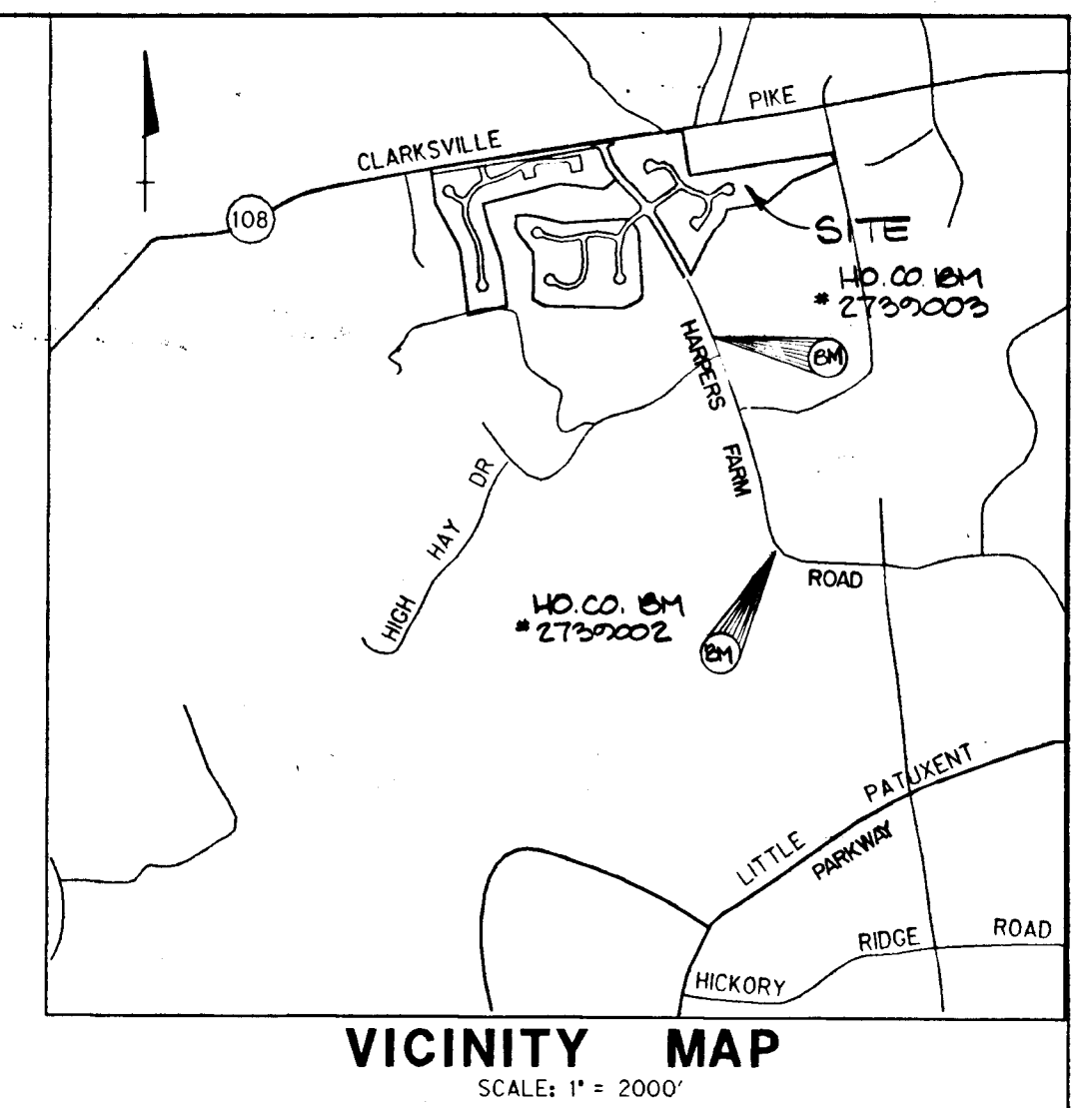


| SHEET INDEX |                                      |
|-------------|--------------------------------------|
| 1           | COVER SHEET                          |
| 2           | PLAN AND PROFILE                     |
| 3           | PLAN AND PROFILE                     |
| 4           | STORM DRAIN PROFILES                 |
| 5           | TYPICAL SECTIONS AND DETAILS         |
| 6           | SEDIMENT AND EROSION CONTROL PLAN    |
| 7           | SEDIMENT AND EROSION CONTROL DETAILS |

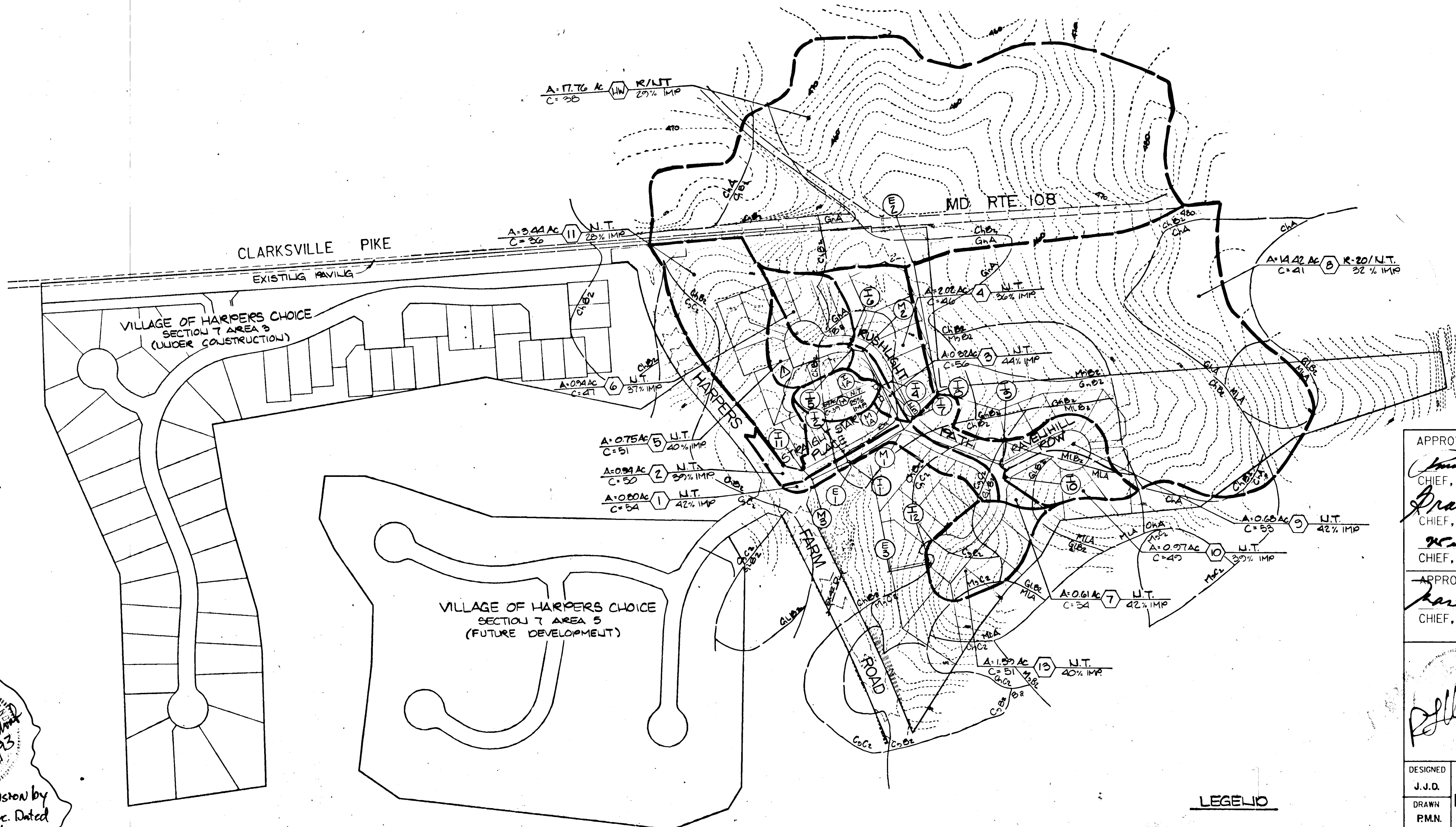
# VILLAGE OF HARPERS CHOICE SECTION 7 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



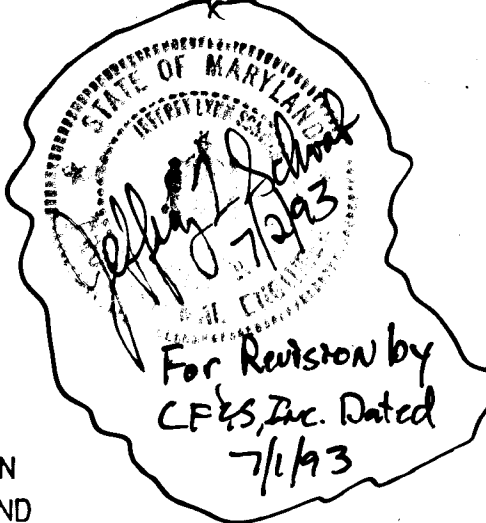
### GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. FROM BEST AVAILABLE INFORMATION THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
 

|   |                |
|---|----------------|
| MISS UTILITY  | 1-800-257-7777 |
| C&P TELEPHONE COMPANY   | 752-9976       |
| HOWARD COUNTY BUREAU OF UTILITIES   | 992-2366       |
| A&T CABLE LOCATION DIVISION   | 393-3653       |
| BALTIMORE GAS AND ELECTRIC COMPANY  | 685-0123       |
| STATE HIGHWAY ADMINISTRATION  | 531-5533       |
| HOWARD COUNTY CONSTRUCTION/INSPECTION/SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK) | 792-7272       |
- TOPOGRAPHY TAKEN FROM AERIAL SURVEY COMPILED BY "MAPS, INC." WITH SUBSEQUENT REVISIONS ACCORDING TO FIELD RUN TOPO & AS-BUILT DRAWINGS.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- THIS PLAT AND THE COORDINATES SHOWN HEREON ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. REFERENCE HOWARD COUNTY CONTROL POINTS 2739002 & 2739003.
- STORM DRAIN STRUCTURES TO BE IN ACCORDANCE WITH HOWARD COUNTY STD. SPEC. & DETAILS, AND MD. S.H.A., ALL STORM DRAIN PIPE TO BE RCCP OR C.M.P.
- TRENCH COMPACTION FOR STORM DRAINS WITHIN ROADS OR STREET RIGHT OF WAY LIMITS SHALL BE IN ACCORDANCE WITH THE 1982 HOWARD COUNTY ROAD CODE.
- MINIMUM COVER OF 12" SHALL BE PROVIDED OVER STORM DRAIN PIPES IN ALL AREAS NOT BEING FINAL GRADED BY THESE PLANS.
- ALL TRAFFIC CONTROL SERVICES, PARKING AND SIGNING TO BE DONE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," 1984 REVISED EDITION.
- PROVIDE CONCRETE SIDEWALK RAMPS IN CURBS, WHERE SHOWN IN PLAN (MAX. 12:1 SLOPE; SEE HOWARD COUNTY STD. DETAILS, R-4.01.)
- STREET LIGHTS SHALL BE 100 WATT HIGH PRESSURE SODIUM VAPOR LAMP POST TOP FIXTURES ON 14-FOOT BRONZE HIGHGLASS POLES.
- STREET TREES WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- STORMWATER MANAGEMENT REQUIREMENT FOR THIS SUBDIVISION HAS BEEN WAIVED IN ACCORDANCE WITH D.P.W. ACTION DATED 9-16-88
- MODIFIED CURB & GUTTER SHALL BE USED THROUGHOUT THIS SUBDIVISION EXCEPT AS SHOWN ON THIS PLANS. TRANSITIONS TO STD. CURB & GUTTER AT "A" INLETS SHALL BE IN ACCORDANCE WITH R-3.06. OTHER TRANSITIONS, AS SHOWN ON THE PLANS, SHALL BE IN ACCORDANCE WITH R-3.02.



DRAINAGE AREA MAP  
SCALE 1"=200'



**STREET TREES:**  
THE LOCATION AND TYPES OF STREET TREES SHOWN ON THESE PLANS ARE TENTATIVE AND ARE USED FOR BOND PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS AND BUILDERS LANDSCAPE PROGRAM. BOND RELEASE IS CONTINGENT UPON SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE DEPT. OF PLANNING AND ZONING.

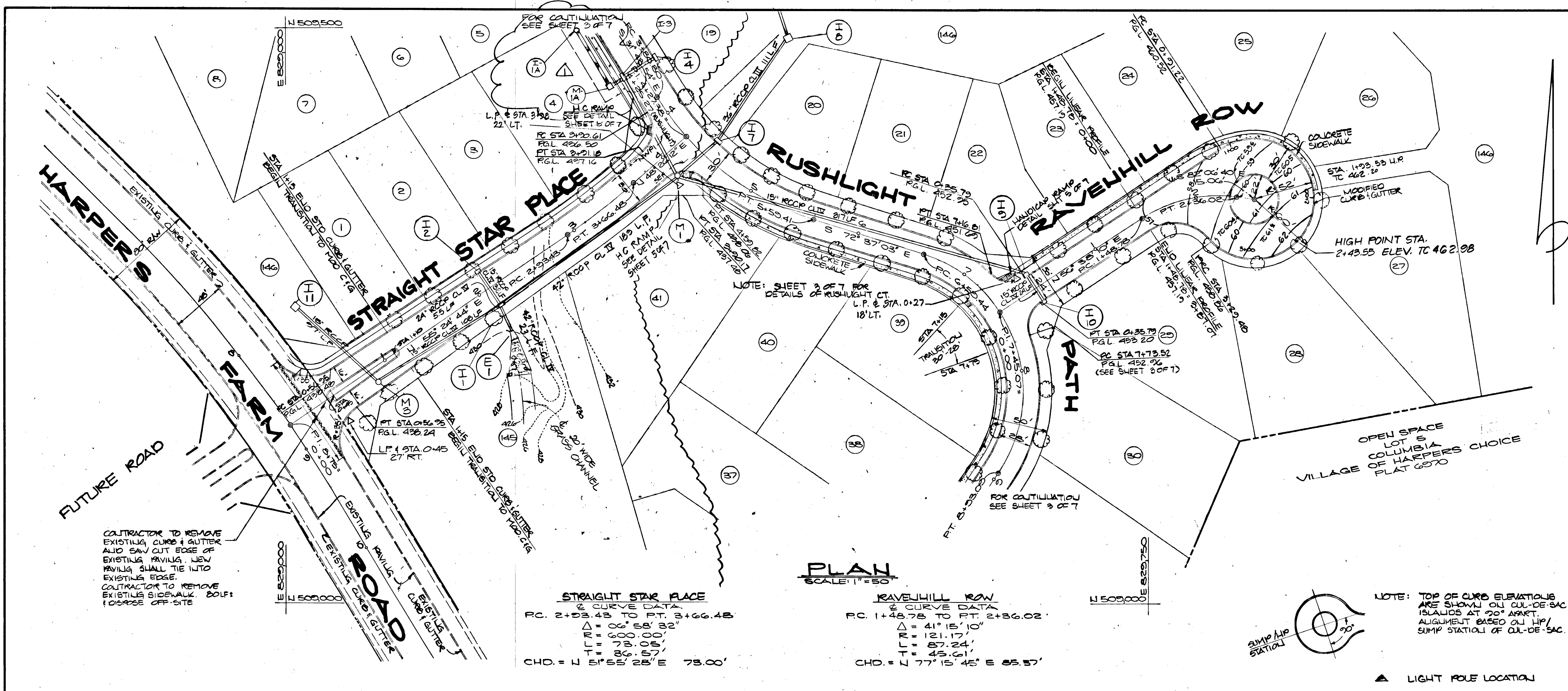
| NO. | REVISION                             | DATE   |
|-----|--------------------------------------|--------|
| 1   | Rev. Drainage Area Map By CF&S, INC. | 7-1-89 |

