
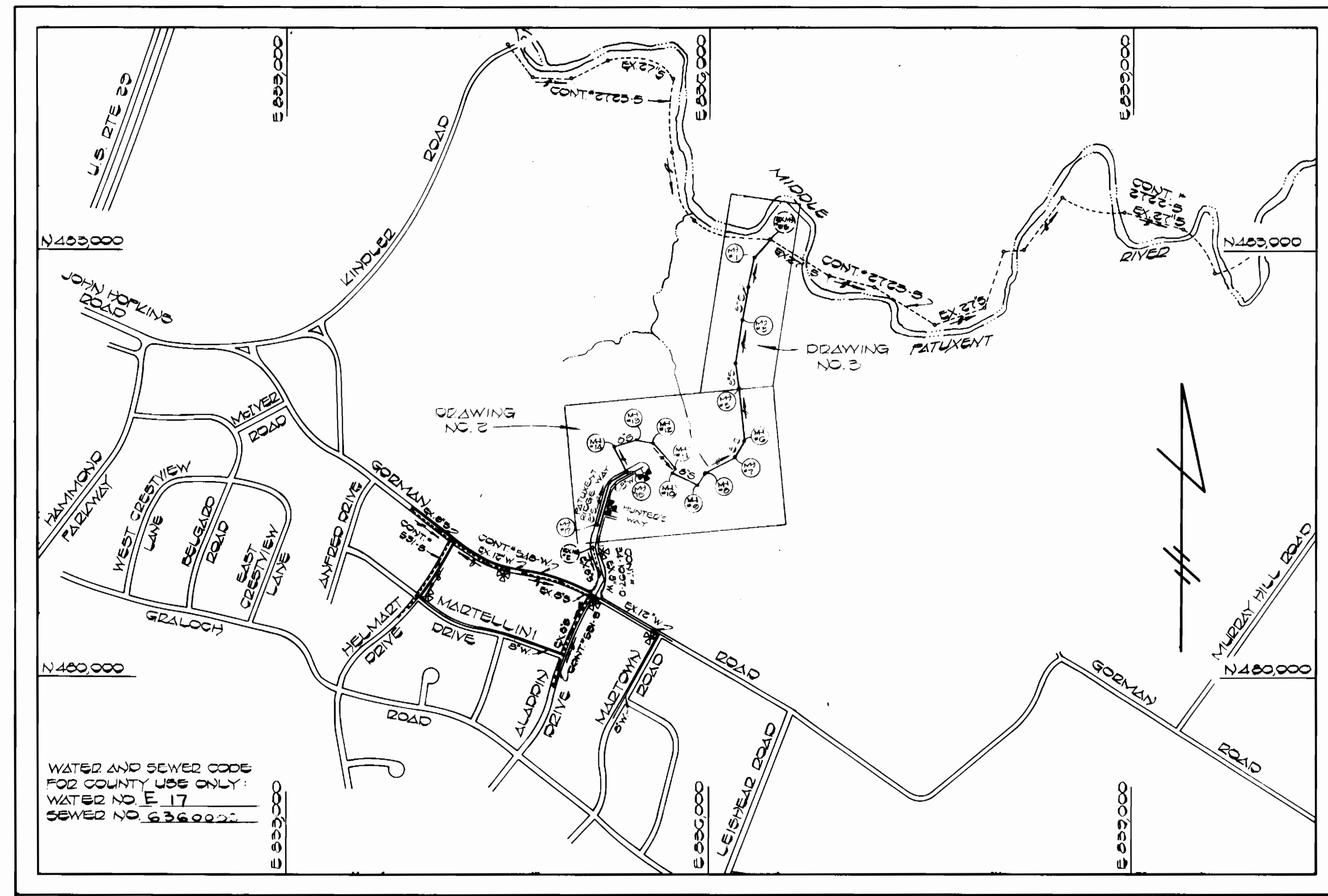


GENERAL NOTES

- 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. THE OWNER HAS CONTACTED THE UTILITIES COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - BALTIMORE GAS & ELECTRIC COMPANY-CONTRACTOR SERVICES:561-2585
 - BALTIMORE GAS & ELECTRIC COMPANY- UNDERGROUND DAMAGE CONTROL 234-5621
 - BALTIMORE GAS & ELECTRIC COMPANY- TROUBLE SHOOTING: 298-9013
 - "MISS UTILITY" : 1-559-0100
 - CHESAPEAKE & POTOMAC TELEPHONE COMPANY : 725-9976
 - BUREAU OF UTILITIES - HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS:992-2366
- 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.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE REGULATION. MEN WORKING AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL SEWER MAINS SHALL BE C.S.P.X., P.V.C., V.C.P.X. OR A.C.P. CLASS 2400 UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- ALL WATER MAINS TO BE D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL 65 51.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL S145. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPED FITTINGS ONLY.
- 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.
- 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.

QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
8" WATER	662 L.F.	758 L.F.	GRIFFEN Pipe
6" WATER	112 L.F.	91 L.F.	GRIFFEN Pipe
1" W.H.C.	105 L.F.	180 L.F.	Howel metal
3/4" W.H.C.	320 L.F.	240 L.F.	Howel metal
FIDE HYD.	2 EA.	2 EA.	US Pipe Foundry
8" SEWER	3438 L.F.	2516 P.V.C.	J+M Manufacturing
6" SEWER	435 L.F.	455 L.F.	J+M Manufacturing
MANHOLES	17 EA.	17 EA.	Terre Hill
8" VALVES	2 EA.	2 EA.	U.S. Pipe Foundry
8" SEWER D.I.P.	800 L.F.	801 #0	GRIFFEN Pipe
21 CURLE BOX	21 EA.	21 EA.	OrmetoK
6" VALVES	2 EA.	2 EA.	U.S. Pipe Foundry
VALVE BOXES	4 EA.	4 EA.	BINCHAM/TAYLOR
8x6 M.T. TEE	14 EA.	14 EA.	U.S. Pipe Foundry
14 CORR. STOP	7 1" / 7 3/4"	7 EA. / 7 EA.	BY McDonald / BY McDonald
1x 3/4" Wyo.	7 EA.	7 EA.	FORD Motor boy Co



WATER AND SEWER CODE FOR COUNTY USE ONLY:
 WATER NO. E-17
 SEWER NO. G-360000

TYPE OF BUILDING - RESIDENTIAL
 NUMBER OF LOTS - 22 (21 BUILDABLE)
 NUMBER OF WATER HOUSE CONNS. - 21
 NUMBER OF SEWER HOUSE CONNS. - 21
 DRAINAGE AREA - MIDDLE PATUXENT

SCALE: 1" = 600'

CONTRACT NO. 34-1199-D WARFIELD'S RANGE SECTION TWO AREA ONE WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH ARTICLE 19 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-04-04.

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

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 APPROVED: *[Signature]* DATE: 6-25-84
 U.S. SOIL CONSERVATION SERVICE

APPROVED: *[Signature]* DATE: *[Signature]*
 HOWARD SOIL CONSERVATION DISTRICT

CONTRACT NO. 34-1199-D
 WARFIELD'S RANGE
 SECTION TWO AREA ONE
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

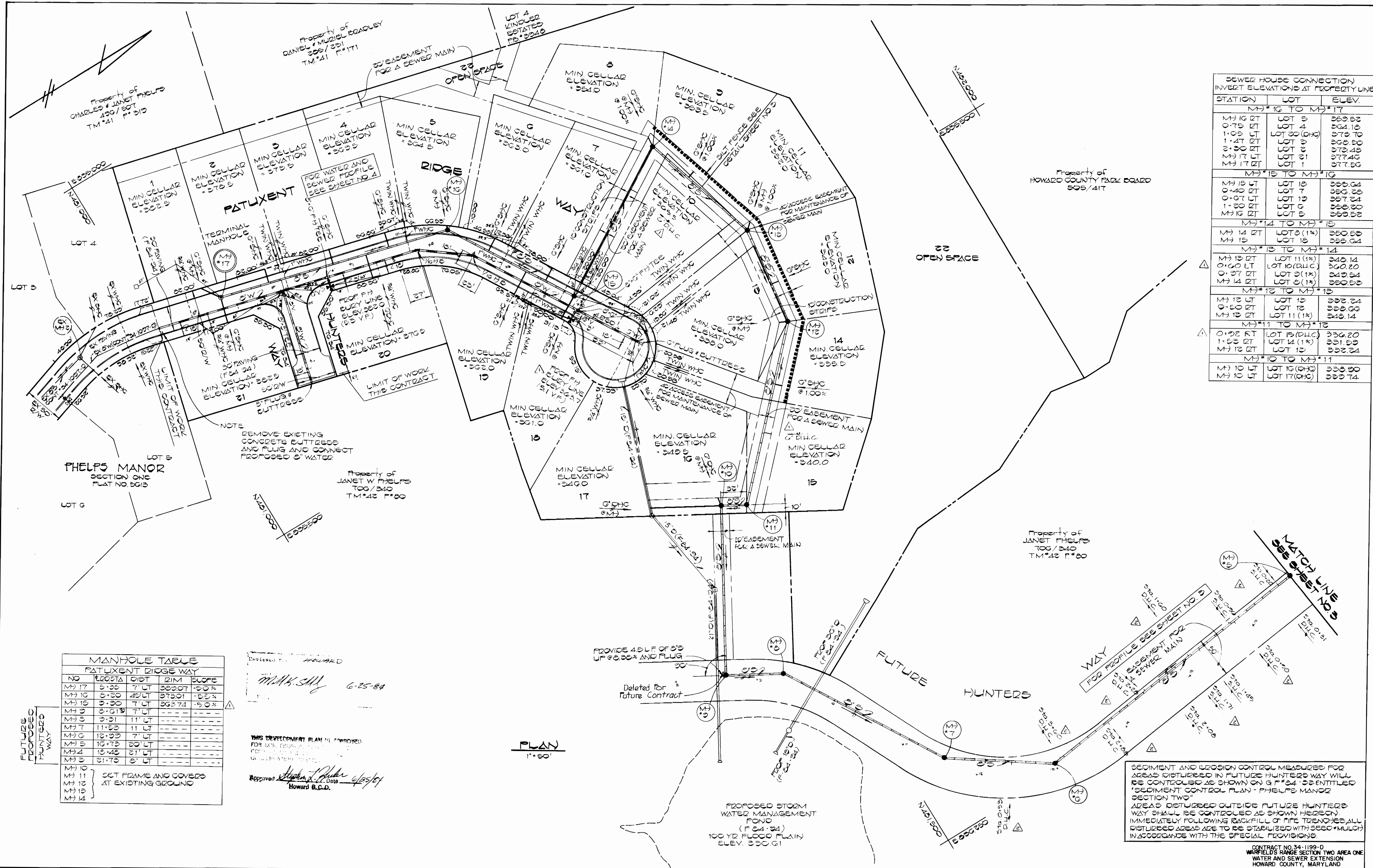
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS: *[Signature]* DATE: 6/25/84
 CHIEF, BUREAU OF UTILITIES: *[Signature]* DATE: 6-25-84
 CHIEF, LAND DEVELOPMENT DIVISION: *[Signature]* DATE: *[Signature]*

