

W.O. Pilbert 1-17-79  
 CHIEF, Bureau of Engineering Date  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
John W. Musselman (P.E.) 12-27-78  
 CHIEF, Division of Land Development Date

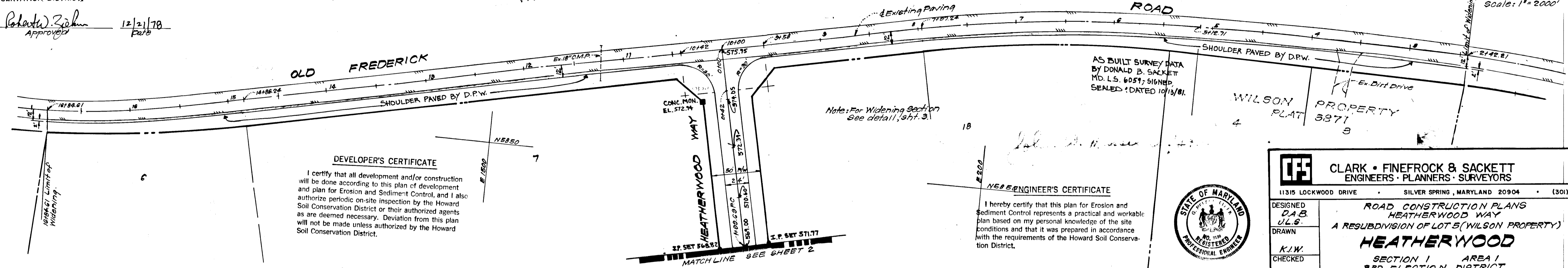
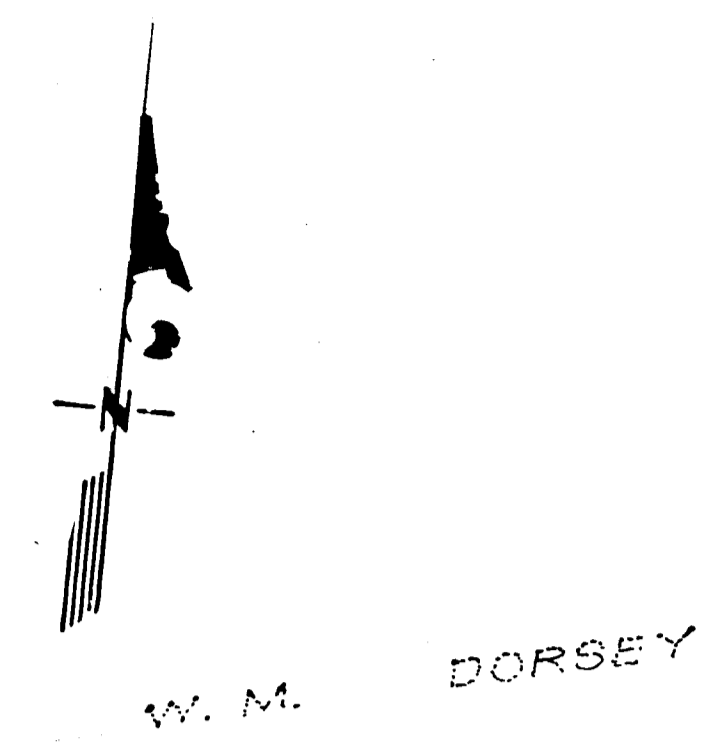
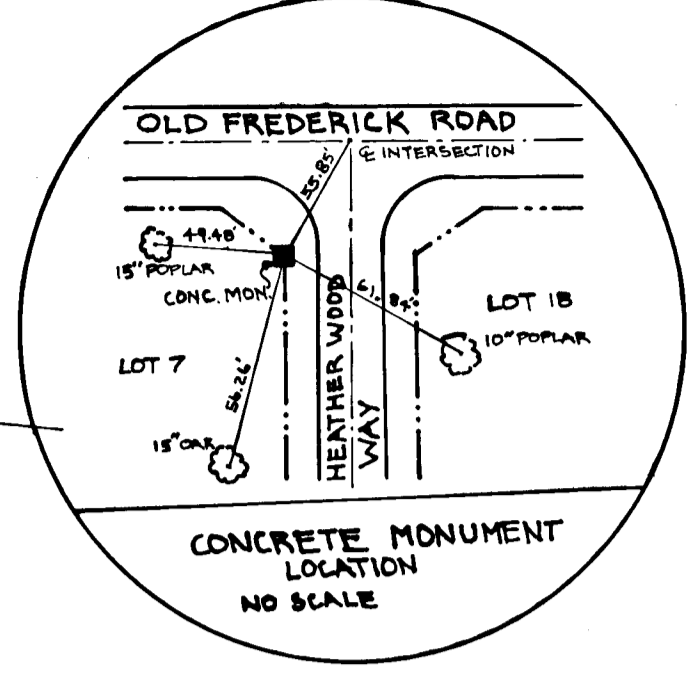
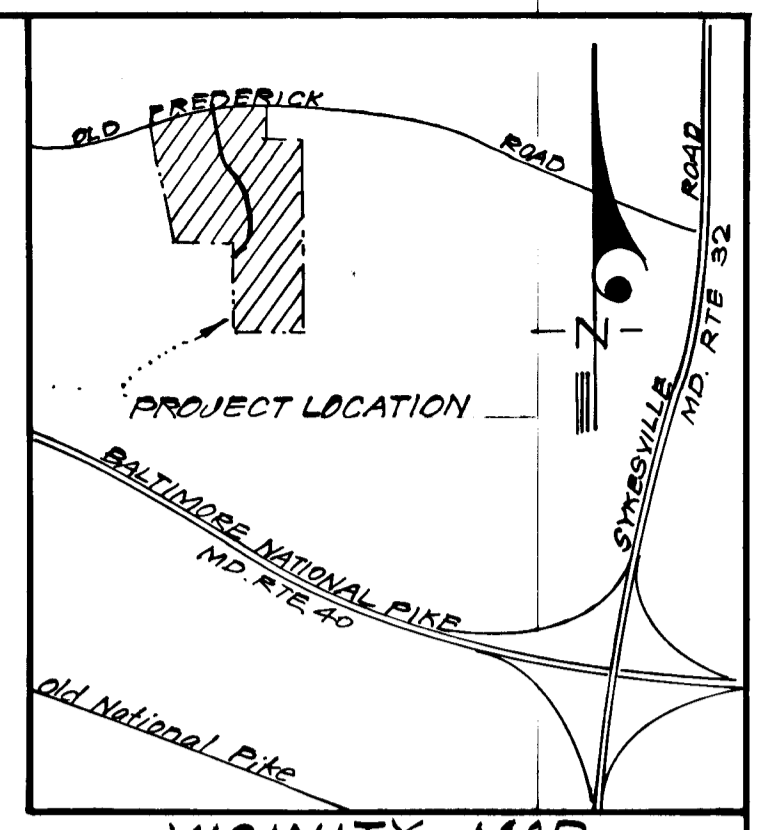
Reviewed for Howard S.C.D. Name  
 and meets Technical Requirements  
C. Hanson 12/21/78 Date  
 Signature  
 U.S. Soil Conservation Service

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

Robert Zohn 12/21/78 Date  
 Approved

**GENERAL NOTES**

- All Storm Drain & Paving shall be constructed in accordance with the latest details and specifications of Howard Co. & Md. S.H.A.
- Types of Storm Drain Structures refer to the Standard Details of Howard County & Maryland State Highway Administration.
- Trench Compaction for Storm Drains within Road or Street right of way limits shall be in accordance with the latest Howard Co. Road Code.
- Information concerning underground utilities was obtained from available records, but the Contractor must determine the exact location and elevation of the mains by digging test pits by hand at all utility crossings, well in advance of construction.
- All utility companies shall be notified 24 hrs. in advance of construction.
- All traffic control services, parking, and signing to be done in accordance with the Manual of Uniform Traffic Control Devices, 1971 Edition.
- Bag and Crest Vertical Curves were designed in accordance with "A Policy on Geometric Design of Rural Highways", 1965, by A.A.S.H.O.
- Design Speed: Heather Wood Way: 30 mph.



