

MARYLAND ROUTE 100

LONG GATE PARKWAY TO COLUMBIA 100

WATER MAIN LOOP EXTENSION

CAPITAL PROJECT W-8156

CONTRACT NO. 10 - 3071

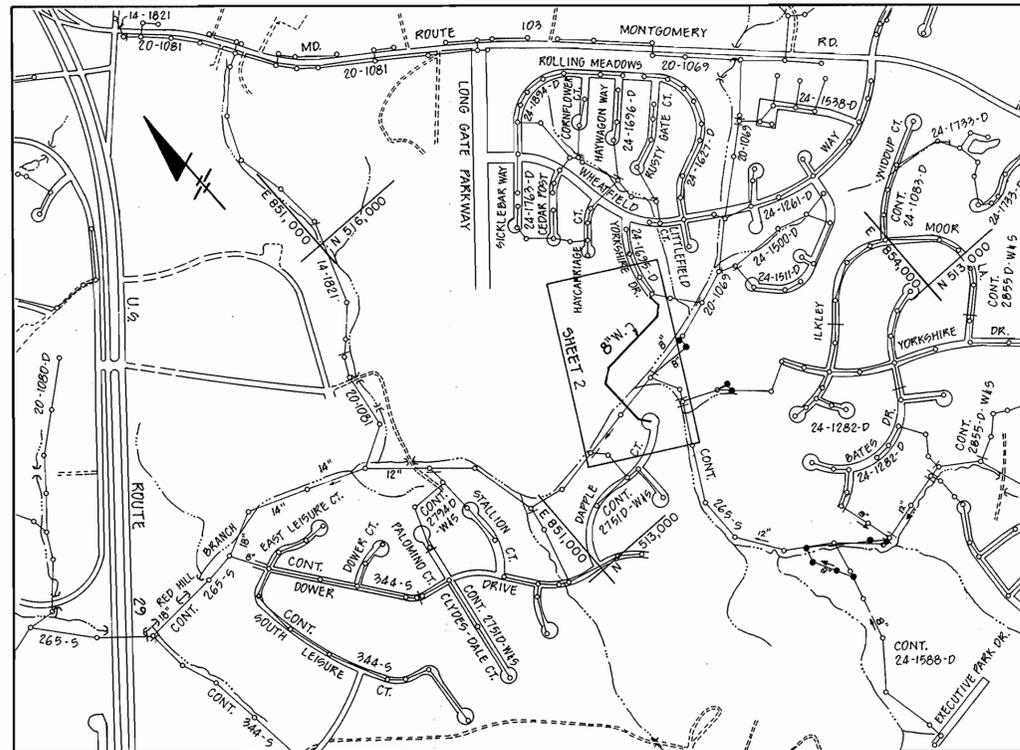
GENERAL NOTES

1. THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGES INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 6".
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS AND SPECIFICATIONS, VOLUME IV DESIGN MANUAL.
7. 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.
8. 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 & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 859-9004
 - BALTIMORE GAS & ELECTRIC CO. - TROUBLE SHOOTING - 298-9050
 - MISG UTILITY - 1-800-257-7777
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900 AT & T - 703-691-6735
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR, NOR OUTSIDE THE EASEMENT.
10. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINES OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR CONSTRUCTION OF THE PROJECT.
11. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
12. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED ON THE DWGS.
- 13.
14. FOR SUGGESTED SEQUENCE OF CONSTRUCTION SEE SHEET 4 OF 4
15. CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES, HOWARD COUNTY AT LEAST 72 HOURS PRIOR TO SCHEDULING WORK ASSOCIATED WITH THE WATER MAIN.
16. FOR EROSION AND SEDIMENT CONTROL GENERAL NOTES AND DETAILS, SEE SHEETS 3 AND 4.

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

Approved: *Howard S. C. D.* 11/24/93
Howard S. C. D.

ITEM	QUANTITIES		MATERIAL TYPE	SUPPLIER
	ESTIMATED	AS BUILT		
6" TAPPING SLEEVE, VALVE & VALVE BOX	1			
8" D.I.P. CL 52 (WATER)	769 L.F.			



REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

J. A. Wainwright
S.O. SOIL CONSERVATION SERVICE

11/24/93
DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH VOLUME 4 SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND THIS PLAN. A COPY OF VOL. 4 DESIGN MANUAL SHALL ACCOMPANY THESE PLANS AT ALL TIMES.

WATER CODE : E09
SEWER CODE : 5750639
TYPE OF BUILDINGS : N/A
NUMBER OF PARCELS : N/A

NO. OF SEWER CONNECTIONS : N/A
DRAINAGE AREA : PATAPSCO

VICINITY MAP

SCALE: 1" = 600'

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILES - WATER MAIN
3	EROSION AND SEDIMENT CONTROL
4	EROSION AND SEDIMENT CONTROL

DEVELOPER'S CERTIFICATION

"I/We certify that any development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a certificate of attendance at a Maryland Department of the Enviro. approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or Their Authorized Agents, as are deemed necessary."

Thomas G. Cutler
SIGNATURE OF DEVELOPER 11/22/93
DATE

ENGINEER'S CERTIFICATION

I 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 Soil Conservation District.

Whitney, Bailey, Cox & Magnani
Date: 11/23/93
WHITNEY, BAILEY, COX & MAGNANI
CONSULTING ENGINEERS
850 YORK ROAD
TIMONIUM, MD. 21093

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. ...
DIRECTOR OF PUBLIC WORKS 11/2/92
DATE

...
CHIEF, BUREAU OF ENGINEERING 11-2-92
DATE



CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD. 21093
301-252-6060



DES: R.J.H.	R.J.H.	ADDITIONS AND REVISIONS	11/1/93
	H.H.	PER HSCD COMMENTS DATED 11-10-93	11/20/93
DRN: H.H.			
CHK: B.D.J.			
DATE: 10/26/92	BY NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. S30 - BLOCK NO. 6 & 12

MARYLAND ROUTE 100
WATER MAIN LOOP EXTENSION
CAPITAL PROJECT W-8156
CONTRACT NO. 10 - 3071
ELECTION DISTRICT-ELLCOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

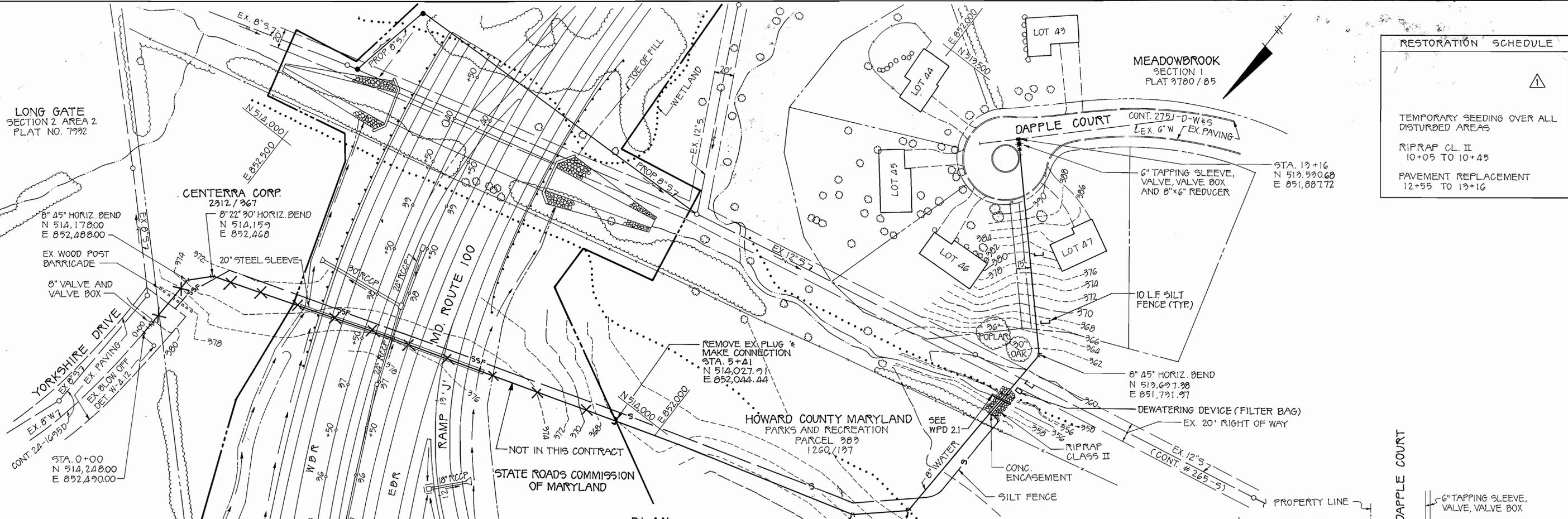
SCALE AS SHOWN

SHEET 1 OF 10

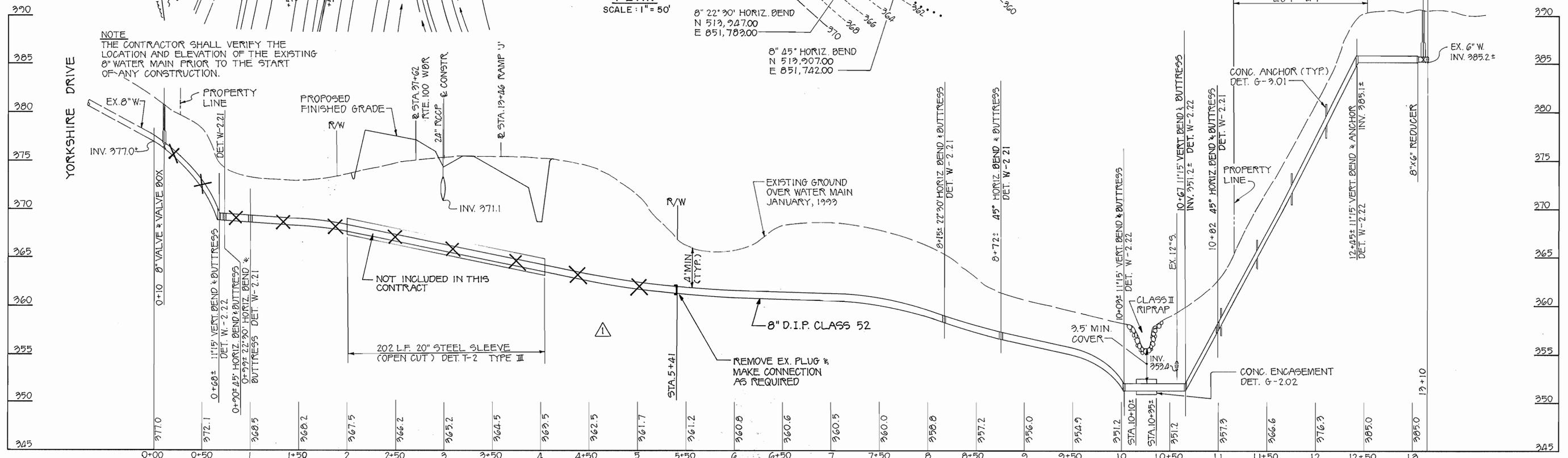
LONG GATE
SECTION 2 AREA 2
PLAT NO. 7992

MEADOWBROOK
SECTION 1
PLAT 3780/85

RESTORATION SCHEDULE	
▲	
TEMPORARY SEEDING OVER ALL DISTURBED AREAS	
RIPRAP CL. II 10+05 TO 10+45	
PAVEMENT REPLACEMENT 12+55 TO 13+16	



PLAN
SCALE: 1" = 50'



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

NOTE
THE CONTRACTOR SHALL VERIFY THE
LOCATION AND ELEVATION OF THE EXISTING
8" WATER MAIN PRIOR TO THE START
OF ANY CONSTRUCTION.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE: 11/3/93
Robert S. ...
 CHIEF, BUREAU OF UTILITIES DATE: 11-7-93
Robert S. ...
 CHIEF, BUREAU OF UTILITIES

WHITNEY
BAILEY
COX
MAGNANI

CONSULTING
ENGINEERS
1850 YORK ROAD
TIMONIUM, MD 21093
301-252-6060

STATE OF MARYLAND
PROFESSIONAL ENGINEER
11-3-93

DES.	R.J.H.	ADDITIONS AND REVISIONS	11/1/93
ORN:	K.S.M.	PER HSCD COMMENTS DATED 11-10-93	11/20/93
CHK:	B.D.J.		
DATE:	BY NO.	REVISION	DATE