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 12/15/89  
 CHIEF, LAND DEVELOPMENT DIVISION DATE  
*[Signature]* 11/13/89  
 CHIEF, BUREAU OF HIGHWAYS DATE  
*[Signature]* 12-18-89  
 CHIEF, BUREAU OF ENGINEERING DATE  
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
*[Signature]* 12/2/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS PLANNERS SURVEYORS  
 1020 CROMWELL BRIDGE ROAD  
 BALTIMORE, MARYLAND 21204  
 301-321-5500

| DESIGNED | SCALE                               |
|----------|-------------------------------------|
| J.J.D.   | COVER SHEET, VICINITY MAP, AS SHOWN |
| DRAWN    | DRAINAGE AREA MAP & GENERAL NOTES   |
| RMN.     | DRAWING 1 OF 7                      |
| CHECKED  |                                     |
| D.N.M.   | COLUMBIA                            |
| DATE     | VILLAGE OF HARPERS CHOICE           |
| 4-14-89  | SECTION 7 AREA 4                    |
|          | 5TH ELECTION DISTRICT               |
|          | HOWARD COUNTY, MARYLAND             |

OWNER DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND COMPANY  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044



**STRAIGHT STAR PLACE**  
 & CURVE DATA  
 RC. 2+53.43 TO PT. 2+66.48  
 $\Delta = 06^{\circ} 58' 32''$   
 $PI = 435.00$   
 $PT = 435.00$   
 CHD. = 4 51' 55" 28' E 73.00'

**RAVENHILL ROW**  
 & CURVE DATA  
 RC. 1+48.78 TO PT. 2+36.02  
 $\Delta = 41^{\circ} 15' 10''$   
 $PI = 458.57$   
 $PT = 458.57$   
 CHD. = 7 77' 15" 45' E 85.57'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Chief, Land Development Division  
 Date: 12/15/89  
 Approved: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 Chief, Division of Community Planning and Land Development  
 Date: 11/13/89

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS PLANNERS SURVEYORS  
 1020 CROMWELL BRIDGE ROAD  
 BALTIMORE, MARYLAND 21204  
 301-321-5500

DESIGNED: P.M.N.  
 DRAWN: J.J.D.  
 CHECKED: D.N.M.  
 DATE: 4-14-89

**PLAN & PROFILES**  
 STRAIGHT STAR PLACE  
 RAVENHILL ROW  
 COLUMBIA  
 VILLAGE OF HARPERS CHOICE  
 SECTION 7 AREA 4  
 5TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE: 1"=50'  
 DRAWING: 2 OF 7  
 JOB NO.: 0188113  
 FILE NO.:

OWNER DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND COMPANY  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044

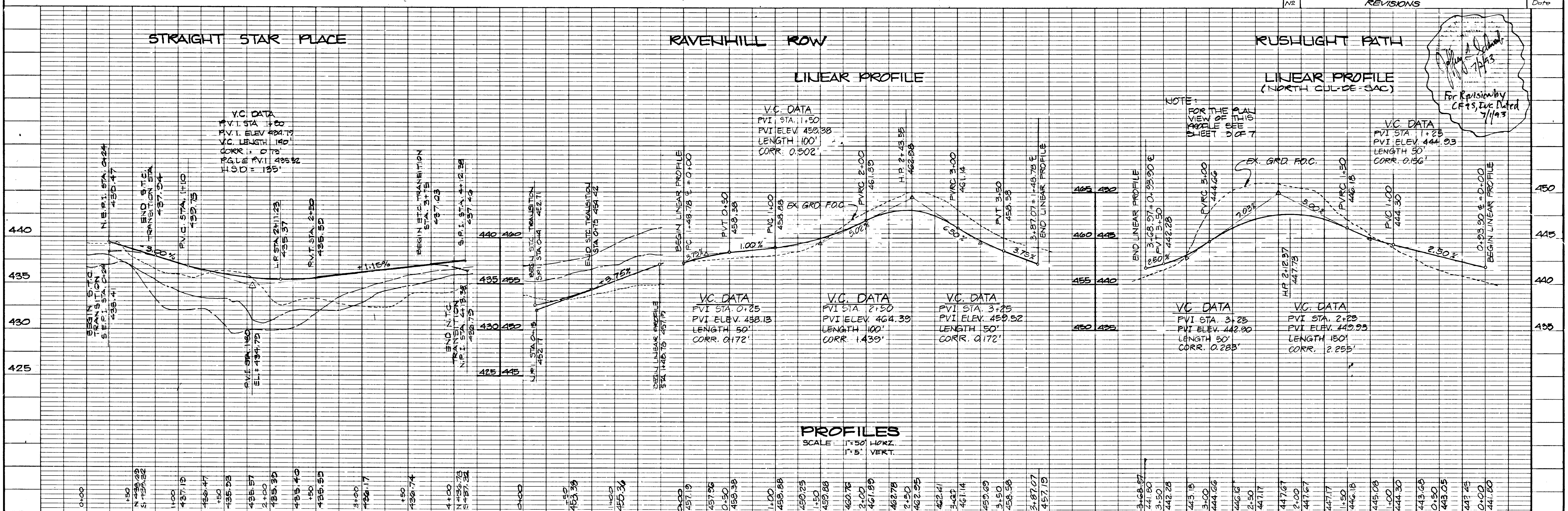
**STORM DRAIN STRUCTURE SCHEDULE**

| No.  | TYPE    | TOP ELEV. | IN/OUT (IN. IN) | LOCATION          | REMARKS  |
|------|---------|-----------|-----------------|-------------------|----------|
| I-1  | A-5     | 425.37    | 16" x 16"       | 2+11.23 (6.71 RT) | 50' 4.01 |
| I-2  | A-5     | 425.37    | 16" x 16"       | 2+11.23 (6.71 RT) | 50' 4.01 |
| I-11 | D       | 425.37    | 16" x 16"       | 0+63.05 LT        | 50' 4.11 |
| M-3  | SHALLOW | 425.37    | 16" x 16"       | 0+63.05 (11' RT)  | 6' 5.05  |

NOTES: \* TOP OF CURB ELEVATIONS ARE SHOWN ON CUL-DE-SAC ISLANDS AT 20' APART. ALIGNMENT BASED ON LHP/ SUMP STATION OF CUL-DE-SAC.

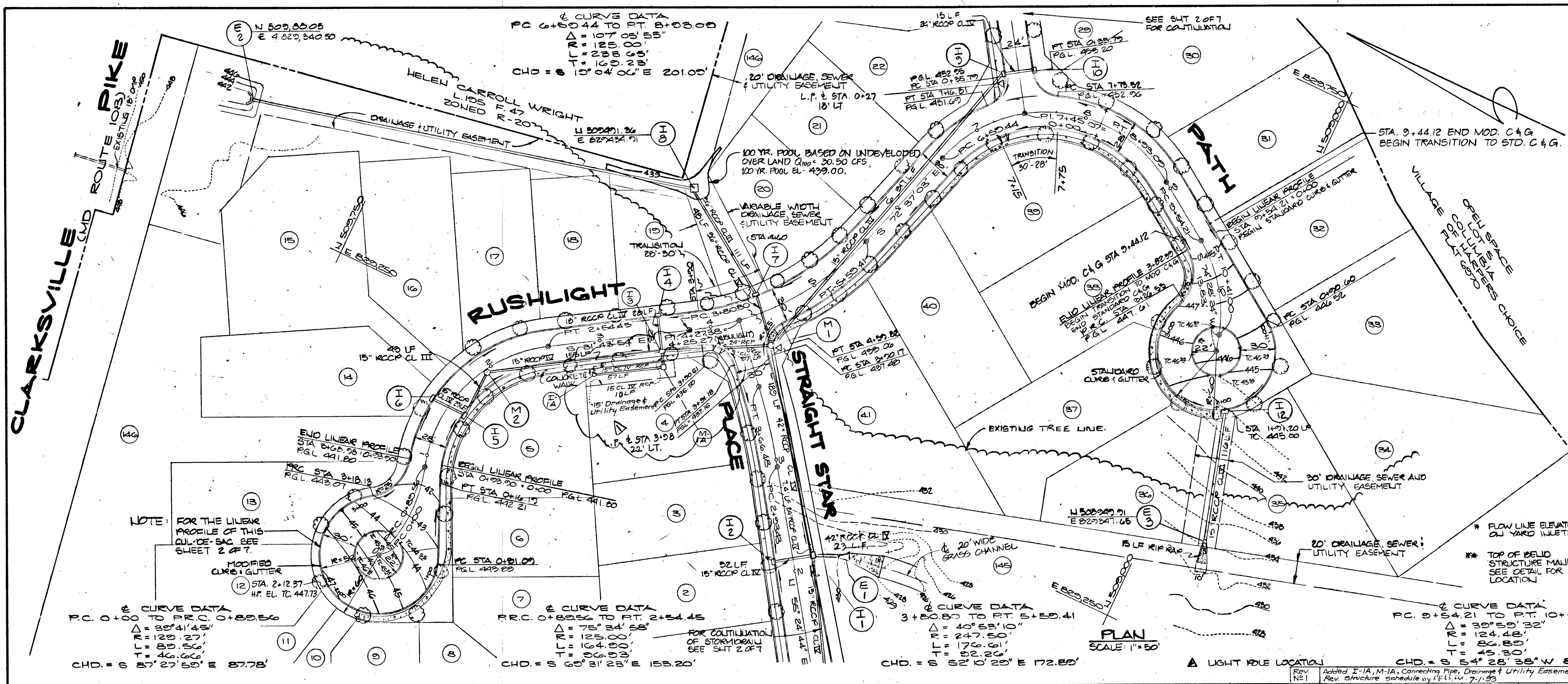
NOTES: \* TOP ELEV. REPRESENTS PROFILE GRADE ELEVATIONS  
 \* FLOW LINE ELEVATION ON YARD INLETS

Added I-1A, M-1A Connecting Pipe, 15' Drainage and Utility Easement by CFS, Inc. 7-1-89  
 REVISIONS  
 Date:



For Revision by CFS, Inc. Dated 7/1/89

**PROFILES**  
 SCALE: 1"=50' HORIZ.  
 1"=5' VERT.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Chief, Land Development Division  
 12/15/89  
 DATE

*Crawford W. Wallace*  
 Chief, Bureau of Highways  
 11/13/89  
 DATE

*William D. Ray*  
 Chief, Bureau of Engineering  
 12-18-89  
 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 Chief, Division of Community Planning and Land Development  
 1/16/89  
 DATE

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS PLANNERS SURVEYORS  
 1020 CROMWELL BRIDGE ROAD  
 BALTIMORE, MARYLAND 21204  
 301-321-5500

DESIGNED: J.J.D.  
 DRAWN: PMN  
 CHECKED: D.N.M.  
 DATE: 4-14-89

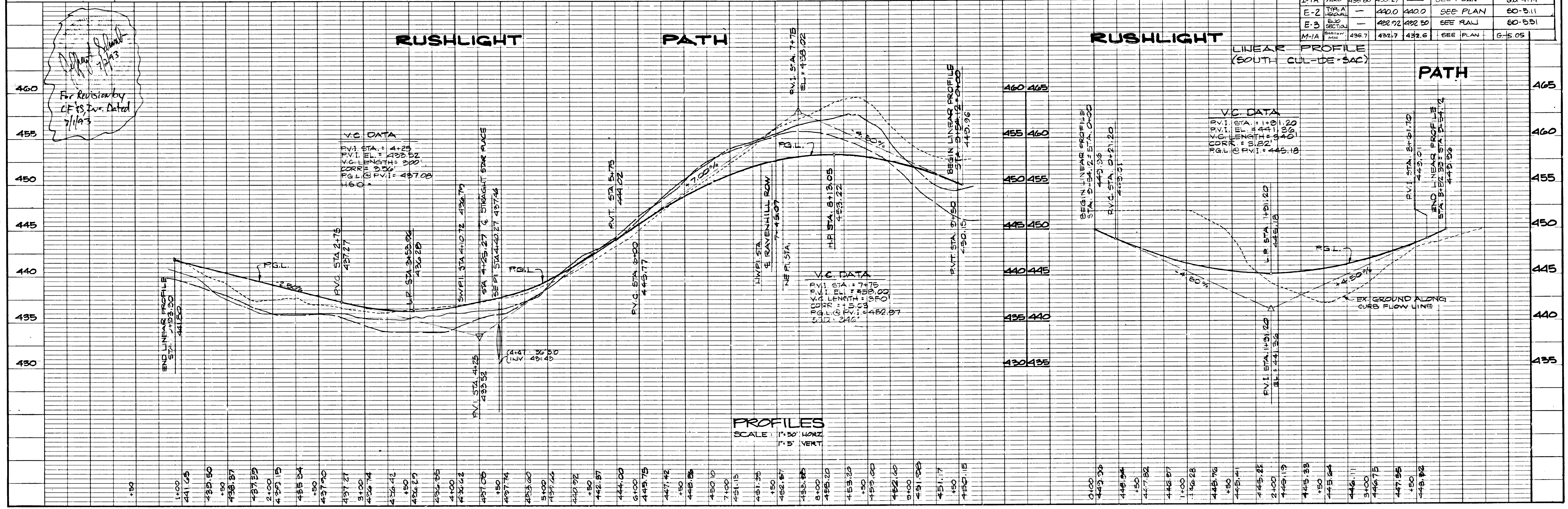
**PLAN & PROFILE**  
 RUSHLIGHT PATH  
 COLUMBIA  
 VILLAGE OF HARPERS CHOICE  
 SECTION 7 AREA 4  
 5TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

OWNER DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND COMPANY  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044

