

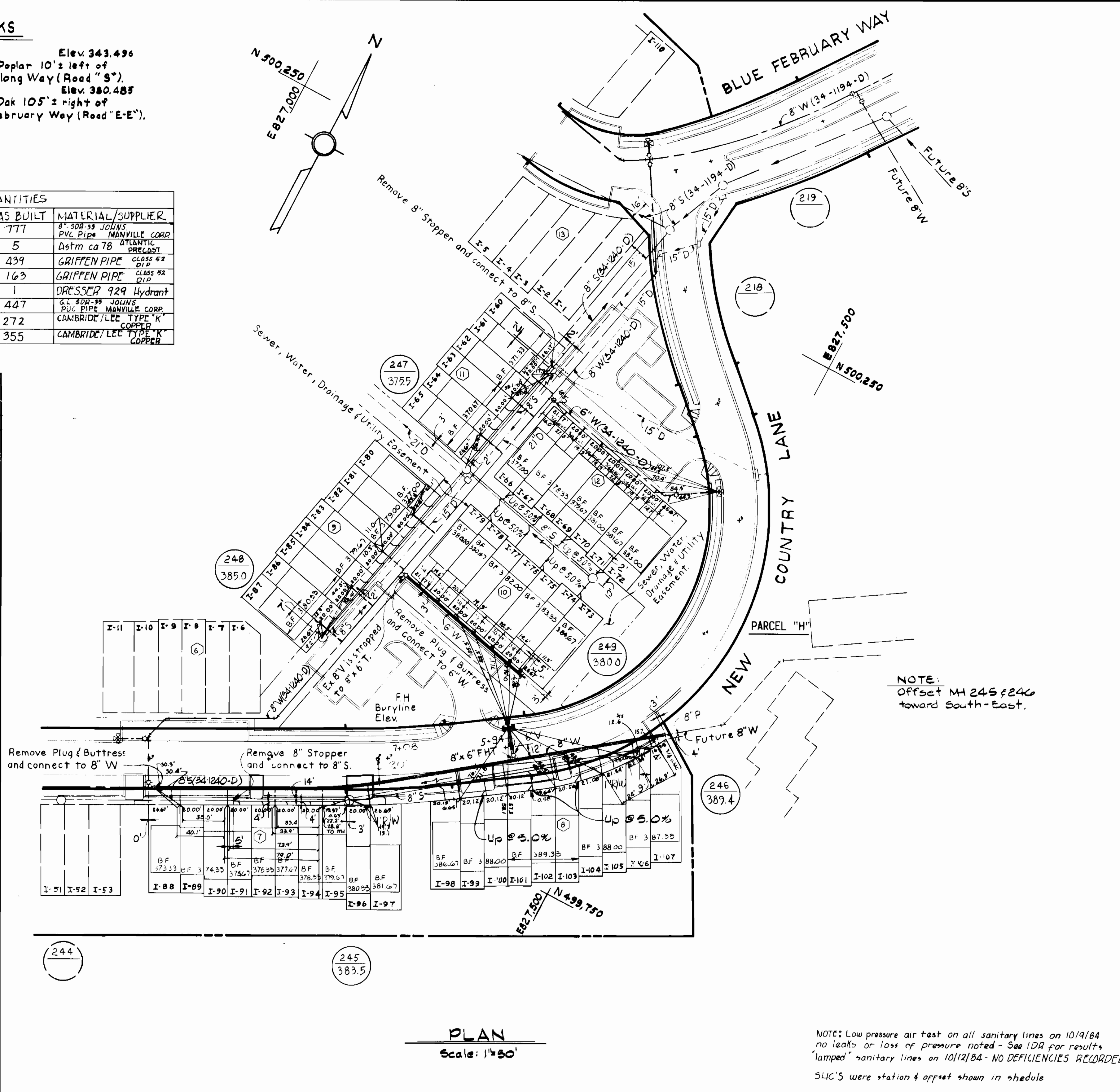
BENCH MARKS

W.R.A. BM "S" 8 Elev. 343.496
 R.R. Spike in base 20' Poplar 10' ± left of
 & Sta. 8+15 ± Winterlong Way (Road "S")
 W.R.A. BM "E-E" 6 Elev. 380.485
 R.R. Spike in base 18' Oak 105' ± right of
 & Sta. 6+70 ± Blue February Way (Road "E-E").