**DEVELOPER'S CERTIFICATE**  
 I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

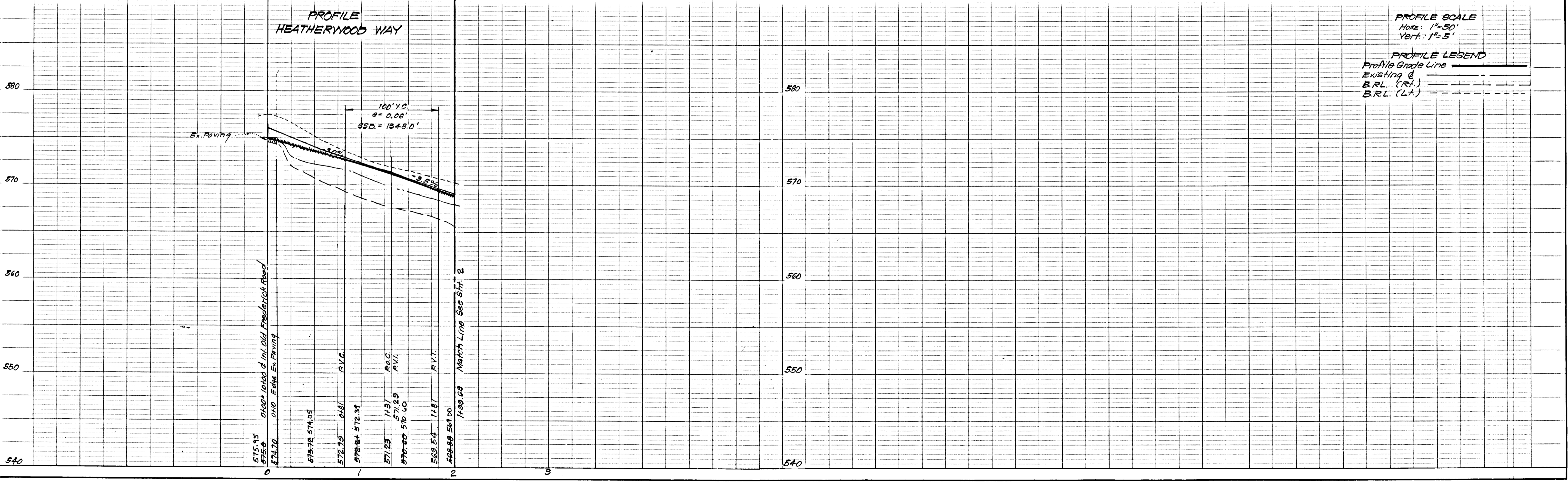
Edward J. Kasemeyer 12/18/78 Date  
 Signature  
 Edward Kasemeyer

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

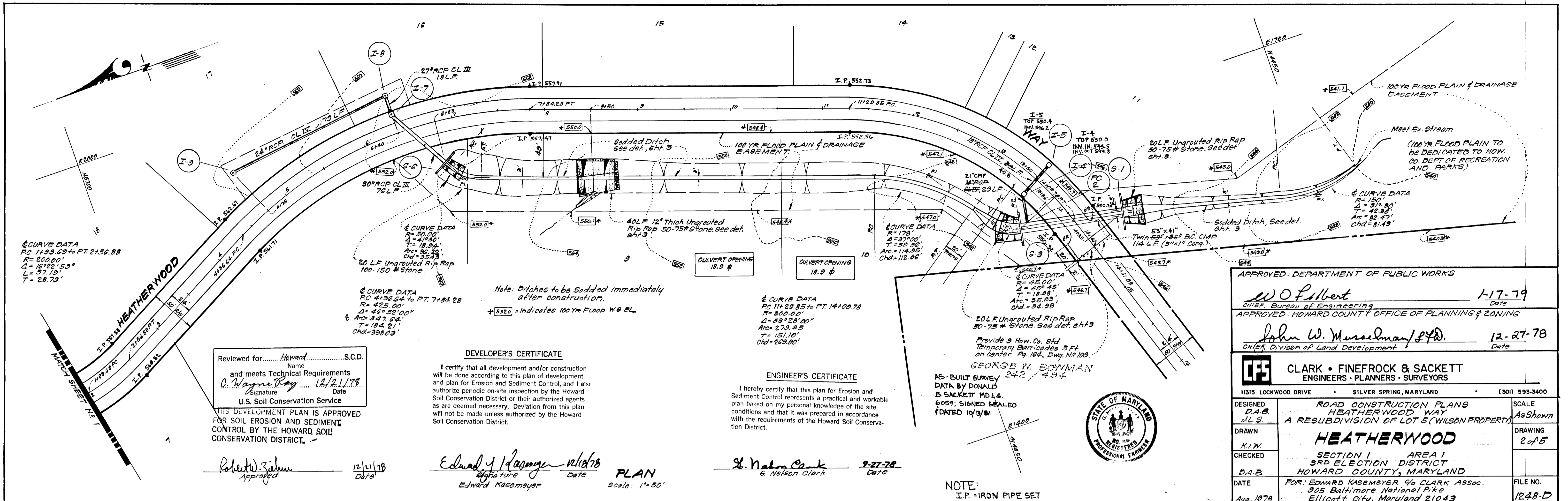
E. Nelson Clark 9-27-78 Date  
 E. Nelson Clark

**CLARK • FINEFROCK & SACKETT**  
 ENGINEERS • PLANNERS • SURVEYORS  
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS HEATHERWOOD WAY A RESUBDIVISION OF LOT 5 (WILSON PROPERTY) <b>HEATHERWOOD</b>	SCALE As Shown
DRAWN J.L.S.		DRAWING 1 of 5
CHECKED K.I.W.	SECTION 1 AREA 1 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO.
DATE Aug, 1978	FOR: EDWARD KASEMEYER % CLARK Assoc. 9251 Baltimore National Pike Ellicott City, Maryland 21043	1248-D



#722



Reviewed for... Howard... S.C.D.  
 Name  
 and meets Technical Requirements  
 C. Wagner Key 12/21/78  
 Signature Date  
 U.S. Soil Conservation Service

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

Robert Ziehm  
 Approved 12/21/78  
 Date

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 as are deemed necessary. Deviation from this plan  
 will not be made unless authorized by the Howard  
 Soil Conservation District.

Edward Kasemeyer 12/18/78  
 Signature Date  
 Edward Kasemeyer

**PLAN**  
 Scale: 1"=50'

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 Sediment Control represents a practical and workable  
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 with the requirements of the Howard Soil Conserva-  
 tion District.

L. Nelson Clark 2-27-78  
 Signature Date  
 L. Nelson Clark

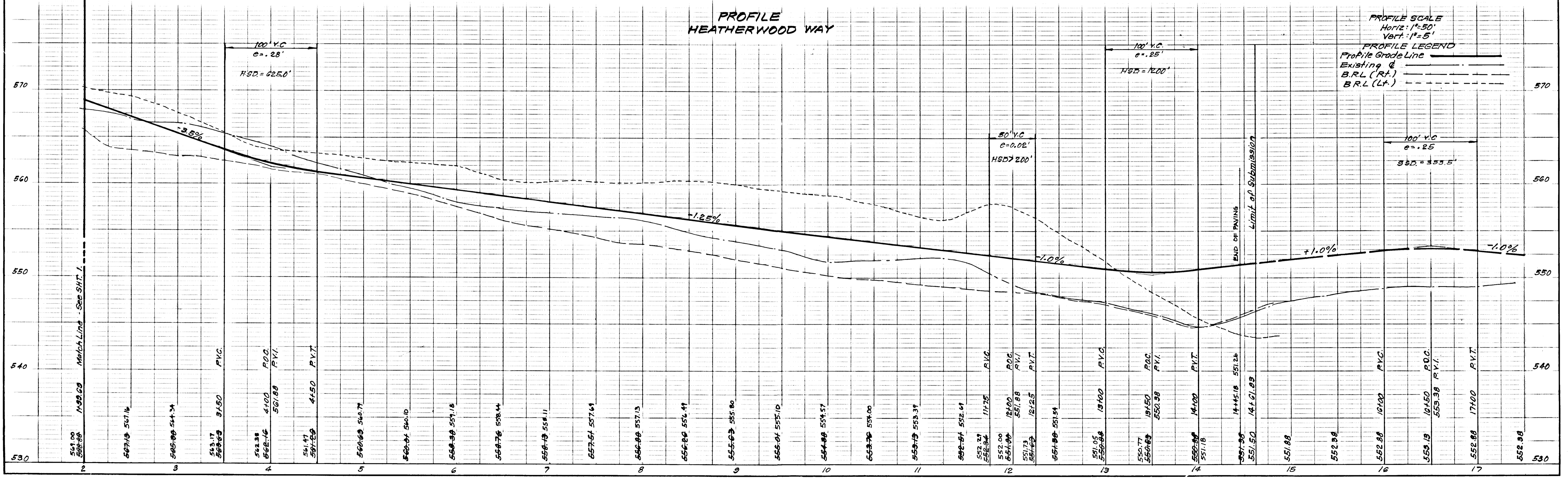


APPROVED: DEPARTMENT OF PUBLIC WORKS  
 W.O. Filbert 1-17-79  
 CHIEF, Bureau of Engineering Date

