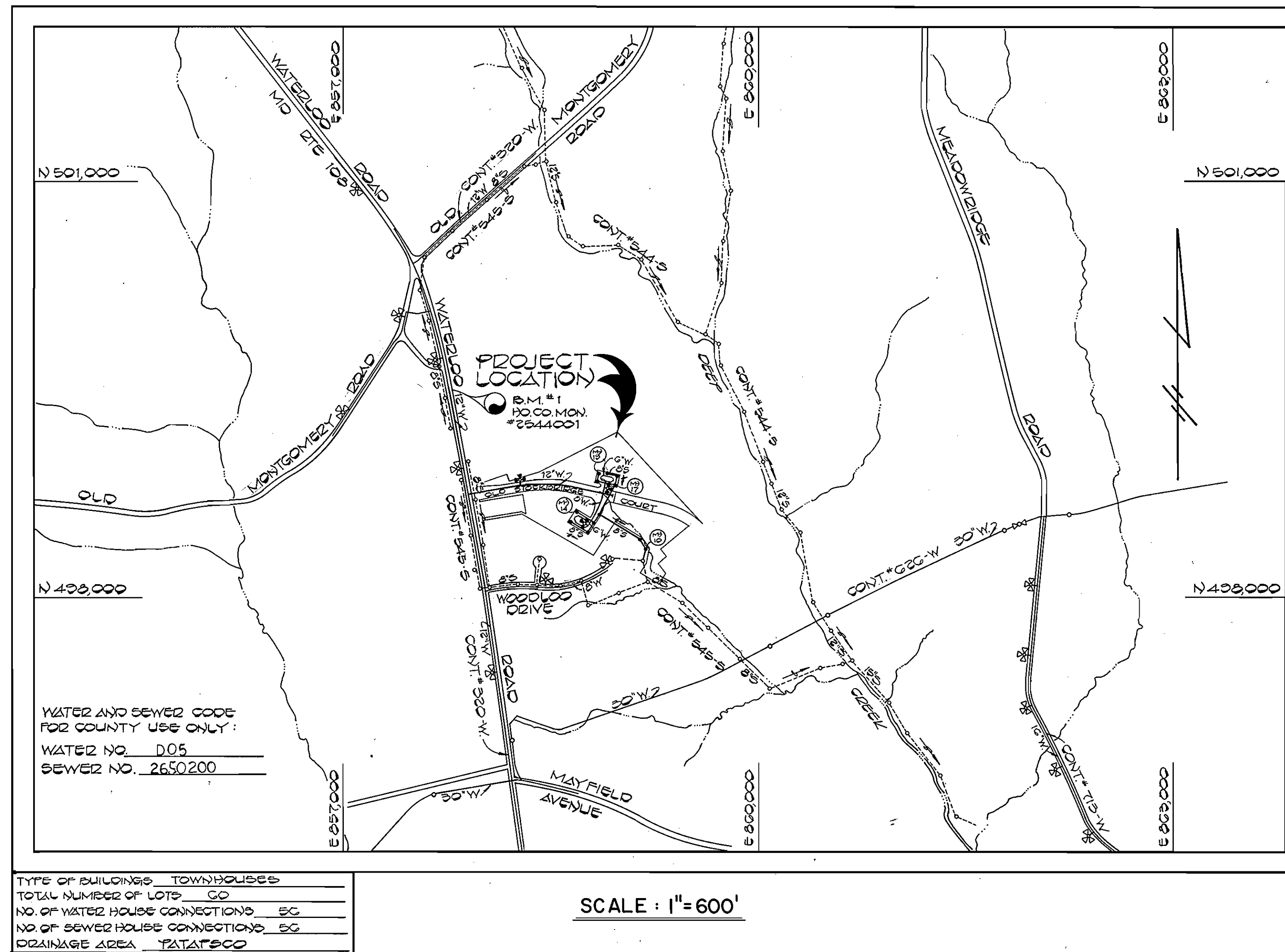


GENERAL NOTES

- 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. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIAL AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION: 531-5533
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE: 685-0123
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE: 685-0123
 - ENGINEERING "DAMAGE CONTROL": 234-5621
 - "MISS UTILITY": 1-559-0100
 - CHESAPEAKE & POTOMAC TELEPHONE COMPANY: 725-9976
 - BUREAU OF UTILITIES - HOWARD COUNTY: 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES 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 BID FOR CONSTRUCTION OF THE MAIN.
- PLACE 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 H.D.P.E., C.S.P.X., R.C.S.P., 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 C.I.P. OR 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.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE 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 TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 57.01 AND 57.05 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 G5.51
- MANHOLES DESIGNATED W/T IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS STANDARD DETAIL G5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE.
- ALL WATER HOUSE CONNECTIONS SHALL BE DUAL CONNECTIONS IN ACCORDANCE WITH DETAIL W3.23, UNLESS OTHERWISE NOTED.
- ALL SEWER HOUSE CONNECTIONS SHALL BE TWIN SEWER HOUSE CONNECTIONS, UNLESS OTHERWISE NOTED.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.

QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
12" WATER	1,047 L.F.	1047	ATLANTIC CAST STATES - IRON D.I.P.
8" WATER	312 L.F.	318	ATLANTIC CAST STATES - IRON D.I.P.