FISHER, COLLINS, AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 DATE: 12/12/83
 TERRELL A. FISHER

DES. D.B.S.					
DRN. D.B.S.					
CHK. T.A.F.					
DATE: 12/12/83	BY	NO.	REVISION		

TITLE SHEET
 600' SCALE MAP NO. 42 BLOCK NO.

WARFIELD'S RANGE
 SECTION TWO AREA ONE
 CONTRACT NO. 34-1199-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 1 OF 5



SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	ELEV.
MH*16 TO MH*17		
MH*16 RT	LOT 5	363.82
0+75 LT	LOT 4	364.10
1+05 LT	LOT 30 (DHC)	379.70
1+47 RT	LOT 3	368.50
2+30 RT	LOT 2	373.48
MH*17 LT	LOT 21	377.46
MH*17 RT	LOT 1	377.56
MH*15 TO MH*16		
MH*15 LT	LOT 10	365.04
0+40 RT	LOT 7	365.28
0+87 LT	LOT 19	367.24
1+30 RT	LOT 6	368.00
MH*16 RT	LOT 5	369.52
MH*14 TO MH*15		
MH*14 RT	LOT 18 (1%)	360.53
MH*15	LOT 18	365.64
MH*13 TO MH*14		
MH*13 RT	LOT 11 (1%)	348.14
0+40 LT	LOT 10 (DHC)	360.20
0+37 RT	LOT 9 (1%)	349.54
MH*14 RT	LOT 8 (1%)	350.53
MH*12 TO MH*13		
MH*12 LT	LOT 13	332.24
0+50 RT	LOT 12	338.00
MH*13 RT	LOT 11 (1%)	349.14
MH*11 TO MH*12		
0+28 RT	LOT 15 (DHC)	336.20
1+52 RT	LOT 14 (1%)	331.59
MH*12 RT	LOT 13	332.24
MH*10 TO MH*11		
MH*10 LT	LOT 10 (DHC)	333.90
MH*10 LT	LOT 17 (DHC)	339.74

MANHOLE TABLE
PATUXENT RIDGE WAY

NO	ELEV STA	DIST	DIM	SLOPE
MH*17	5+35	7' LT	363.07	-5.0%
MH*16	8+30	43' LT	373.01	-5.5%
MH*15	9+30	7' LT	363.74	-5.0%
MH*9	8+51B	7' LT		
MH*9	9+51	11' LT		
MH*7	11+53	11' LT		
MH*6	12+33	7' LT		
MH*5	19+73	20' LT		
MH*4	18+43	21' LT		
MH*3	21+73	6' LT		

MH*10
MH*11 } SET FRAME AND COVERS AT EXISTING GROUND
MH*12
MH*13
MH*14

APPROVED FOR HOWARD
M.M.H. SMY 6-25-84

THIS DEVELOPMENT PLAN IS APPROVED FOR SIX MONTHS FROM THE DATE OF THIS PLAN FOR THE PURPOSES OF THE SUBMITTAL TO THE BOARD OF ENGINEERS.

Approved: *Howard B.C.D.* 4/25/84
Howard B.C.D.

SEDIMENT AND EROSION CONTROL MEASURES FOR AREAS DISTURBED IN FUTURE HUNTERS WAY WILL BE CONTROLLED AS SHOWN ON G*34 "ENTITLED 'SEDIMENT CONTROL PLAN - PHELPS MANOR SECTION TWO'". AREAS DISTURBED OUTSIDE FUTURE HUNTERS WAY SHALL BE CONTROLLED AS SHOWN HEREON IMMEDIATELY FOLLOWING BACKFILL OF PIPE TRENCHES. ALL DISTURBED AREAS ARE TO BE STABILIZED WITH SEED/MULCH IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

