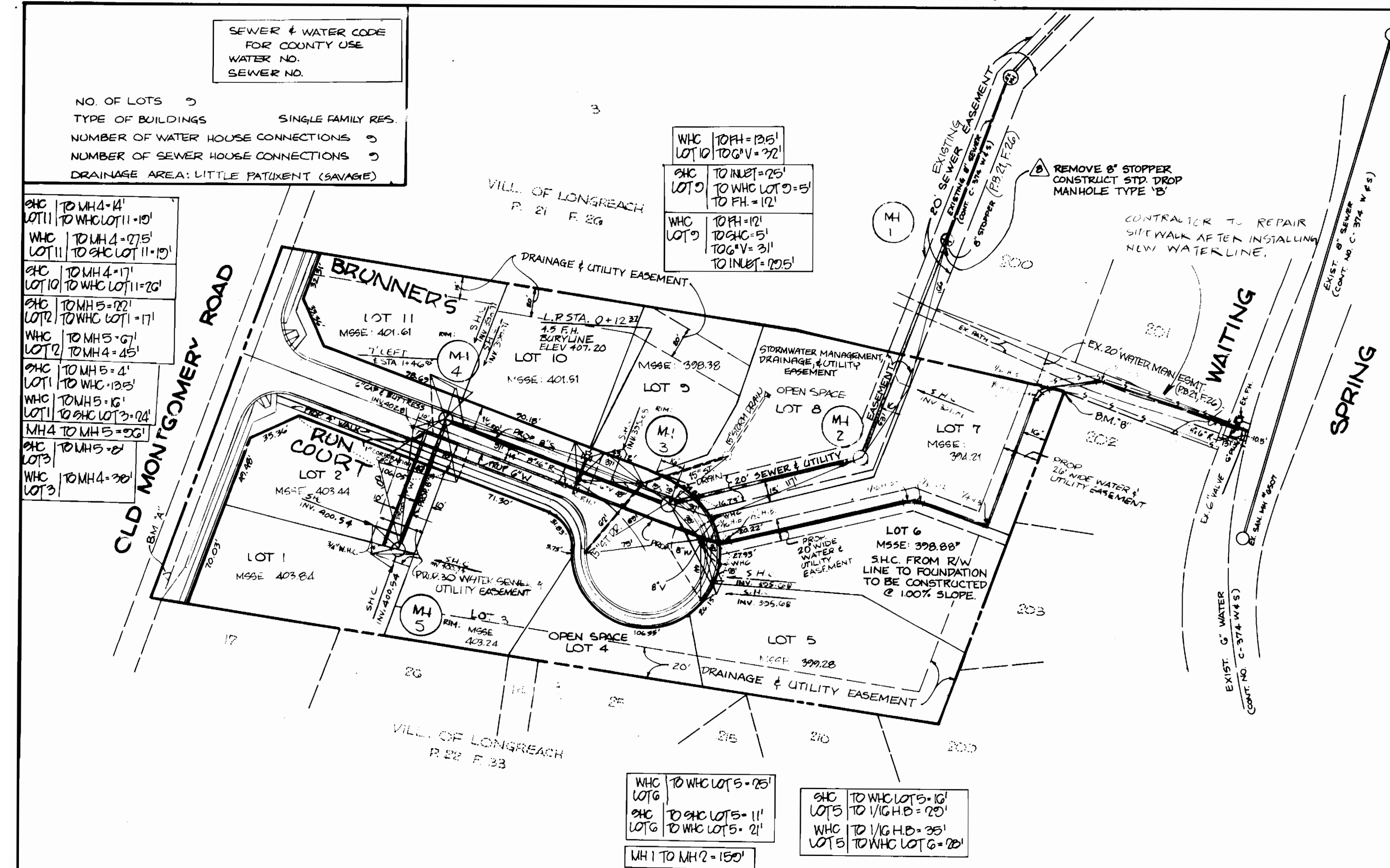


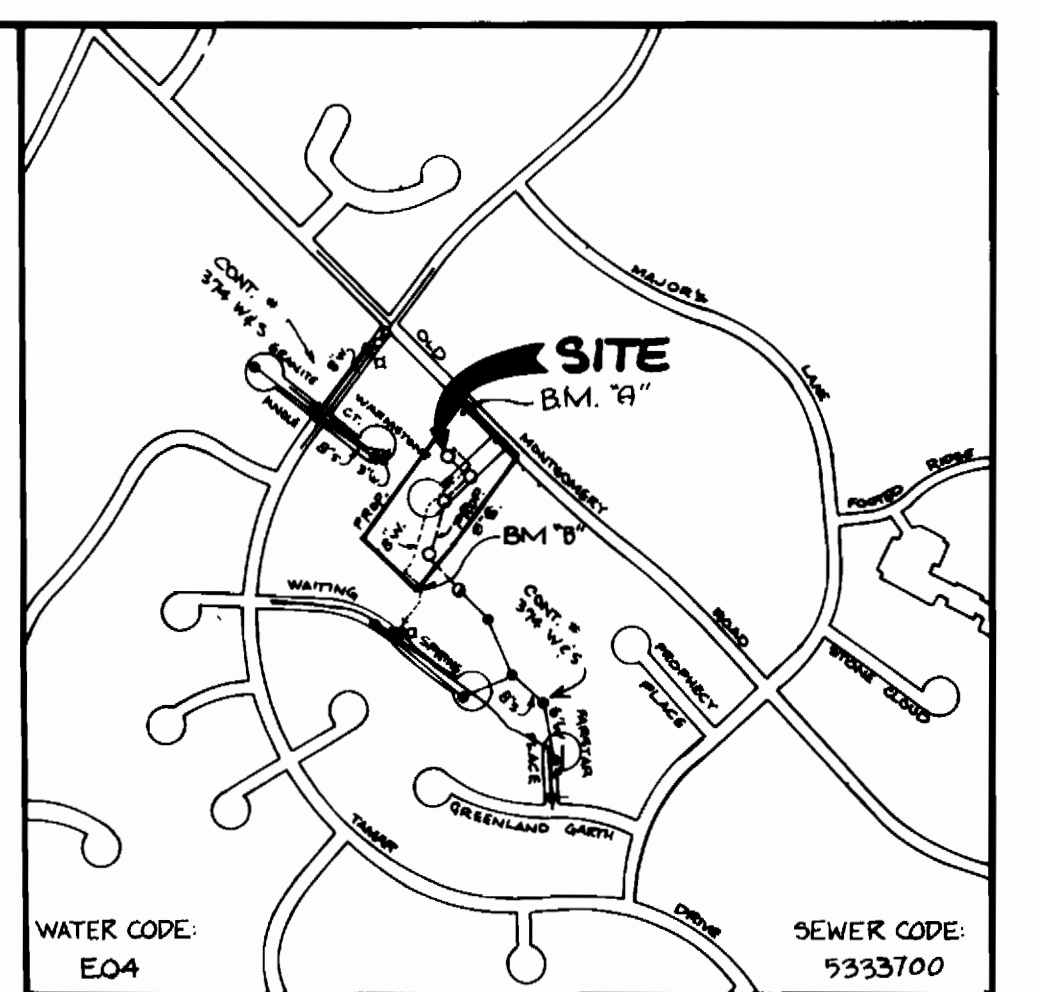
SEWER & WATER CODE FOR COUNTY USE  
 WATER NO.  
 SEWER NO.