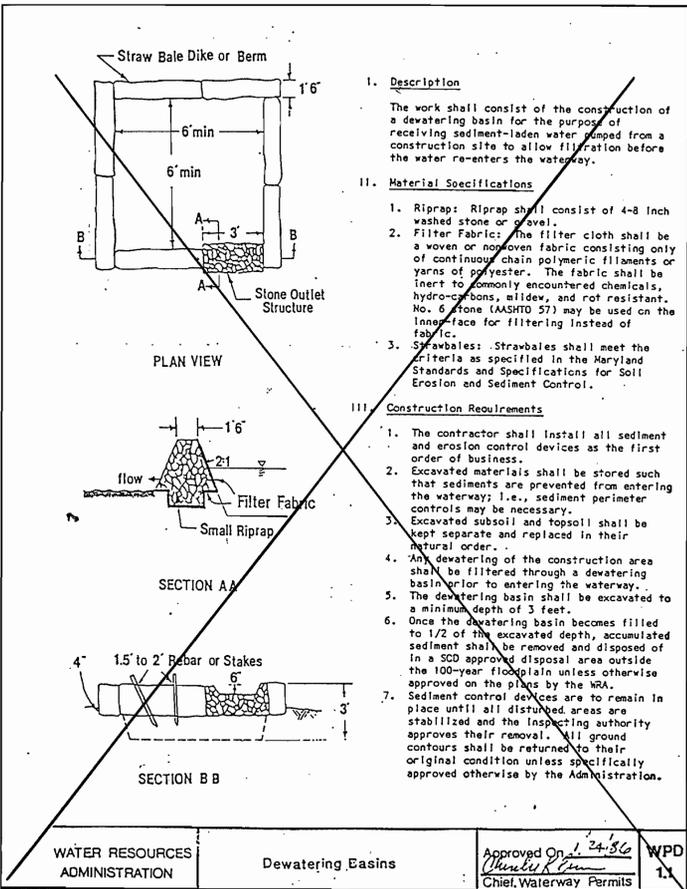
PLAN AND PROFILE

600' SCALE MAP NO. W-30 BLOCK NO.

MARYLAND ROUTE 100
WATER MAIN LOOP EXTENSION
CAPITAL PROJECT NO. W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT-ELLCOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
2 OF 10



I. Description
The work shall consist of the construction of a dewatering basin for the purpose of receiving sediment-laden water pumped from a construction site to allow filtration before the water re-enters the waterway.

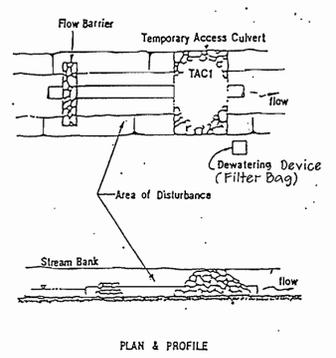
II. Material Specifications

- Riprap: Riprap shall consist of 4-8 inch washed stone or gravel.
- Filter Fabric: The filter cloth shall be a woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydrocarbons, mildew, and rot resistant. No. 6 Stone (ASTM D 57) may be used on the inner face for filtering instead of fabric.
- Strawbales: Strawbales shall meet the criteria as specified in the Maryland Standards and Specifications for Soil Erosion and Sediment Control.

III. Construction Requirements

- The contractor shall install all sediment and erosion control devices as the first order of business.
- Excavated materials shall be stored such that sediments are prevented from entering the waterway, i.e., sediment perimeter controls may be necessary.
- Excavated subsoil and topsoil shall be kept separate and replaced in their natural order.
- Any dewatering of the construction area shall be filtered through a dewatering basin prior to entering the waterway.
- The dewatering basin shall be excavated to a minimum depth of 3 feet.
- Once the dewatering basin becomes filled to 1/2 of the excavated depth, accumulated sediment shall be removed and disposed of in a SCD approved disposal area outside the 100-year floodplain unless otherwise approved on the plans by the WRA.
- Sediment control devices are to remain in place until all disturbed areas are stabilized and the inspecting authority approves their removal. All ground contours shall be returned to their original condition unless specifically approved otherwise by the Administration.

Approved On 1/24/96 WPD
Michael K. ...
 Chief, Waterway Permits

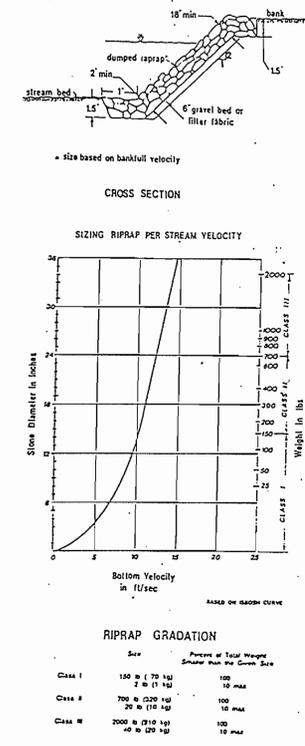


I. Description
The work shall consist of installing a flow diversion structure in conjunction with a temporary culvert crossing in-stream construction such as utility crossings.

II. Construction Requirements

- All erosion and sediment control devices shall be installed as the first order of business.
- Pipes must be sized to accommodate normal stream flow. (24" CMP - 16 Ga.)
- The flow barrier shall be constructed of sandbags, washed riprap, or other approved material as per WPD 2.3. The materials shall be sized to withstand normal stream flow velocities.
- All dewatering of the construction area shall be pumped to a dewatering basin (WPD 1.1) prior to re-entering the stream.
- The temporary culvert crossing shall be constructed in accordance with Standard Detail (TAC-1), 1983 Maryland Standards and Specifications for Sediment and Erosion Control.
- Sediment control devices shall remain in place until all disturbed areas have been stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.

Approved On 1/24/96 WPD
Michael K. ...
 Chief, Waterway Permits



I. Description
This work shall consist of protecting slopes and channels from erosion with coverings of stone in accordance with the plans and specifications shown on this drawing.

II. Material Specifications

- Bedding:
 - Bank run gravel shall meet the following requirements:

Size less than	U.S. Standard sieve size
100	2 1/2 in
85 - 100	1 in
60 - 100	1/2 in
35 - 70	No. 10
20 - 30	No. 40
3 - 20	No. 200
 - Geotextile filter fabric shall meet the following requirements:

Tensile Strength	200 lbs.
Burst Strength	350 lbs.
Puncture Strength	70 lbs.
Permeability	.02 cm/sec
Elongation at Failure	305
Minimum Lap Length	24 in
- Riprap:
 - The maximum weight of stone shall be based upon the bankfull stream channel velocity, using the given chart. The gradation of the stone shall be as indicated.

III. Construction Requirements

- The contractor shall install all sediment and erosion control devices as a first order of business.
- Provisions must be made to anchor the riprap at the stream bed so as to provide protection against undercutting. If this cannot be accomplished by extending the toe trench as indicated in Cross Section, an alternative method of protection must be approved prior to approval of the Administration.
- Excavation for riprap shall be made in reasonably close conformity with the existing stream slope and bed.
- A filter bedding is required under all riprap. Bedding material shall consist of either a bank run gravel or a geotextile filter fabric meeting the specifications of II. 1B above.
- The placement of riprap shall begin with the toe. The larger stones shall be placed in the toe and along the outside edges of the limits of the slope and channel protection. The riprap shall be placed with suitable equipment in such a manner as to produce a reasonably graded mass of stones with zero drop height. The placing of stones that cause extensive segregation is not allowed.
- Any excavation voids existing along the edges of the completed slope and channel protection shall be backfilled.
- All disturbed areas shall be permanently stabilized in accordance with an approved sediment and erosion control plan.

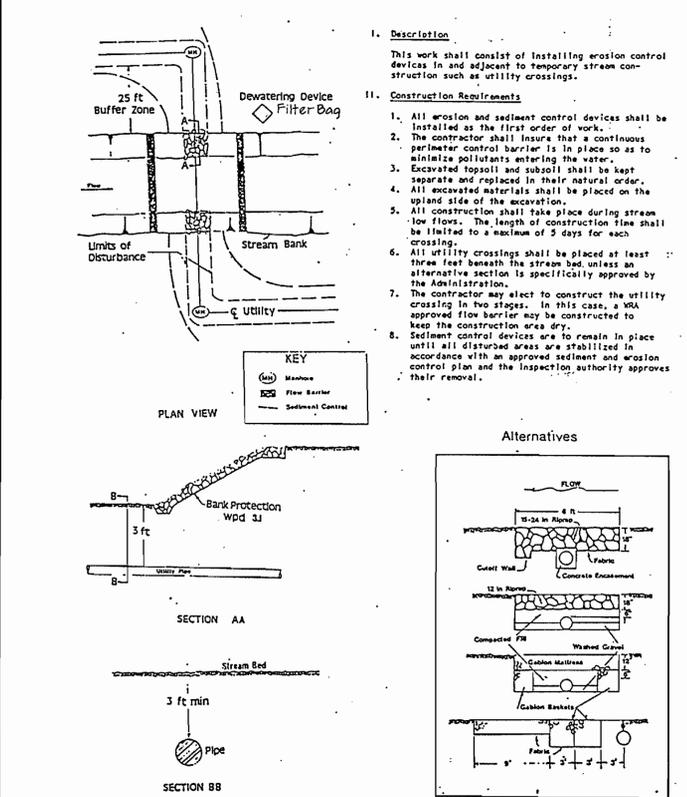
Approved On 1/24/96 WPD
Michael K. ...
 Chief, Waterway Permits

SEQUENCE OF CONSTRUCTION

- OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES FROM THE APPROPRIATE AGENCIES AND A GRADING PERMIT.
- NOTIFY THE ENFORCEMENT DIVISION AT LEAST FIVE DAYS PRIOR TO INITIATION OF CONSTRUCTION AND FIVE DAYS AFTER WORK ENDS. THE ANNAPOLIS OFFICE IS (410) 313-1855 / (410) 974-2641
- INSTALL PERIMETER CONTROLS AS PER WPD 5.1. THE PERIMETER CONTROLS SHALL CONSIST OF STRAW BALE DIKES AND/OR SILT FENCE.
- INSTALL THE UTILITY APPROACHES TO THE STREAM.
- DIVERT THE STREAM. (REFERENCE WPD 2.1 OR 2.3)
- 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 RIP-RAP OR GABIONS. RIP-RAP MUST BE SIZED AND INSTALLED AS PER WPD 3.1 GABIONS MUST BE INSTALLED PER WPD 2.3.
- REMOVE THE DIVERSION FROM UPSTREAM TO DOWNSTREAM. UPON PERMISSION OF THE SEDIMENT CONTROL INSPECTOR.
- STABILIZE ALL DISTURBED AREAS.
- REMOVE PERIMETER CONTROLS. UPON PERMISSION OF THE SEDIMENT CONTROL INSPECTOR.

CONDITIONS AND MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS.

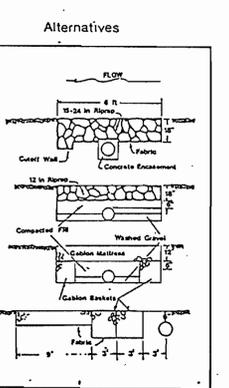
- STOCKPILE AND MAINTAIN SEPARATELY THE TOP 6"-12" OF TOPSOIL MATERIAL, TO BE REPLACED AS THE TOP LAYER OF BACKFILLED MATERIAL.
- REMOVE EXCESS FILL OR CONSTRUCTION MATERIAL OR DEBRIS TO AN UPLAND DISPOSAL AREA.
- PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF THE NON-TIDAL WETLAND.
- USE PREVIOUSLY EXCAVATED MATERIALS AS BACKFILL, UNLESS IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL OR ANY OTHER DELETERIOUS SUBSTANCE. USE CLEAN BORROW MATERIAL WHEN EXCAVATED MATERIAL IS NOT SUITABLE FOR USE AS BACKFILL.
- ALL STABILIZATION IN THE WETLAND AND BUFFER SHALL BE OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), CATS (UNIOLA SP.) AND/OR RYE (SECALE CEREALE). THESE SPECIES ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN THE WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS OF NON-TIDAL WETLANDS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS.
- TO PROTECT IMPORTANT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM AS FOLLOWS:
 - CLASS I WATERS. IN-STREAM WORK MAY NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.



