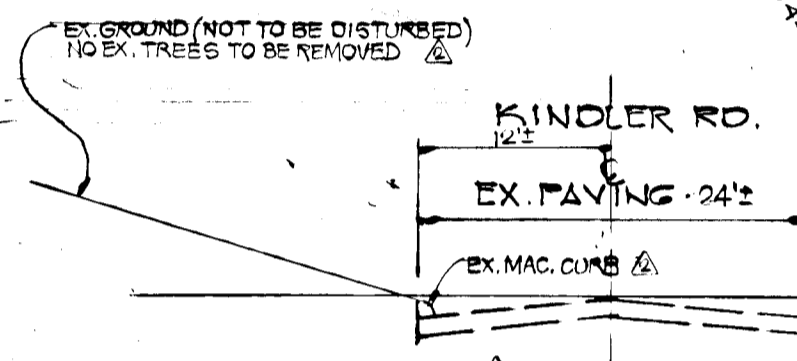
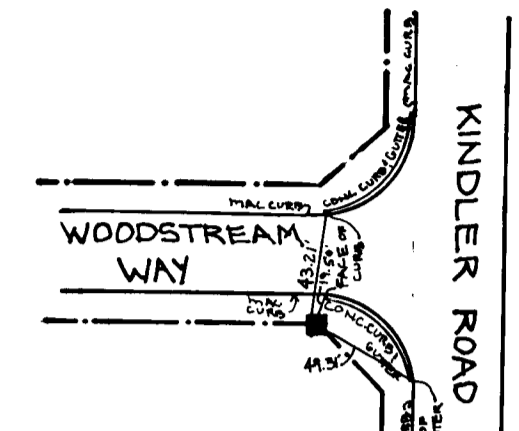


W. Edwin E. Rely **2-27-80**
 CHIEF BUREAU OF ENGINEERING DATE

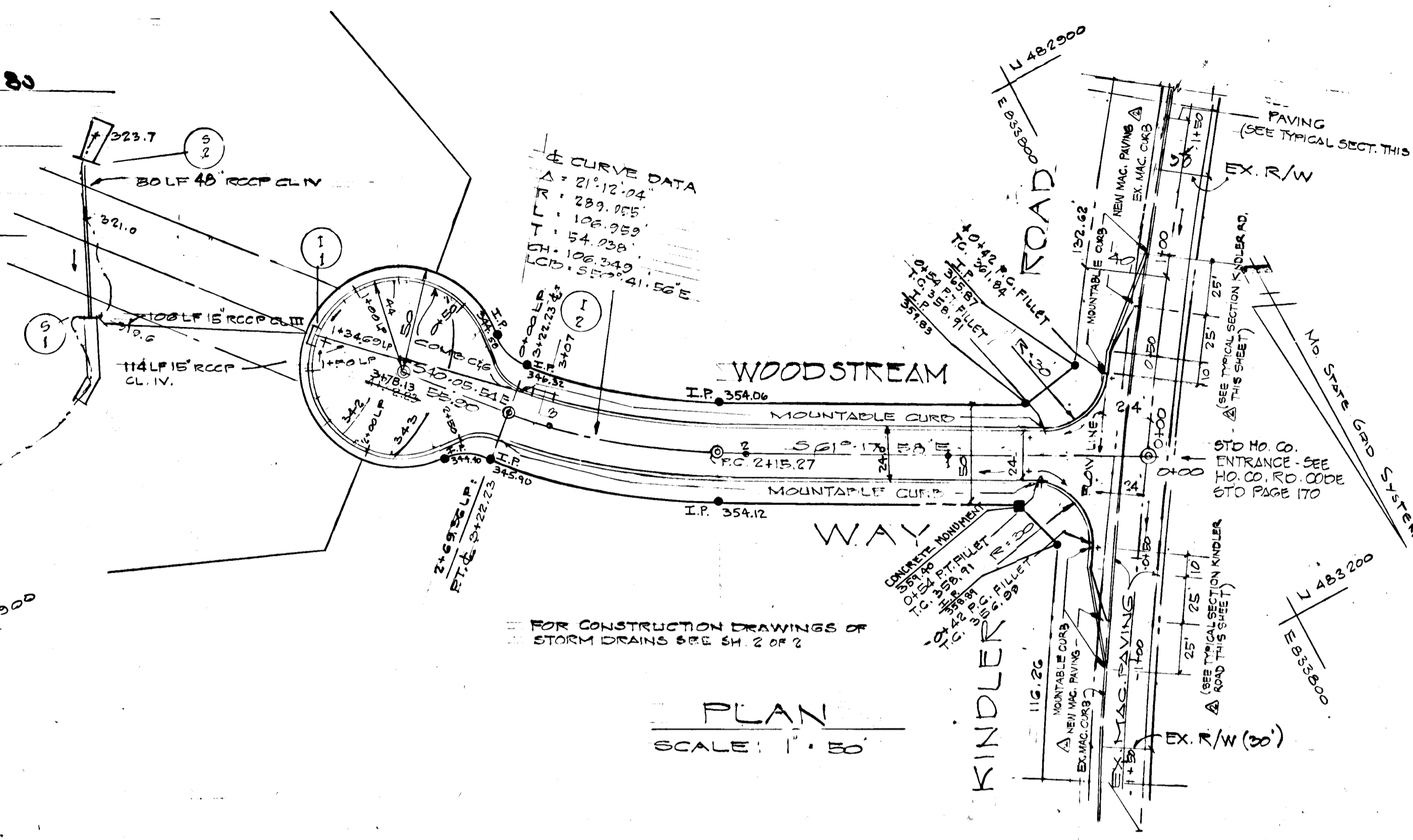
OFFICE OF PLANNING & ZONING
 J. William M... **2-1-80**
 CHIEF DIVISION OF LAND DEVELOPMENT DATE

PLAN	DATE
BY	
DATE	
NO.	

PROFILE	DATE
BY	
DATE	
NO.	



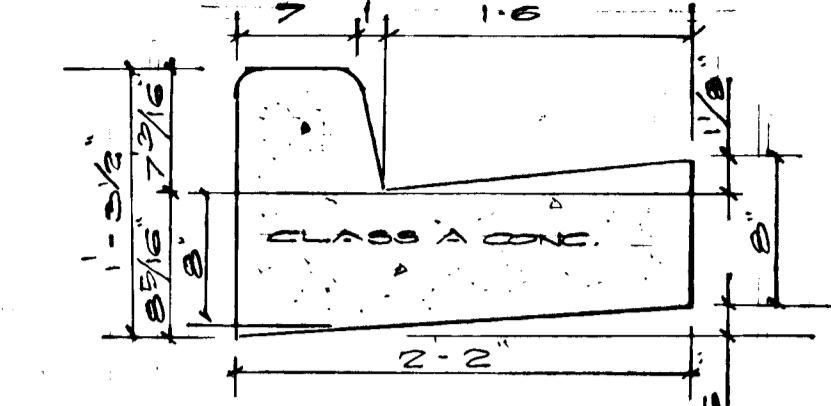
SEE PLAN FOR LOCATION OF NEW MOUNTABLE CURB & PAVING THIS SHEET PROVIDE SMOOTH TRANSITION OF NEW PAVING & MOUNTABLE CURB WITH EX. PAVING & EX. MAC. CURB



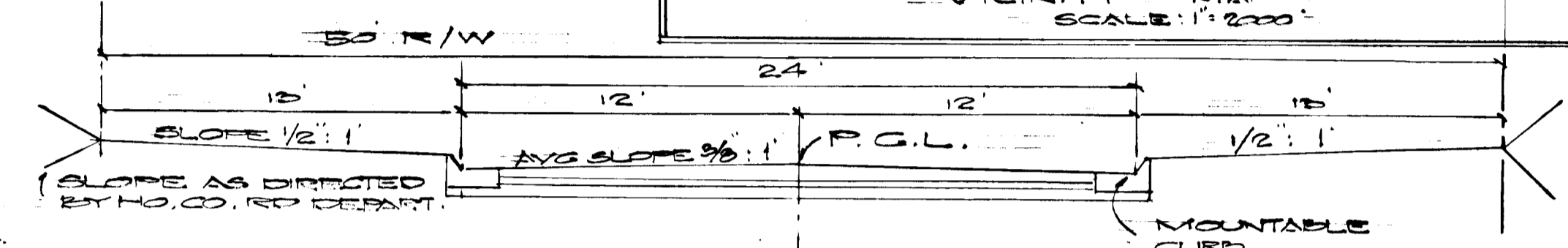
NO.	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
1-1	HO. CO. STD. CL. A-5 INLET	336.20	336.20	341.23	SEE HO. CO. STD. DETAILS DRWS. P-1A PAGE 110-4
1-2	HO. CO. STD. CL. A-5 INLET	342.20	342.20	347.04	SEE HO. CO. STD. DETAILS DRWS. P-1A PAGE 109-1
2-1	STD. TYPE E ENDWALL	322.20	320.00	327.11	SEE HO. CO. STD. DETAILS DRWS. P-1A PAGE 107-1
2-2	STD. TYPE C ENDWALL				

HORIZONTAL CONTROL ESTABLISHED FROM HOWARD COUNTY GEODETIC CONTROL SURVEY STATIONS: NO. 2140002, 4, NO. 2151002.

VERTICAL CONTROL BENCH MARK, P.K. NAIL SET @ INTERSECTION WOODSTREAM WAY & KINDLER ROAD, ELL. 342.17



DRWG. B-40 PAGE 55
 TO BE CONSTRUCTED IN CUL-DA-5-60.
 @ STA. 3+22.23 TO 0+70 L.P. TO STA. 2+69.36 CUL-DA-5-60.



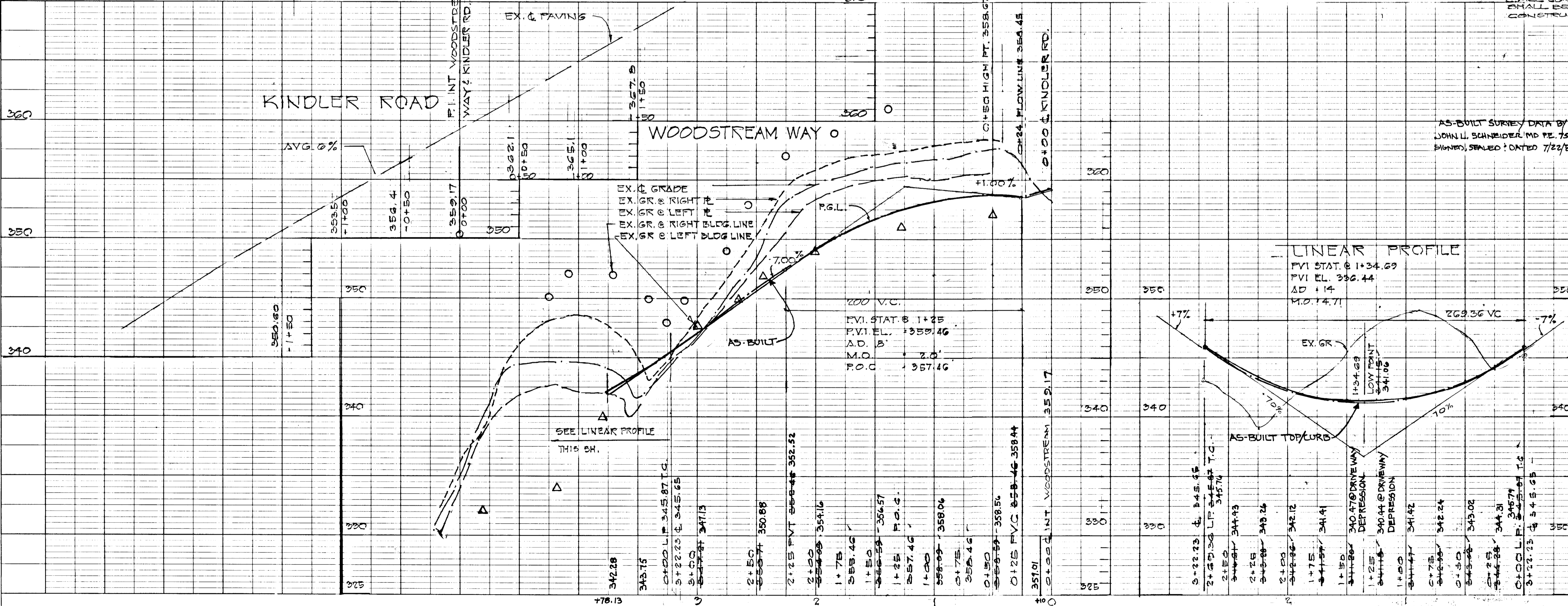
DESIGN SPEED 25 MPH @ STA. 0+24 TO @ STA. 3+22.23
 BITUMINOUS CONCRETE SURFACE 1 1/2" SAND C-8
 BITUMINOUS CONC. BASE 5" GRAVEL MIX