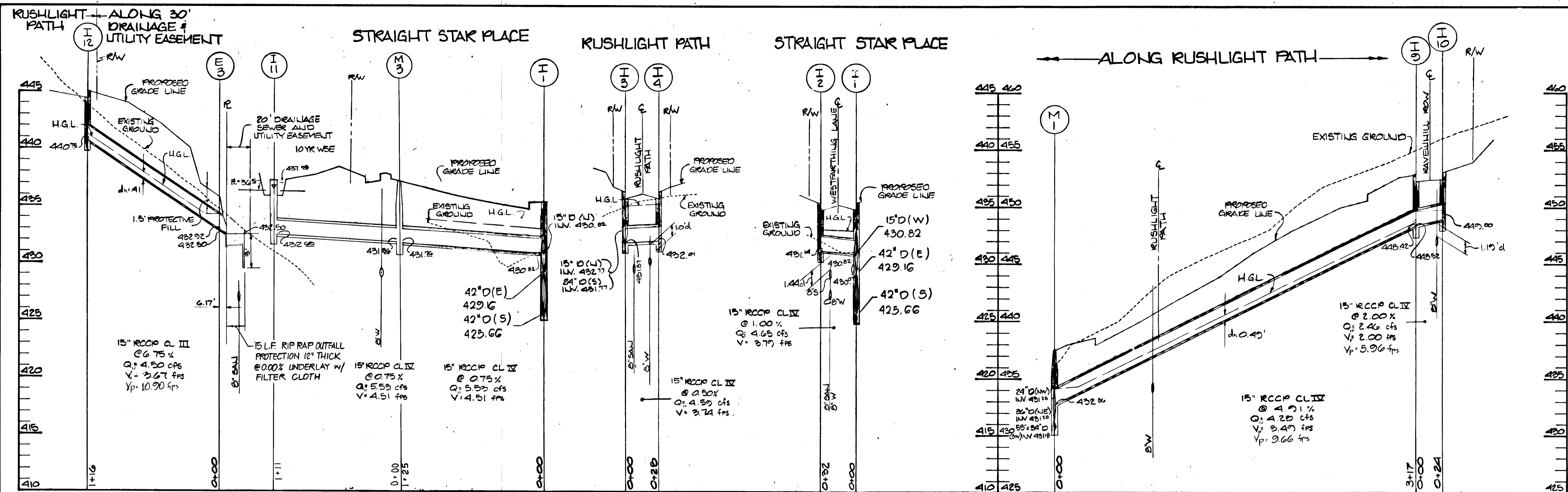
SCALE: 1"=50'  
 DRAWING: 3 OF 7  
 JOB NO.: 0188113  
 FILE NO.:

**STORM DRAIN STRUCTURE SCHEDULE**

| No.  | TYPE     | TOP ELEV. | INV. OUT | INV. IN | LOCATION          | REMARKS                 |
|------|----------|-----------|----------|---------|-------------------|-------------------------|
| I-3  | A-5      | 426.28    | 421.77   | 422.52  | 3+52.36 14.88' RT | SD 4.01                 |
| I-4  | A-5      | 426.28    | 422.01   | -       | 3+58.36 14.88' LT | SD 4.01                 |
| I-5  | A-10     | 440.42    | 425.67   | 425.77  | 1+47 14.88' RT    | SD 4.02                 |
| I-6  | A-10     | 440.50    | 426.25   | -       | 1+46 14.88' LT    | SD 4.02                 |
| I-7  | A-10     | 427.71    | 421.49   | 421.59  | 4+47 15.68' LT    | SD 4.02                 |
| I-8  | MODIFIED | 422.08    | 422.28   | 422.73  | SEE PLAN          | SEE DETAIL SHEET 2 OF 7 |
| I-9  | A-10     | 422.72    | 440.42   | 422.52  | 0+85 14.88' LT    | SD 4.02                 |
| I-10 | A-10     | 422.17    | 440.00   | -       | 0+85 14.88' RT    | SD 4.02                 |
| I-12 | A-5      | 445.00    | 440.75   | -       | 1+71.20 UNL. RT   | SD 4.01                 |
| M-1  | SHALLOW  | 427.47    | 421.18   | 421.28  | 3+92.5 20.5' RT   | G 5.05                  |
| M-2  | SHALLOW  | 427.08    | 424.71   | 424.81  | 1+24 5' RT        | G 5.05                  |
| E-1  | BOX      | -         | 425.43   | 425.35  | 2+05 40' RT       | SD 5.51                 |
| I-1A | YARD     | 425.80    | 425.27   | -       | SEE PLAN          | SD 4.14                 |
| E-2  | TYPICAL  | -         | 440.0    | 440.0   | SEE PLAN          | 60-5.11                 |
| E-3  | SHALLOW  | -         | 422.72   | 422.50  | SEE PLAN          | 60-5.51                 |
| M-1A | SHALLOW  | 426.7     | 422.7    | 422.6   | SEE PLAN          | G-5.05                  |



For Revision by  
 C.F.S. Dated  
 7/1/83



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 12/15/89 DATE  
 CHIEF, LAND DEVELOPMENT DIVISION  
 11/13/89 DATE  
 CHIEF, BUREAU OF HIGHWAYS  
 12-18-89 DATE  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 12/15/89 DATE  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

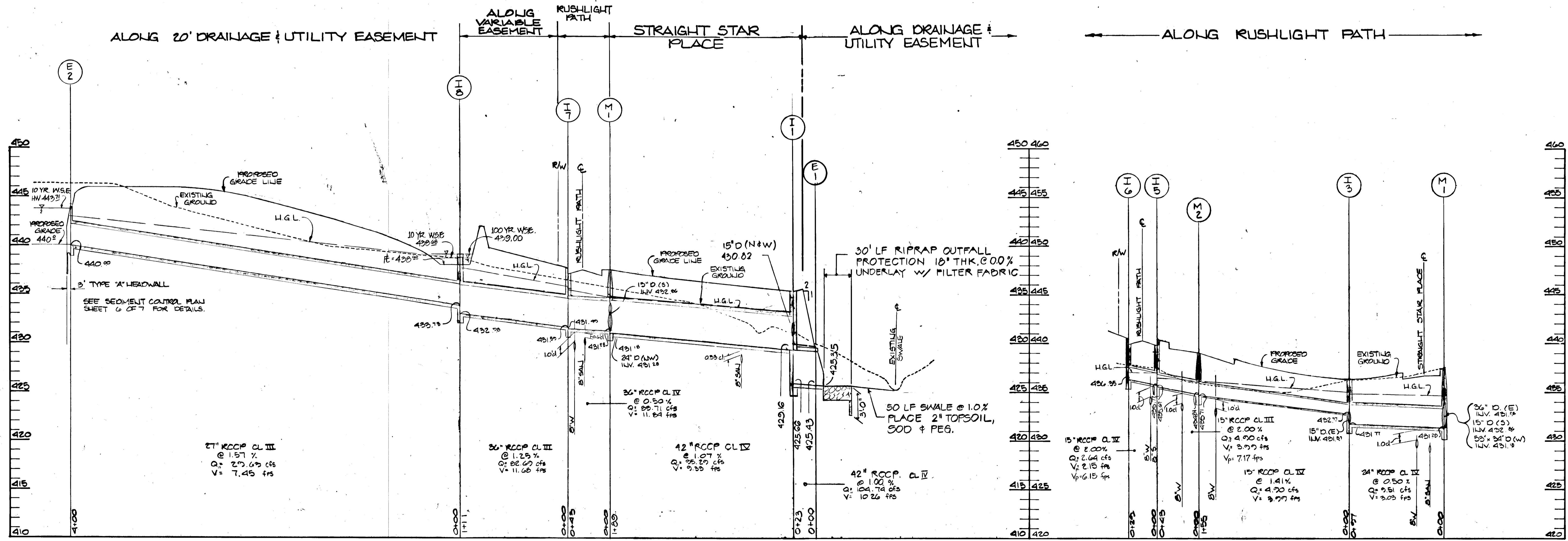
**KIDDE CONSULTANTS, INC.**  
 ENGINEERS PLANNERS SURVEYORS  
 1020 CROMWELL BRIDGE ROAD  
 BALTIMORE, MARYLAND 21204  
 301-321-5500