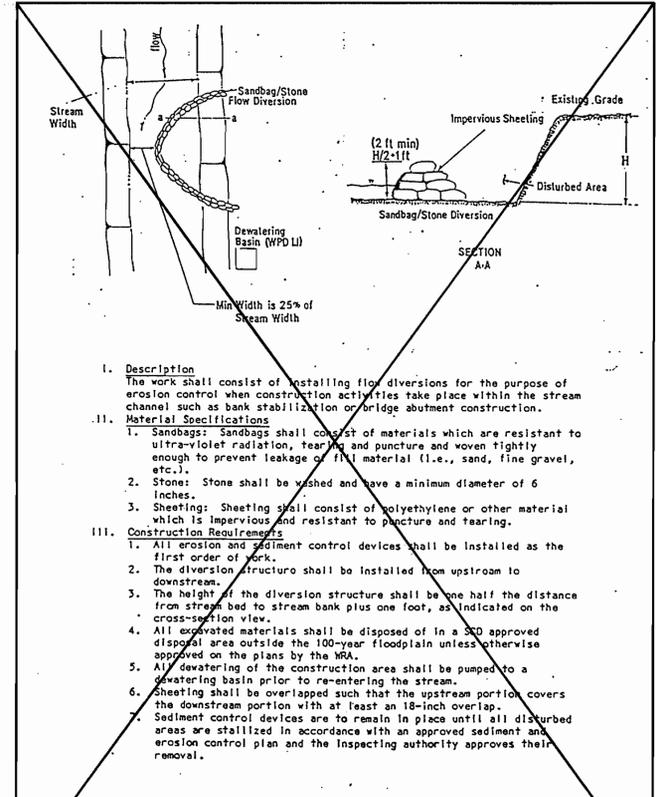
I. Description
This work shall consist of installing erosion control devices in and adjacent to temporary stream construction such as utility crossings.

II. Construction Requirements

- All erosion and sediment control devices shall be installed as the first order of work.
- The contractor shall insure that a continuous perimeter control barrier is in place so as to minimize pollutants entering the waterway.
- Excavated topsoil and subsoil shall be kept separate and replaced in their natural order.
- All excavated materials shall be placed on the upland side of the excavation.
- All construction shall take place during stream low flows. The length of construction time shall be limited to a maximum of 3 days for each crossing.
- All utility crossings shall be placed at least three feet beneath the stream bed unless an alternative section is specifically approved by the Administration.
- The contractor may elect to construct the utility crossing in two stages. In this case, a WRA approved flow barrier may be constructed to keep the construction area dry.
- Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.



Approved On 1/24/96 WPD
Michael K. ...
 Chief, Waterway Permits



I. Description
The work shall consist of installing flow diversions for the purpose of erosion control when construction activities take place within the stream channel such as bank stabilization or bridge abutment construction.

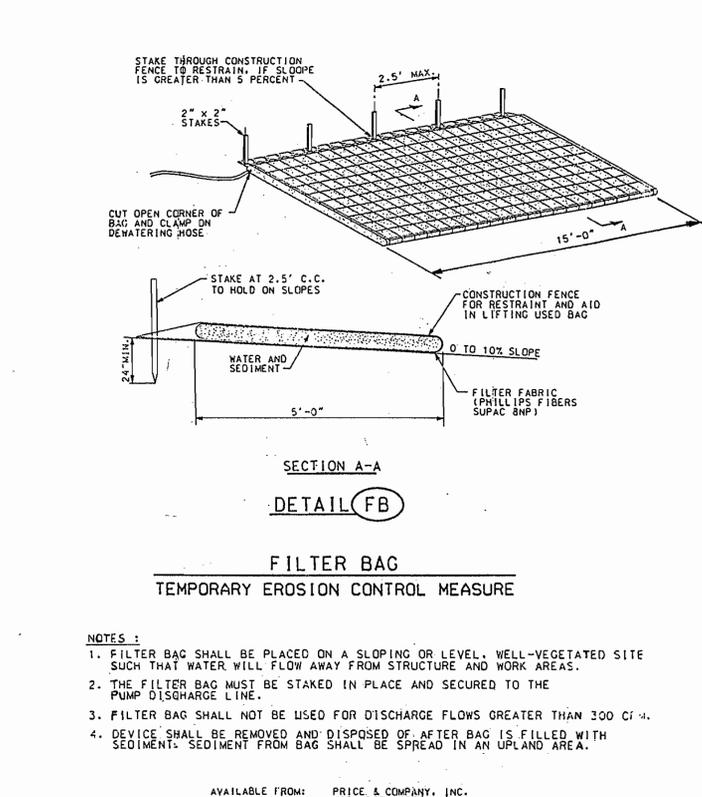
II. Material Specifications

- Sandbags: Sandbags shall consist of materials which are resistant to ultra-violet radiation, tearing and puncture and woven tightly enough to prevent leakage of fill material (i.e., sand, fine gravel, etc.).
- Stones: Stone shall be washed and have a minimum diameter of 6 inches.
- Sheeting: Sheeting shall consist of polyethylene or other material which is impervious and resistant to puncture and tearing.

III. Construction Requirements

- All erosion and sediment control devices shall be installed as the first order of work.
- The diversion structure shall be installed from upstream to downstream.
- The height of the diversion structure shall be one half the distance from stream bed to stream bank plus one foot, as indicated on the cross-section view.
- All excavated materials shall be disposed of in a SCD approved disposal area outside the 100-year floodplain unless otherwise approved on the plans by the WRA.
- All dewatering of the construction area shall be pumped to a dewatering basin prior to re-entering the stream.
- Sheeting shall be overlapped such that the upstream portion covers the downstream portion with at least an 18-inch overlap. Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.

Approved On 1/24/96 WPD
Michael K. ...
 Chief, Waterway Permits



NOTES:

- FILTER BAG SHALL BE PLACED ON A SLOPING OR LEVEL, WELL-VEGETATED SITE SUCH THAT WATER WILL FLOW AWAY FROM STRUCTURE AND WORK AREAS.
- THE FILTER BAG MUST BE STAKED IN PLACE AND SECURED TO THE PUMP DISCHARGE LINE.
- FILTER BAG SHALL NOT BE USED FOR DISCHARGE FLOWS GREATER THAN 300 CFS.
- DEVICE SHALL BE REMOVED AND DISPOSED OF AFTER BAG IS FILLED WITH SEDIMENT. SEDIMENT FROM BAG SHALL BE SPREAD IN AN UPLAND AREA.

AVAILABLE FROM: PRICE & COMPANY, INC.
 425 36TH ST.
 WYOMING, WY 83948
 (616) 530-8230

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
R. J. H. 11-3-93

CHIEF, BUREAU OF UTILITIES DATE
Michael K. ... 11-3-93

WHITNEY BAILEY
 COX MAGNANI

CONSULTING ENGINEERS
 1850 YORK ROAD
 TIMONIUM, MD. 21093
 301-252-6060

DES: R.J.H. H.H. PER HSCD COMMENTS DATED 11-10-93 11/20/93
 DRN: K.S.M.
 CHK: B.D.J.
 DATE: 10/26/92 BY NO. REVISION DATE

EROSION AND SEDIMENT CONTROL

600' SCALE MAP NO. BLOCK NO.

MARYLAND ROUTE 100
 WATER MAIN LOOP EXTENSION
 CAPITAL PROJECT W-8156
 CONTRACT NO. 10-3071
 ELECTION DISTRICT ELLICOTT CITY, NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 4 OF 18

MARYLAND ROUTE 100

LONG GATE PARKWAY TO COLUMBIA 100

SANITARY SEWER RELOCATIONS

CAPITAL PROJECT W-8156

CONTRACT NO. 10 - 3071

GENERAL NOTES

1. THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGES INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 6".
6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
7. 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.
8. 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 & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 859-9004
 - BALTIMORE GAS & ELECTRIC CO. - TROUBLE SHOOTING - 298-9050
 - MISS UTILITY - 1-800-257-7777
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
 - AT & T - 703-691-6735
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR, NOR OUTSIDE THE EASEMENT.
10. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINES OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR CONSTRUCTION OF THE PROJECT.
11. ALL SEWER MAINS SHALL BE D.I.P. OR PVC UNLESS OTHERWISE NOTED.
12. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'0" OF EXTERIOR MANHOLE WALL.
13. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
14. FOR SUGGESTED SEQUENCE OF CONSTRUCTION SEE SPECIAL PROVISIONS PAR. A.17, PAGE 11.
15. CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES, HOWARD COUNTY AT LEAST 48 HOURS PRIOR TO SCHEDULING WORK ASSOCIATED WITH SEWAGE FLOW DIVERSION.
16. FOR EROSION AND SEDIMENT CONTROL GENERAL NOTES AND DETAILS, SEE SHEETS 26 THRU 32.

ITEM	QUANTITIES		MATERIAL TYPE	SUPPLIER
	ESTIMATED	AS BUILT		
8" D.I.P. CL. 52	352 L.F.*			
8" SEWER	568 L.F.*			
12" SEWER	133 L.F.*			
16" D.I.P. CL. 52	435 L.F.*			
MANHOLES	10 EA.			
MANHOLE DEPTH	33 V.F.			

* PIPE LENGTH DOES NOT INCLUDE THE DISTANCE THROUGH THE MANHOLES.

REVIEWED FOR HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE _____ DATE _____

U.S. SOIL CONSERVATION SERVICE

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

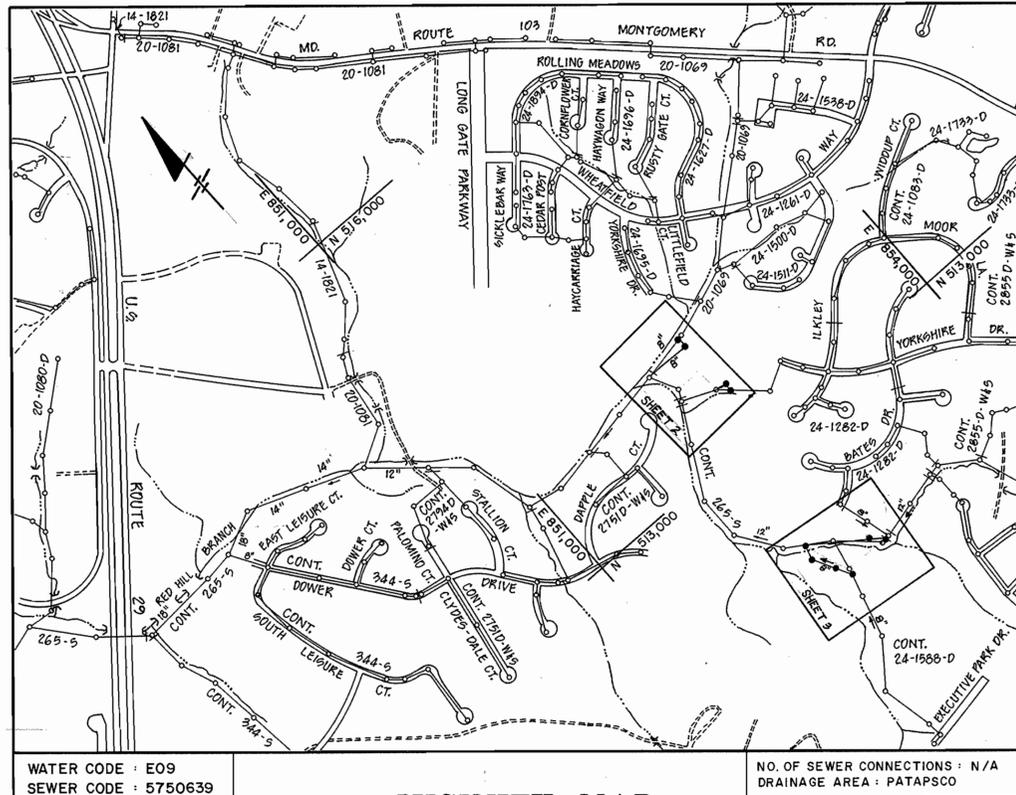
HOWARD S. C. D. _____ DATE _____

ENGINEER'S CERTIFICATION

I 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 Soil Conservation District.

