

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
16" Water LF	1450	1450	U.S. PIPE
Air Release M Ea.	1	1	ATLANTIC PROCAST
16" Valve Vault Ea.	1	1	PENN CAST PROD & SMITH
8" Water LF	90	95	U.S. PIPE
8" Valves Ea.	5	5	SMITH METRO.
6" Water LF	100	100	U.S. PIPE
6" Valve (excl. FHV)	1	1	SMITH METRO
Fire Hydrants Ea.	3	3	SMITH METRO

- ### 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 - 531-5538
    - 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 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.
  - 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 57-45.
  - ALL MANHOLE FRAME AND COVERS SHALL BE SET 0.6' ABOVE EXISTING GRADE WHERE SHOWN IN PROFILE. SEE DETAIL 57-41.
  - ORIGINAL GROUND OVER WATER WAS TAKEN FROM AERIAL PHOTOGRAPHY PREPARED BY MAPS AND INC., AND VERIFIED BY FIELD SURVEY IN AUGUST, 1981.

**CONTRACT NO. 44-1154-D**  
**VILLAGE OF HICKORY RIDGE**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT  
*James M. Hulme* 10-11-83  
 SIGNATURE DATE  
 U.S. SOIL CONSERVATION SERVICE

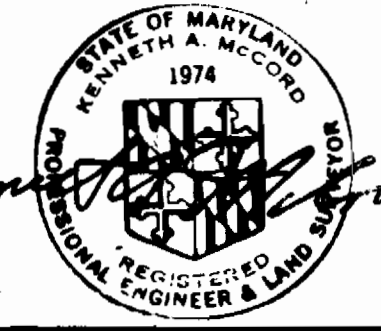
This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District.  
 APPROVED:  
*Howard S.C.D.* 10-11-83  
 HOWARD S.C.D. DATE

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications, and Road Construction Plans F-84-27.

Phase II Part I  
Major Water Main

**DEPARTMENT OF PUBLIC WORKS**  
 HOWARD COUNTY, MARYLAND  
*Henry F. Niemeyer* 10-18-83  
 DIRECTOR OF PUBLIC WORKS - DATE  
*Robert Woodlee* 10-12-83  
 CHIEF - BUREAU OF UTILITIES - DATE  
*William F. Cline* 10-18-83  
 CHIEF - BUREAU OF ENGINEERING - DATE  
*William F. Cline* 10-18-83  
 CHIEF - LAND DEVELOPMENT DIVISION - DATE

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

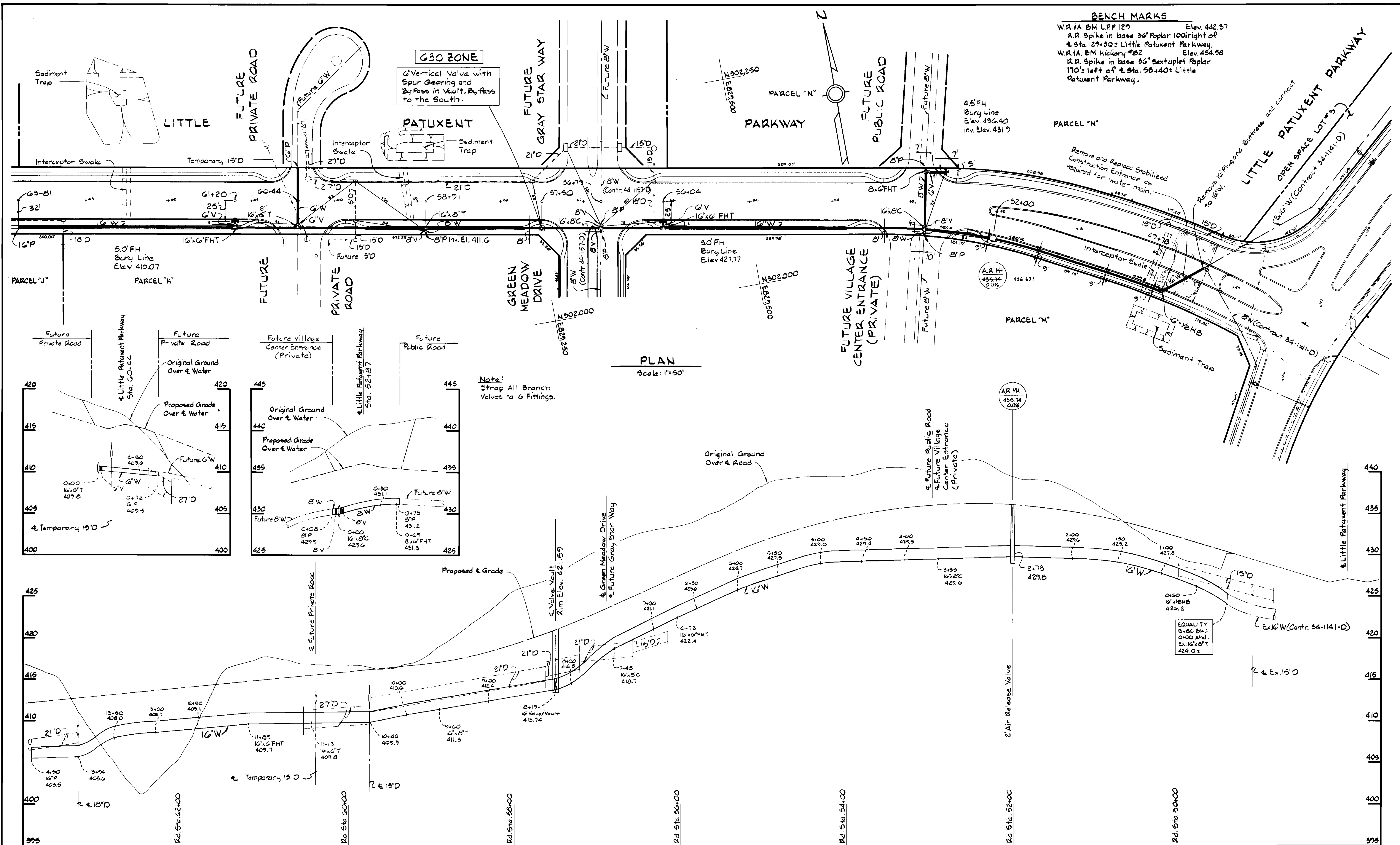


DES: S.J.  
 DRN: J.R.K.  
 CHK: R.B.N.  
 DATE: 10/18/83  
 BY NO. \_\_\_\_\_ REVISION \_\_\_\_\_ DATE \_\_\_\_\_

**VICINITY MAP AND GENERAL NOTES**  
 600 SCALE MAP NO. 35 BLOCK NO. \_\_\_\_\_

**COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 3 AREA 3 ELECTION DISTRICT NO. 5 CONTRACT NO. 44-1154-D**

**SCALE 1"=600'**  
**SHEET 1 OF 2**



**BENCH MARKS**  
 W.R.A. BM L.P.P. 127 Elev. 442.37  
 R.R. Spike in base 56" Poplar 100' right of  
 & Sta. 127+50 Little Patuxent Parkway.  
 W.R.A. BM Hickory #82 Elev. 484.58  
 R.R. Spike in base 56" Sextuplet Poplar  
 170' left of & Sta. 55+40 Little  
 Patuxent Parkway.

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

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

Note:  
 Strap All Branch  
 Valves to 6" Fittings.

EQUALITY  
 5+86 Bk-  
 0+00 and  
 Ex. 16" 8" T  
 Ex. 16" 8" T  
 424.0 ±

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director: F. Neumeier 10-18-83  
 Robert Word for RMB 10/17/83

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

DES: S.J.	BY: NO.	REVISION	DATE
DRN: J.R.K.			
CHK: R.B.N.			
DATE: 10/1/83			

PLAN & PROFILE OF  
 WATER MAINS

COLUMBIA  
 VILLAGE OF HICKORY RIDGE  
 SECTION 3 AREA 3  
 ELECTION DISTRICT NO. 5  
 CONTRACT NO. 44-1154-D

SCALE  
 AS SHOWN  
 SHEET  
 2 OF 2