Any damage to public rights-of-way or paving will be corrected at the contractor's expense.
- Contractor to notify the Howard County Inspection and Survey Division at least three days before starting work shown on these drawings (Telephone: (301) 792-7272).
- All traffic control devices shall be installed in accordance with the Manual of Uniform Traffic Control Devices, 1988 Revised Edition.
- Location of existing utilities shall be verified by the contractor prior to starting any work shown on these drawings. Any damage to existing utilities will be corrected at the contractor's expense.

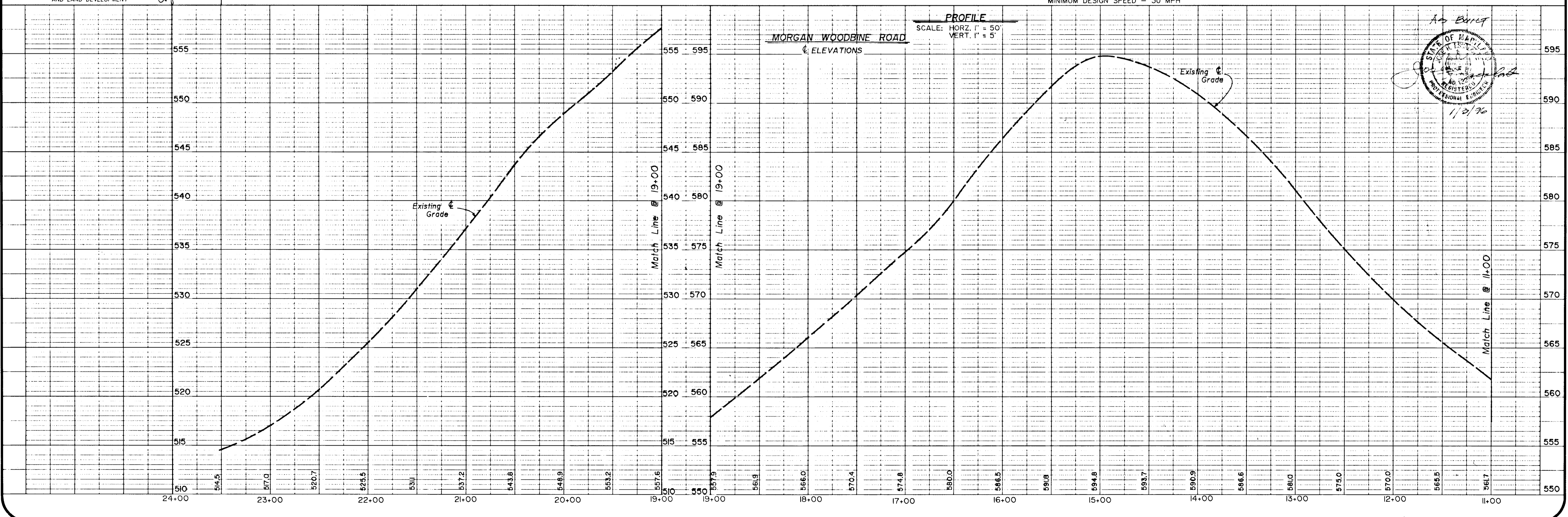
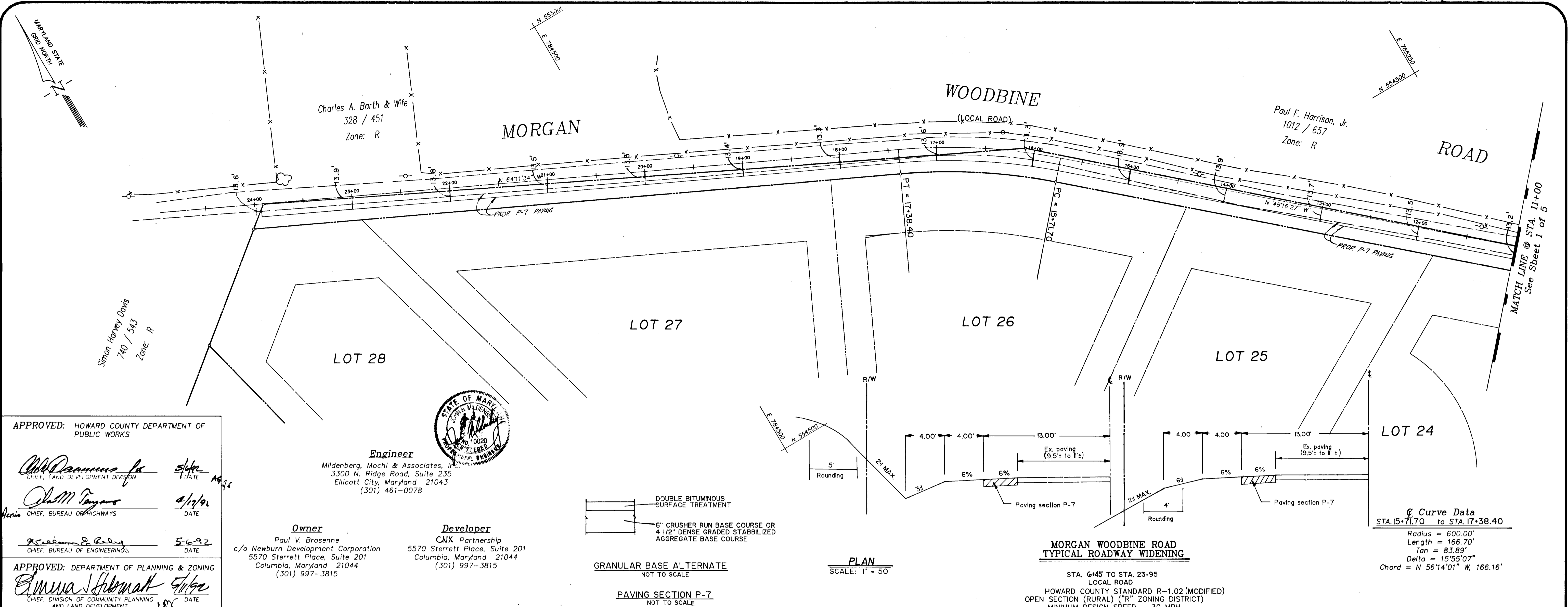
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|----------|--------------|-------------|
| Project | date | SEPT. '89 |
| 89020.00 | illustration | engineering |
| MDC | illustration | JLM |
| scale | scale | 1" = 50' |
| approval | approval | JBM |

