
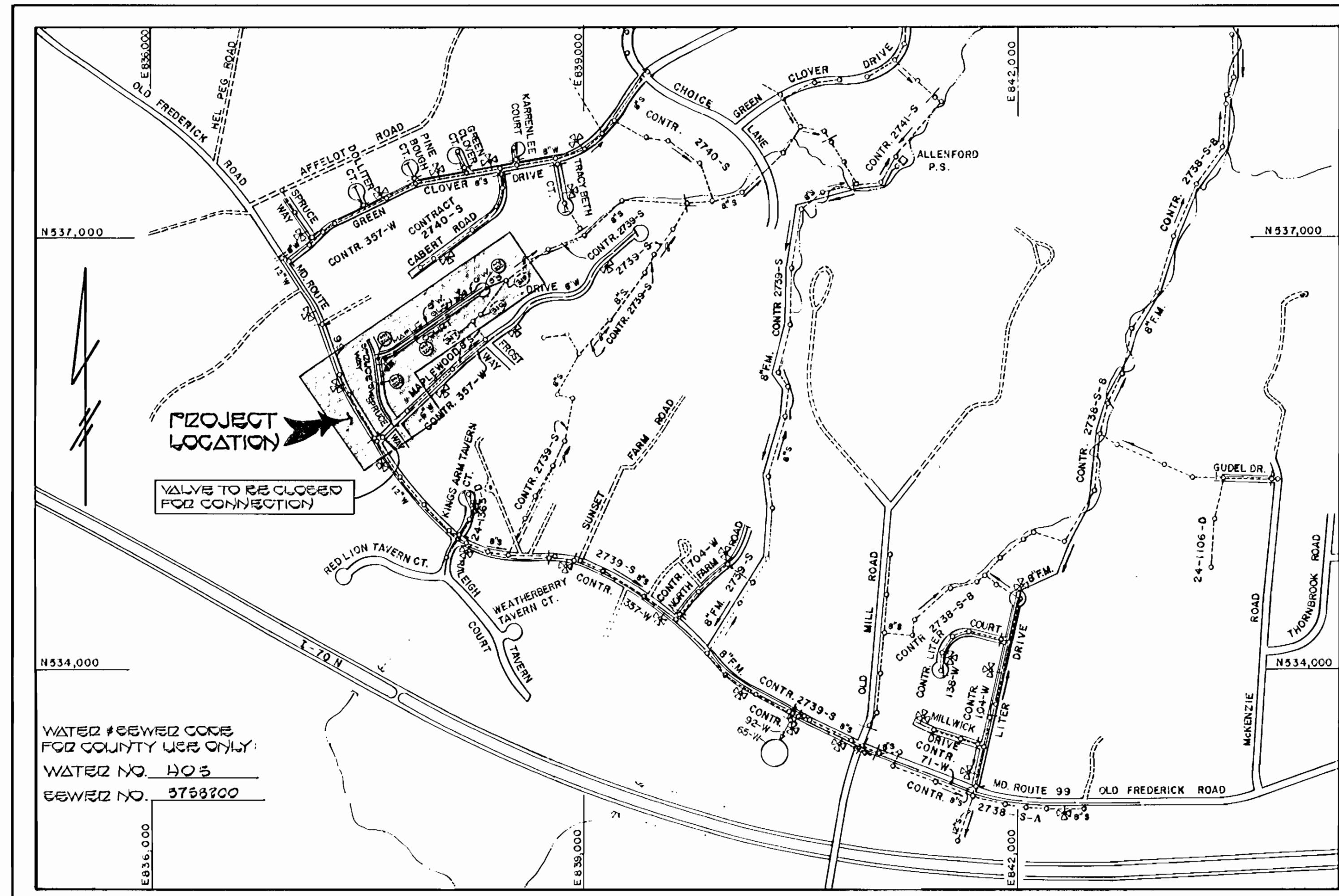


**GENERAL NOTES**

- 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".
- 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 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 & ELECTRIC CO. - CONTRACTOR SERVICES: 850-4620  
 BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL: 859-9004  
 BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING: 298-9001  
 MISS UTILITY: 1-559-0100  
 COLONIAL PIPELINE COMPANY: 795-1390  
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2366  
 C & P TELEPHONE COMPANY : 1-800-257-7777
- 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. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- 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 AND 1008 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- 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 DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL 65.52 WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 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 LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL 65.51.



