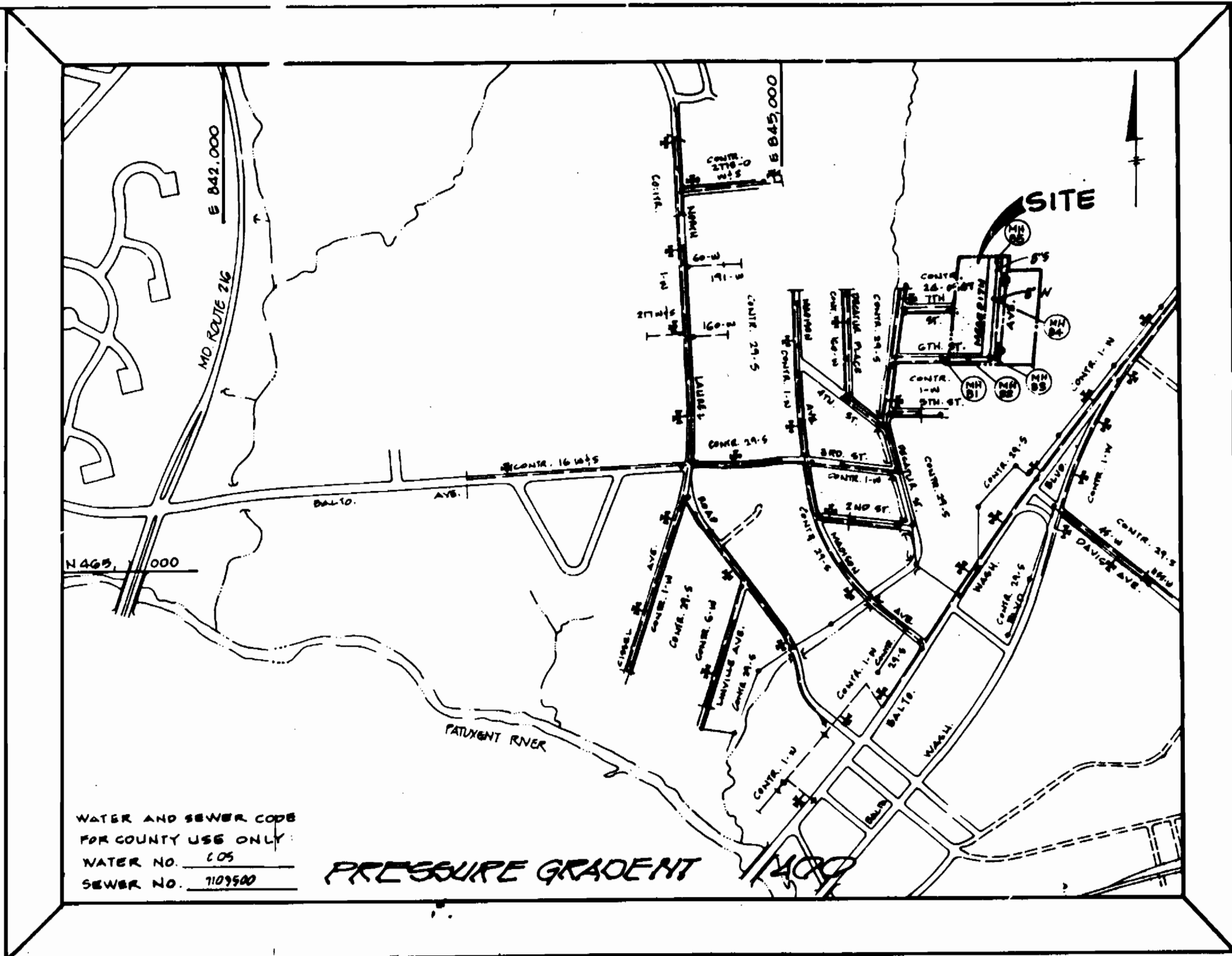


QUANTITIES			
ITEM	EST'D	AS-BUILT	SUPPLIER
6" WATER	730 FT.	714 L.F.	GRIFFIN PIPE CO.
6" WATER	-	24 L.F.	GRIFFIN PIPE CO.
6" W.H.C.	518 FT.	570 L.F.	HOWELL METALS
1" W.H.C.	-	-	-
FIRE HYDRANTS	2 EA.	2 EA.	MUELLER CO.
6" S. S. VALVE	1 EA.	1 EA.	GRIFFIN PIPE CO.
6" S. S. VALVE	704 FT.	686 L.F.	J.M. MANUFACTURING
6" S. S. VALVE (RIP)	-	-	-
MANHOLES	5 EA.	5 EA.	ATLANTIC CONCRETE
6" S. S. VALVE	-	-	-
6" S. S. VALVE	4 EA.	4 EA.	MUELLER CO.
4" S. S. VALVE	106 FT.	518 L.F.	J.M. MANLFA
6" P.H. VALVES	2 EA.	2 EA.	MUELLER CO.

