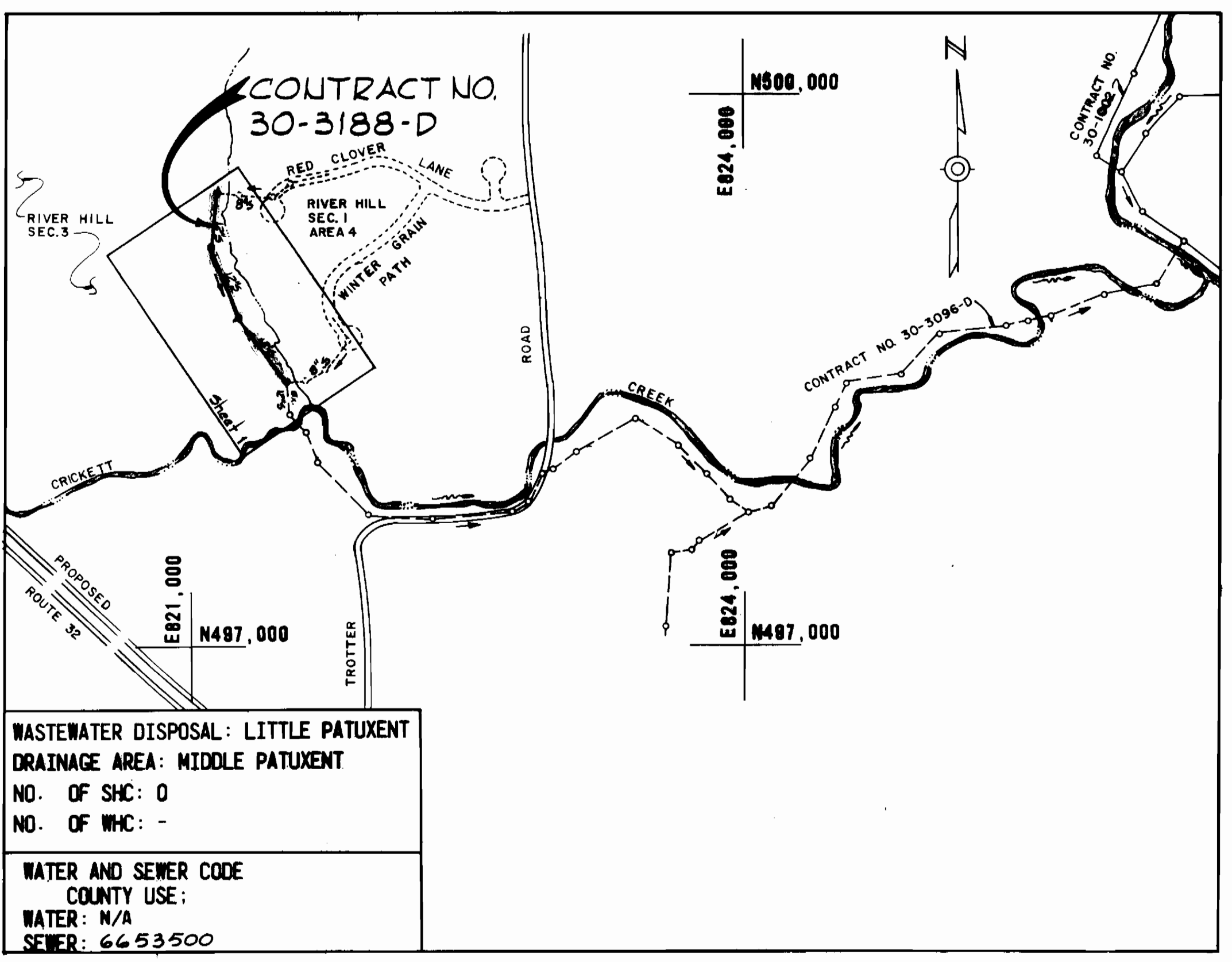


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
MANHOLE	3 Ea.	3 Ea.	12" DIA. CONCRETE	CONCRETE PRODUCTS INC.
12" SEWER	1090 L.F.	1090 L.F.	12" DIA. V.C.P.	ROYAL SUPPLY

NAME OF UTILITY CONTRACTOR: VIE. WILSON & SON INC.

