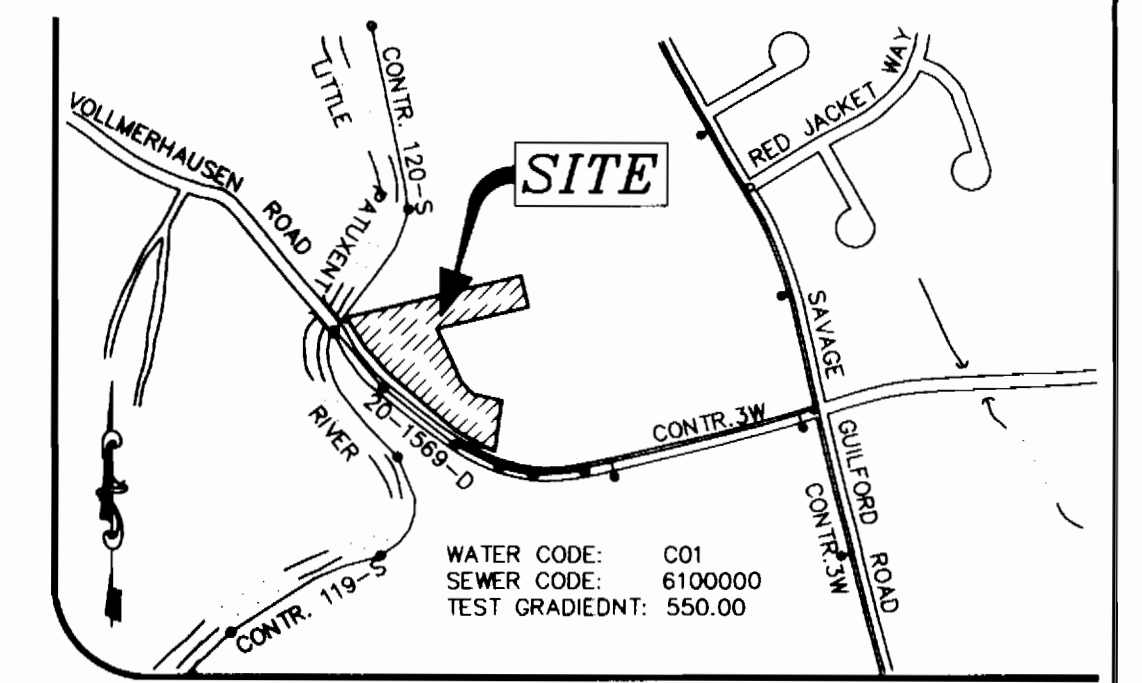


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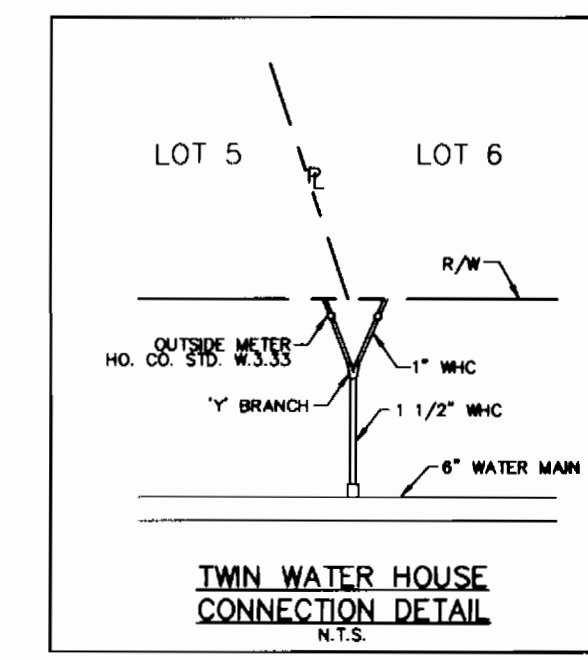
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EL. 271.11



TYPE OF BUILDING	RESIDENTIAL
NO OF LOTS/PARCELS	4
NO OF WATER HOUSE CONNECTIONS	4
NO OF SEWER HOUSE CONNECTIONS	3
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLAN	LITTLE PATUXENT

**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. 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 REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES 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 DETAIL FOR CONSTRUCTION (LATEST EDITION). 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:  
STATE HIGHWAY ADMINISTRATION 531-5533  
BG & E CO. CONTRACTOR SERVICES 850-4620  
BG & E CO. UNDERGROUND DAMAGE CONTROL 787-9068  
MISS UTILITY 1-800-257-7777  
COLONIAL PIPELINE CO. 795-1390  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 313-4900  
BUREAU OF UTILITIES 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM 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. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- 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 TEES SHALL BE STRAPPED TO TEES.
- 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 1000 AND 1005 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 OUTSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- ALL SEWER MAINS SHALL BE P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITH 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- 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 05.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1" - 6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.11(A) OF THE HOWARD COUNTY CODE.
- THE AMOUNT OF DISTURBANCE IS LESS THAN 5,000 SQUARE FEET. NO GRADING PLAN IS REQUIRED.



REVIEWED FOR HOWARD SCD AND MEET TECHNICAL REQUIREMENTS.