BENCHMARKS
 BM #102 - ELEV. 100.71
 HUB WITH TACK
 BM #103 - ELEV. 101.74
 HUB WITH TACK



TYPE OF BUILDINGS	RESIDENTIAL
NUMBER OF LOTS	30
NUMBER OF WATER HOUSES	30
NUMBER OF SEWER HOUSES	30
DRAINAGE AREA	1.00
TREATMENT PLANT	LPW QMC

VIGINITY MAP
 SCALE: 1" = 100'
GENERAL NOTES

- PART I**
- 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.C.S. data.
 - All pipe elevations shown are invert elevations.
 - Clear all utilities by a minimum of 4". Clear all poles by 2' - 0" minimum or tunnel 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 (M) 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.
 - 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, VCPX, CPSP, RCP 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 covers, Standard Detail 05.92. 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.

- 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'-1/2' 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 1000 and 1005 of the standard specifications.
- NOTE:**
 THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD CO. AT (410) 313-2450 AT LEAST FIVE WORKING DAYS PRIOR TO ANY OPEN CUT ON SIXTH STREET FOR CONSTRUCTION OF WATER AND SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE PLANS WILL CONSTITUTE COMPLIANCE WITH DEPARTMENT OF PUBLIC WORKS REQUIREMENTS SECTION 10-114(4) OF THE HOWARD COUNTY CODE.

SEWER HOUSE CONNECTIONS AT PIER LINE

LOT NUMBER	IN. ELEVATION
2	190.44
3	197.10
4	198.35
5	201.64
6	203.95
7	206.18
8	208.07
9	211.73
10	214.35
11	217.08
12	(196.70)
13	198.75
14	202.27
15	204.31
16	206.18
17	209.39
18	212.00
19	214.51
20	217.50
21	220.20

MANHOLE SCHEDULE

NUMBER	TYPE	LOCATION	TOP EL.
MH 81	6'-5" TEE	2100 SIXTH ST. 19 RT.	190.00
MH 82	6'-5" TEE	1157 SIXTH ST. 6 RT.	204.17
MH 83	6'-5" TEE	0145 MERCEDITH 7 LT.	204.17
MH 84	6'-5" TEE	2175 MERCEDITH 7 LT.	212.41
MH 85	6'-5" TEE	2110 MERCEDITH 7 LT.	229.50

WATER APPURTENANCES FROM 6"

6" VALVE	2+97 SIXTH ST. 1 RT.
F.H. TEE	4+95 SIXTH ST. 7 RT.
6" CAP	0+195 MERCEDITH 7 RT.
6" VALVE	0+225 MERCEDITH 7 RT.
6" X 8" TEE	0+315 MERCEDITH 7 RT.
6" VALVE	0+51 MERCEDITH 7 RT.
F.H. TEE	3+96 MERCEDITH 7 RT.
6" CAP	4+86 MERCEDITH 7 RT.

SEDDIMENT 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 DRAWINGS AND SEDIMENT CONTROL PLAN P-87-198.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND METEOROLOGICAL REASSESSMENT:

J.A. Walden 4/15/93
 SOIL CONSERVATION SERVICE

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

[Signature] 4/15/93
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

[Signature] 11/15/93
 DIRECTOR OF PUBLIC WORKS

[Signature] 11/15/93
 CHIEF, BUREAU OF ENGINEERING

[Signature] 11/15/93
 CHIEF, BUREAU OF UTILITIES

[Signature] 11/15/93
 CHIEF, LAND DEVELOPMENT DIVISION

DEWBERRY & DAVIS
 ARCHITECTS ENGINEERS PLANNERS SURVEYORS
 10001 DEREKWOOD LANE, SUITE 100
 LANHAM, MARYLAND 20706
 (301) 731-5551