6" WATER	307 L.F.	1032	ATLANTIC CAST STATES - IRON D.I.P.
3/4" W.H.C.	1,255 L.F.	1323	COPPER TUBING TX04K-REVERE COPPER
1" W.H.C.	370 L.F.	391	REVERE COPPER
FIRE HYDRANTS	3 EA.	3	MUELLER
12" 12" TAPPING SLEEVE & 12" VALVE	1 EA.	1	MUELLER
8" SEWER	1,843 L.F.		
6" SEWER	320 L.F.		
MANHOLES	12 EA.		
12" VALVES	2 EA.	2	MUELLER
8" VALVES	2 EA.	2	MUELLER



CONTRACT NO. 14 - 1108 - D SECTION TWO AREA ONE WOODLAND PARK WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 16 OF THESE SPECIFICATIONS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 U.S. SOIL CONSERVATION SERVICE DATE 5/23/83

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

APPROVED: [Signature] DATE 5-23-83
 HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 14-1108-D
 WOODLAND PARK
 SECTION TWO AREA ONE
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] 5-31-83 DIRECTOR OF PUBLIC WORKS DATE [Signature] 5-27-83 CHIEF, BUREAU OF UTILITIES DATE	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 [Seal] TERRELL A. FISHER DATE	DES. D.B.S. DRN. D.B.S. CHK. T.A.F. DATE: BY NO. REVISION	TITLE SHEET WOODLAND PARK SECTION TWO AREA ONE CONTRACT NO. 14-1108-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 4
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BENCH MARKS

B.M.#1 HO. CO. MON. # 2544001 ELEV. 401.10
 CONCRETE MONUMENT 0.2' BELOW SURFACE, 20.85'
 SOUTH OF BG#E POLE # 254632 ON EAST SIDE
 OF MD RTE 106 (SEE VICINITY MAP-D2WG, NO. 1 OF 4)

B.M.#2 F.C.G. TRAV. STA. "C5-2" ELEV. 301.50
 3/4" IRON PIPE SET - 60" NORTH OF PROPOSED
 & STA. 2+75

B.M.#3 F.C.G. TRAV. STA. "C5-41" ELEV. 370.00
 1" IRON PIPE SET - 65" SOUTHEAST OF LOT 40
 (VICINITY OF LOTS 11 & 2 "WOODLAND PARK"
 SECTION ONE AREA ONE)

