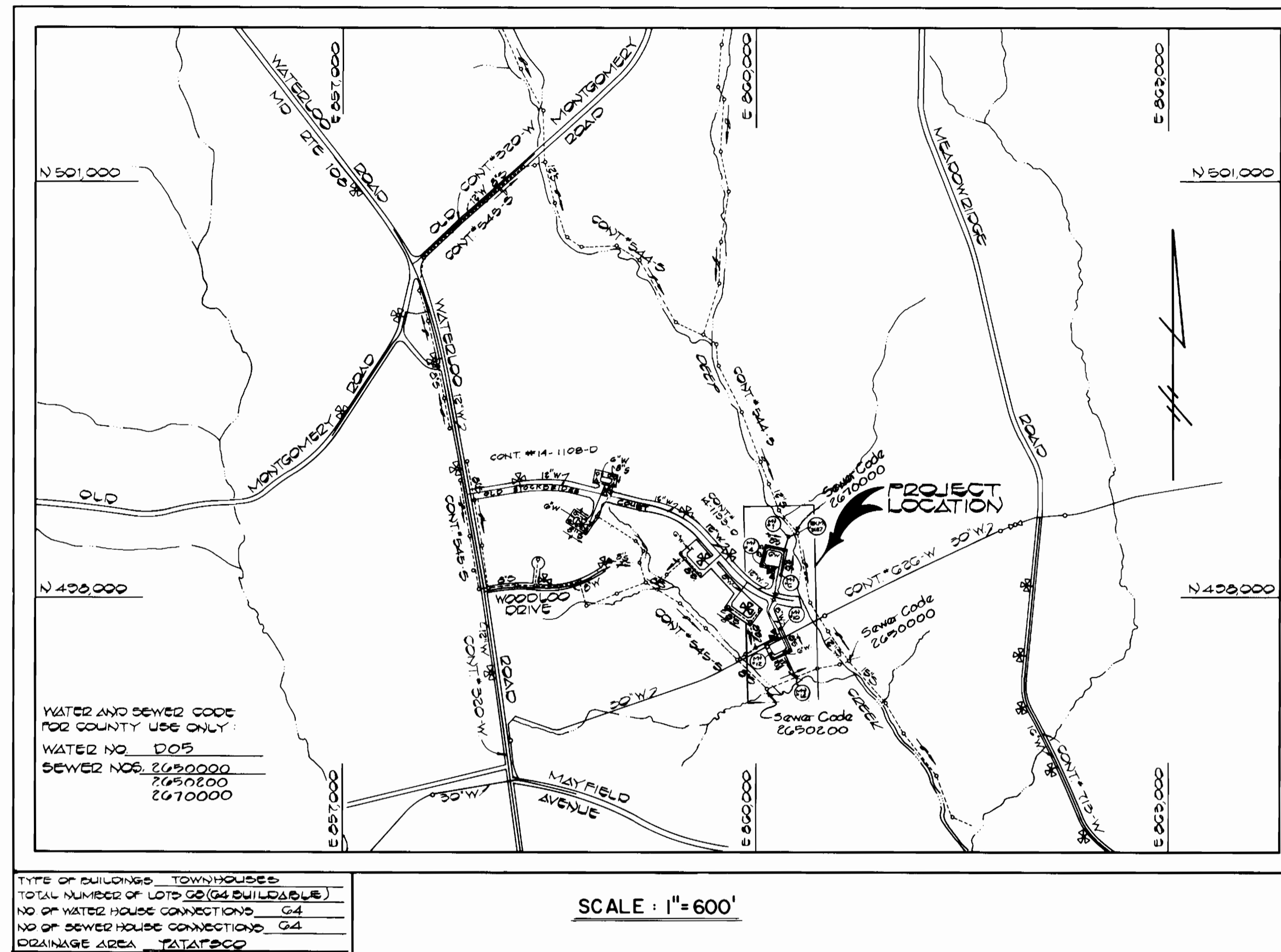


GENERAL NOTES

- 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 BRACING OF THE POLES.
- 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:
 - BALTIMORE GAS AND ELECTRIC CO. - CONTRACTOR'S SERVICES - 561-2585
 - BALTIMORE GAS AND ELECTRIC CO. - DAMAGE CONTROL - 234-5621
 - BALTIMORE GAS AND ELECTRIC CO. - TROUBLE SHOOTING - 298-9013
 - '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 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 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.
- 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 1003 & 1005 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 W323, UNLESS OTHERWISE NOTED.
- ALL SEWER HOUSE CONNECTIONS SHALL BE TWIN SEWER HOUSE CONNECTIONS, 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.
- 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
12" WATER	419 L.F.	411	GRITTEN
8" WATER	403 L.F.	495	GRITTEN
6" WATER	1064 L.F.	1050	GRITTEN
3/4" W.H.C.	2230 L.F.	2685	H-SOLT CANTRIDGE-LEE
1" W.H.C.	205 L.F.	117	H-SOLT CANTRIDGE-LEE
FIRE HYDRANTS	2 EA.	2	PRESSER
MANHOLES	13 EA.		ATLANTIC
8" SEWER	1571 L.F.		J.M.
6" SEWER	1254 L.F.		J.M.
8" VALVES	2 EA.	2	PRESSER
12" VALVES	1 EA.	1	PRESSER
6" VALVES	6 EA.	6	PRESSER
6" F.H. VALVES	2 EA.	2	PRESSER
2" W.H.C.	50 L.F.	40	H-SOLT CANTRIDGE-LEE
1 1/2" BLOW-OFF	2 EA.	2	FORD TRENTON



CONTRACT NO. 14-1204-D
SECTION TWO AREA THREE
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 15 OF THESE SPECIFICATIONS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-84-126.