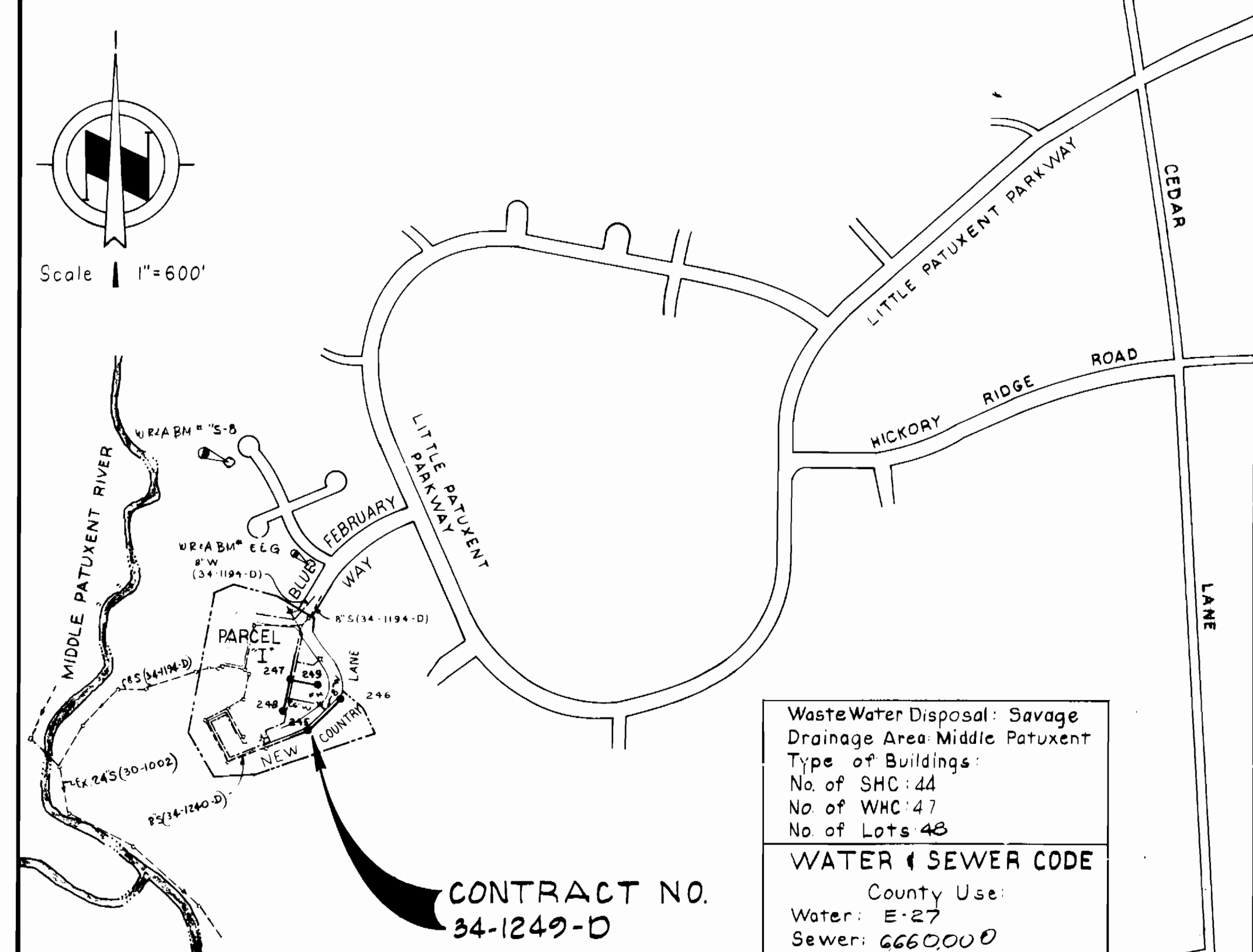
QUANTITIES			
ITEM	BID	AS BUILT	MATERIAL/SUPPLIER
1. 8" Sewer LF	790	777	8" 30R-33 JOHNS PVC PIPE MANVILLE CORP
2. Manholes Ea	5	5	Dstm ca 78 ATLANTIC PRECAST
3. 8" Water LF	440	439	GRIFFEN PIPE CLASS 52 8" PIPE
4. 6" Water LF	160	163	GRIFFEN PIPE CLASS 52 6" PIPE
5. Fire Hydrants Ea	1	1	DRESSER 929 Hydrant
6. 6" SH Connections LF	440	447	G.L. 30R-33 JOHNS PVC PIPE MANVILLE CORP
7. 1" WH Connections LF	270	272	CAMBRIDGE/LEE TYPE "K" COPPER
8. 3/4" WH Connections LF	355	355	CAMBRIDGE/LEE TYPE "K" COPPER

SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	INVERT
EX 8" STOPPER TO MH 247		
0+08	R I-61	366.93
0+33	R I-62	367.06
0+53	R I-63	367.17
0+73	R I-64	367.27
0+96	R I-65	367.39
MH 247 TO MH 248		
0+43	R I-80	370.59
0+68	R I-81	371.68
0+83	R I-82	372.68
1+08	R I-85	373.57
1+28	R I-84	374.51
1+48	R I-85	375.46
1+68	R I-86	376.40
1+88	R I-87	377.29
MH 247 TO MH 249		
0+38	R I-79	371.10
0+42	L I-66	370.79
0+72	R I-77	372.86
0+76	L I-68	372.55
0+93	R I-76	374.07
1+02	L I-69	373.77
1+02	L I-70	373.81
1+11	R I-71	375.60
1+12	R I-72	375.60
1+13	R I-73	376.10
1+14	R I-74	376.10
EX 8" STOPPER TO MH 245		
0+05	R I-71	371.90
0+25	R I-92	372.67
0+45	R I-93	373.44
0+65	R I-94	374.21
0+85	R I-95	374.97
MH 245 TO MH 246		
0+24	R I-76	376.58
0+30	R I-77	377.25
0+49	R I-78	378.45
1+14	R I-99	379.89
1+53	R I-100	379.79
1+53	R I-101	380.84
1+53	R I-102	380.78
1+93	R I-103	381.79
1+93	R I-104	381.69
2+24	R I-105	381.72
2+46	R I-106	382.21
2+46	R I-107	382.33



PLAN
Scale: 1"=50'



CONTRACT NO. 34-1249-D
VICINITY MAP
Scale: 1"=600'

Waste Water Disposal: Savage
 Drainage Area Middle Patuxent
 Type of Buildings:
 No of SHC: 44
 No of WHC: 47
 No of Lots: 48
WATER & SEWER CODE
 County Use:
 Water: E-27
 Sewer: 660000

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 MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- 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.
 STATE HIGHWAY ADMINISTRATION - 531-5533
 BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123.
 BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123.
 "MISS UTILITY" - 1 - 559-0100
 CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 393-3648.
 AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 1 - 865-3803.
 COLONIAL PIPELINE COMPANY - 781-4641.
 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 WATER MAINS SHALL BE D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3-1/2' 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 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 AND 1008 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65-52.
- ALL MANHOLE FRAME AND COVERS SHALL BE SET 0.5' ABOVE EXISTING GRADE WHERE SHOWN IN PROFILE. SEE DETAIL 65-41.
- ORIGINAL GROUND OVER WATER AND SEWER WAS TAKEN FROM AERIAL PHOTOGRAPHY PREPARED BY MAPS AND INC., AND VERIFIED BY FIELD SURVEY IN SEPTEMBER 1983.
- ALL COPPER WATER HOUSE CONNECTIONS SHALL UTILIZE FLARED FITTINGS.
- ALL WATER HOUSE CONNECTIONS SHALL BE 1" UNLESS OTHERWISE NOTED.