TYPE OF BUILDING	RESIDENTIAL
NUMBER OF LOTS <u>OR</u> (61 BUILDINGS)	
NO. OF WATER HOUSE CONNECTIONS	51
NO. OF SEWER HOUSE CONNECTIONS	50
DRAINAGE AREA	LITTLE PATUXENT

PATAPSCO → (Route 102 pumping STA)

SCALE: 1" = 600'

# CONTRACT NO. 24-1691-D

# MAPLEWOOD

## SECTION 4 (LOTS 20-41)

## WATER AND SEWER MAIN EXTENSIONS

# HOWARD COUNTY, MARYLAND

## DEPARTMENT OF PUBLIC WORKS

QUANTITIES				SUPPLIER MANUFACTURER
ITEM	EST'D	AS-BUILT		
1' SEWER	1047 L.F.	1022 L.F.	3" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
6" SEWER	530 L.F.	551 L.F.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
MANHOLES	0 EA.	6 EA.	ATLANTIC STATES	
6" WATER	1300 L.F.	1300 L.F.	ATLANTIC STATES	
6" WATER	274 L.F.	275 L.F.	ATLANTIC STATES	
FIRE HYD.	0 EA.	2 EA.	BEACON FIRE HYDRANT	BEACON FIRE HYDRANT
3/4" WTK	255 L.F.	222 L.F.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
1" WTK	130 L.F.	121 L.F.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
1/2" RAIN	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
1/2" WATER	25 L.F.	46 L.F.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
VALVES	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
VALVES (EXH.)	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
6" G. RECUPER	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
6" G. HB	1 EA.	0 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
6" Y-SEWER	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
6" G. RECUPER	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
6" G. HB	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.
VALVE-TIE-INS	1 EA.	1 EA.	4" POLYETHYLENE GLASS REINFORCED	WATSON PIPE CO.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F 80-07.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*[Signature]* 10/27/87  
 U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED:

*[Signature]* 10/27/87  
 HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN REFERENCE NUMBER F00-07

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]* 11/4/87  
 DIRECTOR OF PUBLIC WORKS DATE

*[Signature]* 10-29-87  
 CHIEF, BUREAU OF UTILITIES DATE

*[Signature]* 11-3-87  
 CHIEF, BUREAU OF ENGINEERING DATE

*[Signature]* 11-29  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC. #9787

CONSULTING ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVENUE  
 ELLICOTT CITY, MARYLAND 21043

*[Signature]*  
 TERRELL A. FISHER DATE

DES: D.B.S.					
DRN: D.B.S.					
CHK: T.A.F.					
DATE: 2/1/87	BY: NO	REVISION	DATE	600' SCALE MAP NO	BLOCK NO

TITLE SHEET

CONTRACT NO. 24-1691-D  
 MAPLEWOOD  
 SECTION 4 (LOTS 20-41)  
 WATER AND SEWER MAIN EXTENSION  
 HOWARD COUNTY, MARYLAND

