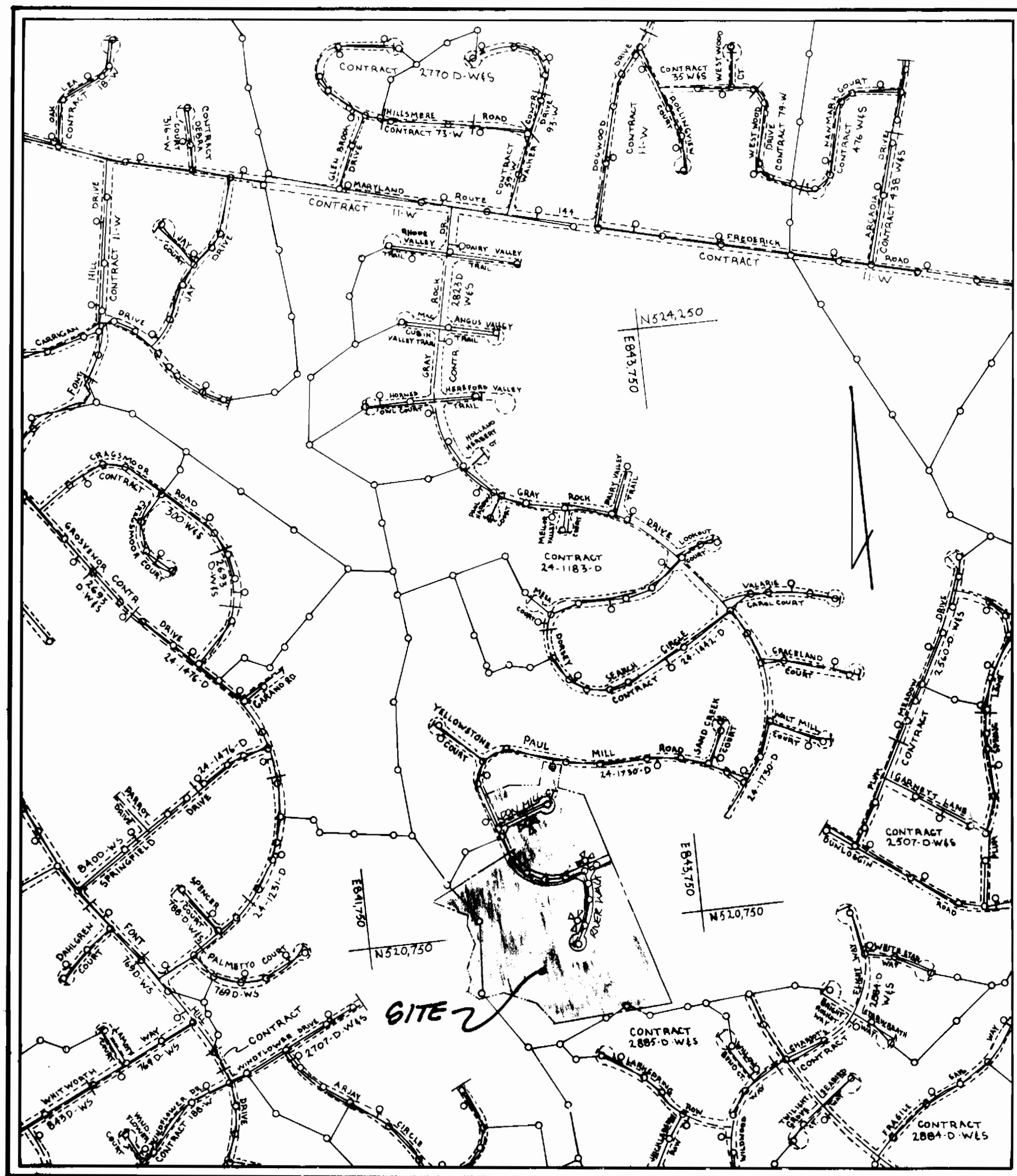


BUILDING TYPE: RESIDENTIAL
 NUMBER OF LOTS: 29
 NUMBER OF S.H.C.: 28
 NUMBER OF W.H.C.: 28
 DRAINAGE AREA: LITTLE PATUXENT
 TREATMENT PLANT: PUMPING STATION PATAPSCO VIA RTE. 108
 WATER CODE: F-07
 SEWER CODE: 686-0000