TYPICAL PAVING SECTION NO SCALE

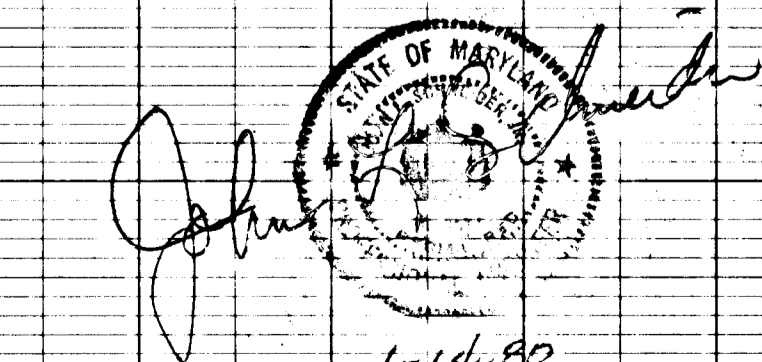
AS-BUILT SURVEY DATA BY JOHN L. SCHNEIDER, MD PE 7519; PLANS, SEALED DATED 7/22/81.
 OWNERS: EDWARD V. & SUSAN R. HANSTROM JR. 8516 PARTMOUTH DRIVE LAUREL, MARYLAND 20811
 LOUIS D. & JOAN B. DEMOSAY 7653 KINDLER ROAD LAUREL, MARYLAND 20810

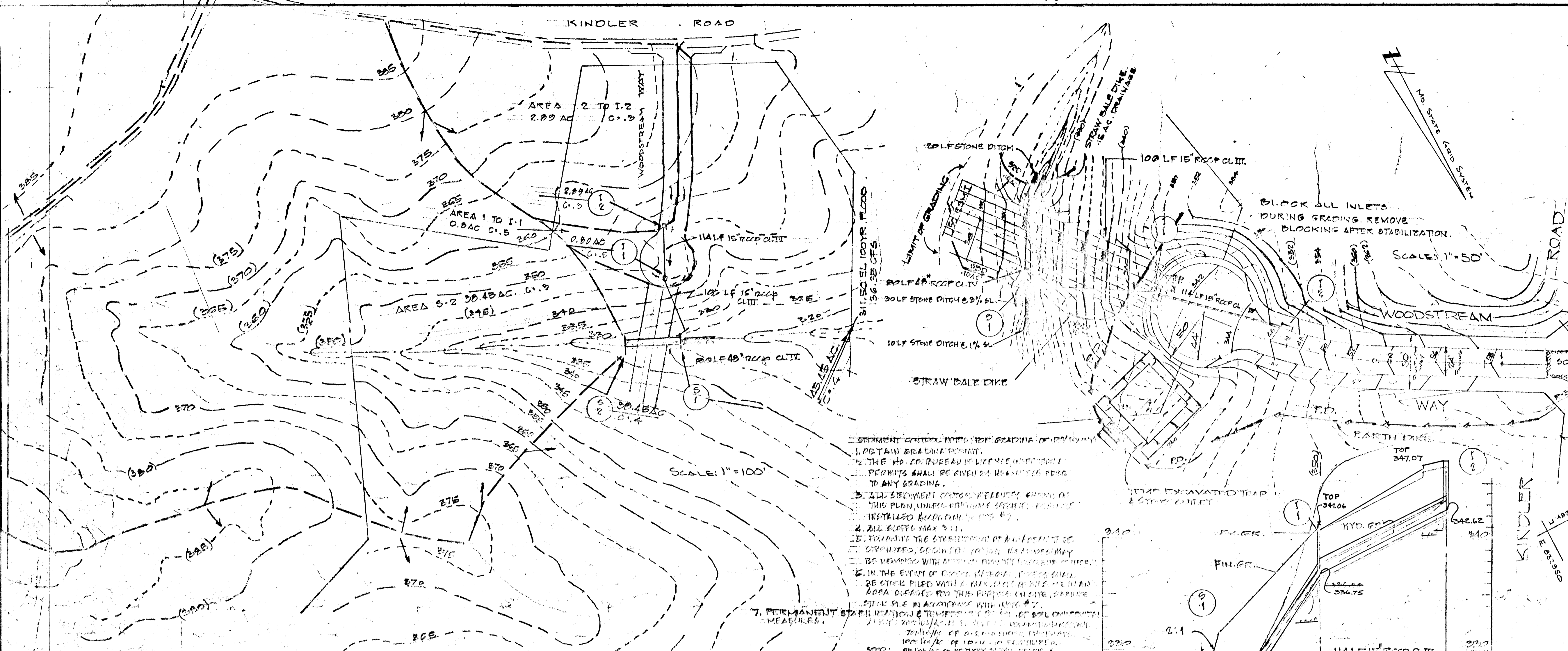
ENGINEERS: JOHN C. MELLEMA, INC. SURVEYORS 3734 MASTAVISH AVE. BALTO. MD. 21223 614-21005

ROAD CONSTRUCTION PLAN & PROFILE WOODSTREAM WAY RESUBDIVISION OF LOTS 1 & 2 KINDLER ESTATES 6TH DISTRICT HO. CO. MD. MARCH 21, 1979
 SCALE: AS SHOWN
 REVISED 5/26/81 - TYPICAL SECTION KINDLER ROAD & PLAN VIEW KINDLER ROAD & WOODSTREAM WAY

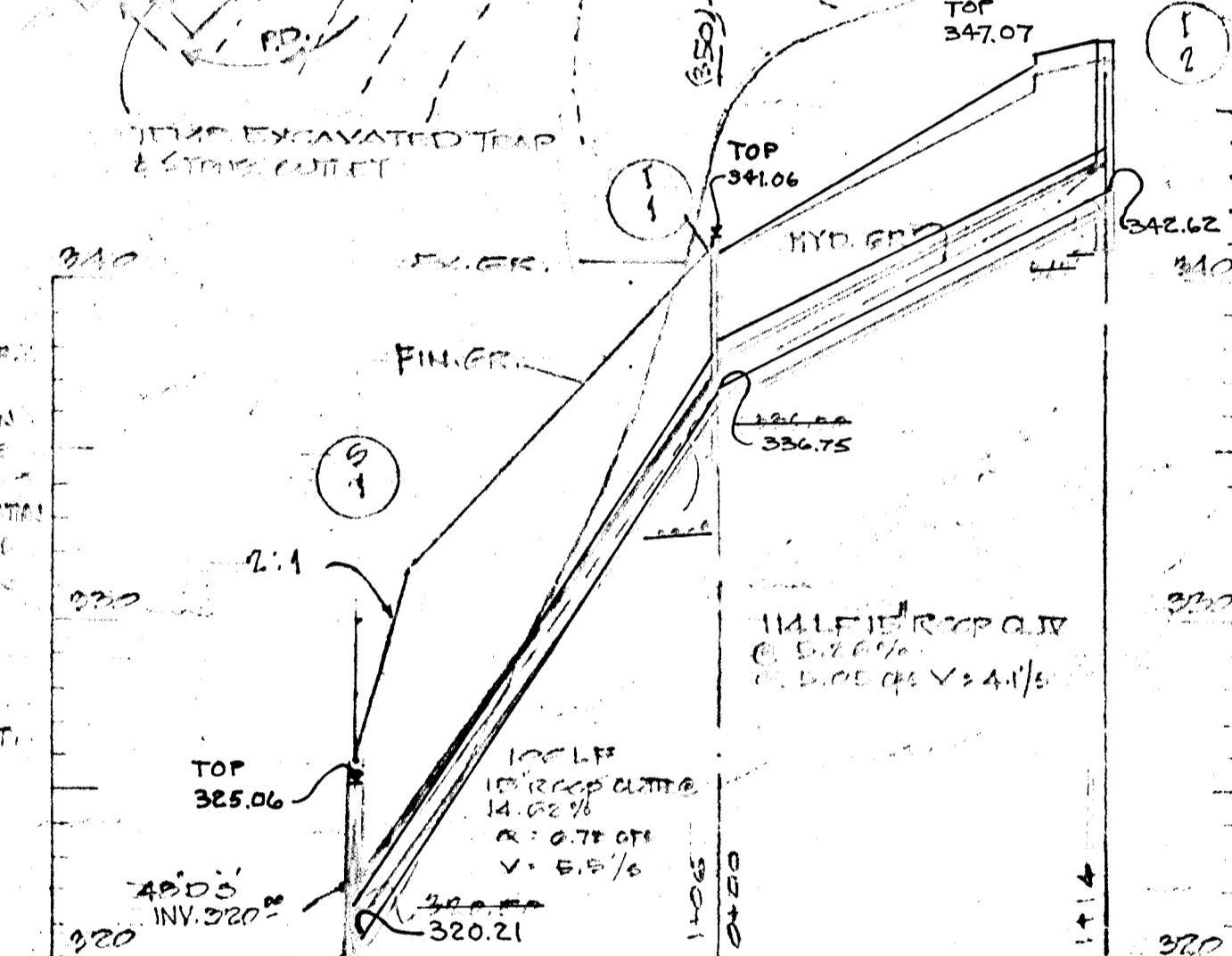
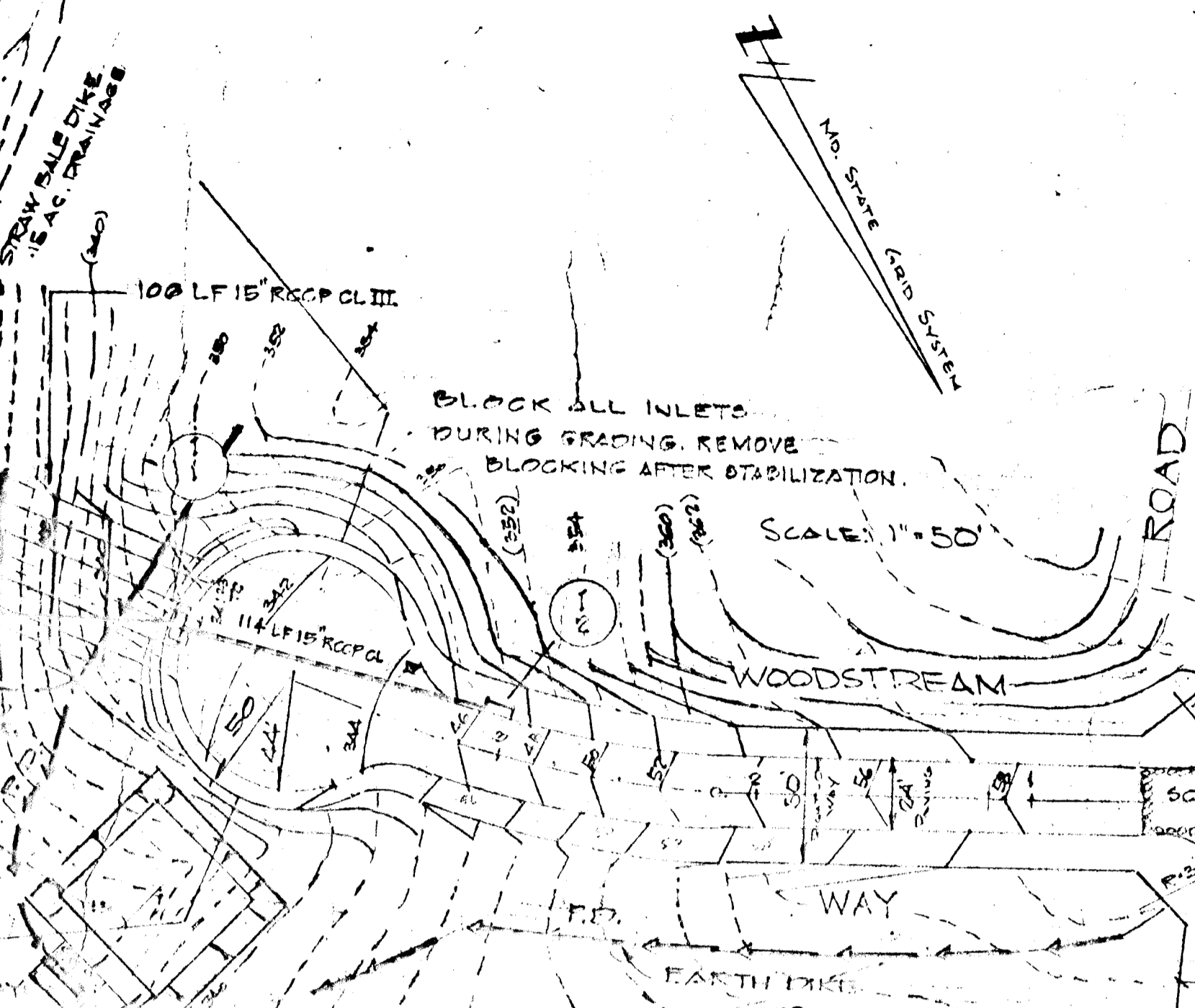


PROFILES SCALE: VERT. 1" = 10'





- PERMANENT CONTROL MEASURES FOR GRADING OR EXCAVATION:
1. OBTAIN GRADING PERMITS.
 2. THE H.D. CO. BUREAU OF ENGINEERING PERMITS SHALL BE OBTAINED PRIOR TO ANY GRADING.
 3. ALL SEDIMENT CONTROL MEASURES SHALL BE INSTALLED ACCORDING TO THE PLAN UNLESS OTHERWISE SPECIFIED.
 4. ALL SLOPES SHALL BE 3:1.
 5. FILLING THE STABILIZATION OF A SLOPE OF 3:1 OR GREATER, SECURED, COVERED, OR OTHERWISE PROTECTED WITH AN EROSION CONTROL MEASURE.
 6. IN THE EVENT OF CONSTRUCTION, ALL EXCAVATED AREAS SHALL BE STOCK PILED WITH A MAXIMUM OF 20% IN AN AREA CLEARED FOR THIS PURPOSE. EXPOSED SOIL SHALL BE COVERED WITH MULCH OR OTHER MEASURES TO PREVENT EROSION.
 7. PERMANENT STABILIZATION MEASURES SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
- NOTE: SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.