NOTE: Low pressure air test on all sanitary lines on 10/19/84
 no leaks or loss of pressure noted - See IDA for results
 "lamped" sanitary lines on 10/12/84 - NO DEFICIENCIES RECORDED
 S4C'S were station & offset shown in schedule

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
 SIGNATURE: *[Signature]* DATE: 7-18-84
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 APPROVED: *[Signature]* DATE: 7-19-84
 HOWARD S.C.D.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE STANDARD SPECIFICATIONS, AND ROAD CONSTRUCTION PLANS (F-34-140)

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS - DATE: 8-13-84
 CHIEF - BUREAU OF UTILITIES - DATE: 7-11-84

WHITMAN, REQUART AND ASSOCIATES ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND
 CHIEF - BUREAU OF ENGINEERING - DATE: 8/13/84
 CHIEF - LAND DEVELOPMENT DIVISION - DATE: 7-11-84

DES: S.J.	BY NO.	REVISION	DATE
DRN: R.P.G.			
CHK: R.B.N.			
DATE: 7/9/84			

AS-BUILTS - SEWER MAINS
 RED = Contract 34-1249-D (DPI)
 YELLOW = Contract 34-1240-D (EBA)
 GREEN = STORM DRAINS (HOWARD COUNTY)
 S4C'S WERE STAS. & OFF. AS SHOWN THIS DWG. R.P.S. 10/1

