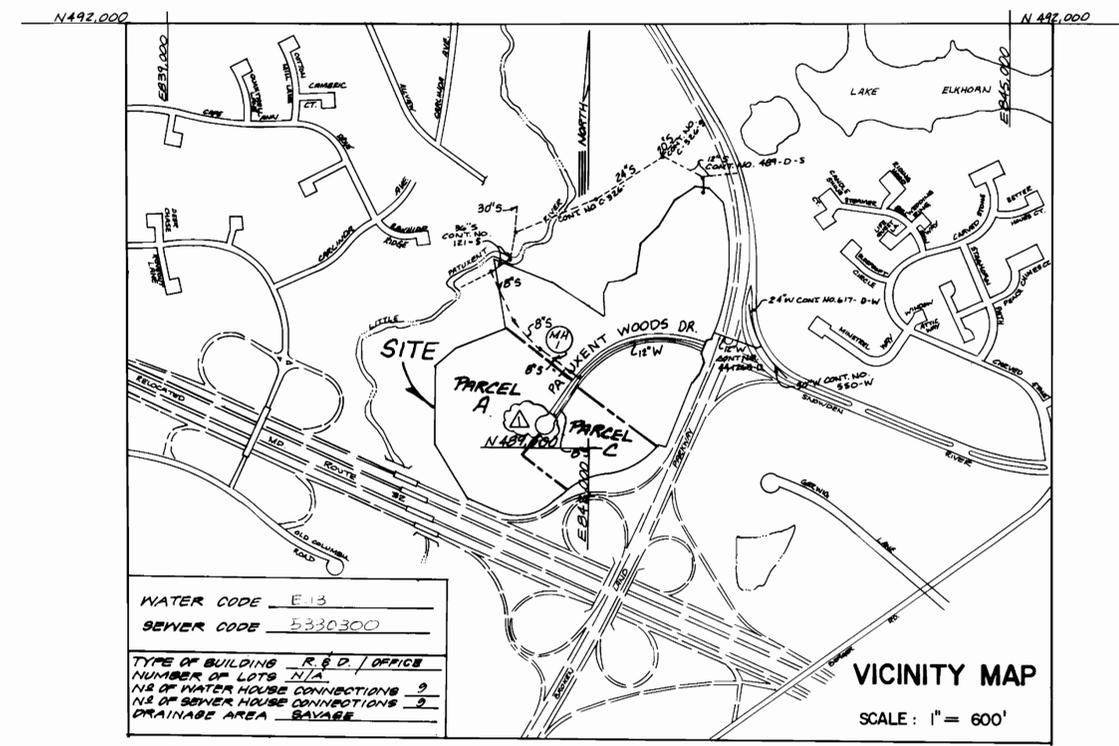


QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
8" WATER	1024'	382	GRIFFIN
6" WATER	874'	866	"
FIRE HYD.	6	6	M+H VALVE CO.
6" FH. VALVES	6	6	M+H VALVE CO.
6" W.H.C.	90	80	SAMPSON
6" VALVES	11	10	M+H VALVE CO.
8x6" TEES	7	7	GRIFFIN
6"x6" TEES	4	5	"
8"x6" RED.	1	1	"
12"x8" RED.	1	1	"
8" 45° BENDS	6	6	"
6" 45° BENDS	1	1	"
8" SEWER	35'	35	HUNTER
MANHOLES	1	1	ATLANTIC PRO. CO.
8" VALVE	1	1	M+H VALVE CO.
3/4" WATER METER	2		
3/4" WATER	70'		



**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 SPECIFICATION.
- 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 & 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.
- ALL SEWER MAINS SHALL BE C.S.P.X., 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.
- 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 ELEVATION 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 AND 1008 OF 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 ABOVE IT.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER STANDARD DETAIL G5.51.
- MANHOLES DESIGNATED WATERTIGHT 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.
- FOR ALL COPPER WATER HOUSE CONNECTIONS UTILIZE FLARED TYPE FITTINGS ONLY.
- STANDARD PAYMENT DEPTH FOR SANITARY MANHOLES = 8'-0"
- MANHOLES SHOWN WITH 12" & 16" WALLS ARE BRICK ONLY.
- PLACE REGULATION "MEN WORKING" & "WARNING" SIGNS AS REQUIRED TO COMPLY WITH "MARYLAND STATE HIGHWAY ADMINISTRATION, MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS".