ENGINEER'S CERTIFICATION
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORITY PERMITS ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Edmund Harnstrom, Jr.
EDMUND HARNSTROM, JR.
2-18-80
DATE

ENGINEER'S CERTIFICATION I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED UPON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John L. Schneider
JOHN L. SCHNEIDER
2-16-80
DATE

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

APPROVED: Howard S.C.D.
HOWARD S.C.D.
2-22-80
DATE

REVIEWED FOR HOWARD S.C.D. AND METEOROLOGICAL REQUIREMENTS.

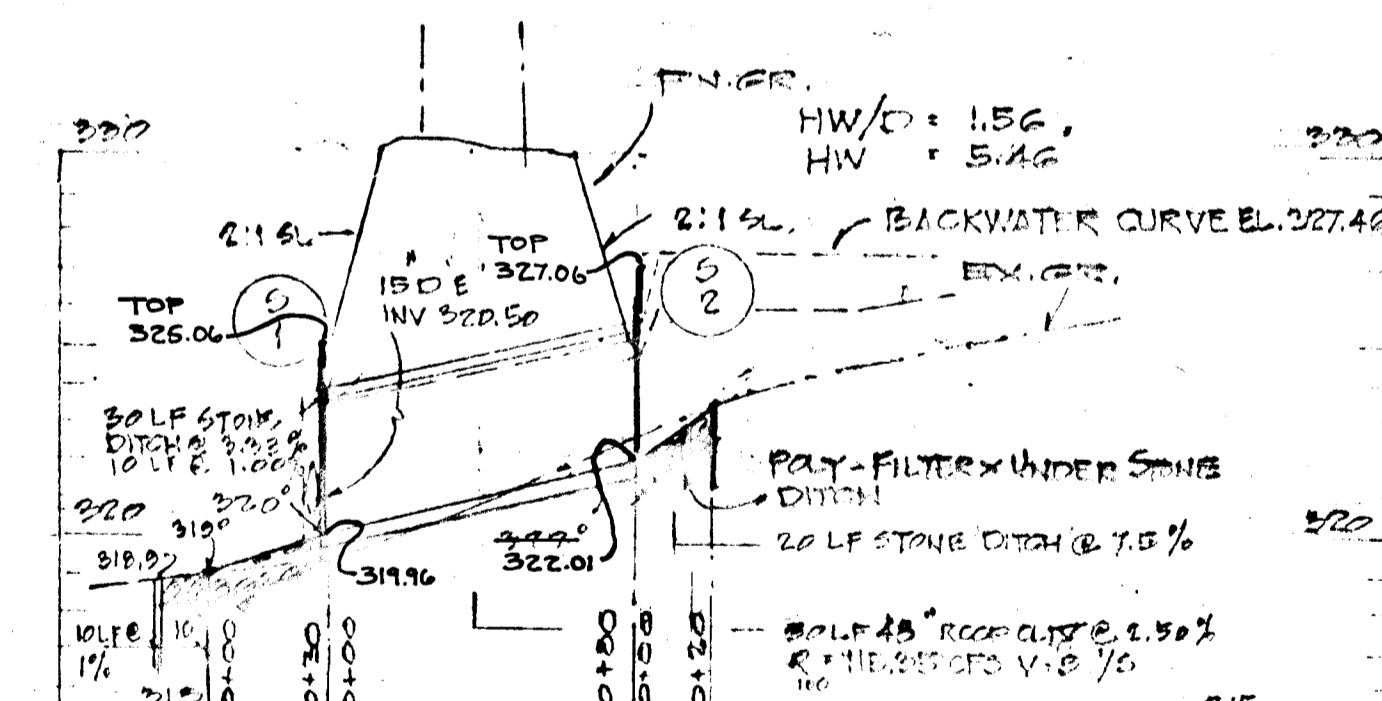
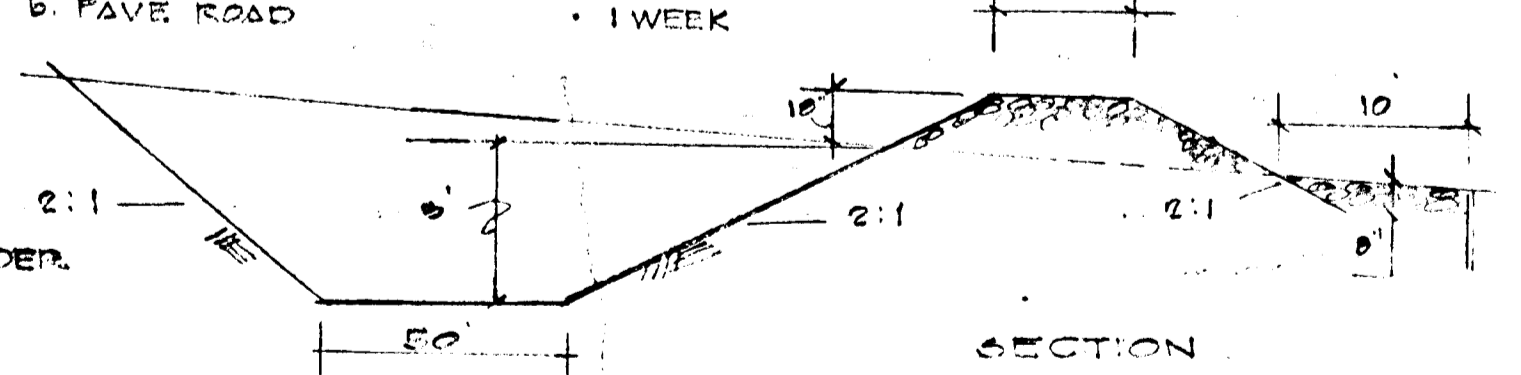
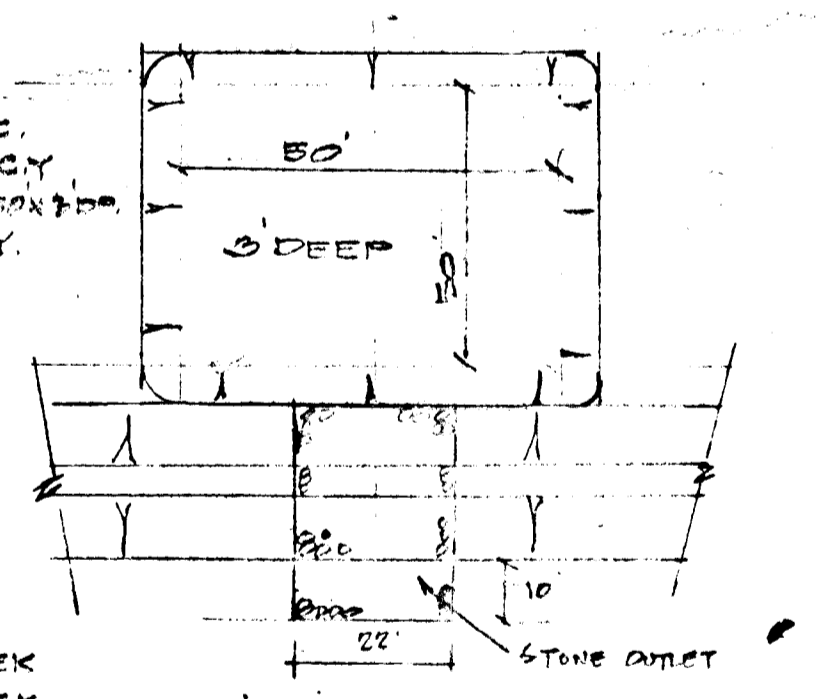
U.S. SOIL CONSERVATION SERVICE
2-22-80
DATE