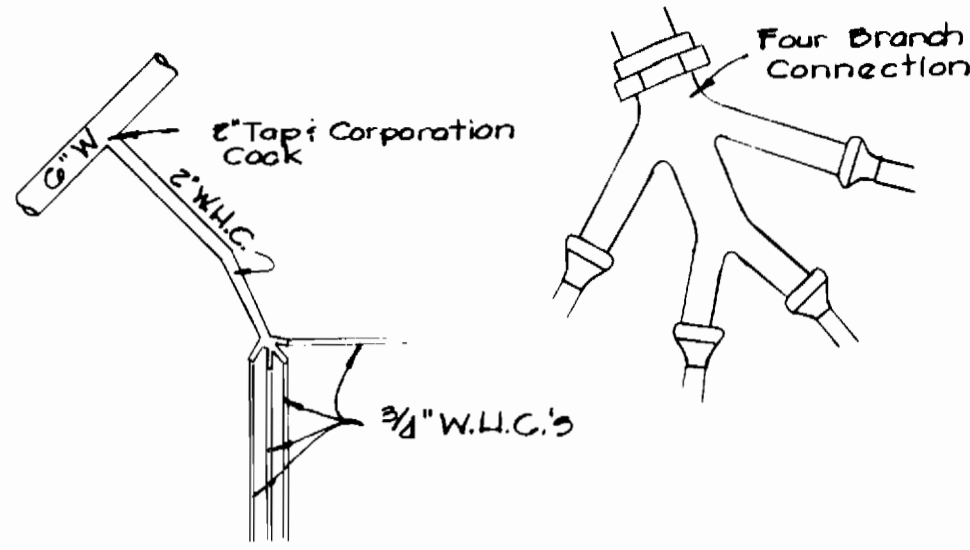
THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 U.S. SOIL CONSERVATION SERVICE DATE 7-13-84

APPROVED: *Stephen L. Fisher* 7-13-84
 HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 14-1204-D
 WOODLAND PARK
 SECTION TWO AREA THREE
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Robert M. Beninger 7-20-84 DIRECTOR OF PUBLIC WORKS DATE Robert M. Beninger 7-20-84 CHIEF, BUREAU OF UTILITIES DATE		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 Terrell A. Fisher 7/23/84 DATE		DES. D.B.S. DRN. D.B.S. CHK. T.A.F. DATE: 7/23/84		TITLE SHEET		WOODLAND PARK SECTION TWO AREA THREE CONTRACT NO. 14-1204-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 1 OF 4
---	--	---	--	--	--	-------------	--	---	--	--------------------------------



4-WAY W.H.C. DETAIL
LOTS 37-40

Revised for _____ S.C.
and _____

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.
Approved _____ Date _____
Howard S.C.D.

Property of
HARRY GOLWELL ET AL
G03/470
T.M.'87 F#128

NOTE:
CONNECT PROP 8'S TO
EX MH #7487 AND REFORM
CHANNEL AS REQUIRED

Property of
UNIVERSITY OF MARYLAND
450/200
T.M.'87 F#882

Property of
HOWARD COUNTY
BOARD OF EDUCATION
1001/200
T.M.'87 F#128

NOTE:
CONTRACTOR SHALL BUILD
PROP MH#4 OVER EXISTING
8" SEWER AND REFORM CHANNEL
AS REQUIRED

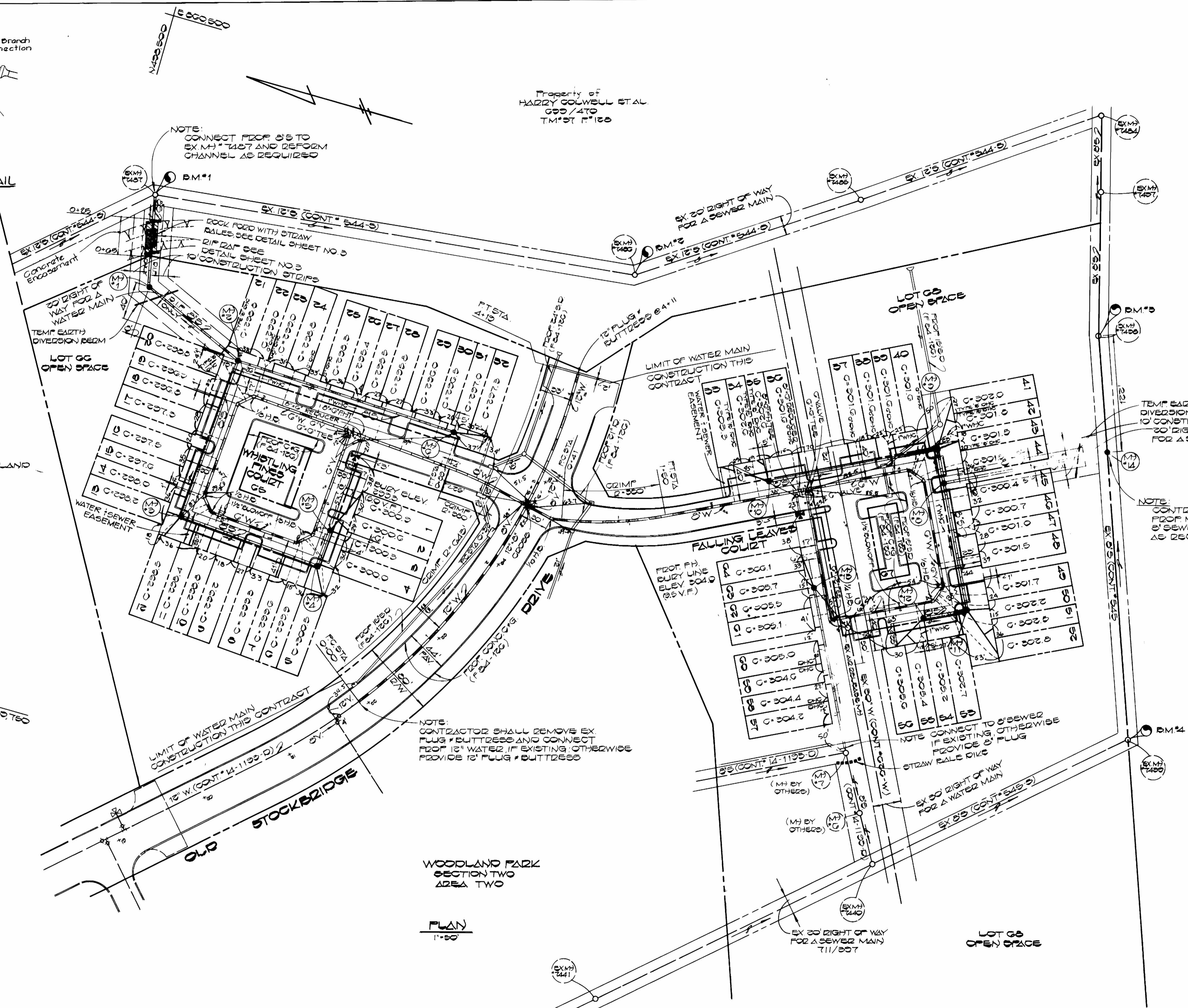
NOTE:
CONTRACTOR SHALL REMOVE EX
PLUG # BUTTRESS AND CONNECT
PROP 12" WATER IF EXISTING, OTHERWISE
PROVIDE 12" PLUG # BUTTRESS