| | | |
|-------------|-------------|-------------|
| 4/6/92 | date | 4/6/92 |
| 1/50 | scale | 1/50 |
| 9/19/90 | date | 9/19/90 |
| 9/1/89 | date | 9/1/89 |
| description | description | description |
| revisions | revisions | revisions |

Section 2 Lots 19 - 28
CHESSIE CROSSING
Parcel 4
ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND
MORGAN WOODBINE ROAD - ROAD IMPROVEMENT PLAN

MILDENBERG, MACHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078

1617

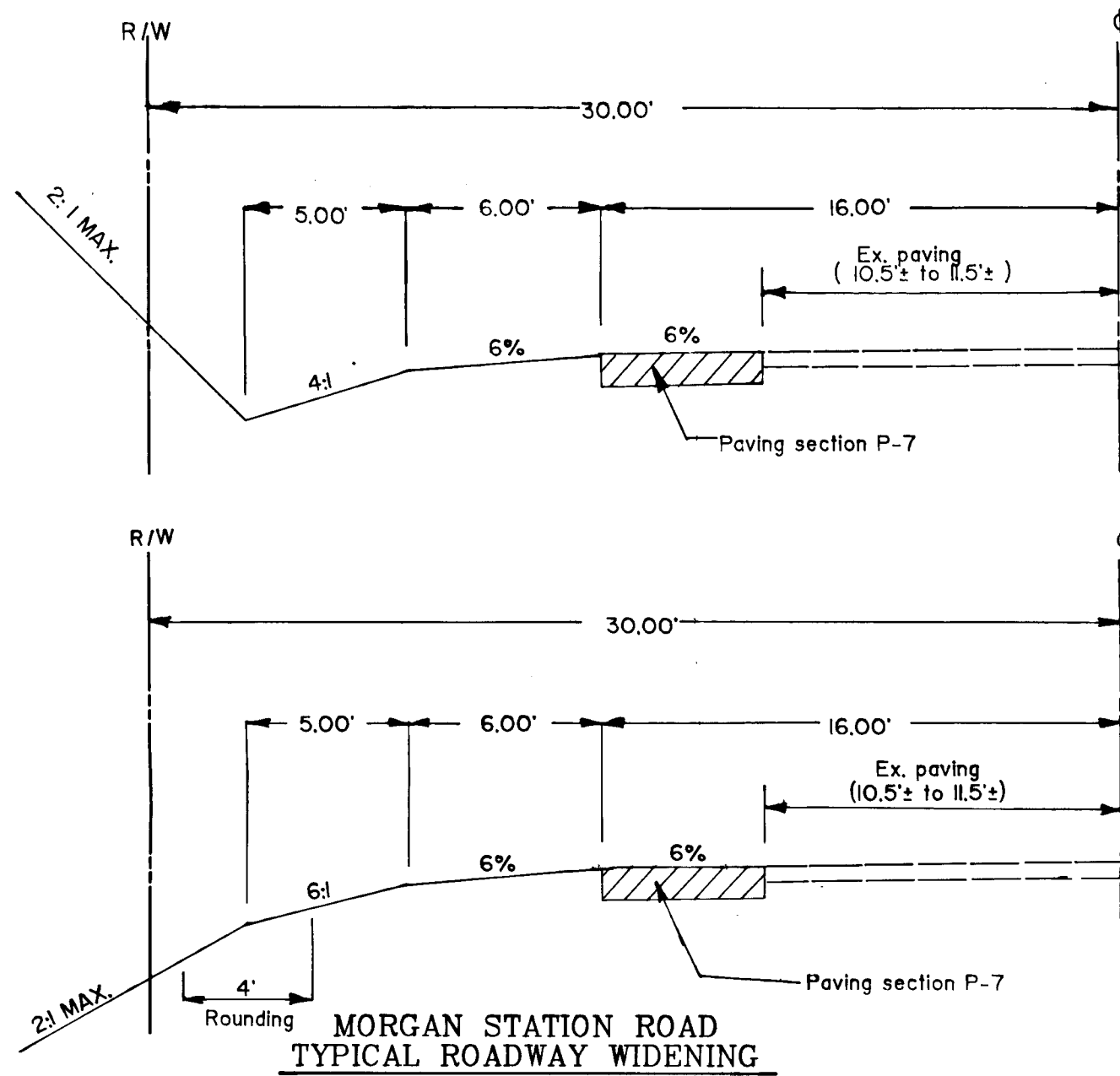


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| Project | 89020.00 | Date | SEPT. '89 |
| Illustration | MDC | Scale | 1" = 50' |
| Approval | JLM | Date | |