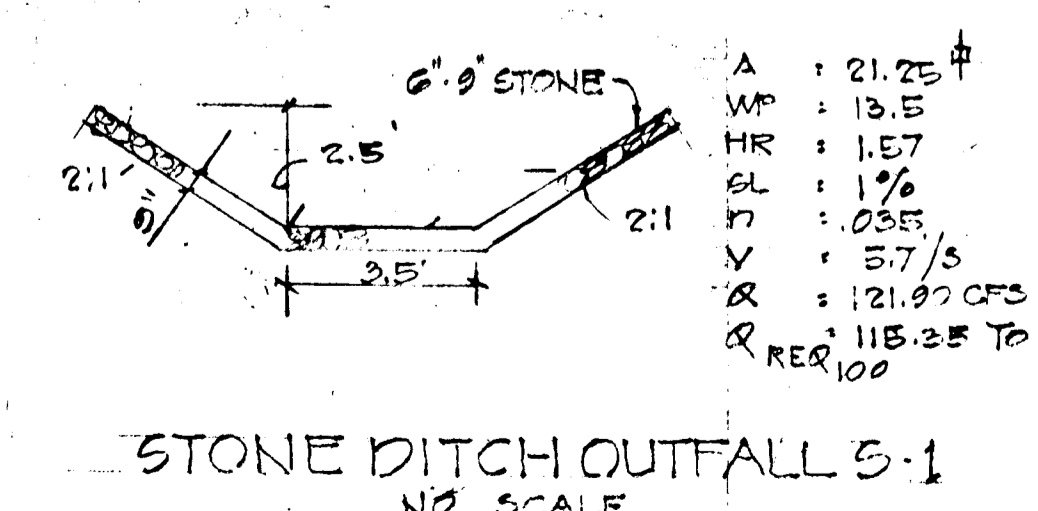
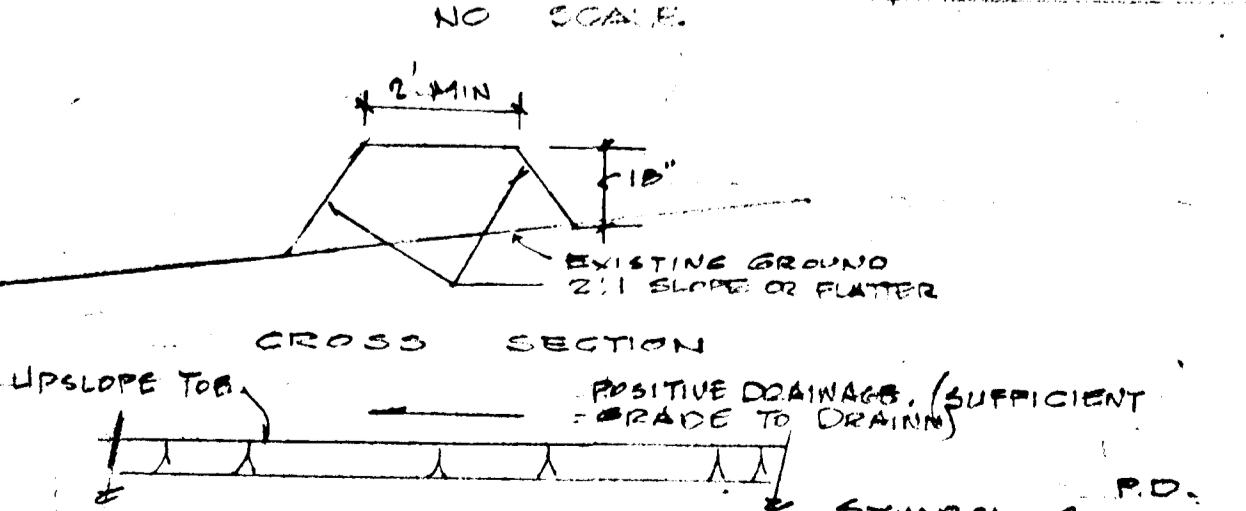
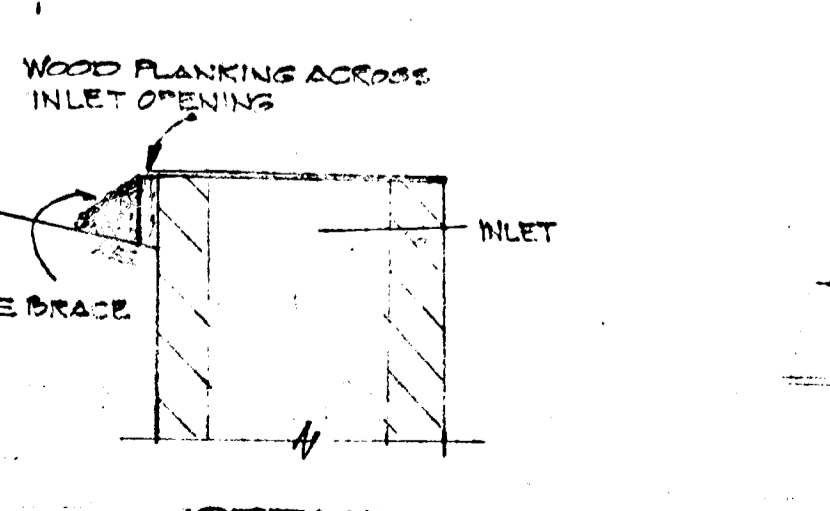
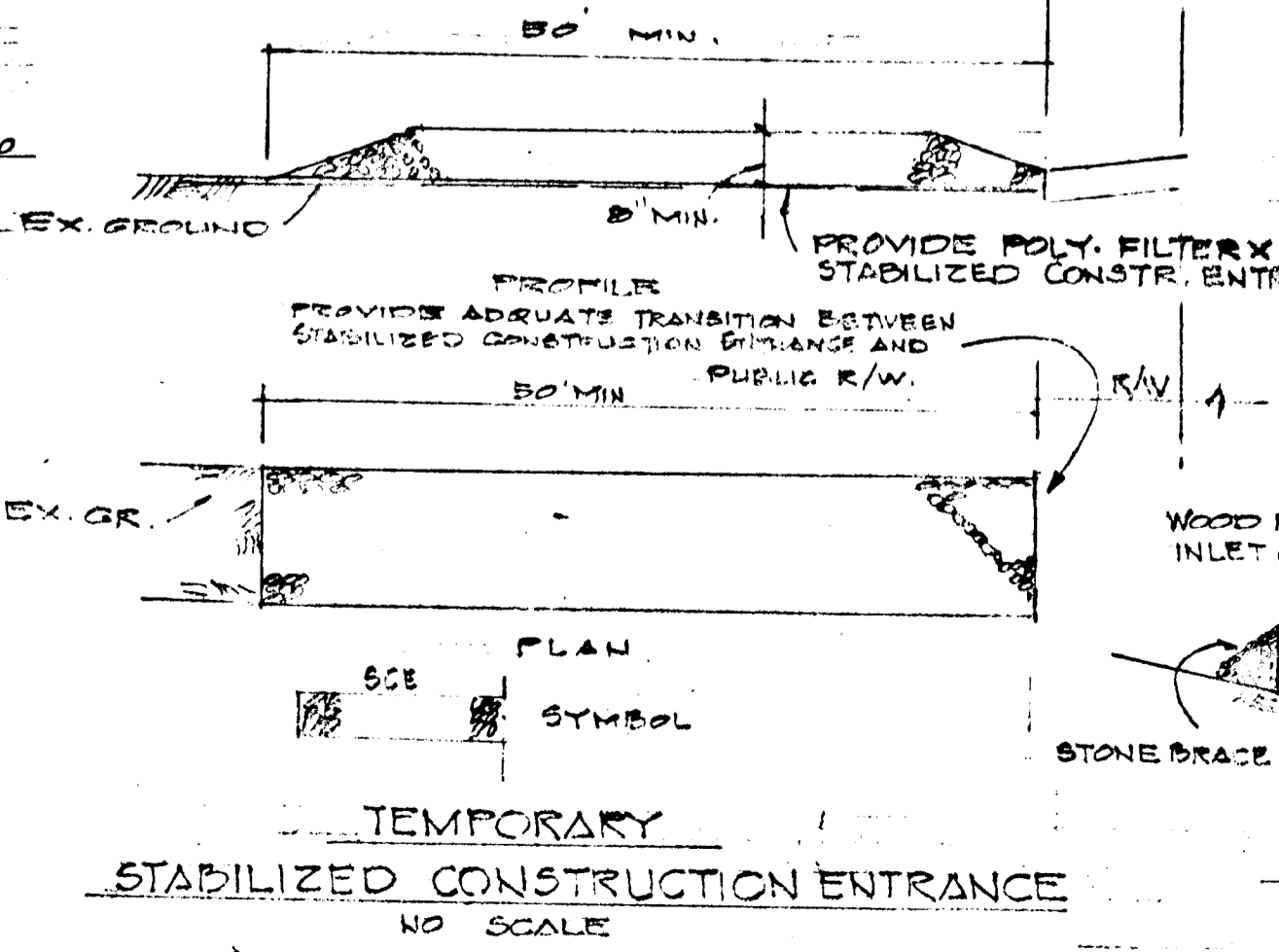
TEMP TRAP DATA
DRAINAGE AREA = 3.69 AC.
VOL. REQUIRED = 247.28 CY
SIZE OF TRAP SHOWN 30' X 10' X 8'
VOL. TRAP SHOWN = 277 CY.

SITE ANALYSIS
AREA OF SITE = 3.69 AC.
DRAINAGE AREA = 3.69 AC.
DISTURBED AREA = 0.89 AC.
CUT = 4000 CY
FILL = 4000 CY

CONSTRUCTION SEQUENCE
1. INSTALL SEDIMENT CONTROL - 1 WEEK
2. GRADE ROAD - 1 WEEK
3. INSTALL STORM DRAINS - 2 WEEKS
4. STABILIZE SITE - 1 WEEK
5. PAVE ROAD - 1 WEEK



PROFILES
SCALE: HOR. 1"=50' VERT. 1"=5'
NOTE: CONTRACTOR TO VERIFY EXISTING GRADES AT 5'-1 & 5'-2 BEFORE CONSTRUCTING AS SHOWN.

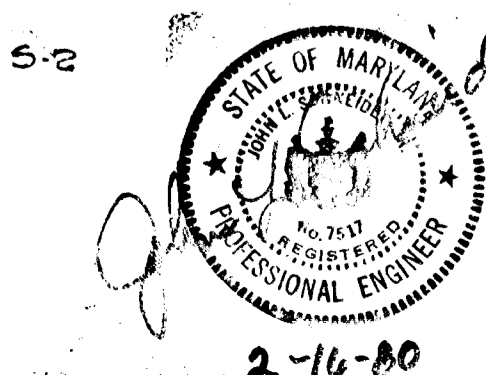


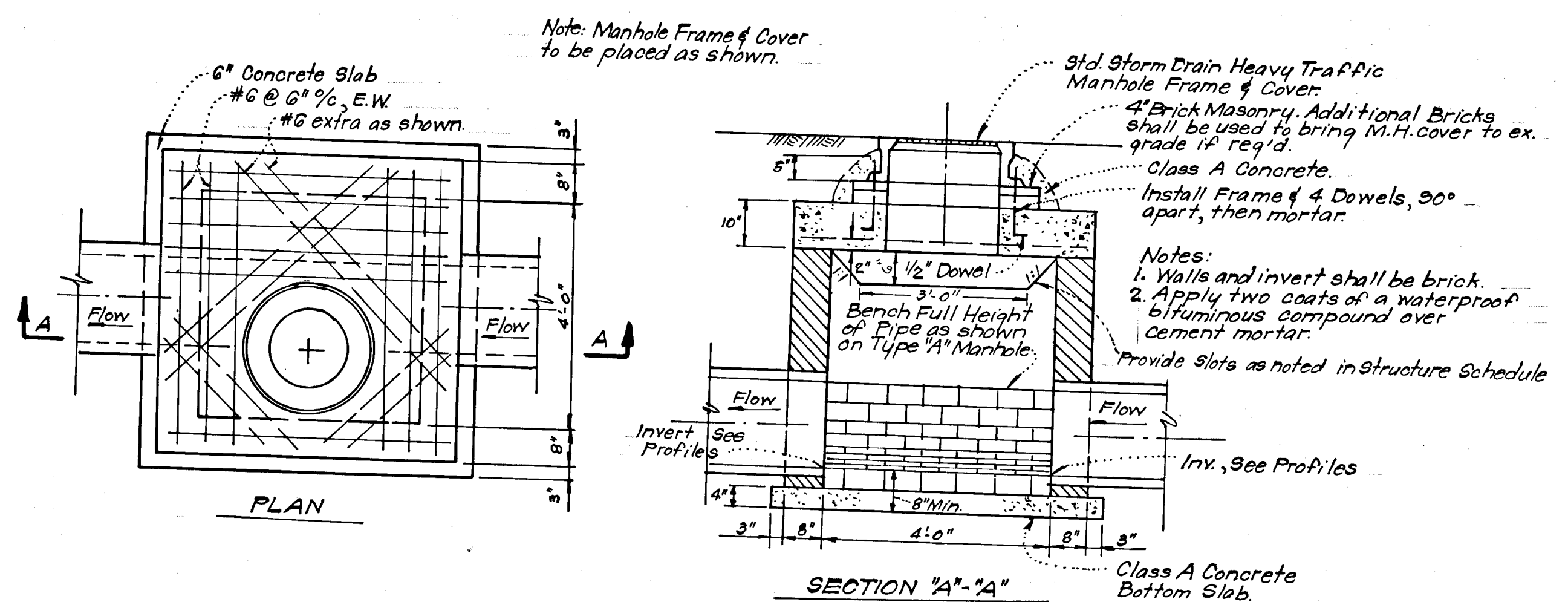
DEPARTMENT OF PUBLIC WORKS
CHIEF BUREAU OF ENGINEERING
OFFICE OF PLANNING AND ZONING
CHIEF DIVISION OF LAND DEVELOPMENT

AS-BUILT SURVEY DATA BY EDWARD V. & SUSAN R. HARNSTROM, JR. 8516 DOVERSHIRE DRIVE LAUREL, MARYLAND 20811
BY JOHN L. SCHNEIDER, JR. M.D.P.E. NO. 7517; SIGNED & SEALED & DATED 7/27/81.
LOUIS J. & JOAN B. DEMONAY 27653-KINDLER ROAD LAUREL, MARYLAND 20810

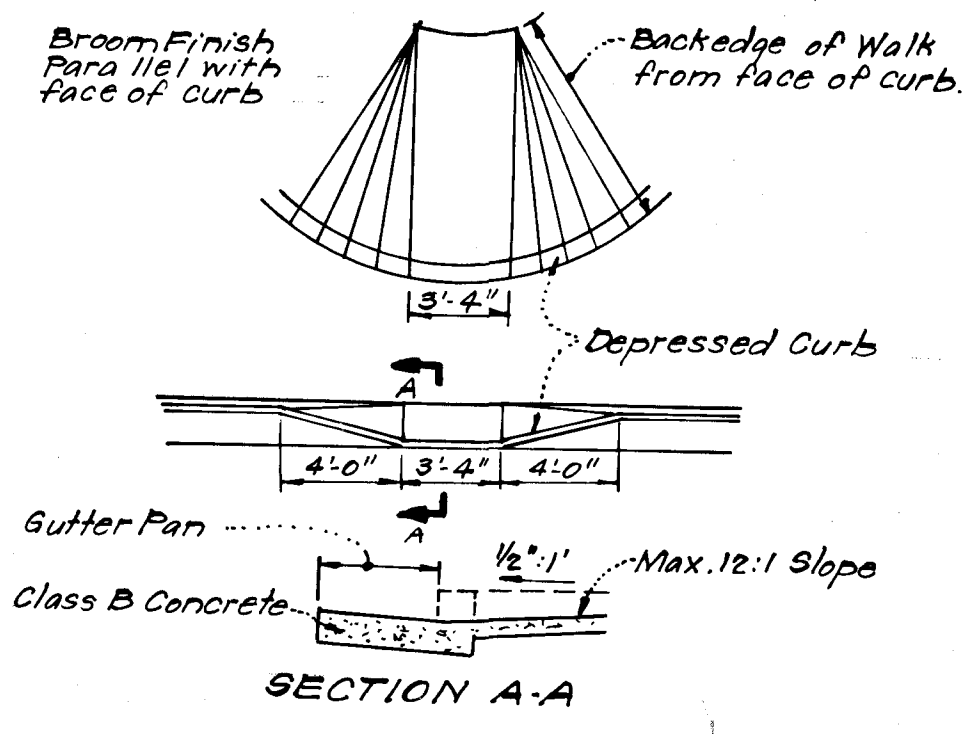
DRAINAGE DETAILS & SOIL CONSERVATION REGRIDDING OF LOTS 1 & 2 KINDLER ESTATES
6TH DISTRICT
SCALE AS SHOWN
HO. CO. MD. MAY 20, 1975