*S BUILT SEWER & WATER*

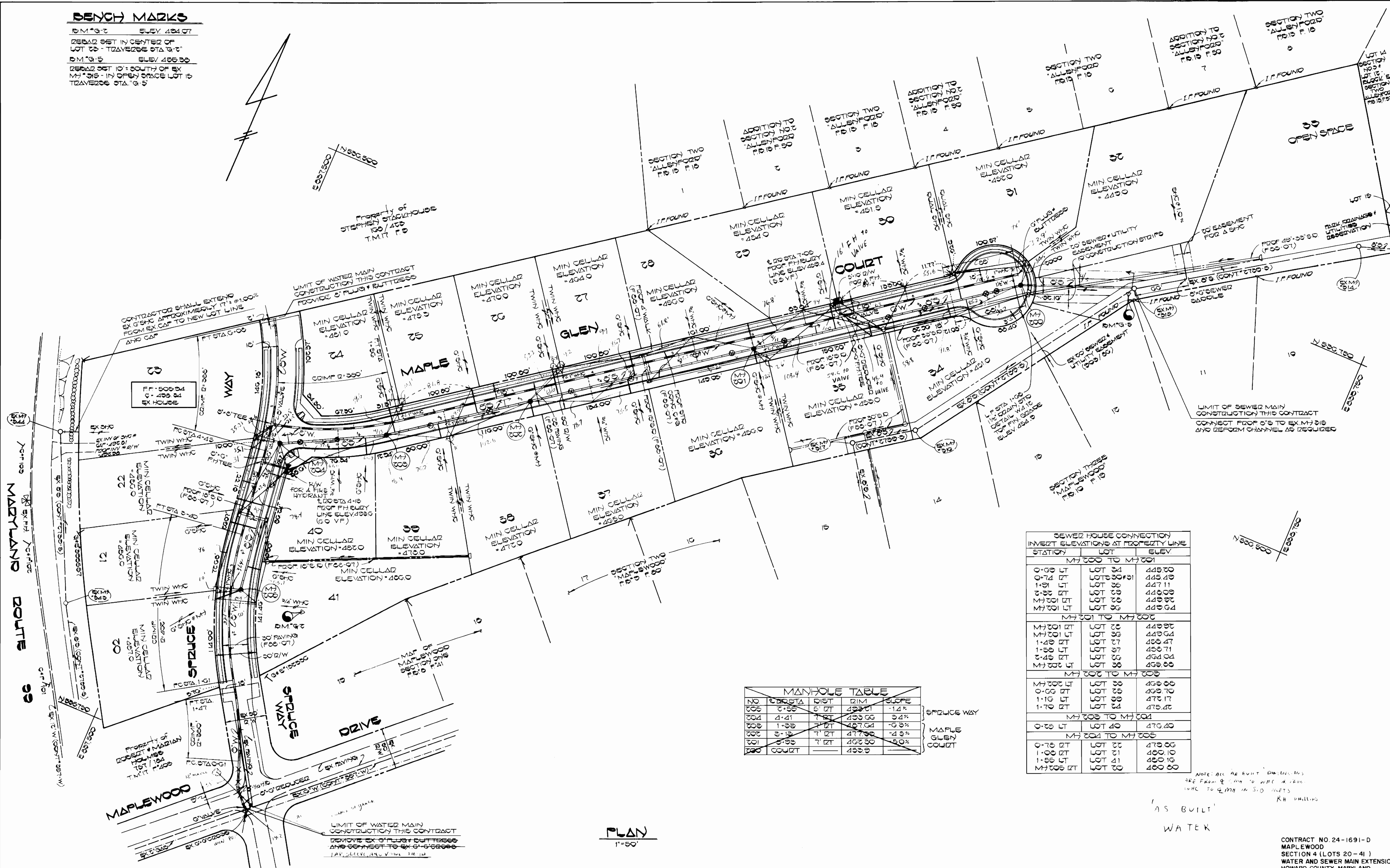
**MAPLEWOOD**  
 SECTION 4 (LOTS 20-41)  
 CONTRACT NO. 24-1691-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 3



**BENCH MARKS**

B.M. # 3-7 ELEV. 434.07  
 BEAR SET IN CENTER OF LOT 22 - TRAVEISE STA. 9+0  
 B.M. # 3-5 ELEV. 436.30  
 BEAR SET 10' SOUTH OF EX. M.H. # 216 - IN OPEN SPACE LOT 15 TRAVEISE STA. 9+5



**SEWER HOUSE CONNECTION  
 INVERT ELEVATIONS AT PROPERTY LINE**

STATION	LOT	ELEV.
M.H. 200 TO M.H. 201		
0+00 LT	LOT 34	445.00
0+74 RT	LOTS 30 & 31	445.49
1+31 LT	LOT 36	447.11
2+32 RT	LOT 39	445.09
M.H. 201 RT	LOT 38	445.92
M.H. 201 LT	LOT 35	445.04
M.H. 201 TO M.H. 202		
M.H. 201 RT	LOT 35	445.92
M.H. 201 LT	LOT 36	445.04
1+49 RT	LOT 37	450.47
1+58 LT	LOT 37	450.71
2+45 RT	LOT 38	454.04
M.H. 202 LT	LOT 38	455.88
M.H. 202 TO M.H. 203		
M.H. 202 LT	LOT 38	455.88
0+00 RT	LOT 35	453.70
1+10 LT	LOT 39	472.17
1+70 RT	LOT 34	475.22
M.H. 203 TO M.H. 204		
0+25 LT	LOT 40	470.40
M.H. 204 TO M.H. 205		
0+75 RT	LOT 32	473.85
1+00 RT	LOT 31	480.10
1+55 RT	LOT 41	480.16
M.H. 205 RT	LOT 30	480.80

