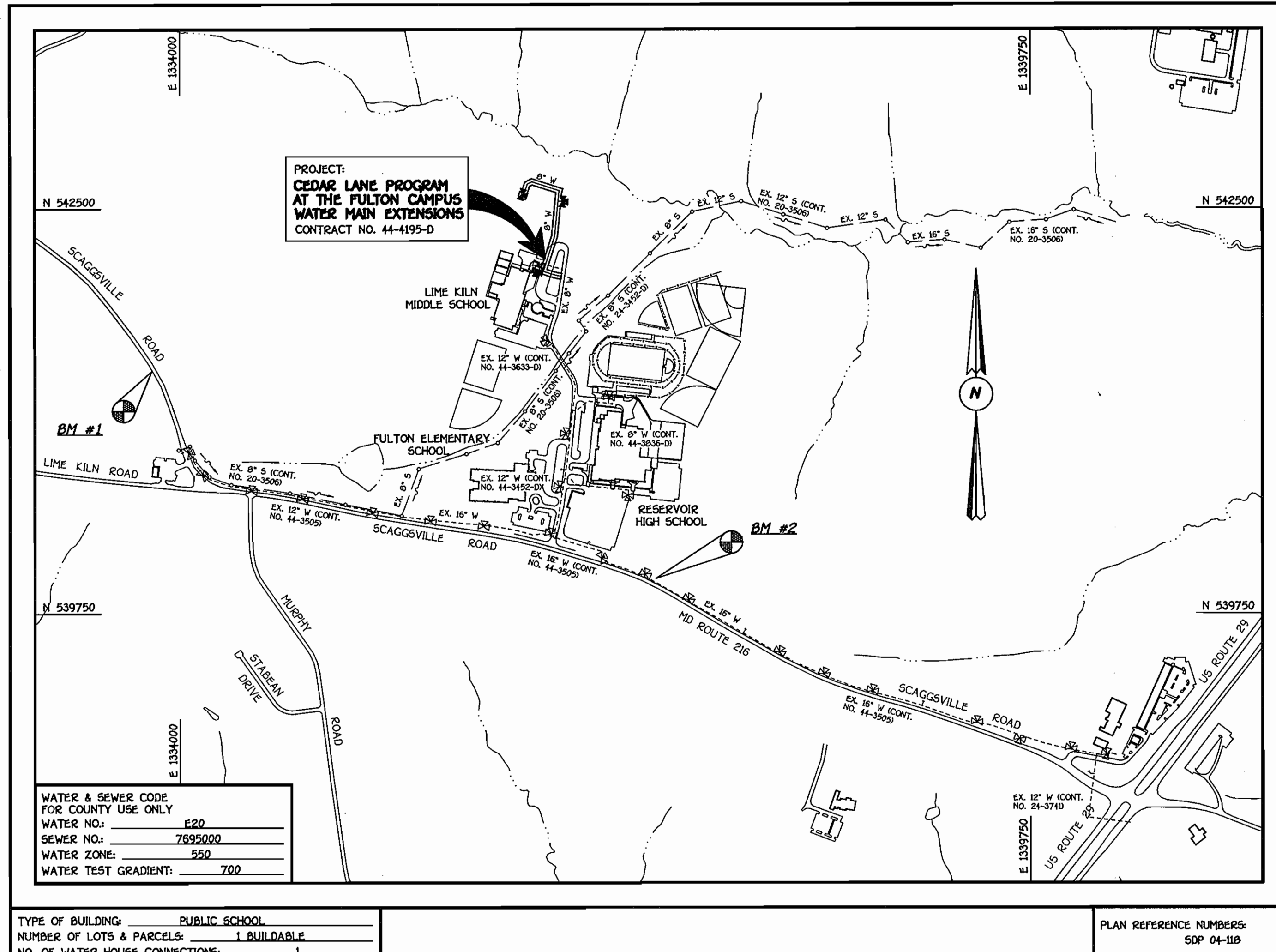


QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
8" WATER	1,052.97 L.F.	970 L.F.	DIP CLASS 52	HUGHES
6" WATER	78.30 L.F.	53 L.F.	DIP CLASS 52	HUGHES
FIRE HYDRANT	3 EACH	3 EACH	KENNEDY	HUGHES
12" X 8" TAPPING SLEEVE & VALVE	1 EACH	1 EACH	FORD C207 KENNEDY VALVE	HUGHES
8" VALVE	3 EACH	3 EACH	KENNEDY VALVE	HUGHES
6" VALVE	4 EACH	4 EACH	KENNEDY VALVE	HUGHES
8" X 8" TEE	2 EACH	2 EACH	TYLER	HUGHES
8" X 6" TEE	3 EACH	3 EACH	TYLER HYD/TEE	HUGHES
1/8" H.B.	2 EACH	2 EACH	TYLER	HUGHES
1/32" H.B.	2 EACH	2 EACH	TYLER	HUGHES
8" X 6" REDUCER	1 EACH	1 EACH	TYLER	HUGHES
8" PLUG & BUTTRESS	3 EACH	1 EACH	TYLER	HUGHES
8" PLUG & BUTTRESS	1 EACH	—	—	—
8" PLUG & BUTTRESS	1 EACH	—	—	—

NAME OF UTILITY CONTRACTOR: ROSS CONTRACTING
SURVEY & DRAFTING DIVISION AS-BUILT DATE: FEBRUARY 2005



GENERAL NOTES

PART I

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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, NAD 83/91.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 88.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 SITE.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATIONS OF THE TEST PITS. 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.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T 1-800-252-1133
BGE (CONTRACTOR SERVICES) 410-850-4620
BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9068
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO 410-795-1390
MESS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033/410-224-9210
- 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 THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(d) OF THE HOWARD COUNTY CODE.

PART II: WATER

- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.

BENCHMARK INFORMATION	
B.M.#1 - HOWARD COUNTY MONUMENT 41GA	N 541399.078 E 1333809.249 ELEVATION = 462.807
B.M.#2 - HOWARD COUNTY MONUMENT 46B2	N 539907.714 E 1337218.435 ELEVATION = 475.235

DEVELOPER'S CERTIFICATION

" I/WE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Wm. Bz 6.3.04
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION

" I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Paul W. Koebel 06-03-04
SIGNATURE OF ENGINEER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Jim Meyer 6/22/04
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *John K. Robertson* 6/22/04
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON SDP 04-118.

Wm. Bz 6.3.04
SIGNATURE OF DEVELOPER DATE

CONTRACT NO. 44-4195-D
CEDAR LANE PROGRAM AT THE FULTON CAMPUS WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 44-4195-D
CEDAR LANE PROGRAM AT THE FULTON CAMPUS WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND
<i>John K. Robertson</i> 6/22/04 CHIEF, BUREAU OF UTILITIES DATE	<i>John K. Robertson</i> 6/22/04 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