NO. OF LOTS 3  
 TYPE OF BUILDINGS SINGLE FAMILY RES.  
 NUMBER OF WATER HOUSE CONNECTIONS 3  
 NUMBER OF SEWER HOUSE CONNECTIONS 3  
 DRAINAGE AREA: LITTLE PATUXENT (SAVAGE)



**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.
- 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 NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED 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:  
 STATE HIGHWAY ADMINISTRATION - 531-3853  
 BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620  
 BALTIMORE GAS & ELECTRIC CO. - UNDERGROUND DAMAGE CONTROL - 859-9004  
 BALTIMORE GAS & ELECTRIC CO. - TROUBLE SHOOTING - 598-9001  
 MDS UTILITY - 1-800-237-7777  
 COLONIAL PIPE CO. 795-1390  
 BUREAU OF UTILITIES, HOWARD COUNTY DEPT. OF PUBLIC WORKS - 992-2366
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAX. MIN. EXTENT. TREES AND SHRUBS 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.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3 1/2' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TREES.
- 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 1003 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTINGS UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- ALL W.H.C.'S SHALL BE 3/4" FOR SINGLE CONNECTIONS & 1" FOR DOUBLE CONNECTIONS.
- ALL SEWER MAINS SHALL BE C.S.P.V., R.C.S.P., V.C.P.V., A.C.P. CLASS 2400 OR 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 SHOWN WITH 12" & 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- ALL S.H.C.'S TO BE 6".
- "M.S.S.E." DESIGNATES "MINIMUM SEWER SERVICE ELEVATION".
- - - S - DENOTES SILT FENCE.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-193 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.