PREPARED BY: JOHN C. MELLEMA SR., INC. LAND SURVEYOR 3704 MACFARLANE AVENUE BOWING GREEN, MARYLAND 21229
REVISION OCT 17, 1975
DRAINAGE AND SOIL CONSERVATION DETAILS
SCALE AS SHOWN
DATE: 2-16-80
DRAWN BY: F-79-103
REVISION NUMBER

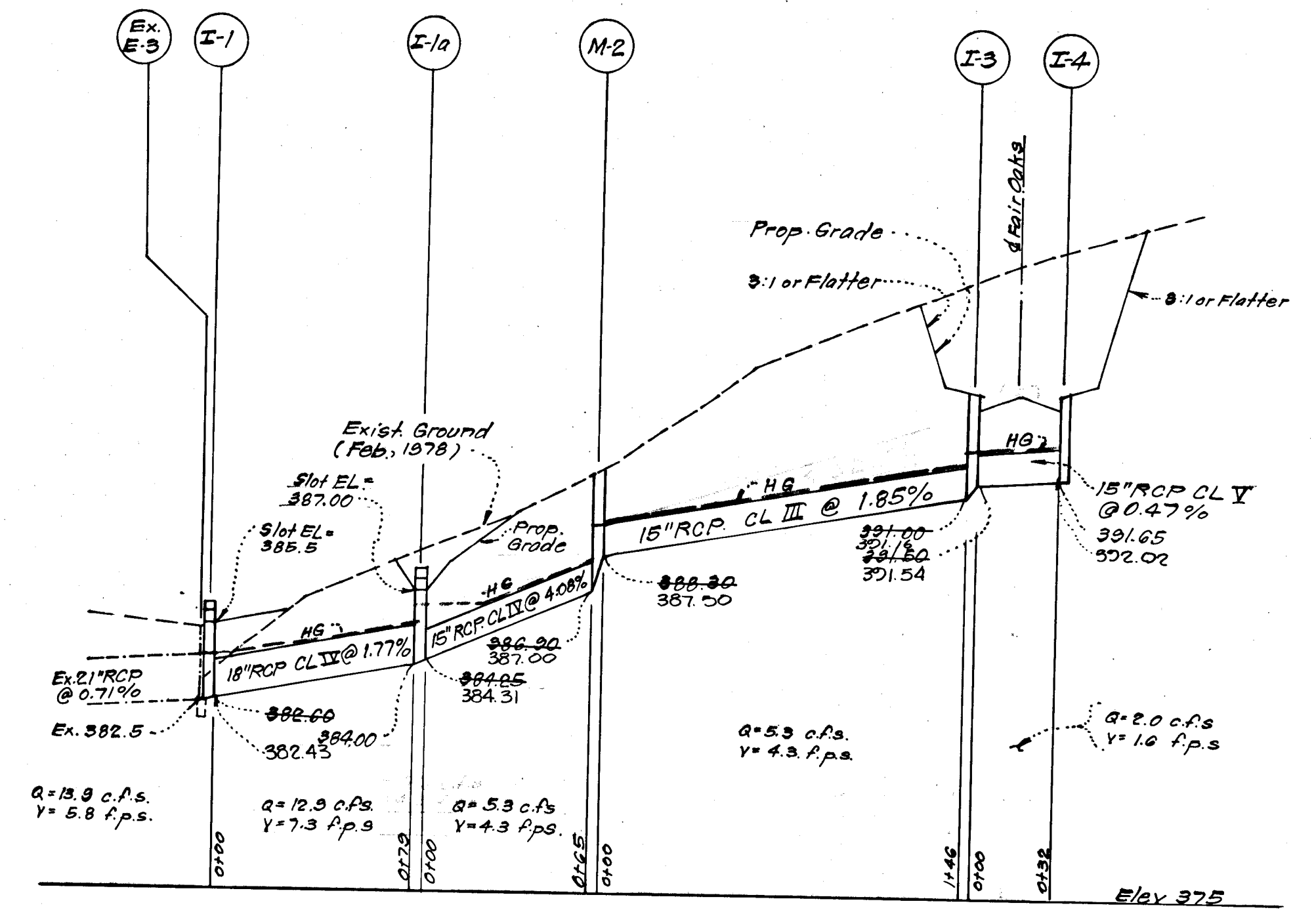




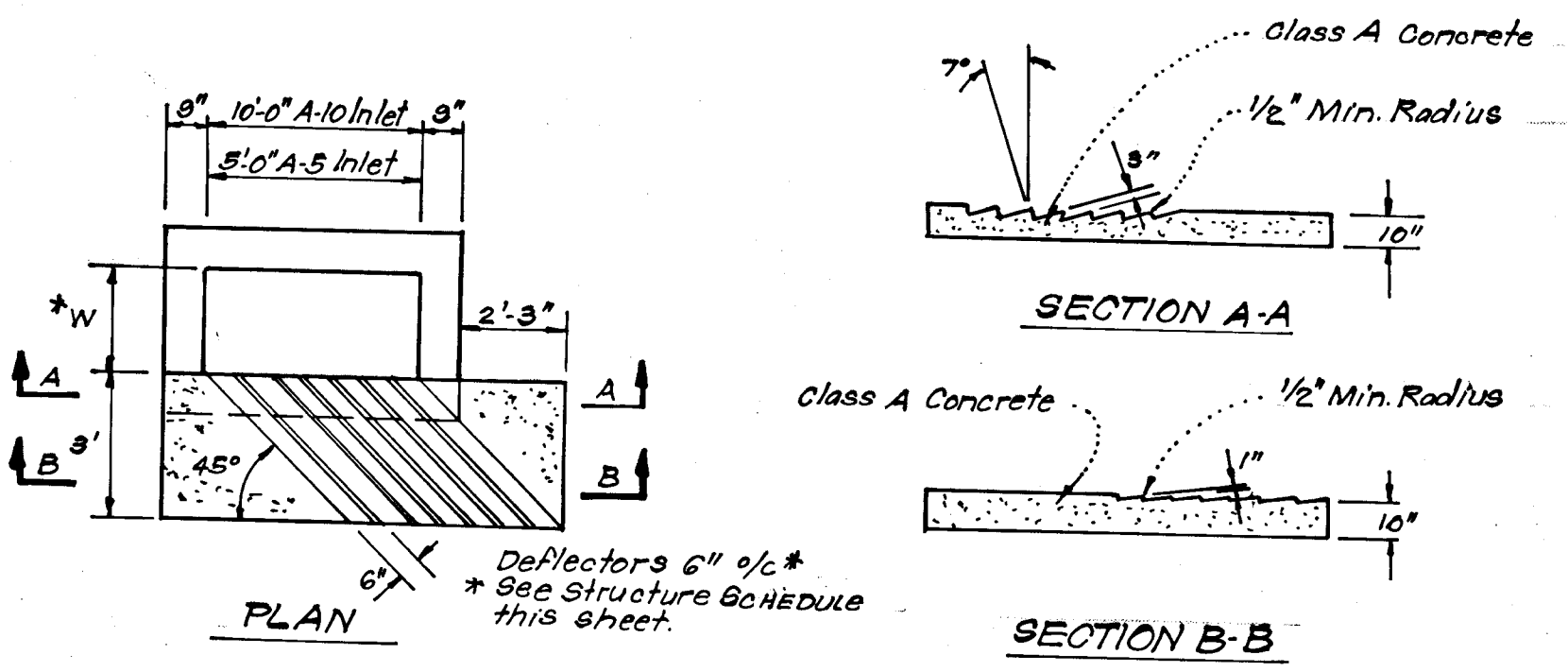
'B' MANHOLE DETAIL
No SCALE



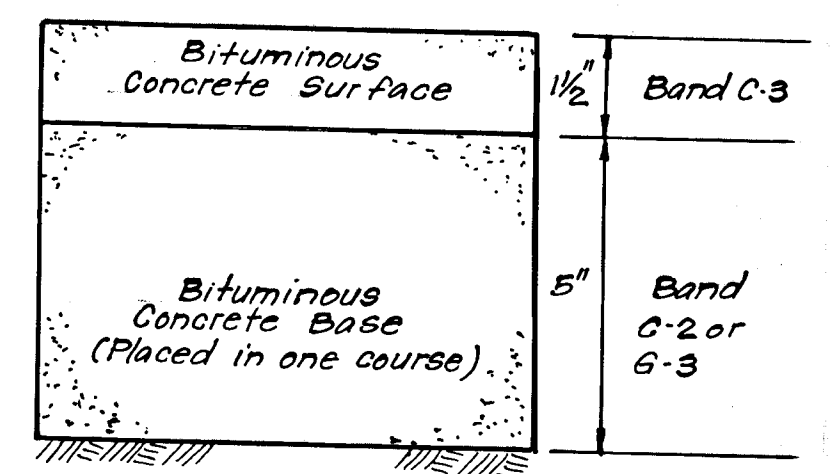
SIDEWALK RAMP DETAILS
No SCALE



STORM DRAINAGE PROFILE
SCALE: Horiz. 1"=50'
Vert. 1"=5'



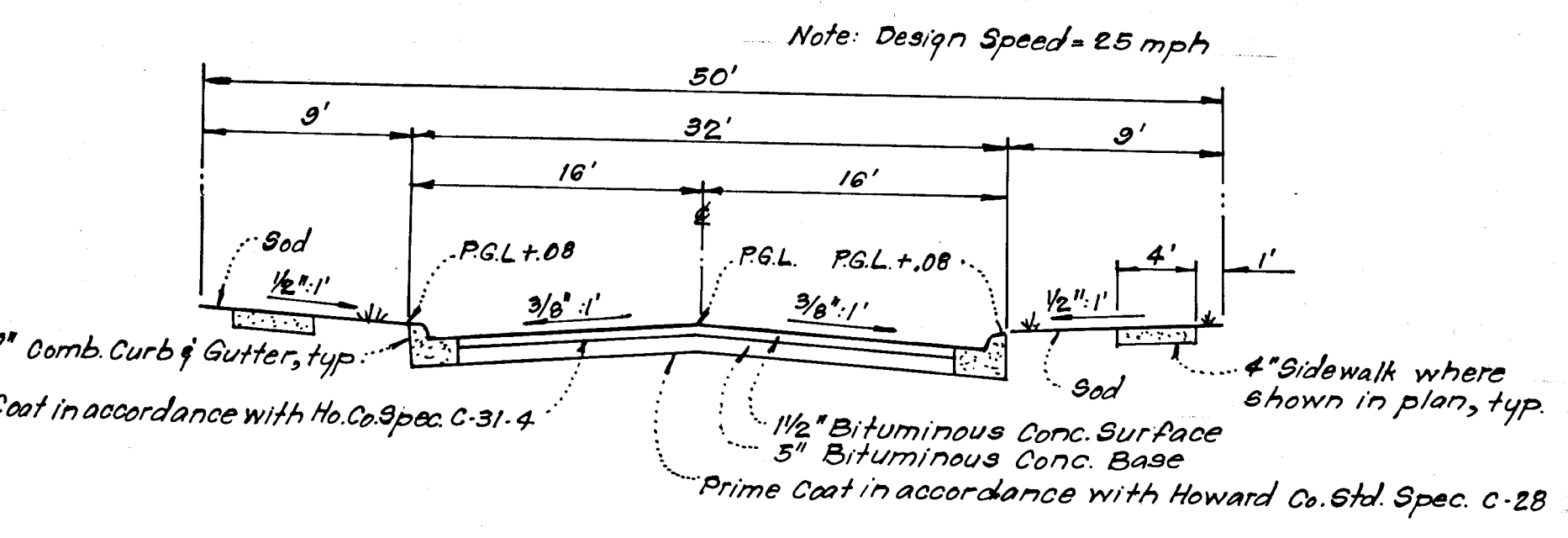
INLET DEFLECTOR DETAIL
No SCALE



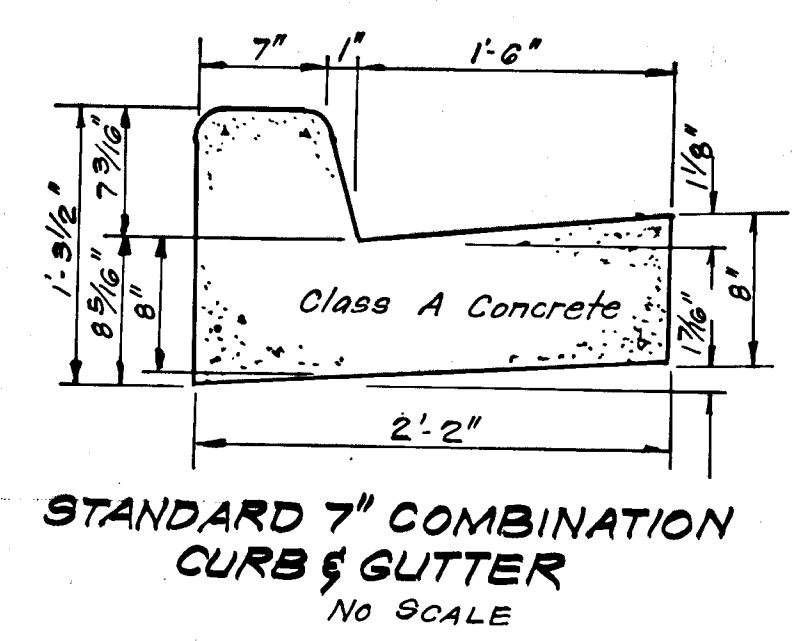
Clearing and Grading Article C-1
Subgrade Article C-2
Base Course Article C-33
Surface Course Article C-31

To be constructed in accordance with the Howard County Road Construction Code and Specifications.