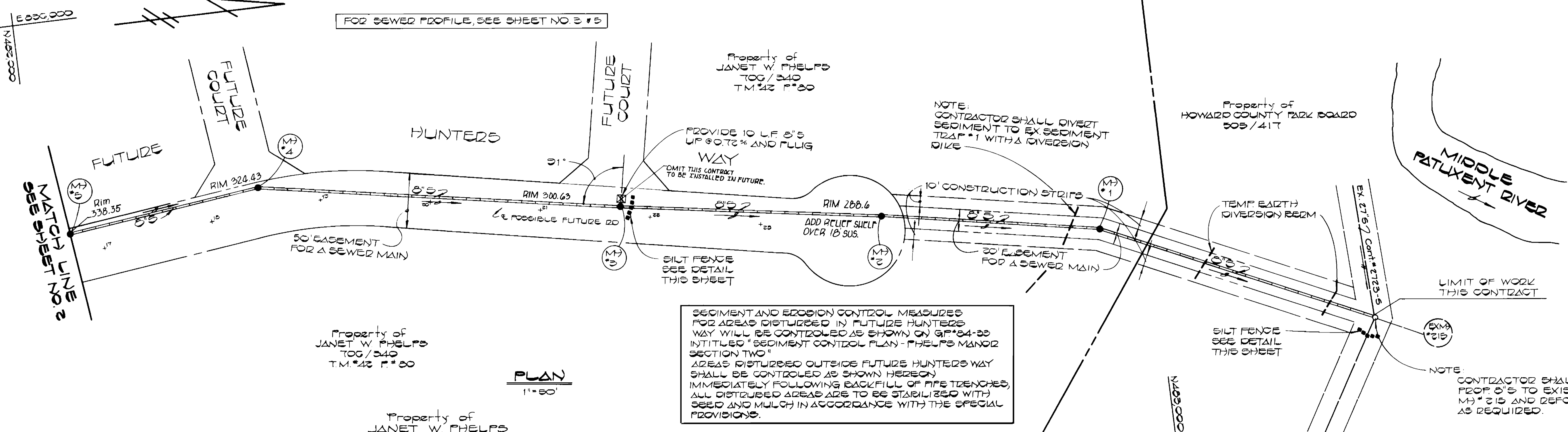
CONTRACT NO. 34-1199-D
WARFIELD'S RANGE SECTION TWO AREA ONE
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>John F. N...</i> 6/24/84 DIRECTOR OF PUBLIC WORKS DATE <i>Robert M. B...</i> 6-28-84 CHIEF, BUREAU OF UTILITIES DATE	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 461-2855 TERRELL A. FISHER DATE	DES. D.B.S. DRN. D.B.S. CHK. T.A.F. DEV. <i>[initials]</i> 12/12/83 REV. <i>[initials]</i> 12/14/84 BY NO. REVISION DATE	PLAN WATER AND SEWER MAINS 600' SCALE MAP NO. 42 BLOCK NO.	WARFIELD'S RANGE SECTION TWO AREA ONE CONTRACT NO. 34-1199-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
					SHEET 2 OF 3