NOTE:
CONNECT TO 8" SEWER
IF EXISTING, OTHERWISE
PROVIDE 8" PLUG

MH#	ELEVATION
#1	1'0" ABOVE EX G20
#2	302.7
#3	302.6
#4	302.4
#5	301.2
#6	299.1
#12	1'0" ABOVE EX G20
#8	303.4
#9	303.3
#10	303.6
#11	306.0
#12	305.9
#13	302.0

BENCH MARKS

- B.M.#1 ELEV. 285.02
X-CUT EAST SIDE OF RIM,
EX SAN MH #7487
- B.M.#2 ELEV. 276.87
X-CUT EAST SIDE OF RIM,
EX SAN MH #7486
- B.M.#3 ELEV. 270.81
X-CUT EAST SIDE OF RIM
EX SAN MH #7488
- B.M.#4 ELEV. 288.00
X-CUT EAST SIDE OF RIM
EX SAN MH #7489



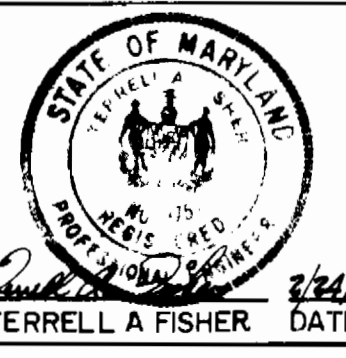
WOODLAND PARK
SECTION TWO
AREA TWO

PLAN
1"=50'

CONTRACT NO. 14-1204-D
WOODLAND PARK
SECTION TWO, AREA THREE
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works
Chief, Bureau of Engineering
Chief, Bureau of Utilities
Chief, Land Development Division

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
461-2855
TERRELL A. FISHER

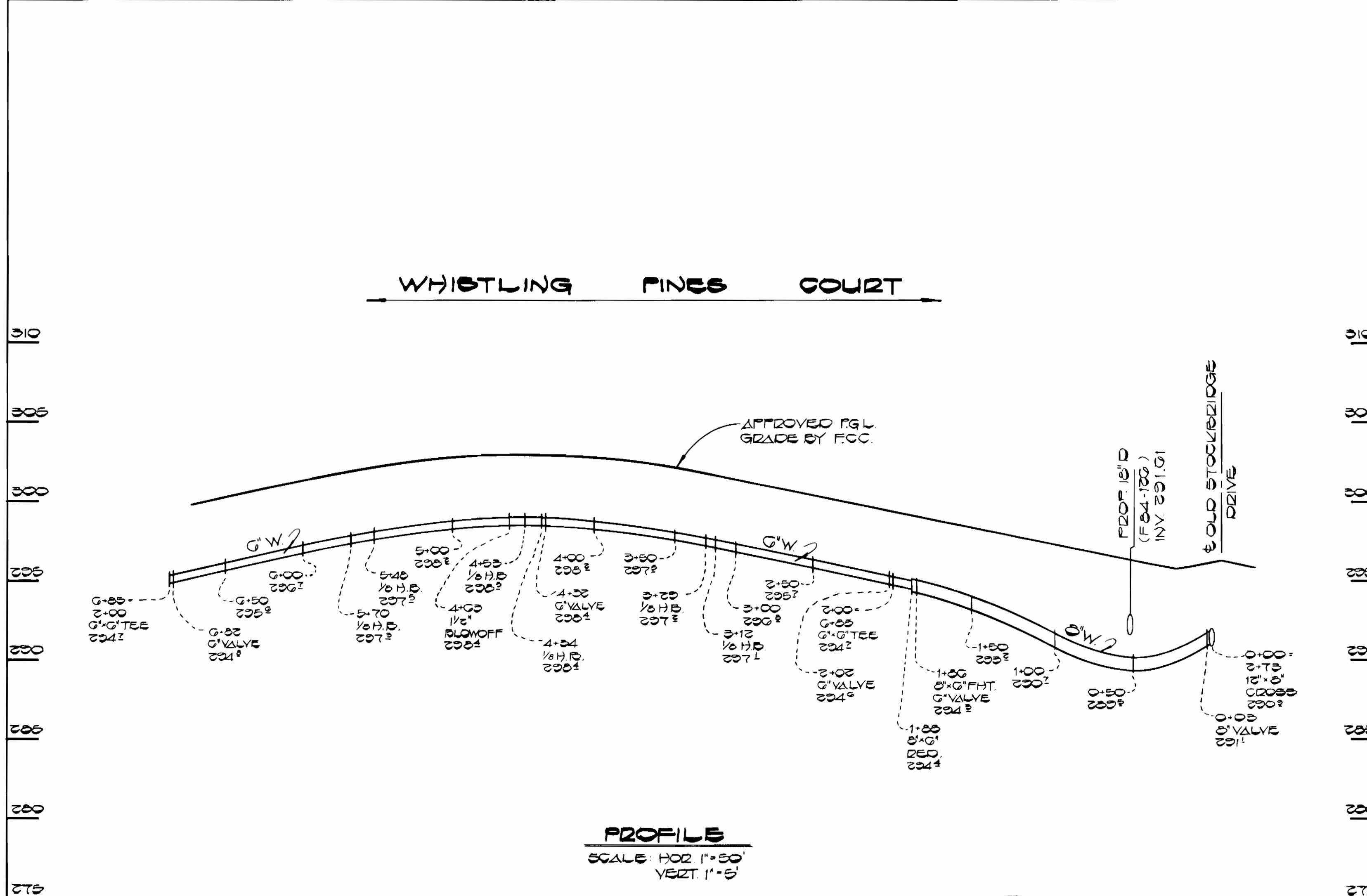
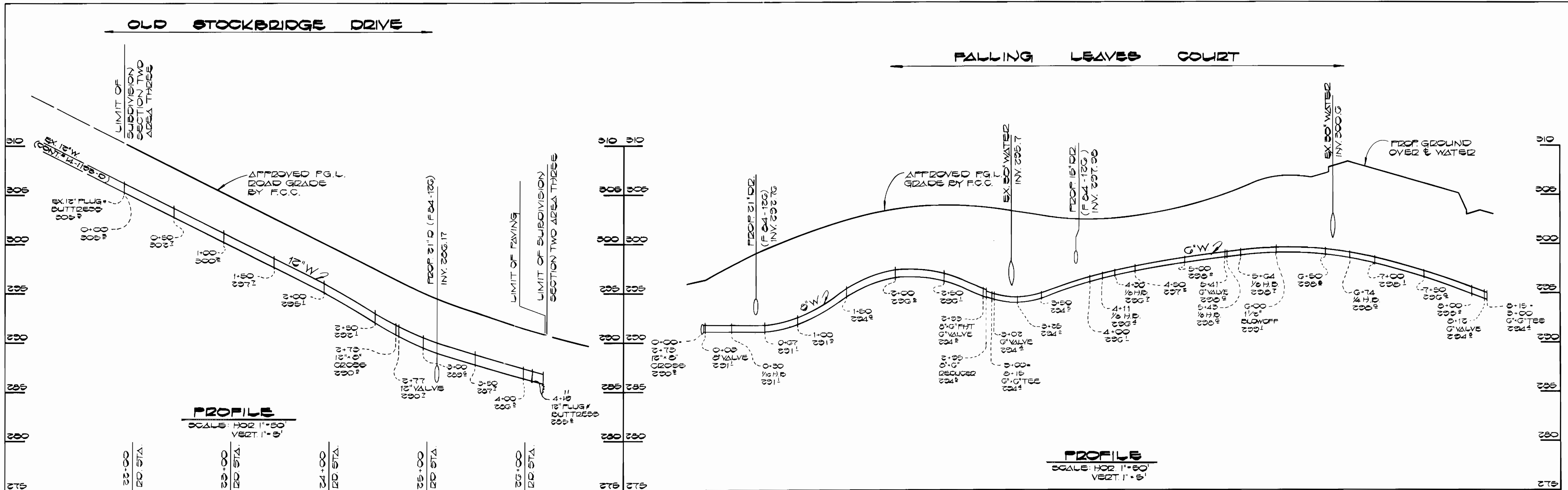