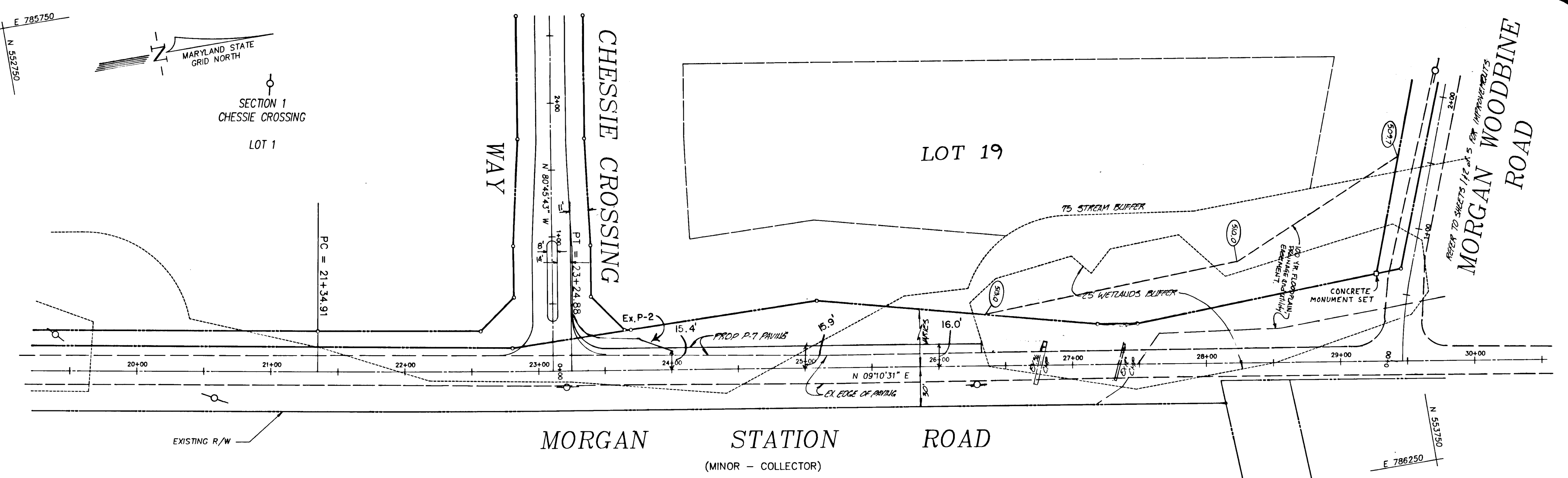
| | | | |
|---|--|---------|--|
| 1 | REVISE PER STA. ON TYP. ROADWAY WIDENING DETAIL | 4/16/92 | |
| 2 | 2ND SUBMISSION TO HOWARD COUNTY DPZ | 2/19/90 | |
| 3 | REVISED PER HOWARD COUNTY COMMENTS DATED 1/18/89 | 9/9/89 | |
| 0 | First submission to Howard County DPZ | | |

Section 2 Lots 19 - 28
CHESSIE CROSSING
 Parcel 4
 Tax Map 3
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 4
MORGAN WOODBINE ROAD - ROAD IMPROVEMENT PLAN

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS - SURVEYORS - PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro: (301) 521-5768



**MORGAN STATION ROAD
TYPICAL ROADWAY WIDENING**
STA. 26+30 TO STA. 17+70
MINOR COLLECTOR
HOWARD COUNTY STANDARD R-1.03 (MODIFIED)
OPEN SECTION (RURAL) ("R" ZONING DISTRICT)
MINIMUM DESIGN SPEED - 40 MPH



MORGAN STATION ROAD
(MINOR - COLLECTOR)

"The Station"
C.M.P. 7386
Zone: R

Roy W. Crum & Wife
P. 25
Zone: R

Rober W. Husingo & Wife
P. 32
Zone: R

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

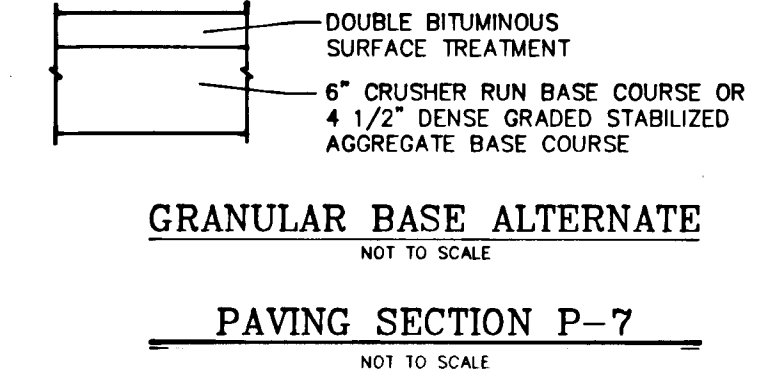
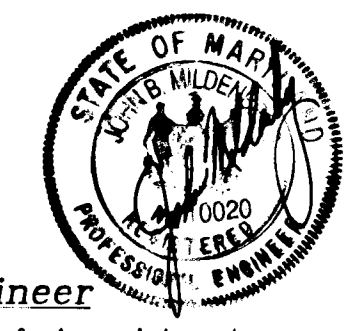
Chad Damman 4/6/92
CHIEF, LAND DEVELOPMENT DIVISION
Alan M. Tangman 4/17/92
CHIEF, BUREAU OF HIGHWAYS
Richard R. Sney 5-6-92
CHIEF, BUREAU OF ENGINEERING

