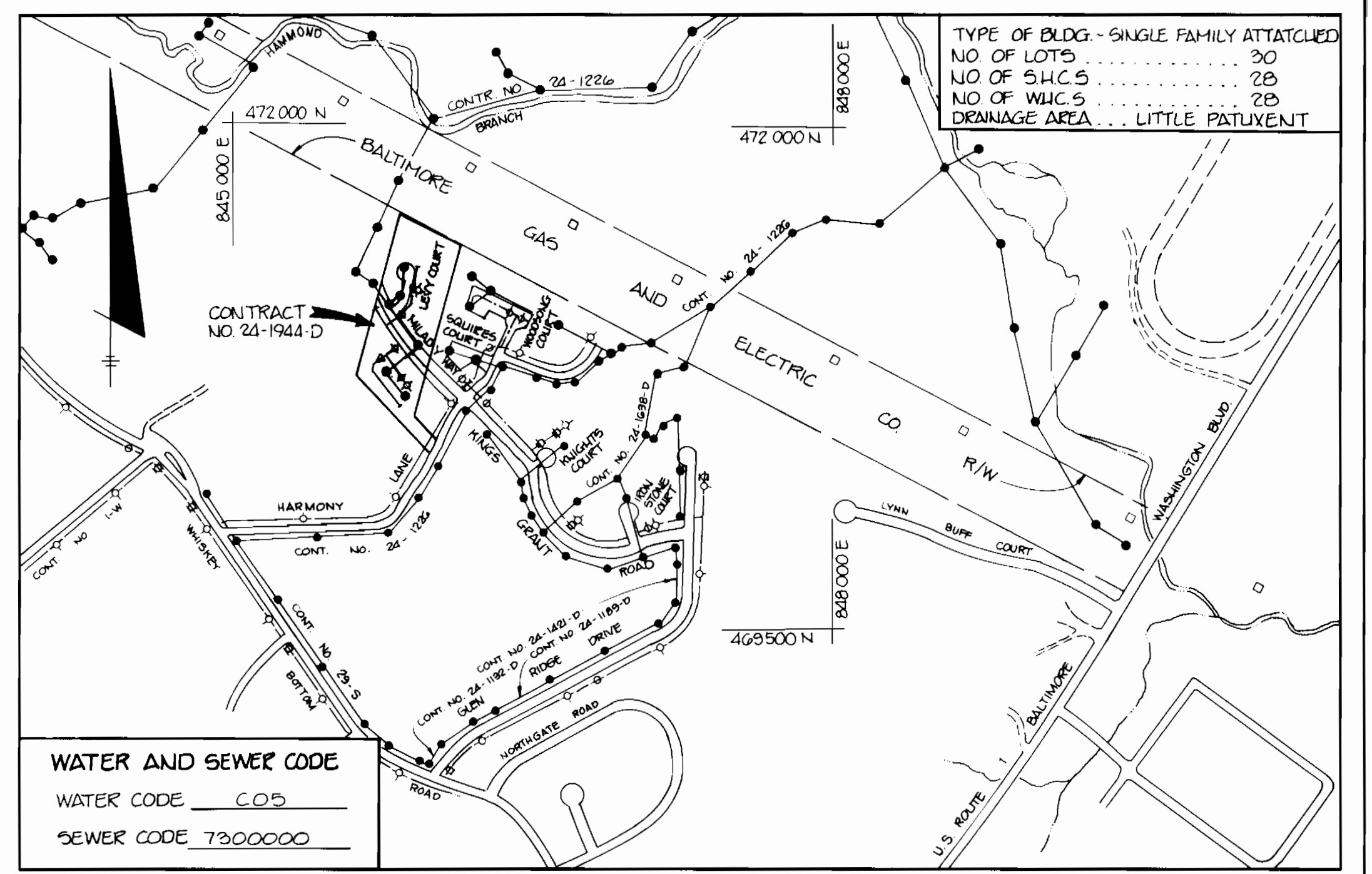


SEQUENCE OF CONSTRUCTION - UTILITY CROSSINGS

- OBTAIN ALL REQUIRED PERMITS, APPROVALS LICENSES FROM THE APPROPRIATE AGENCIES.
- NOTIFY THE ENFORCEMENT DIVISION AT LEAST 5 DAYS PRIOR TO INITIATION OF CONSTRUCTION AND 3 DAYS AFTER WORK ENDS THE ANIAPOLIS OFFICE IS (301) 974-2641.
- INSTALL PERIMETER CONTROLS AS PER W.P.D. 5.1 THE PERIMETER CONTROLS SHALL CONSIST OF STEEL BALE DIKES AND/OR SILT FENCING.
- INSTALL THE UTILITY APPROACHES TO THE STREAM.
- DIVERT THE STREAM (REFERENCE W.P.D. 2.1 OF 2.2)
- DEWATER THE CONSTRUCTION AREA ALL DEWATERING DISCHARGES SHALL BE DIVERTED TO A DEWATERING BASIN AS PER W.P.D. 1.1 BEFORE RE-ENTERING THE STREAM.
- STABILIZE THE DISTURBED BANKS USING FILTER FABRIC AND RIP RAP OR GABIONS. RIP RAP MUST BE SIZED AND INSTALLED AS PER W.P.D. 3.1. GABIONS MUST BE INSTALLED AS PER W.P.D. 2.3.
- REMOVE THE DIVERSIONS FROM UPSTREAM TO DOWNSTREAM.
- STABILIZE ALL DISTURBED AREAS.
- REMOVE PERIMETER CONTROLS.



WATER AND SEWER CODE  
WATER CODE C05  
SEWER CODE 7300000

VICINITY MAP  
SCALE: 1" = 600'

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.C. DATA.
- 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. THE OWNER HAS CONTACTED THE UTILITY COMPANY AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES ADDITIONAL BRACING OF POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY 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 DETAILS FOR CONSTRUCTION. 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 BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
  - C&P ..... 1-800-257-7777
  - STATE HIGHWAY ADMINISTRATION ..... 531-5533
  - BALTIMORE GAS & ELECTRIC CO. CONTRACTOR SERVICES ..... 850-4620
  - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL ..... 859-9004
  - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING ..... 298-9001
  - MISS UTILITY ..... 1-800-559-0100
  - COLONIAL PIPELINE CO. .... 795-1390
  - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS ..... 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 EXCAVATION AND BACKFILL.
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE D.I.P. CLASS 52.
- TOP OF ALL 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 ELEVATIONS 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 100B OF THE GENERAL REQUIREMENTS FOR WATER AND SEWER.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A. SPEC. C-153 DUCTILE IRON COMPACT FITTINGS 3"-12" FOR WATER AND OTHER LIQUIDS.
- THE SERVICE CLAMPS ARE TO HAVE STAINLESS STEEL STRAPS.
- ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X., P.V.C. OR A.C.P. CLASS 2400 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 WATER TIGHT FRAME AND COVERS, STANDARD DETAIL 65.52 VOLUME IV WHERE WATER TIGHT MANHOLE IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE.
- LOT (S) WITH SYMBOL "C.N.S." INDICATES CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12" ABOVE ALL SANITARY SEWER CROSSINGS.
- ALL SANITARY SEWER HOUSE CONNECTIONS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 12" BELOW ALL WATER MAIN CROSSINGS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.

SEWER HOUSE CONNECTION  
INVERT ELEVATION @ PROPERTY LINE

STA	LOT	INV @ PL	MIN. CELLAR
MH-6	MH-7	262.95	266.45
0+74R	9	262.84	266.24
0+74R	9	262.84	266.24
MH-7	MH-8		
0+99R	7	263.22	266.66
0+33R	6	264.38	267.86
0+70R	5	266.19	269.63
0+97R	4	267.48	270.88
1+20R	3	268.59	272.03
0+99R	2	269.06	272.50
0+99R	1	269.20	272.60
MH-5	MH-9		
0+69R	10	249.20	252.62
0+88R	11	249.24	252.66
1+09R	12	249.24	252.64
0+99R	13	249.48	252.88
MH-9	MH-10		
0+07R	14	249.80	253.20
0+35L	28	249.59	252.91
0+50R	15	250.04	253.44
0+52L	27	249.63	253.03
0+71R	16	250.17	253.57
0+73L	26	249.76	253.16
0+82L	25	249.81	253.21
0+96R	17	250.32	253.72
1+06R	18	250.30	253.70
1+21L	24	250.05	253.45
1+79R	19	250.81	254.21
1+80R	20	250.68	254.08
2+10R	21	250.78	254.18
2+15R	22	250.00	254.20
0+99R	23	251.11	254.51