**MANHOLE TABLE**

NO.	ELEV. STA.	DIST.	DIM.	SLOPE
205	2+35	6' RT	493.01	-1.4%
204	4+41	7' RT	493.06	0.4%
203	1+35	7' RT	497.04	-0.9%
202	3+15	7' RT	477.50	-4.5%
201	5+25	7' RT	462.50	5.0%
200	COURT		453.9	

NOTE: ALL AS BUILT DIMENSIONS ARE FROM 0+00 TO M.H. # 200. M.H. TO 2+45 IN 3-D NETS. R.H. PHILLIPS

AS BUILT WATER

CONTRACT NO. 24-1691-D  
 MAPLEWOOD SECTION 4 (LOTS 20-41)  
 WATER AND SEWER MAIN EXTENSION  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works: *James J. Shaw* 11/1/82  
 Chief, Bureau of Engineering: *Robert B. Berman* 10-29-82  
 Chief, Bureau of Utilities: *Robert B. Berman* 10-29-82  
 Chief, Land Development Division: *Robert B. Berman* 11-3-82

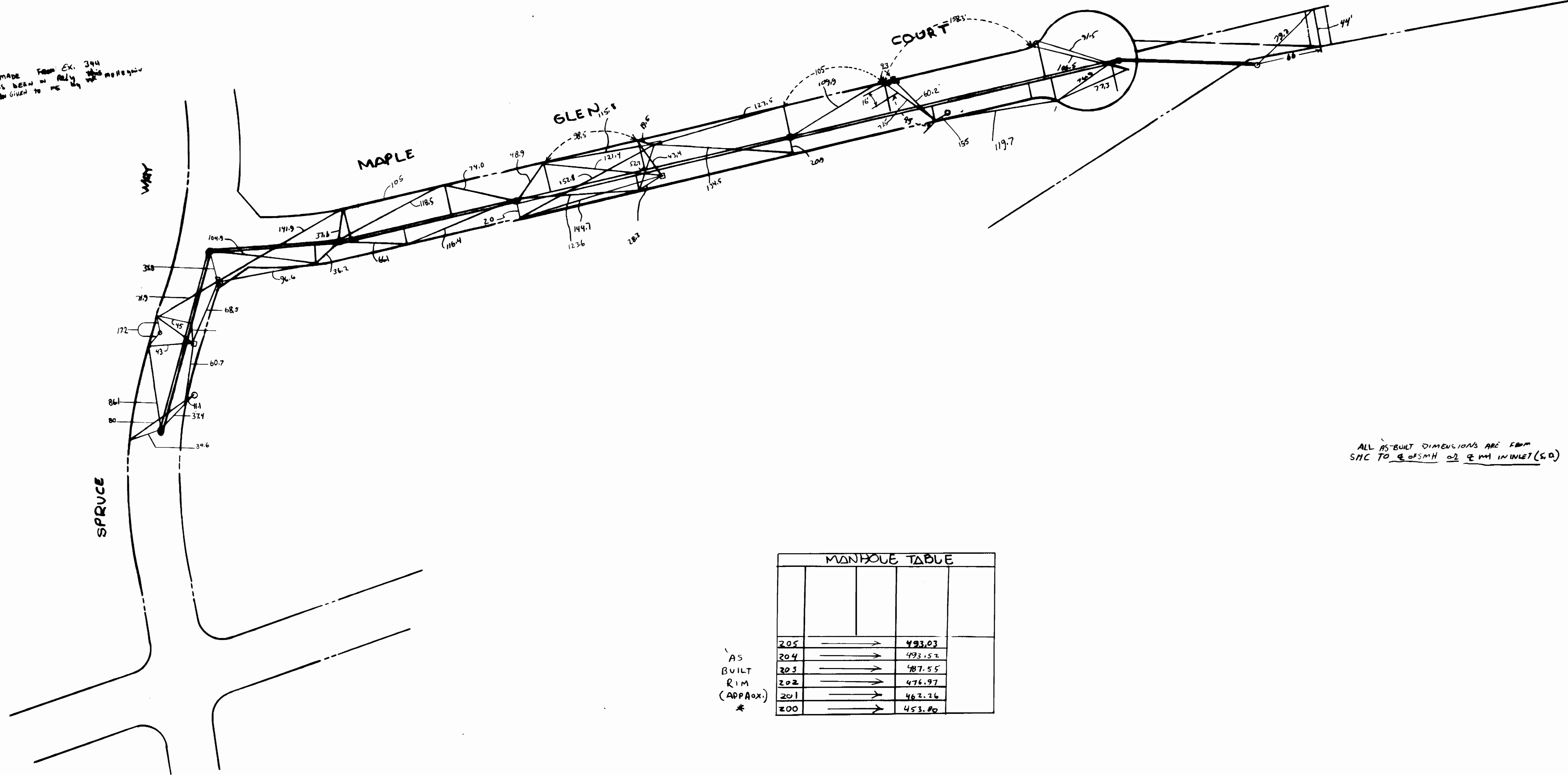
FISHER, COLLINS AND CARTER, INC. # 9757  
 CONSULTING ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVENUE  
 ELLICOTT CITY, MARYLAND 21043  
 State of Maryland Seal: *TERRELL A. FISHER* DATE: 7/16/82