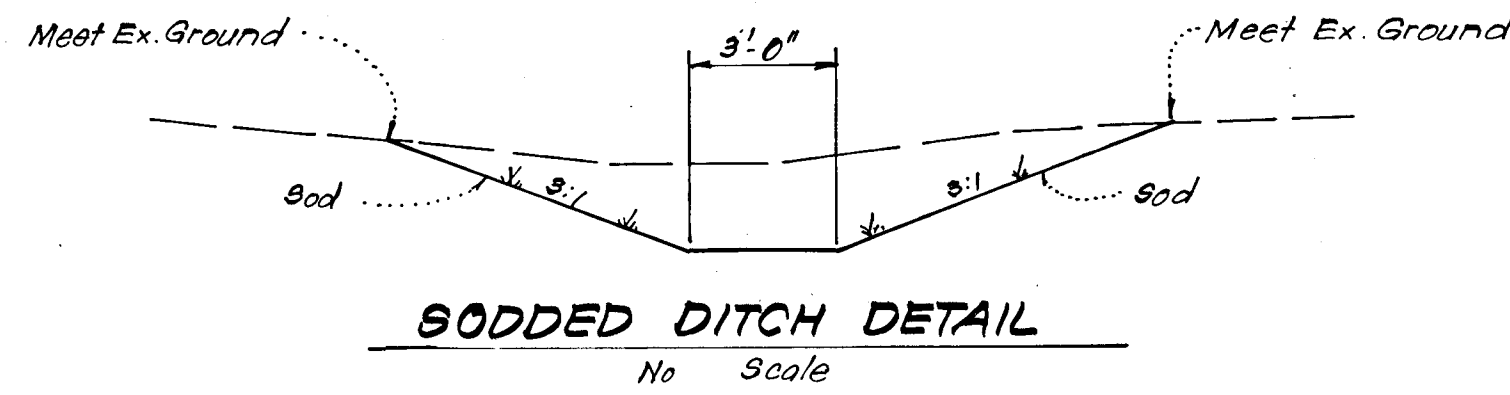
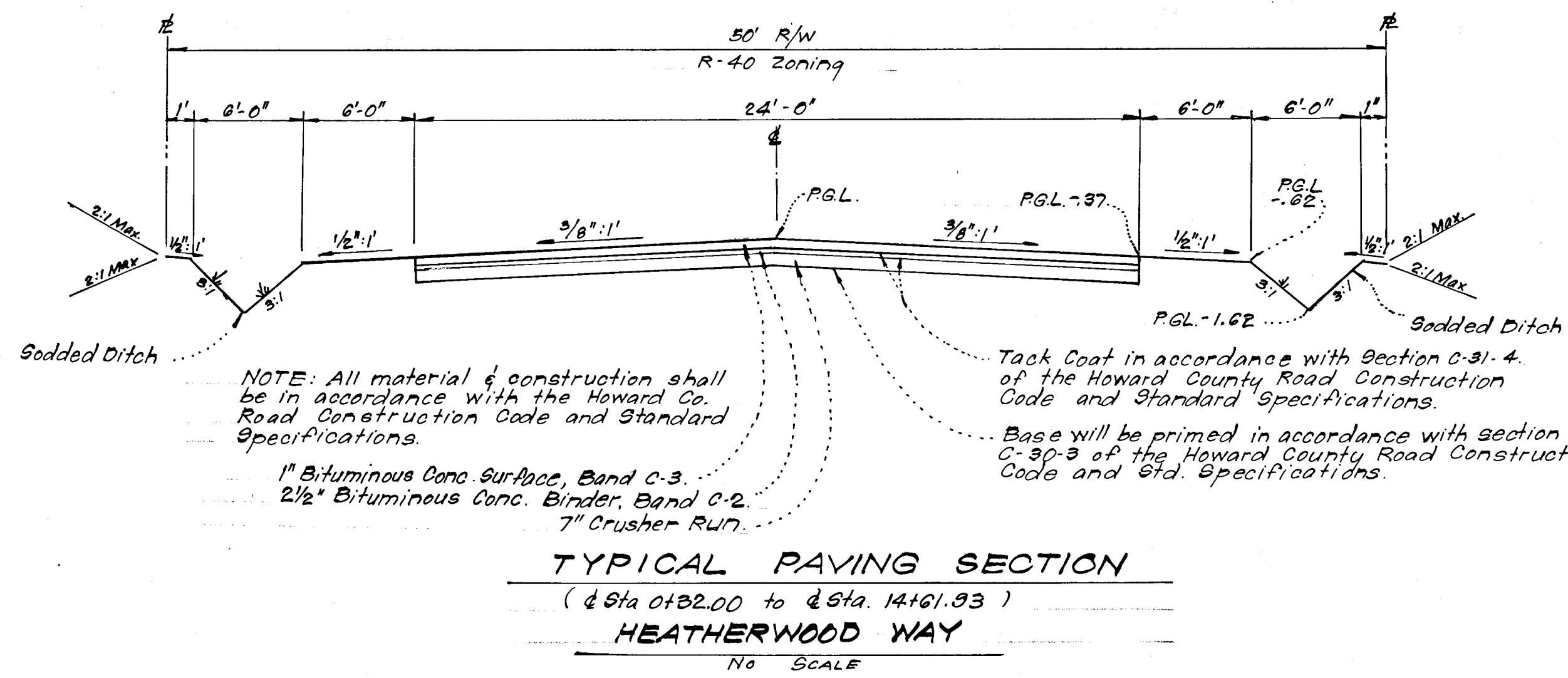
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 John W. Musselman/PTD. 12-27-78  
 CHIEF, Division of Land Development Date

**CLARK • FINEFROCK & SACKETT**  
 ENGINEERS • PLANNERS • SURVEYORS  
 1315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND (301) 593-3400

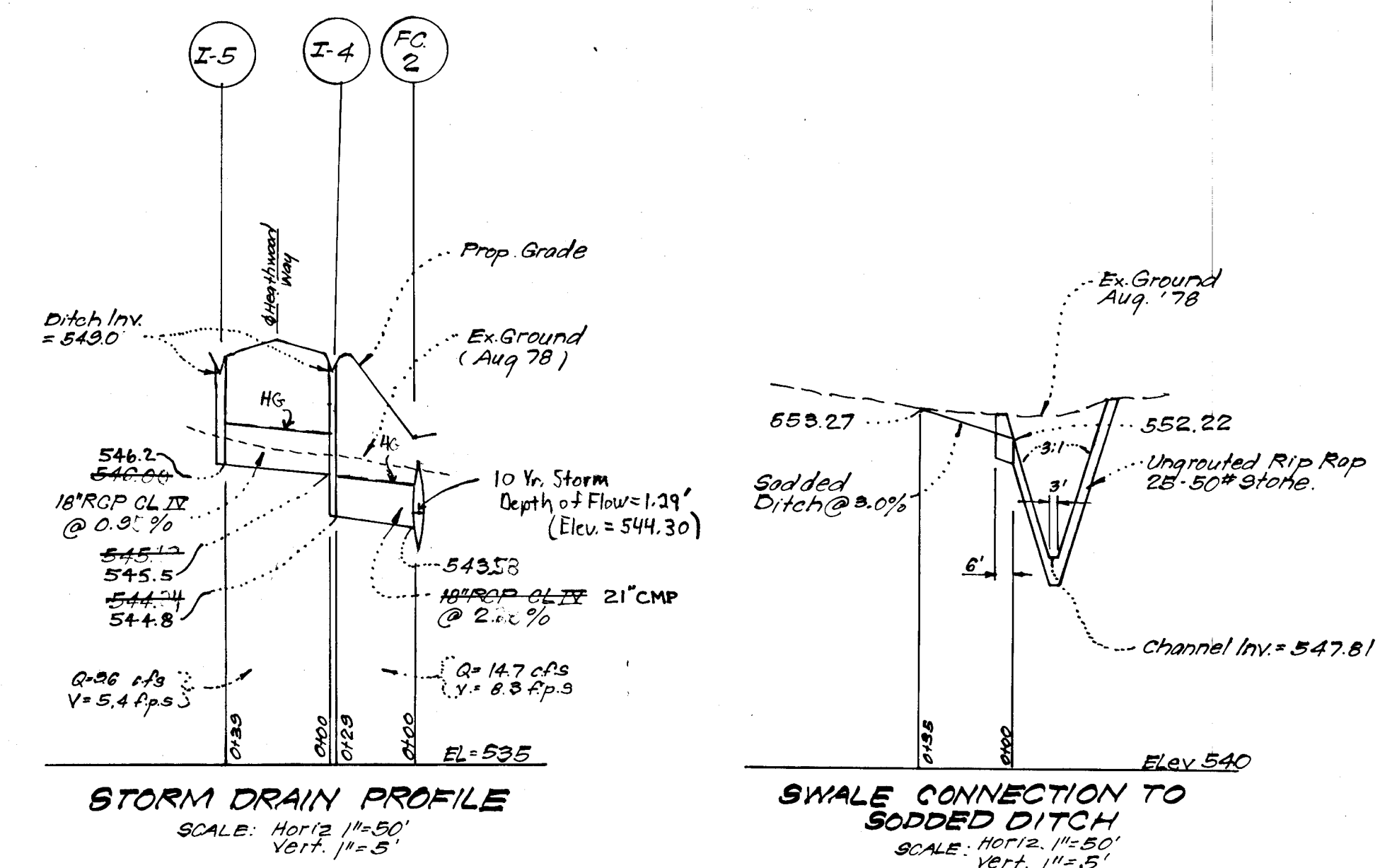
DESIGNED D.A.B. J.L.S.	ROAD CONSTRUCTION PLANS HEATHERWOOD WAY A RESUBDIVISION OF LOT 5 (WILSON PROPERTY)	SCALE As Shown
DRAWN K.L.W.	<b>HEATHERWOOD</b> SECTION 1 AREA 1 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 2 of 5
CHECKED D.A.B.		FILE NO. 1248-D
DATE Aug, 1978	FOR: EDWARD KASEMEYER % CLARK ASSOC. 905 Baltimore National Pike Ellicott City, Maryland 21043	



#722



- GENERAL SODDING NOTES**
1. Apply 10-10-10 Fertilizer @ 1000 # per acre (25 #/1000 #)
  2. Apply Ground Agricultural Limestone @ 2000 #/acre (50 #/1000 #)
  3. Incorporate both Lime & Fertilizer into soil by discing (firm up after incorporation).
  4. Lay sod to a tight fit. Roll to insure contact with underlying soil.
- Water as necessary for 1st two weeks (in summer to ensure establishment).



