

Waste Water Disposal: Sewage  
 Type of Buildings: Town Houses  
 No. of SMC: 60  
 No. of WHC: 96  
 No. of Lots: 96

**WATER & SEWER CODE**  
 County Use:  
 Water: E 16  
 Sewer: G 29000

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
8" Sewer L.F.	1400	1432	VCPX/LOGAN
Manholes Ea.	9	9	ATLANTIC PRECAST
8" Water L.F.	410	440	D.I.P./GRIFFIN
8 Valves Ea.	2	2	DRESSER
6" Water L.F.	1510	1500	D.I.P./GRIFFIN
6" V (excluding F.H.V.)	2	4	DRESSER
Fire Hydrants Ea.	2	2	DRESSER
Blow-Offs Ea.	1		
6" SEWER L.F.		251	VCPX/LOGAN
3/4" COPPER L.F.		799	
1" COPPER L.F.		850	

**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 & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123.
  - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123.
  - ENGINEERING - "DAMAGE CONTROL" - 234-5621.
  - "MISS UTILITY" - 1-559-0100
  - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 725-9976.
  - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553.
  - 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 8" P. OR 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 37.01 AND 37.05 OF THE 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 UNLESS OTHERWISE NOTED.
- 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 BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL S1.45.

**CONTRACT NO. 34-1094-D**  
**VILLAGE OF KINGS CONTRIVANCE**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications.

**REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT**

*[Signature]* 3-31-83  
 SIGNATURE DATE  
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District.

**APPROVED**

*[Signature]* 3-31-83  
 HOWARD S.C.D. DATE

Village of Kings Contrivance  
 Section 3 Area 2 (Lots B-68 Thru B-166)  
 Parcel "B" Phase 2  
 Contract No. 34-1094-D

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]* 4-11-83  
 DIRECTOR OF PUBLIC WORKS - DATE

*[Signature]* 4-7-83  
 CHIEF - BUREAU OF UTILITIES - DATE

*[Signature]* 4-11-83  
 CHIEF - BUREAU OF ENGINEERS - DATE

*[Signature]* 4-11-83  
 CHIEF - LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT  
 AND ASSOCIATES  
 ENGINEERS