Date:

WHITNEY, BAILEY, COX & MAGNANI
CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD. 21093



WATER CODE : E09
SEWER CODE : 5750639
TYPE OF BUILDINGS : N/A
NUMBER OF PARCELS : N/A

NO. OF SEWER CONNECTIONS : N/A
DRAINAGE AREA : PATAPSCO

VICINITY MAP

SCALE: 1" = 600'

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILES
3	PLAN AND PROFILES
4	EROSION AND SEDIMENT CONTROL

SHA CONTRACT NO. HO-661-501-770

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Lewis 11/3/92
DIRECTOR OF PUBLIC WORKS DATE

Robert W. Reinger 10-29-92
CHIEF, BUREAU OF UTILITIES DATE

Michael J. DeLoach 10-28-92
CHIEF, UTILITY DESIGN DIVISION DATE

WHITNEY, BAILEY, COX & MAGNANI
CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD. 21093
301-252-6060

Whitney Bailey 11-2-92
DATE

Robert Cox 10-28-92
DATE

DES: R.J.H.
DRN: H.H.
CHK: B.D.J.
DATE: 10/26/92

BY NO. REVISION DATE

TITLE SHEET

600' SCALE MAP NO. S30 BLOCK NO. 6 & 12

MARYLAND ROUTE 100
SANITARY SEWER RELOCATIONS
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT-ELLCOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 5 OF 18

STATE HIGHWAY ADMINISTRATION

HOWARD CO. MARYLAND
(PARKS & RECREATION)
(EXTRA LAND)
81521

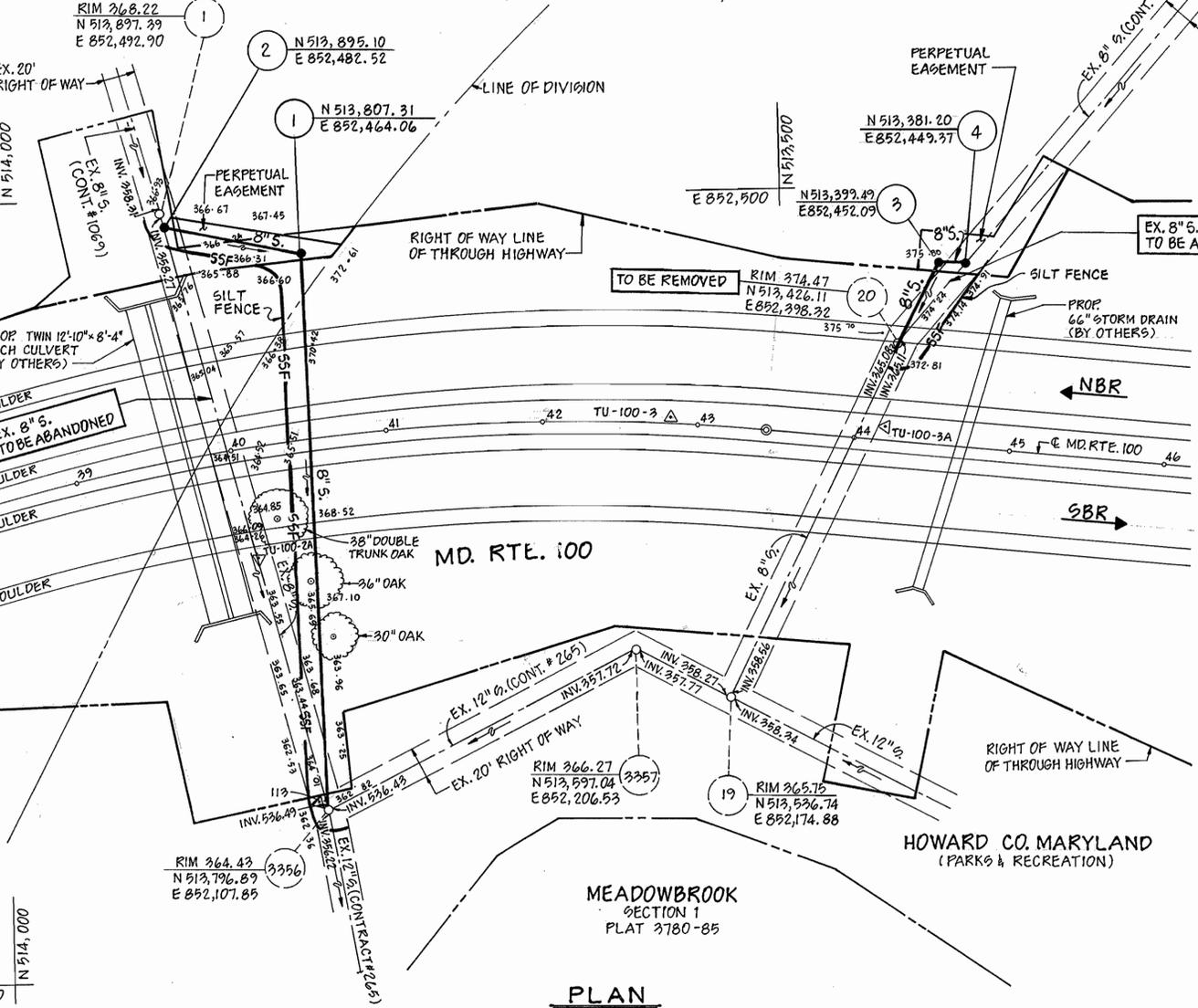
MEADOWBROOK
SECTION 1
PLAT 3780-85

HOWARD CO. MARYLAND
(PARKS & RECREATION)

△ TU-100-2A
(SHA PIN & CAP)
N 513,837.62
E 852,270.28

△ TU-100-3
(SHA PIN & CAP)
N 513,571.20
E 852,355.93

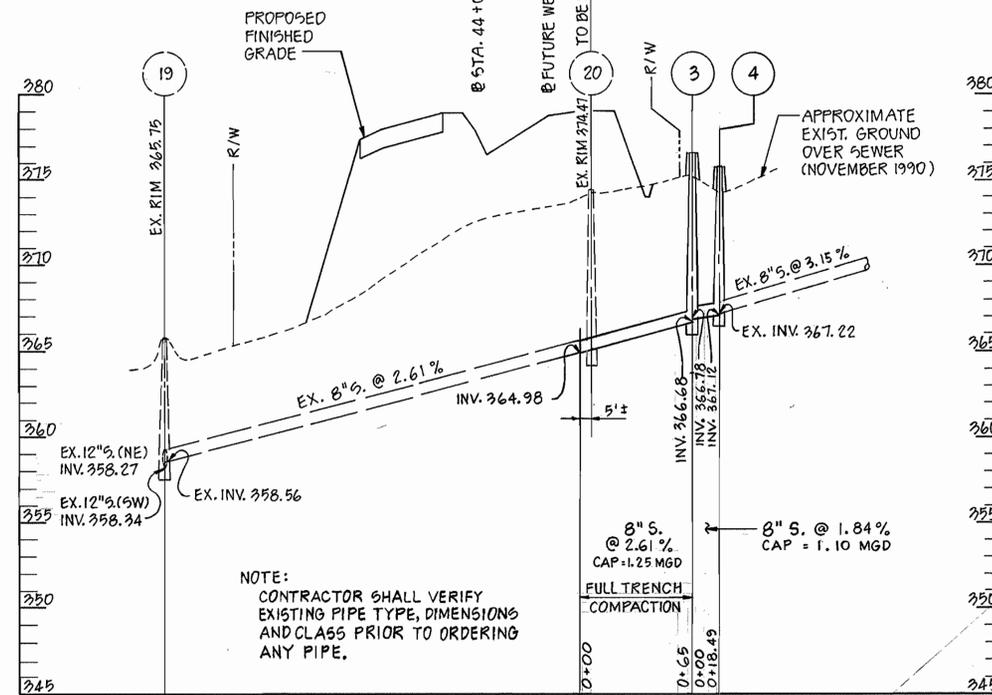
△ TU-100-3A
(SHA PIN & CAP)
N 513,433.98
E 852,346.26



PLAN
SCALE: 1"=50'

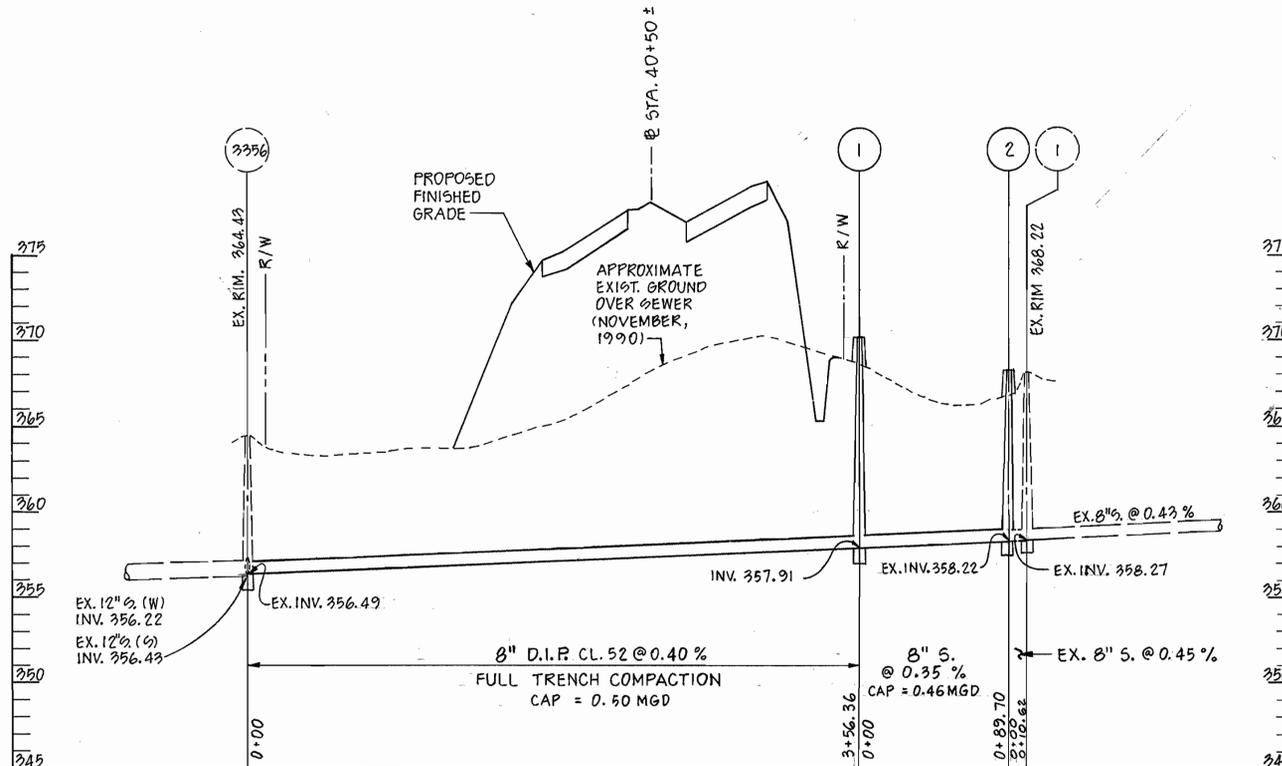
RESTORATION SCHEDULE
TEMPORARY SEEDING OVER ALL
DISTURBED AREAS.

NOTE: CONSTRUCTION STAKEOUT PER INDICATED MH COORDINATES.
ALL D.I.P. AND P.V.C. PIPE WILL BE INSTALLED PER VOL. IV & 2.01 TRENCH BEDDING DETAIL DESIGNATED, "TRENCH FOR PVC PIPE AND HIGH DENSITY POLYETHYLENE PIPE".



PROFILE

SCALE: HOR. 1"=50'
VERT. 1"=5'



PROFILE

SCALE: HOR. 1"=50'
VERT. 1"=5'

TAC IN 36" OAK
TAC IN 30" OAK
141.85'
E SAN. MH.
△ 113 (RE-BAR)
N 513,801.92
E 852,112.29

NOTE: SUGGESTED SEQUENCE OF CONSTRUCTION IS FOUND IN SECTION 4.17 OF THE STANDARD SPECIAL PROVISIONS.