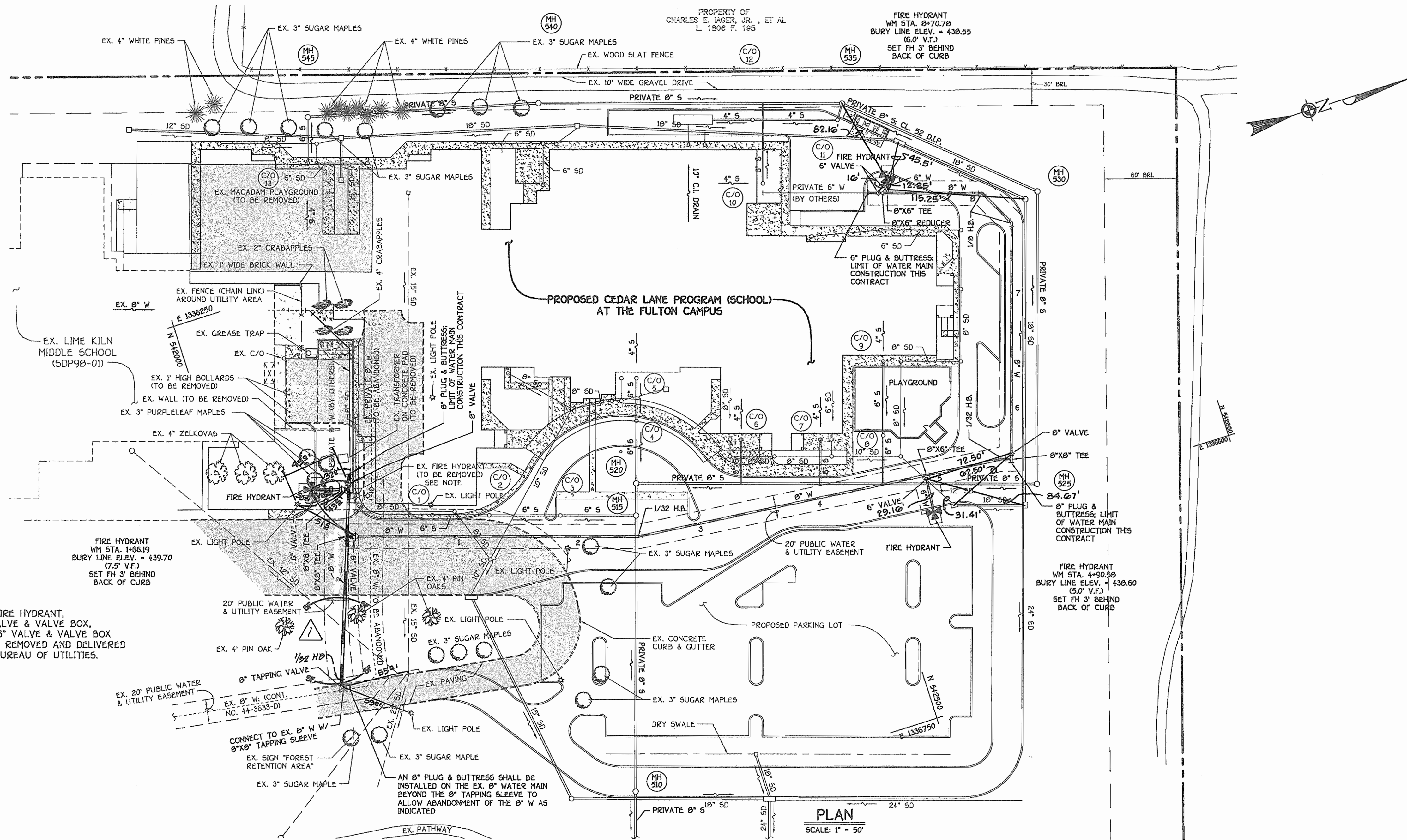
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 661-1255

STATE OF MARYLAND
PROFESSIONAL ENGINEER
TERRELL A. FISHER

DESIGNED BY:	H.D.T.	
DRAWN BY:	H.D.T.	
CHECKED BY:	P.W.K.	
DATE:	JUNE, 2004	
BY NO.		REVISION

WATER MAINS TITLE SHEET	
600' SCALE MAP NO. 41/45	BLOCK NO. 20 & 21/2 & 3
F.C.C. WORK ORDER NO. 61770	
FILE NAME: FINAL WATER MAINS TITLE SH	

CEDAR LANE PROGRAM AT THE FULTON CAMPUS WATER MAIN EXTENSIONS		SCALE AS SHOWN
CONTRACT NO. 44-4195-D FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SHEET 1 OF 3



NOTE: THE EX. FIRE HYDRANT, EX. 8" VALVE & VALVE BOX, AND EX. 6" VALVE & VALVE BOX SHALL BE REMOVED AND DELIVERED TO THE BUREAU OF UTILITIES.

AN 8" PLUG & BUTTRESS SHALL BE INSTALLED ON THE EX. 8" WATER MAIN BEYOND THE 8" TAPPING SLEEVE TO ALLOW ABANDONMENT OF THE 8" W AS INDICATED

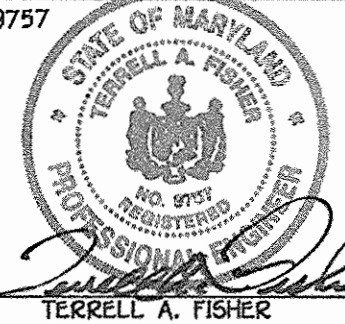
AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 44-4195-D
CEDAR LANE PROGRAM
AT THE FULTON CAMPUS
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21112
(410) 401-2995