2315 ST. PAUL ST.  
 BALTIMORE, MARYLAND



REV NO	REV DATE	REVISION DESCRIPTION
1	5-16-83	HEALTH DEPT COMMENTS SHEET 2 & 3

VICINITY MAP AND GENERAL NOTES

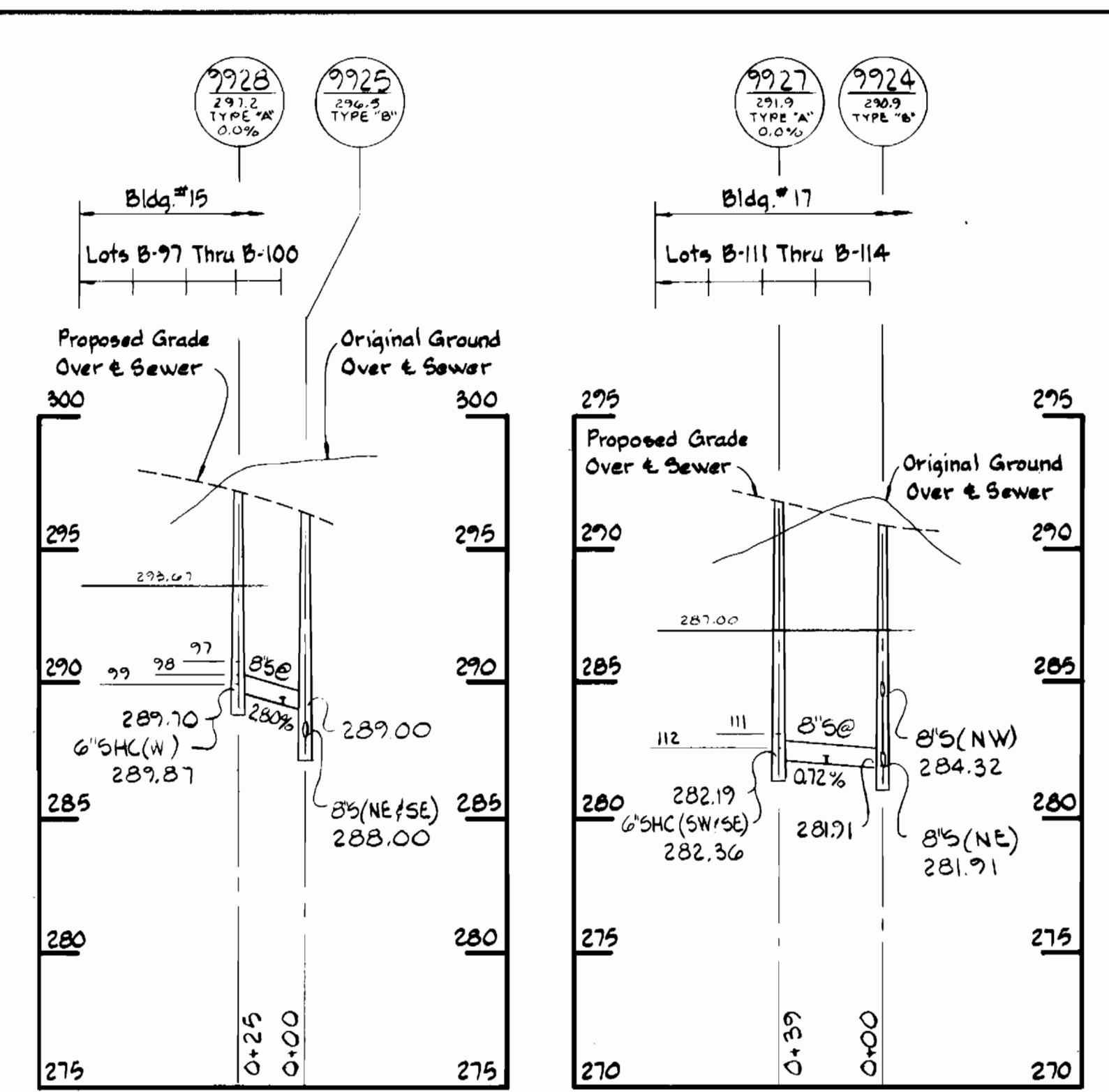