APPROVED: DEPARTMENT OF PLANNING & ZONING
Suma Khanna 5/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

Owner
Paul V. Brosenne
c/o Newburn Development Corporation
5570 Sterrett Place, Suite 201
Columbia, Maryland 21044
(301) 997-3815

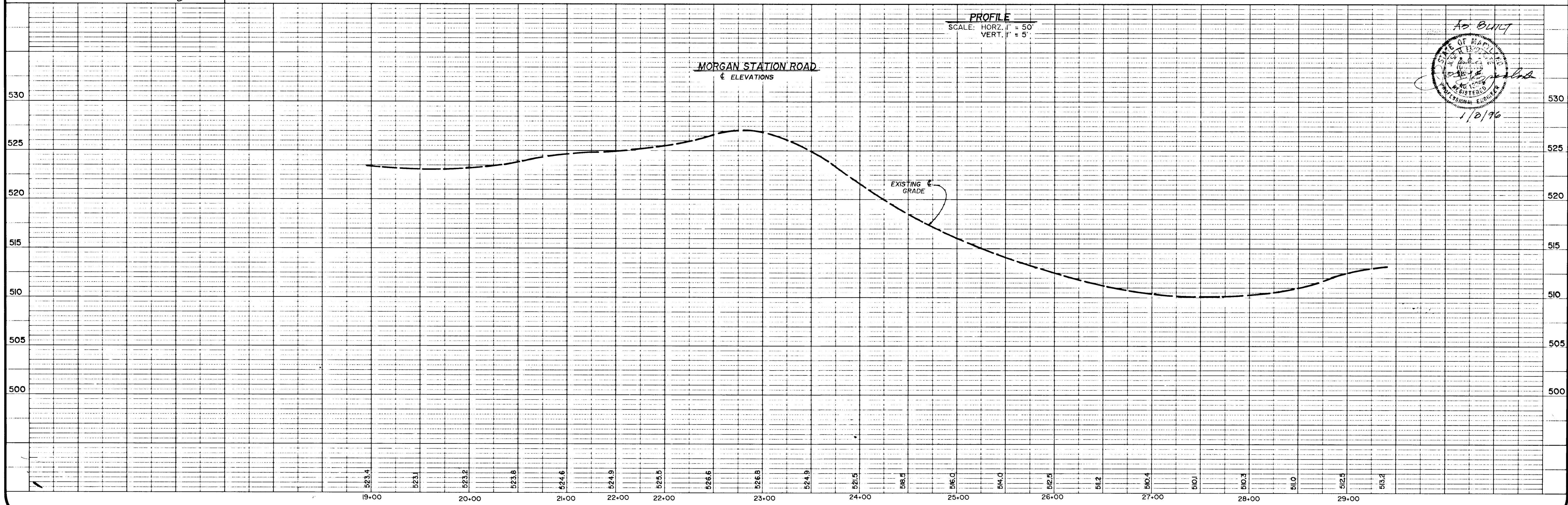
Developer
CNX Partnership
5570 Sterrett Place, Suite 201
Columbia, Maryland 21044
(301) 997-3815

Engineer
Mildenberg, Mochi & Associates, Inc.
3300 N. Ridge Road, Suite 235
Ellicott City, Maryland 21043
(301) 461-0078



PLAN
SCALE: 1" = 50'

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



| | | |
|--------------|----------|-----------|
| Project | date | SEPT. '89 |
| Illustration | 9/20/00 | JLM |
| Scale | MDC | JLM |
| Approval | 9/19/89 | JLM |
| Revision | 9/7/89 | JLM |
| Scale | 1" = 50' | JLM |

| | | | |
|---|--|---------|----------|
| 2 | REVISED PER HOWARD COUNTY COMMENTS DATED 8/18/89 | 9/19/89 | JLM |
| 0 | First submission to Howard County DPZ | 9/7/89 | JLM |
| 0 | description | date | revision |

Section 2
Chessie Crossing
Parcel 4
Parcel 3
Parcel 4
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 4
MORGAN STATION ROAD - ROAD IMPROVEMENT PLAN

MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro: (301) 621-5768

SEDIMENT CONTROL NOTES

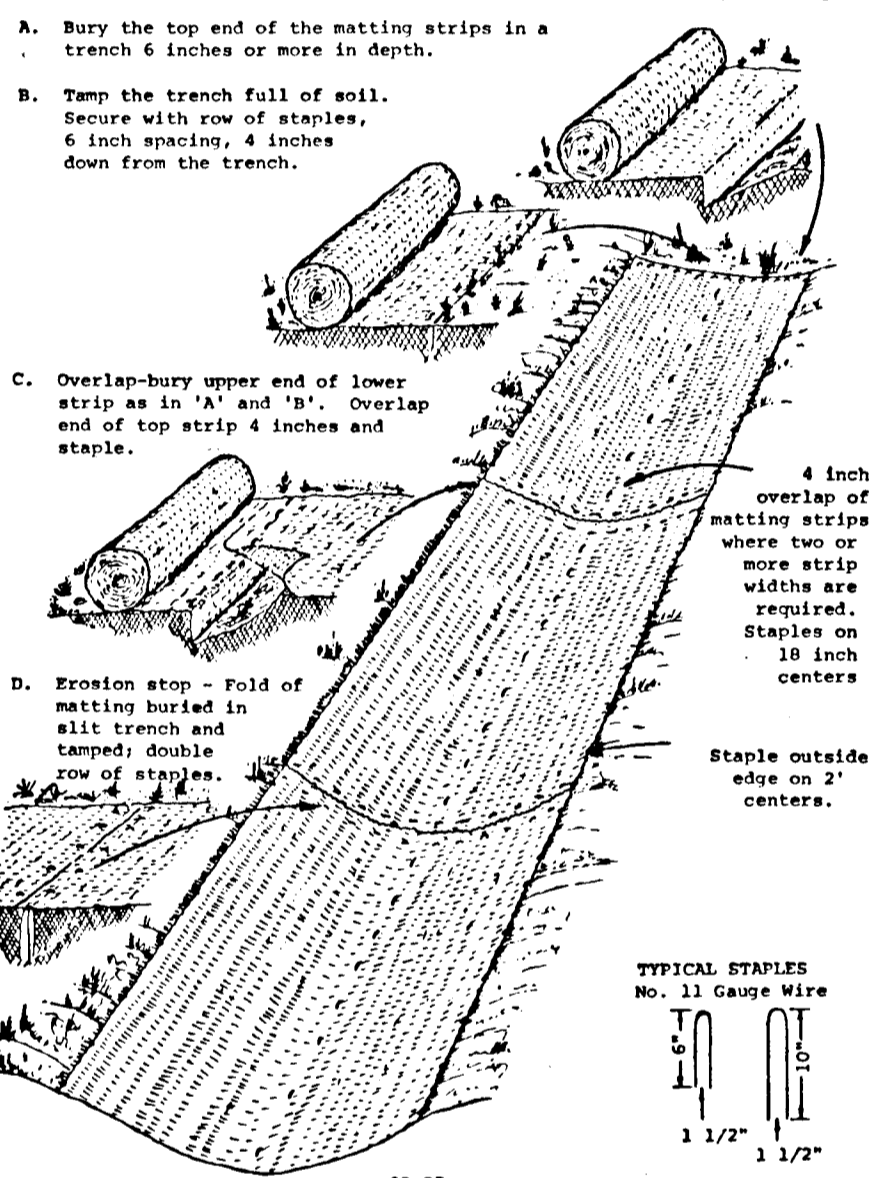
- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (892-2431).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1; b) 14 days as to all other disturbed or graded areas on the project site.
- 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) Soil (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 305.4
Area disturbed 127,685 sq. ft.
Area to be seeded or planted 10,200 sq. ft.
Area to be vegetatively stabilized 11,405 sq. ft.
Total Cut 6696 cu. yd.
Total Fill 58 cu. yd.
Offsite waste/borrow area location N/A
- 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 DPW Sediment Control Inspector.

PERMANENT SEEDING NOTES

- Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeding 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 one of the following schedule.
- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 square feet) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 square feet).
 - Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 square feet) 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 80 lbs per acre (1.4 lbs/1000 square feet) 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 (.05 lbs/1000 square feet) 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 sand. 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 square feet) 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 square feet) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 square feet) for anchoring.
- Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseeding.