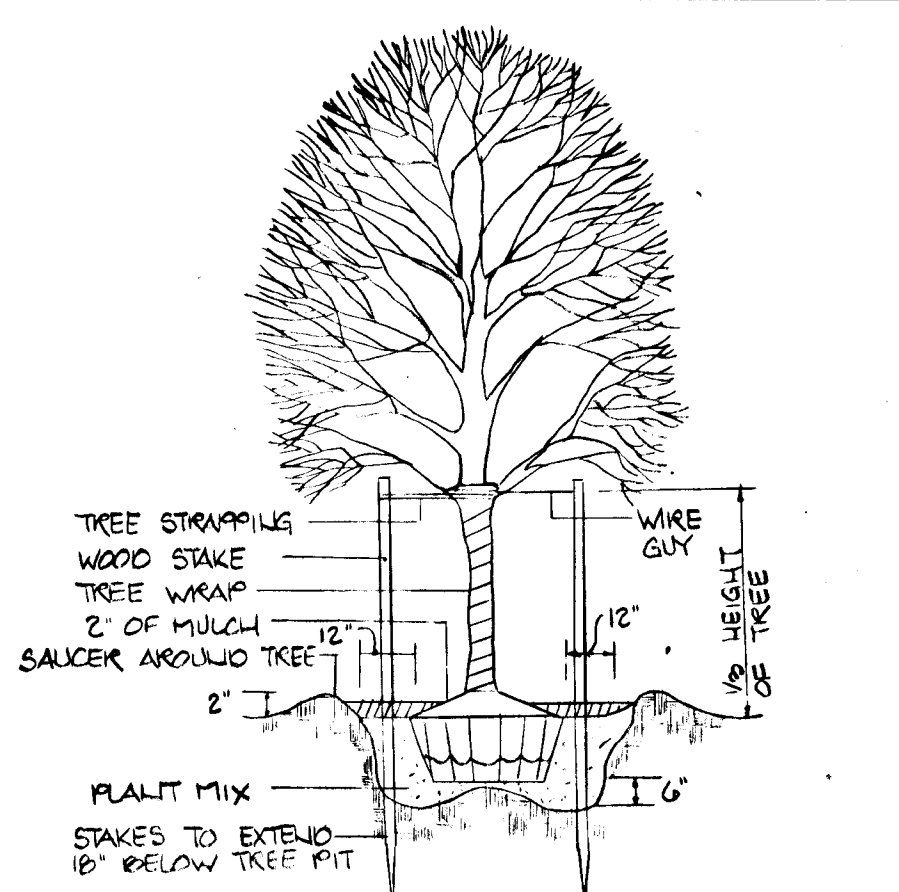
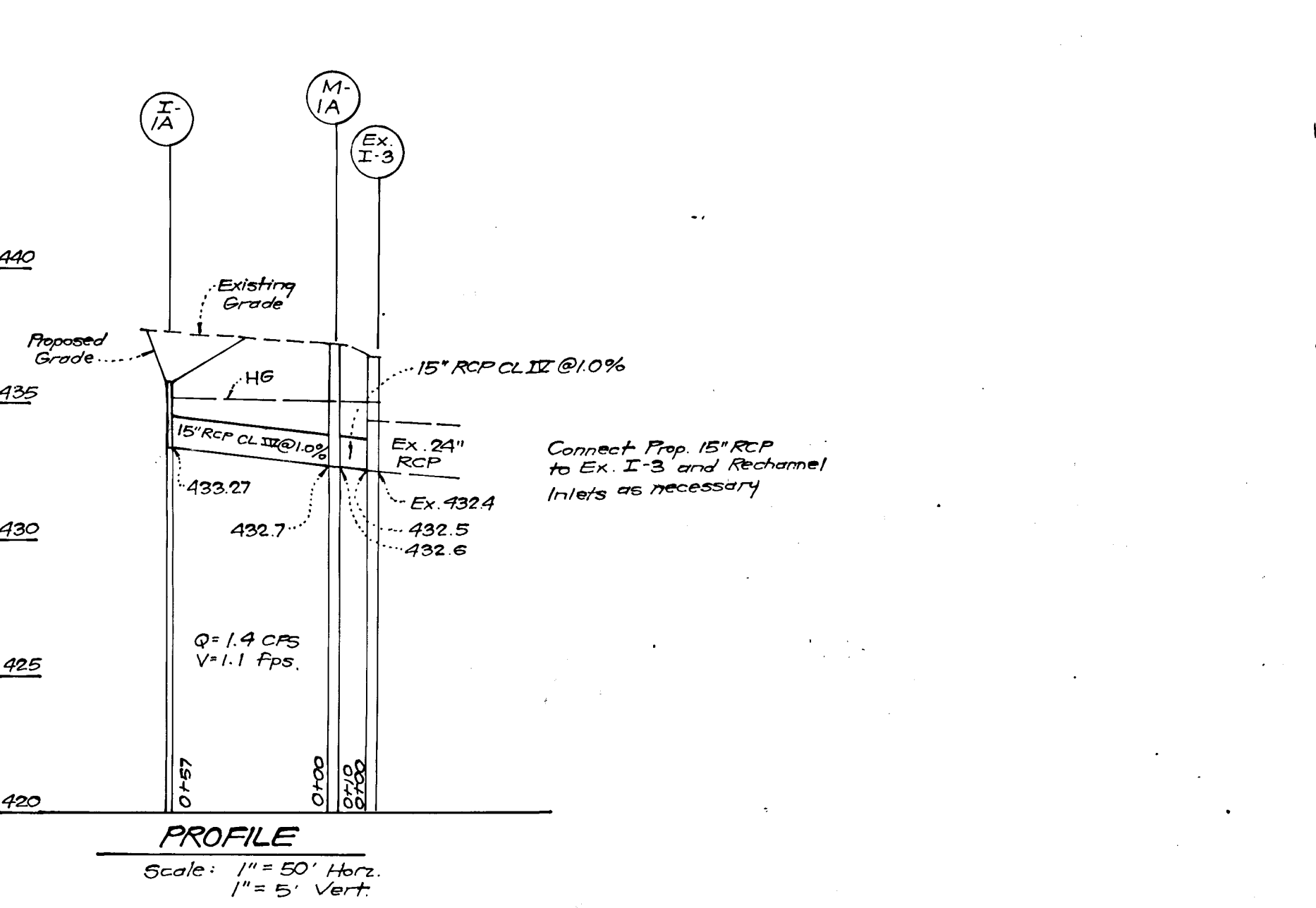
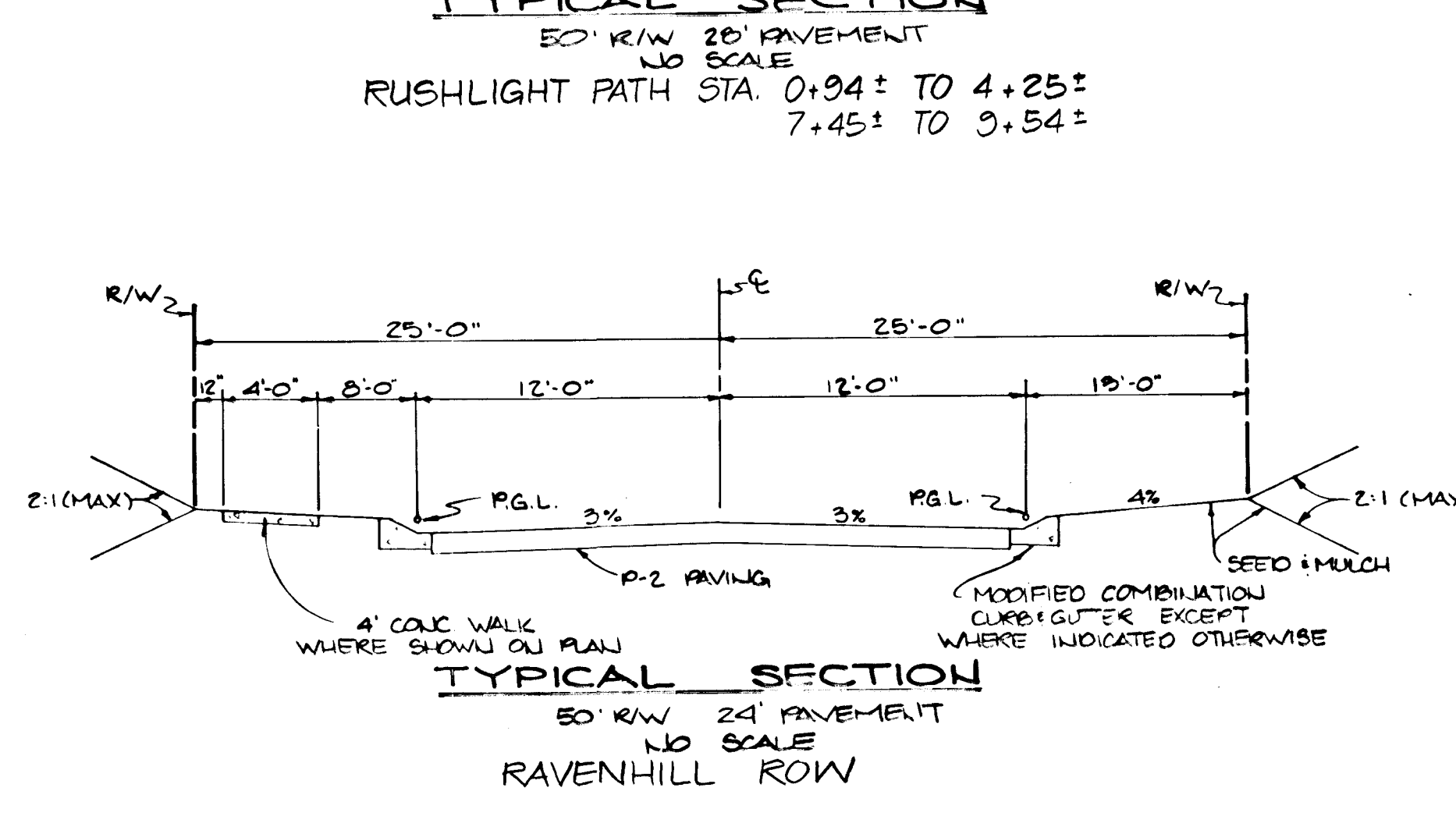
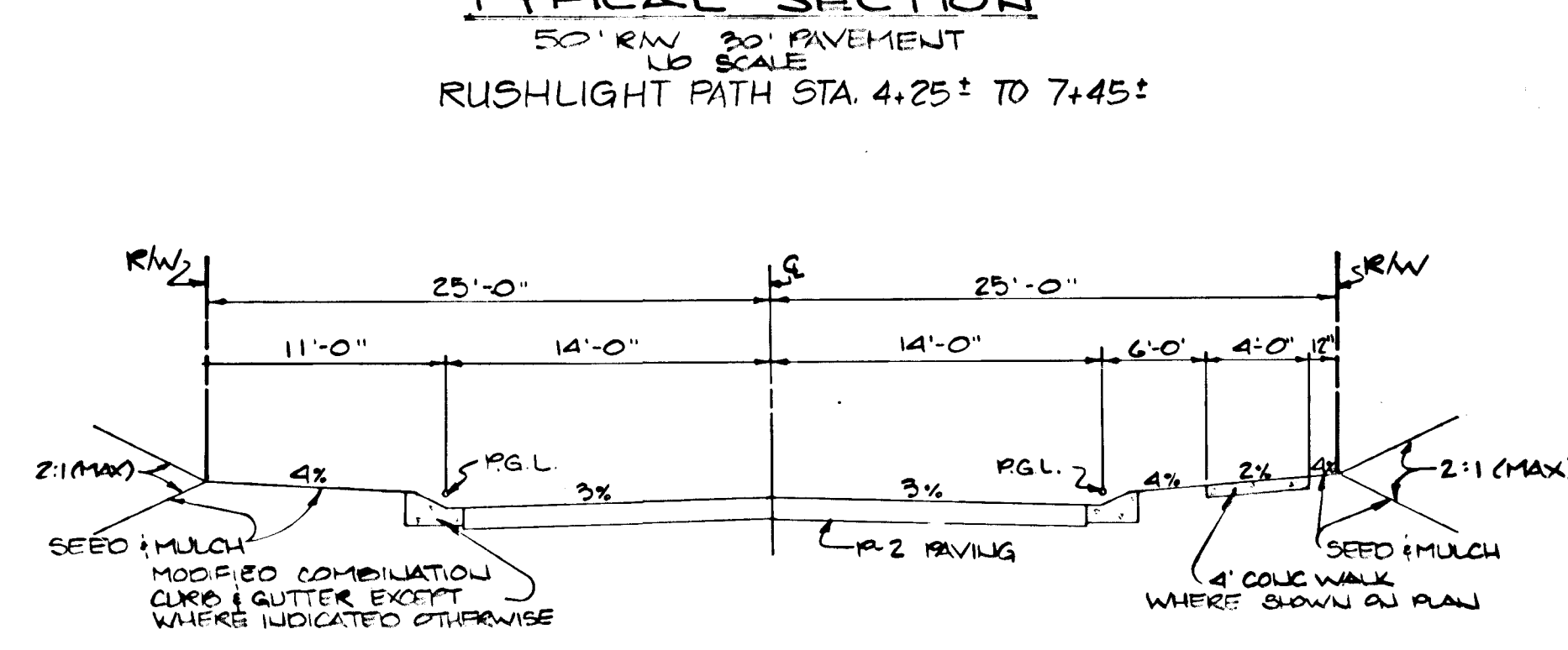
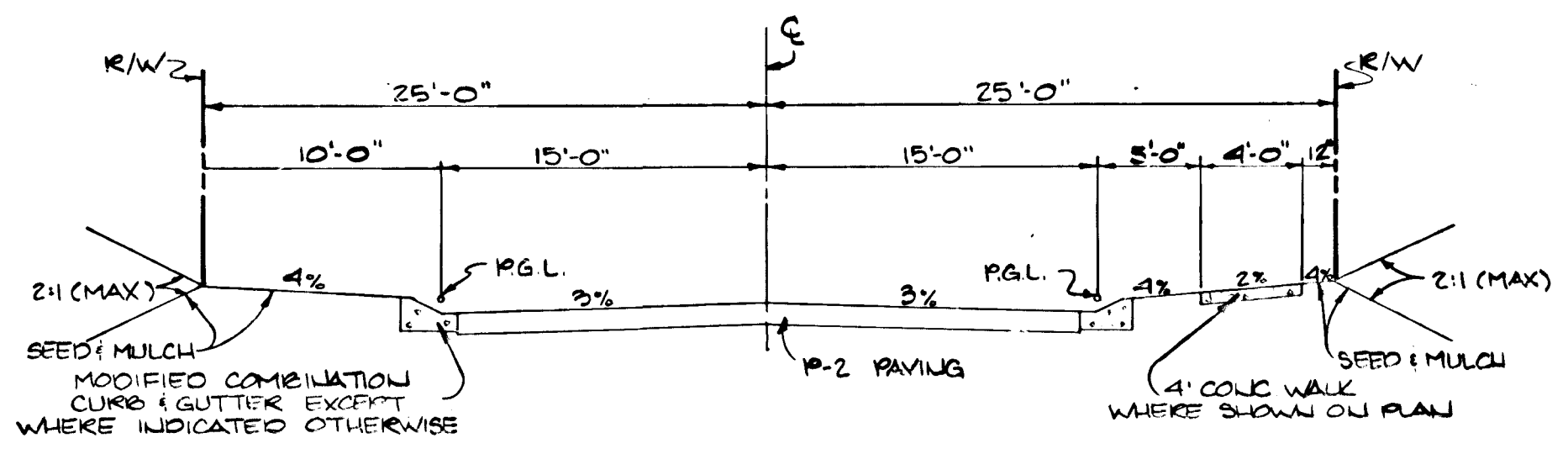
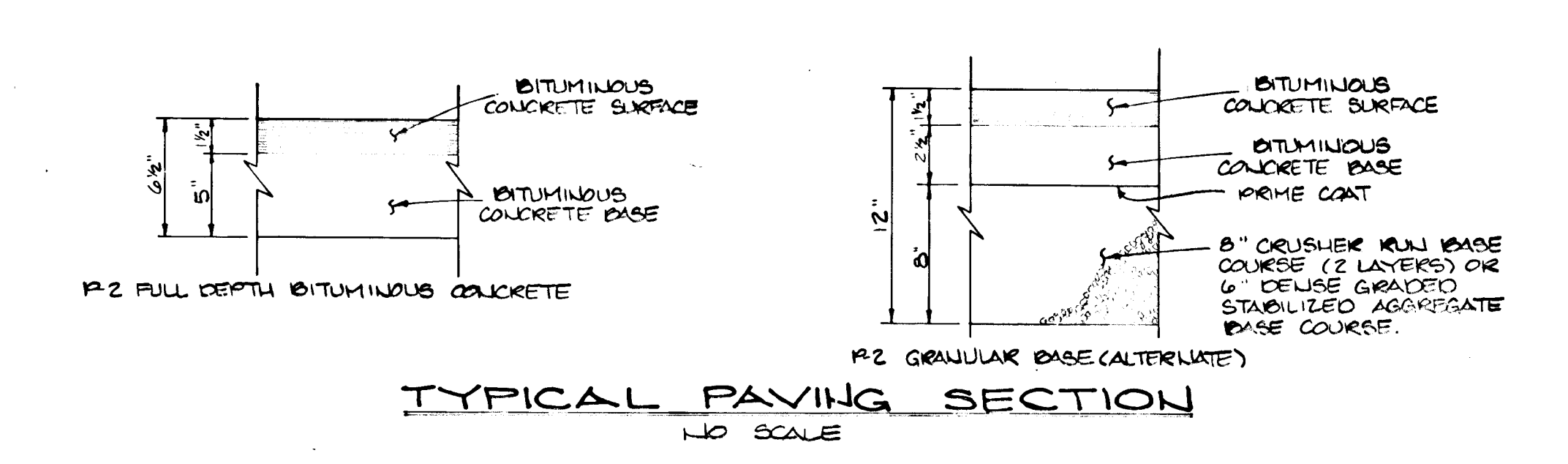
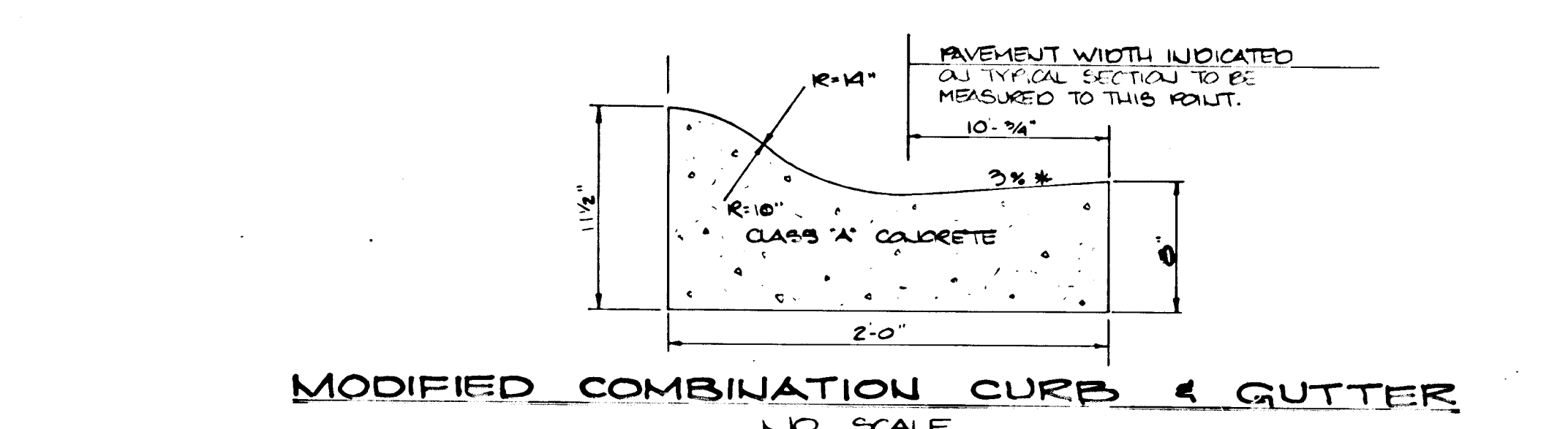
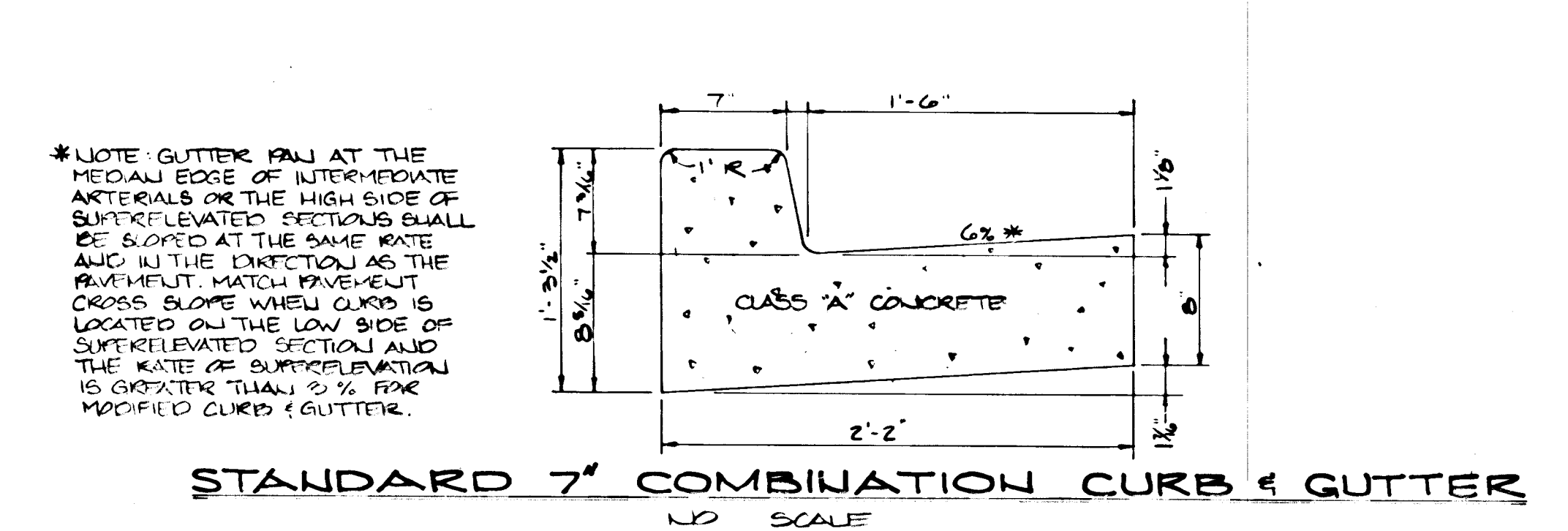
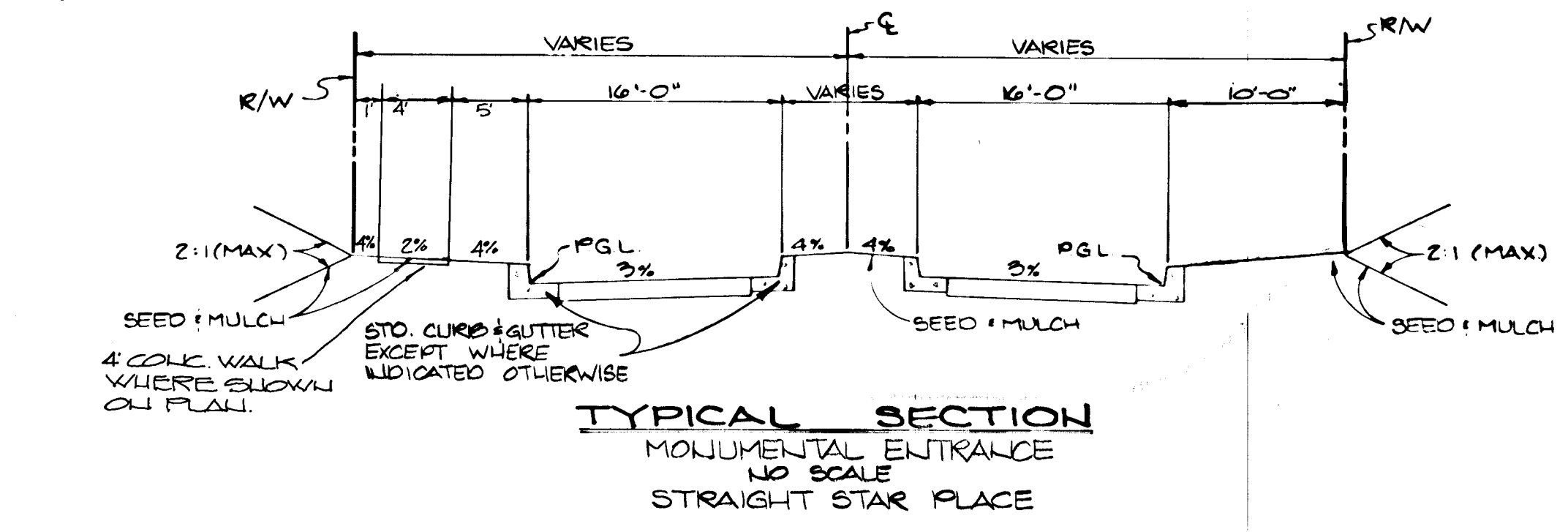
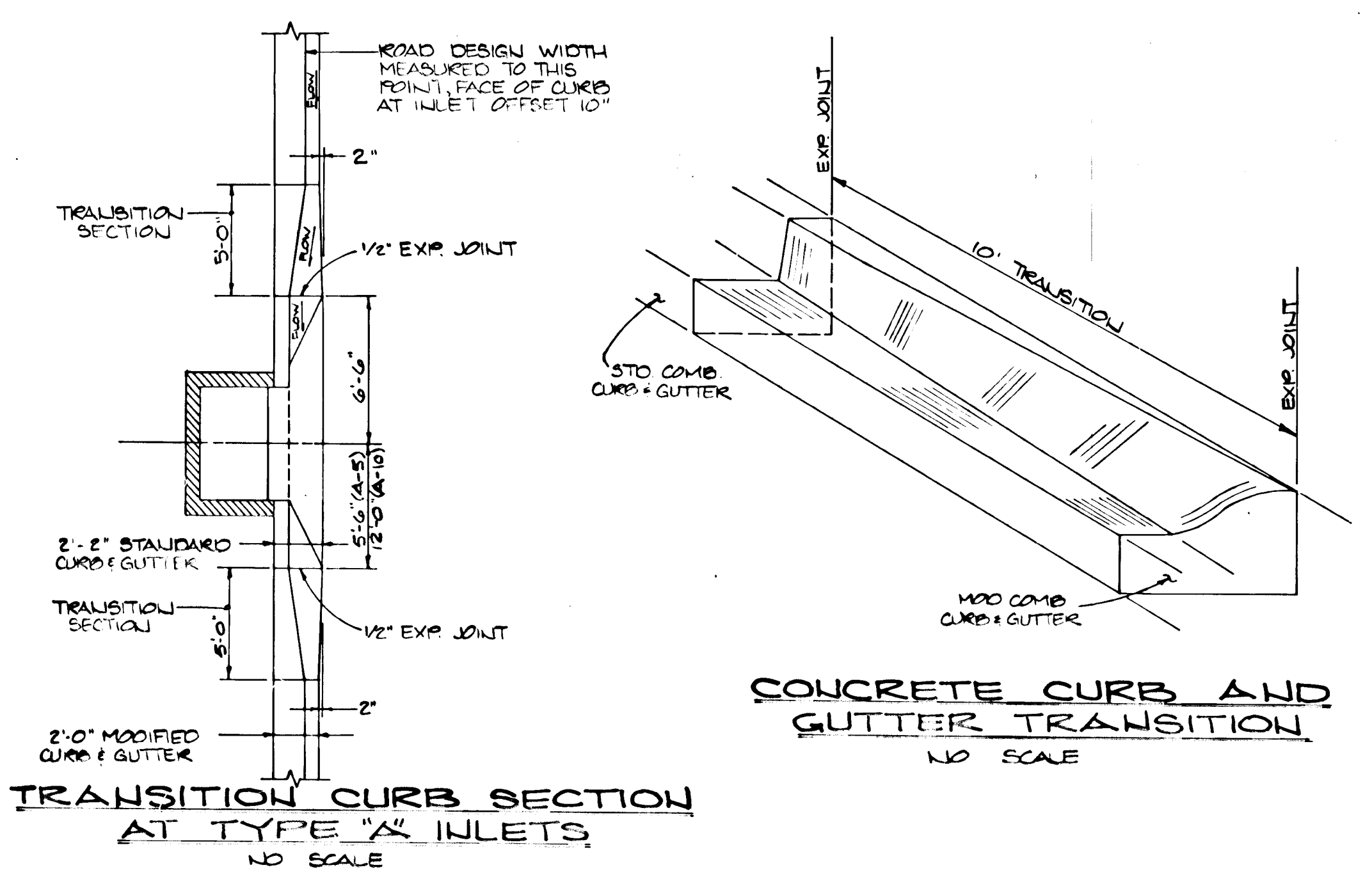
**STORM DRAIN PROFILES**  
**COLUMBIA**  
 VILLAGE OF HARPERS CHOICE  
 SECTION 7 AREA 4  
 5TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

