

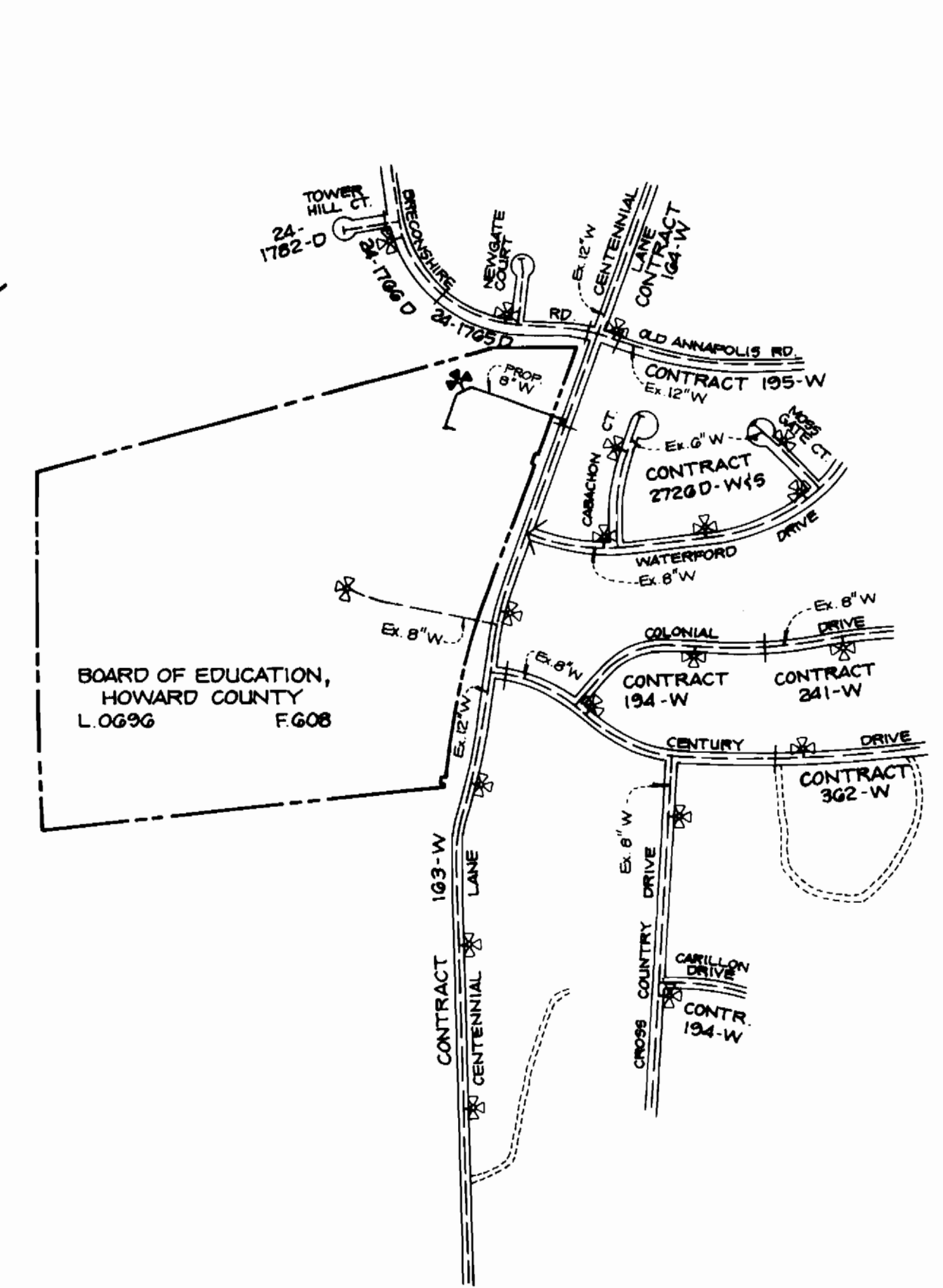
QUANTITIES			
ITEMS	ESTIMATED	AS-BUILT	MATERIAL/SUPPLIER
8" WATER	837'	824	Griffin Pipe 8" D.I.P., CLASS 52
6" WATER	40'	40	Griffin Pipe 6" D.I.P., CLASS 52
12" TAPPING SLEEVE (VALVE)	1 EACH	1	Mueller Co.
8" HORIZONTAL BEND	2 EACH	2	Griffin Pipe Products
8" x 8" TEE	1 EACH	1	Griffin Pipe Products
8" x 6" TEE	1 EACH	1	Griffin Pipe Products
6" VALVE	1 EACH	1	Mueller Co. Below Rd Supply
8" VALVE	1 EACH	1	Mueller Co.
FIRE HYDRANT	1 EACH	1	Mueller Co.
8" CAP	1 EACH	2	Griffin Pipe Products