DES: DBS
DRN: DBS
CHK: TAF
DATE: 2-22-84
BY: NO. REVISION DATE

PLAN
WATER AND SEWER
MAINS

WOODLAND PARK
SECTION TWO, AREA THREE
CONTRACT NO. 14-1204-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

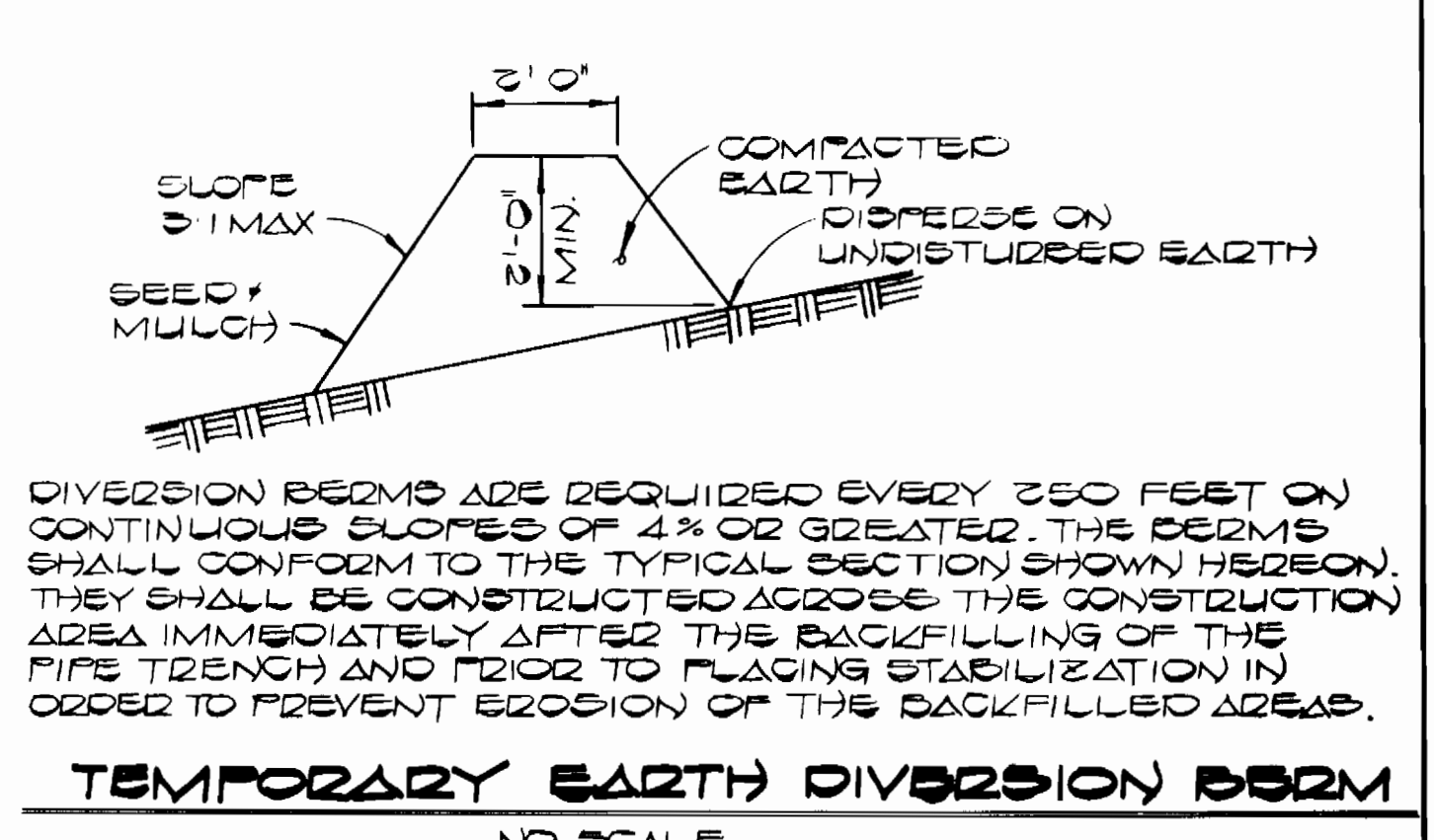
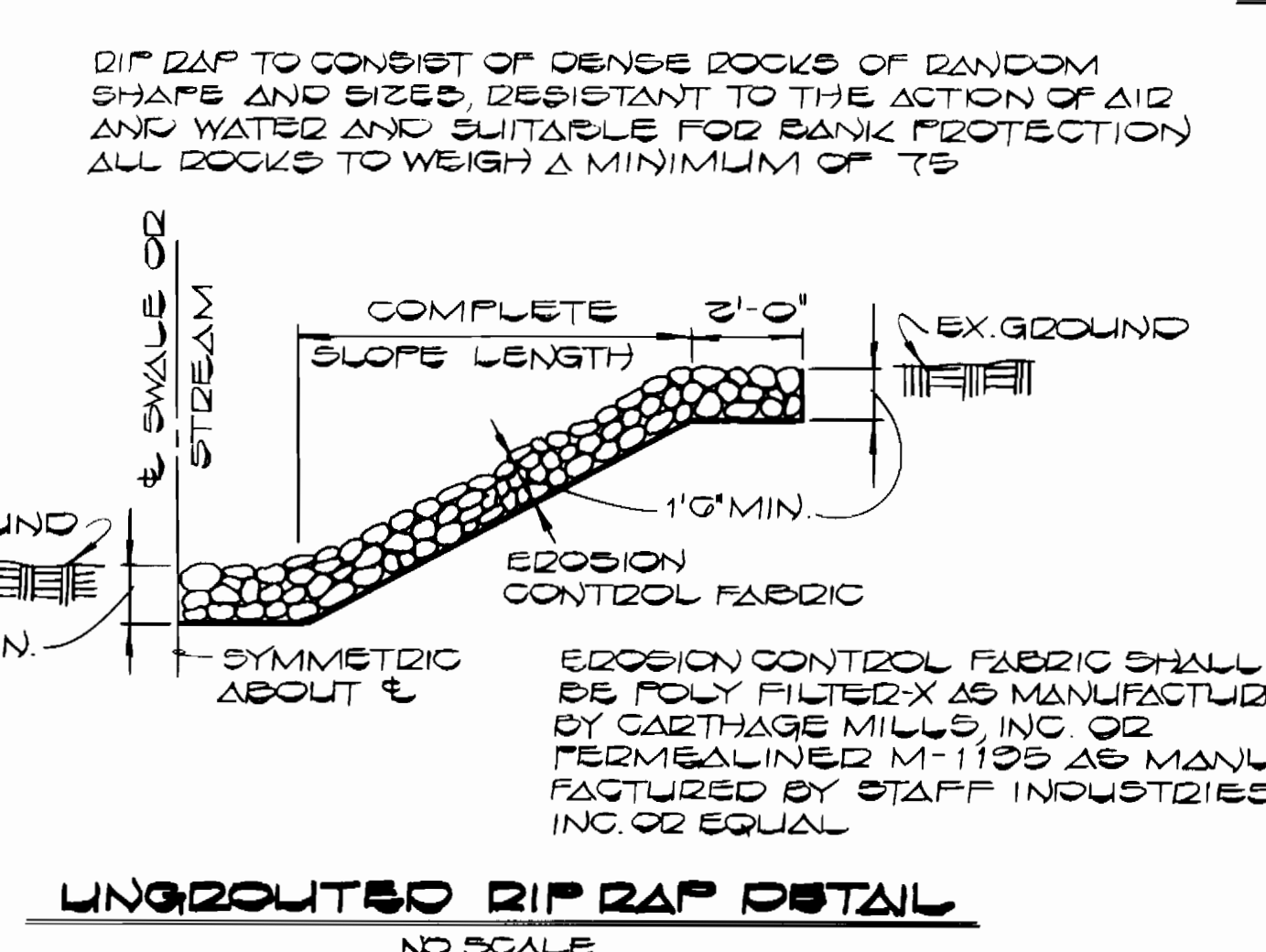
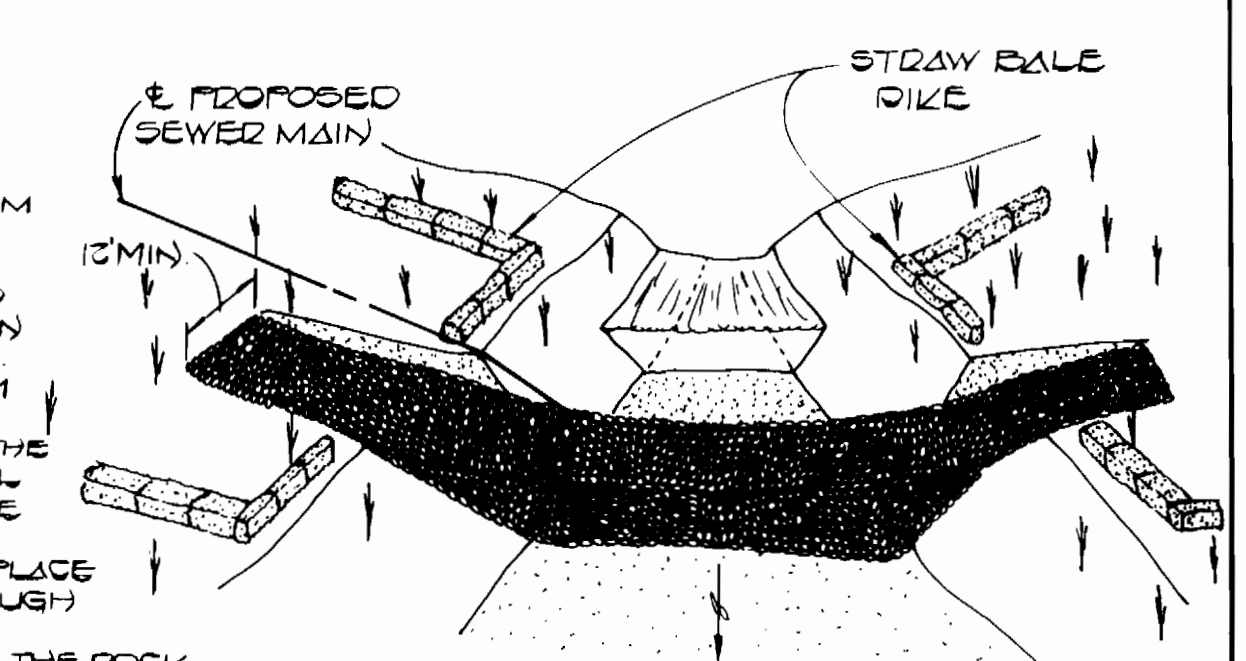
SCALE
AS
SHOWN
SHEET
2 OF 4