OWNER DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND COMPANY  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044

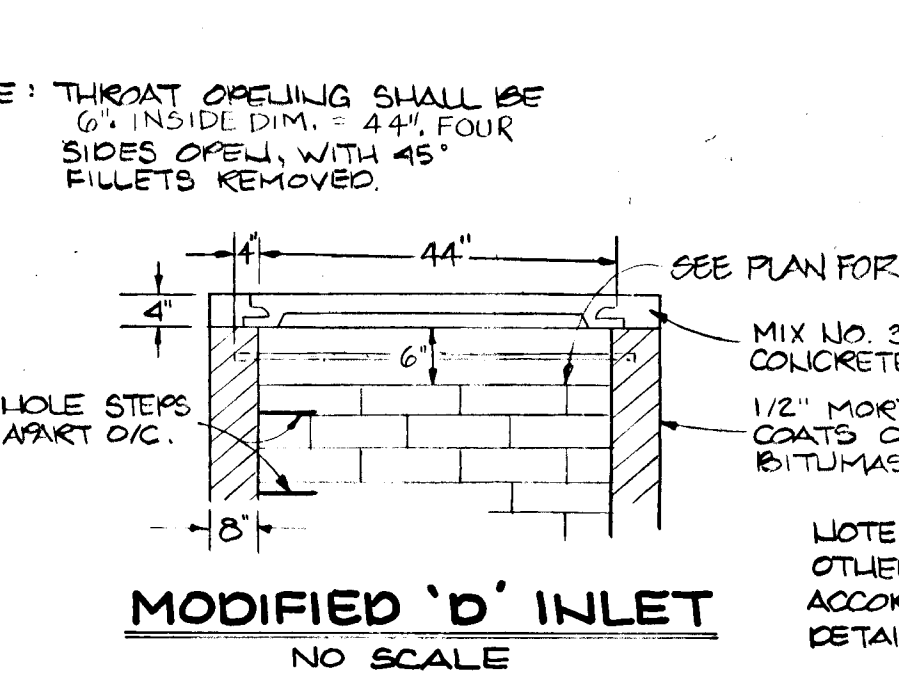
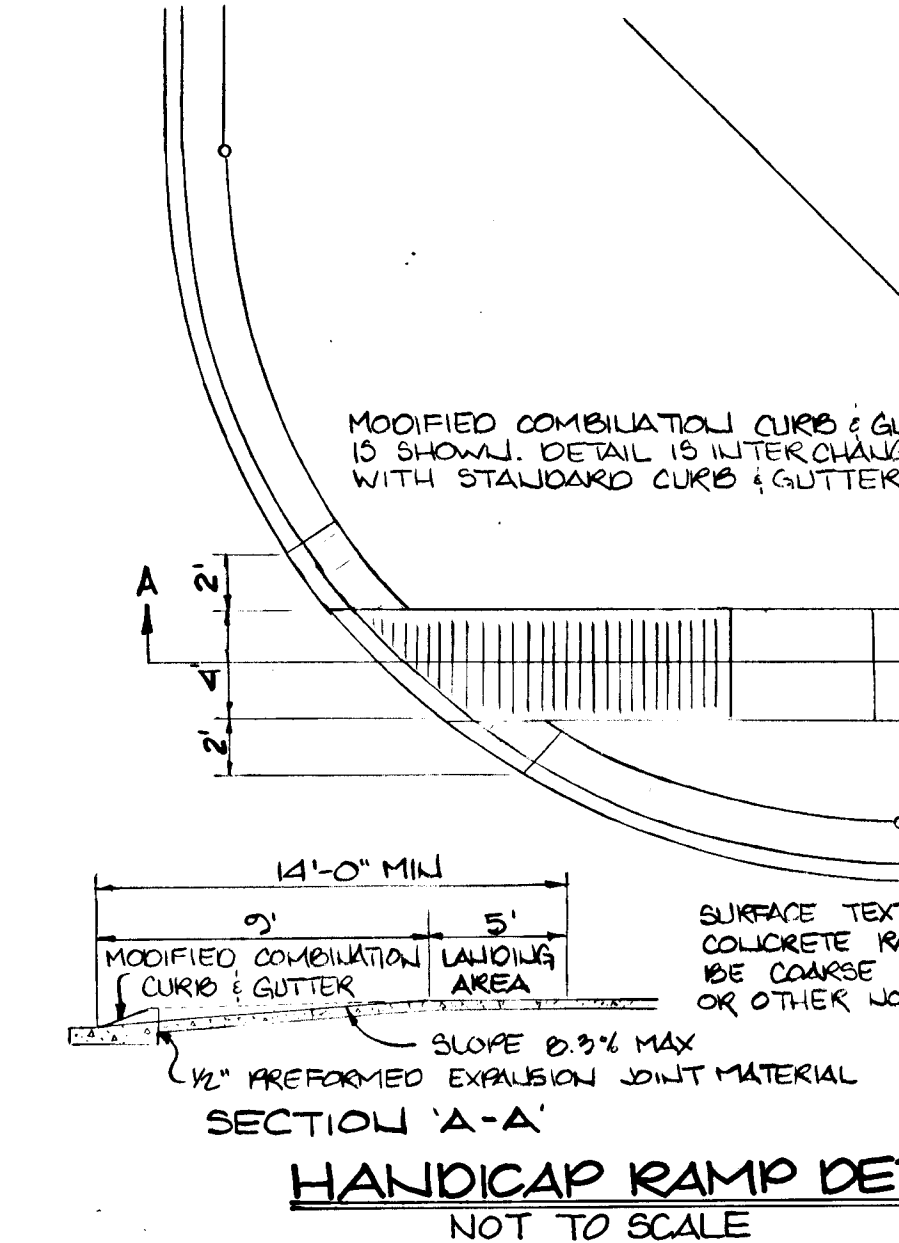
|                    |                    |
|--------------------|--------------------|
| DESIGNED<br>J.J.D. | SCALE<br>1" = 50'  |
| DRAWN<br>P.M.N.    | DRAWING<br>4 OF 7  |
| CHECKED<br>D.N.M.  | JOB NO.<br>0188113 |
| DATE<br>4-14-89    | FILE NO.           |

NOTE: FOR PLAN VIEW SEE SHEETS 2 OF 7 & 3 OF 7.