**VILLAGE OF OWEN BROWN  
SECTION 6 AREA I  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CONTRACT NO. 24-1354-D**

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, SDP-85-130

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.  
 APPROVED: *James McPherson* 6/7/85  
 U.S. SOIL CONSERVATION SERVICE DATE

APPROVED: *Stephen J. Neuber* 6/7/85  
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 DIRECTOR OF PUBLIC WORKS: *James F. Nummy* 6-12-85  
 CHIEF, BUREAU OF UTILITIES: *Richard M. Bringer* 6-11-85  
 CHIEF, LAND DEVELOPMENT DIVISION: *William S. Ryan* 6-11-85  
 DATE

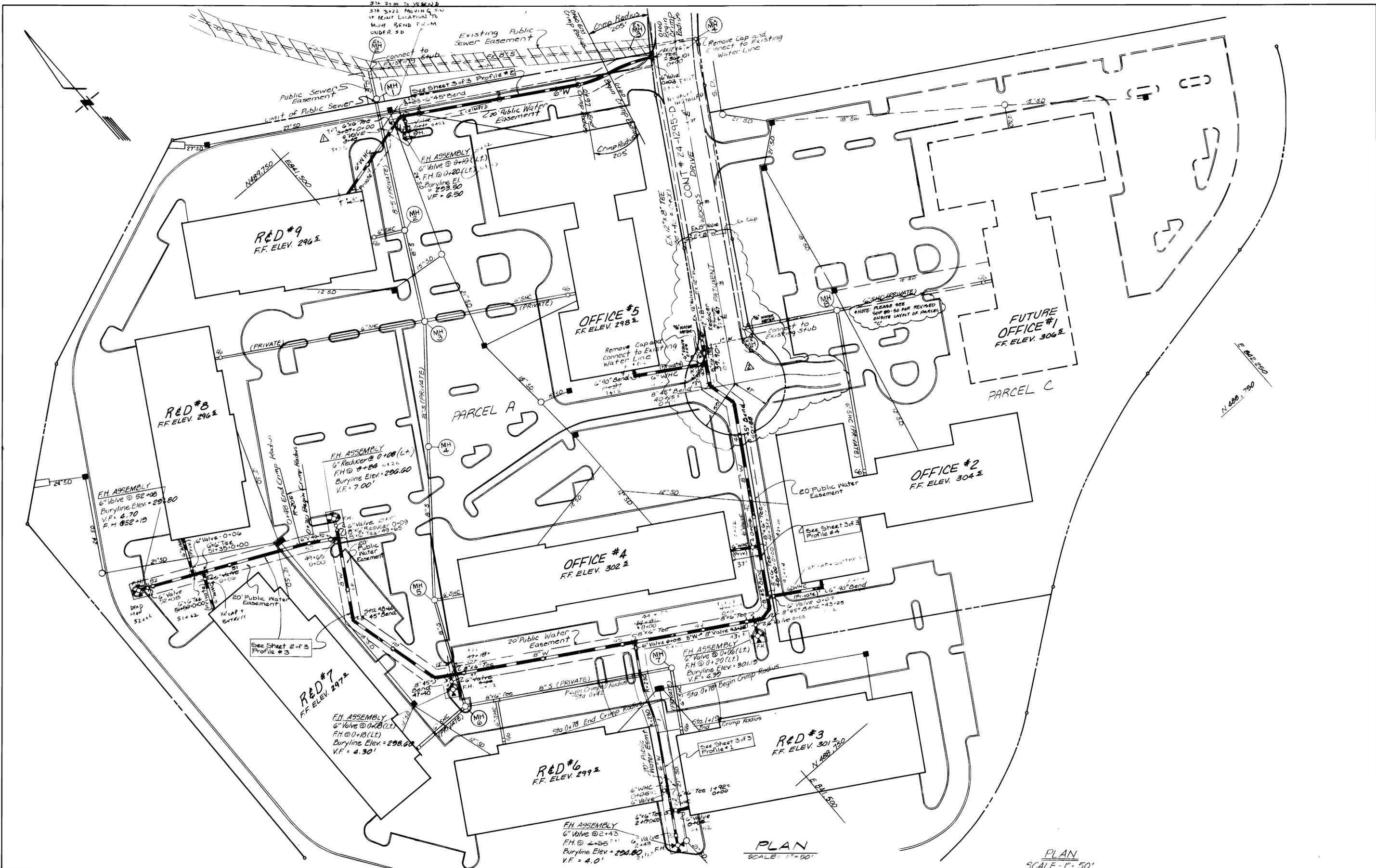
KIDDE CONSULTANTS  
 ENGINEERS, PLANNERS & SURVEYORS  
 8101 SANDY SPRING ROAD / SUITE 101  
 LAUREL, MD. 20707  
 (301) / 792-8086  
*Robert M. May*