NOTE: CONTRACTOR SHALL VERIFY EXISTING PIPE TYPE, DIMENSIONS AND CLASS PRIOR TO ORDERING ANY PIPE.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James J. ... 11-2-92
DIRECTOR OF PUBLIC WORKS
DATE
Richard ... 10-29-92
CHIEF, BUREAU OF UTILITIES
DATE

WHITNEY BAILEY
CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD. 21093
301-252-6060
COX MAGNANI

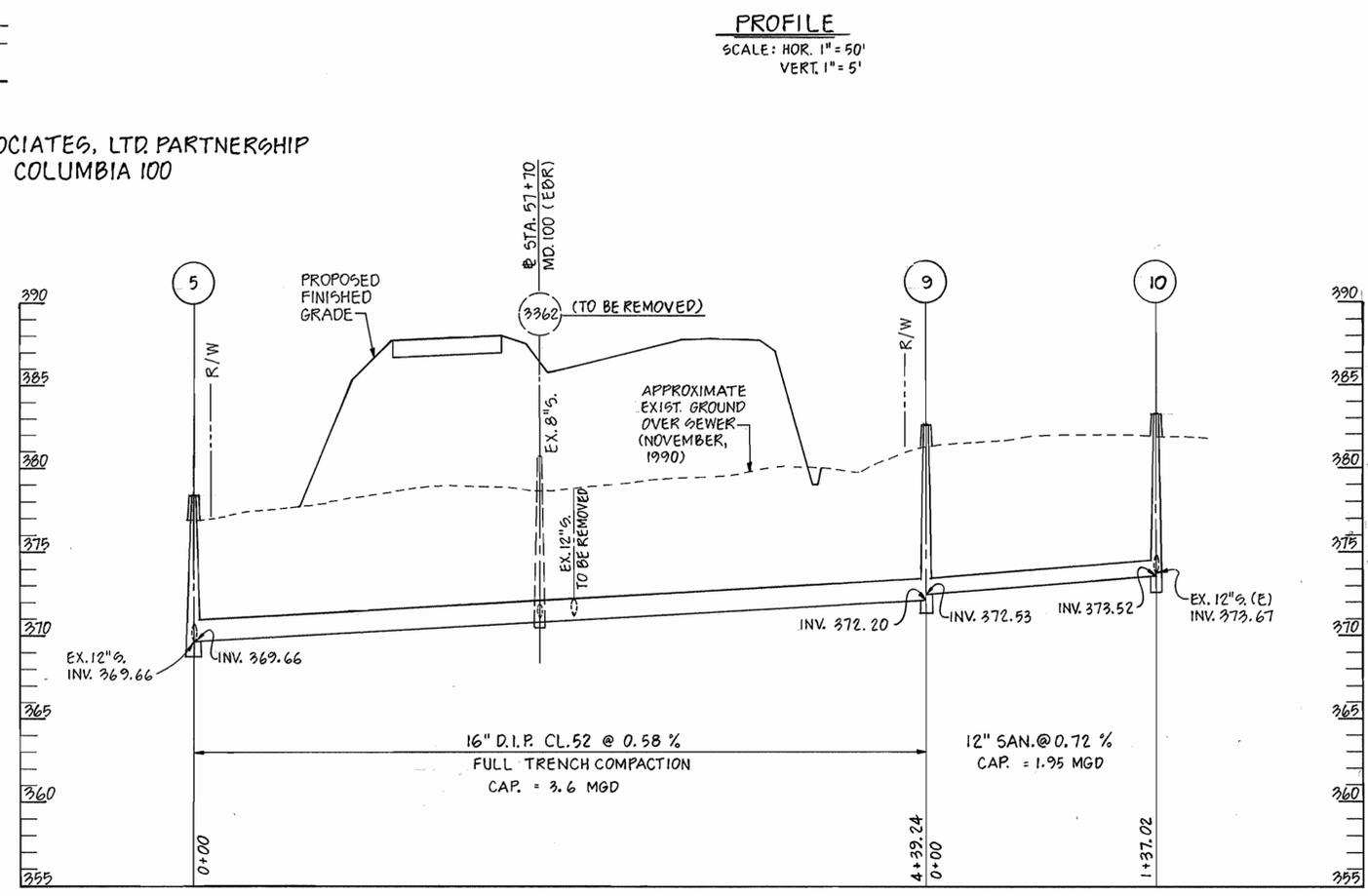
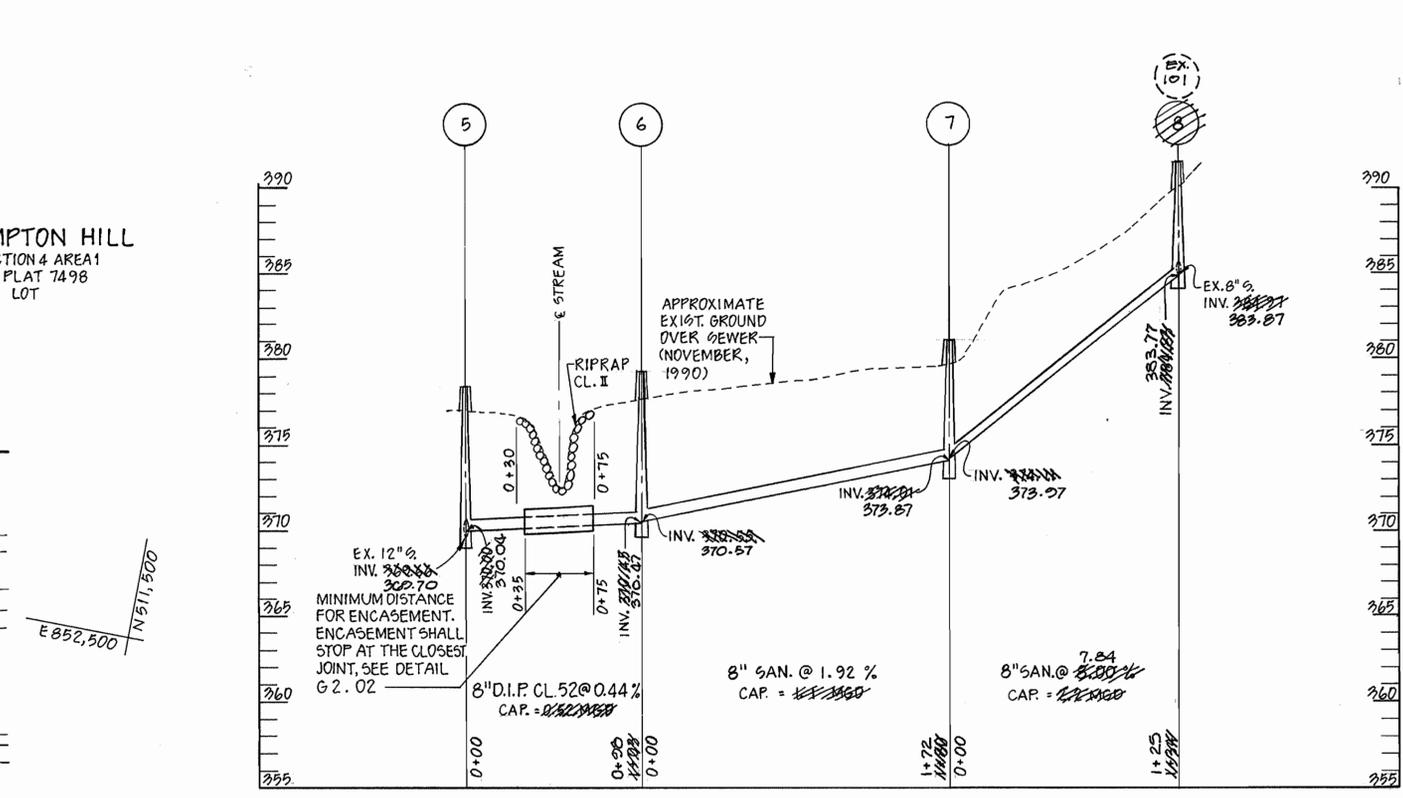
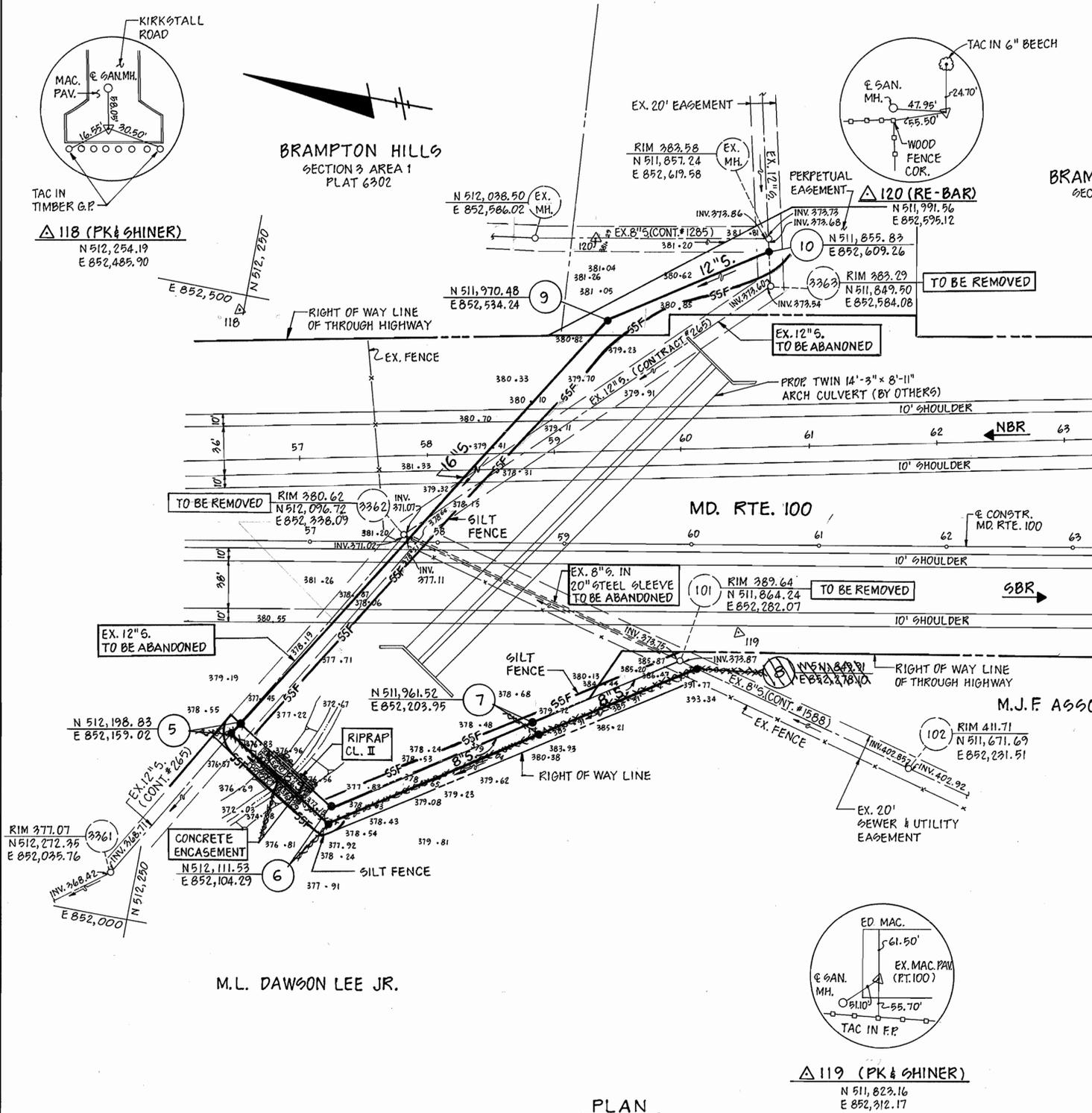


DES: R.J.H.					
DRN: H.H.					
CHK: B.D.J.					
DATE: 10/26/92	BY	NO.	REVISION	DATE	

PLAN AND PROFILES
600' SCALE MAP NO. 330 BLOCK NO. 6 & 12

SHA CONTRACT NO. HO-661-501-770
MARYLAND ROUTE 100
SANITARY SEWER RELOCATIONS
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT- ELLICOTT CITY NO. 2
HOWARD COUNTY, MARYLAND
AS-BUILT

SCALE AS SHOWN
SHEET 6 OF 18



NOTE: SUGGESTED SEQUENCE OF CONSTRUCTION FOR SEWER IS FOUND IN SECTION 4.17 OF THE SPECIAL PROVISIONS.

RESTORATION SCHEDULE	
TEMPORARY SEEDING OVER ALL DISTURBED AREAS.	
RIPRAP CL. II STA. 0+30 TO 0+75 BETWEEN MANHOLES 5 & 6.	

NOTE: CONSTRUCTION STAKEOUT PER INDICATED MH COORDINATES. ALL D.I.P. AND PVC PIPE WILL BE INSTALLED PER VOL IV, G 2.01 TRENCH BEDDING DETAIL DESIGNATED, " TRENCH FOR PVC PIPE AND HIGH DENSITY POLYETHYLENE PIPE".