**TREE PLANTING SPECIFICATIONS**  
 SIZE: 2-2 1/2" CALIBER  
 TYPE: OVERHEAD CANOPY 12-14' HIGH  
 VARIETY: CONFORM WITH THE PLANT LIST SPECIFIED IN SECTION 100.02.04 OF THE HOWARD COUNTY DESIGN MANUAL VOLUME III  
 LOCATION: FROM 0' TO 10' OUTSIDE R/W LINE.  
 NOTE: STREET TREES SHALL BE LIMITED TO A SINGLE VARIETY ON EACH STREET, BUT MAY VARY FROM STREET TO STREET.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James J. ...* 12/15/09  
 CHIEF, LAND DEVELOPMENT DIVISION DATE  
*Lawrence W. ...* 11/13/09  
 CHIEF, BUREAU OF HIGHWAYS DATE  
*James J. ...* 12-18-09  
 CHIEF, BUREAU OF ENGINEERING DATE  
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
*David S. ...* 2/2/10  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS PLANNERS SURVEYORS  
 1020 CROMWELL BRIDGE ROAD  
 BALTIMORE, MARYLAND 21204  
 301-321-5500

DESIGNED: J.J.D.  
 DRAWN: P.M.N.  
 CHECKED: D.N.M.  
 DATE: 4-14-09

**TYPICAL ROAD SECTIONS AND DETAILS**  
**COLUMBIA**  
 VILLAGE OF HARPERS CHOICE  
 SECTION 7 AREA 4  
 5TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

OWNER DEVELOPER  
 THE HOWARD RESEARCH & DEVELOPMENT LAND COMPANY  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044

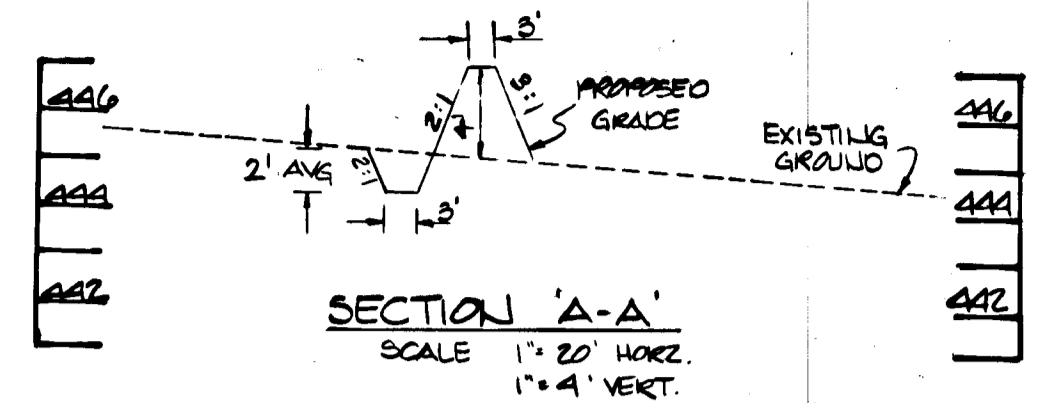
SCALE: 1"=50'  
 DRAWING: 5 OF 7  
 JOB NO.: 0188113  
 FILE NO.:

*James J. ...*  
 For Revision by  
 C.E.S., Inc. Dated  
 7/1/03

|    |   |      |
|----|---|------|
| 1  | Added Storm Drain Profile Sta. I-1A to Ex. I-3 by C.E.S., Inc. 7-1-03 |      |
| N2 | REVISION  | Date |

**SEDIMENT TRAP TABLE**

| TRAP NO.          | 1       | 2       |
|-------------------|---------|---------|
| TYPE OF TRAP      | POST    | SOST    |
| EX. O.A. (AC)     | 4.72 AC | 3.40 AC |
| PROP. O.A. (AC)   | 4.90 AC | 4.10 AC |
| STORAGE REQ. (CF) | 8720    | 7524    |
| STORAGE PRN. (CF) | 3000    | 7700    |
| BOTTOM DIM. (FT)  | 12x12   | 17x17   |
| SIDE SLOPES       | 2:1     | 2:1     |
| OUTLET SIZE (IN)  | 17"     | 17"     |
| BOTTOM ELEV.      | 432.0   | 432.0   |
| WEIR ELEV.        | 435.5   | 434.0   |
| CLEANOUT ELEV.    | 433.75  | 432.0   |
| EMBANKMENT ELEV.  | 436.0   | 435.0   |
| EX. GRADE @ WEIR  | 433.0   | 432.0   |



**OWNER/DEVELOPER CERTIFICATION**  
 I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE CONFORMANT WITH THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 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. ALSO THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS.  
 Signature: *[Signature]* DATE: 6-15-89

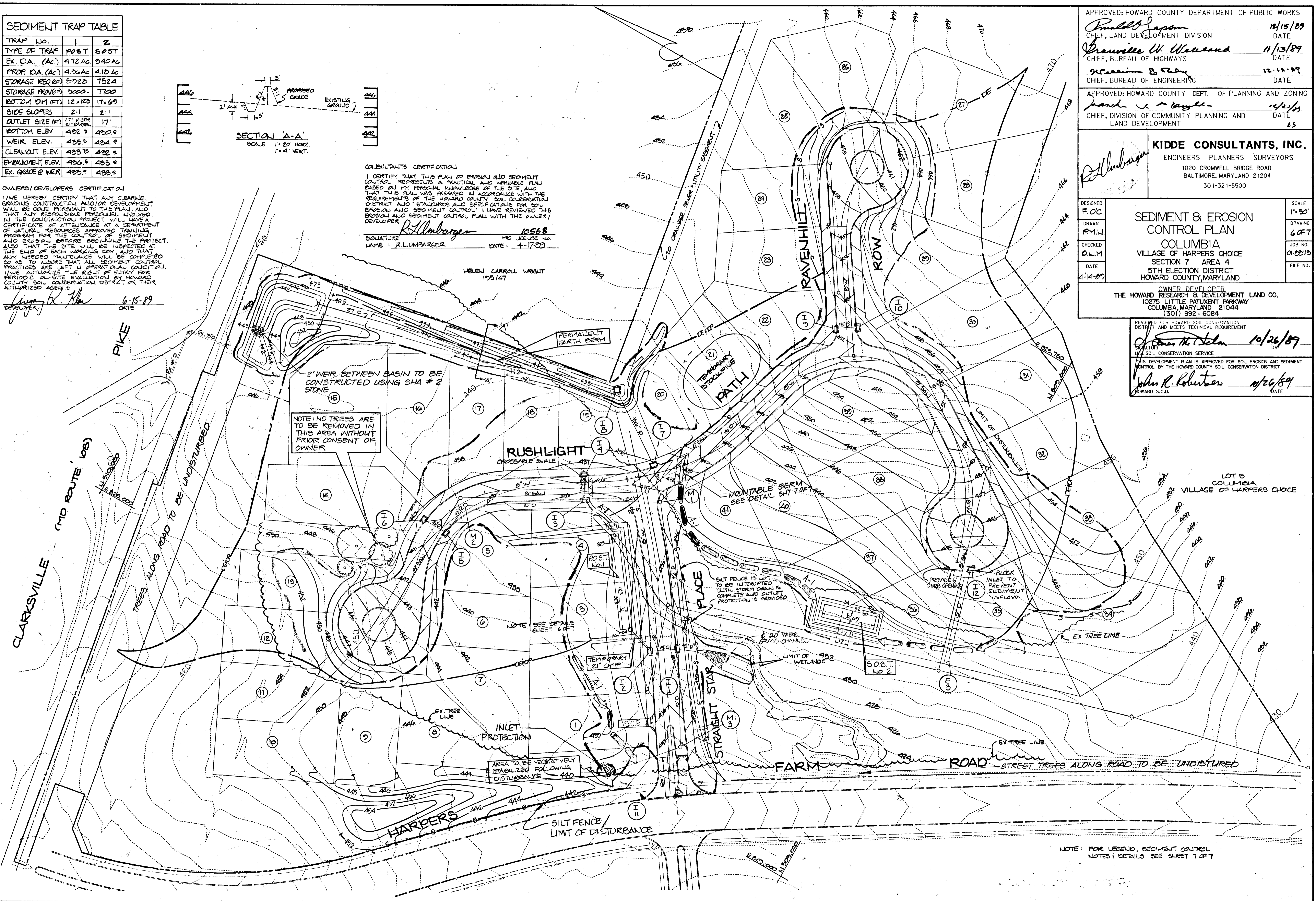
**CONSULTANTS CERTIFICATION**  
 I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.  
 Signature: *[Signature]* DATE: 10/26/89  
 NAME: R. LUMBARGER MD LICENSE NO. 10568 DATE: 4-17-80

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Signature: *[Signature]* DATE: 11/15/89  
 CHIEF, LAND DEVELOPMENT DIVISION  
 Signature: *[Signature]* DATE: 11/13/89  
 CHIEF, BUREAU OF HIGHWAYS  
 Signature: *[Signature]* DATE: 12-18-89  
 CHIEF, BUREAU OF ENGINEERING  
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 Signature: *[Signature]* DATE: 12/15/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS PLANNERS SURVEYORS  
 1020 CROMWELL BRIDGE ROAD  
 BALTIMORE, MARYLAND 21204  
 301-321-5500

DESIGNED: F.O.C.  
 DRAWN: P.M.J.  
 CHECKED: D.L.M.  
 DATE: 4-11-89  
**SEDIMENT & EROSION CONTROL PLAN**  
 COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 50'  
 DRAWING: 607  
 JOB NO.: 01-00118  
 FILE NO.:

OWNER/DEVELOPER:  
 THE HOWARD RESEARCH & DEVELOPMENT LAND CO.  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 (301) 992-6084  
 REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT  
 Signature: *[Signature]* DATE: 10/26/89  
 HOWARD SOIL CONSERVATION SERVICE  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
 Signature: *[Signature]* DATE: 11/26/89  
 HOWARD S.C.D.



NOTE: FOR LEGEND, SEDIMENT CONTROL NOTES & DETAILS SEE SHEET 7 OF 7

STANDARDS AND SPECIFICATIONS

VEGETATIVE STABILIZATION WITH SOD

SPECIFICATIONS

- 1. CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD.
2. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH PLUS OR MINUS 1/4 INCH AT THE TIME OF CUTTING...

L. SITE PREPARATION

- FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TESTS UNDER UNUSUAL CIRCUMSTANCES WHERE THERE IS INSUFFICIENT TIME FOR A COMPLETE SOIL TEST...
A. PRIOR TO SOILING, THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS, AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES, AND OTHER OBJECTS...

M. SOD INSTALLATION

- A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE THE SOD SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING OF SOD.
B. THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER...

N. SOD MAINTENANCE

- A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITY TO INVADE THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET...
B. AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE AND INSURE ESTABLISHMENT.

OWNERS/DEVELOPERS CERTIFICATION

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 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...

Richard L. Umbarger, MD, License No. 10568
Name: RICHARD L. UMBARGER DATE: 4/17/89

CONSULTANT'S CERTIFICATION

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

Signature: John M. Robertson, MD, License No. 10261
Name: JOHN M. ROBERTSON DATE: 4/26/89

SEDIMENT CONTROL NOTES

- 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction.
2. Alternative and structural practices are to be avoided according to the provisions of this plan and/or to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

TEMPORARY SEEDING NOTES

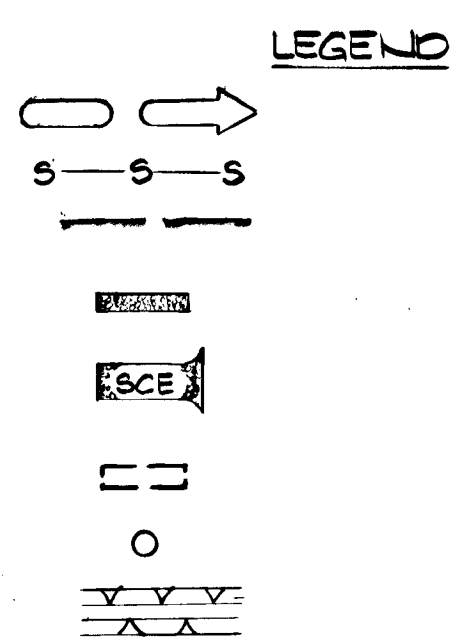
- SEEDING PREPARATION: LOOSEN UPPER 3 INCHES BY DISCING, RAKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE (14 LBS./1,000 SQ. FT.) OF 10-10-10 FERTILIZER.

PERMANENT SEEDING NOTES

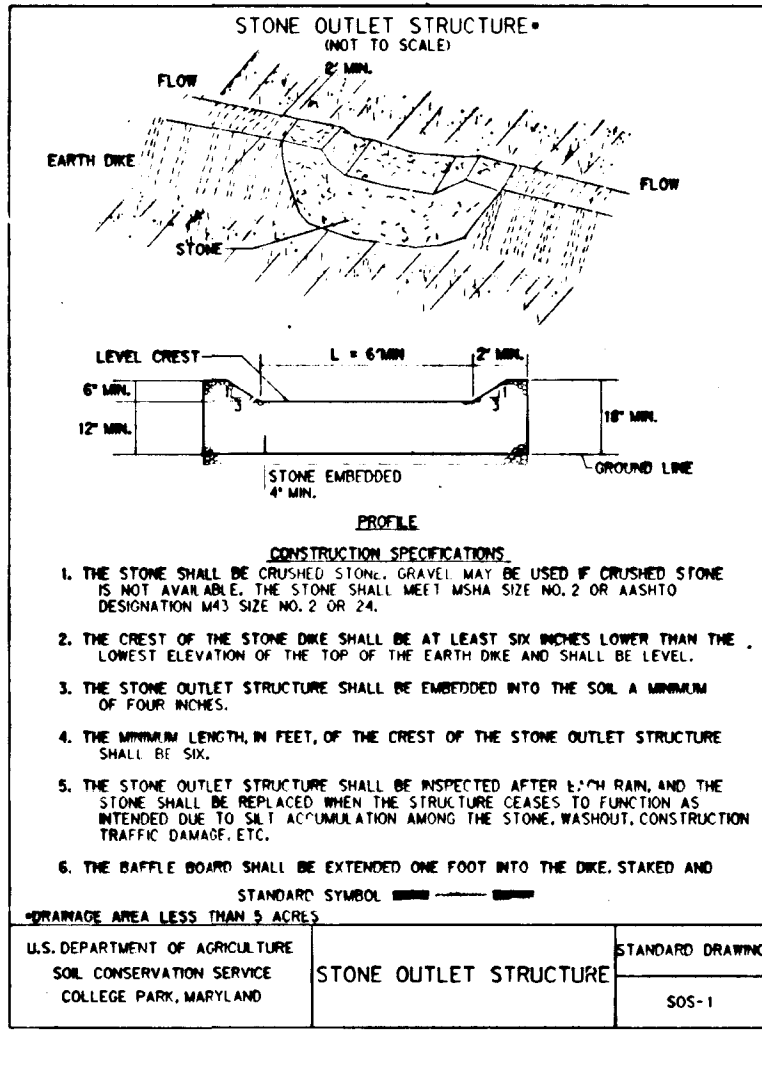
- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
SEEDING PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
SOIL AMENDMENTS: APPLY 2 TONS PER ACRE DELOMITIC LIMESTONE (92 LBS./1,000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1,000 SQ. FT.) BEFORE SEEDING...

GENERAL NOTES

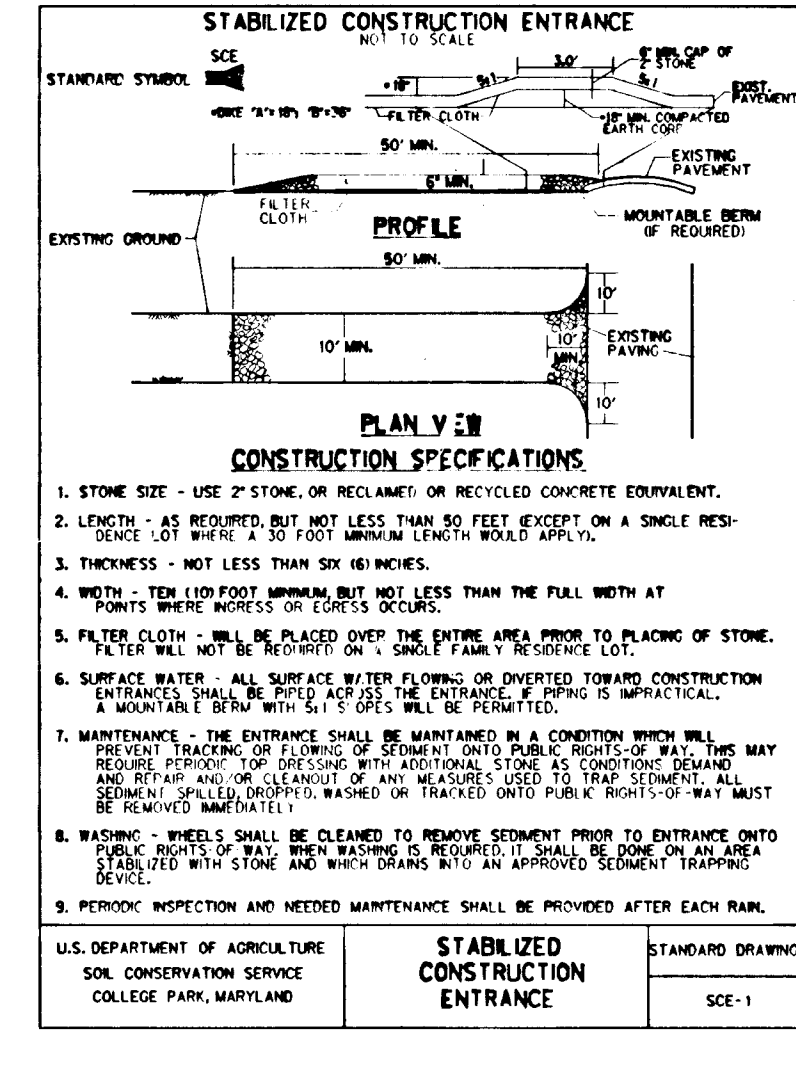
- 1. REFER TO '1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL' FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
2. WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.