**STRUCTURE SCHEDULE**

NO	TYPE	IN	OUT	TOP ELEV.	REMARKS	LOCATION
** 9-1	C-Endwall	-	-	542.25	Ho. Co. Std. Fig. 5.21	Sta. 14+35.48 S. Lt.
FC-2	Field Conn.	-	-	543.58	Ho. Co. Std. Fig. 3.23	Sta. 13+86.41 O. Rt.
** 9-2	C-Endwall	543.08	-	543.01	Ho. Co. Std. Fig. 5.21	Sta. 13+86.51 O. Rt.
** 9-3	K-Inlet	545.65	544.54	549.01	Ho. Co. Std. Fig. 4.12 & 4.13	Sta. 13+50.21 L. Rt.
** 9-4	K-Inlet	-	-	546.00	Ho. Co. Std. Fig. 4.12 & 4.13	Sta. 13+83.40 L. Rt.
** 9-5	C-Endwall	549.46	-	549.46	Ho. Co. Std. Fig. 5.21 D=30"	Sta. 13+83.40 L. Rt.
** 9-6	C-Endwall	551.05	550.39	551.05	Ho. Co. Std. Fig. 4.12 & 4.13	Sta. 13+40.21 L. Lt.
** 9-7	K-Inlet	551.05	551.40	551.40	Ho. Co. Std. Fig. 4.11	Sta. 13+40.21 L. Lt.
** 9-8	P-Inlet	552.87	552.87	552.87	Ho. Co. Std. Fig. 4.11	Sta. 14+75.54 L. Lt.
** 9-9	P-Inlet	-	-	556.54	Ho. Co. Std. Fig. 4.11	Sta. 14+75.54 L. Lt.

\*\* Inv. of Slot, Provide slips in all sides of Str. I-9 and in N.E. & S. Sides of Str. I-8  
\*\* Increase 'L' Dimensions by 12" to allow for Twin Pipes at Str. 9-1 & 9-3 only. Increase 'H' Dimension by 12" to allow for Rip Rap Paving at Str's. 9-1, 9-3 & 9-6.  
\*\* Ditch Invert.  
\* 10' Conc. Valley Gutter on both sides.  
\* 10' Conc. Valley Gutter on North side.

**PIPE SCHEDULE**

SIZE	TYPE	LENGTH
24"	RCP CL III	179 LF
27"	RCP CL III	18 LF
30"	RCP CL III	76 LF
18"	RCP CL IV	68 LF
53"x41"	B.C.C.M.P. (6 page)	228 LF

\* 3"x1" Corrugations

Reviewed for.....Howard.....S.C.D. Name and meets Technical Requirements  
C. Wayne Key, 12/21/78 Signature Date  
U.S. Soil Conservation Service

**DEVELOPER'S CERTIFICATE**  
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Robert Ziehm, 12/21/78, Edward J. Lange, 12/18/78  
Approved Date Signature Date  
Edward Kasemeyer

APPROVED: DEPARTMENT OF PUBLIC WORKS  
W.O. Lambert, 1-17-79  
CHIEF, Bureau of Engineering Date  
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
John W. Musselman / P.D., 12-27-78  
CHIEF, Division of Land Development Date