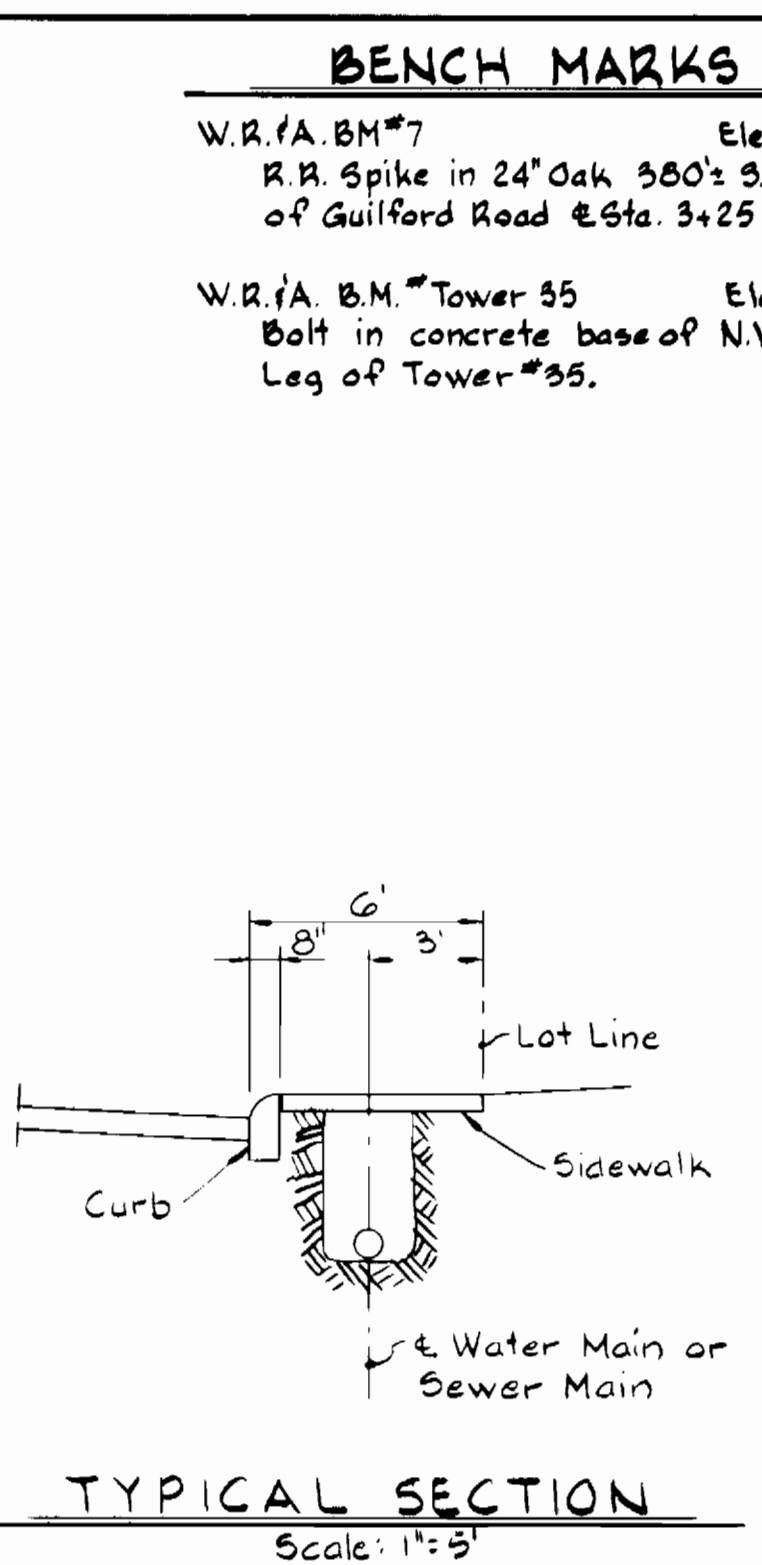
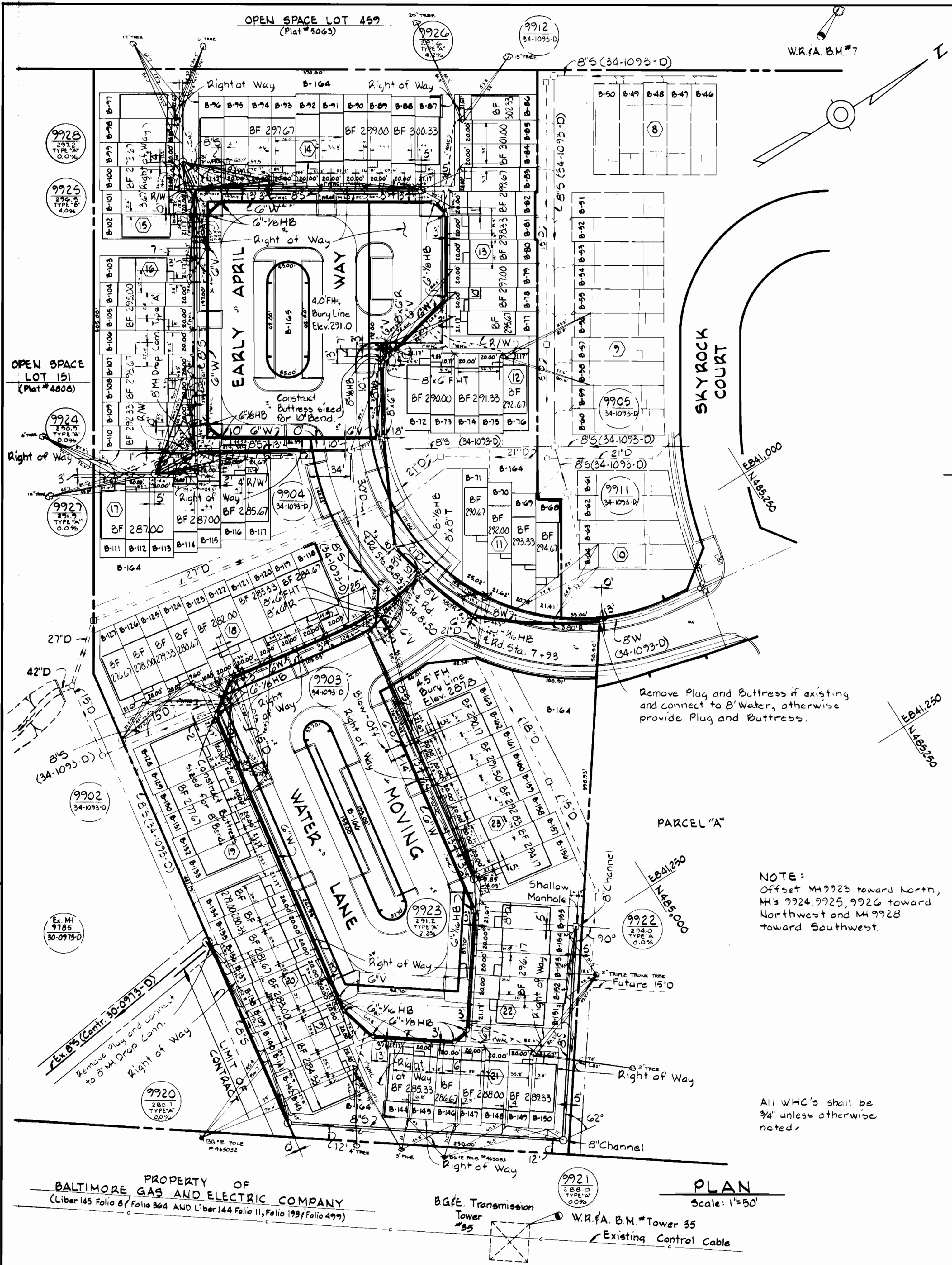
600' SCALE MAP NO. 42 BLOCK NO.