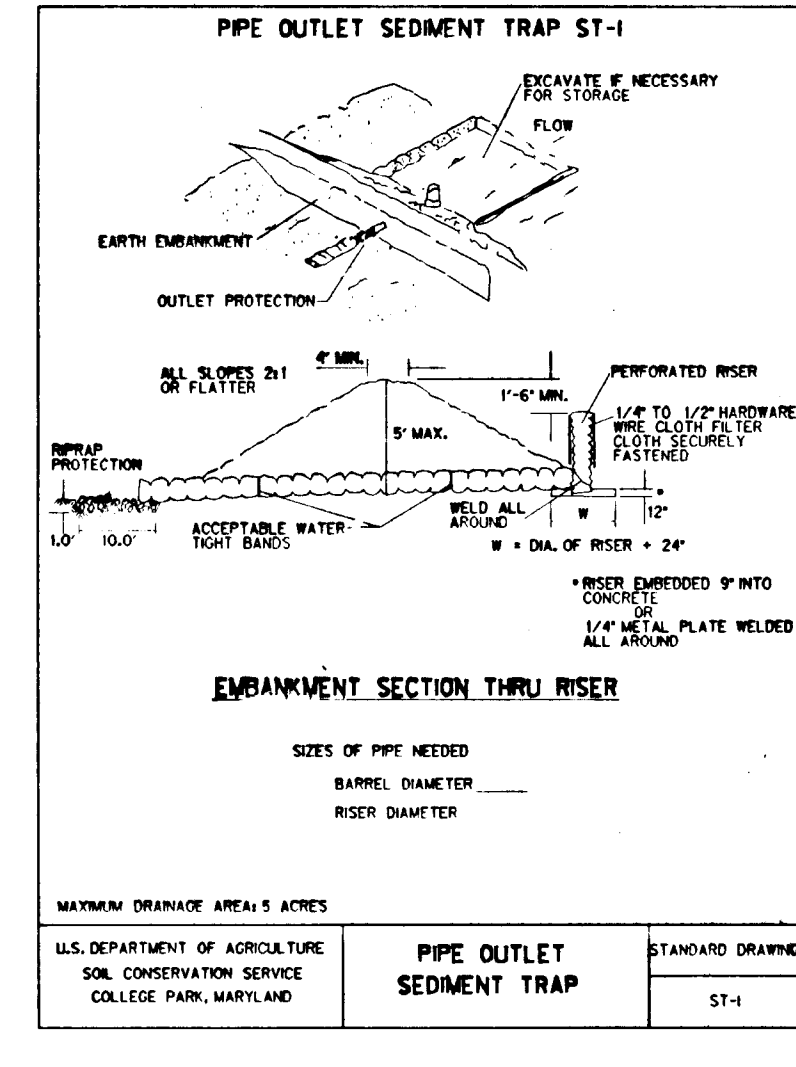
LEGEND
EARTH DIKE
SILT FENCE
LIMIT OF DISTURBANCE
STONE OUTLET STRUCTURE
STABILIZED CONSTRUCTION ENTRANCE
INLET PROTECTION
RISER POST
CROSSABLE SWALE



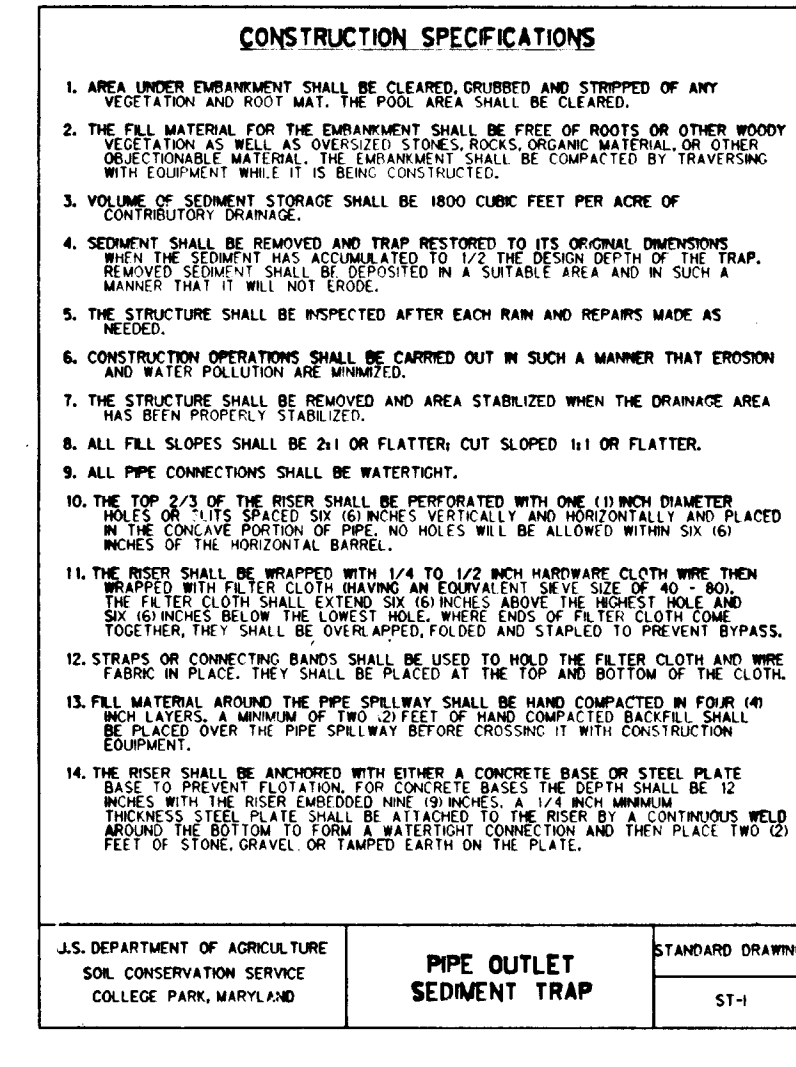
STONE OUTLET STRUCTURE STANDARD DRAWING S05-1



STABILIZED CONSTRUCTION ENTRANCE STANDARD DRAWING SCE-1



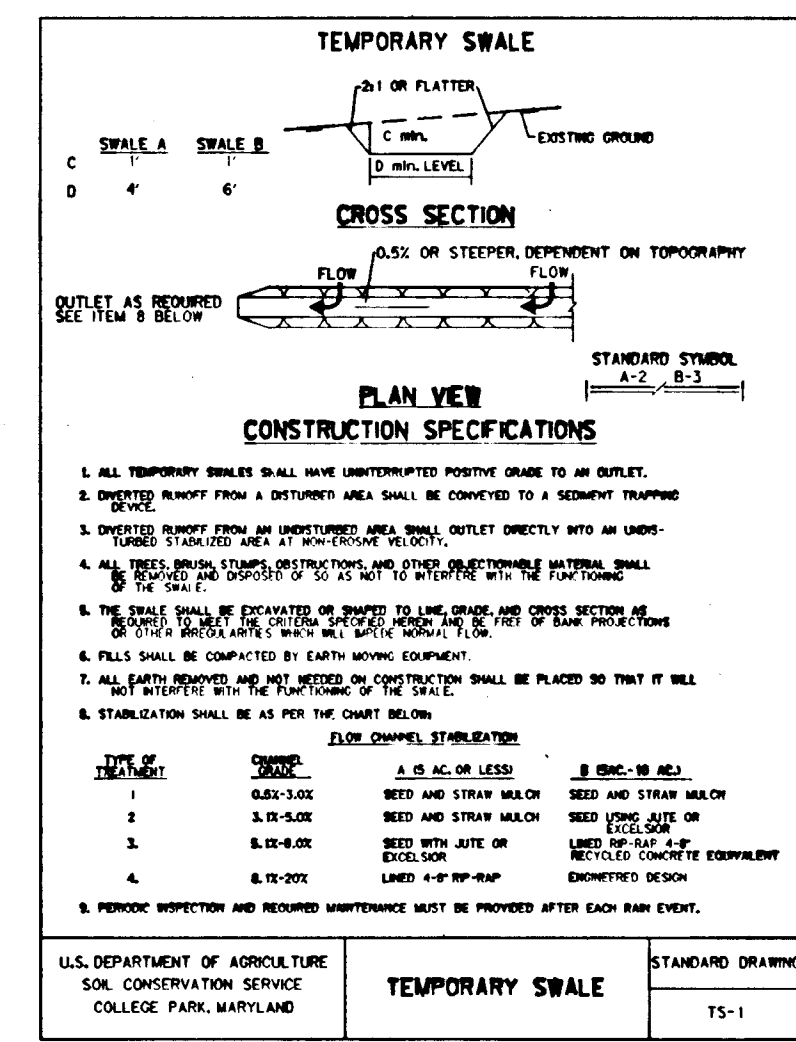
PIPE OUTLET SEDIMENT TRAP STANDARD DRAWING ST-1



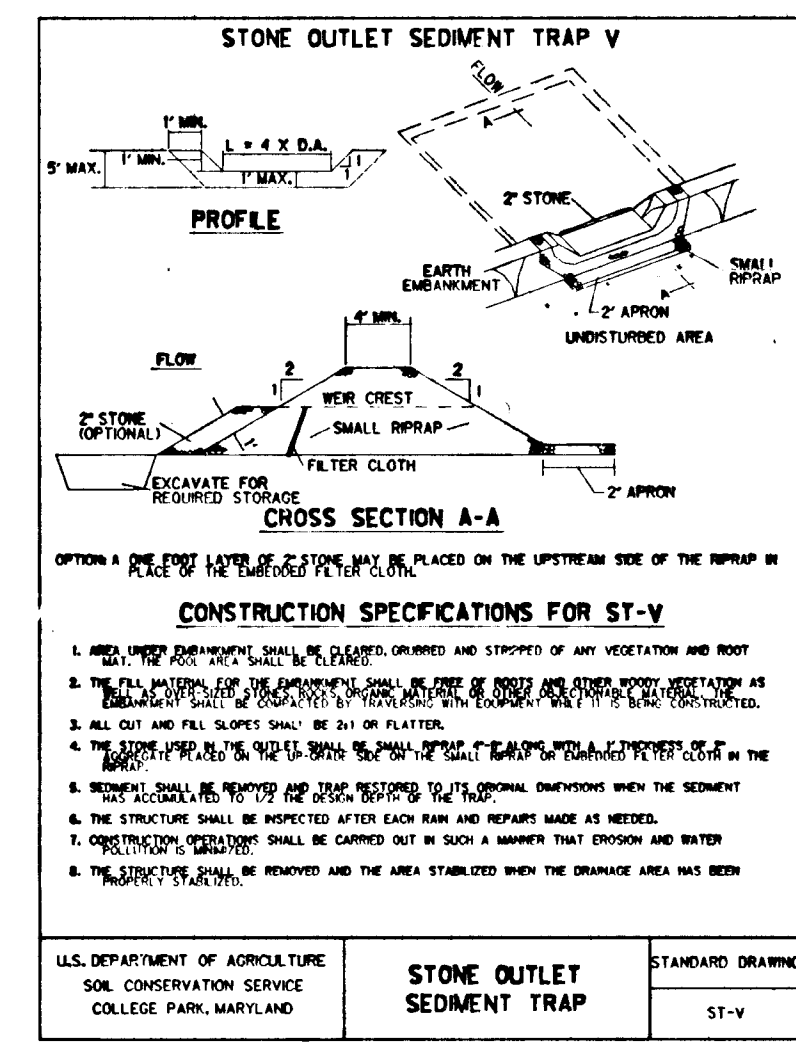
PIPE OUTLET SEDIMENT TRAP STANDARD DRAWING ST-1

SEQUENCE OF OPERATIONS

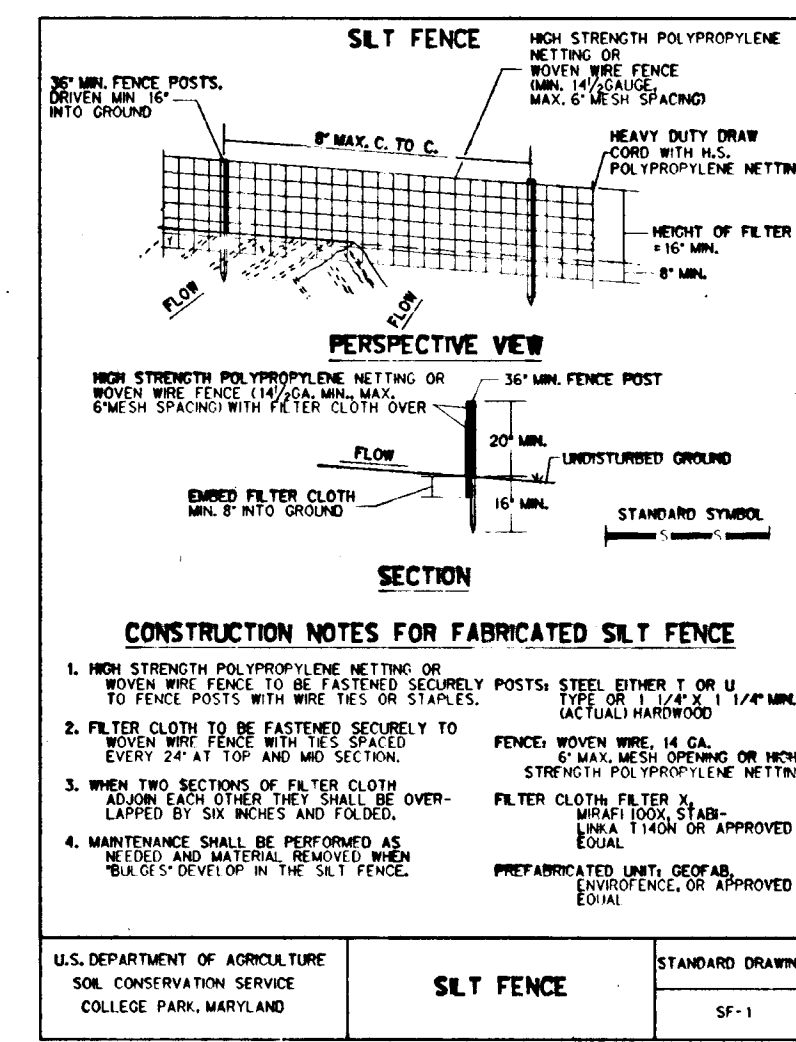
- 1. OBTAIN A GRADING PERMIT.
2. NOTIFY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR AT LEAST 24 HRS PRIOR TO BEGINNING WORK.
3. CLEAR AND GRUB FOR SEDIMENT AND EROSION CONTROL PRACTICES ONLY.
4. INSTALL SEDIMENT AND EROSION CONTROL PRACTICES WITH THE EXCEPTION OF OUTFALL PIPE FROM R.O.S.T. NO. 2 TO I-2.