**VICINITY MAP**  
 SCALE: 1" = 600'

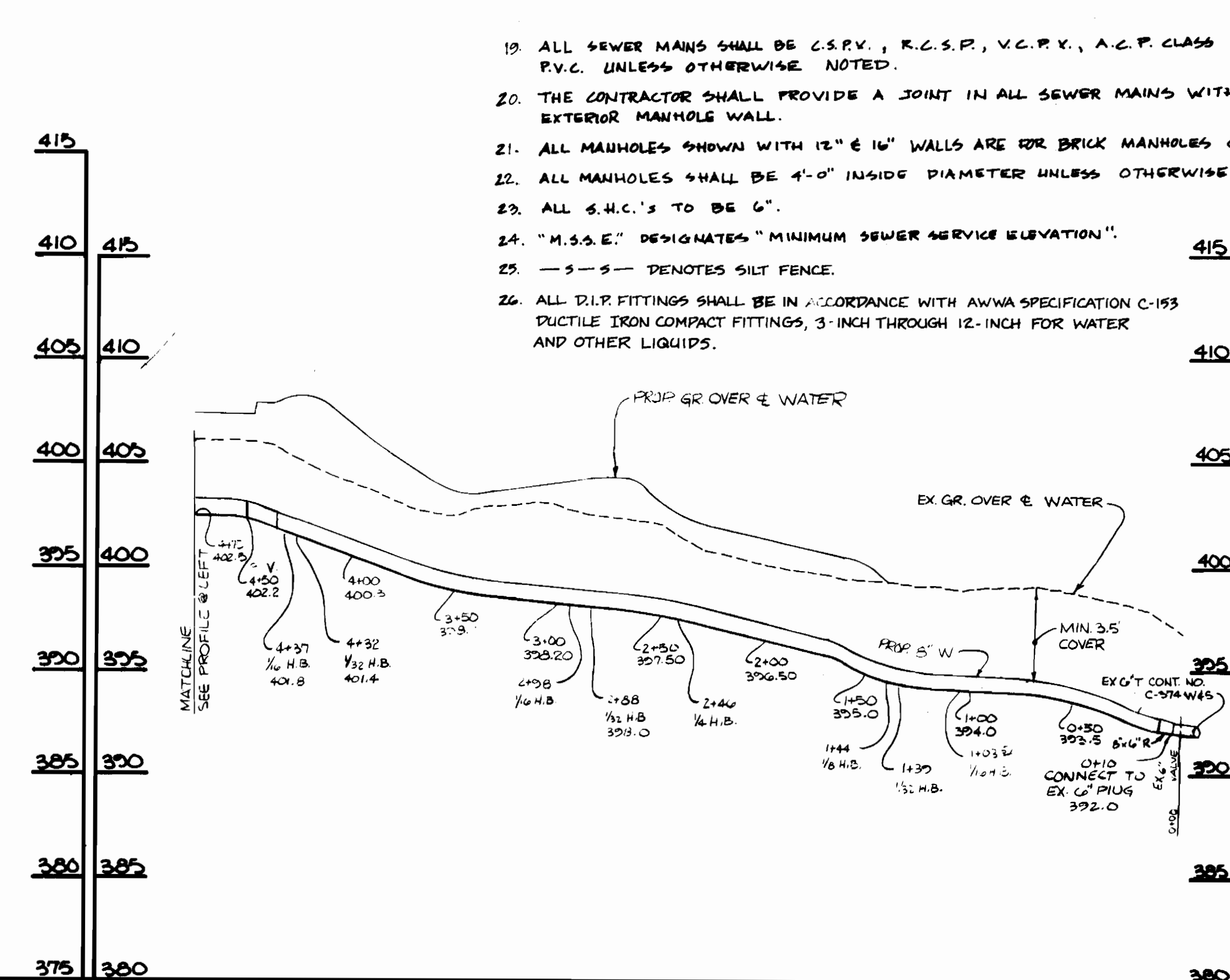