QUANTITIES

ITEM	PROPOSED	AS-BUILT	SUPPLIER
8" WATER	760 LF	723.78 LF	Scott Co.
6" WATER	393 LF	356.50 LF	
8" VALVE	2	2 EA	Medusa Co.
8" D.I.P.	393 LF	349.66 LF	Scott Co.
FIRE HYDRANT	3	3 EA	Shelburne Co.
1" W.I.C.	527 LF	439 LF	Harold Hill Co.
3/4" W.I.C.	170 LF	237 LF	Harold Hill Co.
8" SEWER	1218 LF	1468.83 LF	Scott Co.
MANHOLES	99 VF	78.3 VF	421-2000 Co.
4" S.H.C.	1338 LF	1325 LF	Scott Co.

HOWARD SOIL CONSERVATION DISTRICT:  
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT  
AND MEETS TECHNICAL REQUIREMENTS

*James M. Hilson* 1/24/89  
U.S. SOIL CONSERVATION SERVICE DATE

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

*Stuart L. Schulz* 7/29/87  
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS #89-223 AND AS SHOWN ON THIS PLAN.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James M. Hilson* 7/29/89  
DIRECTOR OF PUBLIC WORKS DATE

*Richard A. Himmelfarb* 7-20-89  
CHIEF, BUREAU OF UTILITIES DATE

*William R. Schulte* 7-23-89  
CHIEF, BUREAU OF ENGINEERING DATE

*Paul L. Schulte* 7/20/89  
CHIEF, LAND DEVELOPMENT DIVISION DATE

TRACY, SCHULTE & ASSOCIATES INC.  
planning engineering surveying  
8480 Baltimore National Pike Suite 418  
Ellicott City, Maryland 21043