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. ... 11/3/92
DIRECTOR OF PUBLIC WORKS DATE

Robert ... 10-29-92
CHIEF, BUREAU OF UTILITIES DATE

Whitney Bailey 10-28-92
CHIEF, BUREAU OF ENGINEERING DATE

Dr. ... 10-28-92
CHIEF, UTILITY DESIGN DIVISION DATE

WHITNEY BAILEY
CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD. 21093
301-252-6060



DES: R.J.H.			
DRN: H.H.			
CHK: B.D.J.			
DATE: 10/26/92	BY	NO.	REVISION

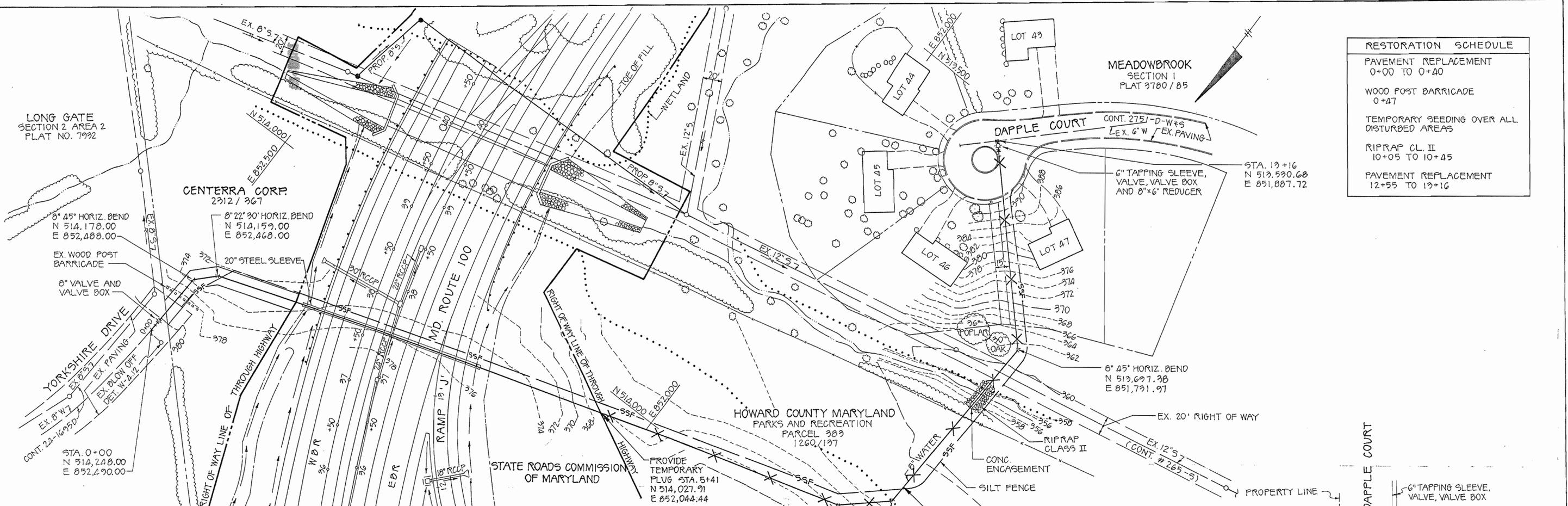
PLAN AND PROFILES

600' SCALE MAP NO. 530 BLOCK NO. 6 & 12

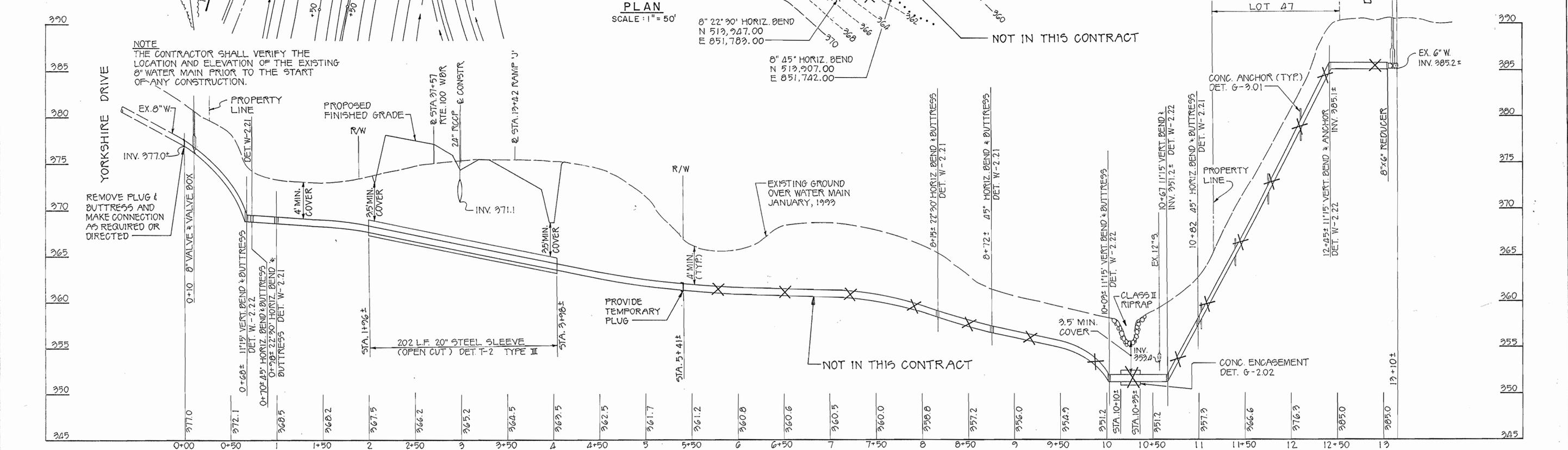
SHA CONTRACT NO. HO-661-501-770

MARYLAND ROUTE 100
SANITARY SEWER RELOCATIONS
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT-ELLCOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 13



RESTORATION SCHEDULE	
PAVEMENT REPLACEMENT	0+00 TO 0+40
WOOD POST BARRICADE	0+47
TEMPORARY SEEDING OVER ALL DISTURBED AREAS	
RIPRAP CL. II	10+05 TO 10+45
PAVEMENT REPLACEMENT	12+55 TO 13+16



PLAN
SCALE: 1" = 50'

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Brown 2-19-93
DIRECTOR OF PUBLIC WORKS DATE

Robert Seaman 2-19-93
CHIEF, BUREAU OF UTILITIES DATE

James M. Brown 2-19-93
CHIEF, BUREAU OF ENGINEERING DATE

Robert Seaman 2-19-93
CHIEF, UTILITY DESIGN DIVISION DATE

WHITNEY
BAILEY
COX
MAGNANI

CONSULTING ENGINEERS
1850 YORK ROAD
TIMONUM, MD 21093
301-252-6060



DES: R.J.H.	
DRN: K.S.M.	
CHK: B.D.J.	
DATE:	BY NO. REVISION DATE

PLAN AND PROFILE

600' SCALE MAP NO. W-30 BLOCK NO.

SHA CONTRACT NO. HO-661-503-770

MARYLAND ROUTE 100
WATER MAIN LOOP EXTENSION
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT-ELLCOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 8 OF 18

AS-BUILT

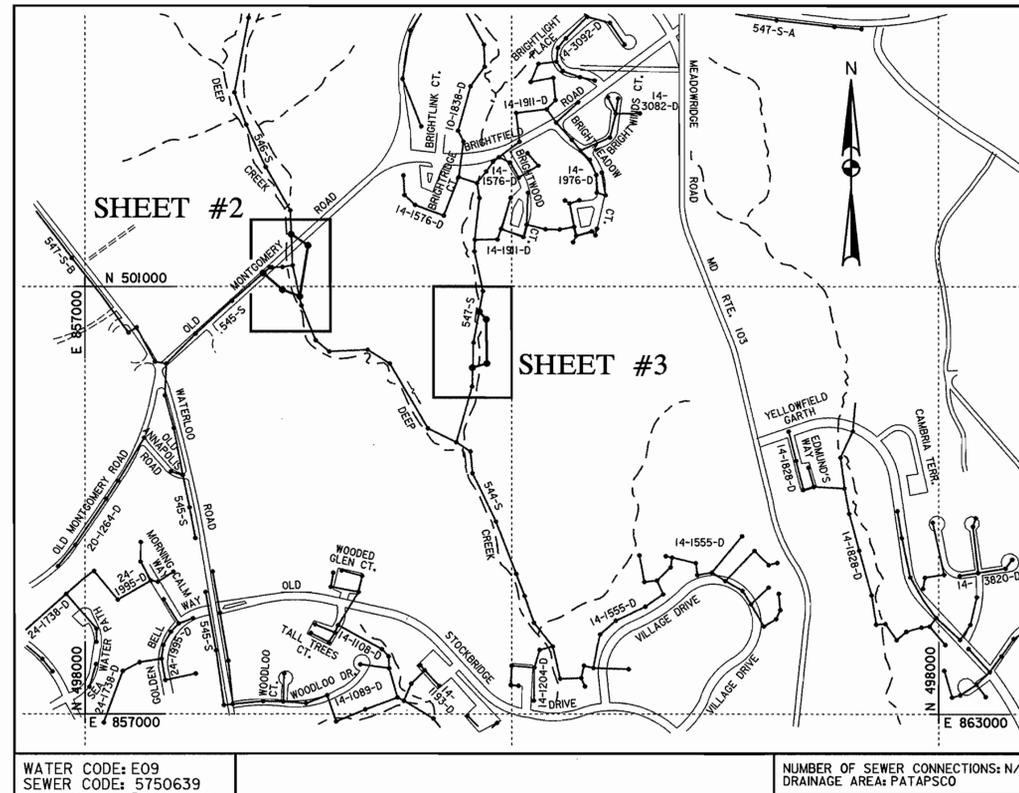
MARYLAND ROUTE 100 SNOWDEN RIVER PARKWAY TO INTERSTATE 95 SANITARY SEWER RELOCATIONS

CAPITAL PROJECT W-8156

CONTRACT NO. 10-3071

ITEM	QUANTITIES		MATERIAL TYPE	SUPPLIER
	ESTIMATED	AS BUILT		
8" D.I.P. CL. 52	404'	•		
8" D.I.P. CL. 54	331'	•		
12" D.I.P. CL. 52	158'	•		
12" D.I.P. CL. 54	371'	•		
MANHOLE	9 EA.			
MANHOLE DEPTH	42 V.F.			
TYPE 'A' DROP CONN.	1 EA.			
20" STEEL SLEEVE	64'			

• PIPE LENGTH DOES NOT INCLUDE THE DISTANCE THROUGH THE MANHOLE



WATER CODE: E09
SEWER CODE: 5750639
TYPE OF BUILDINGS: N/A
NUMBER OF PARCELS: N/A

NUMBER OF SEWER CONNECTIONS: N/A
DRAINAGE AREA: PATAPSCO

VICINITY MAP

SCALE: 1" = 600'

INDEX OF DRAWINGS	
NO.	DESCRIPTION
1.	TITLE SHEET
2.	PLAN & PROFILE - SANITARY SEWER
3.	PLAN & PROFILE - SANITARY SEWER

GENERAL NOTES

- THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGES 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 BASE ON NATIONAL GEODETIC SURVEY (N.G.S.)
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6".
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, REFER TO THE SPECIAL PROVISIONS.
- 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 & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDERGROUND DAMAGE CONTROL - 859-9004
 - BALTIMORE GAS & ELECTRIC CO. - TROUBLE SHOOTING - 298-9050
 - MISS. UTILITY - 1-800-257-7777
 - BUREAU OF UTILITIES, HOWARD CO. DEPARTMENT OF PUBLIC WORKS - 313-4900
 - AT&T - 703-691-6735
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINES OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR CONSTRUCTION OF PROJECT.
- ALL SEWER MAINS SHALL BE DUCTILE IRON PIPE.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES, HOWARD COUNTY AT LEAST 72 HOURS PRIOR TO SCHEDULING WORK ASSOCIATED WITH SEWAGE FLOW DIVERSION.
- BENCH MARKS FOR CONSTRUCTION:
 - *TU100-18 REBAR AND CAP, PSI5
OFFSET STA. 200+83.91 @ CONSTRUCTION MD. RTE. 100
(512.25' LT.) ELEV. 382.35
 - *TU100-19A REBAR AND CAP, PSI7
OFFSET STA. 214+00.87 @ CONSTRUCTION MD. RTE. 100
(558.45' LT.) ELEV. 350.25
- FOR HORIZONTAL CONTROLS, SEE DWG. NO. G-2.