DES: DEP			
DRN: JPH			
CHK: MJP			
DATE: 4-85			
BY: NO.			
ADDED TO QUANTITIES CHART 1 REVISED VICINITY MAP 11-28-85			
REVISION			

LOCATION MAP  
 600 SCALE MAP NO. 42 BLOCK NO. 2,3,8&9

VILLAGE OF OWEN BROWN, SECTION 6 AREA I  
 CONTRACT NO. 24-1354-D  
 SIXTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 1 OF 3



PLAN  
SCALE: 1" = 50'

PLAN  
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James F. Williams*  
DIRECTOR OF PUBLIC WORKS  
DATE: 6-12-85

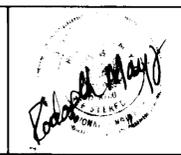
*Robert J. Brown*  
CHIEF, BUREAU OF UTILITIES  
DATE: 6-11-85

KIDDE CONSULTANTS  
ENGINEERS, PLANNERS & SURVEYORS

*Richard J. Kidde*  
CHIEF, BUREAU OF ENGINEERING  
DATE: 6-11-85

*William J. Kidde*  
CHIEF, LAND DEVELOPMENT DIVISION  
DATE: 6-11-85

8101 SANDY SPRING ROAD / SUITE 101  
LAUREL, MD. 20707  
(301) 792-8086



DES: DEP					
DRN: JPH					
CHK: MJP	PRZ	REVISED CU-DE-SAL 1 ADDED 3/4" WATER METERS	11-28-85		
DATE: 4-85	JPH	Revised Stations	8-13-85		
	BY NO.	REVISION	DATE		