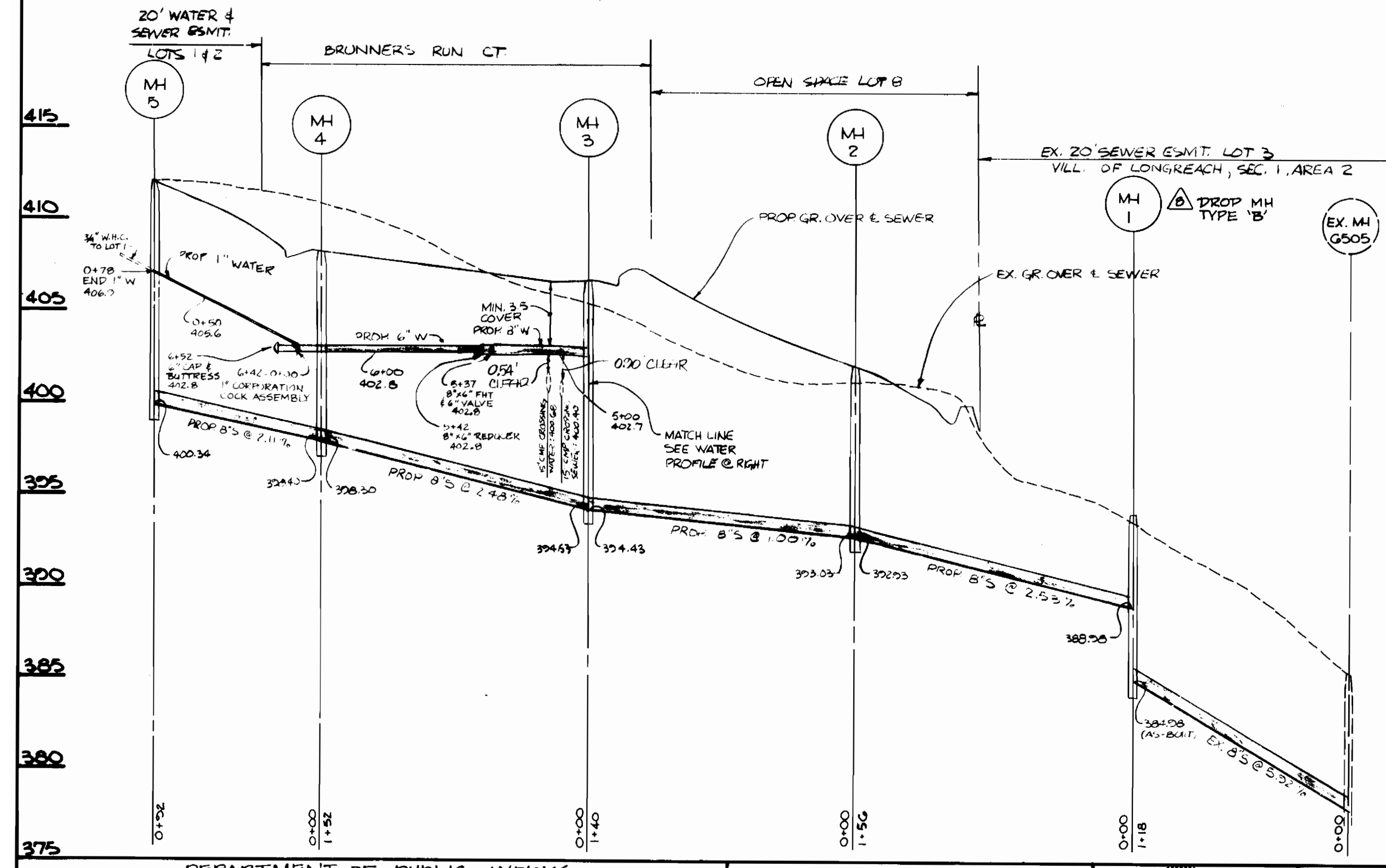
**BENCHMARKS**