BENCH MARK TABLE

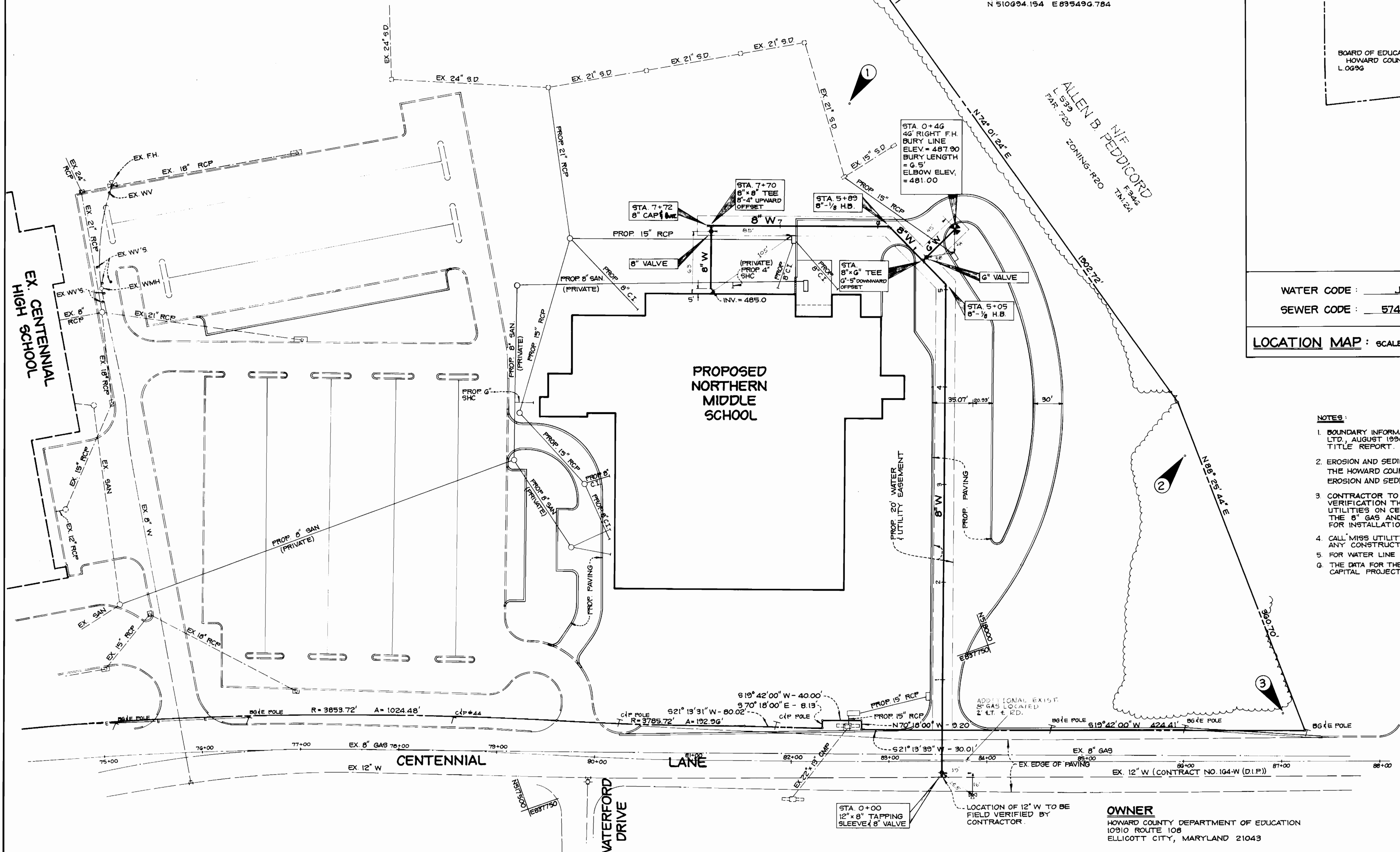
BM#1	IRON PIPE IN GROUND	ELEV. = 485.50
BM#2	IRON PIPE IN GROUND	ELEV. = 501.76
BM#3	IRON PIPE IN GROUND	ELEV. = 493.82