*James R. Tracy*

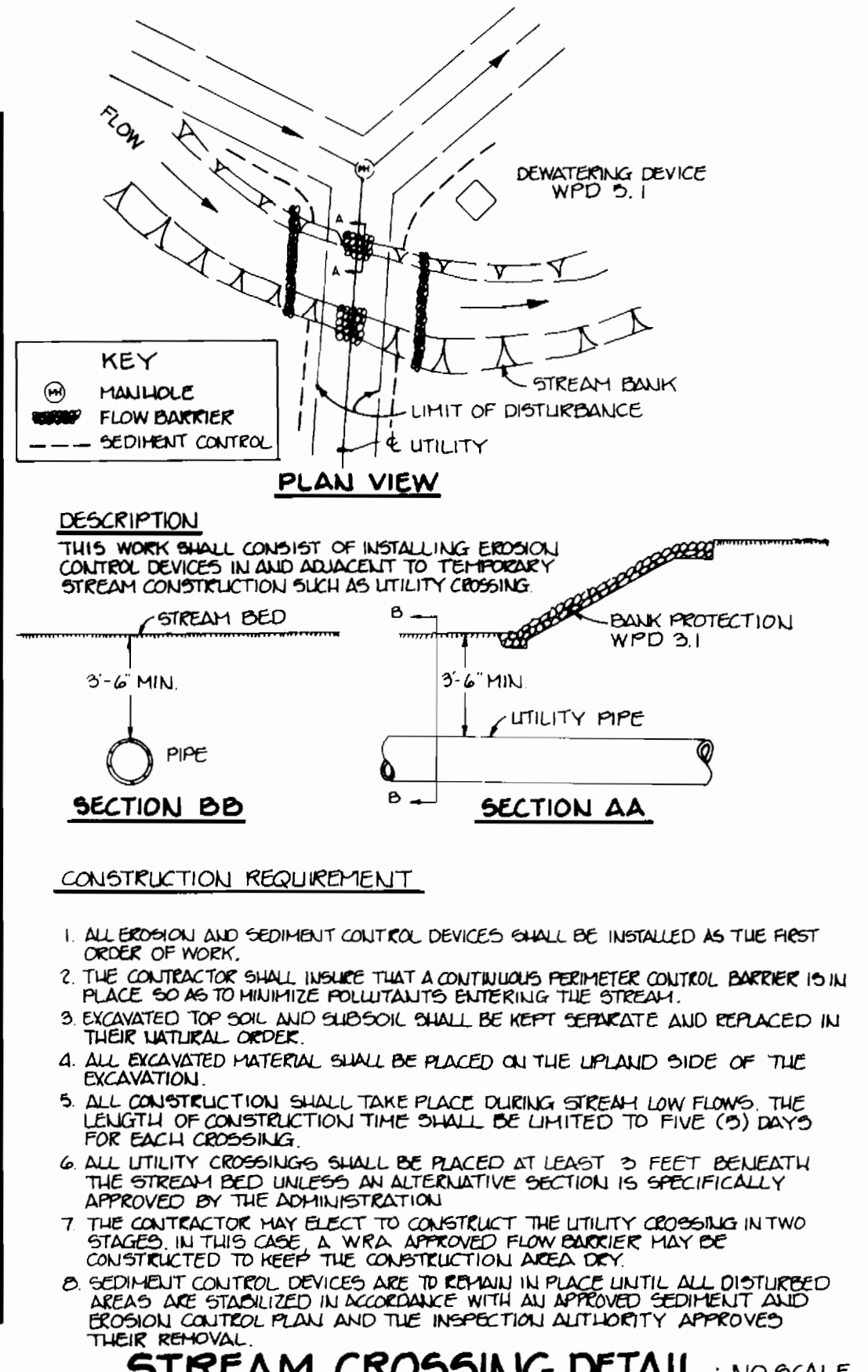
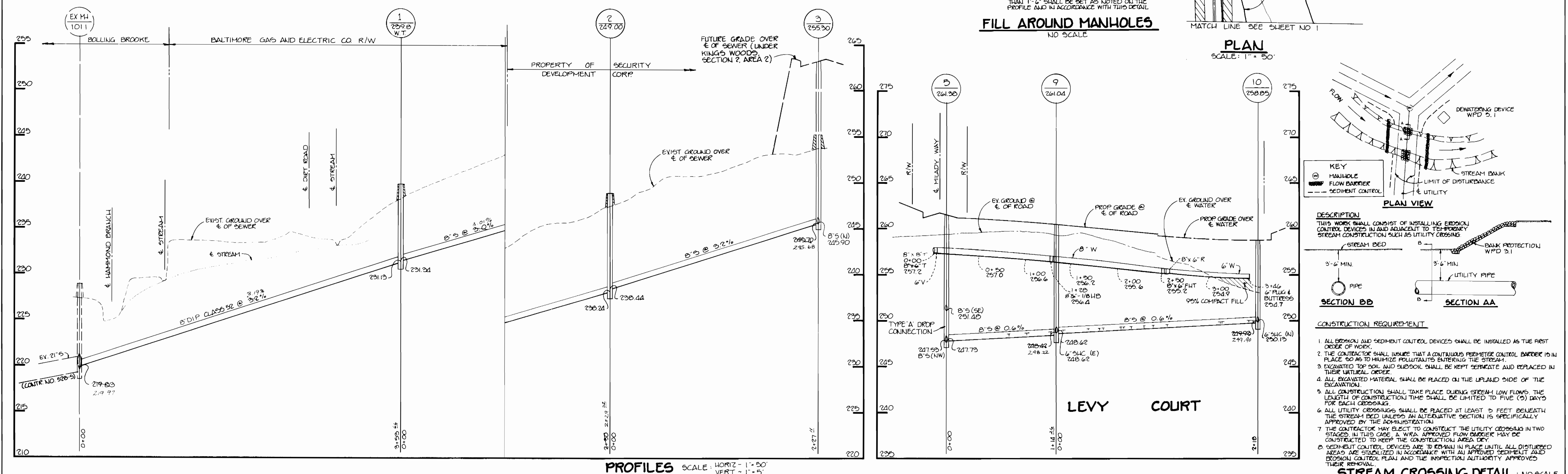
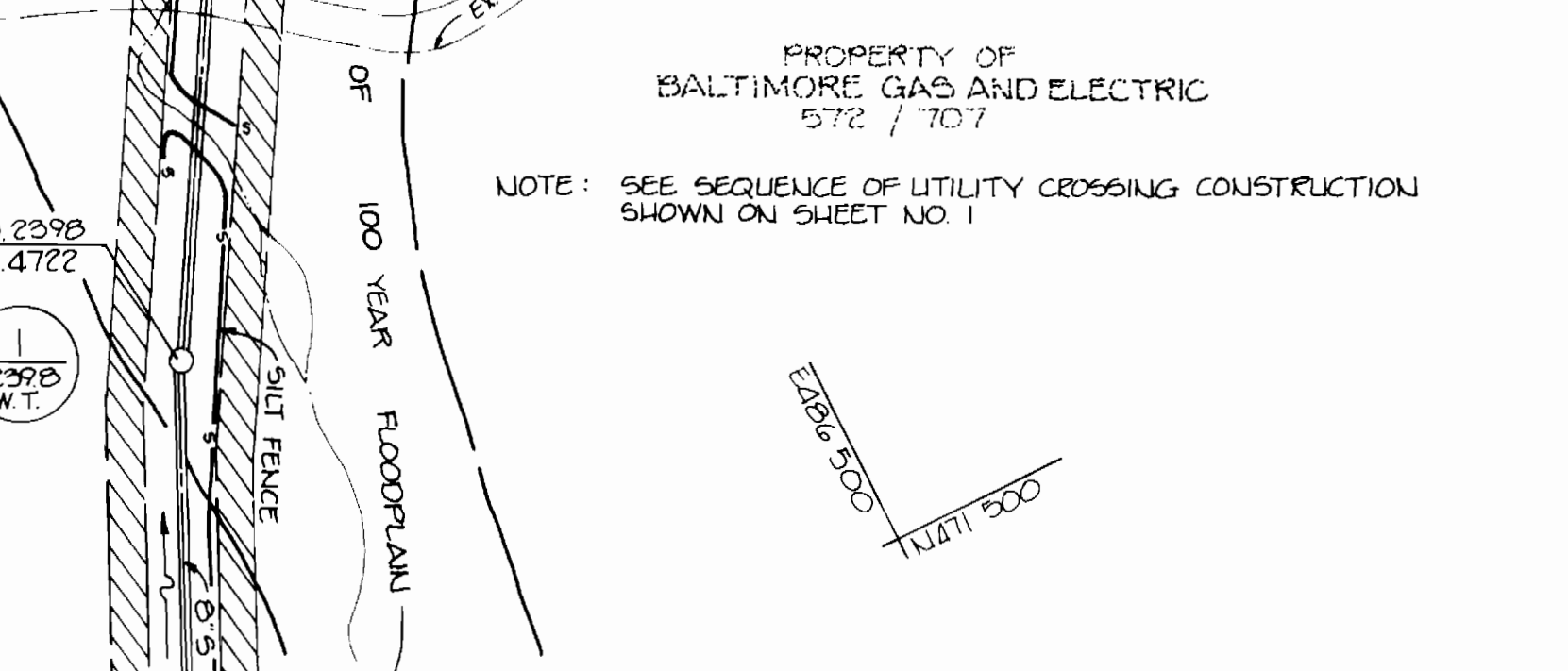
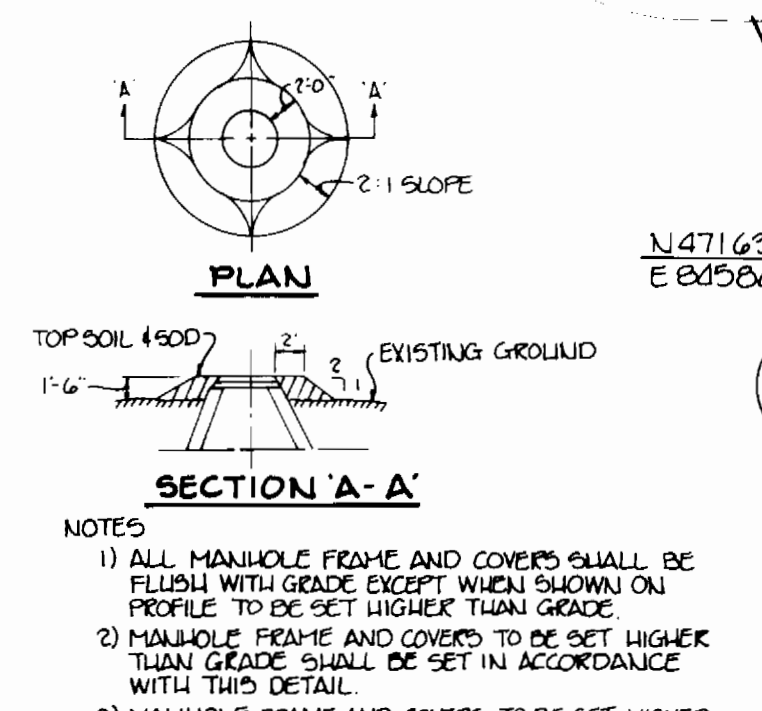
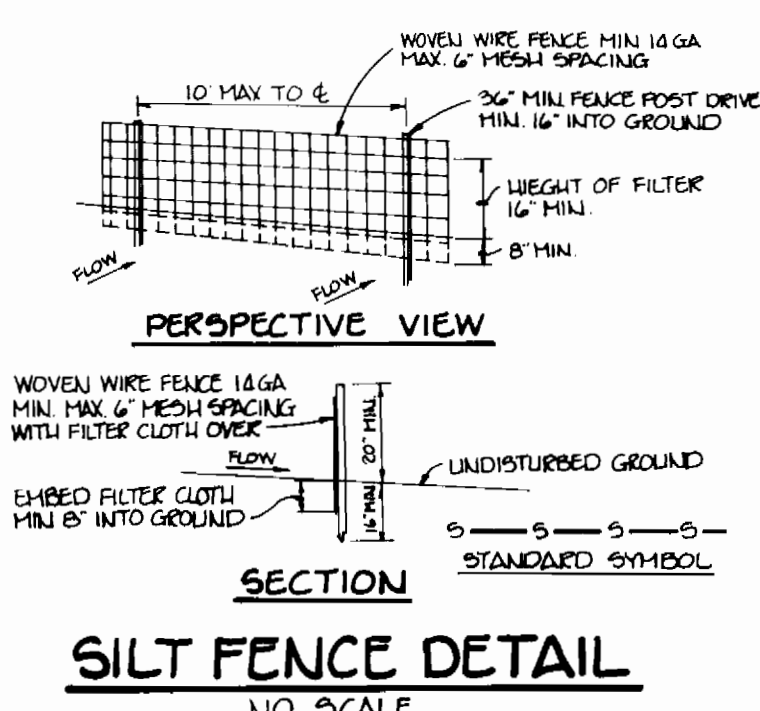
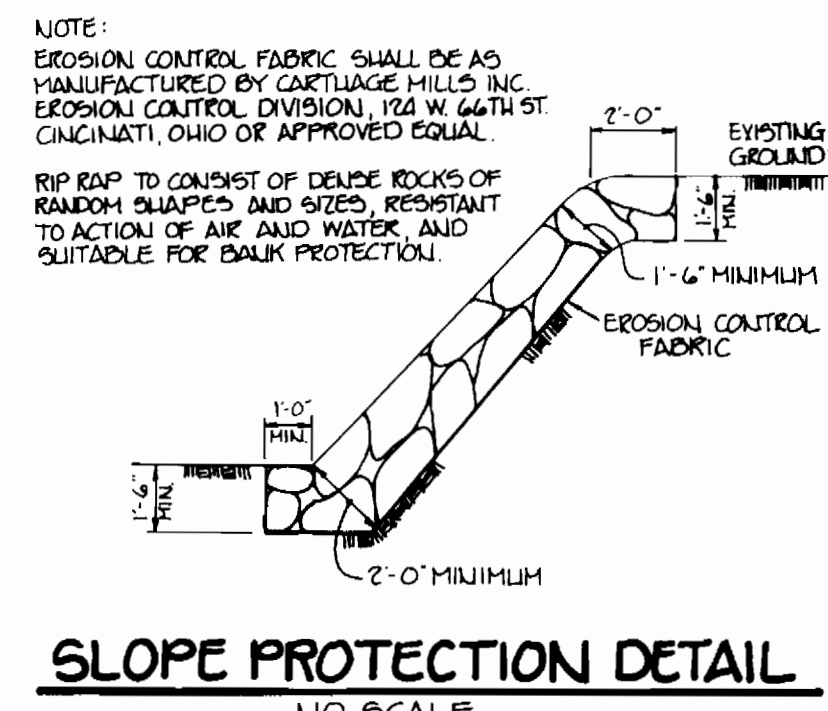
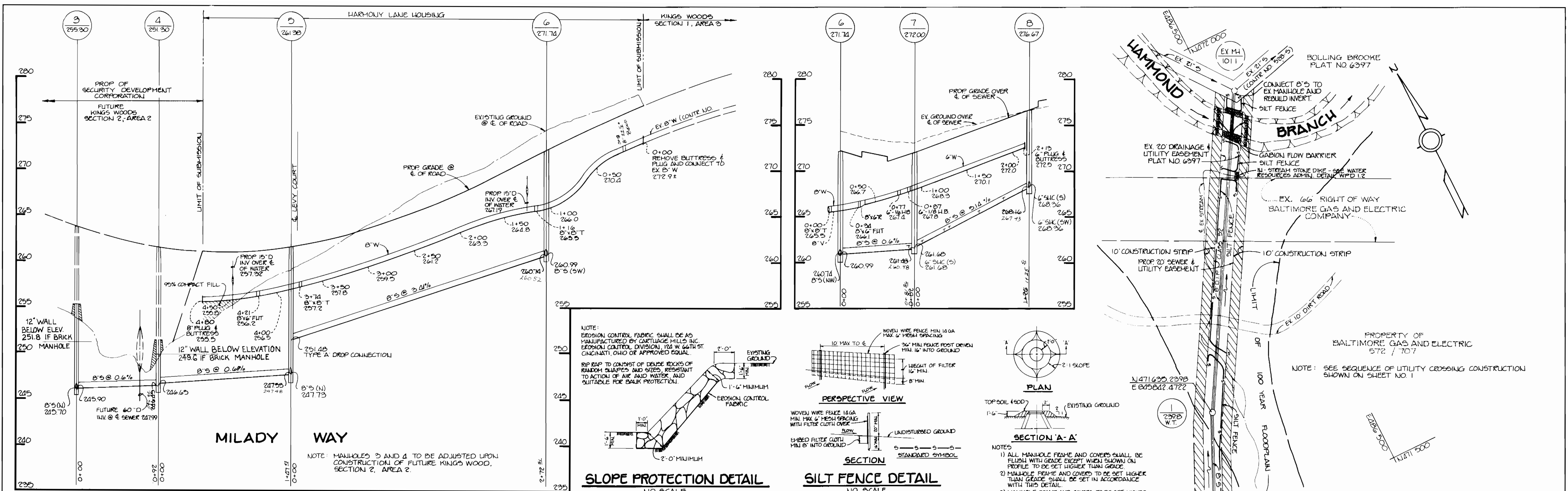
DES. DAM/JH	DRN. JH/MM	CHK.	DATE	BY	NO.	REVISIONS	DATE
			5-12-89				
			7-14-89				

PLAN OF WATER AND SEWER MAINS

SCALE 600' SCALE MAP NO. 47

HARMONY LANE HOUSING  
SECTION 1  
ELECTION DISTRICT NO. 6  
CONTRACT NO. 24-1944-D

SCALE AS SHOWN  
SHEET 1 OF 2



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND James P. Lewis, Director of Public Works, 7/21/89 Michael A. Stremmel, Chief, Bureau of Utilities, 7/26/89		TRACY, SCHULTE & ASSOCIATES INC. planning engineering surveying 8480 Baltimore National Pike Suite 418 Ellicott City, Maryland 21043 Tracy, Schulte, Associates Inc.		DES. DAM/JH DWN. JH CHK. DATE: 5-12-89 BY NO. DATE: 7-14-89		REVISIONS DATE: 6-05-89 MAP NO. 47 BLOCK NO. 22 & 16		SCALE AS SHOWN HARMONY LANE HOUSING SECTION 1 ELECTION DISTRICT NO. 6 CONTRACT NO. 24-1944-D SHEET 2 OF 2	
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