- "A" PK NAIL IN OLD MONTGOMERY RD. WEST END OF SITE EL. 410.11
- "B" IRON PIPE AT SOUTH END OF SITE EL. 397.42

SEDIMENT CONTROL MEASURED FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 210 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 GRADING AND SEDIMENT CONTROL PLAN F-88-82, SPP-88-77.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*James McHelen* 5-11-88  
 U.S. SOIL CONSERVATION SERVICE DATE

THE DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.  
 APPROVED:  
*Stephen L. Shuler* 3/4/88  
 HOWARD SOIL CONSERVATION DISTRICT DATE



QUANTITIES			
ITEM	EST	AS-BUILT	
8" SAN.	540 L.F.	520 L.F.	J.M. MANUFACTURING
8" WATER	532 L.F.	526 L.F.	GRIFFIN
6" WATER	100 L.F.	110 L.F.	GRIFFIN
3/4" W.H.C.	246 L.F.	302 L.F.	HOWELL METALS
1" W.H.C.	85 L.F.	75 L.F.	HOWELL METALS
FIRE HYDRANT	1 EA.	1 EA.	MUELLER
6" F.H. VALVE	1 EA.	1 EA.	MUELLER
SEWER MANHOLES	5 EA.	5 EA.	ATLANTIC CONC. PRODUCTS
S.H.C.	137 L.F.	160 L.F.	J.M. MANUFACTURING CORP.
8"x6" F.H. TEE	1 EA.	1 EA.	GRIFFIN
8" 1/2" BEND	3 EA.	2 EA.	GRIFFIN
6" VALVE	1 EA.	1 EA.	MUELLER
6" VALVE	2 EA.	1 EA.	MUELLER
1 1/2" BLOWOFF	—	—	—
8"x6" REDUCER	2 EA.	2 EA.	GRIFFIN
8" 6" TEE	—	—	—
8" 1/2" BEND	3 EA.	2 EA.	GRIFFIN
8" 1/2" BEND	1 EA.	1 EA.	GRIFFIN
8" 1/2" BEND	1 EA.	1 EA.	GRIFFIN
8" CAP	—	—	—
6" CAP	1 EA.	1 EA.	GRIFFIN

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Ruth Beaman* 5-9-88  
 CHIEF, BUREAU OF UTILITIES DATE

*Charles Johnson* 5/9/88  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

*John Smith* 5/11/88  
 CHIEF, BUREAU OF ENGINEERING DATE

**SHANABERGER & LANE**  
 8726 TOWN & COUNTRY BLVD.  
 SUITE 203  
 ELLICOTT CITY, MARYLAND 21043  
 (301) 461-9563



DESIGNED	SLM	1,2,3,4	10-21-87
DRAWN	SLM	3,4	10-21-87
CHECKED	CPK	1,2,3,4	7-19-88
DATE	BY	NO.	REVISION
9-2-87			

**BRUNNER'S RUN**  
 LOTS 1-11  
 PLAN & PROFILES OF WATER  
 & SEWER MAINS

CONTRACT NO. 24-1684-D  
 SCALE: 1" = 30'  
 SHEET 1 OF 1  
 F-88-82 SPP-88-77