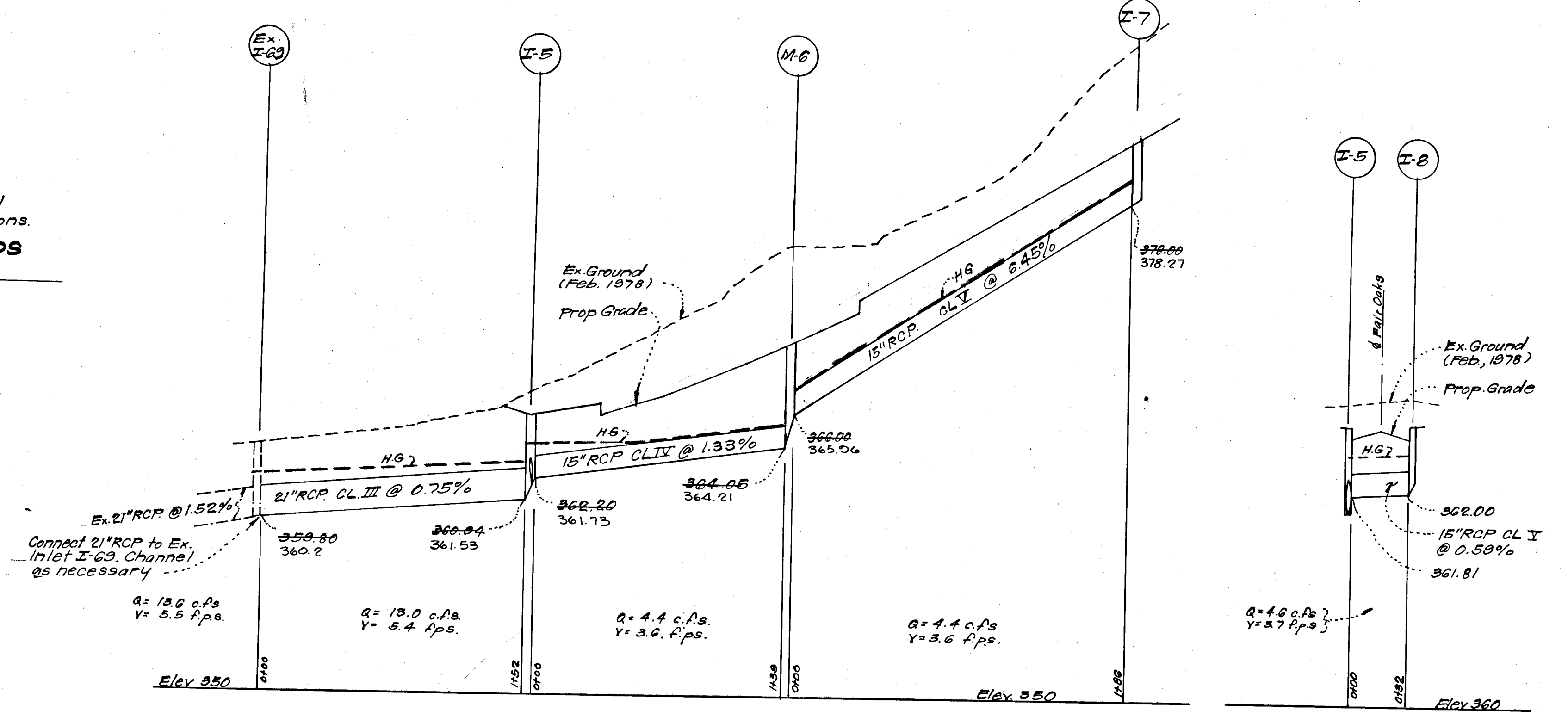
PAVING SECTION FOR PUBLIC ROADS AND ENTRANCES TO PUBLIC ROADS
No SCALE



TYPICAL PAVING SECTION
FAIR OAKS
(STA 0100 to STA. 18+77.70)
No Scale



STANDARD 7" COMBINATION CURB & GUTTER
No SCALE

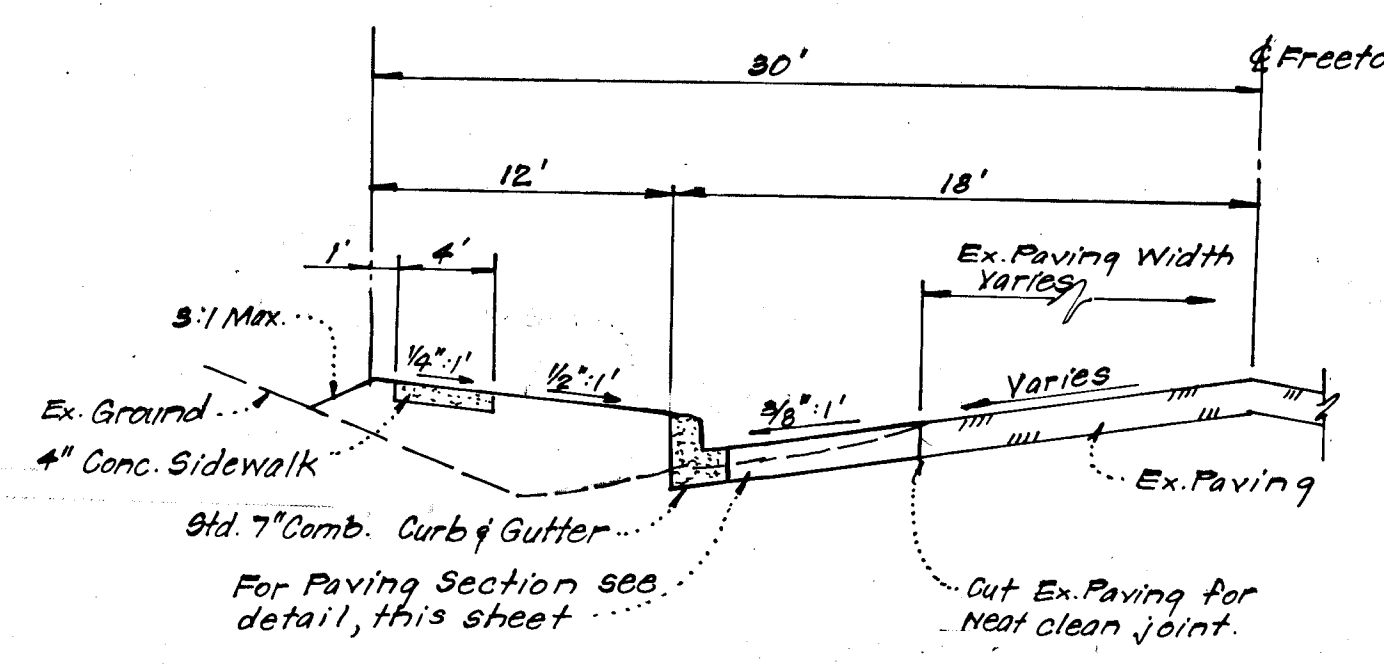


STORM DRAINAGE PROFILES
SCALE: Horiz. 1"=50'
Vert. 1"=5'

NR.	TYPE	INV. IN		TOP ELEVATION		REMARKS	LOCATION
		UPPER	LOWER	UPPER	LOWER		
I-1	B. Manhole W/Slots #	382.60	Ex. 382.50	386.33		See det. this sht.	See Plan
M-2	B. Manhole	388.30	386.90	391.80		See det. this sht.	See Plan
I-3	A-5 INLET *	391.50	391.00	395.39	395.14	Ho. Co. Std. G-4-A pg. 113-A W=2'6"	410129.80-15.33' Lt. to face of curb
I-4	A-5 INLET *		391.65	395.39	395.14	Ho. Co. Std. G-4-A pg. 113-A W=2'6"	410129.80-15.33' Rt. to face of curb
I-5	A-10 INLET	392.80	390.94	395.74	395.59	Ho. Co. Std. G-4-A pg. 113-A W=2'6"	40183-15.33' Lt. to face of curb
M-6	B. Manhole	369.00	364.05	369.90		See det. this sht.	42128 11.00' Rt.
I-7	A-10 INLET *		372.00	381.92	381.24	Ho. Co. Std. G-4-A pg. 113-A W=2'6"	412079-15.33' Rt. to face of curb
I-8	A-10 INLET		362.00	365.74	365.59	Ho. Co. Std. G-4-A pg. 113-A W=2'6"	40183-15.33' Lt. to face of curb
I-1a	B. Manhole W/Slots #	384.25	384.00	387.85		See det. this sheet.	See Plan

* Provide Inlet Deflectors. See detail, this sheet.
* Provide Slots in W Side of Str. I-1 and in S & W in Str. I-1a.

SIZE	TYPE	LENGTH
15"	RCP CLASS III	140 LF
15"	RCP CLASS IV	204 LF
15"	RCP CLASS V	250 LF
18"	RCP CLASS III	79 LF
21"	RCP CLASS III	152 LF



TYPICAL PAVING WIDENING
FREETOWN ROAD - EAST SIDE
(SEE PLAN VIEW FOR LIMITS)
No Scale



APPROVED: DEPARTMENT OF PUBLIC WORKS

W. P. Hubert 7-3-79
CHIEF, Bureau of Engineering Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

William M. Sackett 6-27-79
CHIEF, Division of Land Development Date

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

DESIGNED: R.J.S. ROAD CONSTRUCTION PLANS
DRAWN: K.I.W. PROFILES AND DETAILS
CHECKED: R.J.S. SCALE: As Shown
DATE: May, 1978. JOB NO. 3 of 5
FILE NO. 1237-D

CLEMENS CORNER

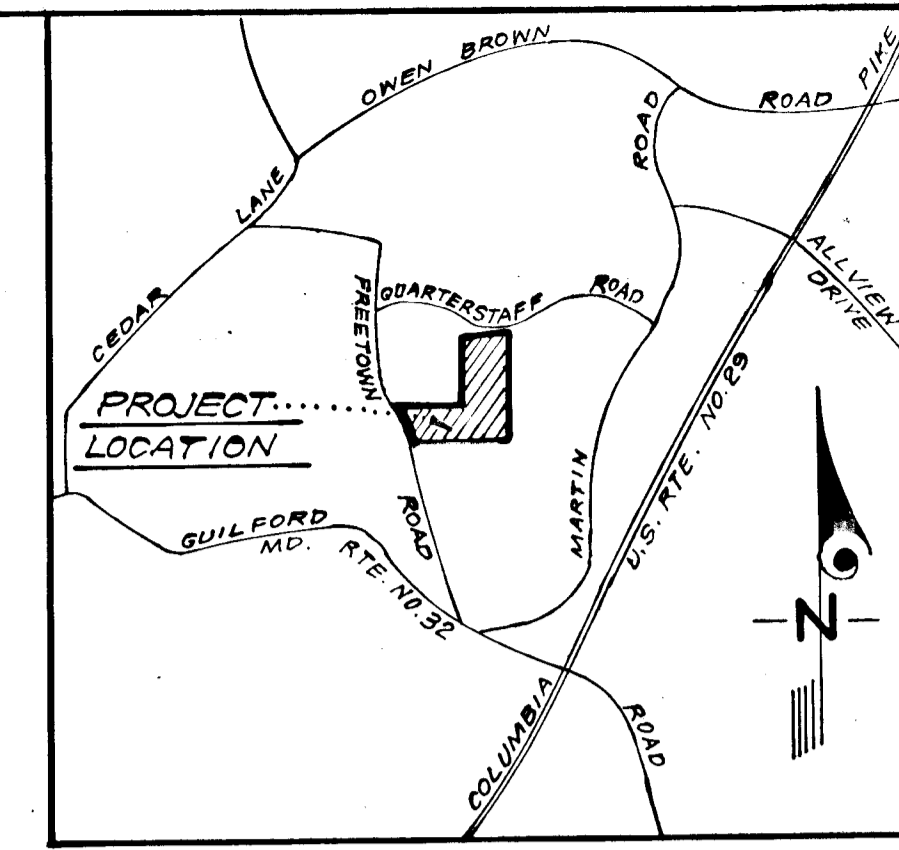
SECTION I AREA I
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: COLUMBIA BUILDERS INC.
606 American City Building
Columbia, Md 21044

COORDINATE SCHEDULE	NO.	NORTH	EAST
1	484 760.32	884 018.63	
2	484 086.15	885 882.31	
3	484 121.88	884 818.48	
4	484 185.80	884 610.56	
5	484 382.15	884 634.86	
6	484 886.42	884 713.31	
7	484 886.19	885 155.25	
8	484 216.80	885 048.91	
9	484 870.41	884 819.07	

Note: The Existing Storm Drainage in Quarterstate Road was designed to accommodate the runoff generated by the development of Clemens Corner.