COLUMBIA  
 VILLAGE OF KINGS CONTRIVANCE  
 SECTION 3 AREA 2  
 ELECTION DISTRICT NO. 6  
 CONTRACT NO. 34-1094-D

SCALE  
 1"=600'

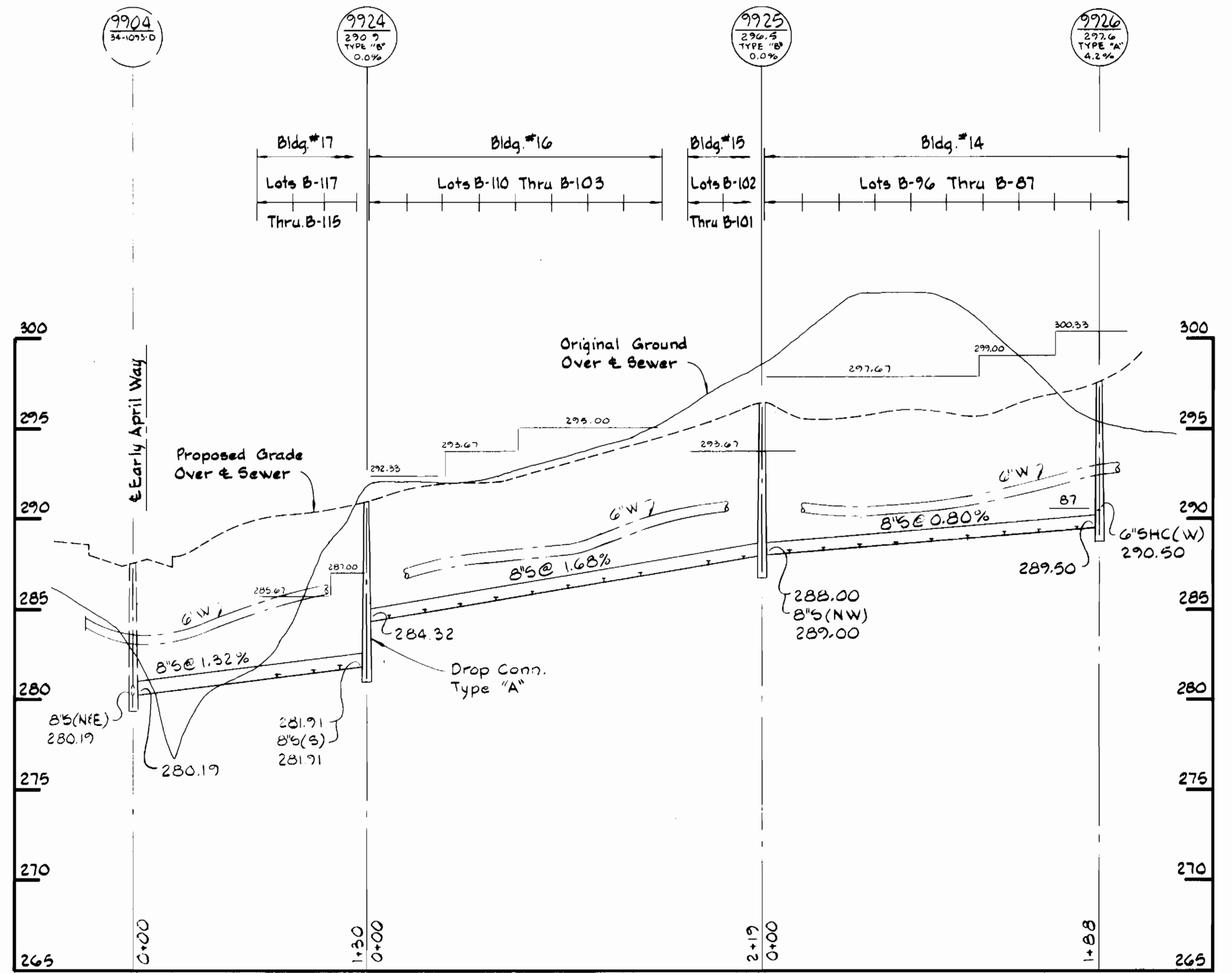
SHEET  
 1 OF 3

AS-BUILT AUG. 1983



### SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	INVERT
Ely. MH 9725 TO MH 9720		
0+05 L	B-135	274.41
0+21 L	B-136	274.53
0+31 L	B-137	274.58
0+61 L	B-138	274.70
0+71 L	B-139	274.75
1+01 L	B-140	274.75
1+11 L	B-141	275.00
1+41 L	B-142	275.11
1+51 L	B-143	275.17
MH 9920 TO MH 9921		
0+97 L	B-144	278.15
	B-145	278.15
1+39 L	B-146	279.25
	B-147	279.25
1+79 L	B-148	280.42
	B-149	280.36
2+16 L	B-150	281.43
MH 9921 TO MH 9922		
0+98 L	B-151	284.61
1+18 L	B-152	287.35
1+38 L	B-153	288.12
1+68 L	B-154	289.29
2+09 L	B-155	289.81
MH 9923 TO MH 9923		
0+89 L	B-163	280.72
1+09 L	B-162	281.23
1+29 L	B-161	281.54
1+49 L	B-160	281.85
1+69 L	B-159	282.17
1+89 L	B-158	282.48
2+09 L	B-157	282.79
2+29 L	B-156	283.43
MH 9924 TO MH 9924		
0+80 L	B-117	281.45
1+00 L	B-116	281.71
1+15 L	B-115	281.95
MH 9924 TO MH 9925		
0+12 L	B-110	284.66
0+32 L	B-109	285.00
0+52 L	B-108	285.33
0+72 L	B-107	285.67
0+92 L	B-106	286.01
1+12 L	B-105	286.34
1+32 L	B-104	286.68
1+52 L	B-103	287.01
1+70 L	B-102	287.65
2+09 L	B-101	287.97
MH 9925 TO MH 9926		
0+14 L	B-76	288.25
0+34 L	B-75	288.41
0+54 L	B-74	288.57
0+74 L	B-73	288.73
0+94 L	B-72	288.89
1+14 L	B-71	289.05
1+34 L	B-70	289.21
1+54 L	B-69	289.37
1+74 L	B-68	289.53
2+14 L	B-67	290.56
MH 9924 TO MH 9927		
0+21 L	B-114	282.34
0+41 L	B-113	282.42
0+61 L	B-112	282.56
	B-111	283.16
MH 9925 TO MH 9928		
0+08 L	B-100	289.60
0+28 L	B-99	290.01
0+48 L	B-98	290.37
0+68 L	B-97	290.91