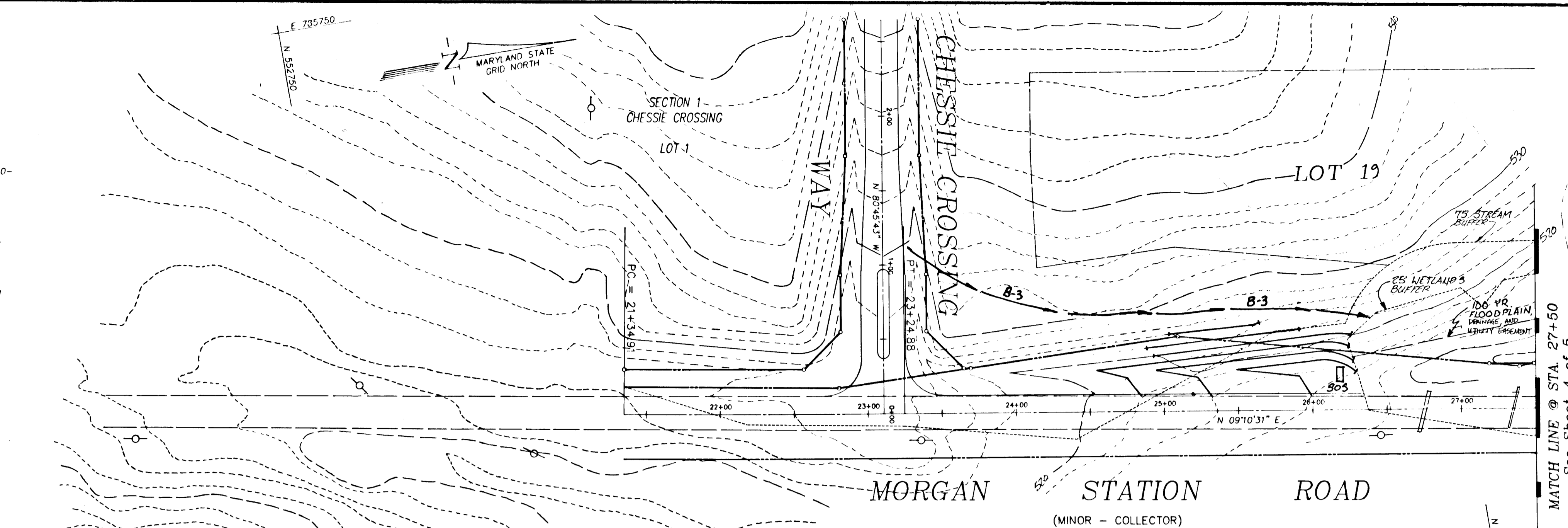
Maryland RCE/WRA April 1983

DETAIL FOR STABILIZING WATERWAYS WITH JUTE OR EXCELSION MATTINGS



Sequence of Construction

- Obtain grading permit.
 - Clear and grub to construct earth dikes in area for road grading.
 - Bring road to grade, install base course and stabilize side slopes using permanent seeding methods. Install stone outlet structures as work progresses down slope of disturbed area.
 - Stabilize all shoulders using permanent seeding method.
 - Inspect all sediment control devices daily and after each rainfall. Repair as necessary.
 - When all contributing areas to sediment control devices have been permanently stabilized, remove sediment control devices, grade area disturbed, and provide permanent seed and mulch. Sediment control devices are to be removed only after receiving permission from the Sediment Control Inspector.
 - Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter slopes and all slopes greater than 3:1; or b) 14 days for all other disturbed graded areas on the project site.
 - Notify Howard County Office of Inspections and Permits for final inspection at completion of project.
- * install jute matting within drainage swale. Begin at sta. 0+00 and ending at 5+30.



"The Station"
C.M.P. 7386
Zone: R

REVIEWED FOR HOWARD COUNTY CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Hildenberg 4/16/92
CHIEF, DIVISION OF CONSERVATION

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY CONSERVATION DISTRICT.

John R. Reuter 4/16/92
CHIEF, DIVISION OF CONSERVATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chris J. Jovish 5/6/92
CHIEF, DIVISION OF PUBLIC WORKS

John M. Szymon 4/12/92
CHIEF, DIVISION OF HIGHWAYS

William E. Reig 5-6-92
CHIEF, DIVISION OF ENGINEERING

APPROVED: DEPARTMENT OF PLANNING & ZONING

Anna Holmash 5/11/92
CHIEF, DIVISION OF PLANNING AND LAND DEVELOPMENT

ENGINEER'S CERTIFICATE

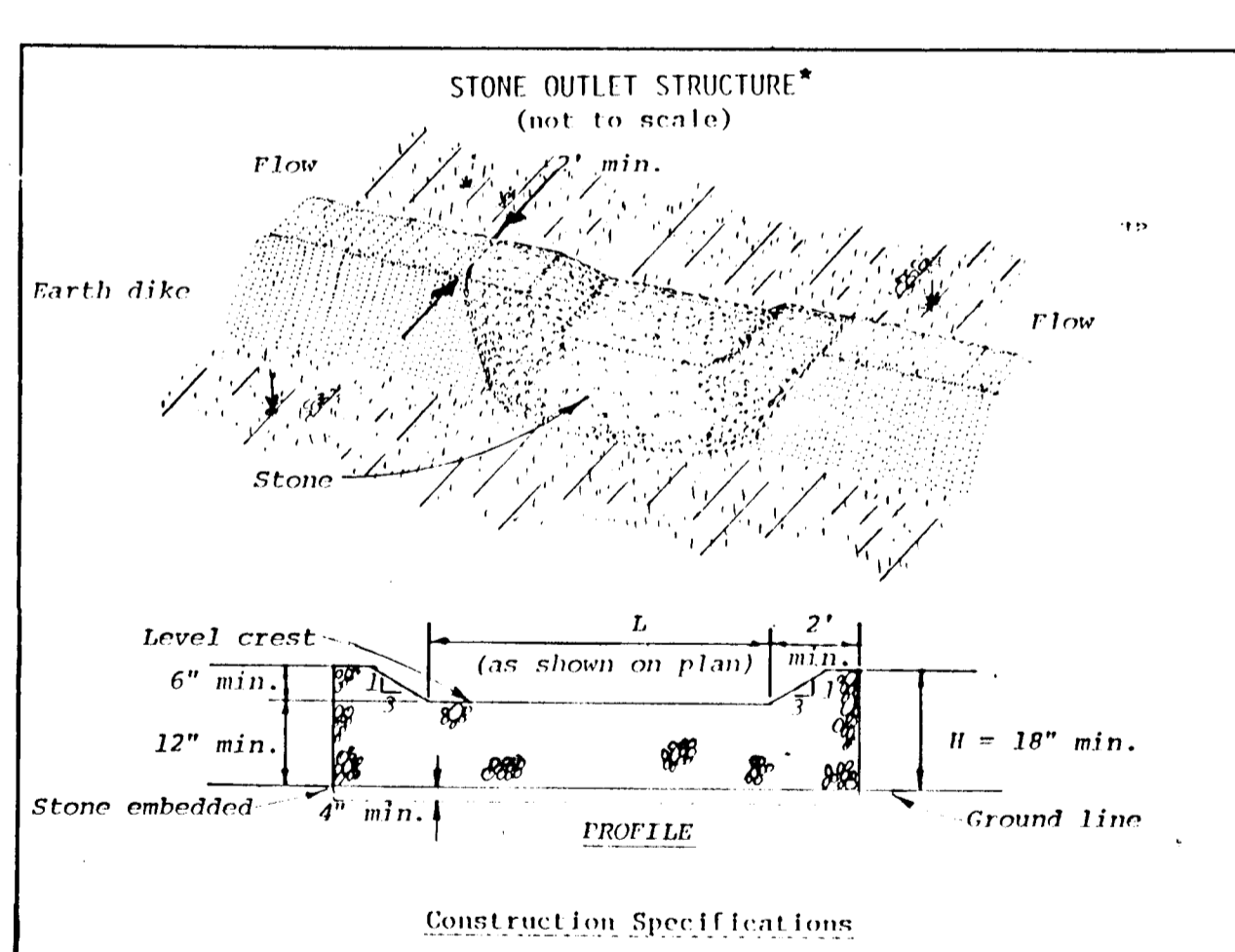
I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Conservation District.