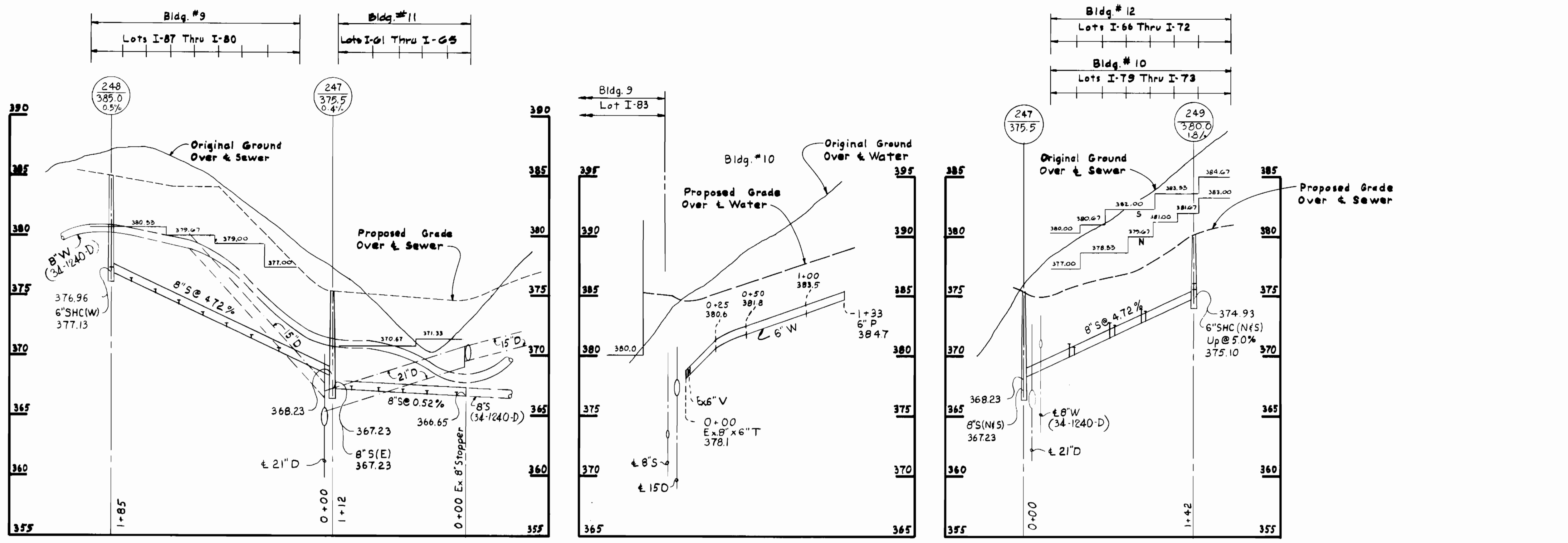
PLAN OF WATER & SEWER MAINS

600' SCALE MAP NO. 35 BLOCK NO. 10

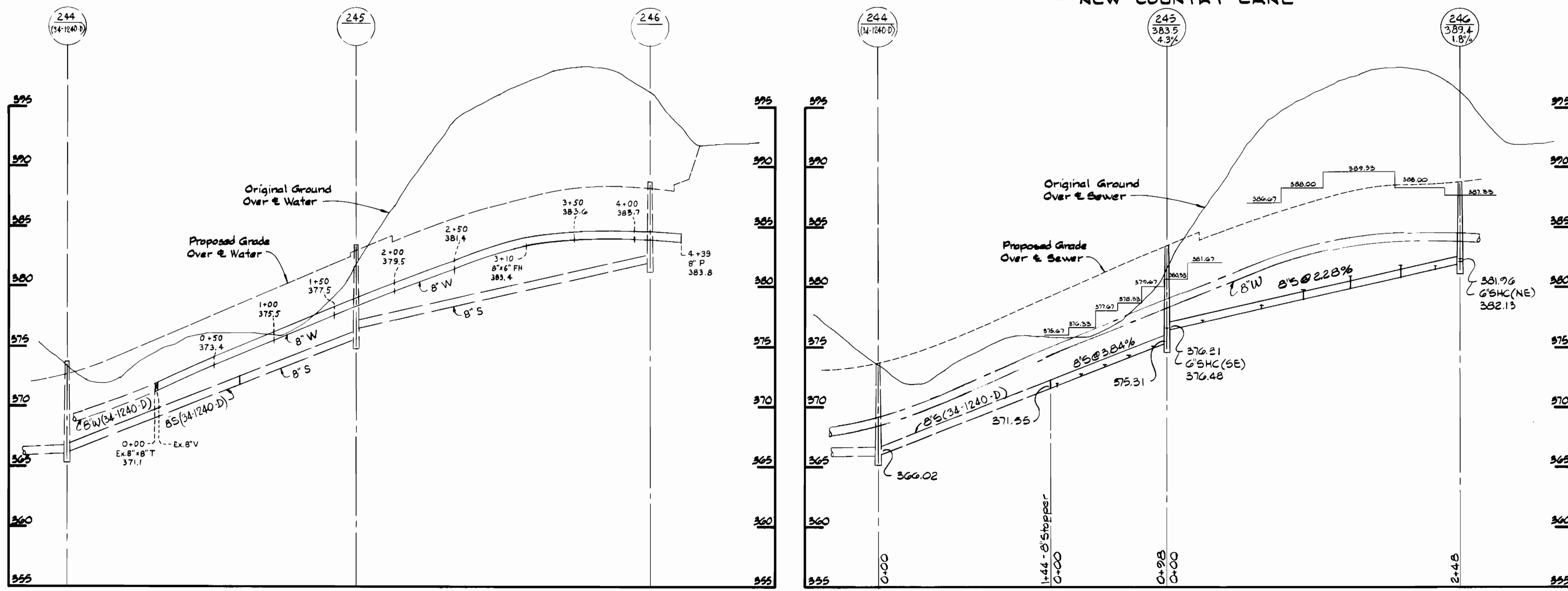
COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 6 ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1249-D

Parcel "I" Phase 2

SCALE AS SHOWN
 SHEET 1 OF 2



Bldg #7 **Bldg #8**
- NEW COUNTRY LANE -



PROFILES
Scale: H:1"=50' V:1"=5'

Parcel "I"
Phase 2

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
8-17-84
7-11-84

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
2315 ST. PAUL ST.
BALTIMORE, MARYLAND



DES: S.J.			
DRN: R.P.G.			
CHK: R.B.N.			
DATE: 7/9/84	BY: NO.	REVISION	DATE

PROFILES OF WATER & SEWER MAINS
600' SCALE MAP NO. 35 BLOCK NO.

COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 6 ELECTION DISTRICT NO. 5 CONTRACT NO. 34-1249-D

SCALE AS SHOWN
SHEET 2 OF 2