Reviewed for Name: **S.C.S.**
and sheets Technical Requirements
Signature: _____ Date: _____
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Approved on: **7/23/84** Date: **7/23/84**
Howard S.C.D.

- ROCK FORD TO BE PLACED PRIOR TO GOODING STREAM.
- THERE WILL BE WATER 4" TO 6" MINIMUM DEEP RUNNING OVER THE FORD AT NORMAL WATER LEVEL.
- FORD TO BE CONSTRUCTED OF 150 TO 300 LB. ROCK WITH SMALLER ROCK ON THE TOP FOR THE RUNNING SURFACE.
- THE BANK SHALL BE CUT BACK AT 5:1 SLOPE AT THE FORD.
- THE CONTRACTOR SHALL NOT OPEN THE TRENCH ACROSS THE STREAM UNTIL THE PIPE IS ON SITE AND READY TO BE INSTALLED.
- THE ROCK FORD SHALL REMAIN IN PLACE DURING INSTALLATION OF PIPE THROUGH STREAM.
- UPON COMPLETION AND BACKFILLING THE ROCK FORD SHALL BE REMOVED AND THE STONES PLACED ON THE DISTURBED STREAM BANK AS RIP-RAP SEE DETAIL THIS SHEET.



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Brinson, Director of Public Works
DATE: 7-24-84

Richard J. Brinson, Chief, Bureau of Utilities
DATE: 7-27-84

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043
461-2855

STATE OF MARYLAND
TERRELL A. FISHER, DATE: 7/23/84

DES: DBS	
DRN: DBS	
CHK: TAF	
DATE: 2-22-84	
BY: NO.	
REVISION	
DATE	

PROFILES AND DETAILS
WATER MAINS

600' SCALE MAP NO. 37 BLOCK NO.

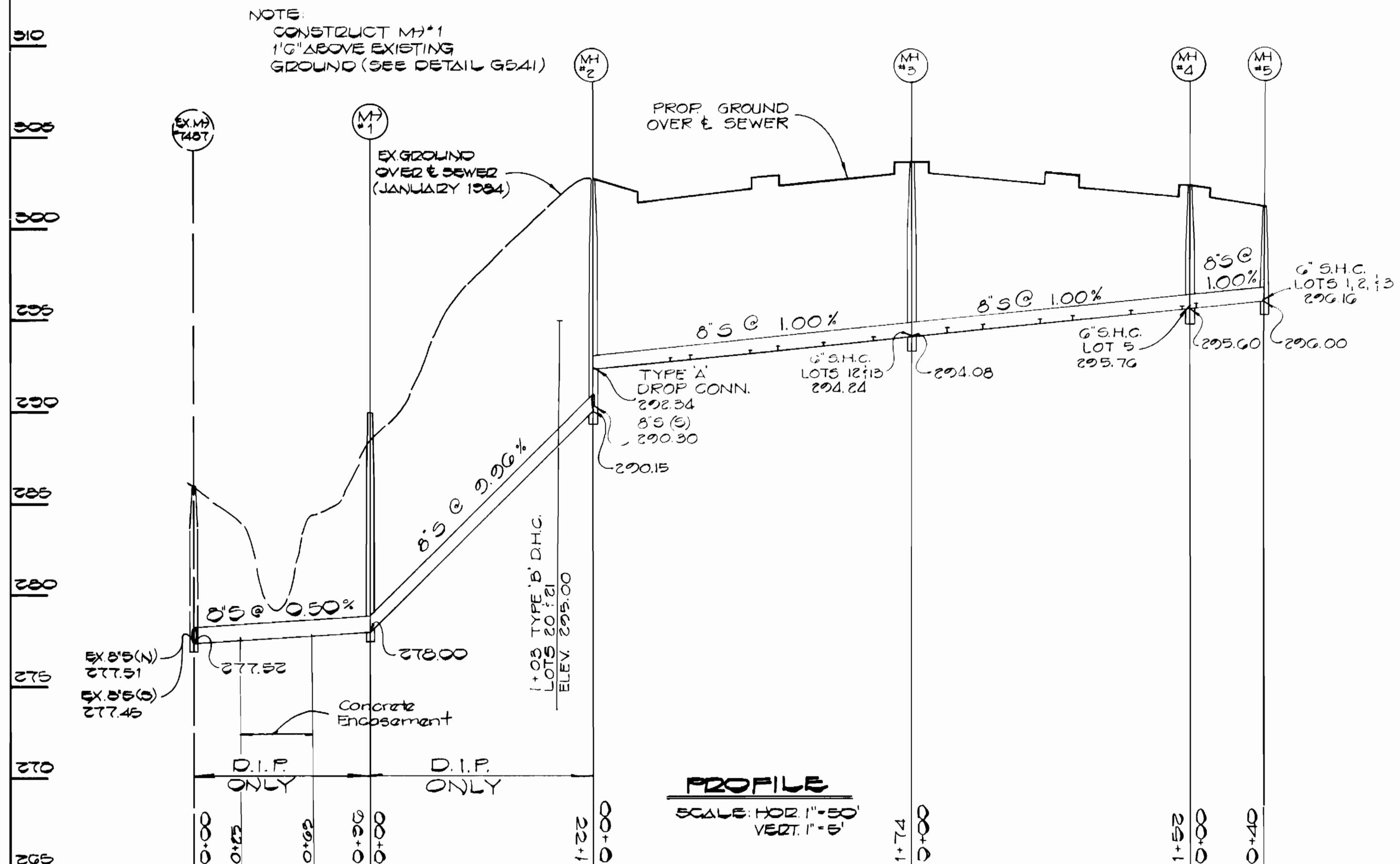
WOODLAND PARK
SECTION TWO AREA THREE
CONTRACT NO. 14-1204-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 4