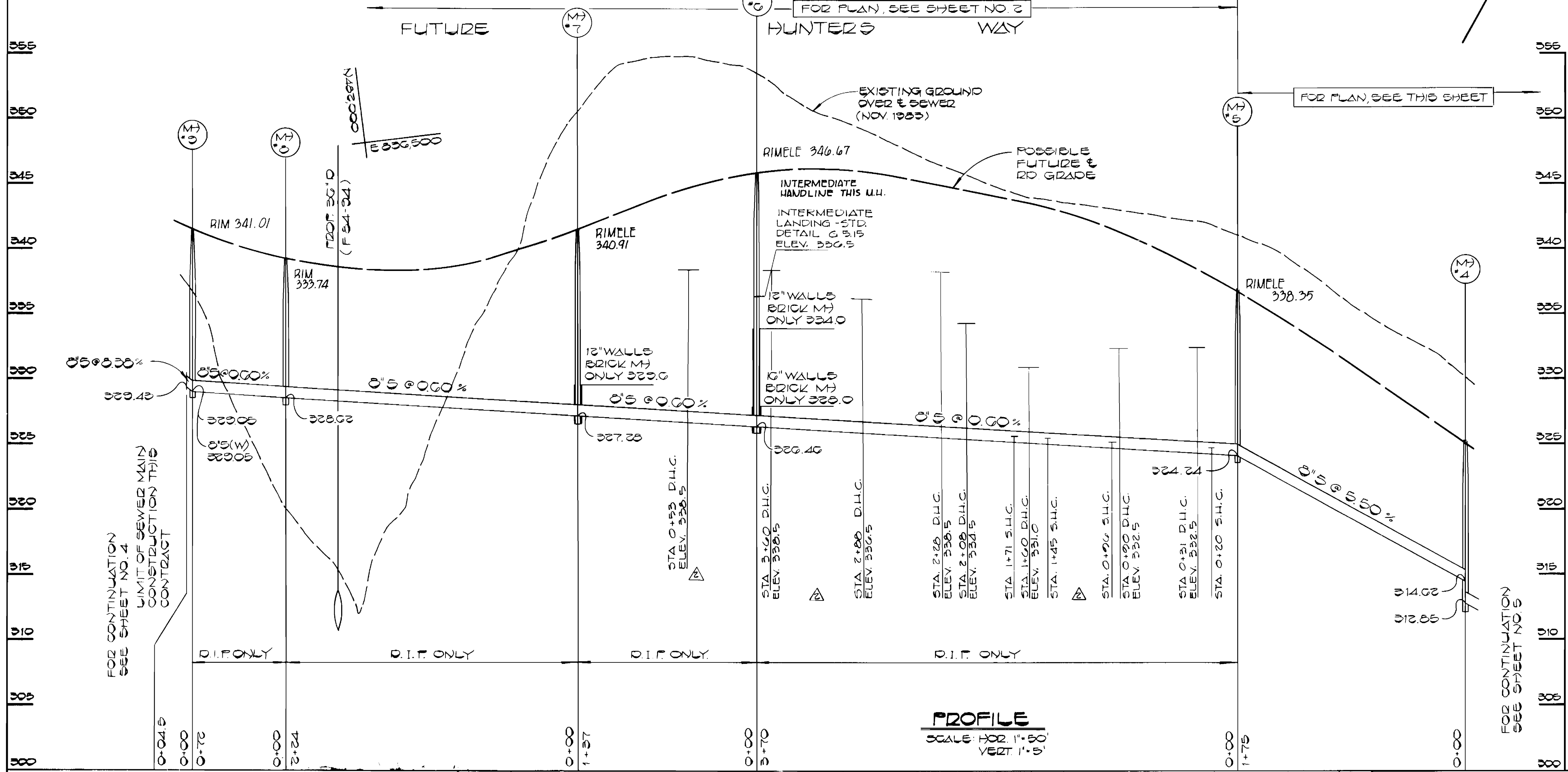
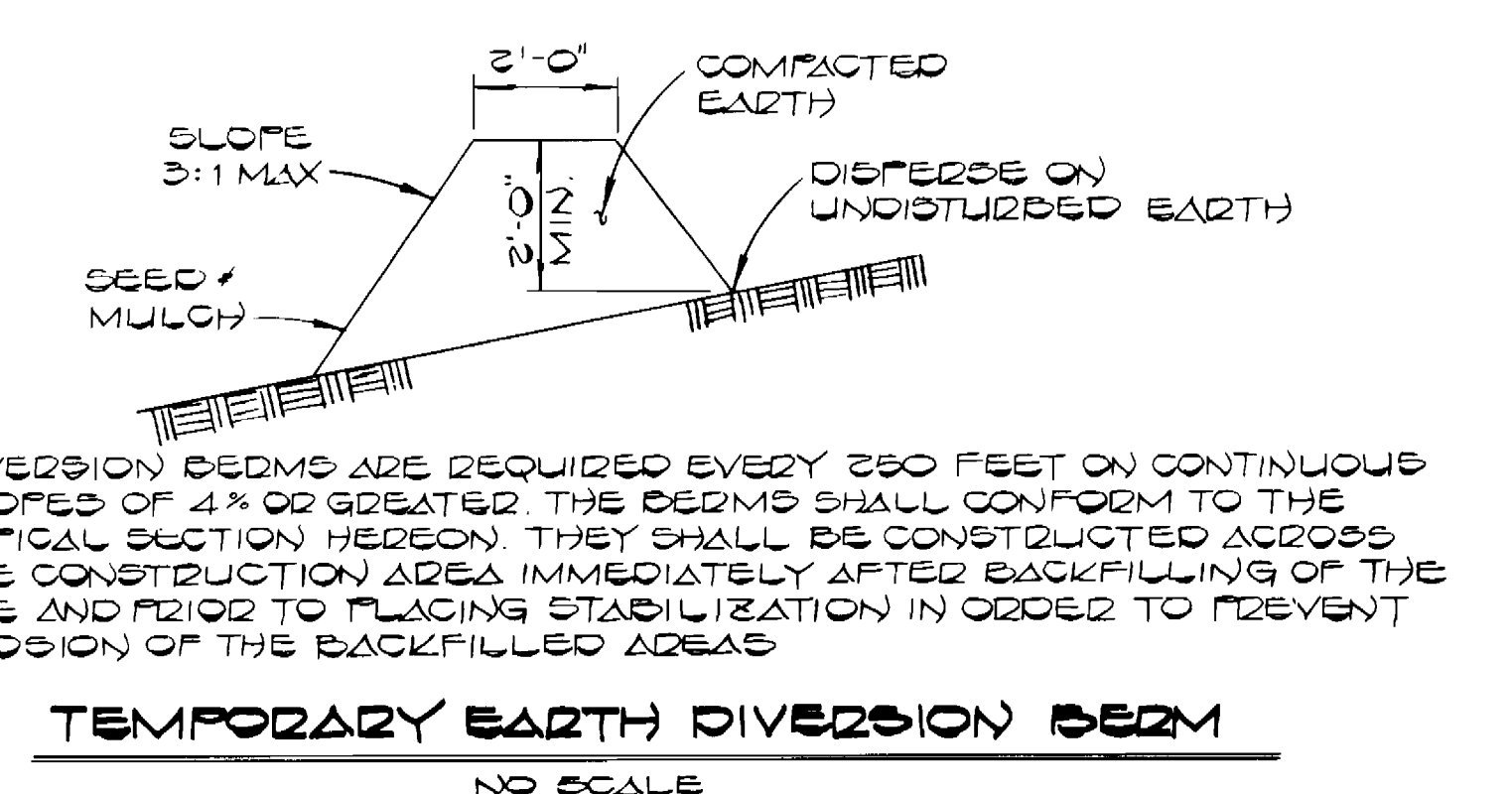
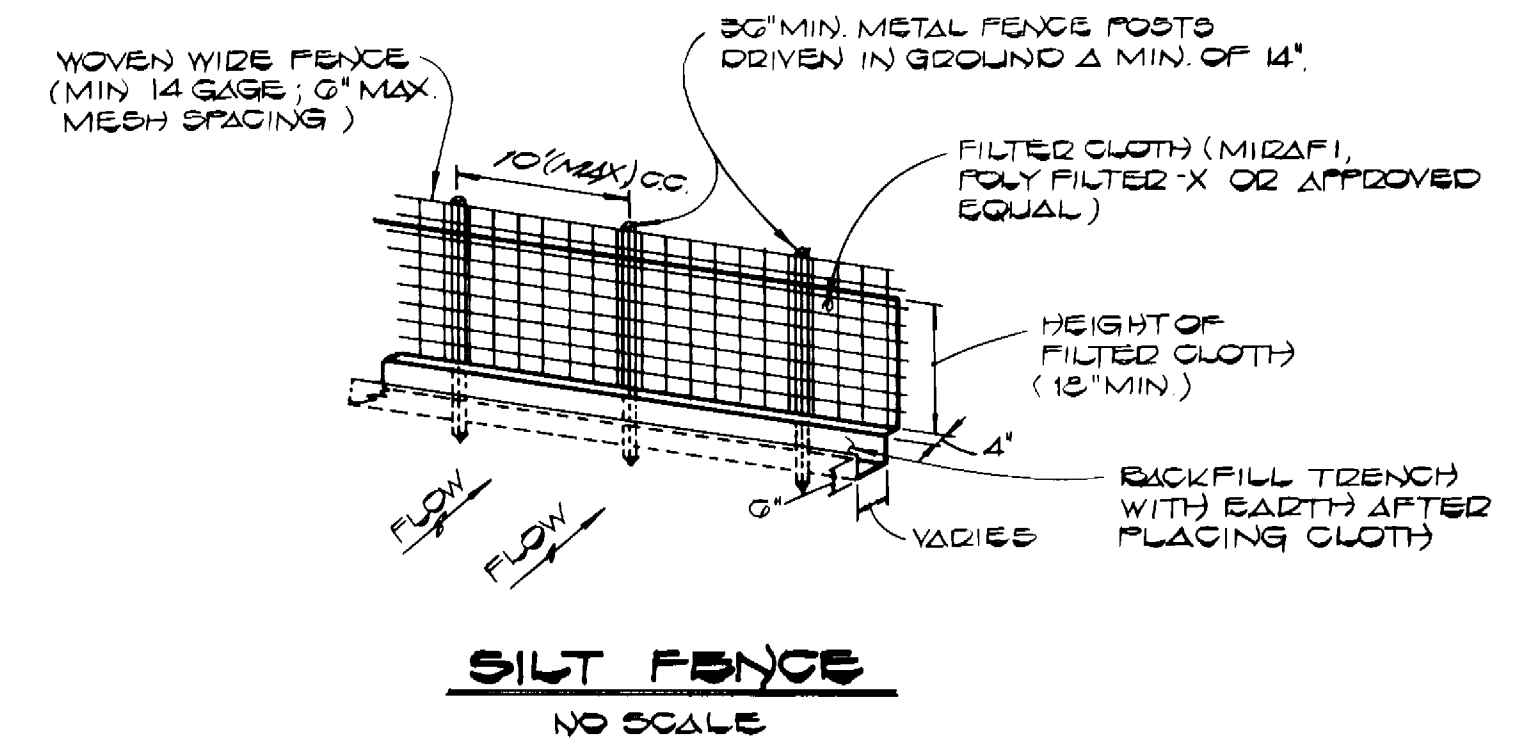
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved: *Howard S. D.D.*
Howard S. D.D.