*J. H. Winkler* 8/24/96  
DATE

HOWARD SCD

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

*John P. Robertson* 8/28/96  
DATE

HOWARD SCD

F 95-123

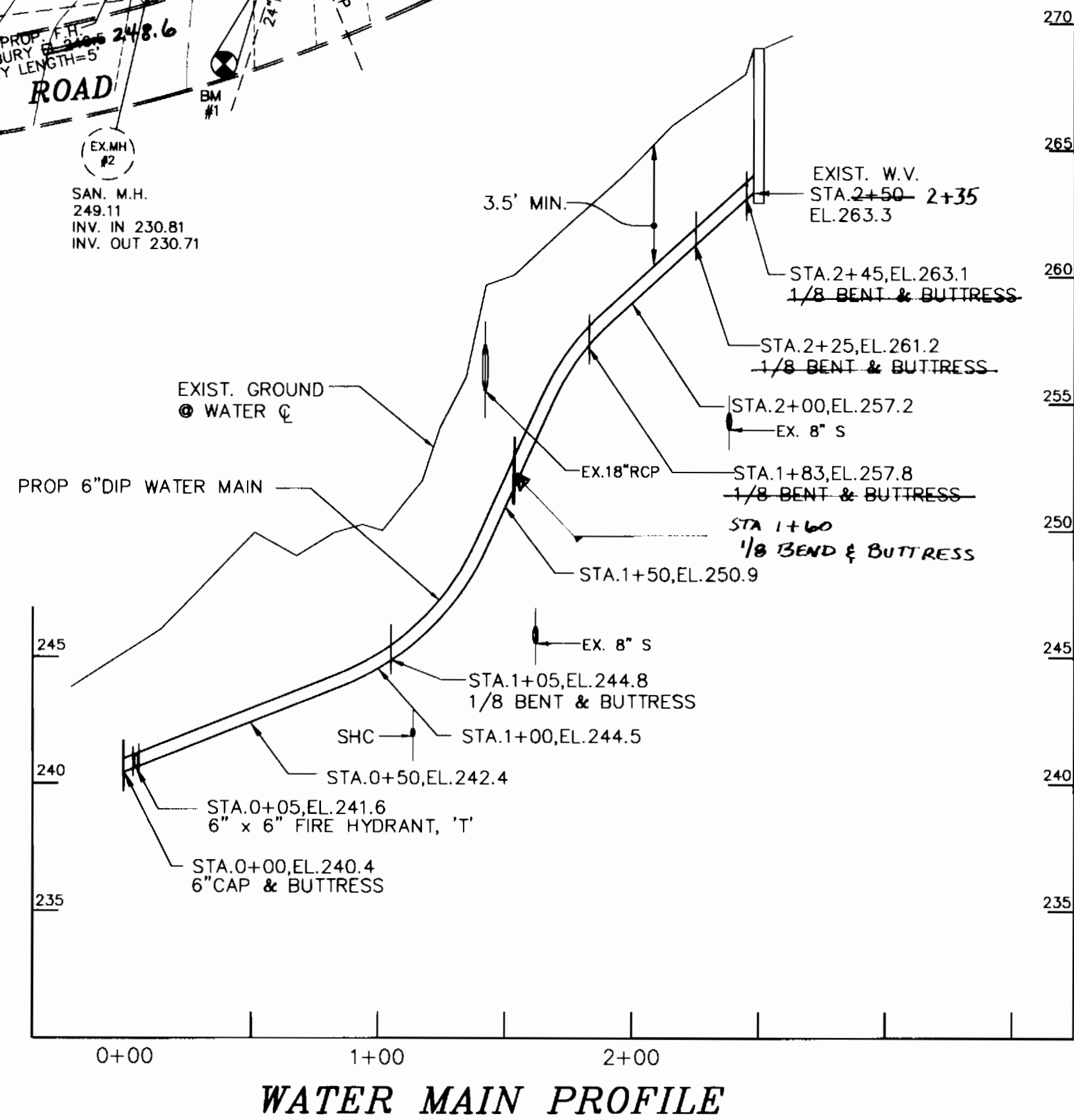
**PLAN**  
SCALE: 1"=50'

**QUANTITY TABLE**

ITEMS	QUANTITIES ESTIMATED	AS BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6"DIP	250'	253'	CL 52 DIP	JM MANUFACTURING / BRS
W.H.C.	16'	37'	"K" JOFT	HOWELL METALS / BRS
S.H.C.	106'	41'	CL 52 DIP	GRIFFIN PIPE PRODUCTS / BRS
W.V.	1		GATE	MUELLER CO. / BRS
F.H.	1		SUPER CENTERION	MUELLER CO. / BRS
1/8 H.B.	4	2	M.J	GRIFFIN PIPE PRODUCTS / BRS
6"x6" T	1	1	M.J FHT	GRIFFIN PIPE PRODUCTS / BRS
6"CAP & BUTTR.	1	1	M.J	GRIFFIN PIPE PRODUCTS / BRS
OUTSIDE METER	4	4		MUELLER CO. - FORD METAL BOX / BRS
1 1/2" TWIN METER	8'	2'	"K" SOFT	HOWELL METALS / BRS

NAME OF UTILITY CONTRACTOR \_\_\_\_\_

SURVEY AND DRAFTING DIVISION AS-BUILT DATE \_\_\_\_\_



**NOTE:**  
THIS WATER AND SEWER CONSTRUCTION PLAN WILL SUPERSEDE THE WATER AND SEWER CONSTRUCTION PLAN APPROVED AND SIGN BY CHIEF, DEVELOPMENT ENGINEERING DIVISION ON 8-7-95

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND	<b>MILDENBERG, BOENDER &amp; ASSOC., INC.</b> Engineers Planners Surveyors 5072 Dorsey Hall Drive, Suite 202, Elkocott City, Maryland 21042 (410) 997-0296 Fax (301) 521-5521 Telex (410) 997-0296 Fax	engineering M.P. illustration M.P. approval J.H. project 94039 date AUG. 96	BY NO. _____ REVISION _____ DATE _____	<b>WATER MAIN PLAN &amp; PROFILE</b>	<b>SHANK PROPERTY</b> CONTRACT NO. 24-3427-D 6th ELECTION DISTRICT HOWARD COUNTY	scale 1"=50' 1 of 1
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**(AS-BUILT) 4-3-97**