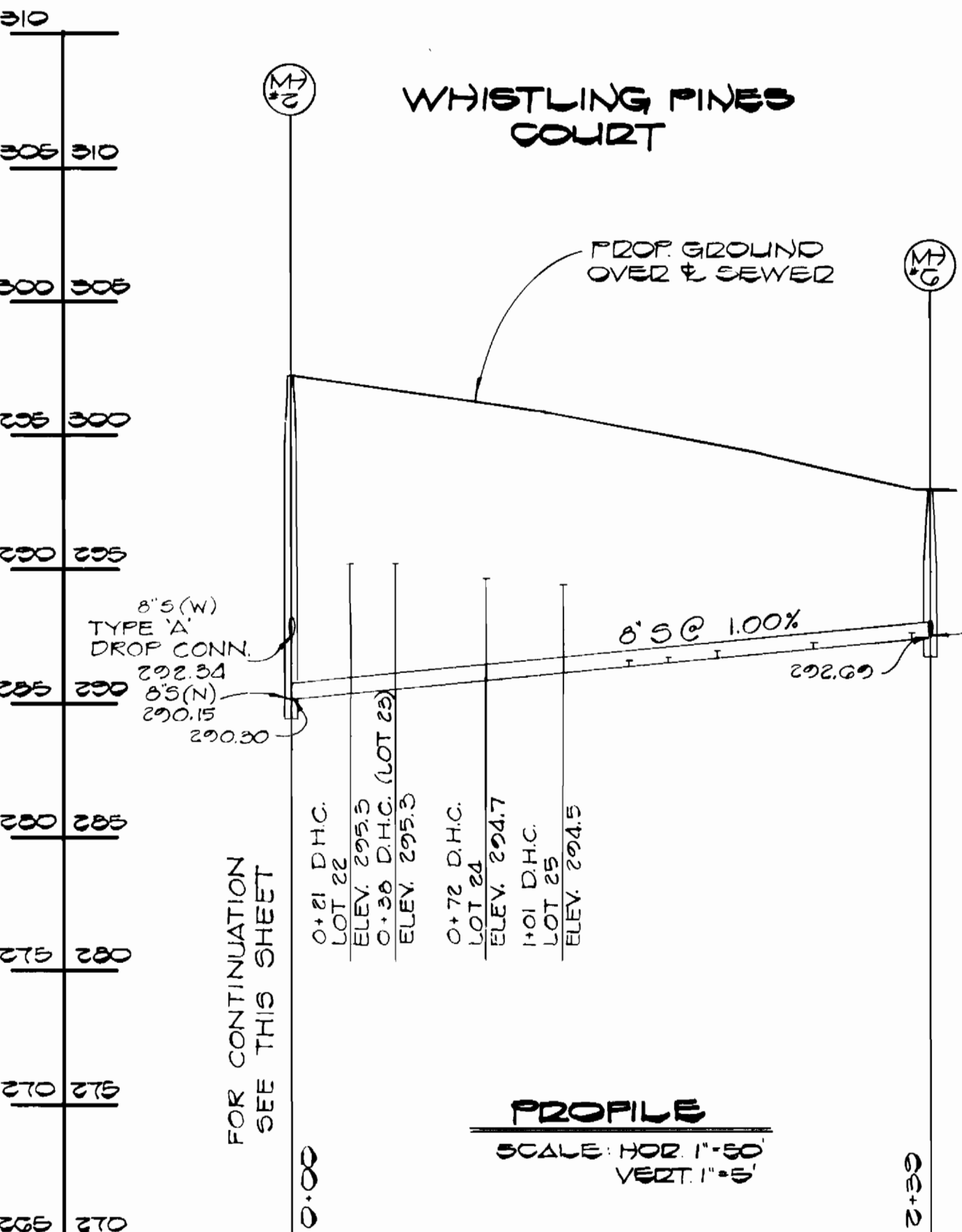
SEWER HOUSE CONNECTION
INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	ELEV.	STATION	LOT	ELEV.
MH #11 TO MH #12					
MH #11	LOT 50	297.62	MH #4 RT	LOT 5	296.40
MH #11	LOT 51	298.02	0+05 RT	LOT 4	296.11
0+08 LT	LOT 52	298.28	MH #5 RT	LOT 3	296.56
MH #12 LT	LOT 53	298.17	MH #5 RT	LOT 2	296.76
MH #12	LOT 54	300.68	MH #5 RT	LOT 1	297.14
MH #12	LOT 55	300.90	MH #5 TO MH #4		
MH #12	LOT 56	301.08	MH #5	LOT 19	294.54
MH #5 TO MH #11					
0+08 LT	LOT 45	295.90	0+10 RT	LOT 12	294.76
0+31 LT	LOT 46	296.20	0+30 RT	LOT 11	294.65
0+56 LT	LOT 47	296.54	0+50 RT	LOT 10	295.05
0+81 LT	LOT 48	296.98	0+70 RT	LOT 9	295.32
1+06 LT	LOT 49	297.10	0+60 RT	LOT 8	295.54
MH #11 LT	LOT 50	297.62	1+20 RT	LOT 7	295.86
MH #11 LT	LOT 51	298.02	1+40 RT	LOT 6	296.14
MH #11 LT	LOT 52	298.28	MH #4 RT	LOT 5	296.40
MH #7 TO MH #15					
0+40 LT	LOT 57	299.68	0+42 RT	LOT 19	293.14
0+74 LT	LOT 58	300.07	0+55 RT	LOT 18	293.25
0+84 LT	LOT 59	300.12	0+66 RT	LOT 17	293.58
1+17 LT	LOT 60	300.45	1+01 RT	LOT 16	293.75
1+34 LT	LOT 61	300.62	1+40 RT	LOT 15	294.12
1+54 LT	LOT 62	300.96	1+55 RT	LOT 14	294.25
MH #15 LT	LOT 63	301.15	MH #3 RT	LOT 13	294.54
MH #15 LT	LOT 64	301.37	MH #3	LOT 12	294.76
MH #6 TO MH #9					
0+11 RT(DHC)	LOT 44	297.46	1+05 RT TYPE 'B'	LOT 20	295.20
MH #9 RT	LOT 45 TYPE 'B'	297.46	1+05 LT U.H.C.	LOT 21	295.20
MH #9 RT	LOT 42	297.04			
MH #9 RT	LOT 41	296.00			
MH #2 TO MH #10					
MH #9	LOT 43 TYPE 'B'	297.46			
MH #9	LOT 42	297.04			
MH #9	LOT 41	296.00			
0+09 RT(DHC)	LOT 40	297.28			
0+48 RT(DHC)	LOT 39	297.28			
0+64 RT(DHC)	LOT 38	297.08			
0+95 RT(DHC)	LOT 37	297.08			
1+46 RT(DHC)	LOT 36	297.08			
MH #10 RT	LOT 35 TYPE 'B'	298.28			
MH #10 RT	LOT 34 TYPE 'B'	298.20			
MH #10 RT	LOT 33	299.28			
MH #2 TO MH #6					
0+21 LT(DHC)	LOT 28	295.50			
0+50 LT(DHC)	LOT 29	295.50			
0+72 LT(DHC)	LOT 24	294.86			
1+01 LT(DHC)	LOT 25	294.64			
1+25 LT	LOT 26	291.77			
1+40 LT	LOT 27	291.92			
1+58 LT	LOT 28	292.10			
1+84 LT	LOT 29	292.46			
2+51 LT	LOT 30	292.85			
MH #6 LT	LOT 31	293.29			
MH #6 LT	LOT 32	293.57			