FINISHED MANHOLE RIM ELEVATIONS	
MANHOLE NO.	ELEVATION
#10	1'-0" ABOVE EX.GRD
#11	1'-0" ABOVE EX.GRD
#12	355.82
#13	357.28
#14	362.00
#15	361.06
#16	364.52
#17	355.51
#18	355.10
#19	353.74
#20	360.81
#21	360.40

Property of
 UNIVERSITY OF MARYLAND
 450 / 206
 TAX MAP 07
 PARCEL # 552

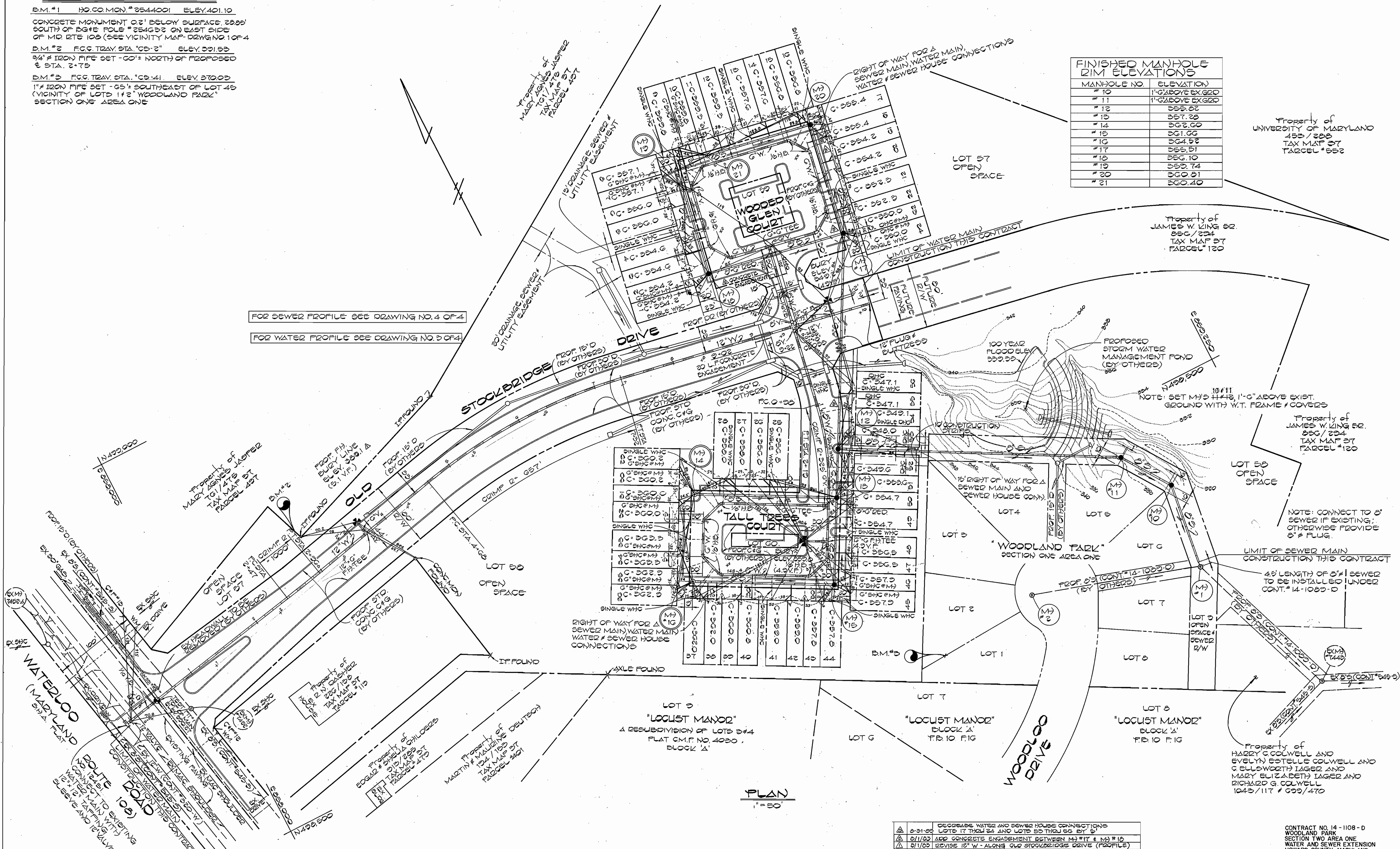
Property of
 JAMES W. KING SR.
 250 / 204
 TAX MAP 07
 PARCEL # 120