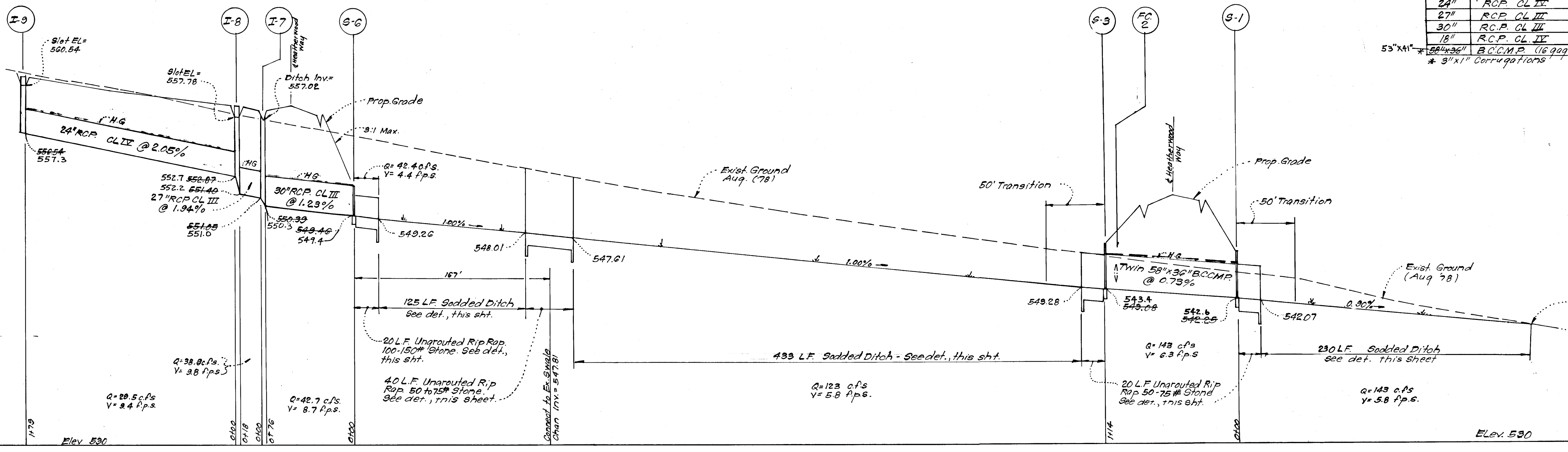
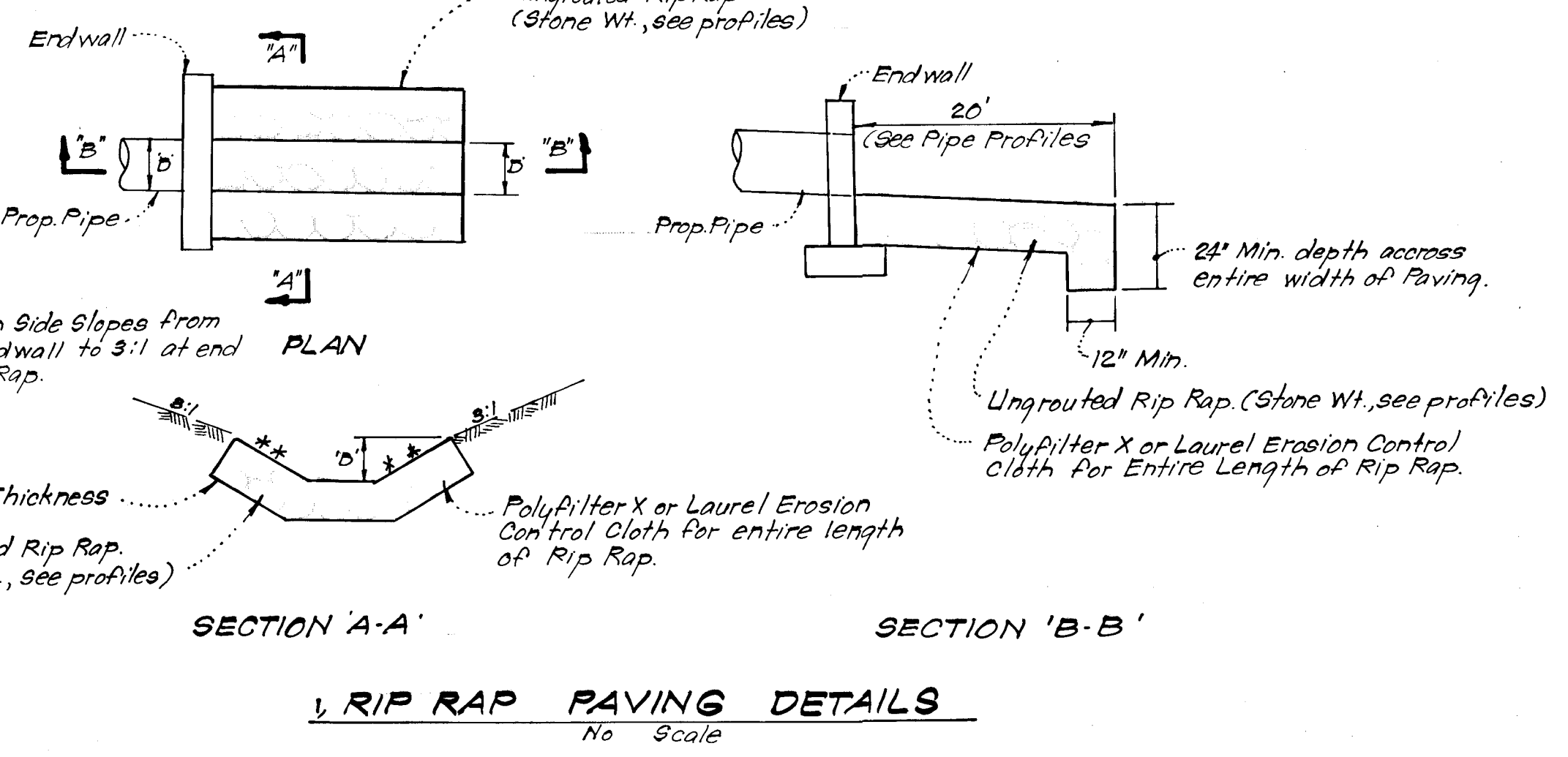
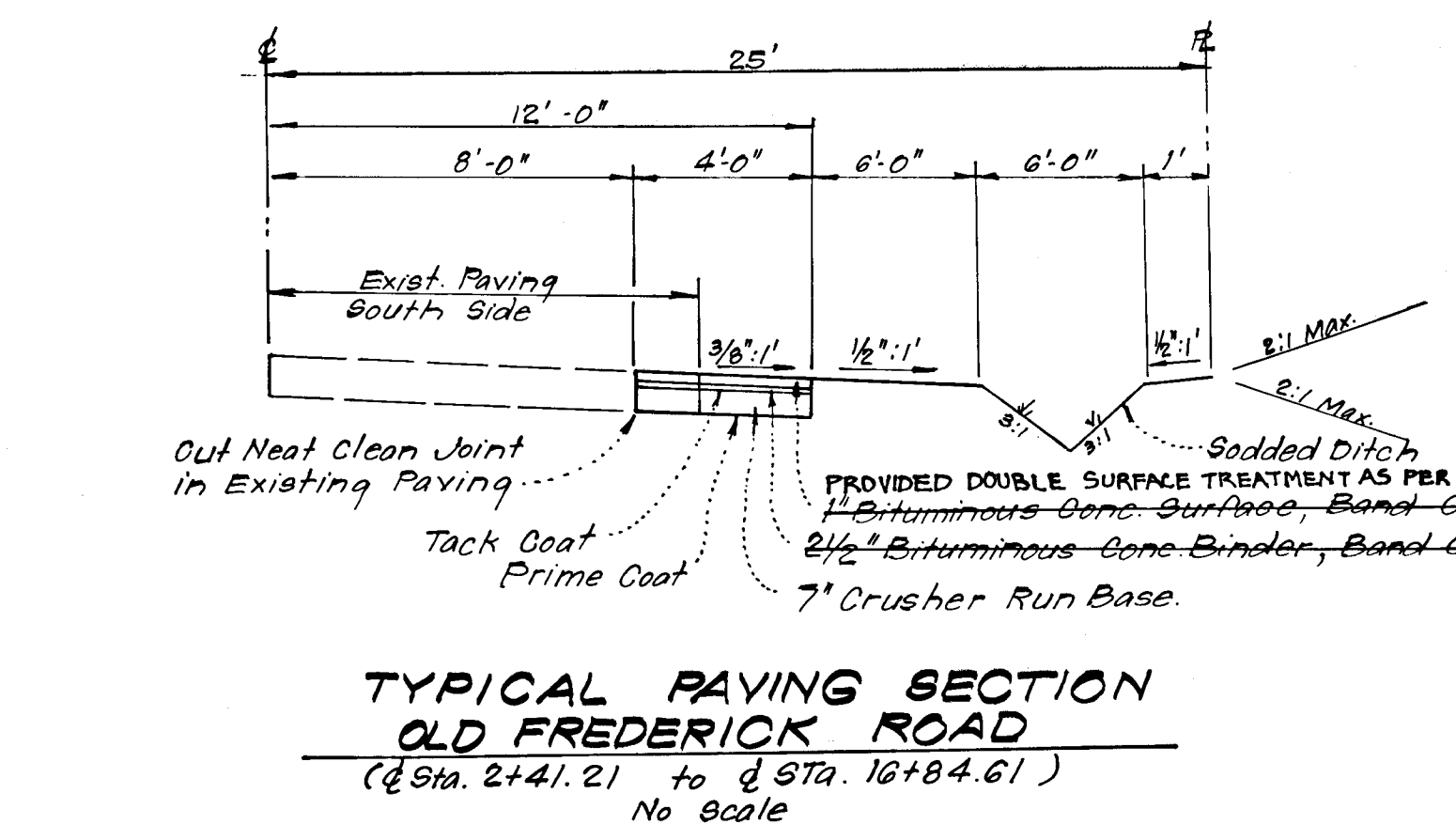
**CLARK • FINEROCK & SACKETT**  
ENGINEERS • PLANNERS • SURVEYORS  
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593 3400

DESIGNED: J.L.S.  
DRAWN: K.L.W.  
CHECKED: J.L.S.  
DATE: Aug, 1978

**ROAD CONSTRUCTION PLANS**  
STORM DRAINAGE AND PAVING DETAILS  
A RESUBDIVISION OF LOT 5 (WILSON PROP.)

**HEATHERWOOD**  
SECTION 1 AREA 1  
3RD ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
FOR: EDWARD KASEMEYER & CLARK ASSOC.  
305 Baltimore National Pike  
Ellicott City, Maryland 21043

SCALE: As Shown  
DRAWING: 3 of 5  
JOB NO.:  
FILE NO.: 1248-D



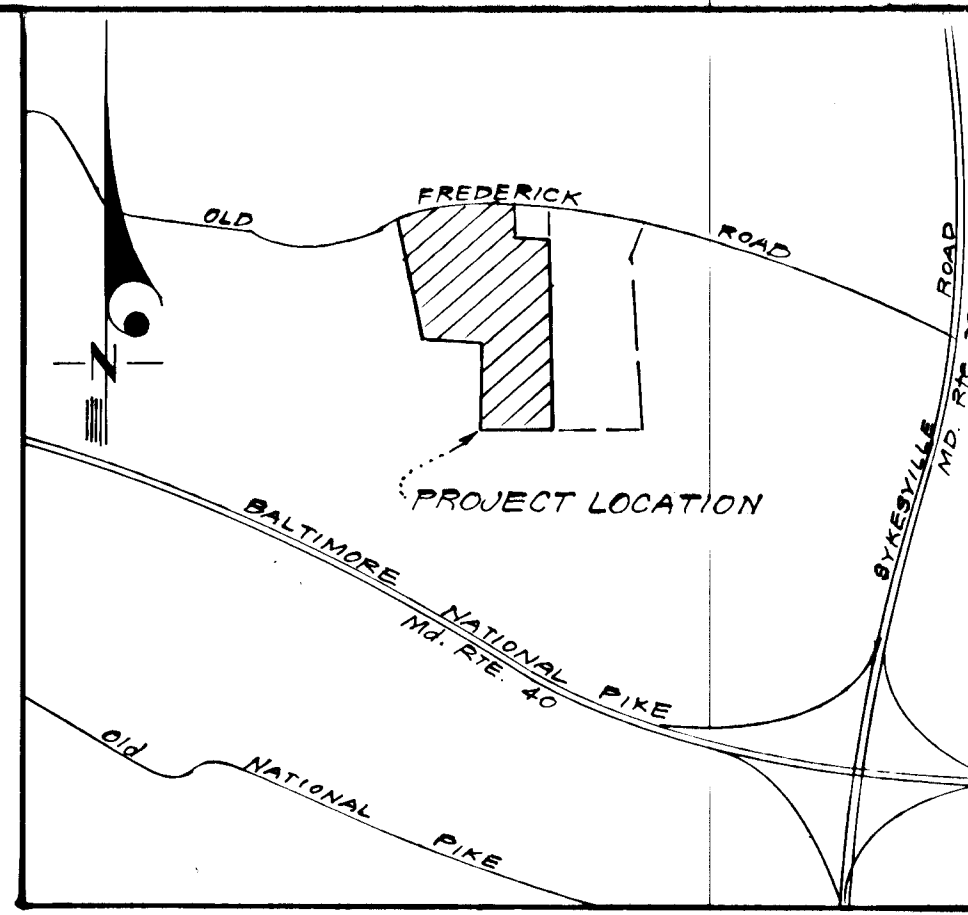
**ENGINEER'S CERTIFICATE**  
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