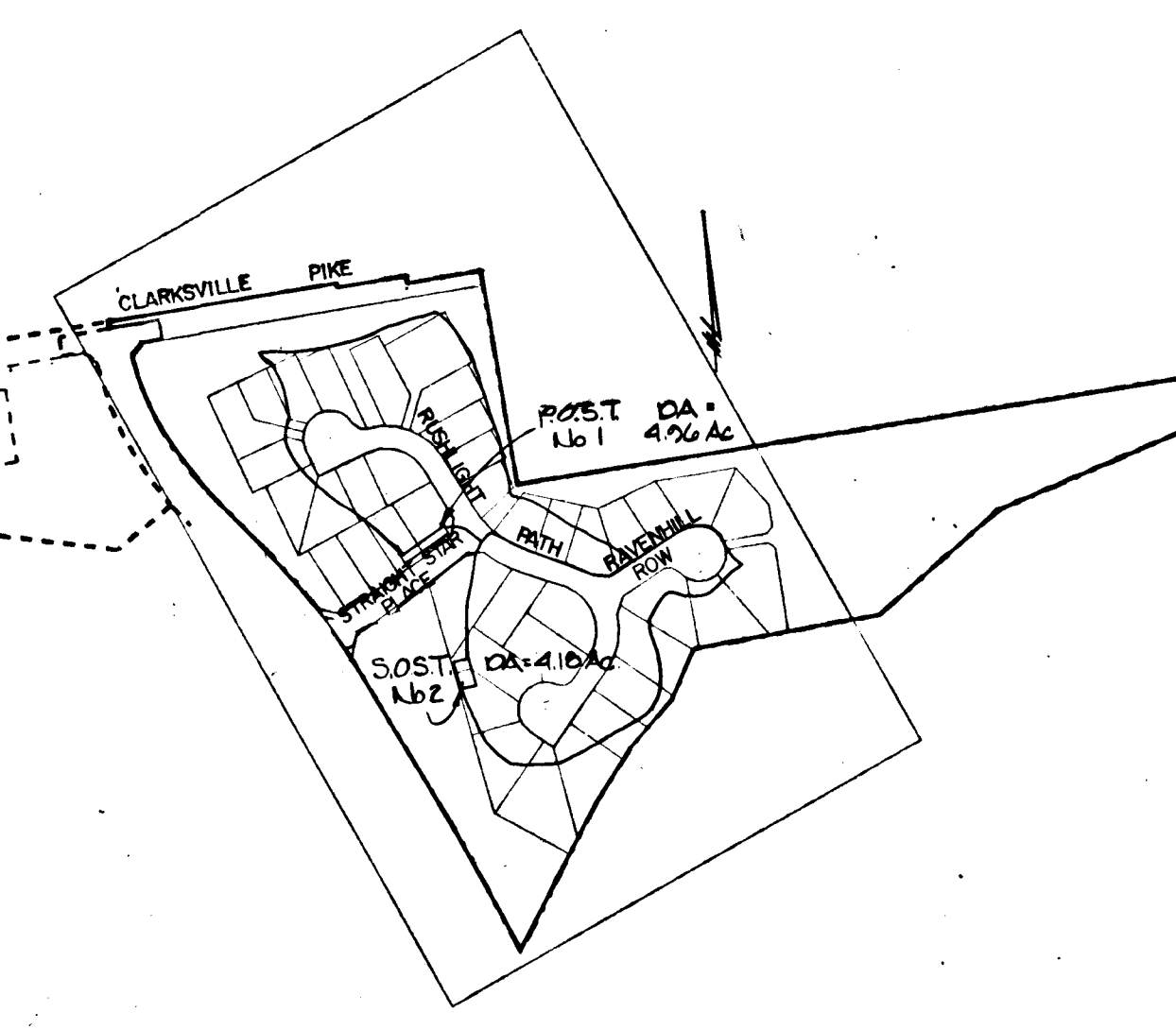
TEMPORARY SWALE STANDARD DRAWING TS-1



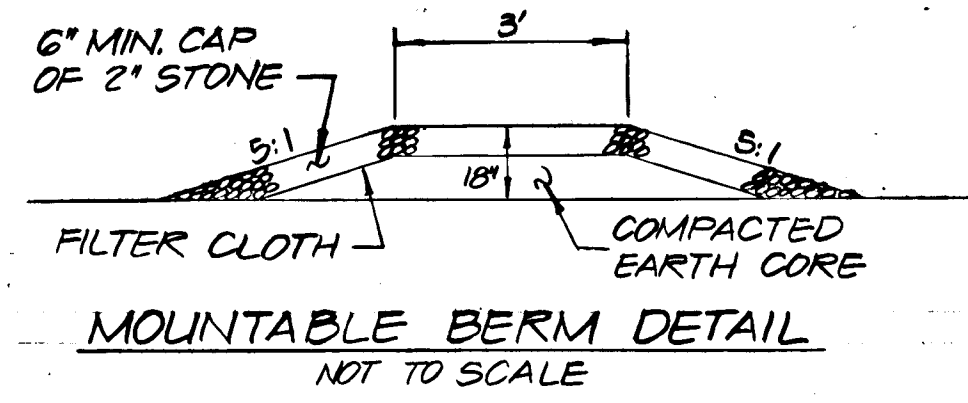
STONE OUTLET SEDIMENT TRAP STANDARD DRAWING ST-V



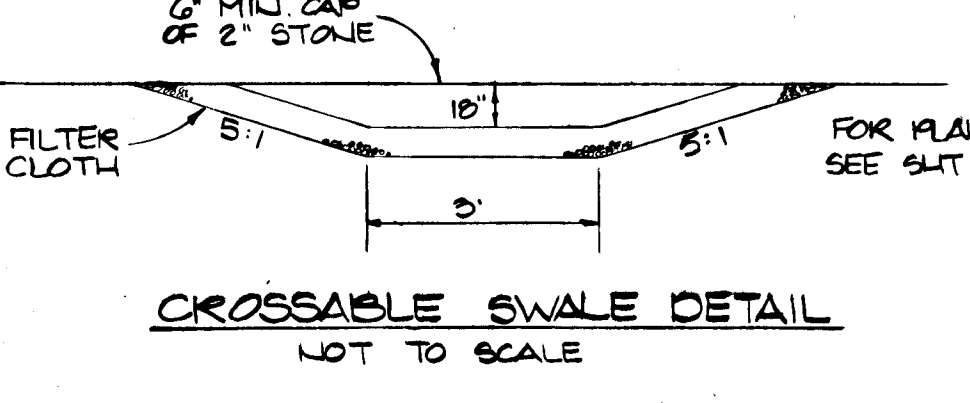
SILT FENCE STANDARD DRAWING SF-1



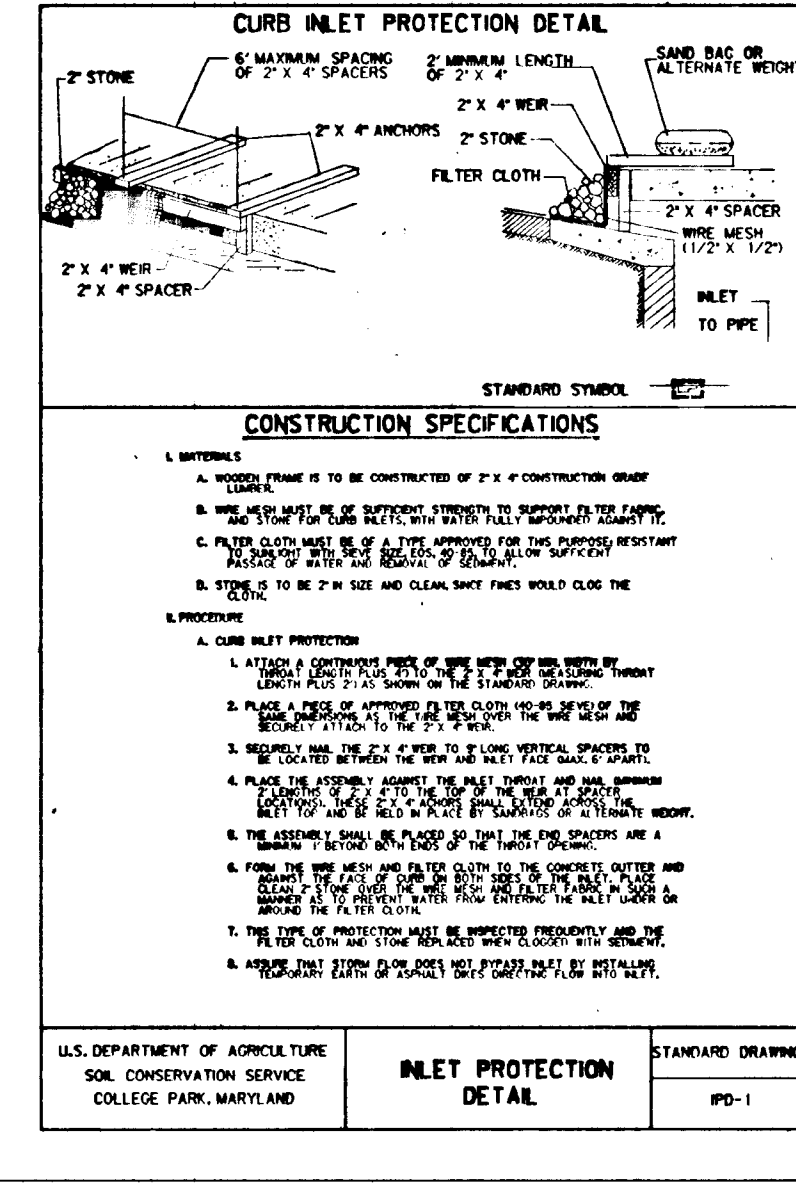
LOCATION MAP SCALE 1"=400'



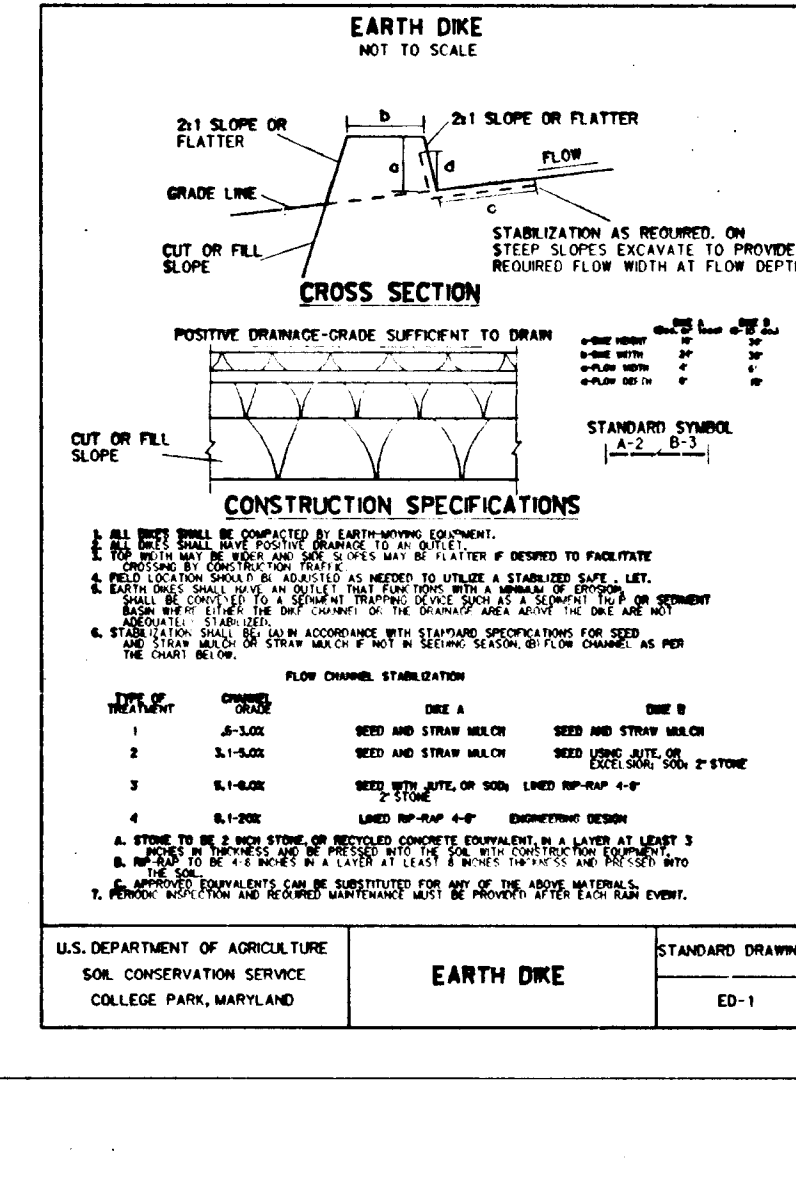
MOUNTABLE BERM DETAIL NOT TO SCALE



CROSSABLE SWALE DETAIL NOT TO SCALE



INLET PROTECTION DETAIL STANDARD DRAWING IPD-1



EARTH DIKE STANDARD DRAWING ED-1

COLUMBIA
VILLAGE OF HARPERS CHOICE
SECTION 7 AREA 4
ELECTION DISTRICT NO.
CONTRACT NO.

KIDDE CONSULTANTS, INC.
ENGINEERS SURVEYORS PLANNERS
1020 CROMWELL BRIDGE ROAD
TOWSON, MARYLAND 21204
(301) 321-5500

OWNER / DEVELOPER
THE HOWARD RESEARCH & DEVELOPMENT LAND COMPANY
10275 LITTLE PATRUXENT PKWY.
COLUMBIA, MARYLAND 21044

Table with columns: DES, DRN, CHK, DATE, BY, NO., REVISION, DATE. Includes revision history.

SEDIMENT & EROSION CONTROL DETAILS
APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 12/15/89
DATE: 11/13/89
DATE: 12/19/89

APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DATE: 12/16/89
DATE: 12/16/89

SCALE AS SHOWN
SHEET 7 OF 7
F-89-201