DES: D.B.S.  
 DRN: D.B.S.  
 CHK: T.A.F.  
 DATE: 7/16/82  
 BY: NO. REVISION DATE

PLAN  
 WATER & SEWER MAINS  
 600' SCALE MAP NO. 17 BLOCK NO. 7

MAPLEWOOD SECTION 4 (LOTS 20-41)  
 CONTRACT NO. 24-1691-D  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 3 OF 3

(10230 address)  
 NOTE: I CHECKED TO SEE  
 IF CONNECTION HAD BEEN MADE FROM EX. 344  
 TO R. THE CONNECTION HAS BEEN IN PLACE  
 JOB STREET. THIS INFORMATION GIVEN TO ME BY  
 5-25-64



ALL AS-BUILT DIMENSIONS ARE FROM  
 SHC TO CENTERLINE OF 12" IN DIAMETER (S.D.)

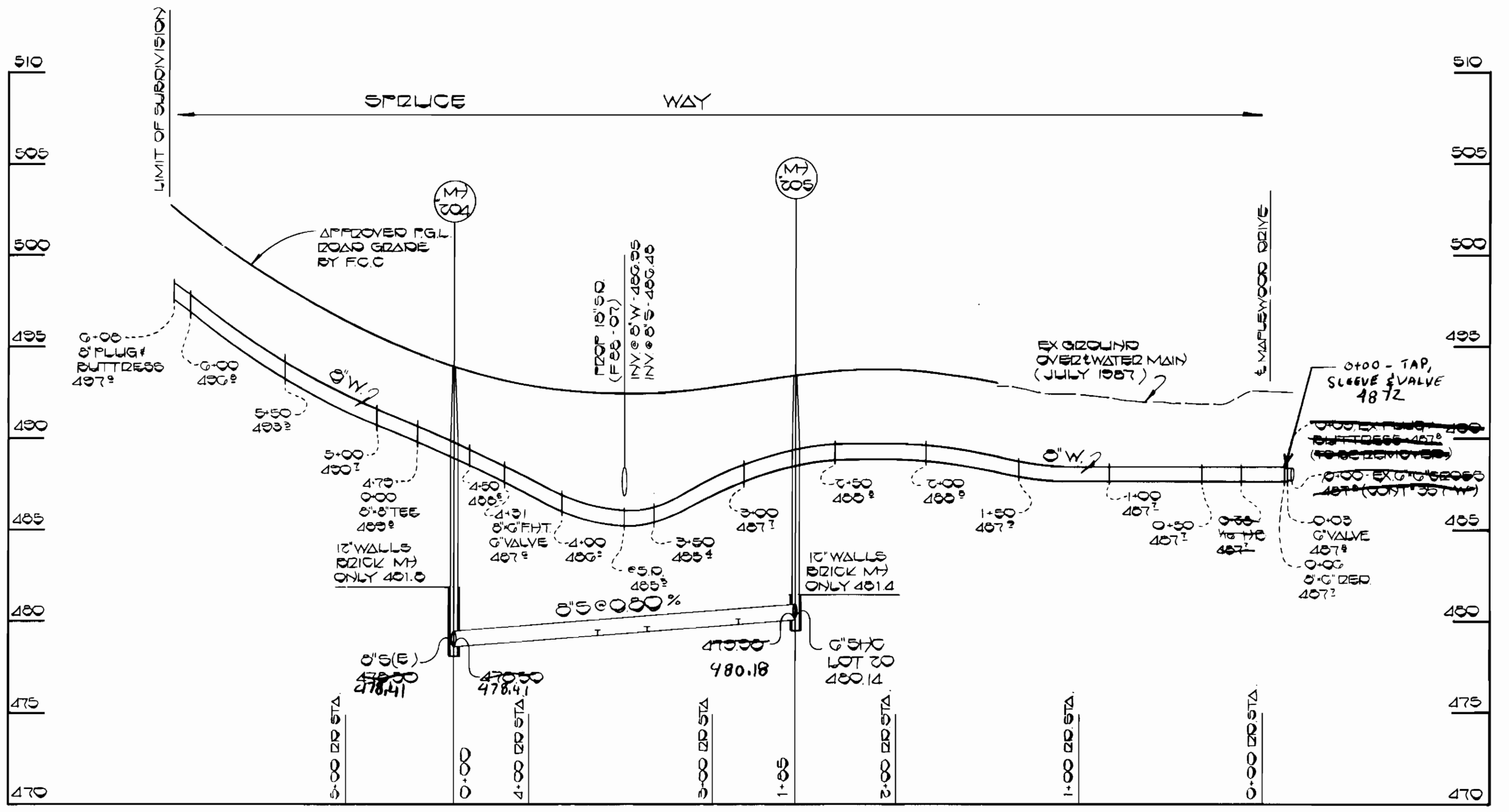
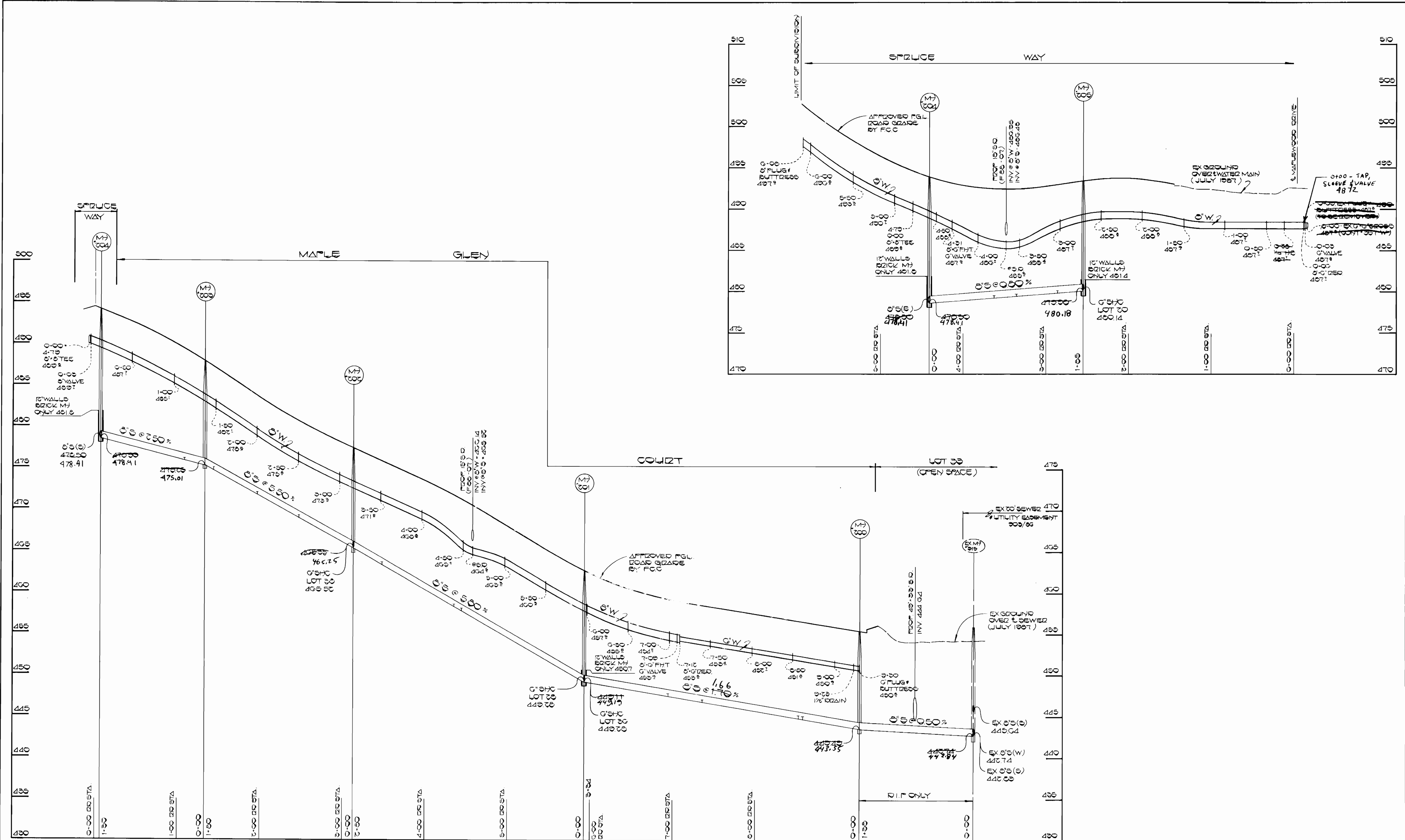
MANHOLE TABLE	
MANHOLE NO.	ELEVATION
205	493.03
204	493.52
203	487.55
202	476.97
201	462.26
200	453.00