WATER & SEWER  
PLAN

600' SCALE MAP NO. 42  
BLOCK NO. 2, 3, 219

VILLAGE OF OWEN BROWN, SECTION 6 AREA I

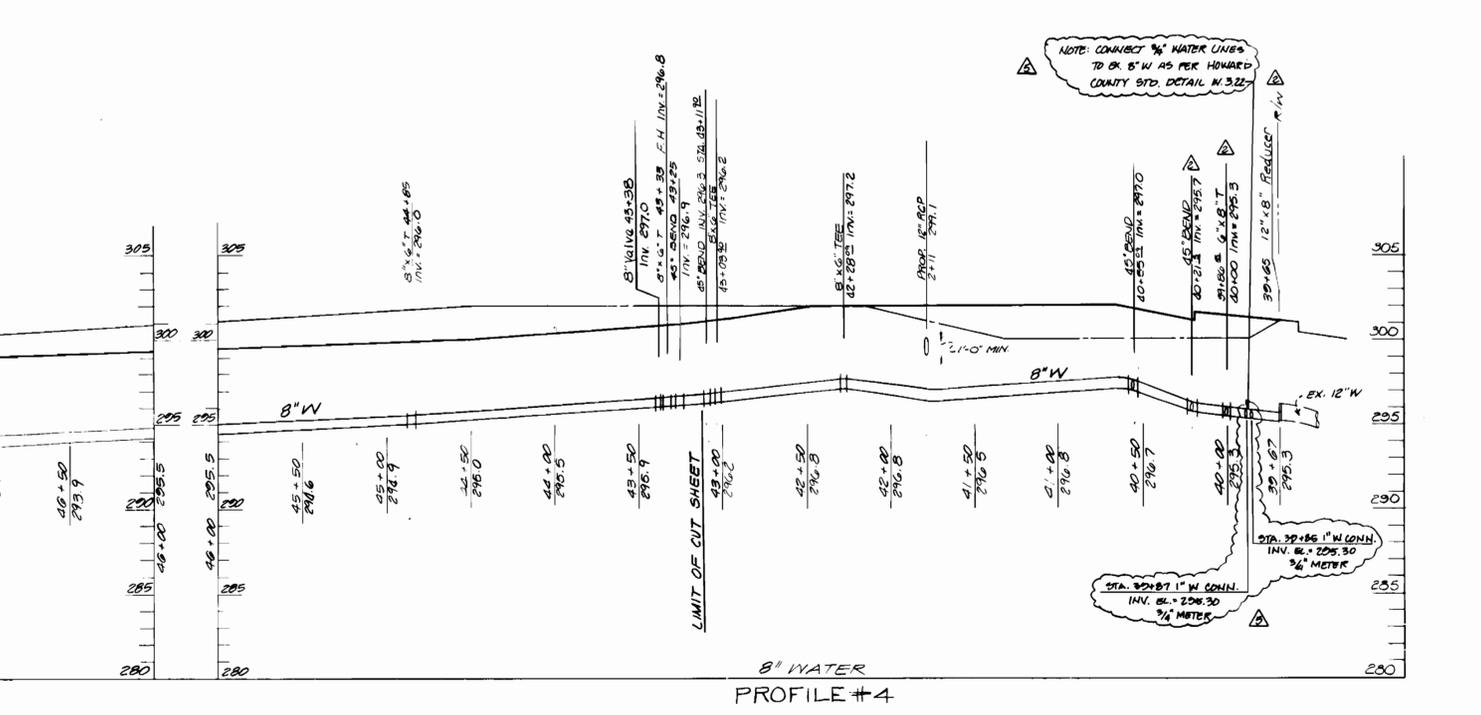
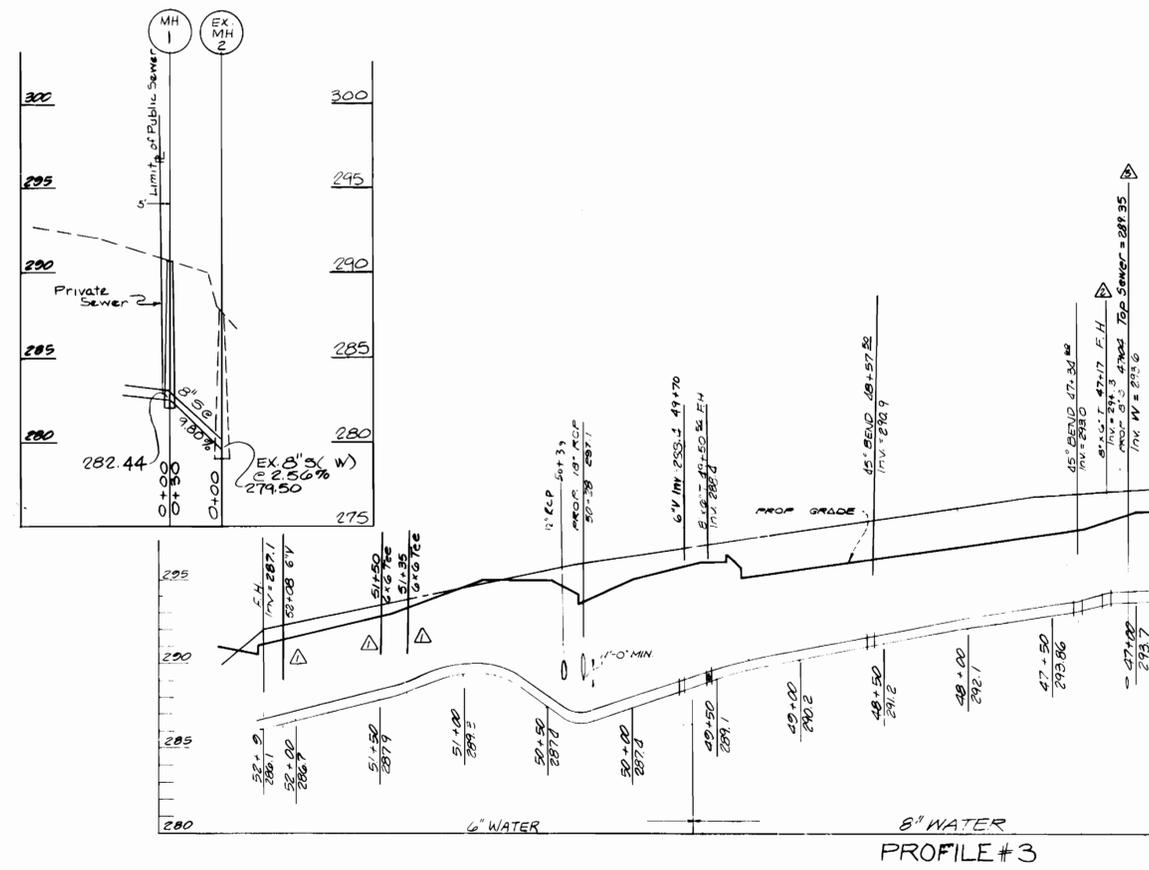
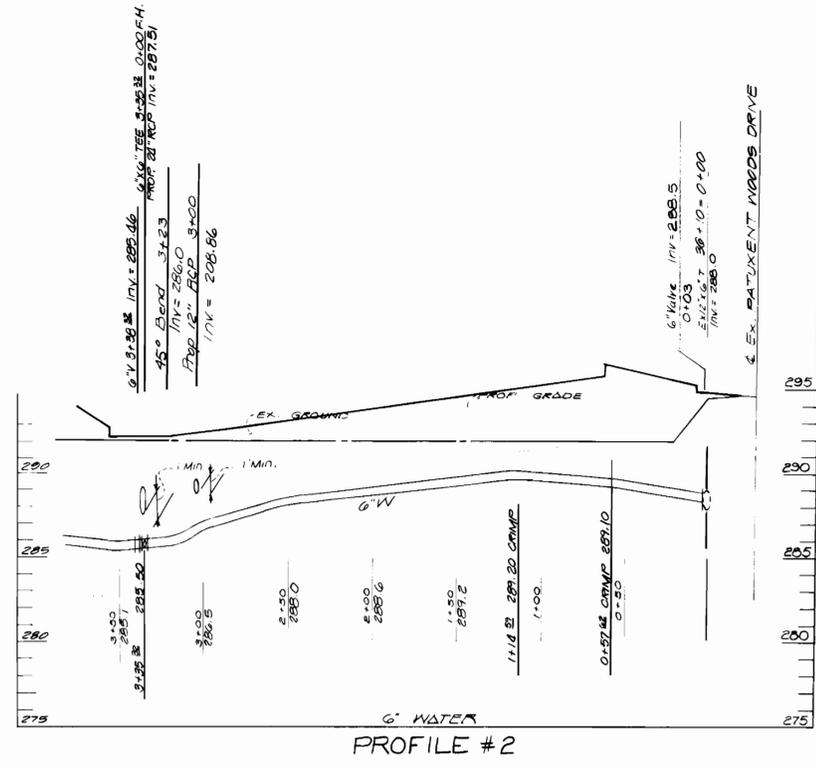
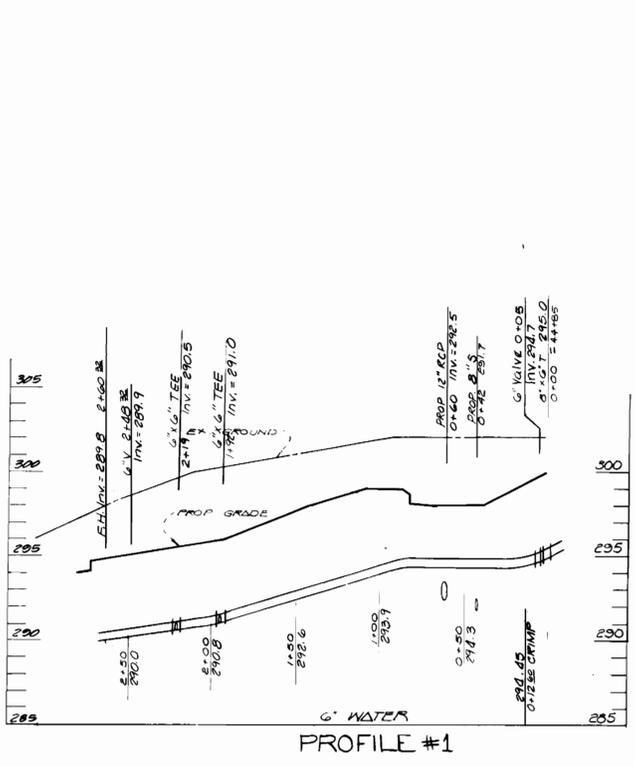
CONTRACT NO. 24-B54-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 3

