

**QUANTITIES**

ITEM	QUANTITIES ESTIMATED	AS - BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	535	535	D.I.P.	U.S. PIPE FOUNDRY
6" WATER	55	54.5	D.I.P.	"
8"x8" TAPPING SLEEVE	1 EA.	1	STAINLESS STEEL	DRESSER
8" VALVES	1 EA.	1	RESILIENT SEAT GATE VALVE	MUELLER
8"x6" TEES	1 EA.	1	D.I.P.	U.S. PIPE FOUNDRY
6" VALVES	2 EA.	2	RESILIENT SEAT GATE VALVE	MUELLER
FIRE HYDRANTS	1 EA.	1	D.I.P.	"
6" SHC (PVC)	80 LF.	74	P.V.C.	J.M. MANUFACTURE
4' OIA. MANHOLE	1 EA.	1	PRECAST CONC.	ATLANTIC

UTILITY CONTRACTOR: **BENHOFF SONS**

SURVEY AND DRAFTING DIVISION AS-BUILT DATE

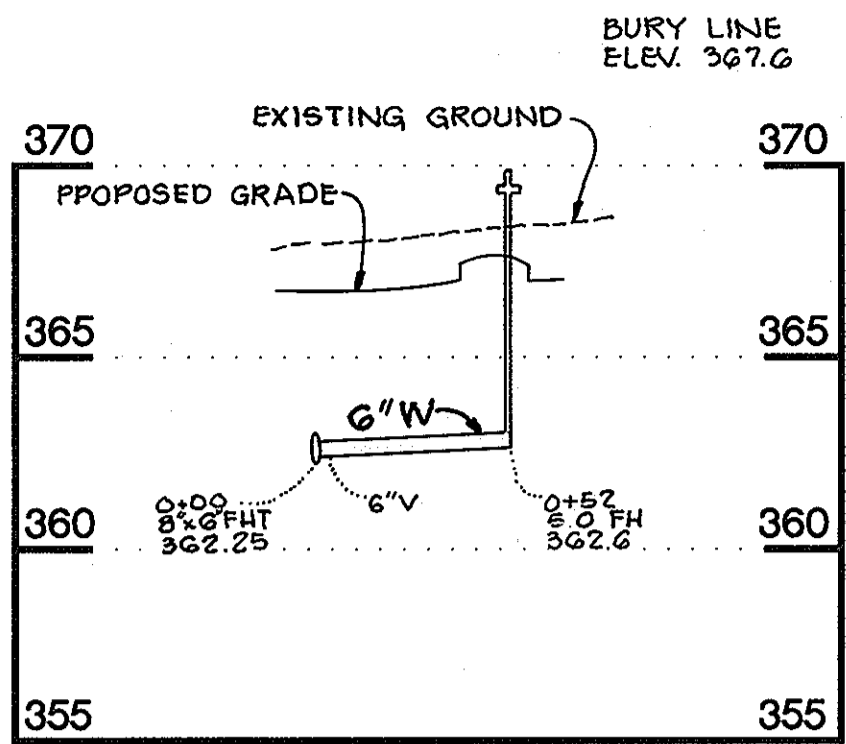
**BENCH MARKS**

BM #24BA ELEV. 396.357  
ALUMINUM DISC ON CONCRETE MONUMENT SET FLUSH WITH GROUND 4' BEHIND FACE OF CURB OF U.S. ROUTE 40 WEST-BOUND LANE, 28.8' FROM P.C. OF SAID CURB AND APPROXIMATELY 96' PERPENDICULAR EAST TO INTERSECTION OF PLUM TREE DRIVE.

BM #24B5 ELEV. 390.945  
ALUMINUM DISC ON CONCRETE MONUMENT SET FLUSH WITH GROUND IN EASTERN MEDIAN STRIP, 6.3' BEHIND EASTBOUND FACE OF CURB AND 12.8' BEHIND WESTBOUND FACE OF CURB OF U.S. ROUTE 40, PERPENDICULAR 76.2' TO INTERSECTION OF DOGWOOD ROAD.