Property of
 JAMES W. KING SR.
 250 / 204
 TAX MAP 07
 PARCEL # 120

NOTE: CONNECT TO 8" SEWER IF EXISTING; OTHERWISE PROVIDE 8" & PLUG.

LIMIT OF SEWER MAIN CONSTRUCTION THIS CONTRACT
 4.5' LENGTH OF 8" SEWER TO BE INSTALLED UNDER CONT. # 14-1089-D

Property of
 HARRY C. COLWELL AND
 EVELYN ESTELLE COLWELL AND
 C. ELLSWORTH JAGER AND
 MARY ELIZABETH JAGER AND
 RICHARD G. COLWELL
 1043 / 117 # 999 / 470



FOR SEWER PROFILE SEE DRAWING NO. 4 OF 4
 FOR WATER PROFILE SEE DRAWING NO. 3 OF 4

PLAN
 1" = 50'

NO.	DATE	REVISION
1	8-31-83	DECREASE WATER AND SEWER HOUSE CONNECTIONS LOTS 17 THRU 24 AND LOTS 25 THRU 26 BY 5'
2	9/1/83	ADD CONCRETE ENGAGEMENT BETWEEN M#17 & M#18
3	9/1/83	REVISE 18" W - ALONG OLD STOCKBRIDGE DRIVE (PROFILE)

CONTRACT NO. 14-1108-D
 WOODLAND PARK
 SECTION TWO AREA ONE
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director: *John F. Neuman* 5-31-83
 Chief, Bureau of Public Works

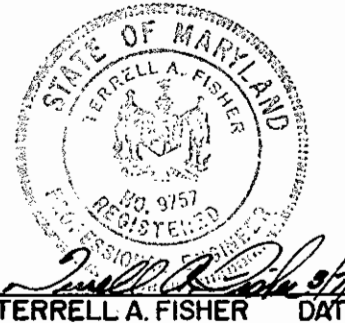
Chief, Bureau of Utilities: *Robert M. Benjamin* 5-27-83