AS BUILT  
JUNE 19, 1986

168430-06-2/3 2nd



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

ELEVATIONS SEE NOTE # SHEET 1

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Mark F. Nease*  
DIRECTOR OF PUBLIC WORKS  
DATE: 6-11-85

*Mark F. Nease*  
CHIEF, BUREAU OF ENGINEERING  
DATE: 6-11-85

*Mark F. Nease*  
CHIEF, BUREAU OF UTILITIES  
DATE: 6-11-85

KIDDE CONSULTANTS  
ENGINEERS, PLANNERS & SURVEYORS

8101 SANDY SPRING ROAD / SUITE 101  
LAUREL, MD. 20707  
(301) / 792-8086

*Edolph May*

DES: DEP	PRZ	ADDED 1" W CONNECTIONS I NOTE	11-28-80
DRN: J.P.A.	JPH	REVISED ALL WATER PROFILES	1-31-86
CHK: M.J.P.	JPH	Added Top Sewer Elevation	
	JPH	Revised Stations	8-13-85
	JPH	Added valve & tee	8-13-85
DATE: 4-85	BY NO.	REVISION	DATE

**WATER & SEWER PROFILES**

600' SCALE MAP NO. 42 BLOCK NO. 2,3,2,1

**VILLAGE OF OWEN BROWN, SECTION 6 AREA I**

CONTRACT NO. 24-1354-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 3 OF 3

AS BUILT  
JUNE 19, 1986

1084130-06-3/3