GENERAL NOTES:

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE INSPECTOR, AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATE SYSTEM.
- ALL VERTICAL CONTROLS ARE BASED ON U.S. B.S. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATION.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6' CLEAR ALL PILES BY 2' MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT THE PILE SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS, 1980 AMENDMENTS, UNLESS OTHERWISE NOTED.
- FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - B.G. & E. CO. - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE: 686-0125
 - B.G. & E. CO. - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE: 686-0128
 - STATE HIGHWAY ADMINISTRATION: 381-5888
 - "MISB UTILITY": 380-0188
 - CHEAPSAKE & POTOMAC (C.F.P.) TELEPHONE COMPANY: 725-0076
 - AMERICAN TELEPHONE & TELEGRAPH - CABLE LOCATION DIVISION: 328-3868
 - COLONIAL PIPELINE COMPANY: 781-4641
 - BUREAU OF UTILITIES, HOWARD COUNTY: 522-2316
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF THREE FEET IN ADVANCE.
- CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN RISK.
- 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 & ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE PRICE BID FOR CONSTRUCTION OF THE MAIN.
- PLACE REGULATORY "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH THE MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- IF SEWER MAIN SHALL BE C.S.P.R., R.C.S.P., P.V.C., U.C.P.K., UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PRODUCE A JOINT IN THE SEWER MAIN WITHIN 2' OF EXISTING MANHOLE WALLS.
- ALL WATER HOSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- ALL WATER MAINS SHALL BE D.I.P., CLASS 52.
- TOP OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 8" COVER UNLESS OTHERWISE NOTED.
- MANHOLE MOMENT TO TEE SHALL BE STAMPED TO TREE.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STAMPED & SURTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAIL 100, 1-1005 OF THE STANDARD SPECIFICATIONS, VOLUME III.

**GRAY ROCK FARM
SECTION - 5**

HOWARD COUNTY, MARYLAND

**CONTRACT NO:
24-3069-D**

SCALE - 1" = 600'

NOTE: SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND SHOWN ON F-90-147.

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

[Signature] 10/16/90
S.O. SOIL CONSERVATION SERVICE DATE

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

[Signature] 10/16/90
S.O. SOIL CONSERVATION DISTRICT DATE

QUANTITY CHART

ITEM	ESTMD	AS-BUILT	MATERIAL/SUPPLIES
3/4" W.H.C.	200 L.F.	796 L.F.	HOWELL METALS
8" W.BENDW.	4	4	DIAMOND PLASTICS
8" CAP	1	1	GRIFFIN PIPE PROD.
6" CAP	2	2	GRIFFIN PIPE PROD.
FIRE HYDRANT	4	4	U.S. PIPE
6" WATER VALVE	4	4	MUELLER COMP.
8" WATER VALVE	2	2	MUELLER COMP.
8" W. TEE	2	2	GRIFFIN PIPE COMP.
6" W. TEE	2	2	GRIFFIN PIPE COMP.
8" W. TEE	1	1	GRIFFIN PIPE COMP.
6" WATER MAIN	406 L.F.	405 L.F.	GRIFFIN PIPE PROD.
8" WATER MAIN	1230 L.F.	1178 L.F.	GRIFFIN PIPE PROD.
1" W.H.C.	800 L.F.	797 L.F.	DIAMOND PLASTICS
TECH. MANHOLE	3	3	
S. MANHOLE	5	11	ATLANTIC CONCRETE PROD.
8" LOWER MAIN	1370 L.F.	1470 L.F.	DIAMOND PLASTICS

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 10/19/90 *[Signature]* 10-19-90
DATE CHIEF BUREAU OF ENGINEERING DATE