### PROFILES

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

Village of Kings Contrivance  
Section 3 Area 2 (Lots B-68 Thru B-166)  
Parcel "B" Phase 2  
Contract No. 34-1094-D

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Robert M. Bennett, 4-11-83  
DIRECTOR OF PUBLIC WORKS - DATE

Robert M. Bennett, 4-7-83  
CHIEF - BUREAU OF UTILITIES - DATE

WHITMAN, REQUARDT  
AND ASSOCIATES  
ENGINEERS

2315 ST. PAUL ST.  
BALTIMORE, MARYLAND

1  
REV NO

5-16-83  
REV DATE

HEALTH DEPT. COMMENTS.  
REVISION DESCRIPTION

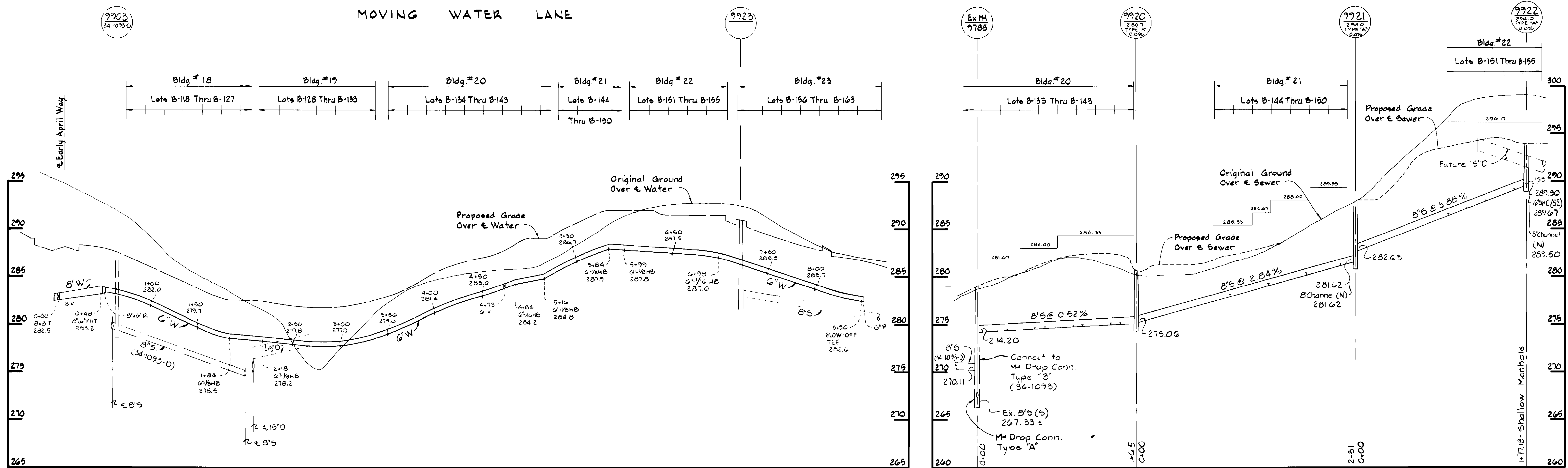
PLAN & PROFILES OF  
WATER & SEWER MAINS