HOWARD COUNTY HORIZONTAL CONTROL STATIONS

STATION 2840003	3/4" REBAR 0.0' BELOW SURFACE	N 510778.49G E 890294.725
STATION 2840004	3/4" REBAR 0.5' BELOW SURFACE	N 510694.154 E 895496.784



WATER CODE :	J01	TYPE OF BUILDING :	SCHOOL
SEWER CODE :	5740300	NUMBER OF WHC :	1
		NUMBER OF SHC :	N/A
		DRAINAGE AREA :	LITTLE PATUXENT
		TREATMENT PLANT :	PATAPSCO (VIA ROUTE 108 PUMPING STATION)
LOCATION MAP : SCALE 1" = 600'			



- NOTES:**
- BOUNDARY INFORMATION FROM SURVEY BY BENGTON, DEBELL, ELKIN & TITUS, LTD., AUGUST 1990, AND WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT.
 - EROSION AND SEDIMENT CONTROL MEASURES WILL FOLLOW SECTION 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS. FOR THE APPROVED EROSION AND SEDIMENT CONTROL PLANS, SEE SDP-90-200.
 - CONTRACTOR TO FIELD VERIFY BY HAND EXCAVATION OR PNEUMATIC VERIFICATION THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES ON CENTENNIAL LANE (INCLUDING BUT NOT LIMITED TO THE 8" GAS AND 12" WATER LINE) PRIOR TO MECHANICAL EXCAVATING FOR INSTALLATION OF THE PROPOSED 8" WATER LINE.
 - CALL "MISS UTILITY", 1-800-257-7777, 48 HOURS IN ADVANCE TO ANY CONSTRUCTION IN THIS AREA.
 - FOR WATER LINE CONSTRUCTION WITHIN R/W USE OPEN CUT TRENCH
 - THE DATA FOR THE EX 12" WATER LINE WAS OBTAINED FROM HOWARD COUNTY CAPITAL PROJECT J-4015 PLANS.

SDP-90-200

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Tolson 10/24/90
DATE

US SOIL CONSERVATION SERVICES

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

John R. Rutherford 10/23/90
DATE

HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP-90-200

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Brown 10/26/90
DIRECTOR OF PUBLIC WORKS (10/26/90) DATE

Robert M. Brown 10-17-90
CHIEF, BUREAU OF UTILITIES DATE

John M. Brown 10/26/90
CHIEF, BUREAU OF ENGINEERING DATE

John M. Brown 10/26/90
CHIEF, LAND DEVELOPMENT DIVISION DATE

BENGTON, DEBELL, ELKIN & TITUS, LTD.