SURVEY AND DRAFTING DIVISION AS-BUILT DATE \_\_\_\_\_



- GENERAL NOTES**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
  - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
  - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
  - CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
  - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USED HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 ADDENDUM THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
  - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
  - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:  
STATE HIGHWAY ADMINISTRATION - 531-5533  
BALTIMORE GAS AND ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620  
BALTIMORE GAS AND ELECTRIC CO. - UNDERGROUND DAMAGE CONTROL - 859-9004  
BALTIMORE GAS AND ELECTRIC CO. - TROUBLE SHOOTING - 298-9001  
MISS UTILITY - 1 - 800-257-7777  
COLONIAL PIPELINE CO. - 795-1390/CAP TELEPHONE CO. - 1-800-257-7777  
BUREAU OF UTILITIES HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 992-2366.
  - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO A MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION.
  - ALL SEWER MAINS TO BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
  - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
  - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
  - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
  - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL GS-52, WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED SET TOP OF FRAME 1.5' ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
  - STRAW BALE DIME AND SILT FENCE ARE INTERCHANGEABLE.
  - FOR MANHOLES IN OPEN SPACE OR OUTFALL, SET TOP OF FRAME 1.5' ABOVE FINISHED GRADE UNLESS OTHERWISE SHOWN ON DRAWINGS.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

*John M. Hahn* 4/24/92  
SIGNATURE U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED: *John R. Roberts* 4/22/92  
HOWARD S.C.D. DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James P. ...* 4-27-92  
DIRECTOR OF PUBLIC WORKS - DATE

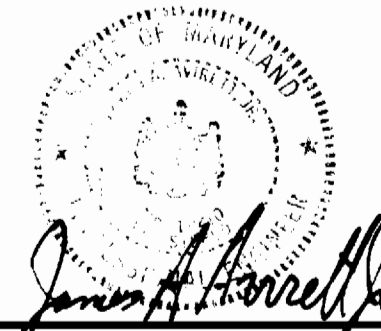
*Robert ...* 4-14-92  
CHIEF - BUREAU OF UTILITIES - DATE

*...* 4-27-92  
CHIEF - BUREAU OF ENGINEERING - DATE

*...* 4/27/92  
CHIEF - LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT  
AND ASSOCIATES  
ENGINEERS