NORTHING 586783.250 EASTING 1359211.698

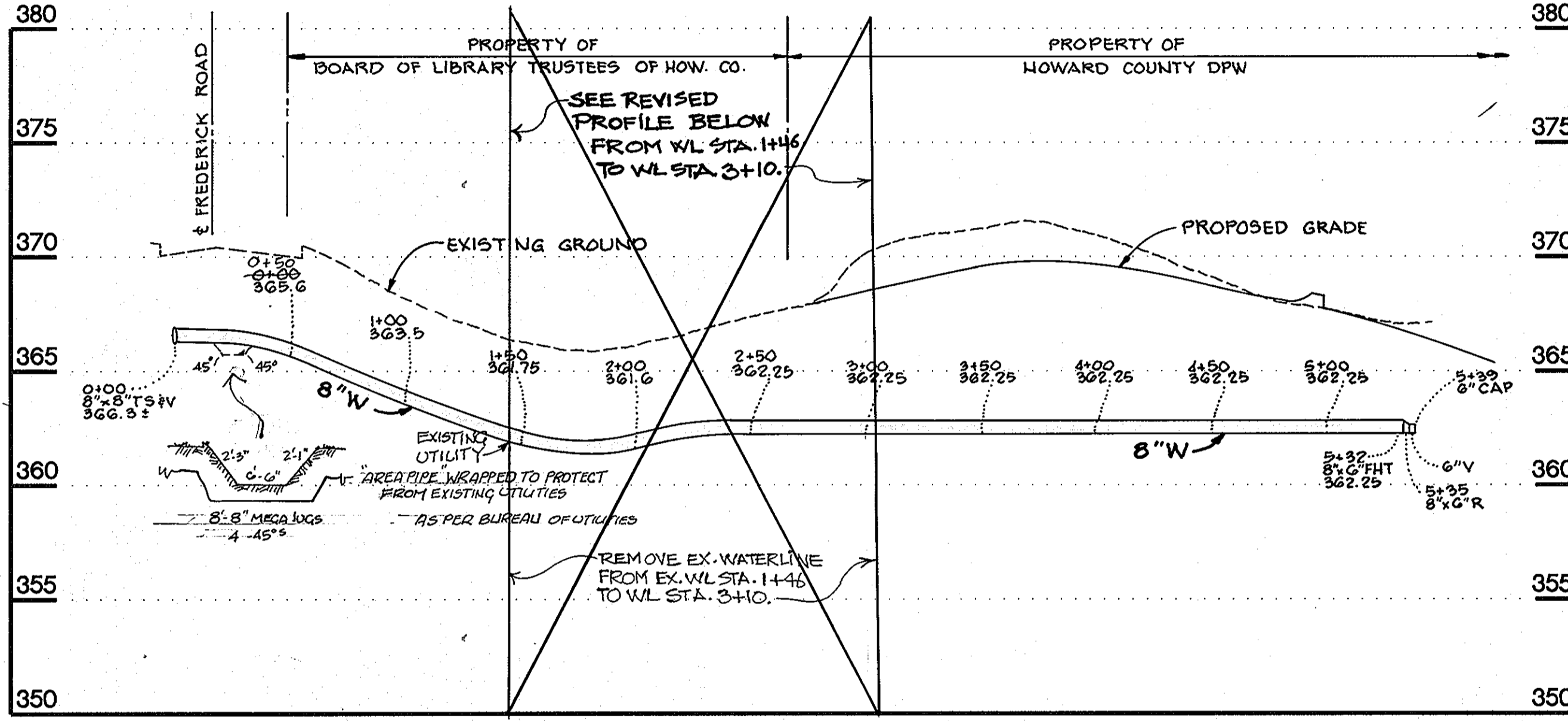
NORTHING 586956.233 EASTING 1356570.840



**PROFILE**

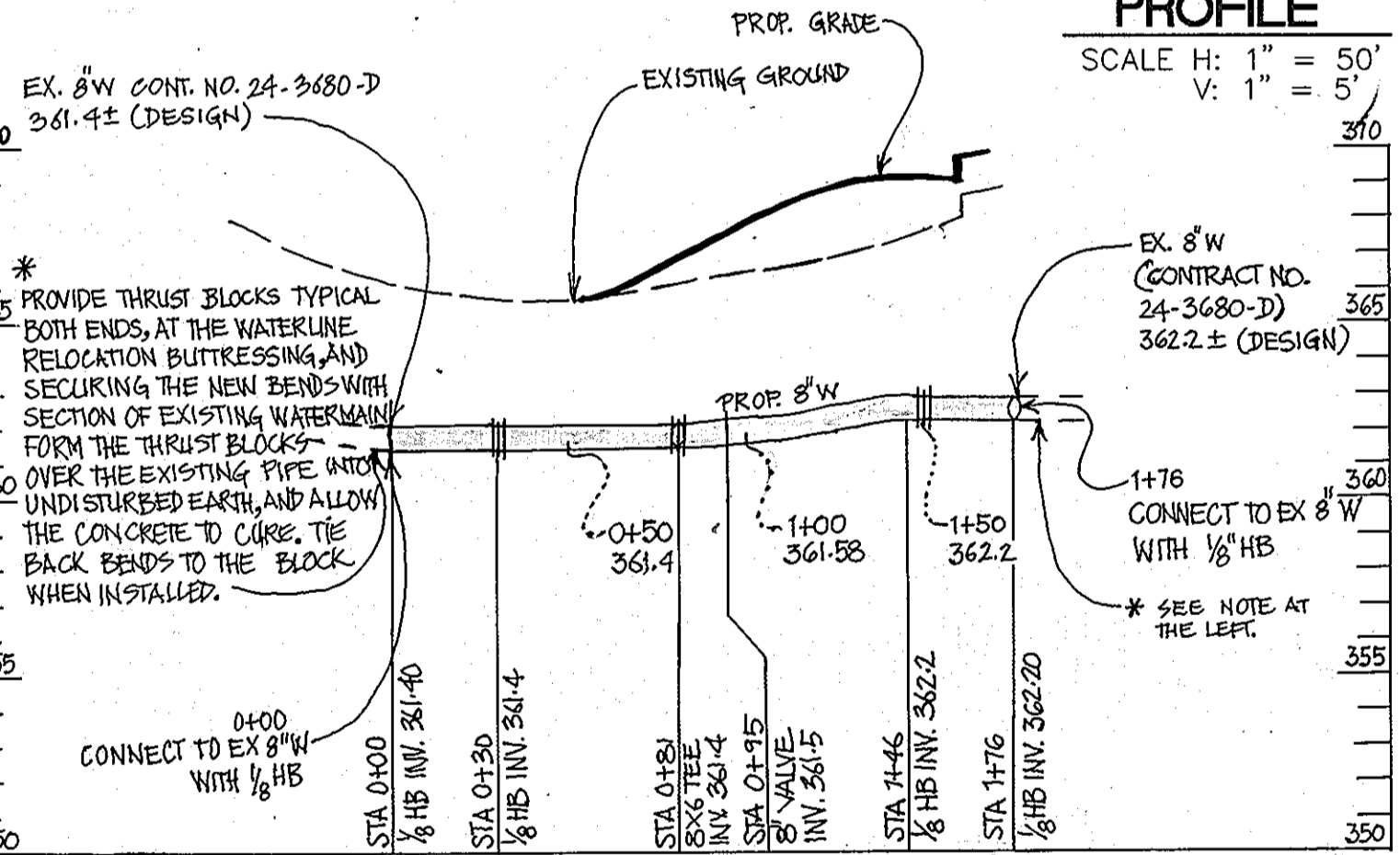
SCALE H: 1" = 50'  
V: 1" = 5'

\* PROVIDE THRUST BLOCK TYP. BOTH ENDS, AT THE WATERLINE RELOCATION, FOR BUTRESSING, AND SECURING THE NEW BENDS WITH SECTION OF EXISTING WATERMAIN. FORM THE THRUST BLOCKS OVER THE EXISTING PIPE INTO UNDISTURBED EARTH, AND ALLOW THE CONCRETE TO CURE. THE BACK BENDS TO THE BLOCK WHEN INSTALLED.



**PROFILE**

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



**PUBLIC WATERMAIN "B" PROFILE**

SCALE: HOR: 1"=50' VERT: 1"=5'

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER SITE DEVELOPMENT PLANS SDP 00 - 140

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*J.C. Waples* 11/13/00

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

*Steph W. Hill* 11/13/00

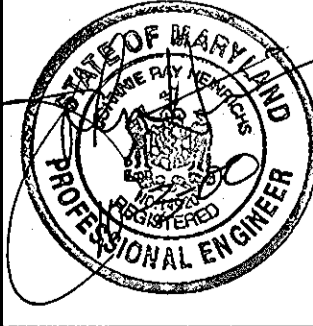
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*Robert W. Beaman* 11-6-00  
CHIEF, BUREAU OF UTILITIES