600 SCALE MAP NO. 42 BLOCK NO.

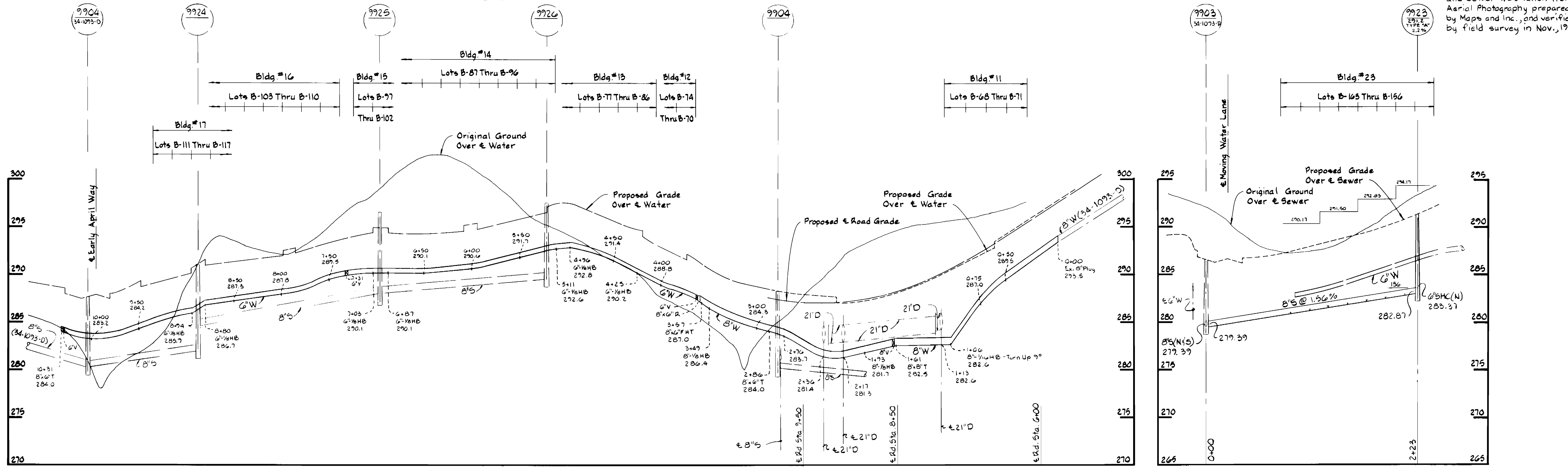
COLUMBIA  
VILLAGE OF KINGS CONTRIVANCE  
SECTION 3 AREA 2  
ELECTION DISTRICT NO. 6  
CONTRACT NO. 34-1094-D

SCALE AS SHOWN  
SHEET 2 OF 3

MOVING WATER LANE



EARLY APRIL WAY



Original Ground Over Water and Sewer was taken from Aerial Photography prepared by Maps and Inc., and verified by field survey in Nov., 1982.

Village of Kings Contrivance Section 3 Area 2 (Lots B-68 Thru B-166) Parcel "B" Phase 2 Contract No. 34-1094-D

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
4-11-83  
4-11-83

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

REV NO	REV DATE	REVISION DESCRIPTION
1	5-16-83	HEALTH DEPT COMMENTS

PROFILES OF WATER & SEWER MAINS  
600 SCALE MAP NO. 42 BLOCK NO.

COLUMBIA VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2 ELECTION DISTRICT NO. 6 CONTRACT NO. 34-1094-D

SCALE H:1"=50' V:1"=5'  
SHEET 3 OF 3