AS-BUILT SURVEY DATA BY DONALD B. SACKETT MD. L.S. 6059; SIGNED, SEALED & DATED 10/13/81.

g. Nelson Clark, 9-27-78  
G. Nelson Clark Date

STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER

#722



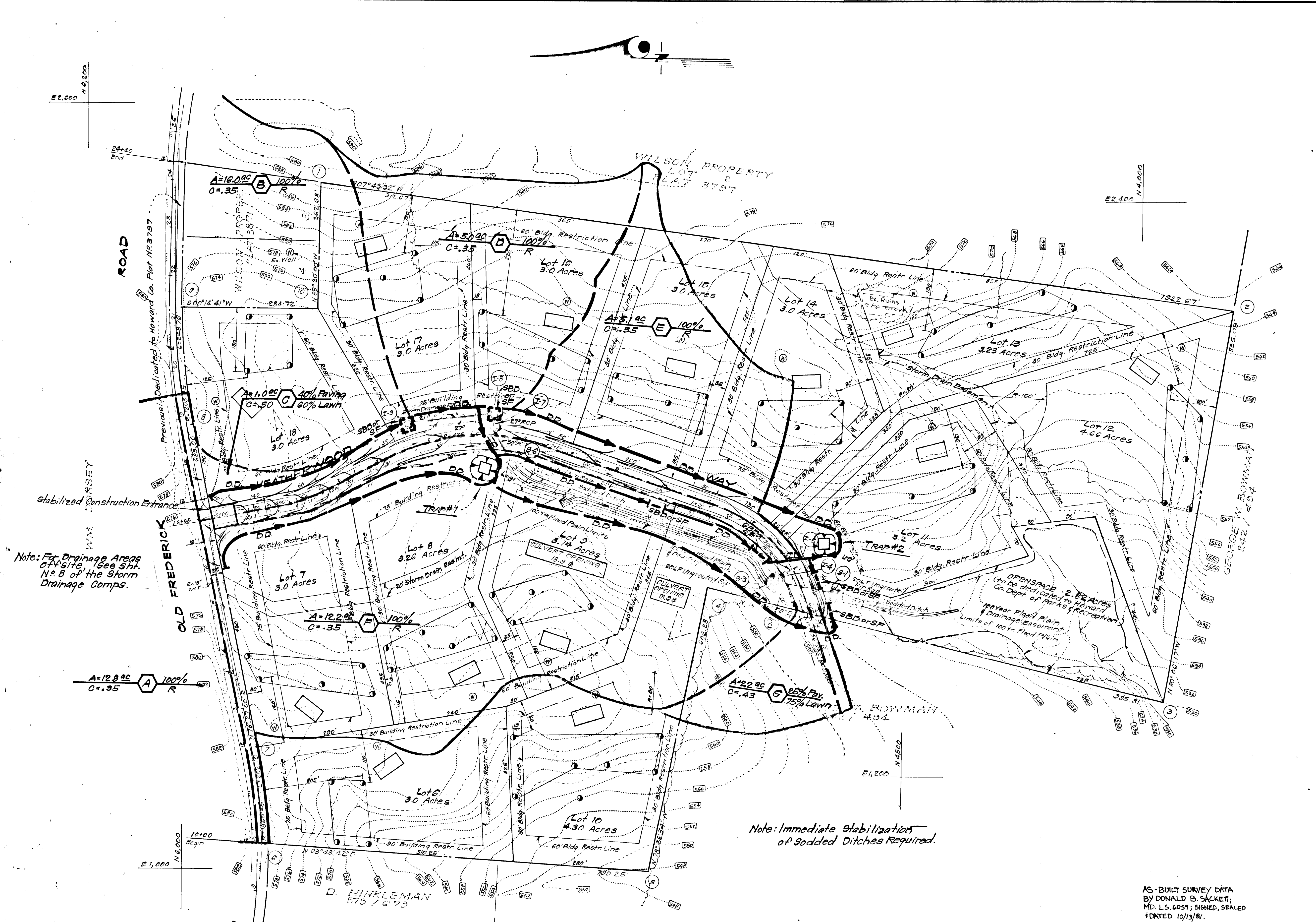
VICINITY MAP  
SCALE: 1"=2000'

LEGEND

1. Contour Interval
2. Effective Absorption Area
3. Existing Contour
4. Approx. Location Prop. Dwelling
5. Approx. Location Prop. Well
6. Percolation Test Hole
7. Prop. Storm Drainage
8. Diversion Dike
9. Straw Bale Dike or Silt Fence
10. Stabilized Construction Entrance
11. Interceptor Dike
12. Sediment Trap

**Sediment Trap No. 1 (S.O.S. L=9')**  
 Drainage Area = 1.5 Acres  
 Storage Required = 1.5 x 1800 = 2700 c.f.  
 Storage Provided = 2700 c.f.  
 Bottom Elev. = 353.00  
 Top of Stone Crest = 357.00  
 Bottom Dimensions = 24' x 24'

**Sediment Trap No. 2 (S.O.S. L=9')**  
 Drainage Area = 1.5 Acres  
 Storage Required = 1.5 x 1800 = 2700 c.f.  
 Storage Provided = 2700 c.f.  
 Bottom Elev. = 545.00  
 Top of Stone Crest = 549.00  
 Bottom Dimensions = 24' x 24'



Note: For Drainage Areas Offsite, See Sht. No. 8 of the Storm Drainage Comps.

Note: Immediate Stabilization of Sodded Ditches Required.

Reviewed for..... Howard..... S.C.D.  
 Name  
 and meets Technical Requirements  
C. Wayne Ray 12/21/78  
 Signature Date  
 U.S. Soil Conservation Service

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

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APPROVED: DEPARTMENT OF PUBLIC WORKS

W.O. Lallier 1-17-79  
 Chief, Bureau of Engineering Date

APPROVED: HOWARD CO. OFFICE OF PLANNING & ZONING  
John W. Manselmann / JFD 12-27-78  
 Chief, Division of Land Development Date

**CLARK • FINEFROCK & SACKETT**  
 ENGINEERS • PLANNERS • SURVEYORS  
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400

DESIGNED J.L.S.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN & DRAINAGE AREA MAP A RESUBDIVISION OF LOT 5 (WILSON PROPERTY)	SCALE 1"=100'
DRAWN K.I.W.	<b>HEATHER WOOD</b>	DRAWING 4 of 5
CHECKED D.A.B.	SECTION 1 AREA 1 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO.
DATE Aug. 1978	FOR: EDWARD KASMEYER 90 CLARK ASSOC. 3051 Balt. Nat. Pike Ellicott City, Maryland 21043	FILE NO. 1248-D



Robert Ziehm 12/21/78  
 Approved Date

Edward J. Kasmeier 12/18/78  
 Signature Date  
 Edward Kasmeier

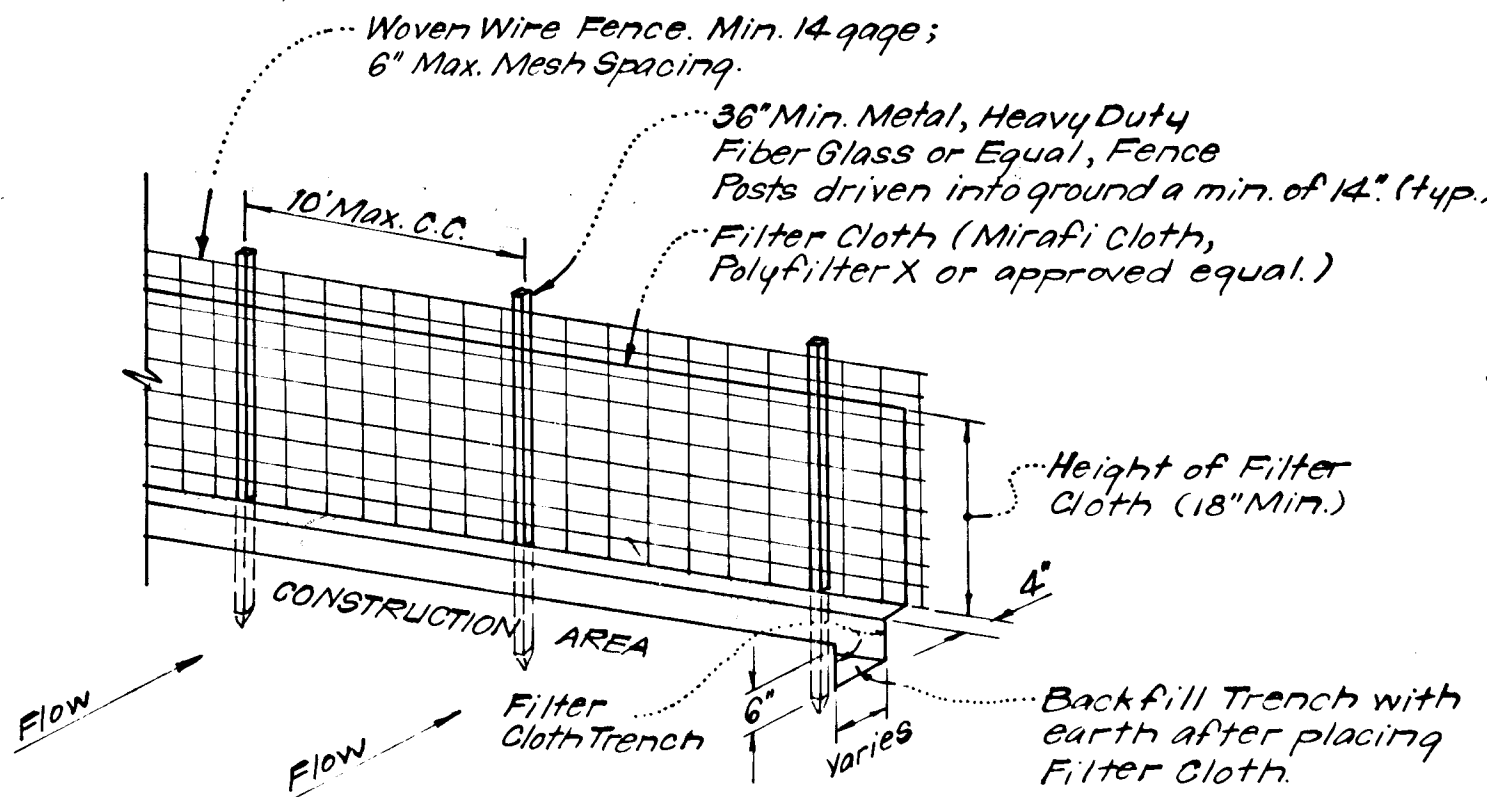
g. Nelson Clark 2-27-78  
 g. Nelson Clark Date