10801 LOCKWOOD DRIVE, SUITE 320
SILVER SPRING, MARYLAND 20901
(301) 681-8515

DES: JKK					
DRN: RER					
CHK:					
DATE:	BY	NO.	REVISION	DATE	

OWNER

HOWARD COUNTY DEPARTMENT OF EDUCATION
10910 ROUTE 108
ELLCOTT CITY, MARYLAND 21043

PLAN FOR
PROPOSED WATER MAIN
CONTRACT NO. 44-3080-D

600' SCALE MAP NO. 24 BLOCK NO. _____

NORTHERN MIDDLE SCHOOL

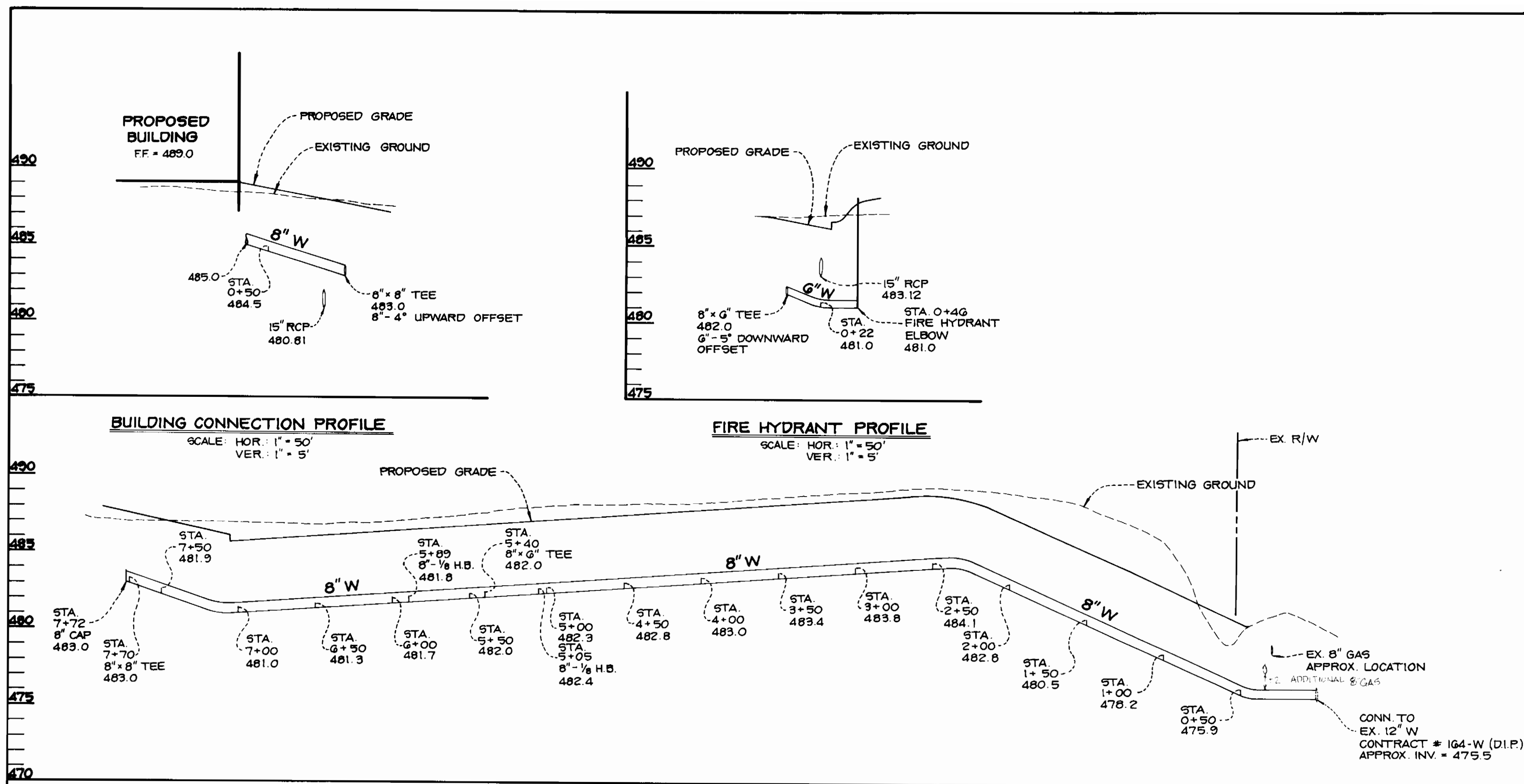
2ND ELECTION DISTRICT
TAX MAP 24, PARCEL 1095