[Signature] 10-10-90 *[Signature]* 10/19/90
DATE CHIEF LAND DEVELOPMENT DISTRICT DATE

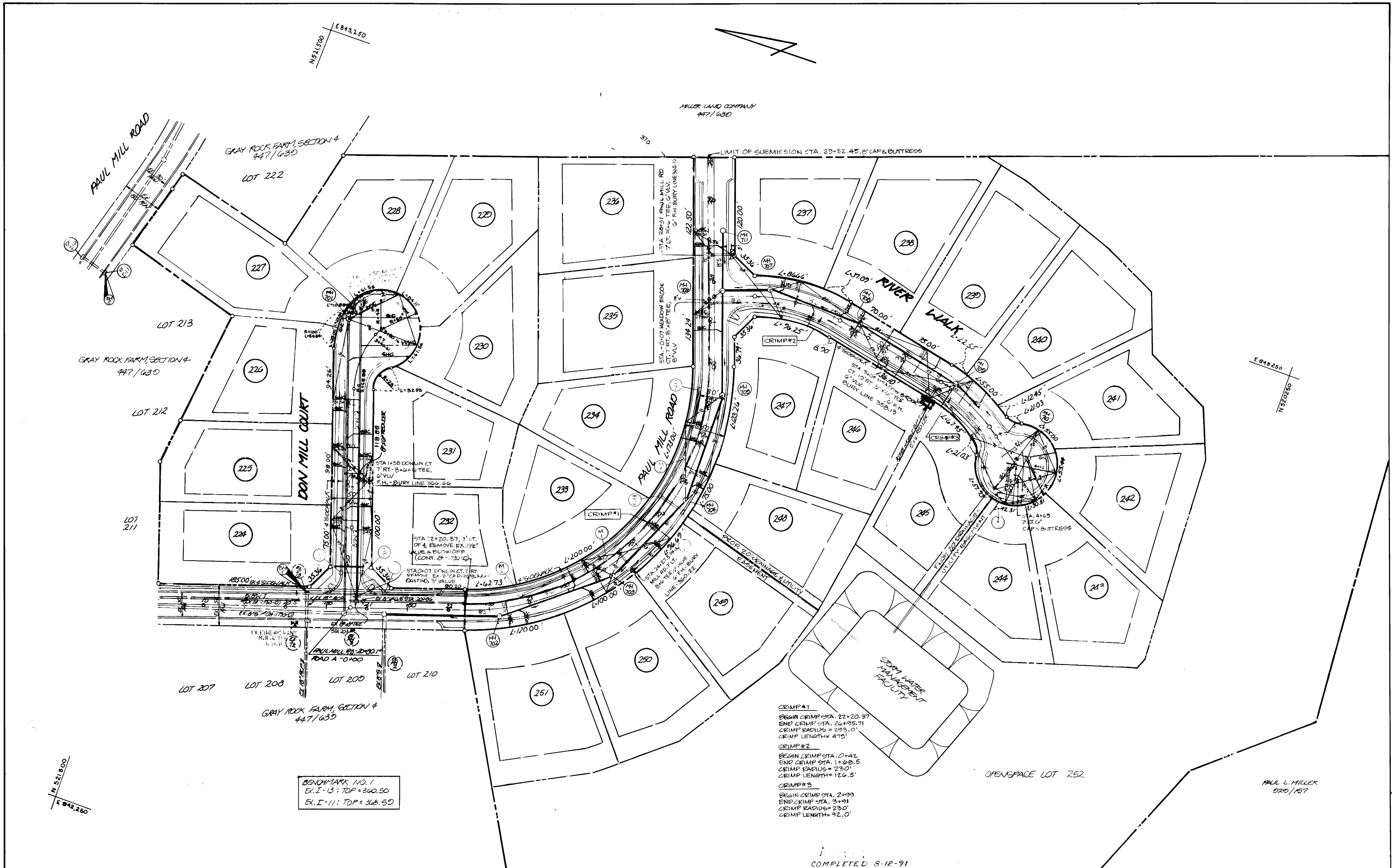
Boender Associates
ENGINEERS & ARCHITECTS
3230 BETHANY LAKE
FREDERICK, MARYLAND 21704