- LEGEND**
- Contour Interval 2 Ft.
 - Existing Contours
 - Existing Sewer Line
 - Existing Water Line
 - Existing Storm Drain
 - Proposed Storm Drain
 - Diversion Dike
 - Straw Bale Dike or Silt Fence
 - Stabilized Construction Entrance
 - Stone Filter Inlet Protection
 - Sediment Trap



Reviewed for Howard S.C.D. Name: Winston Smith 6-27-79 Date: 6-27-79
Signature: Winston Smith
U.S. Soil Conservation Service

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

William J. Rame 6-27-79 Approved Date

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 authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agent as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

B. James Greenfield 5-25-78 Signature Date
B. JAMES GREENFIELD

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.

G. Nelson Clark 5-25-78 Signature Date
G. Nelson Clark



APPROVED: DEPARTMENT OF PUBLIC WORKS

W. O. Sackett 7-3-79 Chief, Bureau of Engineering Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

William J. Rame 6-27-79 Chief, Division of Land Development Date

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

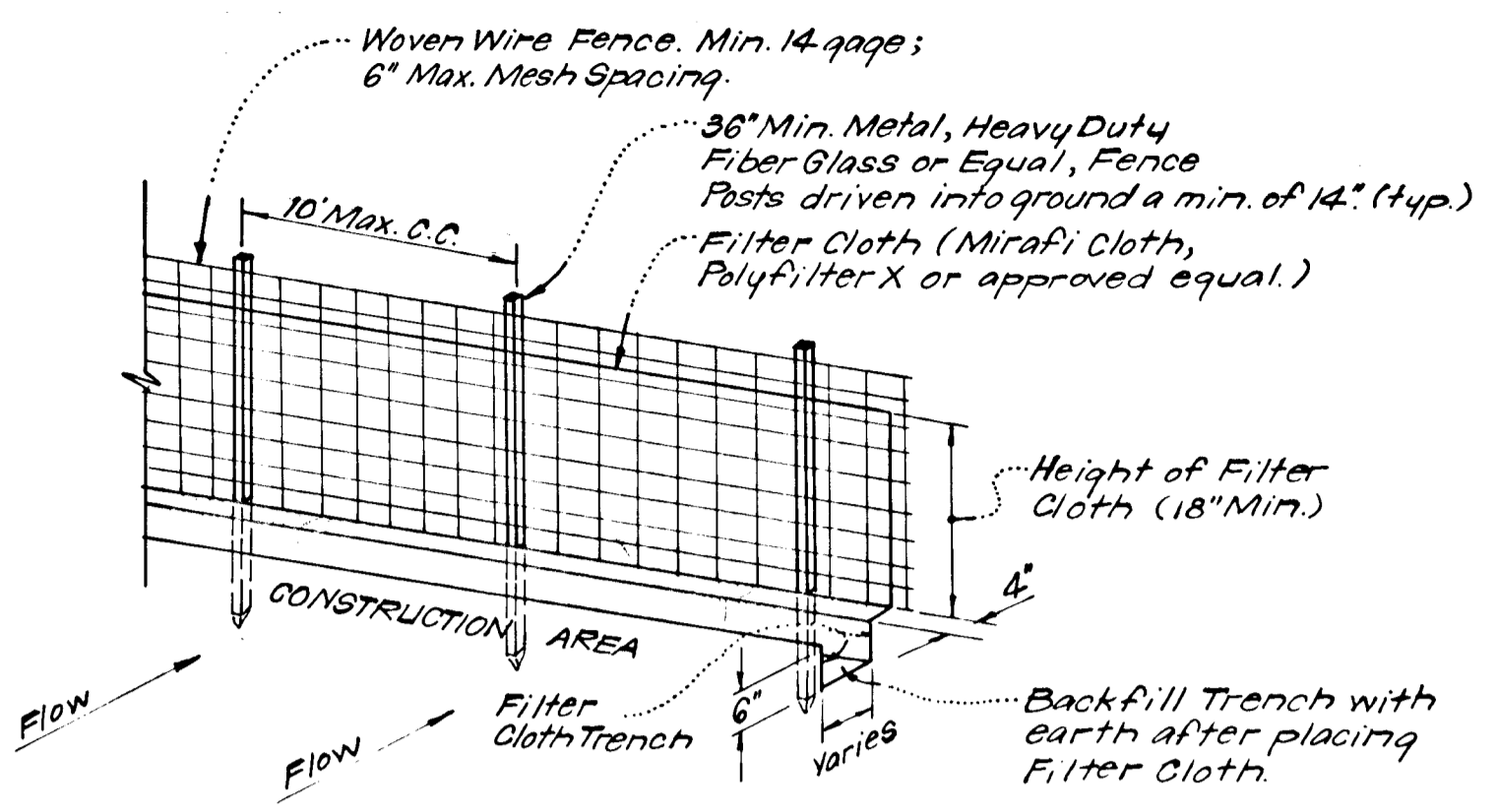
DESIGNED R.J.S.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP CLEMENS CORNER SECTION 1, AREA 1 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 100'	
DRAWN K.T.W.		DRAWING 40F5	
CHECKED R.J.S.		JOB NO.	
DATE May, 1978		OWNER: COLUMBIA BUILDERS 606 American City Building Columbia, Md. 21044	FILE NO. 1237-D

Note: The Existing Storm Drainage in Village of Hickory Ridge, Section 1, Area 1, was designed to accommodate the runoff generated by the development of Clemens Corner.

#796

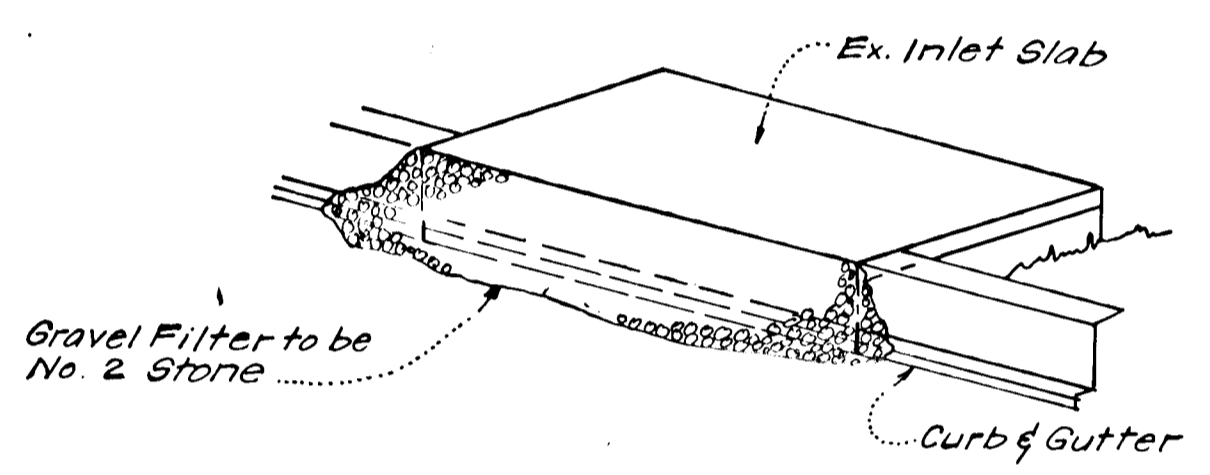
GENERAL NOTES

- 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 #5 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 grain 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 left from traffic leaving 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: 16.088 Acres
 - Area to be paved: 2.311 Acres
 - Area to be seeded: 4.362 Acres
 - Area Undisturbed: 9.415 Acres
- A complete site grading plan must be developed and approved before building permits can be issued.
- CONSTRUCTION SEQUENCE:**
 - Grading Permits shall be obtained prior to any installation of Sediment Control or Grading.
 - Install all Sediment & Erosion Controls.
 - Grade Streets as necessary to properly install storm drainage. Install Storm Drainage and block with S.F.I.P.'s.
 - Construct Paving.
 - Stabilize all disturbed areas in accordance with General Note #5.
 - Sediment Control devices to be removed only after areas draining to these devices have been stabilized.

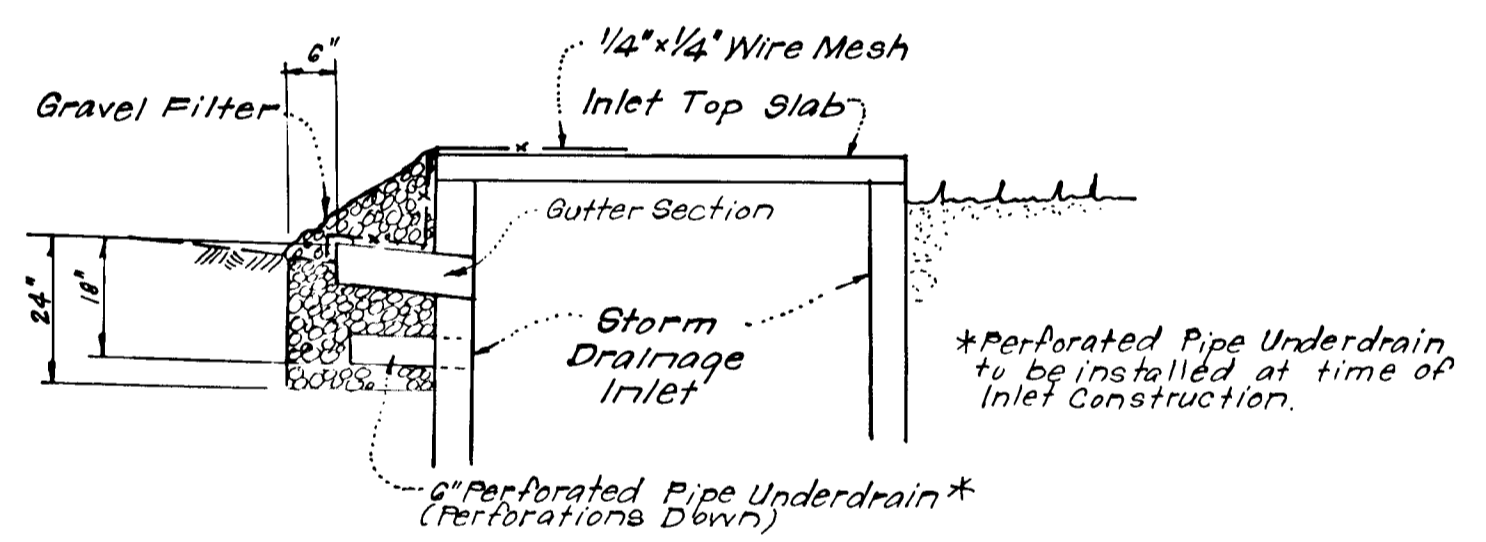


- NOTES:**
- Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
 - Filter Cloth to be fastened securely to woven wire fence by use of wire ties spaced every 24" x 24".