HOWARD COUNTY, MARYLAND
JULY, 1990

SCALE AS SHOWN

SHEET 1 OF 2

AS-BUILT 5-1-91 L.0425



GENERAL NOTES:

PART 1

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICE 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.C.S. DATUM.
- ALL PIPE ELEVATIONS 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 THE BRACING OF ADDITIONAL POLES, OR DAMAGE SHALL BE DEDUCTED FROM THE MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOL. IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOL. IV ON THE JOB.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, USE HOWARD COUNTY STANDARD DETAILS.
- 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 UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.

STATE HIGHWAY ADMINISTRATION.....	531-5533
"MISS UTILITY".....	1-(301)-559-0100
CHESAPEAKE & POTOMAC (C&P).....	
TELEPHONE COMPANY.....	725-9976
COLONIAL PIPELINE COMPANY.....	795-1390
BALTIMORE GAS & ELECTRIC COMPANY.....	
CONTRACTOR SERVICES.....	561-2585
UNDERGROUND DAMAGE CONTROL.....	234-5621
TROUBLE-SHOOTING.....	298-9013
BUREAU OF UTILITIES, HOWARD COUNTY.....	992-2366

PART 2

- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT.
- CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OR THE MAIN.
- PLACE REGULATION "MEN WORKING" WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATIONS MANUAL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL WATER MAINS TO BE CLASS 52 D.I.P.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5' 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 ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE 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 INSIDE METER SETTINGS UNLESS OTHERWISE NOTED.
- ALL FIRE HYDRANTS TO BE SET THREE FEET BEHIND FACE OF CURB UNLESS NOTED OTHERWISE.
- MINIMUM CRIMP RADIUS WILL BE SPECIFIED BY PIPE MANUFACTURER.
- SERVICE CLAMPS ARE TO HAVE STAINLESS STRAPS.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. Brown 10/26/90
DIRECTOR OF PUBLIC WORKS (Acting) DATE

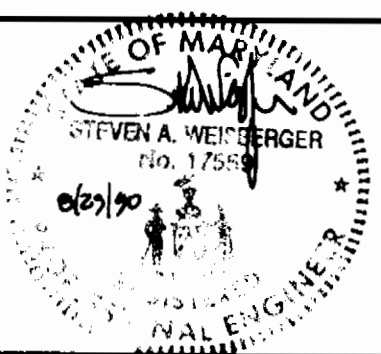
Robert J. Brown 10-17-90
CHIEF, BUREAU OF UTILITIES DATE

Robert J. Brown 10-26-90
CHIEF, BUREAU OF ENGINEERING & CONSTRUCTION DATE

Robert J. Brown 10/26/90
CHIEF, LAND DEVELOPMENT DIVISION DATE

BENGTSON, DEBELL, ELKIN & TITUS, LTD.

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CONTRACT NO. 44-3080-D

600' SCALE MAP NO. 24 BLOCK NO.

NORTHERN MIDDLE SCHOOL
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TAX MAP 24, PARCEL 1095
HOWARD COUNTY, MARYLAND
JULY, 1990

SCALE AS SHOWN
SHEET 2 OF 2

AS-BUILT 5-1-91 2 pages