SHA CONTRACT NO. HO-661-504-770

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Lewis 4/22/96
DIRECTOR OF PUBLIC WORKS DATE

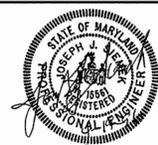
Paul D. Johnson 4/22/96
CHIEF BUREAU OF ENGINEERING DATE

Robert S. Brown 4-22-96
CHIEF BUREAU OF UTILITIES DATE

Debra M. Johnson 4-22-96
CHIEF UTILITY DESIGN DIVISION DATE

WHITNEY
BAILEY
COX
MAGNANI

CONSULTING ENGINEERS
849 FAIRMOUNT AVENUE
SUITE 100
BALTIMORE, MD 21286
(410) 512-4500



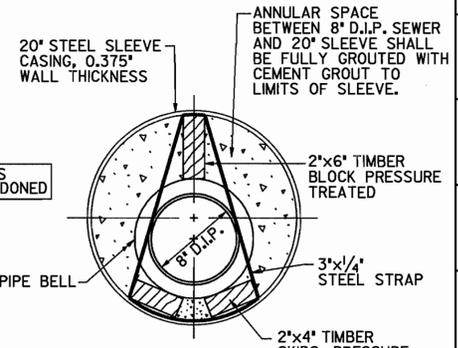
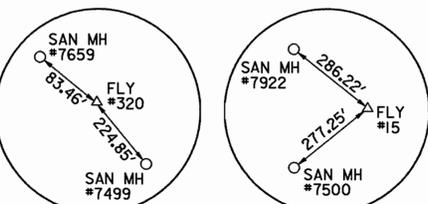
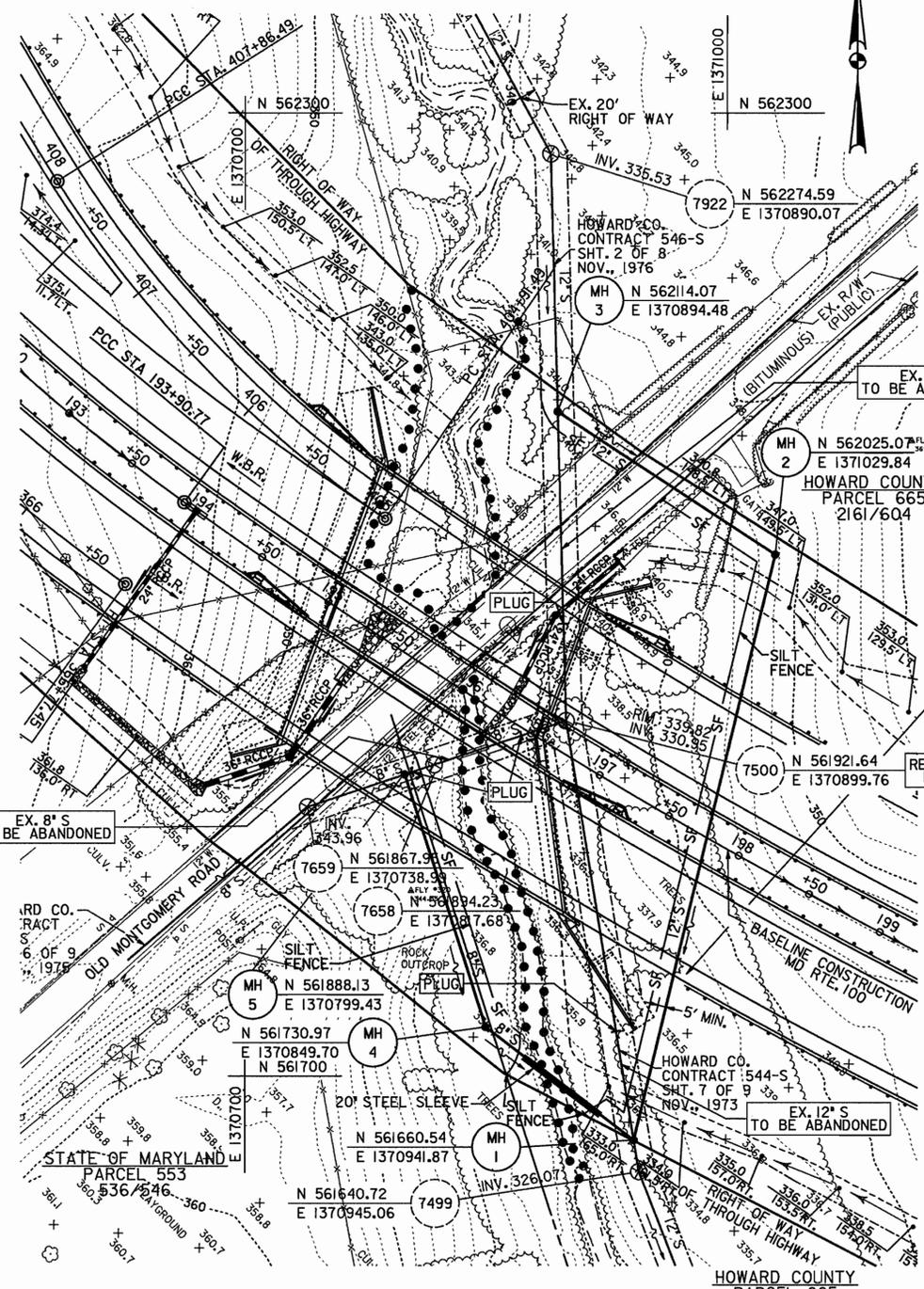
DES:	R.J.H.			
DRN:	J.R.S.			
CHK:	J.J.S.			
DATE:	4/19/96			
BY	NO.	REVISION	DATE	

TITLE SHEET

600' SCALE MAP NO. S-37 BLOCK NO. 2 & 8

MARYLAND ROUTE 100
SANITARY SEWER RELOCATIONS
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT - ELLICOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

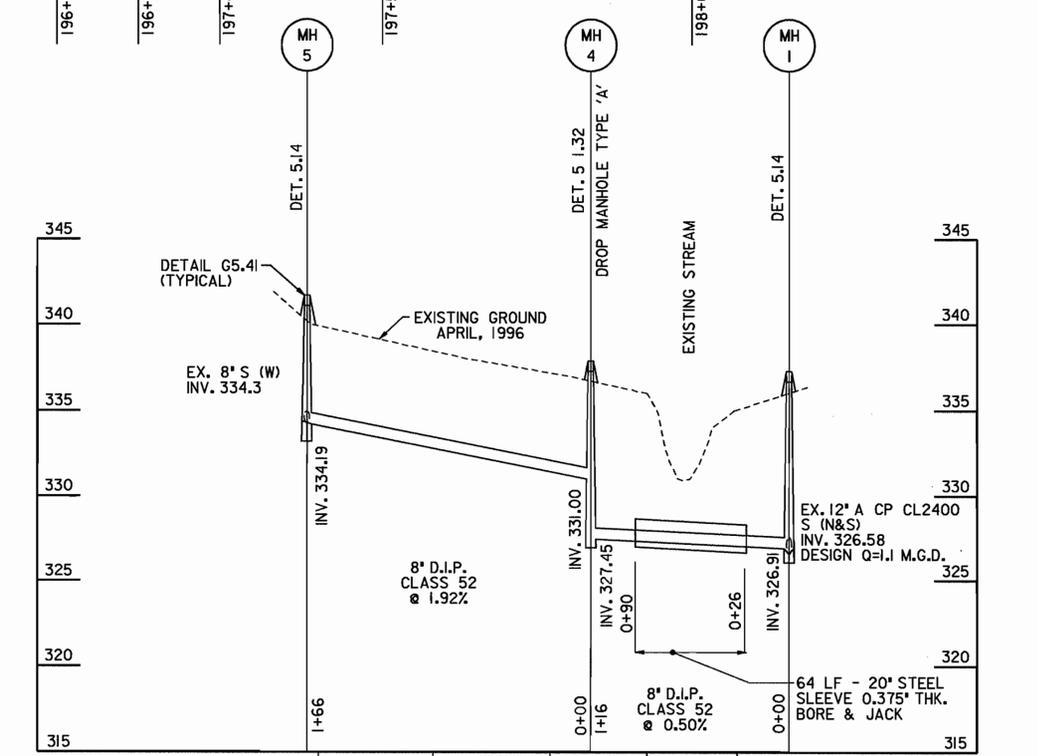
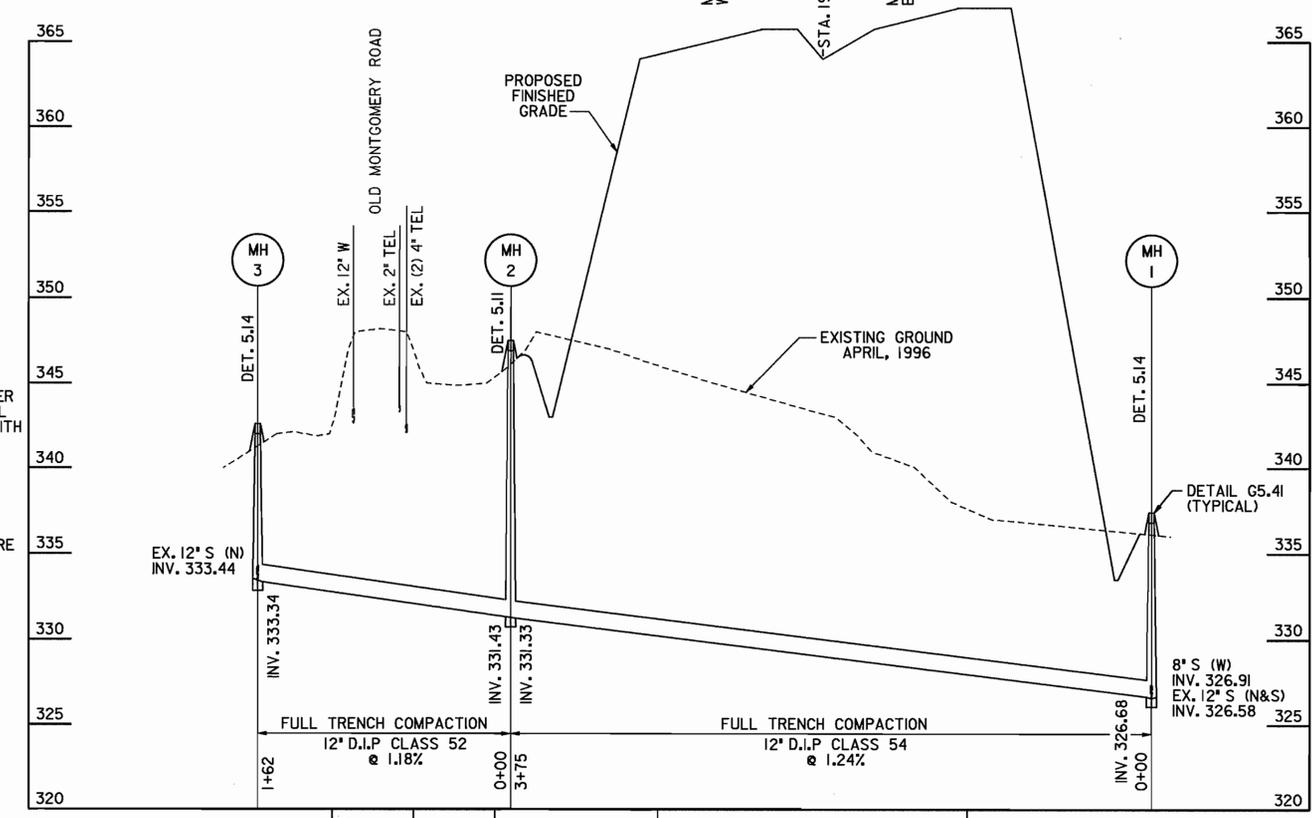
SCALE AS SHOWN
SHEET 2 OF 18



SUGGESTED SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE FOR EROSION AND SEDIMENT CONTROL.
2. CLEAR AND GRUB SITE AS REQUIRED FOR THE SANITARY SEWER CONSTRUCTION.
3. CONSTRUCT NEW MANHOLE 1 OVER EXISTING 12" SANITARY SEWER WHERE INDICATED. MAINTAIN FLOW IN THE EXISTING SYSTEM.
4. INSTALL 12" SEWERS AND MANHOLES 2 AND 3. MAINTAIN FLOW IN EXISTING SYSTEM.
5. TEST NEW SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS.
6. WHEN NEW SYSTEM IS APPROVED, BREAK OUT THE TOP OF THE EXISTING PIPE IN MANHOLES 1 AND 3. DIVERT FLOW TO NEW SYSTEM IN MANHOLE 3.
7. INSTALL 8" SEWERS AND MANHOLES 4 AND 5. MAINTAIN FLOW IN EXISTING SYSTEM.
8. TEST NEW SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS.
9. WHEN NEW SYSTEM IS APPROVED, BREAK OUT THE TOP OF THE EXISTING PIPE IN MANHOLES 1 AND 3. DIVERT FLOW TO NEW SYSTEM.
10. REMOVE AND SALVAGE THE FRAMES AND COVERS FROM MANHOLES 7500 AND 7658. DELIVER TO HOWARD COUNTY, BUREAU OF UTILITIES.
11. REMOVE AND DISPOSE OF MANHOLES 7500 AND 7658.
12. GROUT FILL THE ABANDONED 8" AND 12" SEWERS WHERE SHOWN ON THE DRAWING.
13. TEMPORARY SEED ALL DISTURBED AREAS.
14. REMOVE EROSION AND SEDIMENT CONTROL DEVICES ONLY WHEN DIRECTED BY THE DEPARTMENT OF NATURAL RESOURCES.