2315 ST. PAUL ST.  
BALTIMORE, MARYLAND



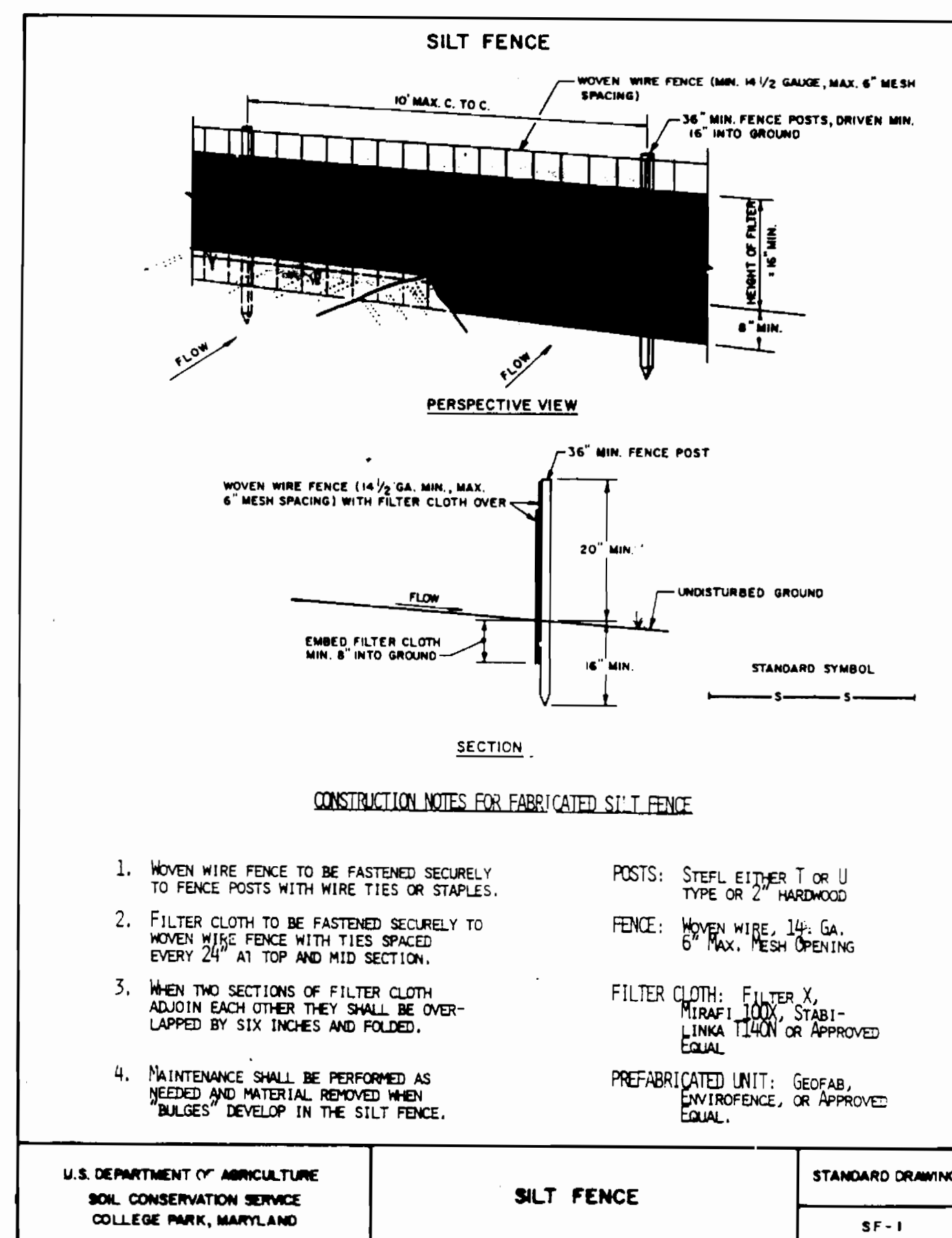
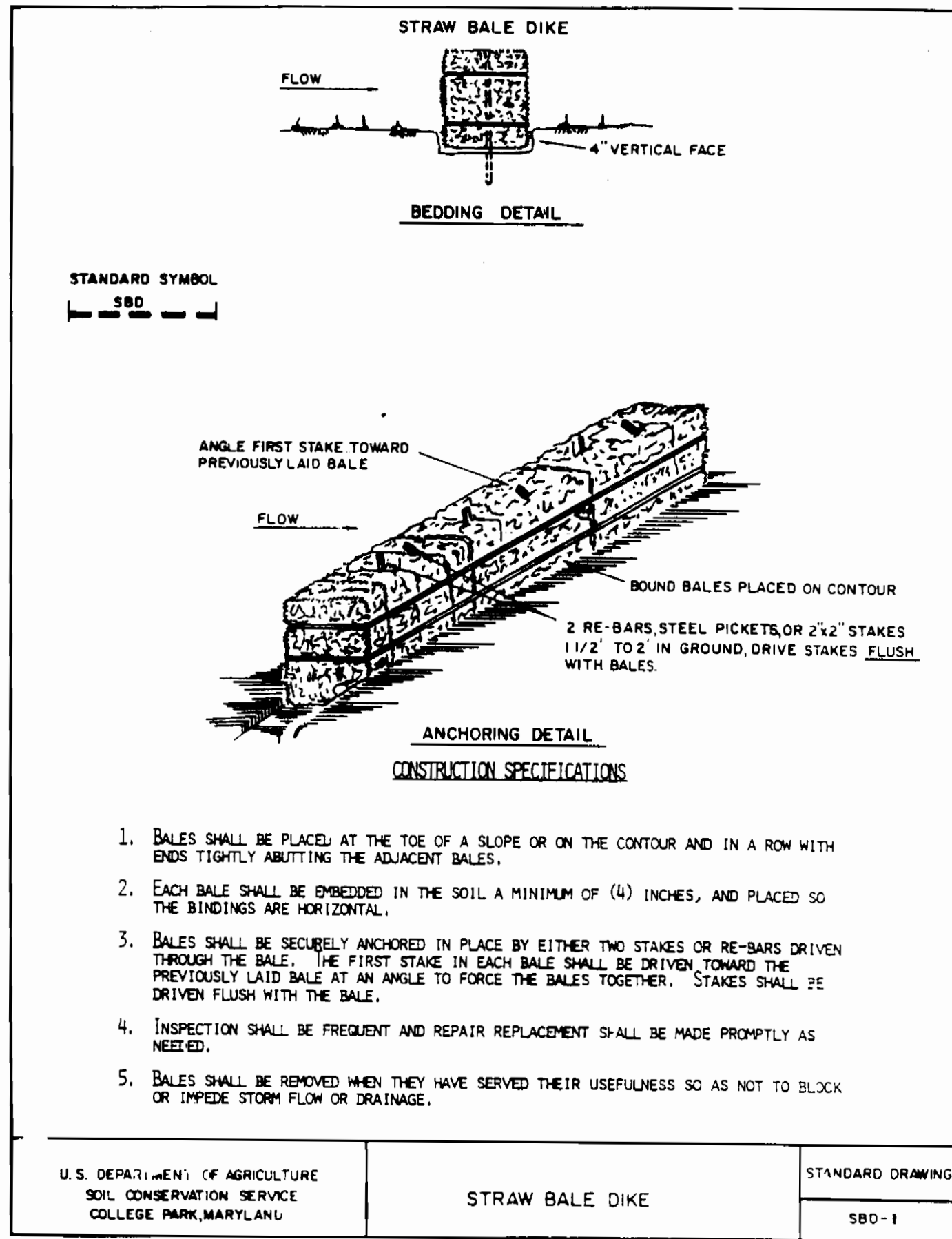
DES. R.A.F.					
DRN. R.A.F.					
CHK. R.B.N.					
DATE 4-6-92	BY NO.	REVISION	DATE	600' SCALE MAP NO. 35	BLOCK NO.