Reviewed for: *Howard*
and must be: *Mark S. Sully*
Signature: *6-25-84*
U.S. Soil Conservation District



SEDIMENT AND EROSION CONTROL MEASURES FOR AREAS DISTURBED IN FUTURE HUNTERS WAY WILL BE CONTROLLED AS SHOWN ON GP#84-23 INTITLED "SEDIMENT CONTROL PLAN - PHELPS MANOR SECTION TWO". AREAS DISTURBED OUTSIDE FUTURE HUNTERS WAY SHALL BE CONTROLLED AS SHOWN HEREON IMMEDIATELY FOLLOWING BACKFILL OF PIPE TRENCHES. ALL DISTURBED AREAS ARE TO BE STABILIZED WITH SEED AND MULCH IN ACCORDANCE WITH THE SPECIAL PROVISIONS.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
Richard M. Bunker
DATE: 6-23-84

CHIEF, BUREAU OF UTILITIES

CHIEF, LAND DEVELOPMENT DIVISION

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

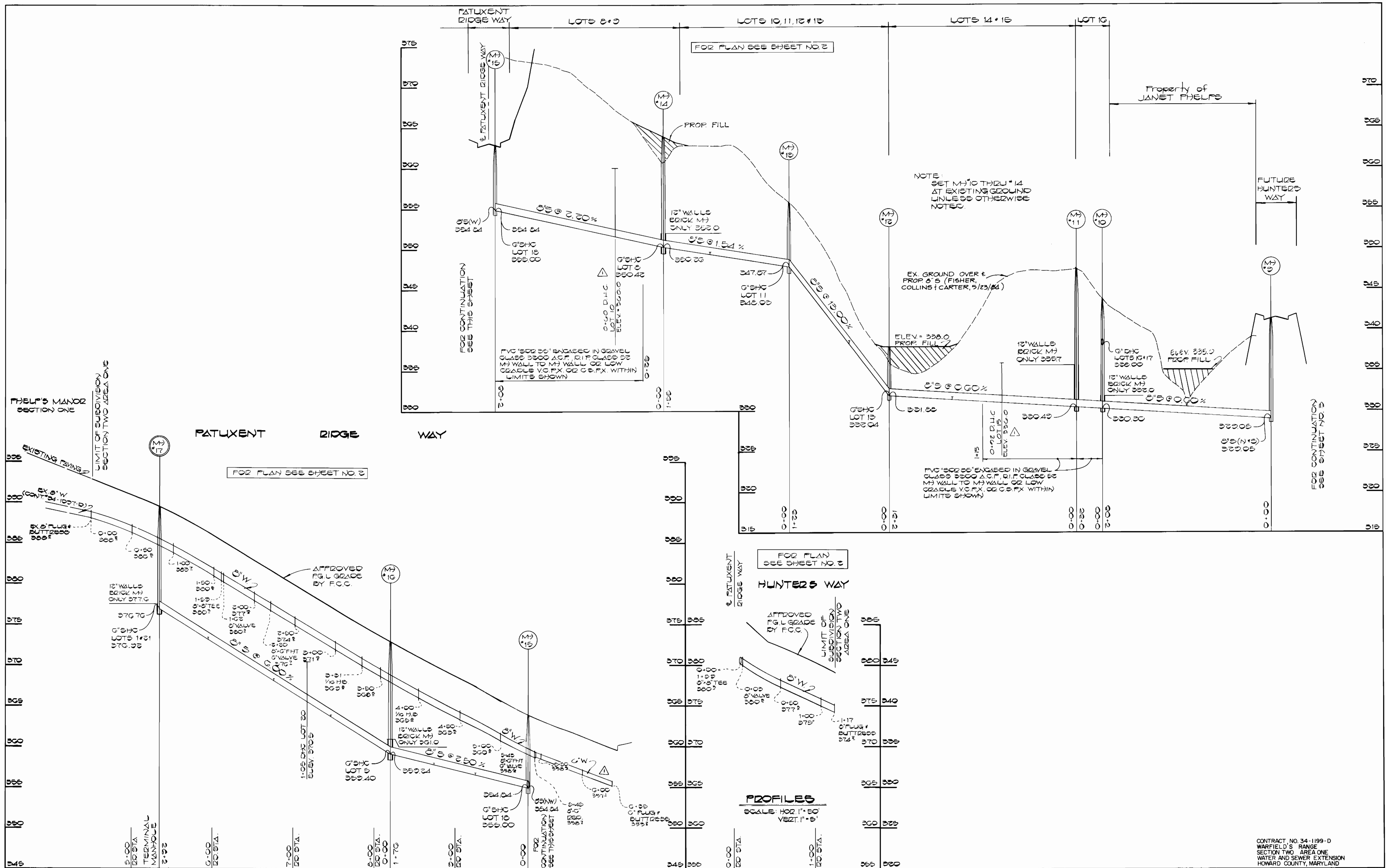
TERRELL A. FISHER
DATE: 12/12/83

DES: D.B.S.	
DRN: D.B.S.	
CHK: T.A.F.	
DEV: <i>ADD S.H.C.'S & D.H.C.'S FOR FUTURE LOTS BETWEEN M# 5 & M# 7.</i>	12/1/84
BY: NO.	REVISION
DATE: 12/12/83	DATE: 600' SCALE MAP NO. 42

PLAN, PROFILE AND DETAILS
SEWER MAIN

WARFIELD'S RANGE
SECTION TWO AREA ONE
CONTRACT NO. 34-1199-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 5



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
 CHIEF, BUREAU OF UTILITIES DATE

CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS, AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043