John Hildenberg Apr 8 '92
PROFESSIONAL ENGINEER

DEVELOPER'S CERTIFICATE

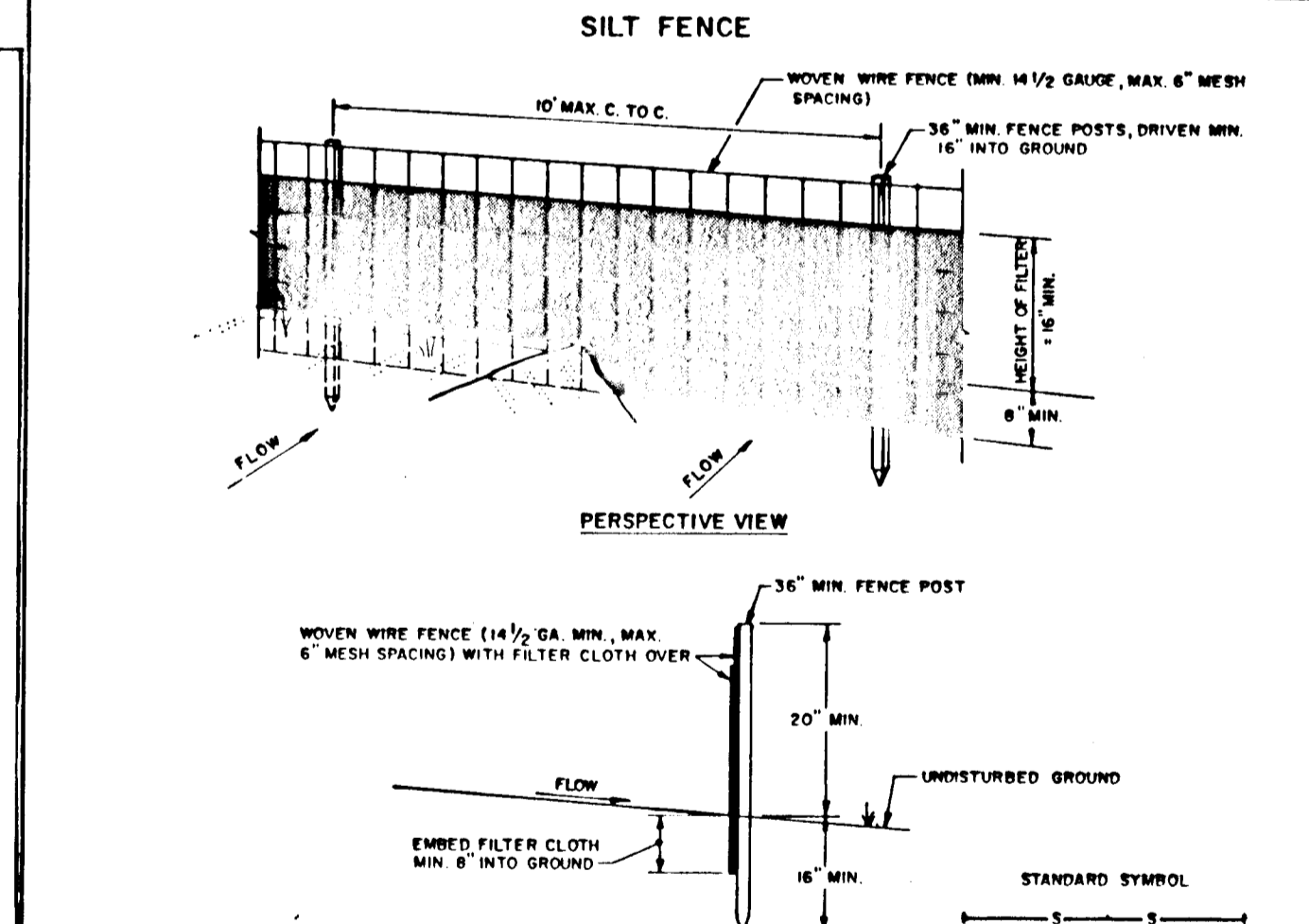
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard County Conservation District or their authorized agents, as are deemed necessary.