PLAN & PROFILE OF  
SEWER MAINS

SECTION I AREA 4  
ELECTION DISTRICT NO. 5  
CONTRACT NO. 30-3188-D

SCALE AS SHOWN

SHEET 1 OF 2



**PERMANENT SEEDING**

APPLIES TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT, LONG LIVED VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION:** LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENEED.

**SOIL AMENDMENTS:** IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED** - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREA FORM FERTILIZER (9 LBS/1000 SQ. FT.).
- ACCEPTABLE** - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING, HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

**SEEDING:** - FOR THE PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROJECT 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 SOO. 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 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

**MAINTENANCE:** - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**TEMPORARY SEEDING**

APPLIES TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION:** LOOSEN UPPER THREE (3) INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENEED.

**SOIL AMENDMENTS:** APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER, (14 LBS/1000 SQ. FT.) AND ONE TON PER ACRE OR 46 LBS/1000 SQ. FT. OF DOLOMITIC LIMESTONE.

**SEEDING:** FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ. FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USED SOO.

**MULCHING:** APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/100 SQ. FT.) 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 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GALLON PER ACRE (8 GAL./1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TEMPORARY SEEDING SPECIFICATIONS NOT COVERED.

**SEDIMENT CONTROL NOTES**

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. (892-2437).

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 REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER 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 SEEDINGS (SEC. 51) SOO (SEC. 54). TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52) TEMPORARY STABILIZATION WITH MULCH ALONG C&W 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 ..... 1.0 ACRES  
AREA DISTURBED ..... 0.5 ACRES \*  
AREA TO BE ROOFED OR PAVED ..... NONE ACRES  
AREA TO BE VEGETATIVELY STABILIZED ..... 0.5 ACRES  
TOTAL CUT ..... NONE CU. YDS.  
TOTAL FILL ..... NONE CU. YDS.  
OFFSITE WASTE/BORROW AREA LOCATION