TERRELL A. FISHER DATE

DES: DBS
 DRN: D.B.S.
 CHK: T.A.F.
 DATE: 12/12/83

REVISION
 DATE

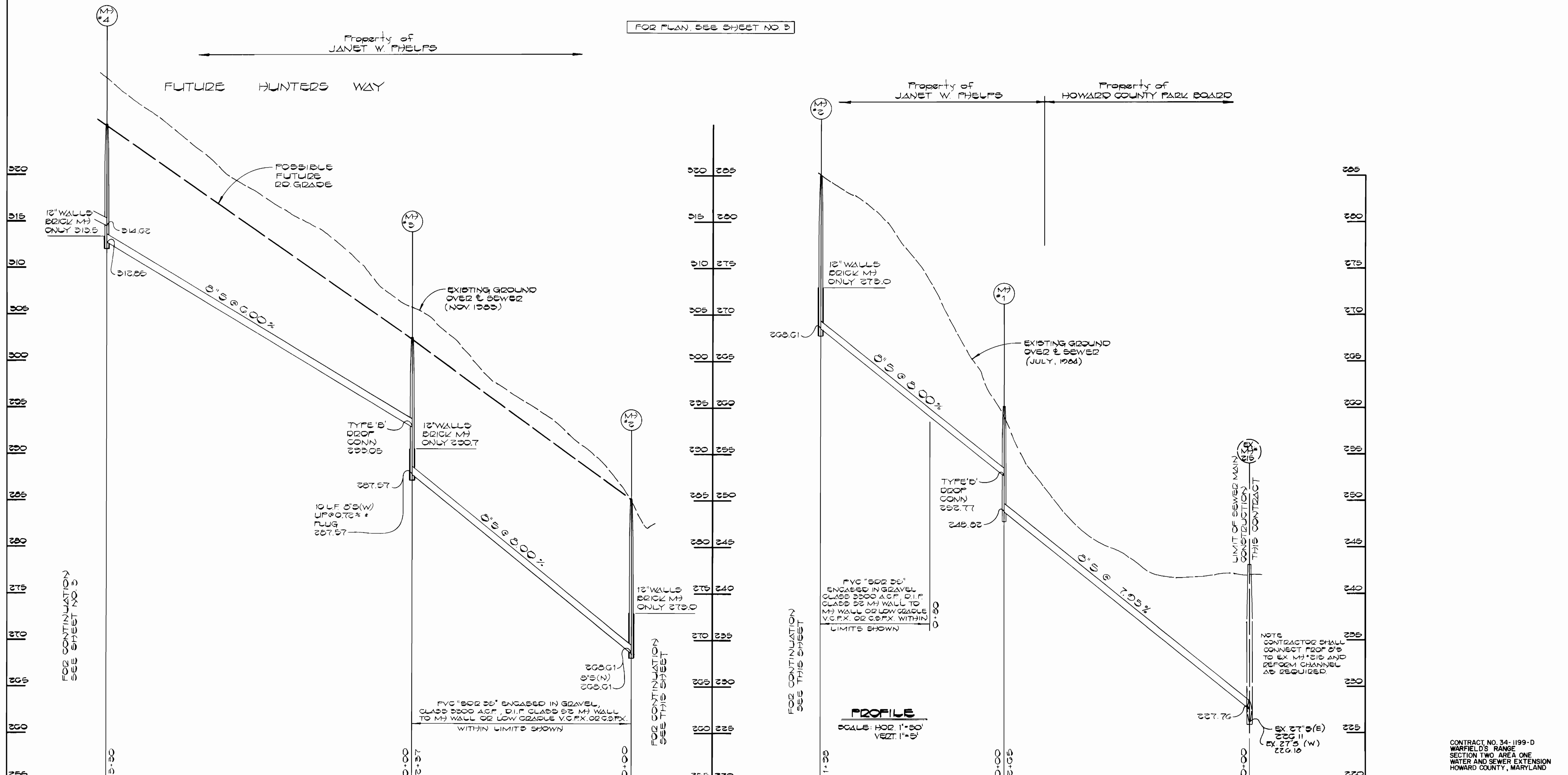
PROFILE
 WATER AND SEWER MAINS

600' SCALE MAP NO. 42 BLOCK NO.

WARFIELD'S RANGE
 SECTION TWO AREA ONE
 CONTRACT NO. 34-1199-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 4 OF 5

AS BUILT February 14, 1985 MAY 9, 1984



FOR PLAN, SEE SHEET NO. 3

FOR CONTINUATION SEE THIS SHEET

FOR CONTINUATION SEE THIS SHEET

FOR CONTINUATION SEE SHEET NO. 1

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

LIMIT OF SEWER MAIN CONSTRUCTION THIS CONTRACT

NOTE
CONTRACTOR SHALL
CONNECT PROP 0.5
TO EX M#215 AND
REFORM CHANNEL
AS REQUIRED.

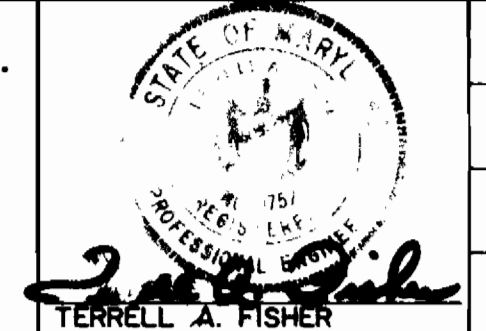
CONTRACT NO. 34-1199-D
WARFIELD'S RANGE
SECTION TWO AREA ONE
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert B. Beisinger
DIRECTOR OF PUBLIC WORKS
DATE: 6-28-84
CHIEF, BUREAU OF UTILITIES

Chief, Bureau of Engineering
DATE: 4/21/84
Chief, Land Development Division
DATE:

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043



DES: DBS					
DRN: DBS					
CHK: TAF					
DATE: 12/12/83	BY:	NO.:	REVISION:	DATE:	

PROFILE
SEWER MAINS

600' SCALE MAP NO. 42 BLOCK NO.

WARFIELD'S RANGE
SECTION TWO AREA ONE
CONTRACT NO. 34-1199-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 5