#722

**GENERAL NOTES**

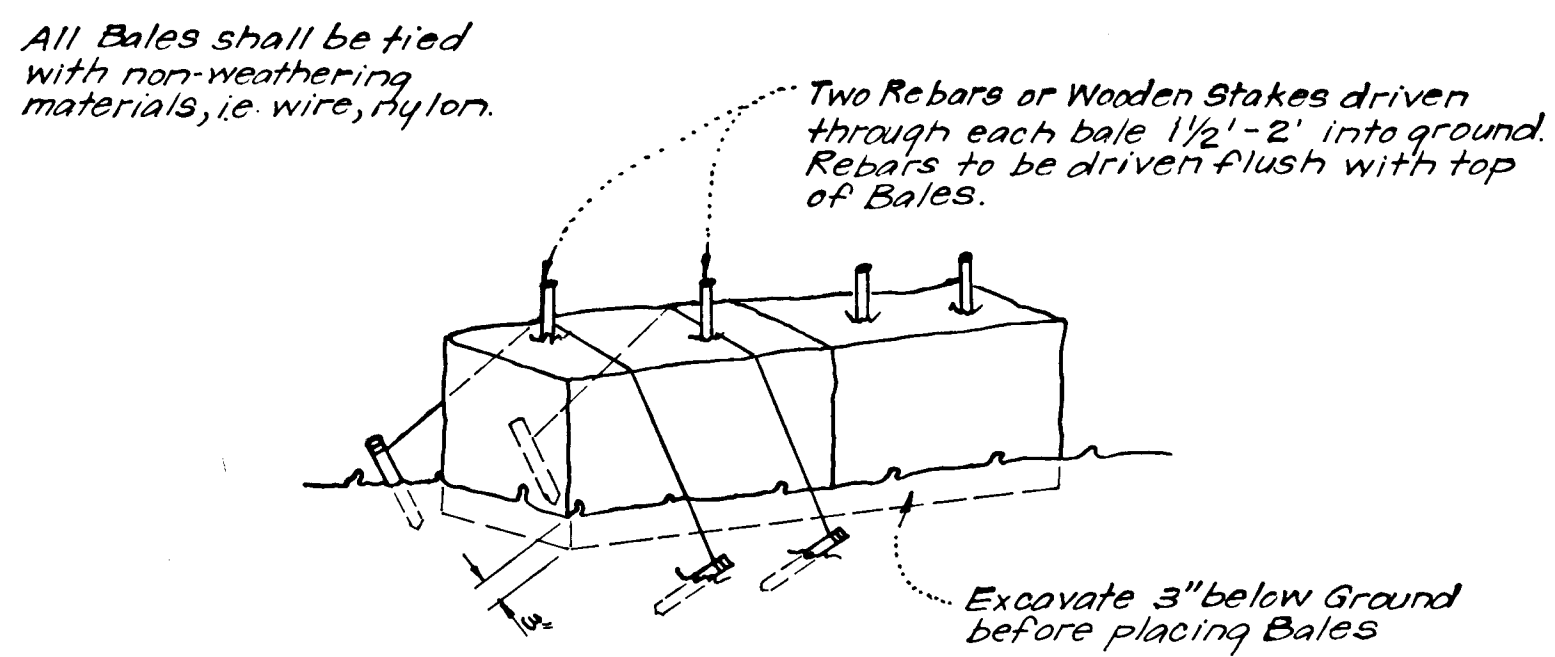
- Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
- All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See Note # 6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 sq. ft.
- Notify the Bureau of Inspections and Permits at least 24 hours before starting any work.
- All Sediment Control Practices to conform to the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" and shall be adjusted to meet actual field conditions.
- Stabilization of Disturbed Ground to be done as soon after construction as possible.
- All Grading shall be treated in accordance with the following Specifications:
  - Seed - certified 85% germination applied at the rate of 3 lbs/1000 sq. ft. mixture - 40% Kentucky Blue, 20% Chewing Fescue, 20% Kentucky 31, and 20% annual rye.
  - Fertilizer - 10-10-10 applied at the rate of 23 lbs/1000 sq. ft. Ground Agricultural Lime or Dolomitic Lime applied at the rate of 46 lbs/1000 sq. ft.
  - Mulch - Weed free straw applied at the rate of 70 lbs/1000 sq. ft. Mulch shall be secured to the ground by any approved method i.e. asphalt tacks, chemical binder, wood chips, etc.
- All Structural Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Bureau of Inspections and Permits.
- On Site Inspection and Maintenance of all Sediment Control Measures including clean out of sediment traps and dikes, and proper establishment of all planned vegetative measures will be the responsibility of the Developer or his representative on the site, on a continuing day to day basis.
- Protection of stabilized area from sediment runoff shall be provided by the use of an approved Sediment Control Device, i.e. straw bale, diversion dike, etc.
- The Contractor shall keep all public roads free of sediment deposits 12 ft from traffic leaving the construction site.
- Upstream ends of all storm drain pipes shall be blocked at the end of each working day. See detail, this sheet.
- SITE ANALYSIS:
  - Total Area: 48.200 Acres
  - Area to be Paved: 0.805 Acres
  - Area to be Seeded: 2.717 Acres
  - Area Undisturbed: 44.768 Acres
- A complete site grading plan must be developed and approved before buildings permits can be issued.
- CONSTRUCTION SEQUENCE:
  - Install Sediment & Erosion Control.
  - Grade Streets as necessary to properly install storm drainage. Install Storm Drainage and block with S.B.D.'s or S.F.'s.
  - Construct Paving.
  - Stabilize all Areas in accordance with general note #6.
  - Sediment Control Devices to be removed only after areas draining to these devices have been stabilized.

AS-BUILT SURVEY DATA  
BY DONALD B. SACKETT  
MD. L.S. 6057; SIGNED  
SEALED & DATED 10/13/81.



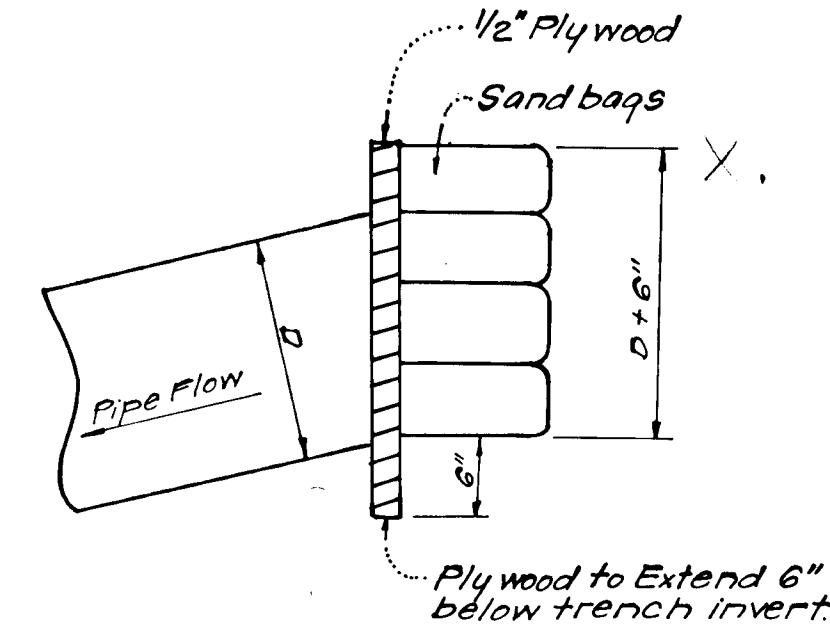
- NOTES:**
- Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
  - Filter Cloth to be fastened securely to woven wire fence by use of wire ties spaced every 24" x 24".