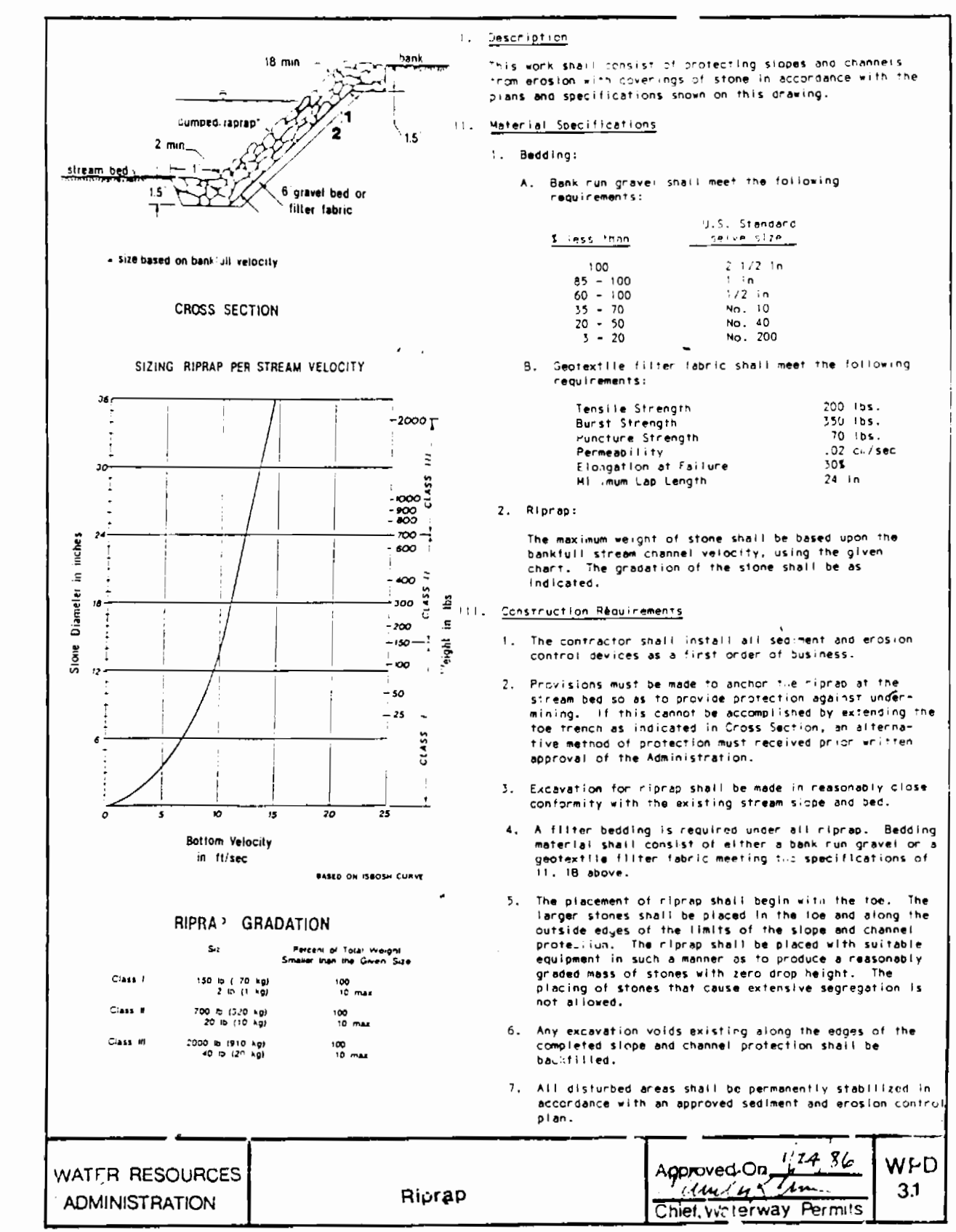
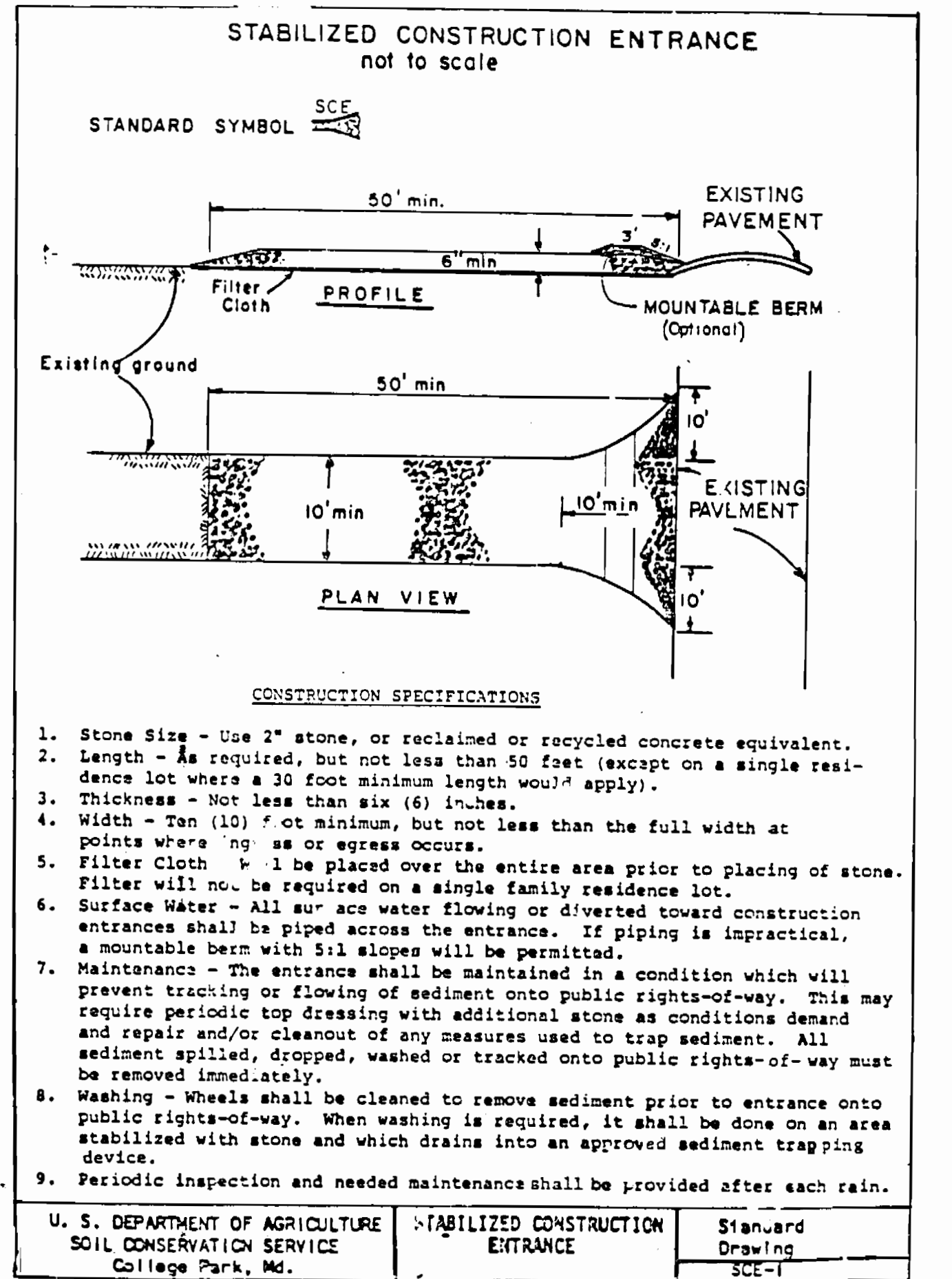