DATE	BY	NO	REVISION
AUGUST 1990			
			CPW COMMENTS, SEPTEMBER 10, 1990
			CPW COMMENTS, NOVEMBER 1990

TITLE SHEET

GRAY ROCK FARM SECTION-5
2ND ELECTION DISTRICT
CONTRACT NO. 24-3069-D

SCALE: 1" = 600'



CRIMP #1
 BEGIN CRIMP STA. 22+20.37
 END CRIMP STA. 26+35.71
 CRIMP RADIUS = 293.0'
 CRIMP LENGTH = 475'

CRIMP #2
 BEGIN CRIMP STA. 0+42
 END CRIMP STA. 1+68.5
 CRIMP RADIUS = 230'
 CRIMP LENGTH = 126.5'

CRIMP #3
 BEGIN CRIMP STA. 2+99
 END CRIMP STA. 3+91
 CRIMP RADIUS = 230'
 CRIMP LENGTH = 92.0'

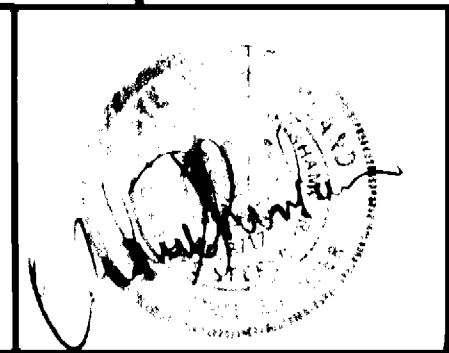
BENCHMARK NO. 1
 EX. I-13: TOP = 360.50
 EX. I-11: TOP = 368.50

COMPLETED 8-12-91

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

10/19/90
 10-10-90

Boender Associates
 ENGINEERS, PLANNERS, SURVEYORS
 3230 BETHANY LANE
 ELLICOTT CITY, MD. 21043
 (301) 465-7777

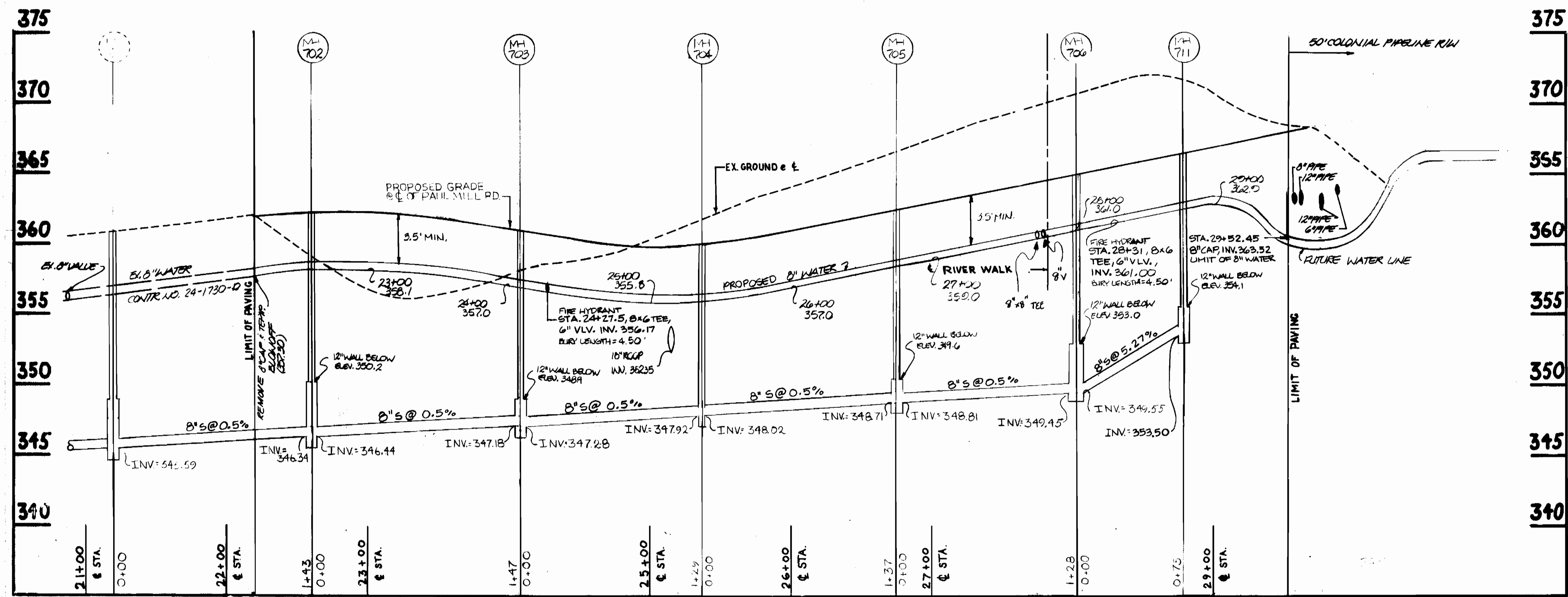


DATE	BY	NO.	REVISION	DATE
JANUARY, 1990				

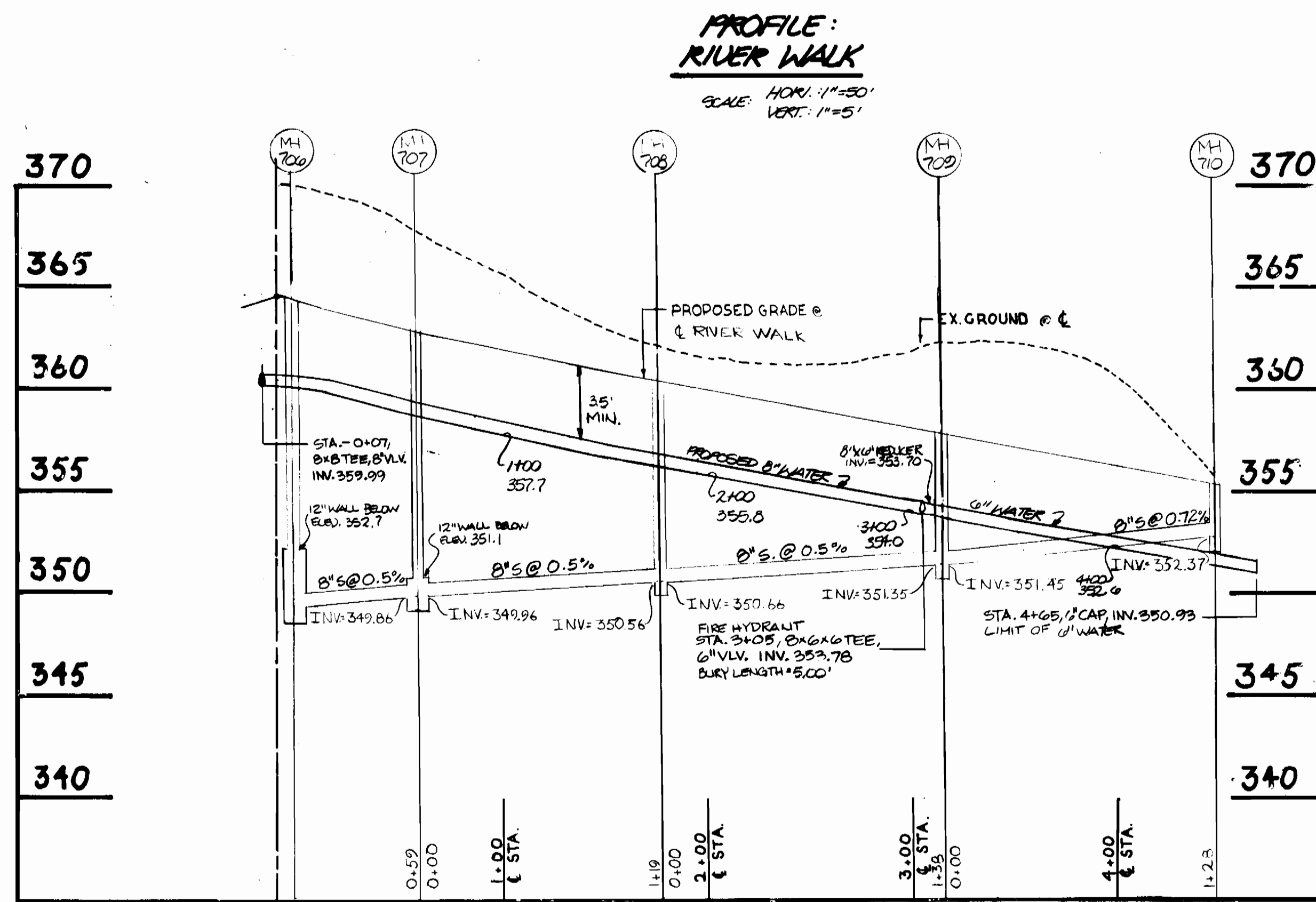
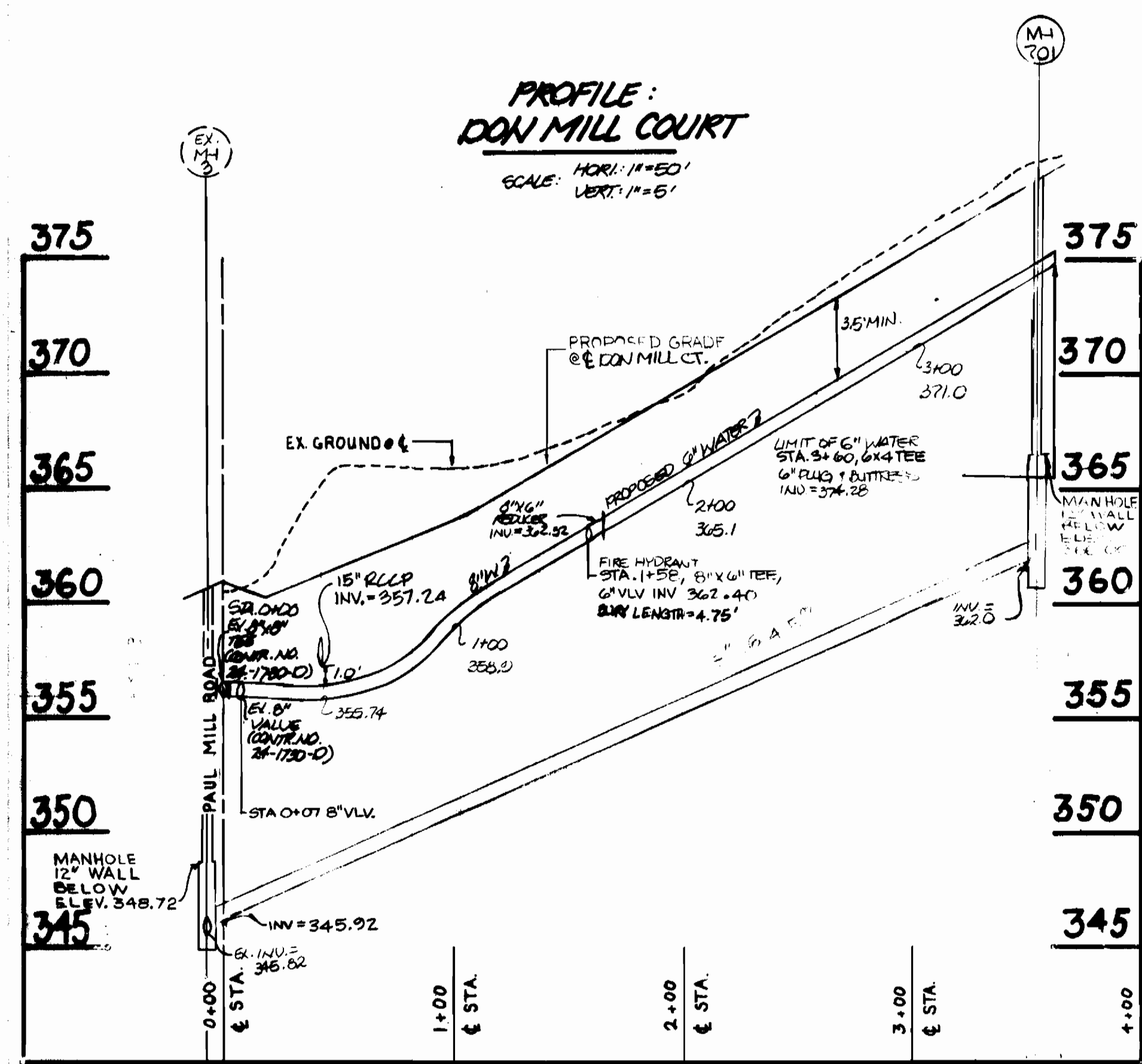
PLAN

GRAY ROCK FARM, SECTION 5
 2ND ELECTION DISTRICT
 CONTRACT NO. 24-3060-D

SCALE: 1"=50'
 SHEET: 2



LOT #	SHC. & STA.	INV. S.H.C. SEWER	INV. S.H.C. RW	MIN. CELLAR ELEV.	HOWARD CO. STD. CONTROL
224	0+23	350.91	351.27	355.23	
225	1+70	354.56	354.92	358.86	
226	2+40	357.82	358.18	362.68	
227	3+53	362.14	362.94	366.84	
228	3+53	362.14	363.08	366.88	
229	3+53	362.14	363.24	368.14	
230	3+02	361.47	362.65	366.75	
231	2+08	356.43	357.07	360.87	
232	1+20	351.44	352.08	356.60	
233	23+55	354.11	355.91	359.71	
234	25+47	355.57	357.43	361.23	
235	27+39	349.21	351.37	355.09	
236	28+43	351.82	353.98	357.68	
237	0+70	350.03	350.39	354.11	
238	1+53	350.88	351.28	355.00	
239	2+67	351.40	351.76	355.50	
240	3+52	351.80	352.18	356.08	
241	4+01	351.98	352.17	355.47	
242	4+48	352.47	352.84	356.04	
243	4+48	352.47	352.97	356.17	
244	4+35	352.34	353.00	356.10	
245	3+22	351.88	352.27	355.32	
246	2+50	351.01	351.65	355.45	
247	1+20	350.25	350.77	354.67	
248	25+40	348.12	348.42	352.12	
249	24+58	347.58	347.98	351.78	
250	23+63	346.99	347.39	351.19	
251	23+83	347.60	348.00	349.50	



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

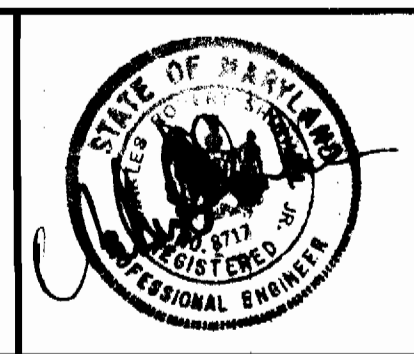
James P. Sklar 10-19-90
 Director of Public Works DATE

Robert J. ... 10-19-90
 Chief, Bureau of Engineering DATE

Robert J. ... 10-19-90
 Chief, Bureau of Utilities DATE

Howland Development Division DATE

Boender Associates
 ENGINEERS - ARCHITECTS - SURVEYORS
 3230 BETHANY LANE
 ELLICOTT CITY, MD. 21043
 (301) 465-7771



DATE:		
DRN:		
CHK:		
DATE:		
BY:		
NO.:		
REVISION:		
DATE:		

WATER & SEWER PROFILES

GRAY ROCK FARM, SECTION 5
 2ND ELECTION DISTRICT
 CONTRACT NO. 24-3060-D

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

SHEET:
 3