*Steph W. Hill* 11/13/00  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

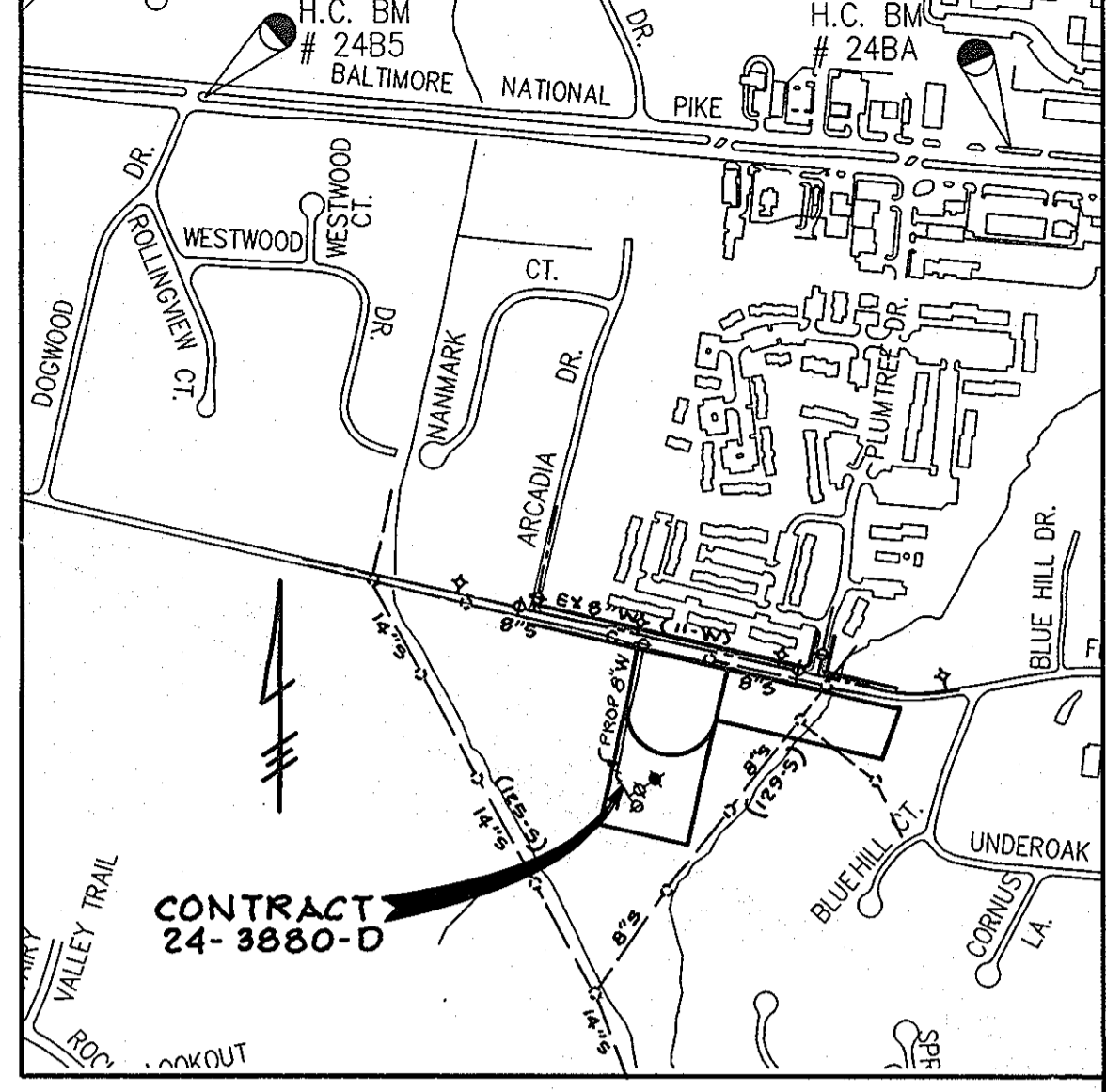
**PHOENIX ENGINEERING, INC.**  
CONSULTING ENGINEERS  
813 MAIDEN CHOICE LANE  
BALTIMORE, MARYLAND 21228  
(410) 247-8833



DES: R.J.W.			
DRN: R.H.D.			
CHK: J.R.H.	2	REVISE WATERLINE AND PROFILE	8/28/09
	1	AS-BUILT CONDITIONS ADDED TO PLAN	10/21/01
DATE: 09-00	BY NO.	DESCRIPTION	DATE

**PLAN & PROFILES OF WATER MAINS**

600' SCALE MAP NO. 24 BLOCK NO. 10



**VICINITY MAP**

SCALE: 1" = 600'

NUMBER OF LOTS	1
BUILDING TYPE	COMMERCIAL
NUMBER OF W.H.C.	1
NUMBER OF S.H.C.	1
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	SAVAGE

WATER & SEWER CODE  
WATER NO. F-07  
SEWER NO. 5753700  
TEST GRADIENT ELEV. 700

**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 AS 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 DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- 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. UNDER GROUND DAMAGE CONTROL	787-9068
MISS UTILITY	1-800-257-7777
HOWARD COUNTY DEPARTMENT OF WORKS	
BUREAU OF UTILITIES	313-4900
- 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 BUTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON DRAWINGS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

ELLICOTT CITY SENIOR CENTER  
CONTRACT NO. 24-3880-D

CAPITAL PROJECT C-0269

**ELLICOTT CITY SENIOR CENTER**

ELECTION DISTRICT 2  
CONTRACT NO. 24-3880-D

SCALE AS SHOWN

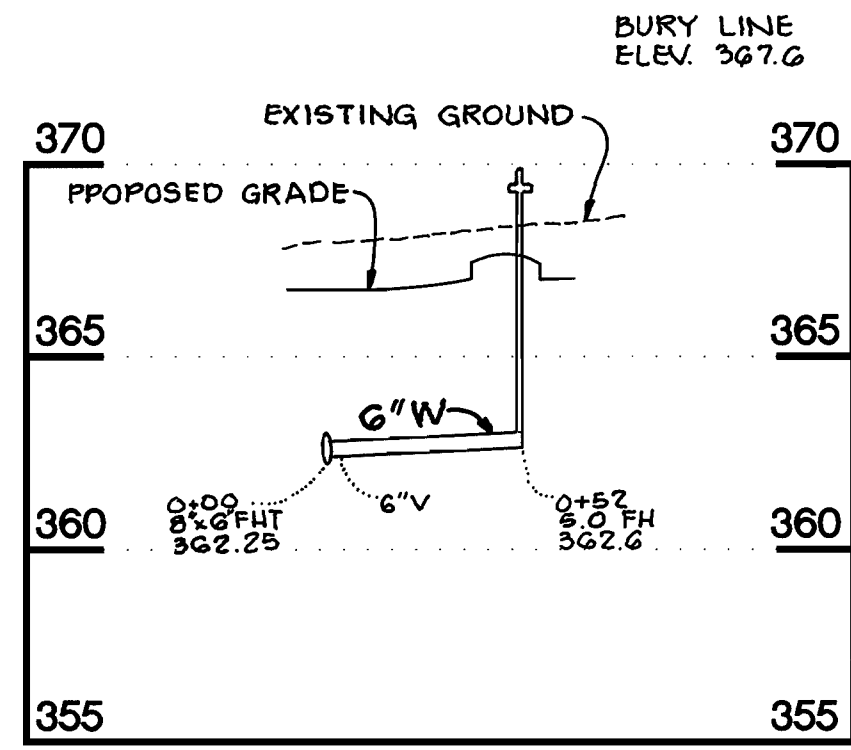
SHEET 1 OF 1

PROJ: 99-030

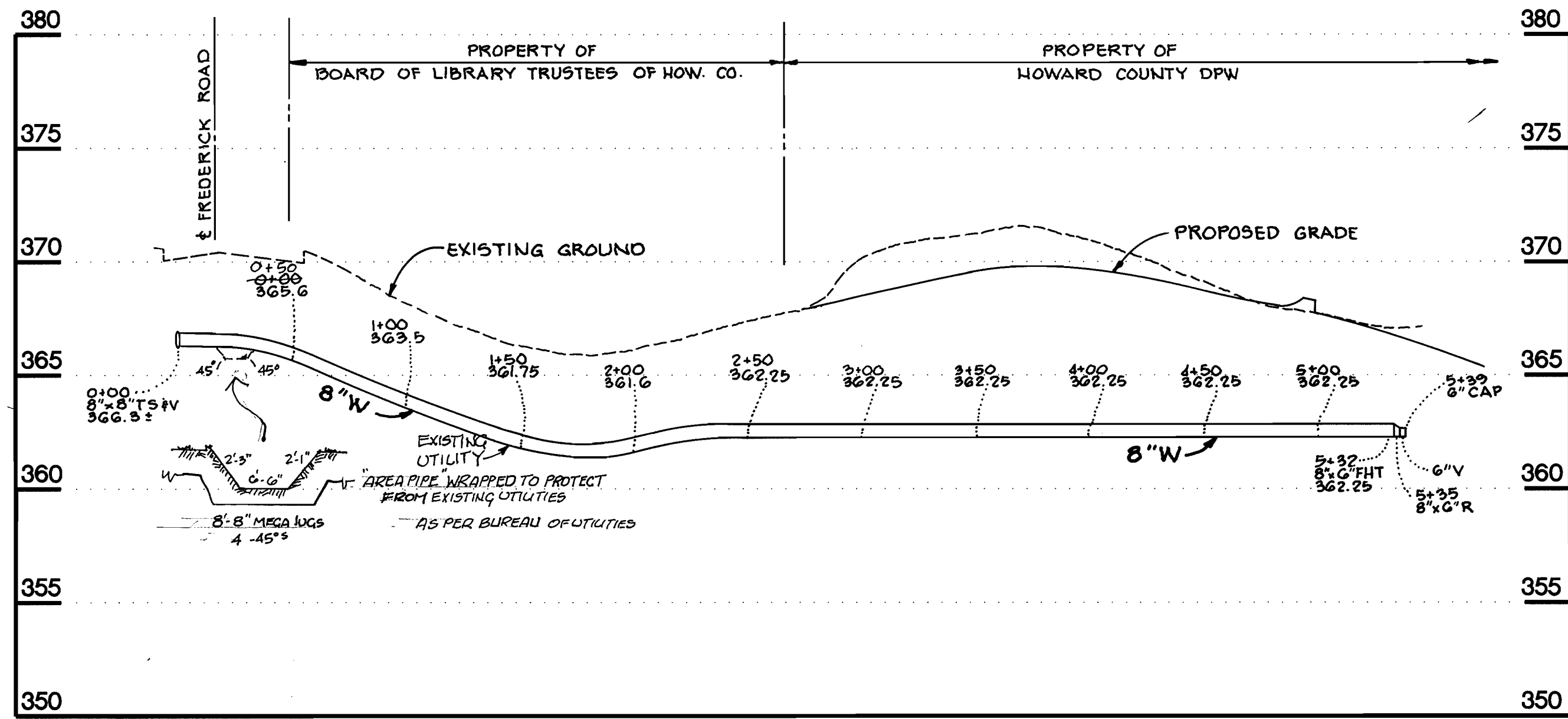
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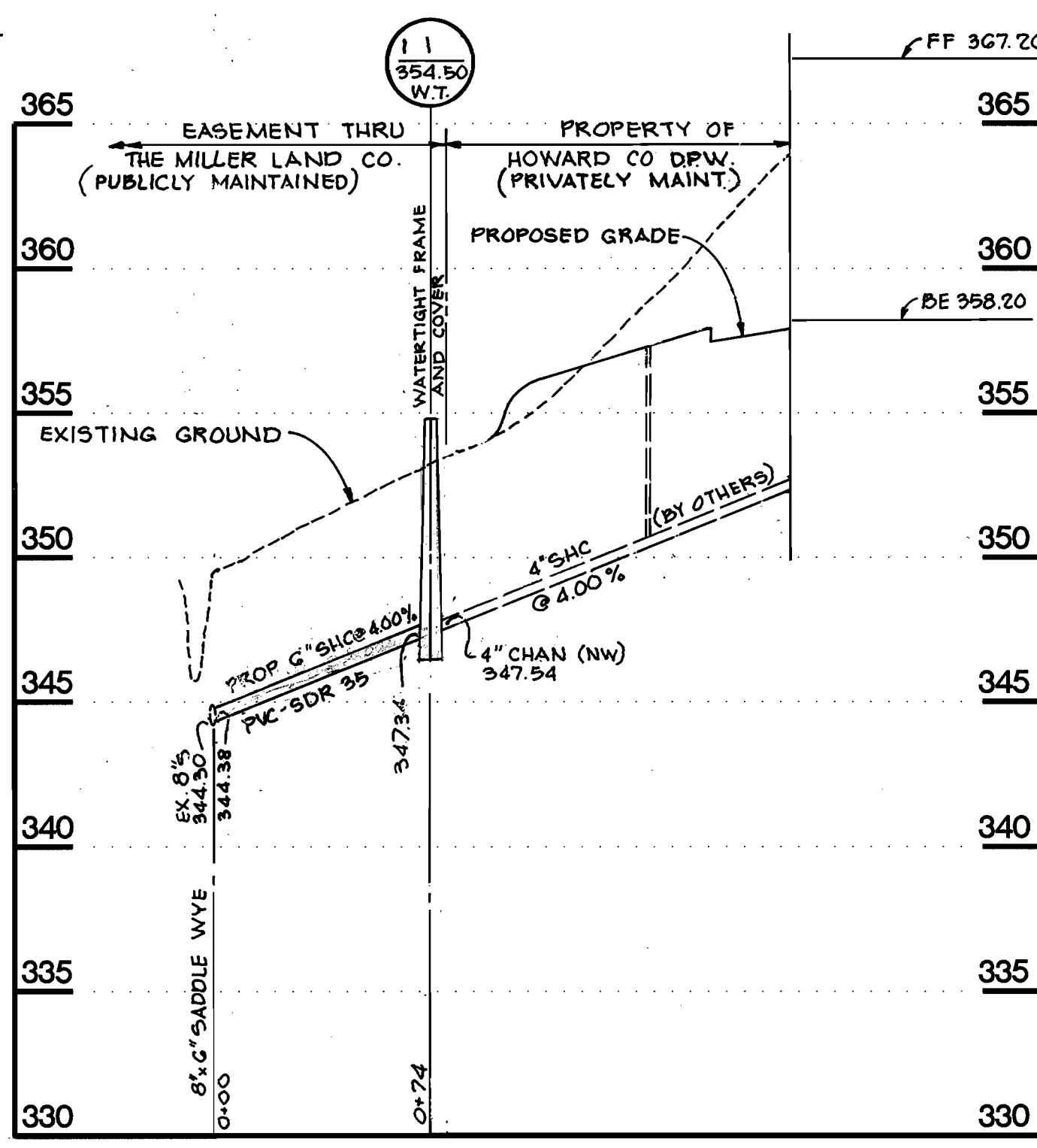
UTILITY CONTRACTOR **BENHOFF SONS**  
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE



**PROFILE**  
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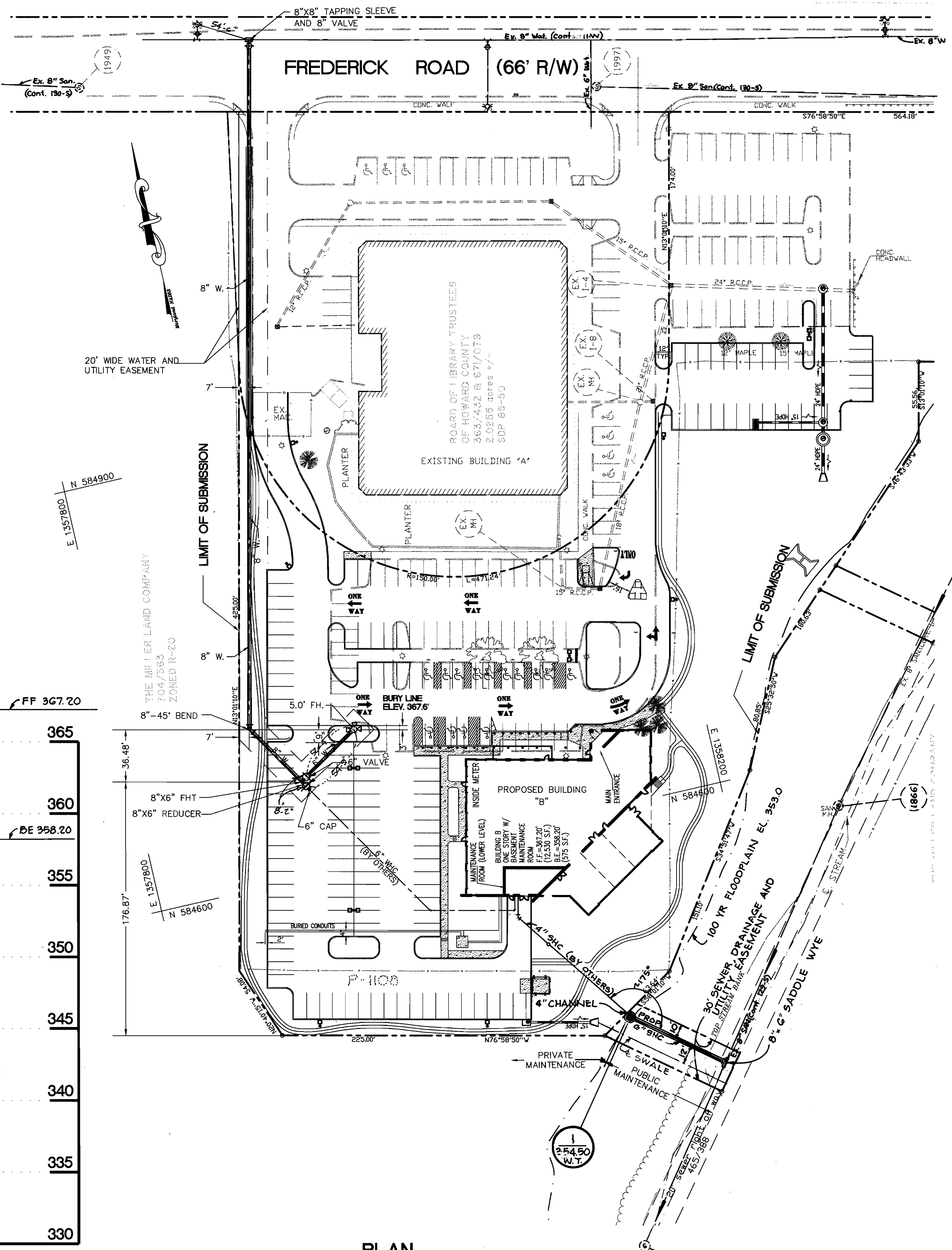


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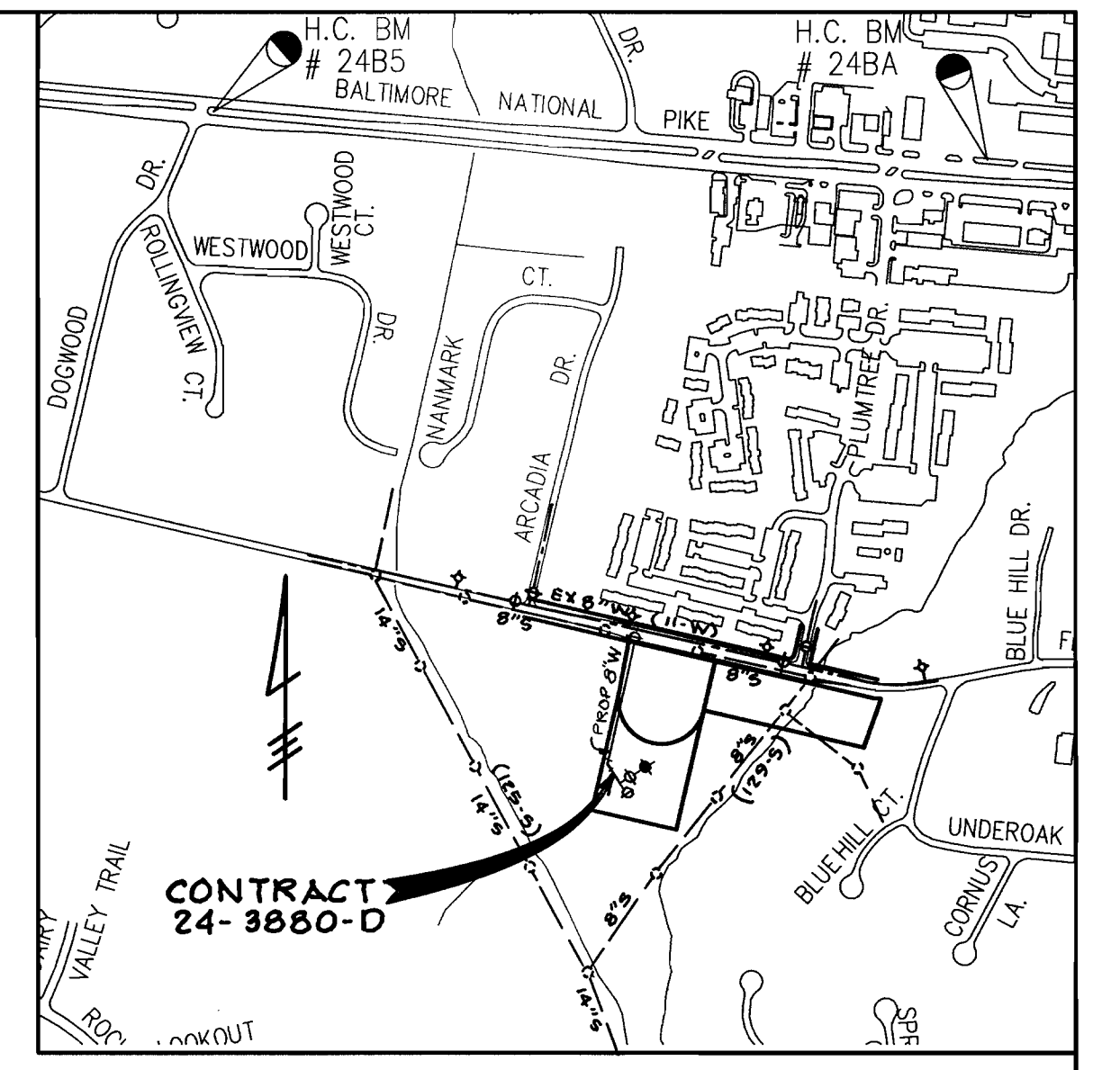
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**PLAN**  
 SCALE: 1" = 50'



**VICINITY MAP**  
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  - B&E CO. CONTRACTOR SERVICES..... 850-4620
  - B&E CO. UNDER GROUND DAMAGE CONTROL ..... 787-9068
  - MISS UTILITY ..... 1-800-257-7777
  - HOWARD COUNTY DEPARTMENT OF WORKS BUREAU OF UTILITIES. .... 313-4900
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ELICOTT CITY SENIOR CENTER  
 CONTRACT NO. 24-3880-D

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER SITE DEVELOPMENT PLANS SDP 00 - 140

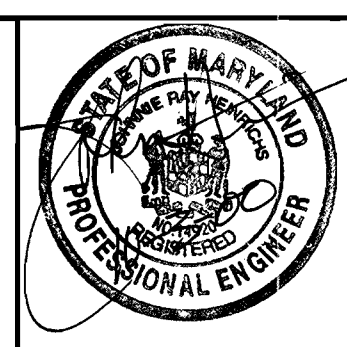
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
*J. Co. [Signature]* 11/13/00  
 NATURAL RESOURCES CONSERVATION SERVICES

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
*[Signature]* 11/13/00  
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 11-6-00

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 11/15/00

**PHOENIX ENGINEERING, INC.**  
 CONSULTING ENGINEERS  
 813 MAIDEN CHOICE LANE  
 BALTIMORE, MARYLAND 21228  
 (410) 247-8833



DES: R.J.W.			
DRN: R.H.D.			
CHK: J.R.H.	1	AS-BUILT CONDITIONS ADDED TO PLAN	12/21/01
DATE: 09-00	BY NO.	DESCRIPTION	DATE

**PLAN & PROFILES OF WATER MAINS**  
 600' SCALE MAP NO. 24 BLOCK NO. 10

CAPITAL PROJECT C-0269  
**ELICOTT CITY SENIOR CENTER**  
 ELECTION DISTRICT 2  
 CONTRACT NO. 24-3880-D

SCALE AS SHOWN  
 SHEET 1 OF 1  
 PROJECT 99-000