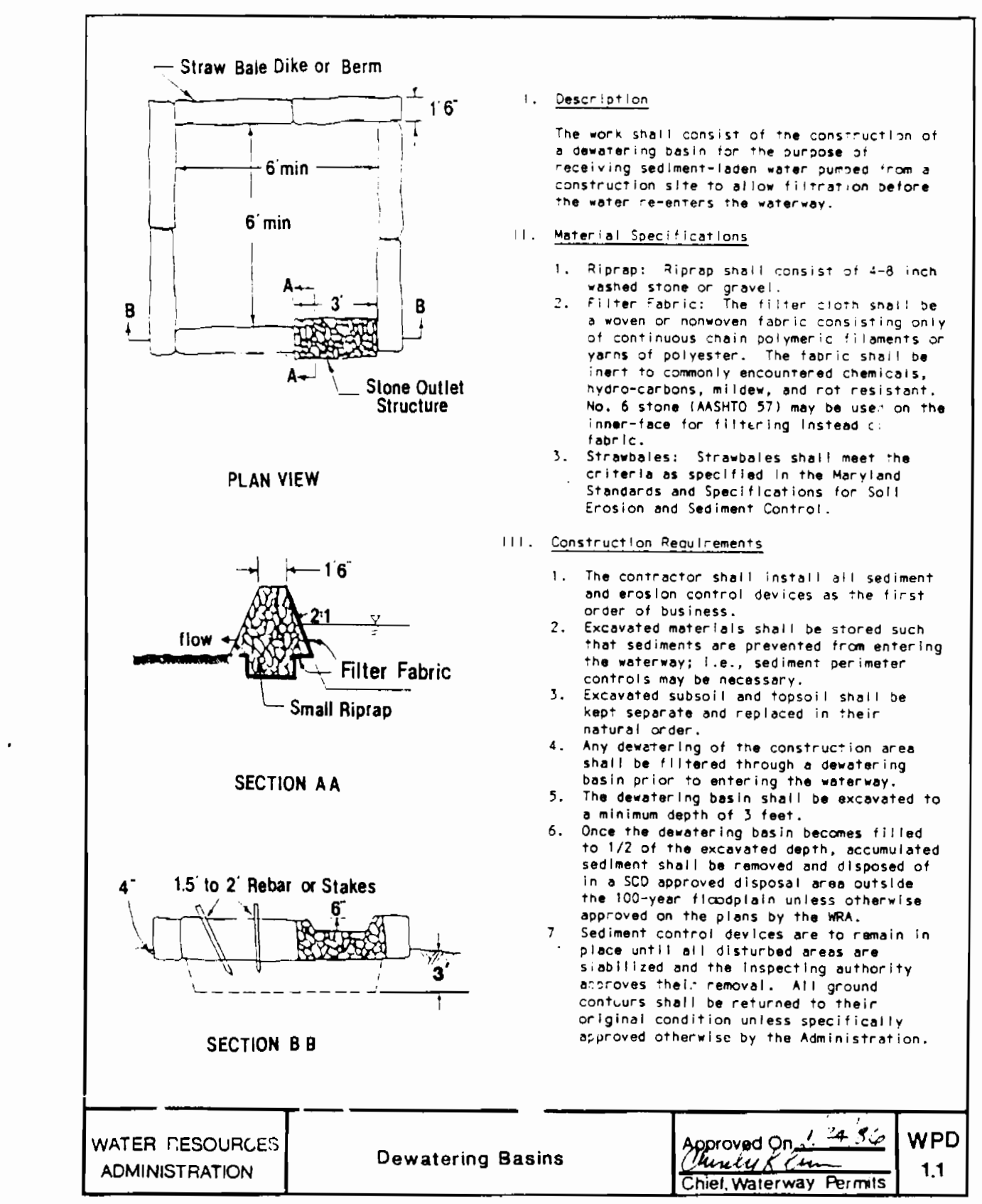
ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.

ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

**NOTE:**

\* SITE ANALYSIS IS FOR DISTURBED AREAS BEYOND THESE PROTECTED BY THE ROAD CONSTRUCTION.



**SEQUENCE OF CONSTRUCTION: UTILITY CROSSING**

- OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES FROM THE APPROPRIATE AGENCIES.
- NOTIFY THE ENFORCEMENT DIVISION AT LEAST FIVE DAYS PRIOR TO INITIATION OF CONSTRUCTION AND FIVE DAYS AFTER WORK ENDS. THE ANNAPOLIS OFFICE IS (301) 974-2641. NOTIFY HOWARD COUNTY S.C.S. CONTROL INSPECTORS (301) 465-3180.
- INSTALL PERIMETER CONTROLS CONSISTING OF STRAW BALE DIKES AND/OR SILT FENCING.
- INSTALL THE UTILITY APPROACHES TO THE STREAM.
- DIVERT THE STREAM REFERENCE WPD 2.1.
- DEWATER THE CONSTRUCTION AREA. ALL DEWATERING DISCHARGES SHALL BE DIVERTED TO A DEWATERING BASIN AS PER WPD 1.1 BEFORE RE-ENTERING THE STREAM.
- STABILIZE THE DISTURBED BANKS USING FILTER FABRIC AND RIPRAP. RIPRAP MUST BE SIZED AND INSTALLED AS PER WPD 3.1.
- REMOVE THE DIVERSION FROM UPSTREAM TO DOWNSTREAM.
- STABILIZE ALL DISTURBED AREAS.
- NOTIFY S.C.S. INSPECTOR.
- REMOVE PERIMETER CONTROLS.

**NOTES:**

- PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT ALL ACCESS POINTS TO PAVED ROADS.

- SEE PERMITS BOUND IN SPECIFICATIONS AS FOLLOWS:  
WRA N/A  
COE N/A

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

Signature: *John C. Robertson* DATE: 4/24/92

Signature: *John C. Robertson* DATE: 4/24/92

HOWARD COUNTY S.C.D.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS  
2315 ST. PAUL ST  
BALTIMORE, MARYLAND

DES. R.A.F.  
DRN. R.A.F.  
CHK. R.B.N.  
DATE 4-6-92

SEWER OUTFALL EXTENSION ALONG TRIBUTARY OF CRICKETT CREEK VILLAGE OF RIVER HILL

SECTION 1 AREA 4  
ELECTION DISTRICT NO. 5  
CONTRACT NO. 30-3188-D

SCALE AS SHOWN  
SHEET 2 OF 2

AS-BUILT  
April 6, 1992