Chief, Land Development Division: *William P. ...*

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS

8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043

Terrell A. Fisher



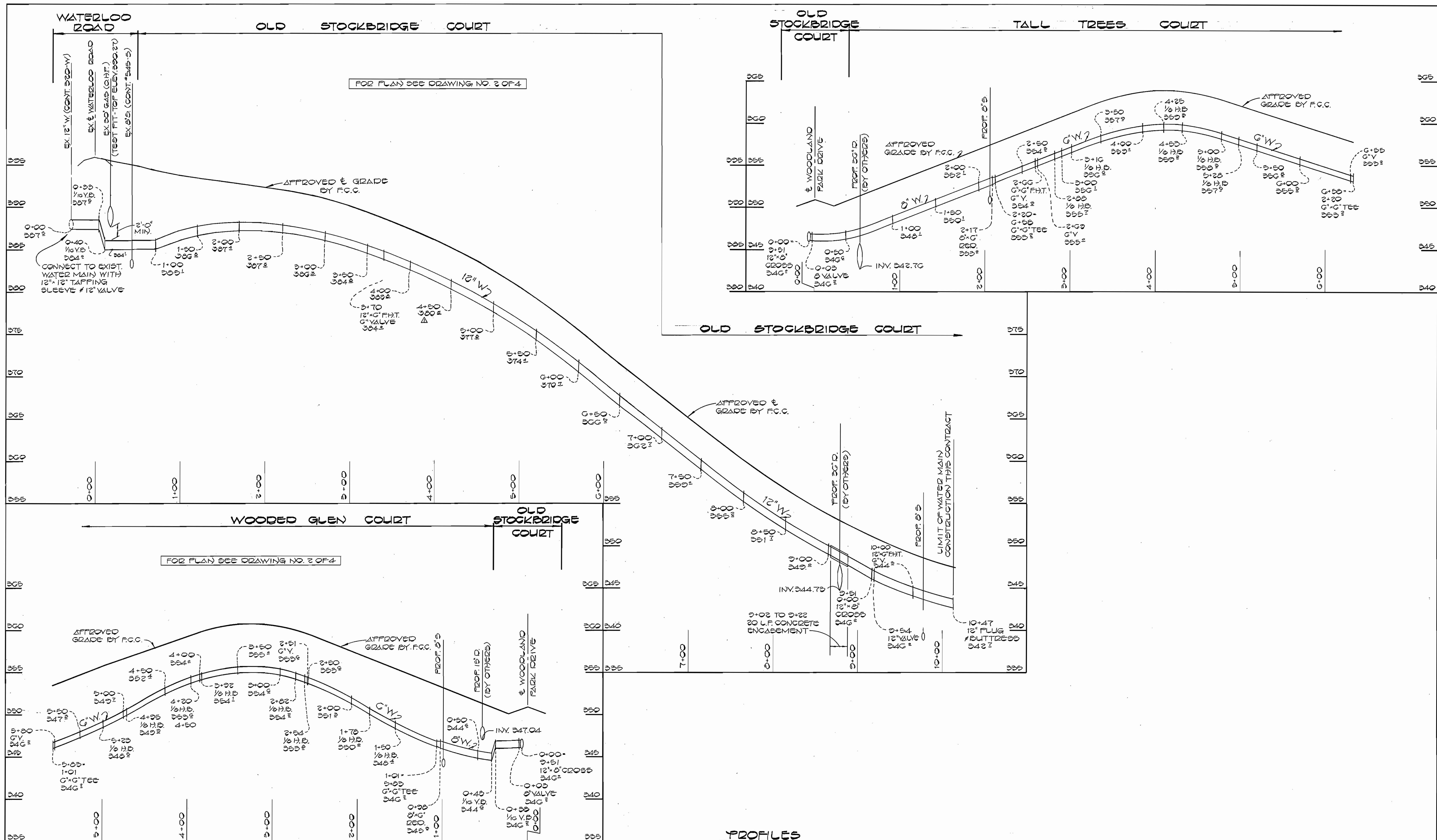
DES.	DRN.	CHK.	BY	NO.	REVISION	DATE
D.B.S.	D.B.S.	T.A.F.				

PLAN
WATER AND SEWER MAINS

WOODLAND PARK
 SECTION TWO AREA ONE

CONTRACT NO. 14-1108-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
 SHEET 2 OF 4



CONTRACT NO. 14-1108-D
WOODLAND PARK
SECTION TWO AREA ONE
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

NO.	DATE	REVISION
1	5/1/83	REVISE 12" W.P. PROFILE - STA 1+00 TO 3+50 (OLD STOCKBRIDGE CR.)
2		REVISION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John F. Neuman 5-31-83
DIRECTOR OF PUBLIC WORKS DATE

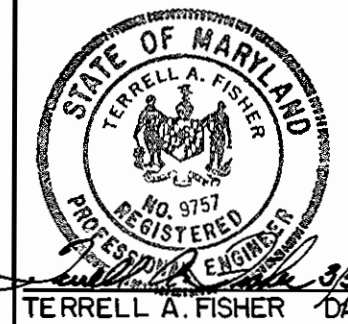
Robert M. Berger 5-27-83
CHIEF, BUREAU OF UTILITIES DATE