WHISTLING PINES COURT

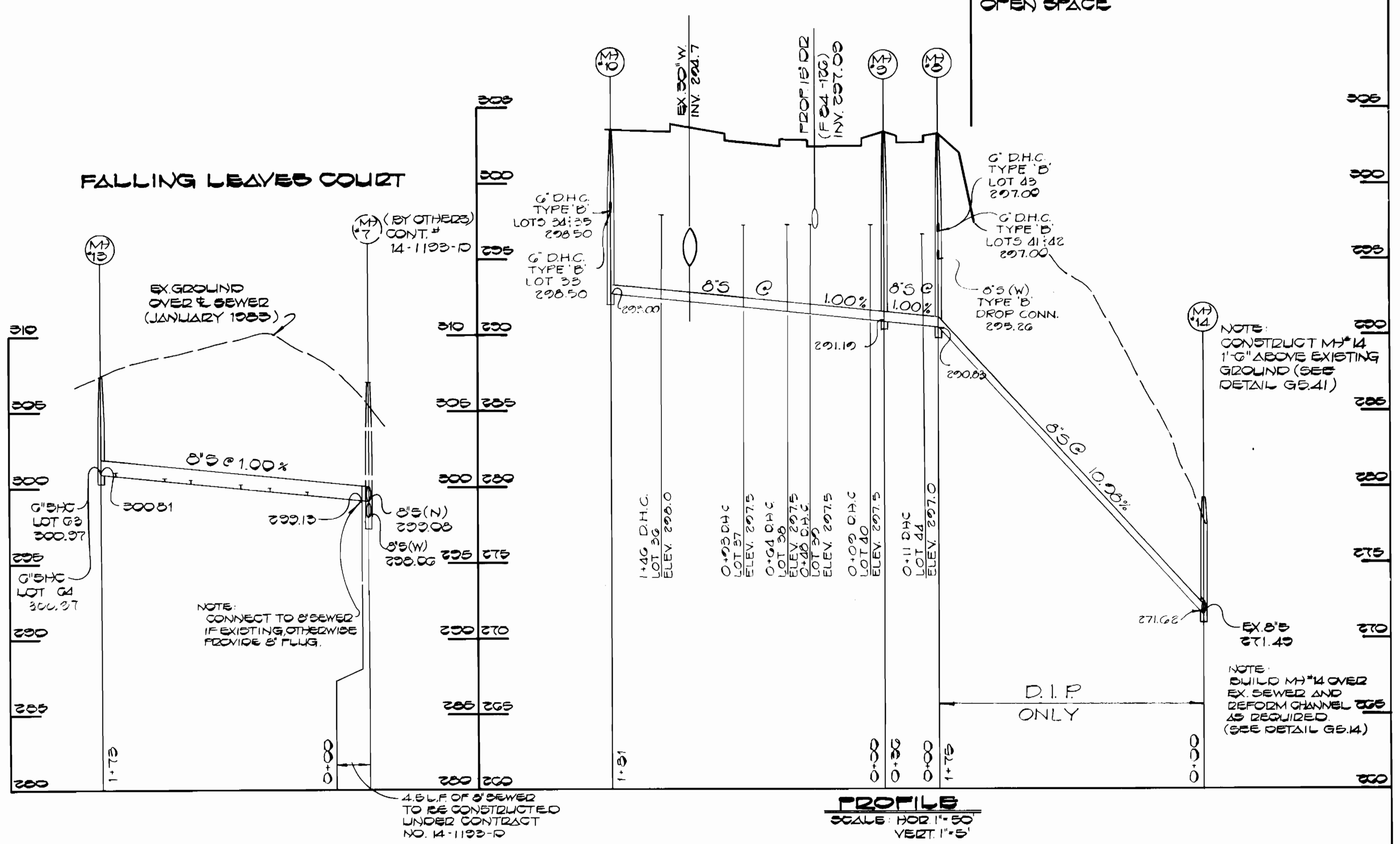


PROFILE
SCALE: HOR 1"=50'
VERT. 1"=5'



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

FALLING LEAVES COURT



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

PROFILES
SEWER MAINS

WOODLAND PARK
SECTION TWO AREA THREE
CONTRACT NO. 14-1204-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
4 OF 4

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: [Signature] DATE: 7-24-84
Chief, Bureau of Engineering: [Signature] DATE: 7-27-84
Chief, Bureau of Utilities: [Signature] DATE: 7-27-84

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043
461-2855
[Signature] DATE: 7/21/84

DES: DBS			
DRN: DBS			
CHK: TAF			
DATE: 2-22-84	BY: NO.	REVISION	DATE

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

CONTRACT NO. 14-1204-D
WOODLAND PARK
SECTION TWO AREA THREE
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND