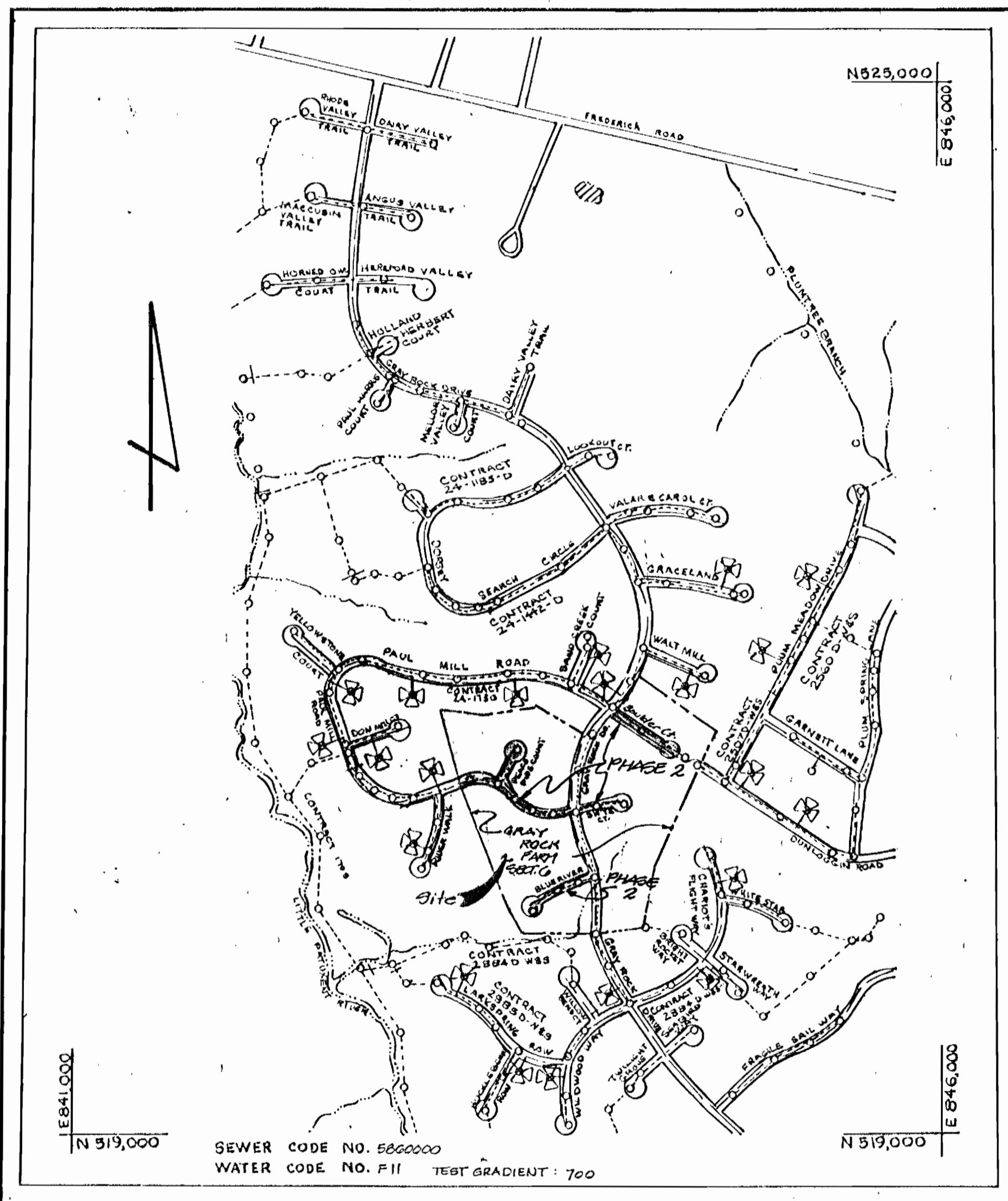


Lot No.	SEWER & DIA.	By Sewer	Inv. 3'0" DIA.	Min. Center Elevation	TYPE OF CONNECTION
253	8" DIA.	366.75	367.07	371.07	SEWER HOUSE
254	8" DIA.	368.12	369.12	372.72	SEWER HOUSE
255	8" DIA.	370.0	370.50	374.50	SEWER HOUSE
256	8" DIA.	371.86	372.18	376.18	SEWER HOUSE
257	8" DIA.	376.20	377.20	381.00	SEWER HOUSE
258	8" DIA.	379.10	379.70	381.50	SEWER HOUSE
259	8" DIA.	371.37	372.37	376.17	SEWER HOUSE
260	8" DIA.	373.70	374.70	377.50	SEWER HOUSE
261	8" DIA.	373.10	374.10	376.50	SEWER HOUSE
262	8" DIA.	380.30	380.70	384.80	SEWER HOUSE
263	8" DIA.	373.40	374.40	378.00	SEWER HOUSE
264	8" DIA.	373.54	374.54	378.00	SEWER HOUSE
265	8" DIA.	373.27	374.27	378.50	SEWER HOUSE
266	8" DIA.	373.14	374.14	378.00	SEWER HOUSE
267	8" DIA.	376.60	377.60	381.00	SEWER HOUSE
268	8" DIA.	371.54	372.54	376.54	SEWER HOUSE
269	8" DIA.	371.12	372.12	376.22	SEWER HOUSE
270	8" DIA.	368.93	369.93	372.83	SEWER HOUSE
271	8" DIA.	368.30	369.30	372.40	SEWER HOUSE
272	8" DIA.	362.10	363.10	366.00	SEWER HOUSE
273	8" DIA.	362.00	363.00	366.00	SEWER HOUSE
274	8" DIA.	362.50	363.50	366.50	SEWER HOUSE
275	8" DIA.	362.30	363.30	366.30	SEWER HOUSE
276	8" DIA.	357.8	358.8	360.58	SEWER HOUSE
277	8" DIA.	351.50	351.70	355.50	SEWER HOUSE
278	8" DIA.	352.13	352.77	356.07	SEWER HOUSE
279	8" DIA.	352.52	353.26	354.26	SEWER HOUSE
280	8" DIA.	353.46	354.06	356.06	SEWER HOUSE
281	8" DIA.	352.64	353.54	356.54	SEWER HOUSE
282	8" DIA.	352.40	353.40	357.00	SEWER HOUSE
283	8" DIA.	352.00	353.00	356.00	SEWER HOUSE
284	8" DIA.	352.07	353.07	357.07	SEWER HOUSE
285	8" DIA.	364.37	367.00	370.40	SEWER HOUSE
286	8" DIA.	364.14	367.50	368.50	SEWER HOUSE
287	8" DIA.	352.28	353.62	363.62	SEWER HOUSE
288	8" DIA.	356.35	359.67	360.67	SEWER HOUSE
289	8" DIA.	358.17	359.81	359.81	SEWER HOUSE
290	8" DIA.	354.64	359.00	360.00	SEWER HOUSE
291	8" DIA.	356.20	356.06	360.06	SEWER HOUSE
292	8" DIA.	357.06	358.22	363.22	SEWER HOUSE
293	8" DIA.	359.22	360.10	364.50	SEWER HOUSE
294	8" DIA.	362.76	363.30	367.50	SEWER HOUSE
295	8" DIA.	356.08	359.00	363.00	SEWER HOUSE
296	8" DIA.	356.16	359.44	360.44	SEWER HOUSE
297	8" DIA.	360.82	361.30	363.50	SEWER HOUSE
298	8" DIA.	360.75	370.40	374.20	SEWER HOUSE
299	8" DIA.	378.21	378.81	382.81	SEWER HOUSE
300	8" DIA.	380.30	381.4	384.4	SEWER HOUSE



SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 OF THE SPECIFICATIONS AND IS SHOWN ON P. 52-16A

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
James M. Helms 12/23/92
 SOIL CONSERVATION SERVICES DATE

THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John L. Helms 12/23/92
 SOIL CONSERVATION DISTRICT DATE

Type of Building: Single Family Detached
 No. of Lots/Parcels: 38
 No. of Water House Connections: 38
 No. of Sewer House Connections: 38
 Drainage Area: Little Patuxent
 Treatment Plant: *Edgemoor, W. R. R. 1.08, 2.08, 3.08, 4.08*

SCALE: 1"=60'

BENCHMARK INFORMATION
 1) HOWARD COUNTY CONTROL STA. 3241002 CONC. MON. @ SURF 3.5' E OF EDGE OF RT. 40 EAST 11.3' E OF EAST END OF CONC. BRIDGE ELEV. = 354.602
 2) HOWARD COUNTY CONTROL STA. 3241003 CONC. MON. @ SURF 8.4' N. OF EDGE OF RT. 40 EAST 12.4' E OF E. EDGE OF CROSSLINK @ DOGWOOD DRIVE ELEV. = 361.771

GRAY ROCK FARM SECTION - 6
 HOWARD COUNTY, MARYLAND
CONTRACT NO: 24-3247-D

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
James Z. Chen 1/5/93
 DIRECTOR OF PUBLIC WORKS
Robert A. ... 1/5/93
 DATE

Boender Associates
 3230 BETHANY LANE
 BELTSVILLE CITY, MD 21034
 (301) 453-7777

DATE	BY	NO.	REVISION
JULY, 1992			

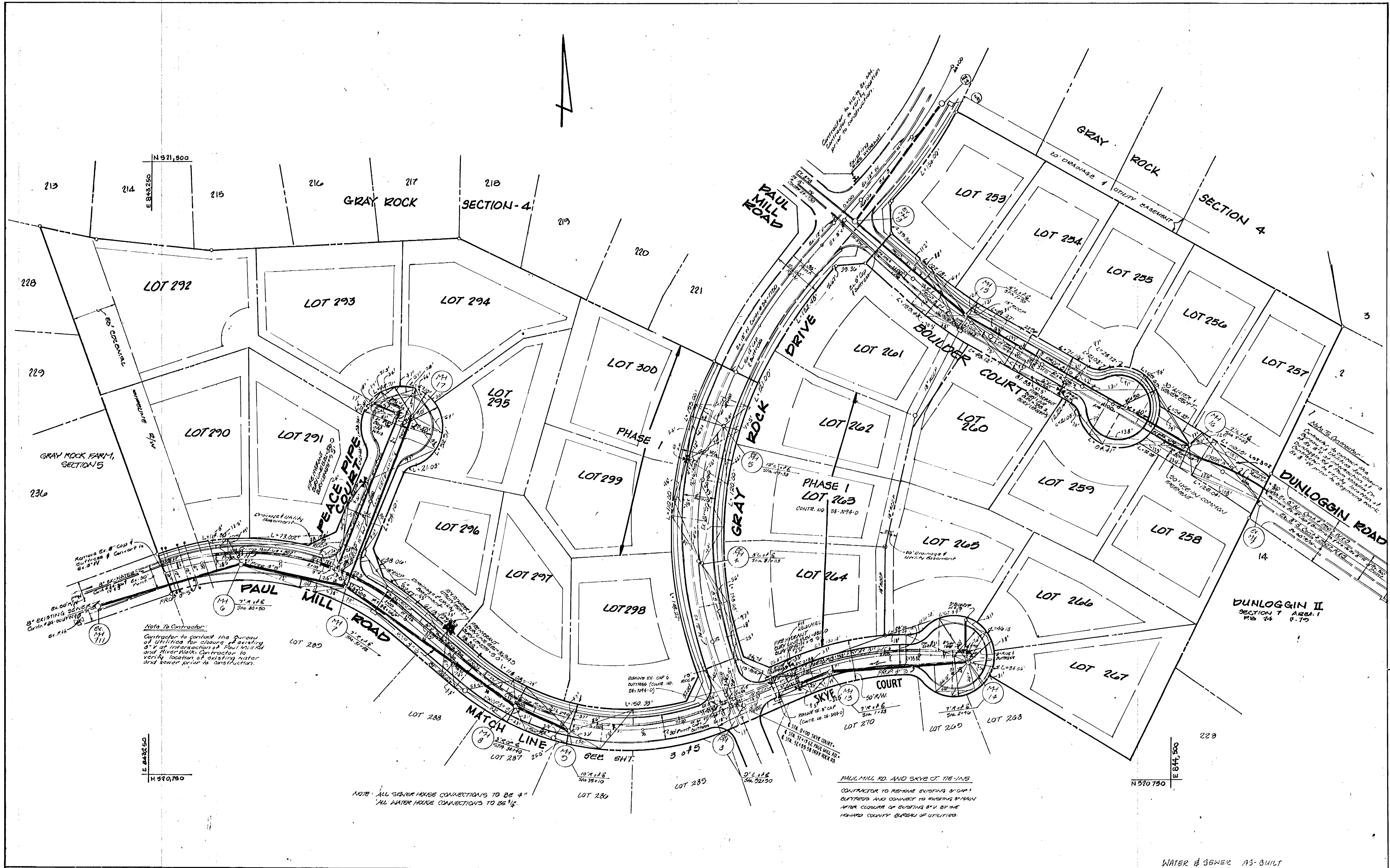
TITLE SHEET
 600 SCALE MAP NO. 24, BLOCK 13

GRAY ROCK FARM, SECTION 6, PHASE 2
 PHASE 2 - LOTS 283-281, 283-270, 276-283, 286-298, 300
 2nd ELECTION DISTRICT
CONTRACT NO. 24-3247-D
 SCALE AS SHOWN
 SHEET 1 OF 5
 DATE: 5/10/92

- GENERAL NOTES
- PART I - WATER
- 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 or the Contractor's expense.
 - All horizontal controls are based on Maryland State Coordinates.
 - All vertical controls are based on U.S.C.S. datum.
 - All pipe elevations shown are invert elevations.
 - Clear all utilities to a minimum of 6". Clear all poles by 2' - 0" minimum or funnel as required. The owner has contacted the utility 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 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.
 - For details not shown on the drawings, and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (Latest Edition). 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.
 - Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:
 State Highway Administration 531-5533
 BGE Co. Contractor Services 550-4820
 BGE Co. Under Ground Damage Control 787-9058
 M&E Utility 1-800-237-7777
 Colonial Pipeline Co. 725-1390
 Howard County Department of Public Works 313-4900
 Bureau of Utilities
 - 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.
- PART II - WATER
- All water mains to be D.I.P. Class 52 unless otherwise noted.
 - Top of all water mains to have a minimum of 3'-1" cover unless otherwise noted.
 - Valves adjacent to tees shall be strapped to tees.
 - All fittings shall be buffed 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 fire elevations shown on the drawings. All fire hydrants shall be replaced and buffed with concrete in accordance with Standard Detail 52.12.2. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 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 plans or in specifications.
- PART III - SEWER
- All sewer mains shall be DIP, RCP, VCP, CSPX, RCCP, and 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.
 - Force mains shall be D.I.P. only.
 - Manholes shown with 12" and 18" walls are for brick manholes only.
 - Manholes designated W.T. in plan and profile shall have watertight frame and cover. Standard Detail 05.32. Where watertight manhole frame and cover is used, set top of frame 1" - 6" above finished grade unless otherwise noted on the drawings.
 - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

NOTE: CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/LARKING OPERATION IN COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH OPEN REQUIREMENTS PER SECTION 18.11A(1) OF THE HOWARD COUNTY CODE.

ITEMS	QUANTITIES ESTIMATED	QUANTITIES AS-BUILT	MANUFACTURER/BRAND
12" x 8" CROSS	1 EA.	1 EA.	GRIFFEN
4" VALVE	2 EA.	2 EA.	MUELLER
4" WATER	110 LF.	117 LF.	GRIFFEN
8" O.I.P.	150 LF.	151 LF.	GRIFFEN
8" SEWER	1801 LF.	1801 LF.	MANNVILLE
MUST OUTREES	3 EA.	3 EA.	
5" BLOWOFF	1 EA.	2 EA.	MUELLER
34" M.H.C.	1108 LF.	1109 LF.	MUELLER
6" S.H.C.	110 LF.	110 LF.	MANNVILLE
5" VALVE	5 EA.	5 EA.	MUELLER
8" VALVE	1 EA.	2 EA.	MUELLER
8" x 8" TEE	1 EA.	1 EA.	GRIFFEN
8" x 8" TEE	3 EA.	1 EA.	GRIFFEN
8" x 8" TEE	1 EA.	5 EA.	
8" VALVE	1 EA.	1 EA.	MID-ATLANTIC
8" VALVE	1 EA.	3 EA.	MID-ATLANTIC
FIRE HYDRANT	5 EA.	5 EA.	MUELLER
6" WATER	45 LF.	45 LF.	GRIFFEN
6" WATER	2114 LF.	2114 LF.	GRIFFEN
	QUANTITIES	TYPE	MANUFACTURER/BRAND
			AS-BUILT



Note To Contractor:
 Contractor to contact the Bureau of Utilities for closure of existing 8" V at intersection of Paul Mill Rd and River Walk. Contractor to verify location of existing water and sewer prior to construction.

NOTE: ALL SEWER HOUSE CONNECTIONS TO BE 4"
 ALL WATER HOUSE CONNECTIONS TO BE 1/2"

PAUL MILL RD. AND SKYE CT. TIE-INS
 CONTRACTOR TO REMOVE EXISTING 8" CAP OUTFALLS AND CONNECT TO EXISTING 8" MAIN AFTER CLOSURE OF EXISTING 8" V BY THE HOWARD COUNTY BUREAU OF UTILITIES.

WATER & SEWER AS-BUILT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 James M. Shinn, Director of Public Works
 Michael A. Williams, Chief Bureau of Utilities
 1/5/92 DATE

Boender Associates
 ENGINEERS, PLANNERS, SURVEYORS
 3230 BETHANY LANE
 ELLICOTT CITY, MD. 21043
 (301) 465-7171

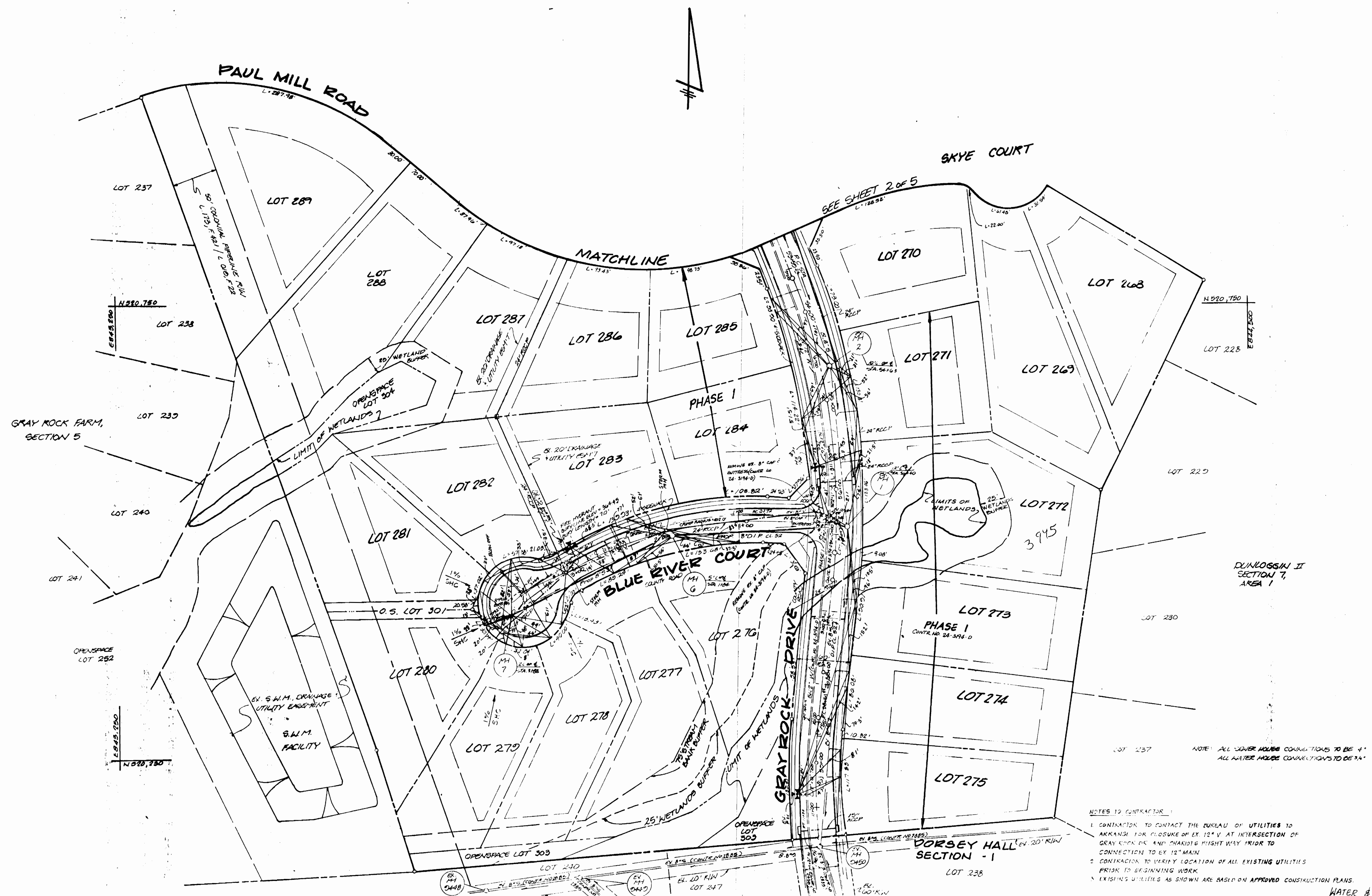
DATE	BY	NO.	REVISION
JULY, 1992	BY	NO.	

WATER & SEWER PLAN
 600 SCALE MAP NO. 24, BLOCK 113

GRAY ROCK FARM, SECTION 4, PHASE 2
 PHASE 2; LOTS 253-261, 263-270, 276-283, 286-298, 302, 304
 2ND ELECTION DISTRICT
 CONTRACT NO. 24-3247-D

SCALE: 1" = 50'
 SHEET: 2 OF 5
 15/92

3247 WS/3 GRAY ROCK FARM



NOTE: ALL SEWER HOUSE CONNECTIONS TO BE 4"
ALL WATER HOUSE CONNECTIONS TO BE 3/4"

NOTES TO CONTRACTOR:
1. CONTRACTOR TO CONTACT THE BUREAU OF UTILITIES TO ARRANGE FOR CLOSURE OF EX. 12" V. AT INTERSECTION OF GRAY ROCK DR. AND CHARLES FIGHT WAY PRIOR TO CONNECTION TO EX. 12" MAIN.
2. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK.
3. EXISTING UTILITIES AS SHOWN ARE BASED ON APPROVED CONSTRUCTION PLANS.

WATER & SEWER AS-BUILT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
James M. Shinn, Director of Public Works
1/5/93
DATE

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

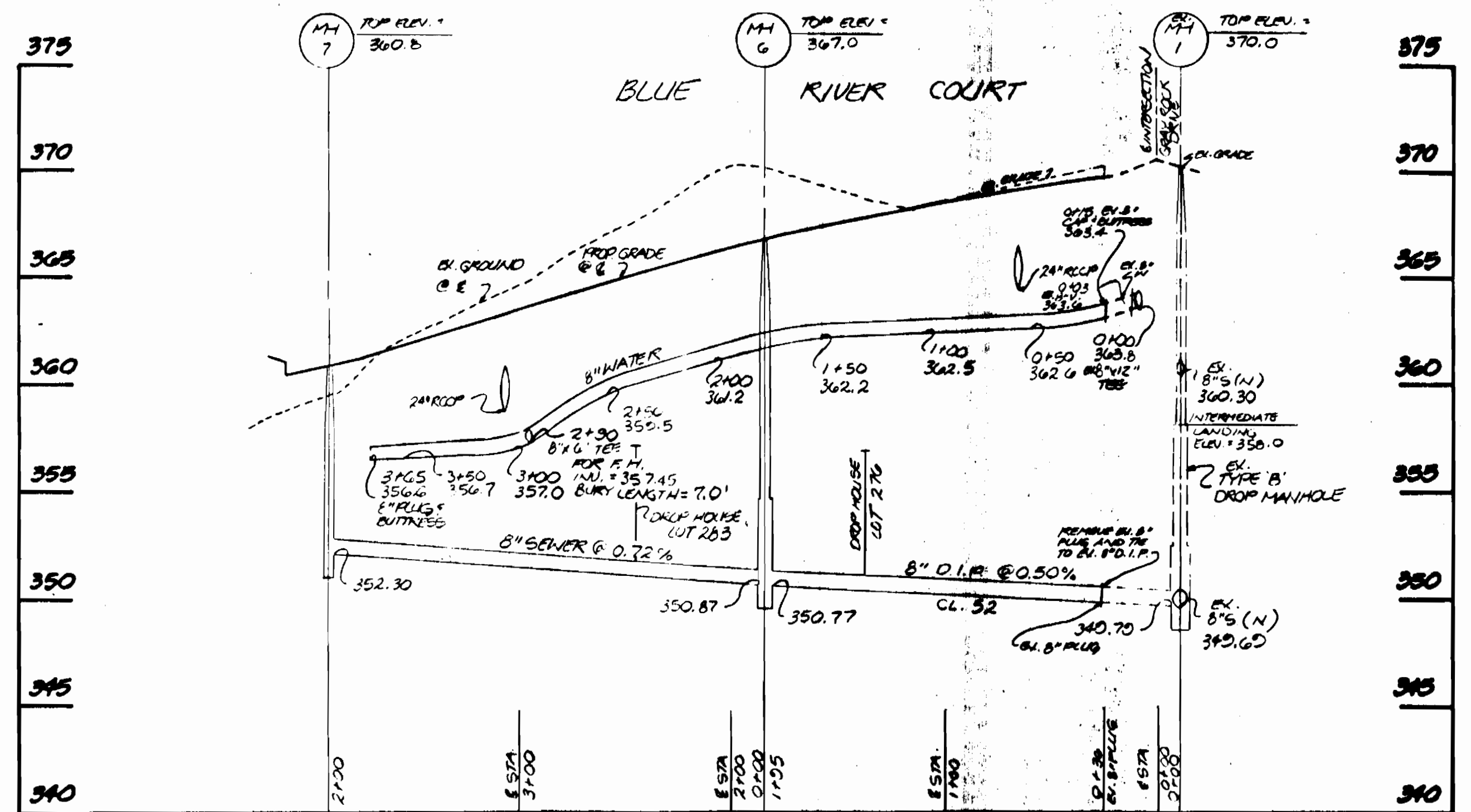
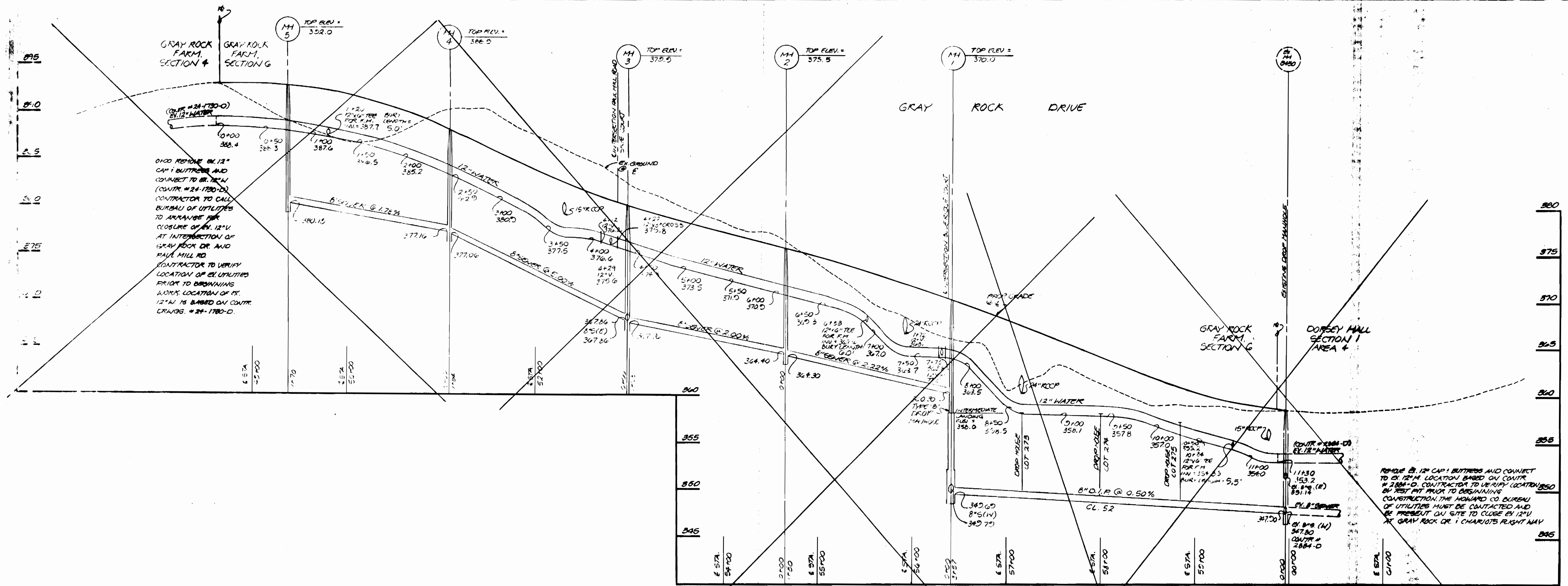
DESIGNED BY	JJB/JCO	DATE	JULY, 1992
DRAWN BY	JCO	DATE	
CHECKED BY		DATE	
DATE	JULY, 1992	BY	NO.
REVISION		DATE	

WATER & SEWER PLAN
600 SCALE MAP NO. 24, BLOCK 170

GRAY ROCK FARM, SECTION G, PHASE 2
PHASE 2 - LOTS 283-281, 265-270, 276-279, 266-268, 272, 264
2nd ELECTION DISTRICT
CONTRACT NO. 24-3247-D

Rev

3247 WS/4 GRAY ROCK FARM



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

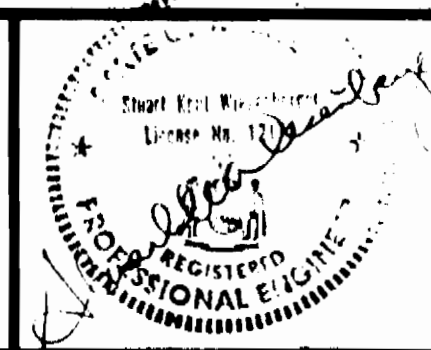
[Signature] 1/5/92 DATE
DIRECTOR OF PUBLIC WORKS

[Signature] 8/22/92 DATE
CHIEF, BUREAU OF ENGINEERING

[Signature] 1/5/93 DATE
CHIEF, LAND DEVELOPMENT DIVISION

Boandar Associates
ENGINEERS - PLANNERS - SURVEYORS

3230 BETHANY LANE
ELLCOTT CITY, MARYLAND 21042
(410) 485-7777 FAX: (410) 485-7988



DES:	J.S.B./J.C.O.
DRN:	J.C.O.
CHK:	
DATE:	JULY 1992
BY:	No.
REVISIONS:	
DATE:	

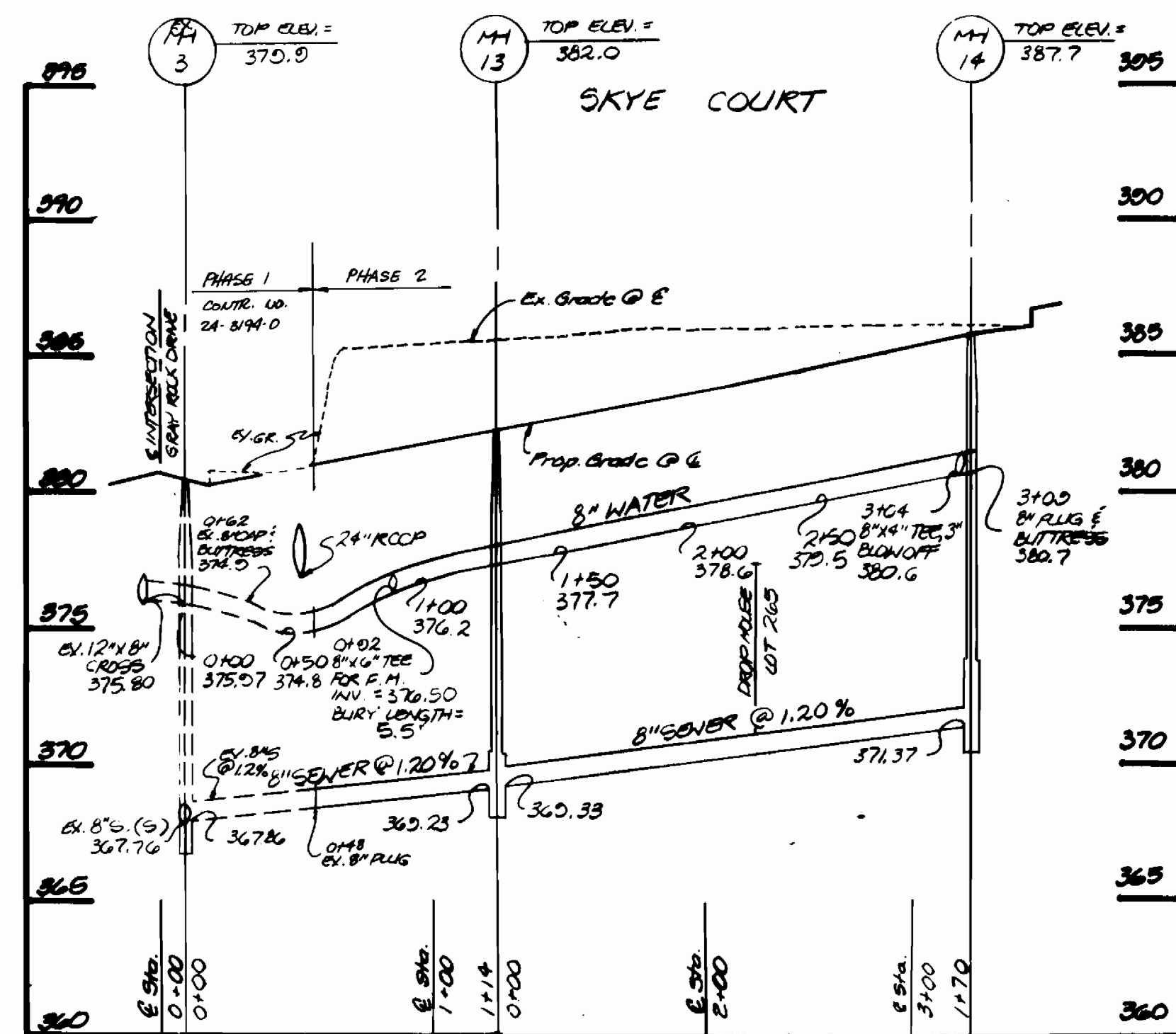
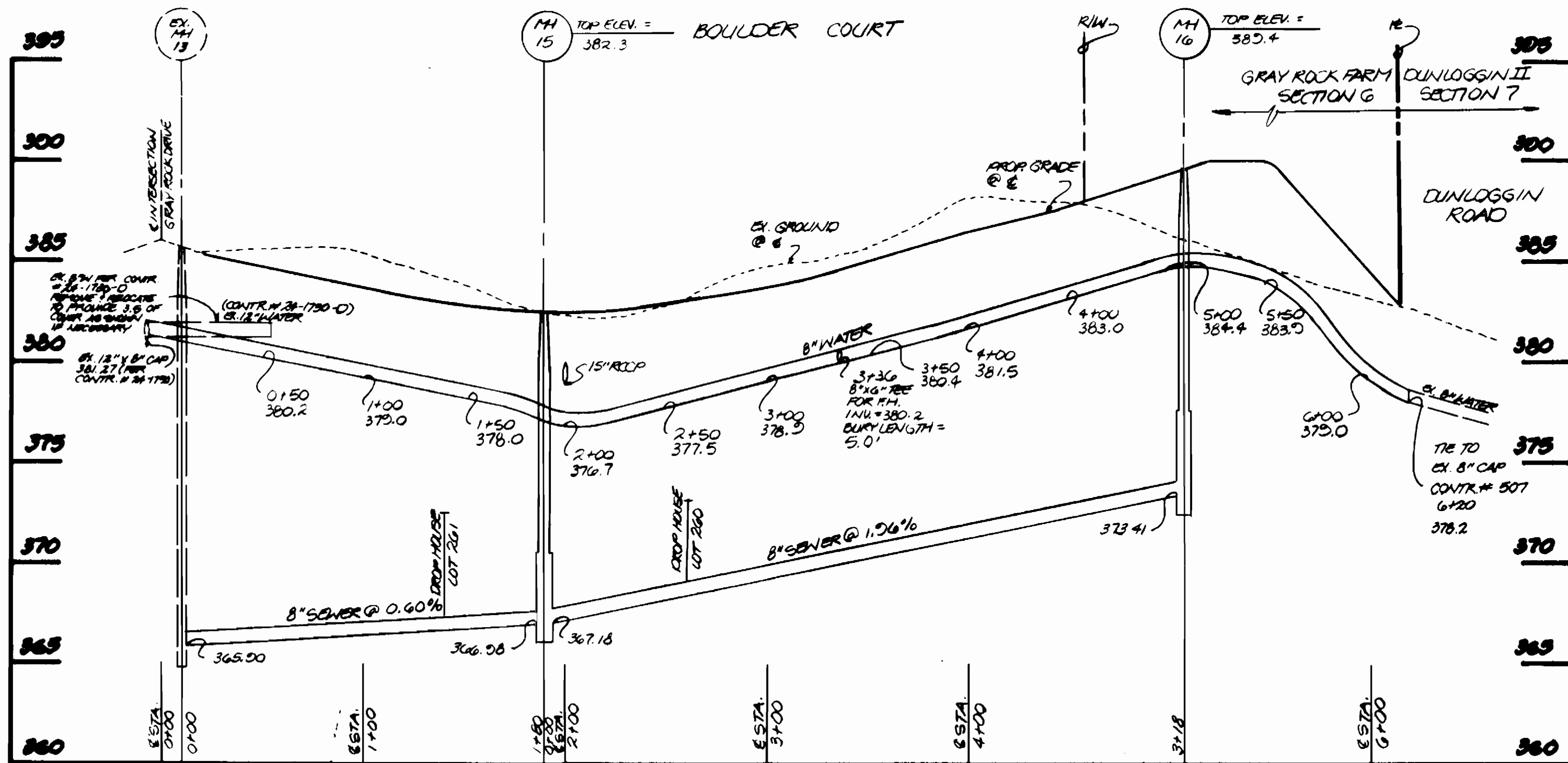
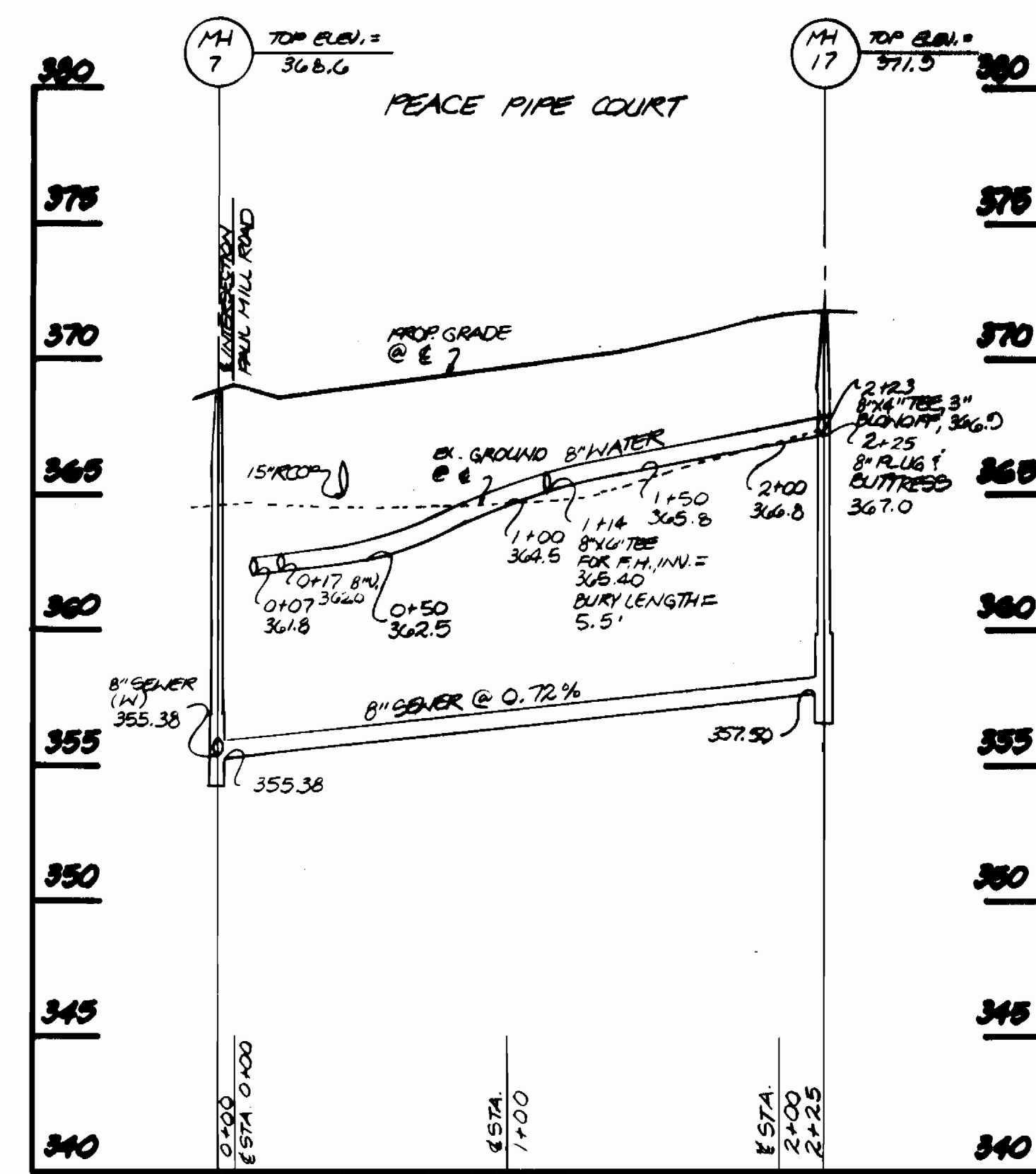
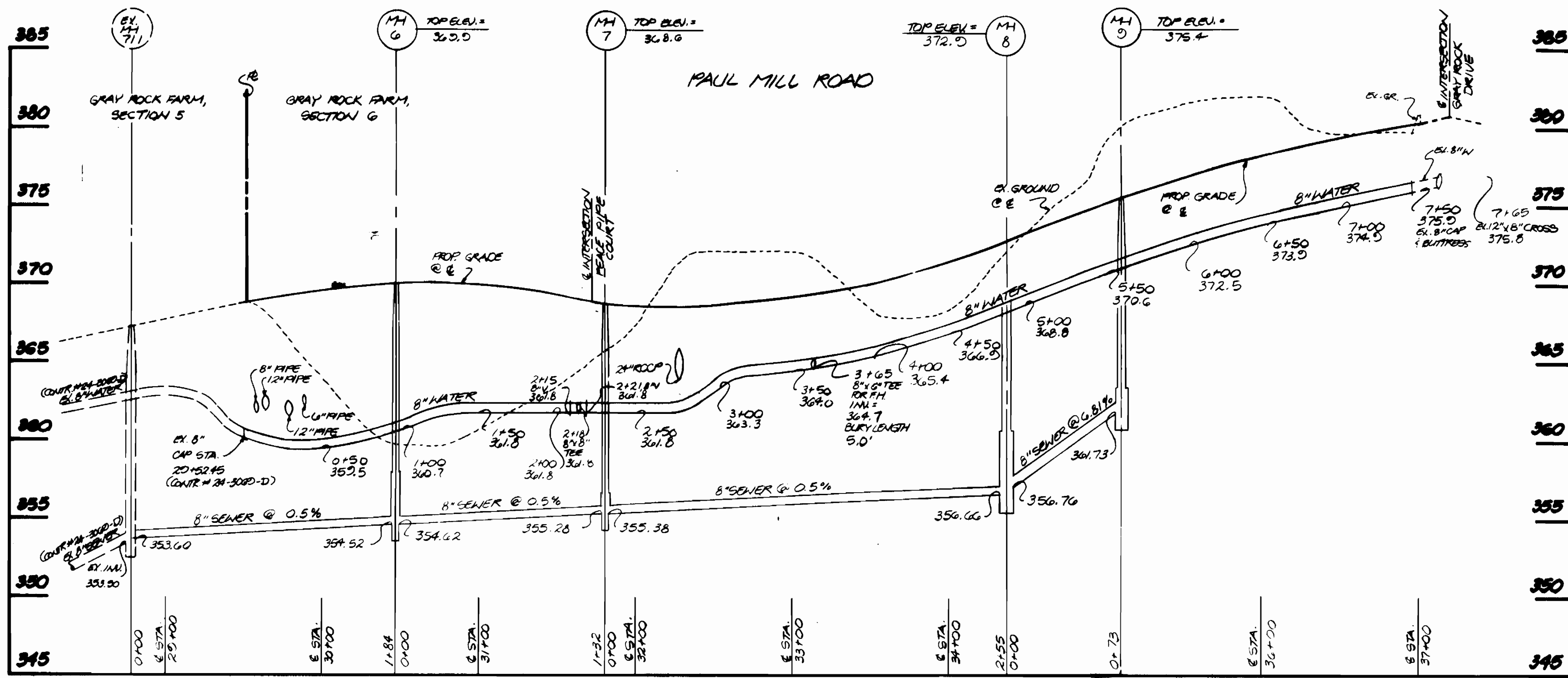
WATER AND SEWER PROFILES