William S. Roy 5/31/83
CHIEF, BUREAU OF ENGINEERING DATE

William H. ... 5/31/83
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

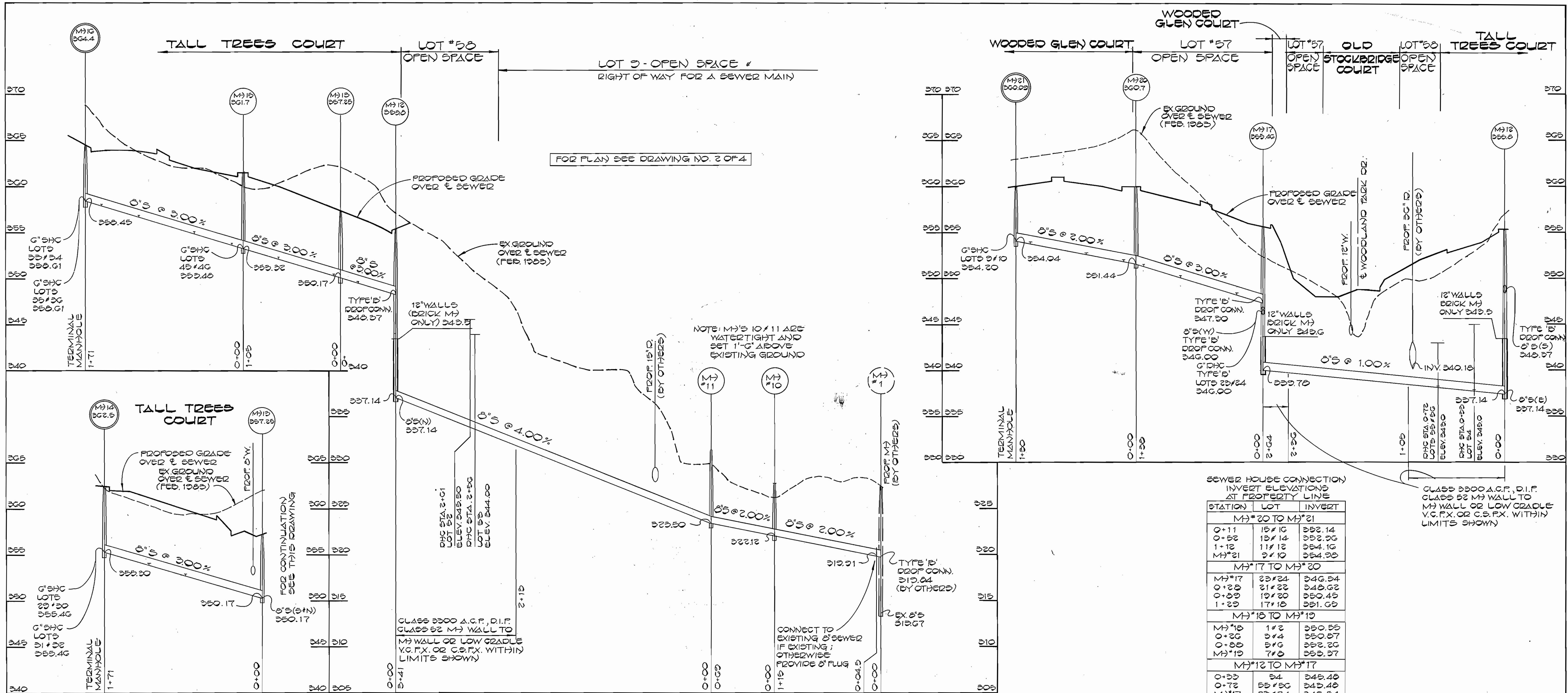


DES. D.B.S.			
DRN. D.B.S.			
CHK. T.A.F.			
DATE:			
BY	NO.	REVISION	DATE

PROFILES
WATER MAINS

WOODLAND PARK
SECTION TWO AREA ONE
CONTRACT NO. 14-1108-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

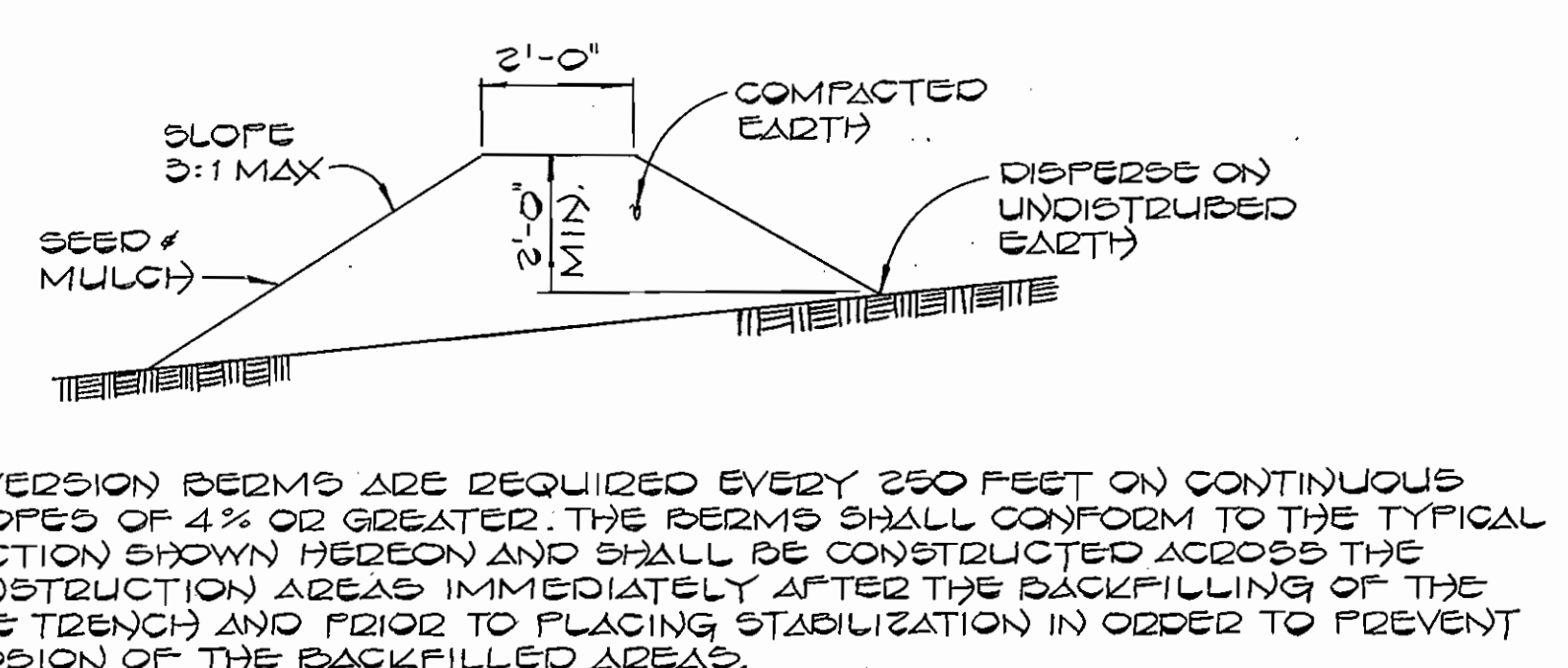
SCALE AS SHOWN
SHEET 3 OF 4



SEWER HOUSE CONNECTION
INVERT ELEVATIONS
AT PROPERTY LINE

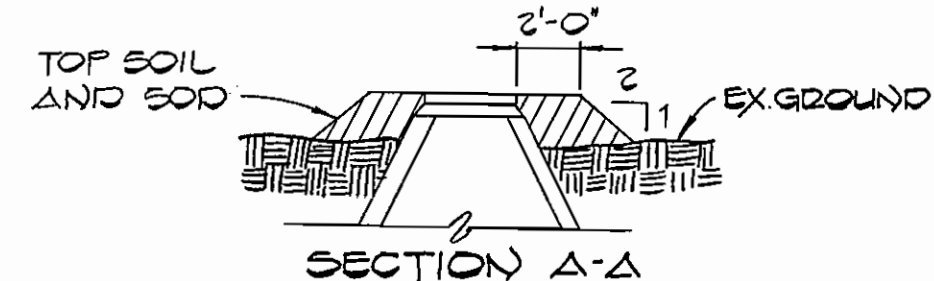
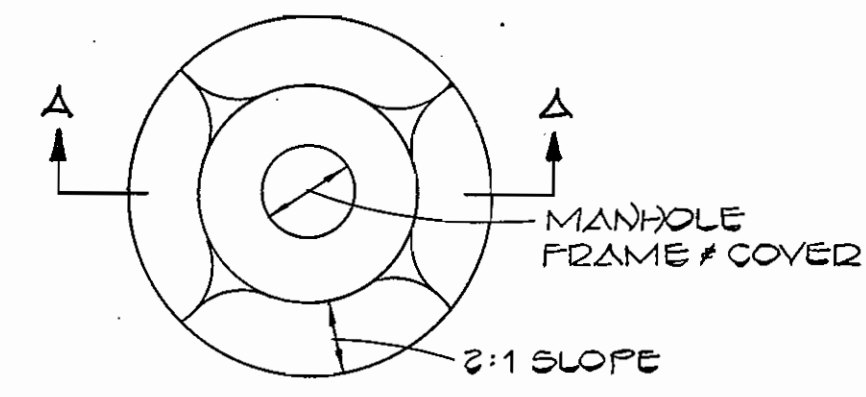
STATION	LOT	INVERT
M#20 TO M#21		
0+11	15#16	352.14
0+52	13#14	352.20
1+12	11#12	354.10
M#21	3#10	354.20
M#17 TO M#20		