**SILT FENCE DETAIL (S.F.)**  
NO SCALE

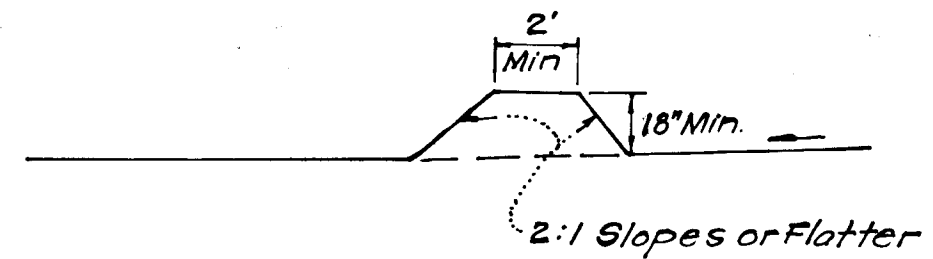


- NOTE:**
- In lieu of the use of rebar each Straw Bale may be fastened to ground with pegs (4 per bale and wire or nylon as shown above).

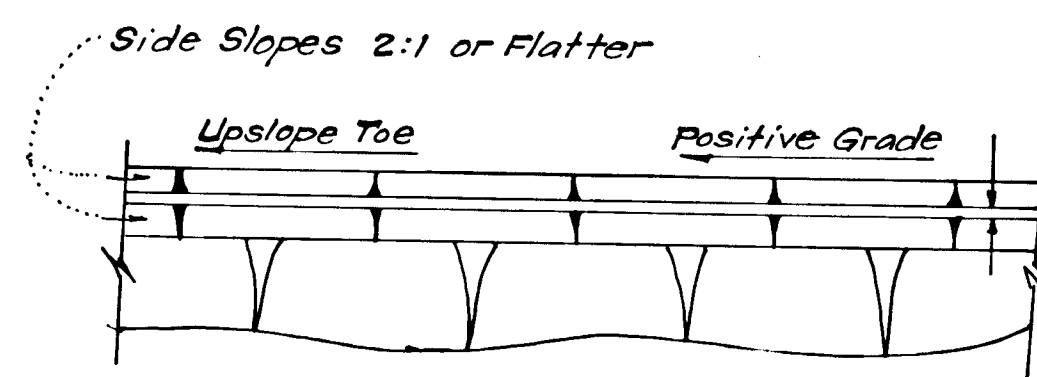
**TYPICAL STRAW BALE DETAIL (S.B.D.)**  
NO SCALE



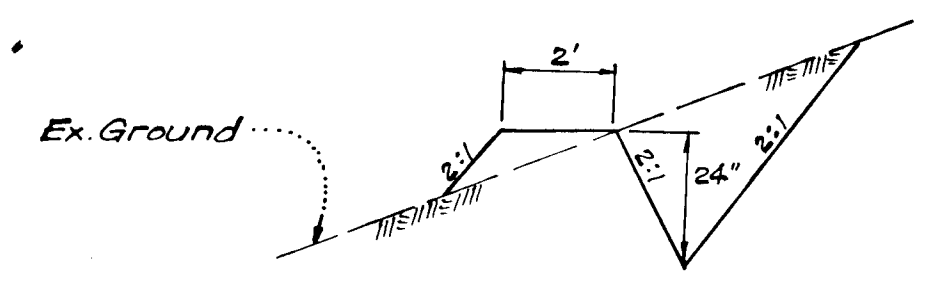
**PIPE BLOCKING DETAIL**  
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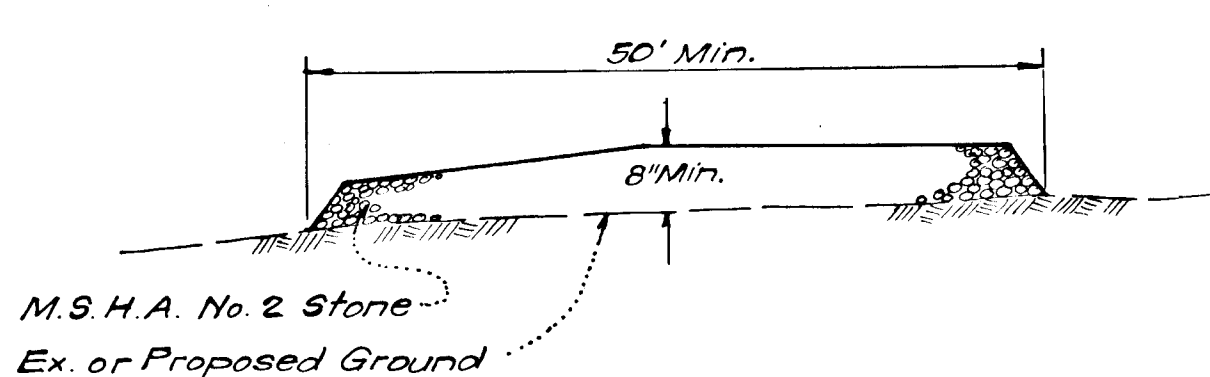
**CROSS SECTION**  
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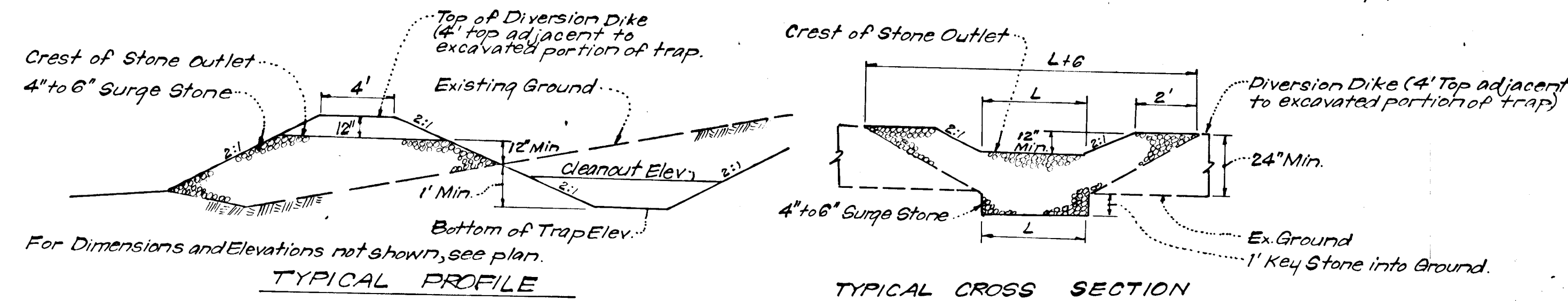
**PLAN VIEW**  
**DIVERSION DIKE (D.D.)**  
NO SCALE



**CUT DIVERSION DIKE**  
NO SCALE



**SECTION VIEW**  
**STABILIZED CONSTRUCTION ENTRANCE**  
NO SCALE



**TYPICAL PROFILE**  
**TYPICAL CROSS SECTION**  
**DETAILS OF STONE FILTER OUTLET**  
**(FOR STONE OUTLET SEDIMENT TRAP)**  
NO SCALE

- STONE FILTER OUTLET NOTES:**
- Sediment Trap to be cleaned out when sediment reaches a level of 1 ft. below the Crest of Stone Outlet.
  - Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
  - Stone Outlet to be constructed through diversion dike adjacent to excavated portion of Sediment Trap.

Reviewed for.....Howard.....S.C.D.  
Name  
and meets Technical Requirements  
*C. Wagner*..... 12/21/78  
Signature Date  
U.S. Soil Conservation Service

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*Robert Zehner*..... 12/21/78  
Signature Date

*Edward J. Kasemeyer*..... 12/18/78  
Signature Date  
Edward Kasemeyer

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*E. Nelson Clark*..... 9-27-78  
Signature Date  
E. Nelson Clark



APPROVED: DEPARTMENT OF PUBLIC WORKS  
*W. O. Albert*..... 1-17-79  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY OF PLANNING & ZONING  
*John W. Murselman*..... 12-27-78  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**CLARK • FINEPROCK & SACKETT**  
ENGINEERS • PLANNERS • SURVEYORS  
11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED <i>U.L.S.</i>	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL DETAILS A RESUBDIVISION OF LOT 5 (WILSON PROPERTY)	SCALE AS SHOWN
DRAWN <i>K.I.W.</i>	<b>HEATHERWOOD</b>	DRAWING 5 of 5
CHECKED <i>D.A.B.</i>	SECTION 1 AREA 1 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO.
DATE Aug, 1978	FOR: EDWARD KASEMEYER c/o Clark Assoc. 3051 Balt. Nat. Pike Ellicott City, Md. 21043	FILE NO. 1248-D

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