AS  
 BUILT  
 RIM  
 (APPROX.)  
 \*

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS _____ DATE _____ CHIEF, BUREAU OF ENGINEERING _____ DATE _____	Howard County Bureau of Engineering Surveying Division Public Works Administration 17000 Route 204 Laurel, MD 20707	DES:						<b>PLAN</b> <b>WATER &amp; SEWER MAINS</b>	<b>MAPLEWOOD</b> SECTION 4 (LOTS 20-41) CONTRACT NO. 24-1691-D SECOND ELECTION DISTRICT HOWARD COUNTY, MD	SCALE AS SHOWN
		DRN: SR								
		CHK:								
		DATE: 6-17-64	BY:	NO.:	REVISION:	DATE:	600' SCALE MAP NO. 12	BLOCK NO. 2		

6-17-64 AS-BUILT





PROFILES  
SCALE FOR 1"=50'  
VERT 1"=5'

CONTRACT NO. 24-1691-D  
MAPLEWOOD  
SECTION 4 (LOTS 20-41)  
WATER AND SEWER MAIN EXTENSION  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Director of Public Works DATE 11/1/87  
Chief, Bureau of Engineering DATE 11-2-87  
Chief, Bureau of Utilities DATE 10-29-87  
Chief, Land Development Division DATE 11-2-87

FISHER, COLLINS AND CARTER, INC. #9757  
CONSULTING ENGINEERS AND LAND SURVEYORS  
8388 COURT AVENUE  
ELLICOTT CITY, MARYLAND 21043

TERRELL A. FISHER DATE 7/14/87

DES. REC. BY	
DRN. D.B.S.	
CHK. P.W.K.	
DATE	7/14/87
BY	NO.
REVISION	
DATE	

PROFILES  
WATER & SEWER MAINS

600 SCALE MAP NO. 17 BLOCK NO. 7

MAPLEWOOD  
SECTION 4 (LOTS 20-41)  
CONTRACT NO. 24-1691-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 3 OF 3

6-17-88 AS SHOWN