600 SCALE MAP NO. 24, BLOCK 13

GRAY ROCK FARM, SECTION 6, PHASE 2
PHASE 2 - LOTS 268-271, 265-270, 276-283, 286-289, 292, 304

2nd ELECTION DISTRICT
CONTRACT NO. 24-3247-D

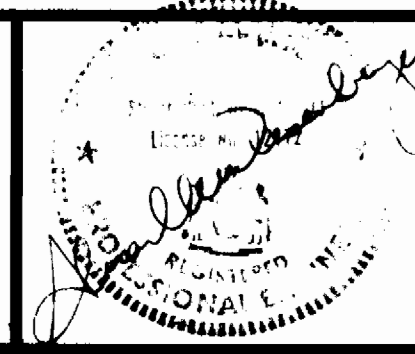
SCALE:
VERT. 1"=5'
HOR. 1"=50'
SHEET
4 OF 5



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* DATE: 1/5/92
 Chief, Bureau of Engineering: *[Signature]* DATE: 1-5-92
 Chief, Bureau of Utilities: *[Signature]* DATE: 1-31-92
 Chief, Land Development Division: *[Signature]* DATE: 1/5/92

Boander Associates
 ENGINEERS - PLANNERS - SURVEYORS
 3230 BETHANY LANE
 ELLICOTT CITY, MARYLAND 21042
 (410) 485-7777 FAX: (410) 485-7988



DES: J.S.B.N.C.O.
 DRN: J.C.A.
 CHK:
 DATE: JULY, 1992
 BY: No. DATE: 600 SCALE MAP NO. 24, BLOCK 15

WATER AND SEWER PROFILES

GRAY ROCK FARM, SECTION G, PHASE 2
 PHASE 2 - LOTS 265-261, 265-270, 276-283, 286-298,
 2ND. ELECTION DISTRICT 302, 304
 CONTRACT NO. 24-3147-0

SCALE: 1"=5'
 MAP: 1"=5'
 SHEET: 8 OF 8