James L. Nubson 9-19-89
Signature of Developer Date



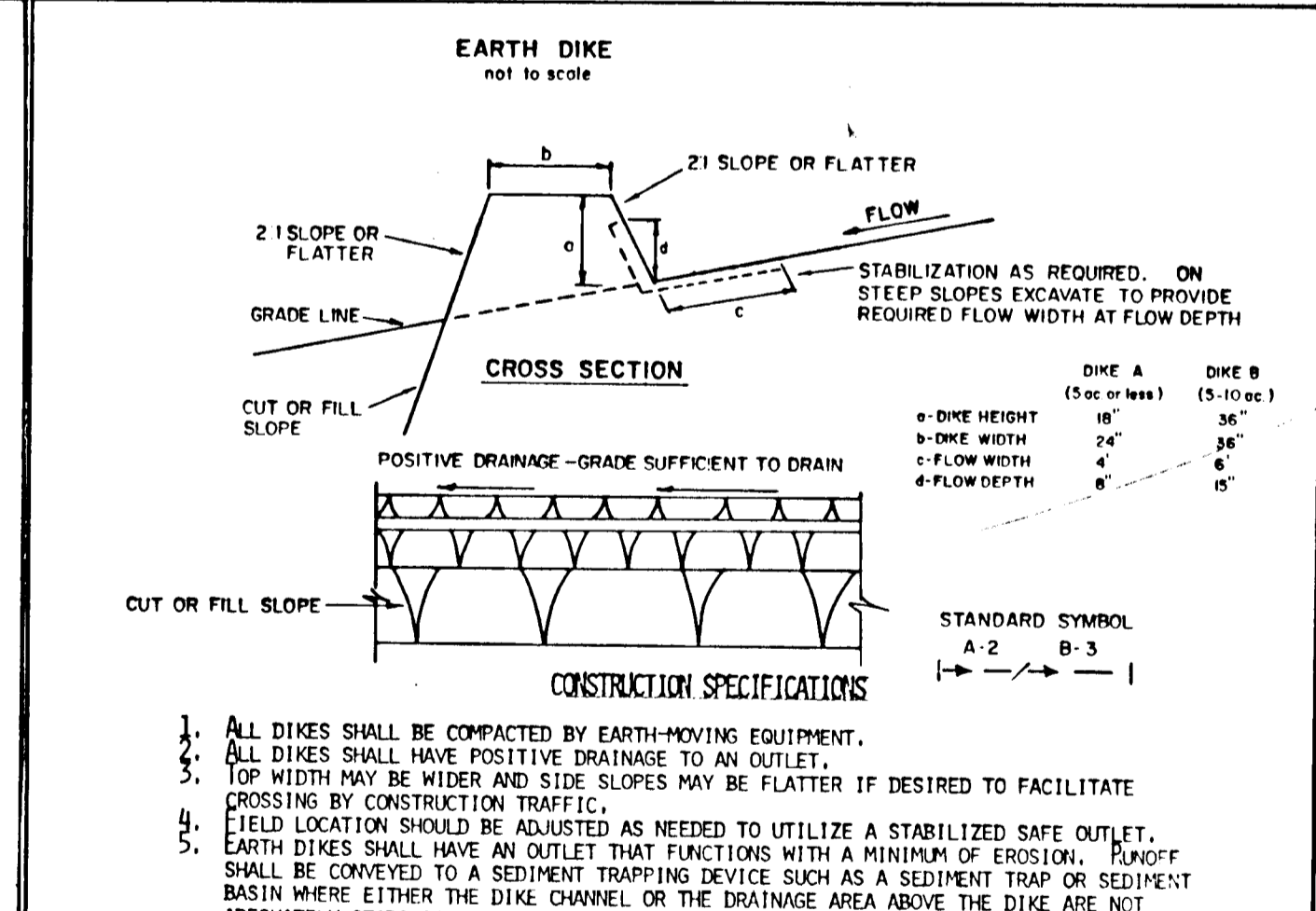
- The stone shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet MSHA Size No. 2 or AASHTO designation M3 Size No. 2 or 24.
- The crest of the stone dike shall be at least six inches lower than the lowest elevation of the top of the earth dike and shall be level.
- The stone outlet structure shall be embedded into the soil a minimum of four inches.
- The minimum length, in feet, of the crest of the stone outlet structure shall be equal to six times the number of acres of contributing drainage area.
- The stone outlet structure shall be inspected after each rain, and the stone shall be replaced when the structure ceases to function as intended due to silt accumulation among the stone, washout, construction traffic damage, etc.

| | | |
|--|------------------------|---------------------------|
| U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md. | STONE OUTLET STRUCTURE | Standard Drawing SOS-1 |
|--|------------------------|---------------------------|



- CONSTRUCTION NOTES FOR FABRICATED SILTS FENCE**
- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
 - When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 - Maintenance shall be performed as needed and material removed when bridges develop in the silts fence.

| | | |
|---|-------------|--------------------------|
| U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND | SILTS FENCE | STANDARD DRAWING SF-1 |
|---|-------------|--------------------------|



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

| | | |
|---|------------|--------------------------|
| U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND | EARTH DIKE | STANDARD DRAWING ED-1 |
|---|------------|--------------------------|

| | | | |
|--------------|---------|----------|-----------|
| Project No. | 8902000 | Date | SEPT. '89 |
| Illustration | MDC | Scale | 1" = 50' |
| Approval | JLM | Revision | |

| | | | |
|---------|---------|--------|-----------|
| 4/10/92 | 2/29/90 | 9/1/89 | date |
| 1 | 0 | 0 | no. |
| 2 | 1 | 0 | revisions |
| 3 | 1 | 0 | revisions |

Section 2 Lots 19 - 28
CHESSIE CROSSING
Parcel 4
Tax Map 3
ELECTION DISTRICT No. 4
HOWARD COUNTY, MARYLAND
GRADING & SEDIMENT CONTROL PLAN, DETAILS & NOTES

MILDENBERG, JOCH & ASSOCIATES, INC.
ENGINEERS • ARCHITECTS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro: (301) 621-5768