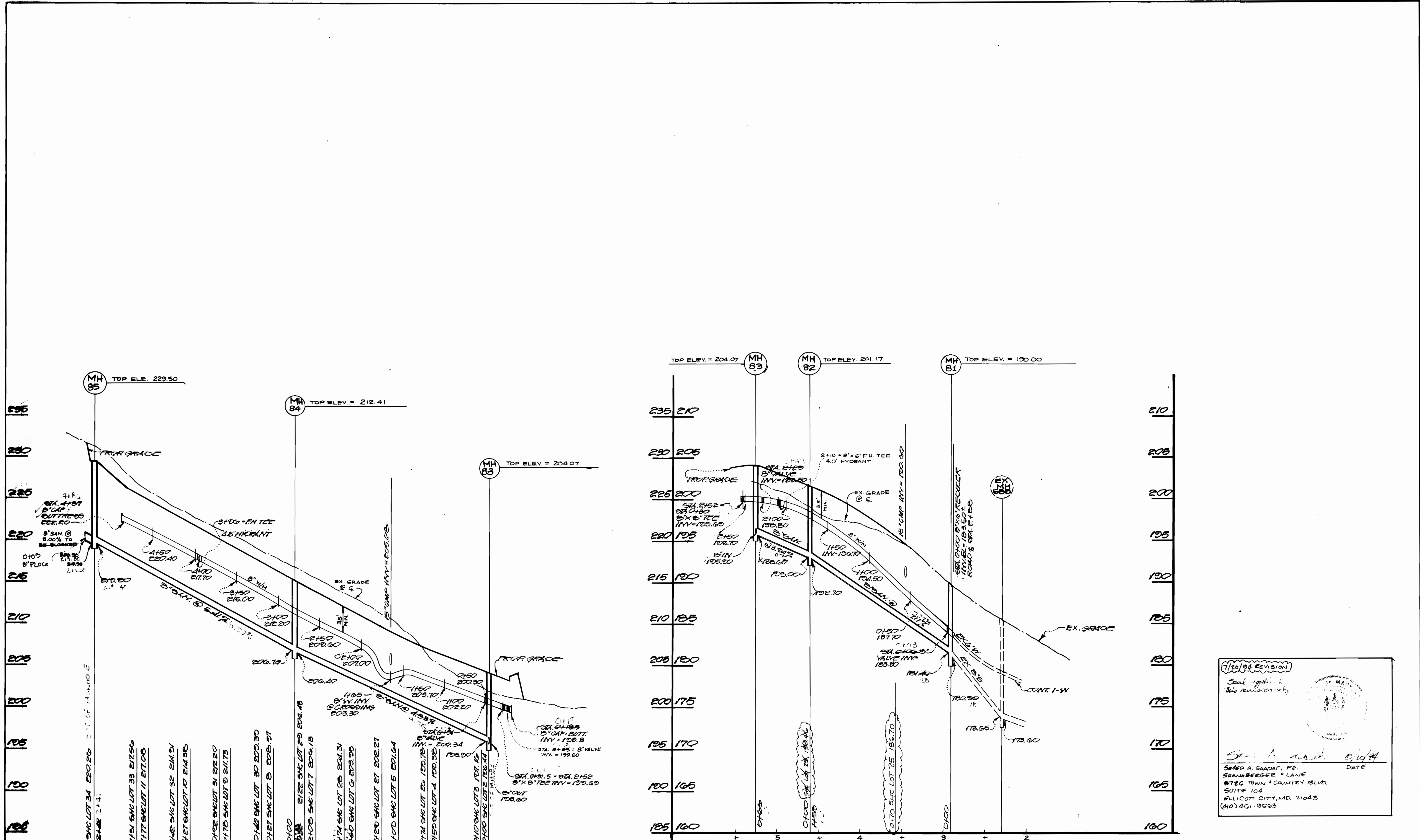


DES:	6/11/93	RELOCATION OF 6" WATER MAIN AND 6" S.W. FOR LOT 25, BLOCK 8
DRN:		
CHK:		
DATE:		
BY:	NO.	REVISION
DATE:	6/01/93	MAP NO. 50
		BLOCK NO. 8

PLAN
WATER & SEWER MAINS

CONTRACT NO. 2A-1700-D
NORTH LAUREL PARK
 BLOCK 5 LOTS 6-11 AND BLOCK 6 LOTS 25-34
 CONTRACT NO. 2A-1700-D
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 10 OF 2



7/30/04 REVISION
 Seal required to this revision only.

SHAYED A. SAADAT, PE. DATE 8/10/04
 SHANABERGER & LANE
 8720 TOWN & COUNTRY BLVD.
 SUITE 104
 ELLICOTT CITY, MD 21043
 (410) 401-9563

CONTRACT NO. 2A-1700D
 NORTH LAUREL PARK
 BLOCK 5 LOTS 25-34
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

11/15/93 DATE
 CHIEF, BUREAU OF ENGINEERING

11-12-93 DATE
 CHIEF, LAND DEVELOPMENT DIVISION

DEWBERRY & DAVIS
 ARCHITECTS-ENGINEERS-PLANNERS-SURVEYORS

10001 DEREKWOOD LANE, SUITE 100
 LANHAM, MARYLAND 20706
 (301) 731-5551



DES: ERB	BY: [Signature]	NO. 50	REVISION	DATE 2/99
DRN: WEO				
CHK: MRS				

600' SCALE MAP NO. 50	BLOCK NO. 4
-----------------------	-------------

CONTRACT NO. 2A-1700D
 TAX MAP BLOCK 5 LOTS 25-34
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 2