SILT FENCE DETAIL (S.F.)
No Scale

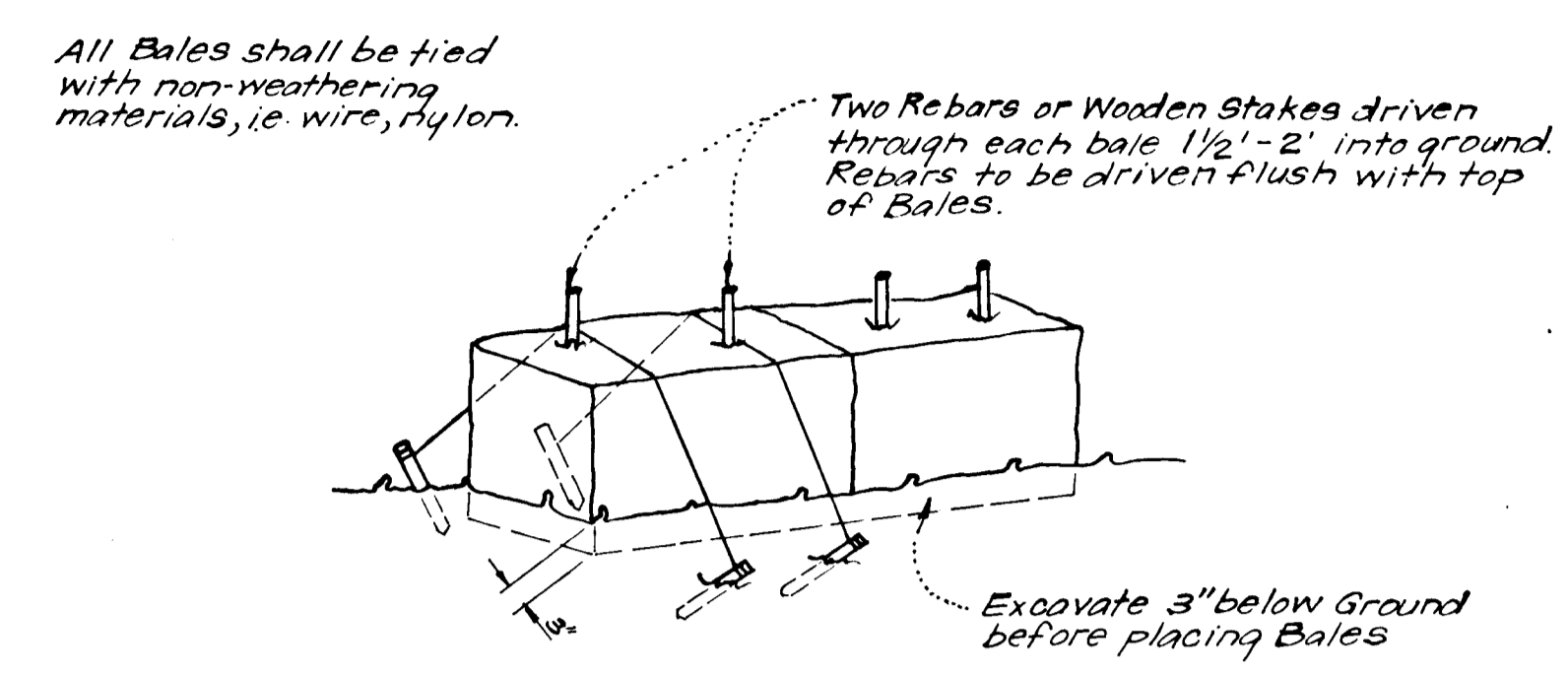


ISOMETRIC VIEW



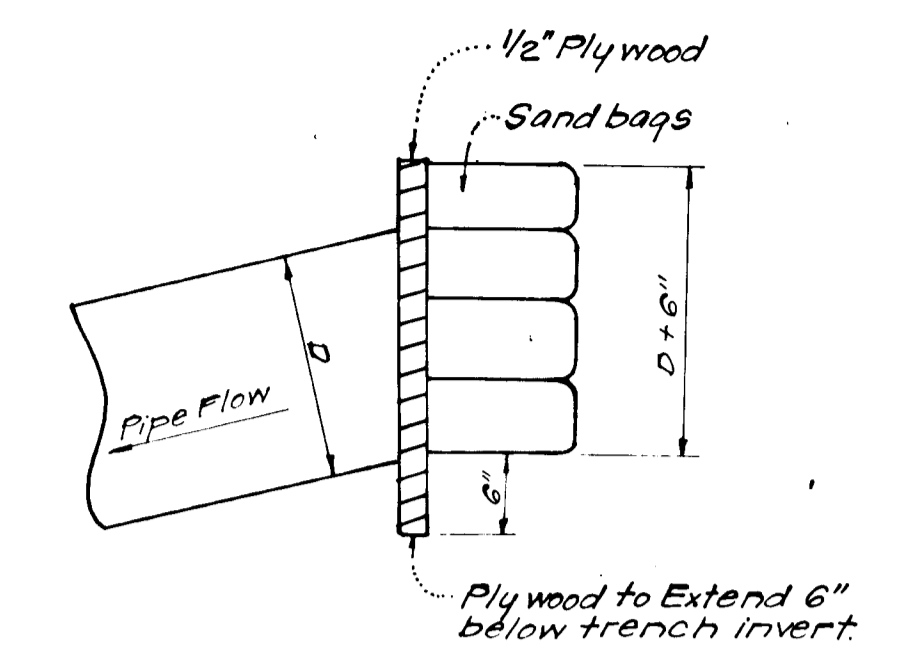
SECTION VIEW

STONE FILTER INLET PROTECTION DETAIL (S.F.I.P.)
No Scale

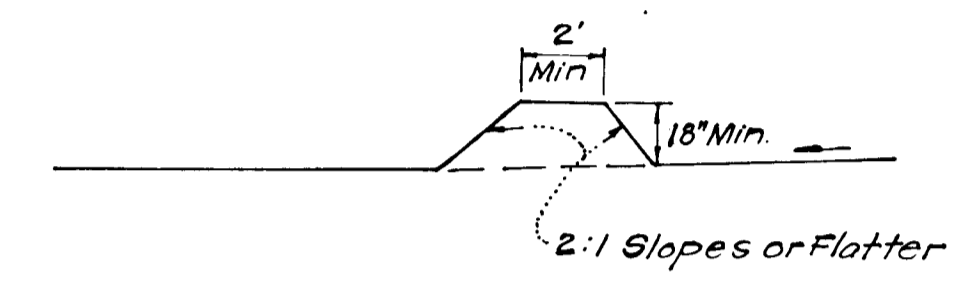


- NOTE:**
- In lieu of the use of rebar each Straw Bale may be fastened to ground with pegs (4 per bale and wire or nylon as shown above).

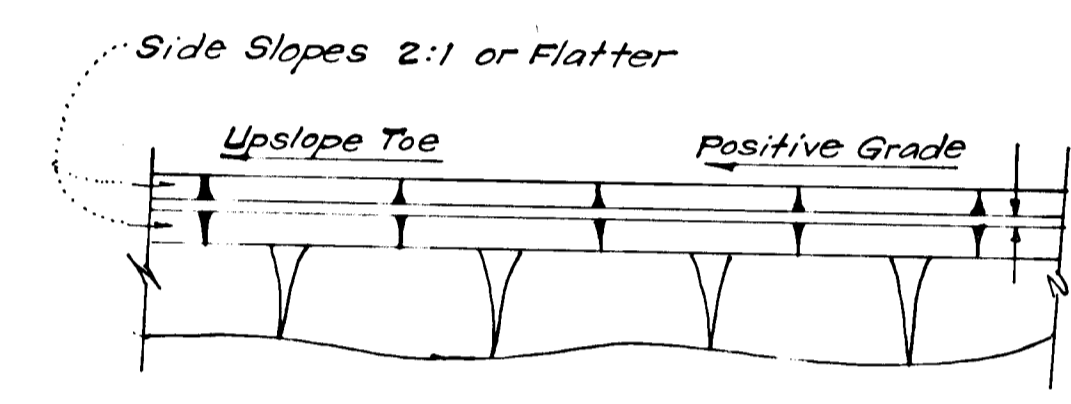
TYPICAL STRAW BALE DETAIL (S.B.D.)
No Scale



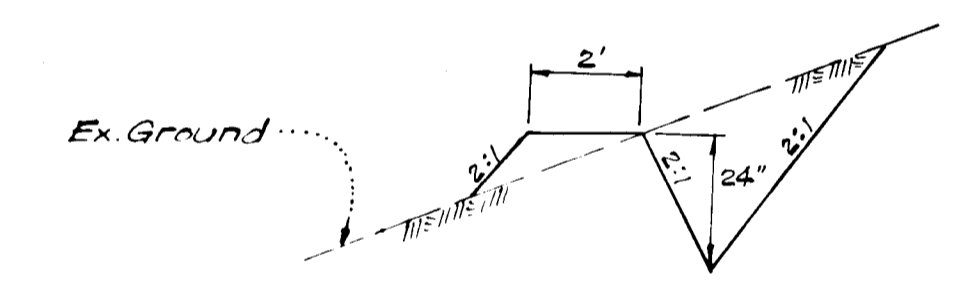
PIPE BLOCKING DETAIL
No Scale



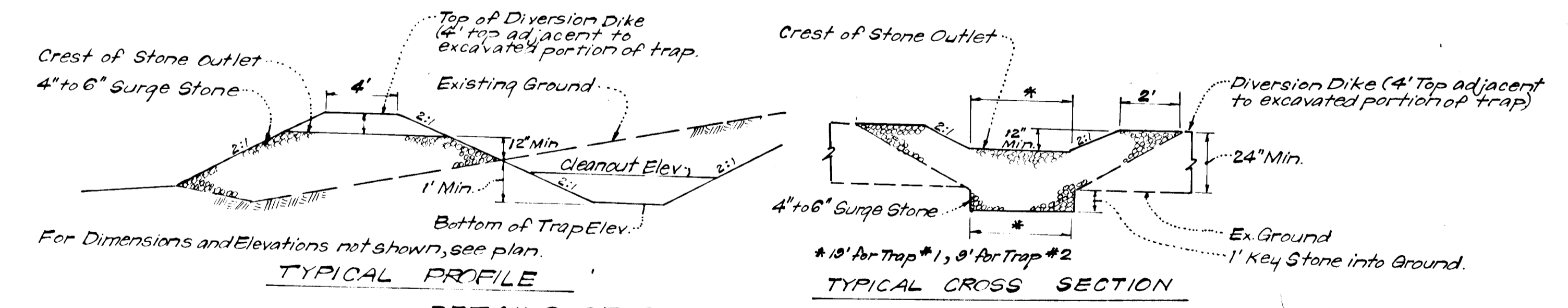
CROSS SECTION



PLAN VIEW DIVERSION DIKE (D.D.)
No Scale

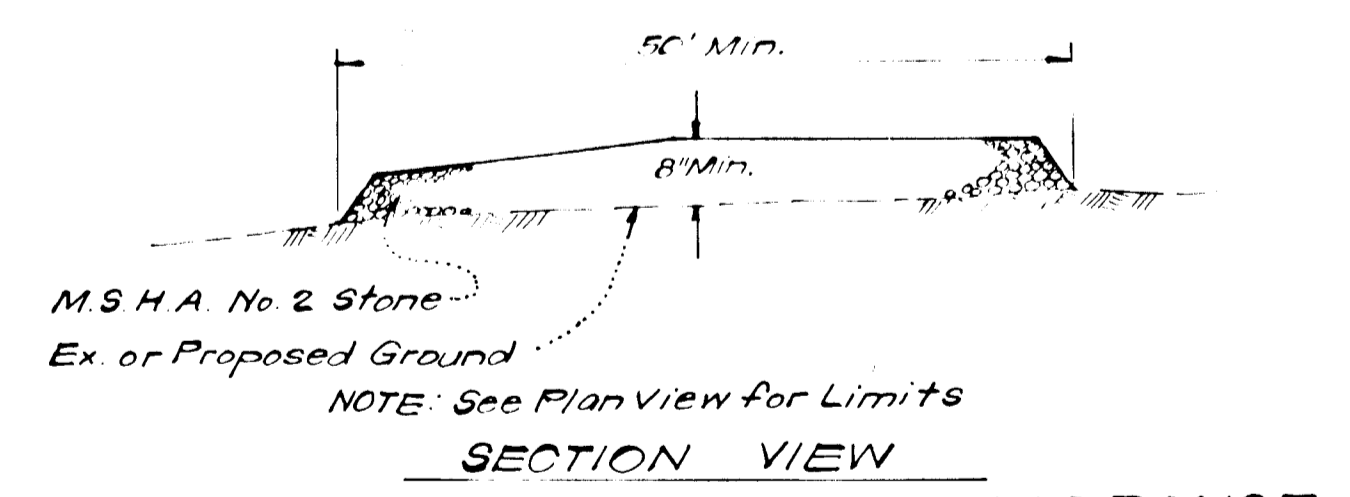


CUT DIVERSION DIKE
No Scale



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.



SECTION VIEW STABILIZED CONSTRUCTION ENTRANCE
No Scale

Reviewed for Howard S.C.D. Name and meets Technical Requirements
 Signature: *Winston Burdette* Date: 6-27-79
 U.S. Soil Conservation Service

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

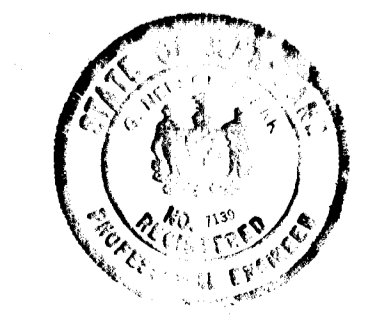
DEVELOPER'S CERTIFICATE
 I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed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

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.

William J. Rene 6-27-79
 Signature Date

B. James Greenfield 6-27-79
 Signature Date
 B. JAMES GREENFIELD

G. Nelson Clark 5-27-78
 Signature Date
 G. Nelson Clark



APPROVED: DEPARTMENT OF PUBLIC WORKS		7-3-79
CHIEF, BUREAU OF ENGINEERING		DATE
APPROVED: HOWARD COUNTY OF PLANNING & ZONING		7-3-79
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400		
DESIGNED	R.J.S.	SCALE As Shown
DRAWN	K.I.W.	DRAWING 5 of 5
CHECKED	R.J.S.	JOB NO.
DATE	May, 1978	FILE NO. 1237-D
ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN CLEMENS CORNER SECTION 1 AREA 1 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: COLUMBIA BUILDERS INC. 606 American City Building Columbia, Md. 21044		