M#17	23#24	346.54
0+20	21#22	346.02
0+00	19#20	350.45
1+20	17#18	351.00
M#18 TO M#19		
M#18	1#2	350.55
0+20	3#4	350.67
0+00	5#6	352.20
M#19	7#8	353.37
M#12 TO M#17		
0+00	5#4	345.40
0+72	55#50	345.40
M#17	23#24	346.54
M#11 TO M#12		
2+50	50	344.20
2+01	52	345.70
M#12 TO M#13		
0+40	51	350.00
M#13 TO M#14		
0+00	25#20	353.14
1+20	27#25	354.34
M#14	32#31	352.04
M#14	30#29	350.20
M#13 TO M#15		
0+07	49#50	350.00
0+07	47#48	352.00
M#15	45#40	353.00
M#15 TO M#16		
0+12	43#44	354.10
0+50	41#42	355.20
1+10	39#40	357.10
1+50	37#38	358.00
M#16	35#30	359.00
M#16	33#34	359.40

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



DIVERSION BERMS ARE REQUIRED EVERY 250 FEET ON CONTINUOUS SLOPES OF 4% OR GREATER. THE BERMS SHALL CONFORM TO THE TYPICAL SECTION SHOWN HEREON AND SHALL BE CONSTRUCTED ACROSS THE CONSTRUCTION AREAS IMMEDIATELY AFTER THE BACKFILLING OF THE PIPE TRENCH AND PRIOR TO PLACING STABILIZATION IN ORDER TO PREVENT EROSION OF THE BACKFILLED AREAS.

TEMPORARY EARTH DIVERSION BERM
NO SCALE



FILL AT MANHOLE
NO SCALE

NO.	DATE	REVISION
1	8/1/83	ADD CONCRETE ENGAGEMENT - M#17 TO M#10

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
5-31-83
5-27-83

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

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

PROFILES AND DETAILS
SEWER MAINS

WOODLAND PARK
SECTION TWO AREA ONE
CONTRACT NO. 14-1108-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 4