NOTE: FOR EROSION AND SEDIMENT CONTROL MEASURES AND DETAILS SEE DWG. NO. ES-1 & ES-2.



RESTORATION SCHEDULE

TEMPORARY SEEDING OVER ALL DISTURBED AREAS
--

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

4/22/96
DATE

4-22-96
DATE

CHIEF BUREAU OF UTILITIES

WHITNEY BAILEY CONSULTING ENGINEERS
COX MAGNANI

849 FAIRMOUNT AVENUE
SUITE 100
BALTIMORE, MD 21286
(410) 512-4500

4/22/96
DATE

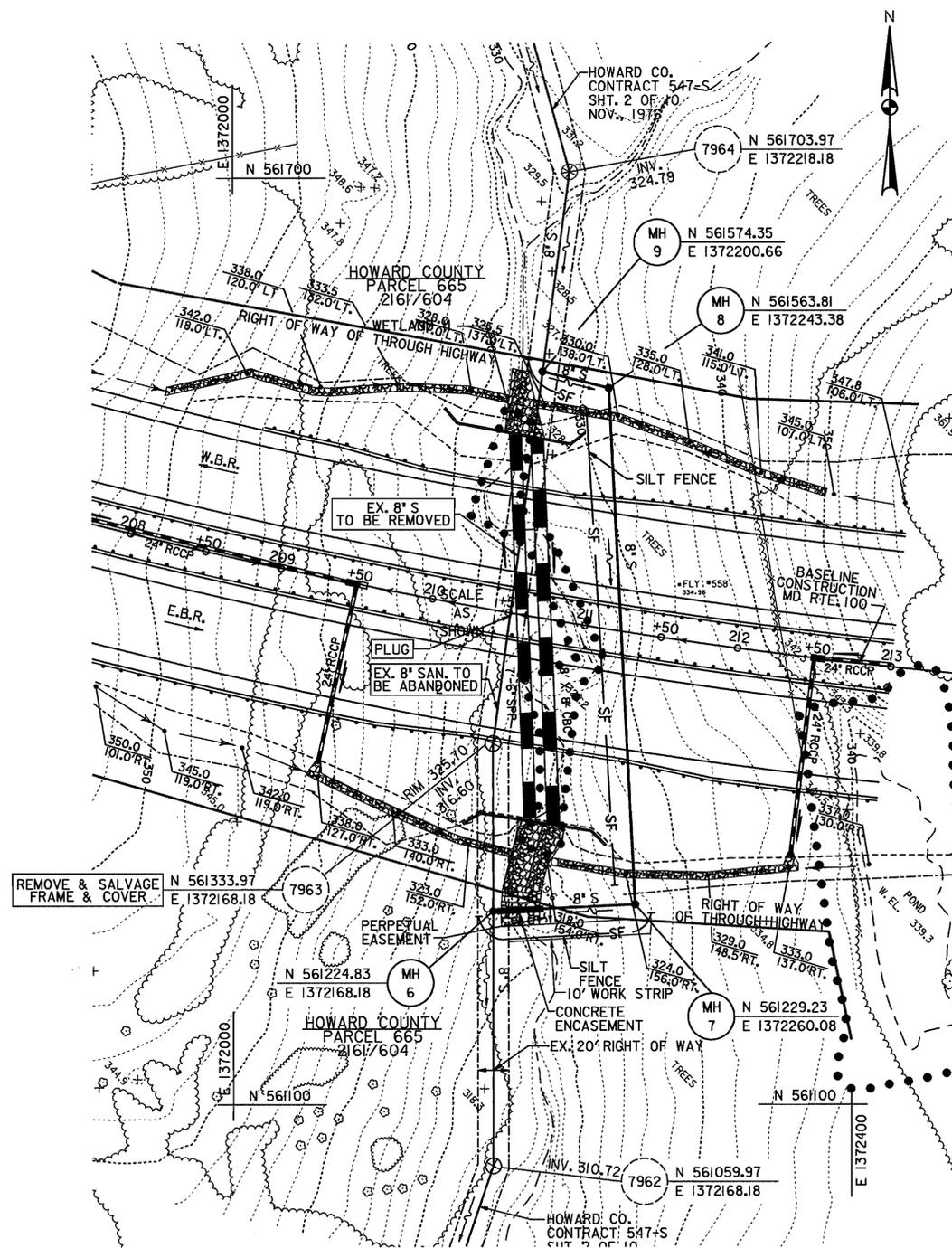


DES:	R.J.H.
DRN:	J.R.S.
CHK:	J.J.S.
DATE:	4/19/96
BY:	NO.
REVISION:	
DATE:	600' SCALE MAP NO. S-37
BLOCK NO.:	2 & 8

PLAN & PROFILES

MARYLAND ROUTE 100
SANITARY SEWER RELOCATIONS
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT - ELLICOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

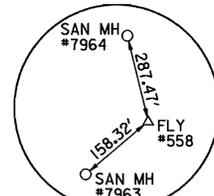
SCALE AS SHOWN
SHEET 10 OF 18



PLAN
SCALE: 1" = 50'

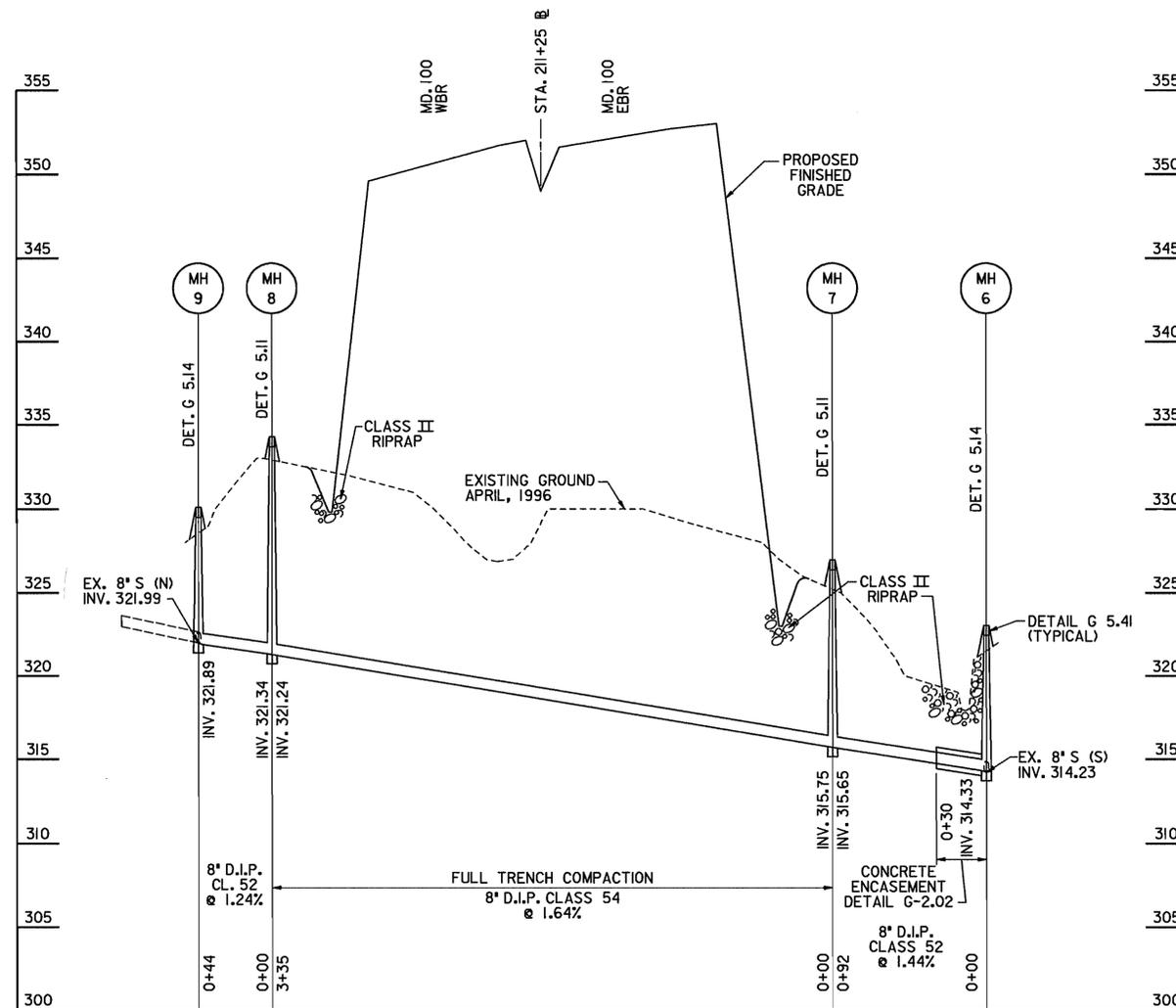


FLY # 558
N 561436.136
E 1372289.043



FLY # 558
N 561436.136
E 1372289.043

NOTE:
FOR EROSION AND SEDIMENT CONTROL MEASURES AND DETAILS
SEE DWG. NO. ES-1 & ES-2.



PROFILE: SANITARY SEWER

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

SUGGESTED SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE FOR EROSION AND SEDIMENT CONTROL.
2. CLEAR AND GRUB SITE AS REQUIRED FOR THE SANITARY SEWER CONSTRUCTION.
3. CONSTRUCT NEW MANHOLE 6 OVER EXISTING SANITARY SEWER, UPSTREAM FROM EXISTING MANHOLE 7962.
4. INSTALL NEW SEWERS AND MANHOLES 7, 8 & 9. MAINTAIN FLOW IN EXISTING SYSTEM.
5. TEST NEW SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS.
6. BREAK OUT THE TOP OF THE EXISTING PIPE IN MANHOLES 6 AND 9.
7. ABANDON THE UPSTREAM PIPE IN MANHOLE 6 AND THE DOWNSTREAM PIPE IN MANHOLE 9.
8. EXISTING MANHOLE 7963 SHALL BE REMOVED AND THE FRAME AND COVER SALVAGED.
9. GROUT FILL THE ABANDONED SEWER BETWEEN MANHOLE 6 AND 7963 AND BETWEEN 7963 AND THE BASELINE MD. RTE. 100.
10. REMOVE THE ABANDONED SEWER BETWEEN THE BASELINE AND MANHOLE 9.
11. TEMPORARY SEED ALL DISTURBED AREAS.
12. REMOVE SILT FENCE ONLY WHEN DIRECTED BY THE DEPARTMENT OF NATURAL RESOURCES.

SHA CONTRACT NO. HO-661-504-770

RESTORATION SCHEDULE
TEMPORARY SEEDING OVER ALL DISTURBED AREAS

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Lawrence J. ...* DATE: 4/22/96
Chief Bureau of Utilities: *Robert ...* DATE: 4-22-96
Chief Bureau of Engineering: *Paul ...* DATE: 4/22/96
Chief Utility Design Division: *C. J. ...* DATE: 4-22-96

WHITNEY CONSULTING ENGINEERS
BAILEY COX MAGNANI
849 FAIRMOUNT AVENUE
SUITE 100
BALTIMORE, MD 21286
(410) 512-4500



DES:	R.J.H.		
DRN:	J.R.S.		
CHK:	J.J.S.		
DATE:	4/19/96		
BY	NO.	REVISION	DATE

PLAN & PROFILE

600' SCALE MAP NO. S-37 BLOCK NO. 8

MARYLAND ROUTE 100
SANITARY SEWER RELOCATIONS
CAPITAL PROJECT W-8156
CONTRACT NO. 10-3071
ELECTION DISTRICT - ELLICOTT CITY NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 11 OF 18