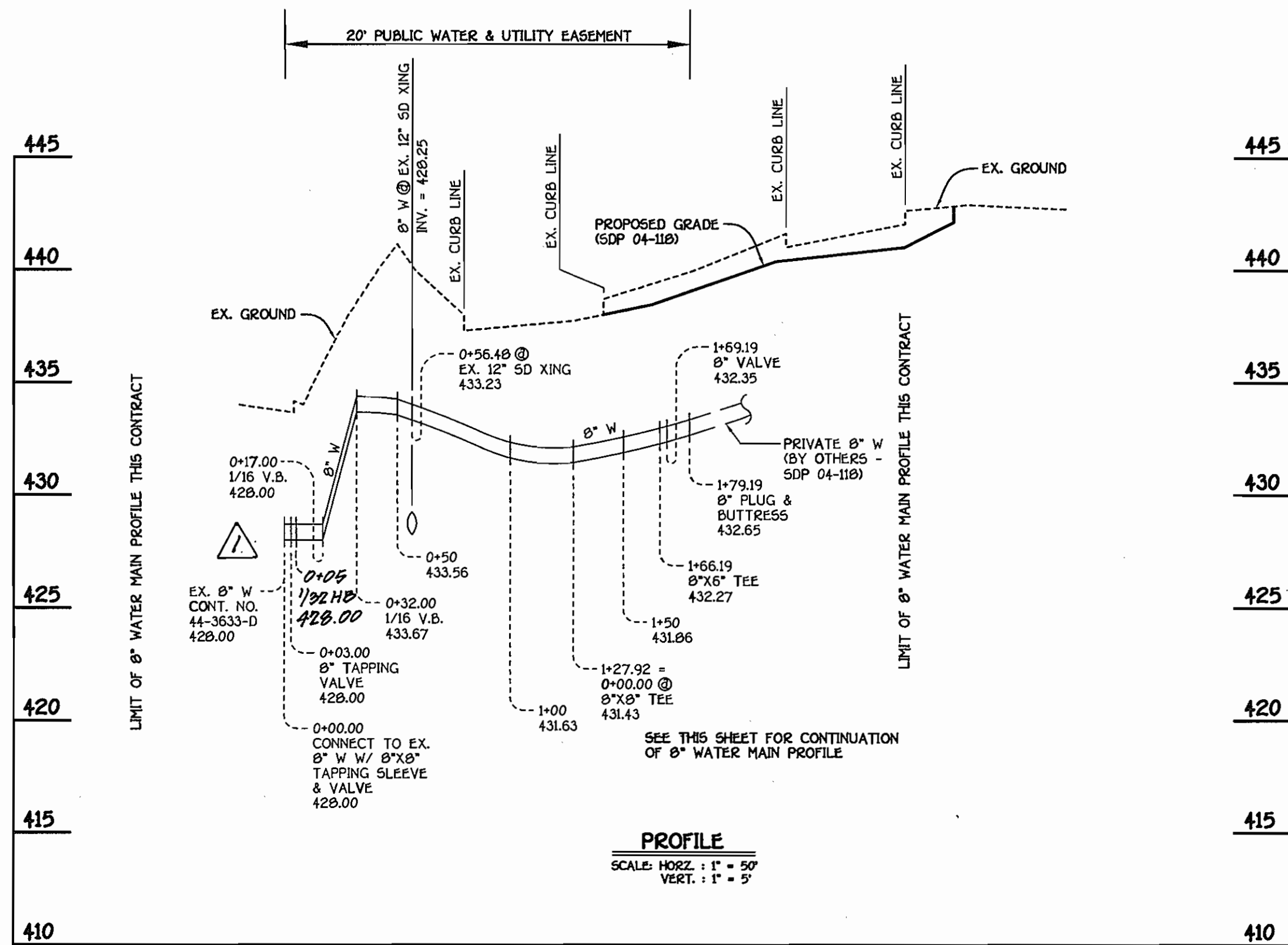
DESIGNED BY:	M.D.T.
DRAWN BY:	M.D.T.
CHECKED BY:	P.W.K.
DATE:	JUNE, 2004
BY NO.	
REVISION	1-9-05 Moved approx 170' of public 8" water main to avoid ex. underground electric conduit

WATER MAINS PLAN	
600' SCALE MAP NO.	41/15 BLOCK NO. 20 & 21/2 & 3
F.C.C. WORK ORDER NO.	51770
FILE NAME	FINAL WATER MAIN PLAN SH1 2

CEDAR LANE PROGRAM AT THE FULTON CAMPUS
WATER MAIN EXTENSIONS
CONTRACT NO. 44-4195-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

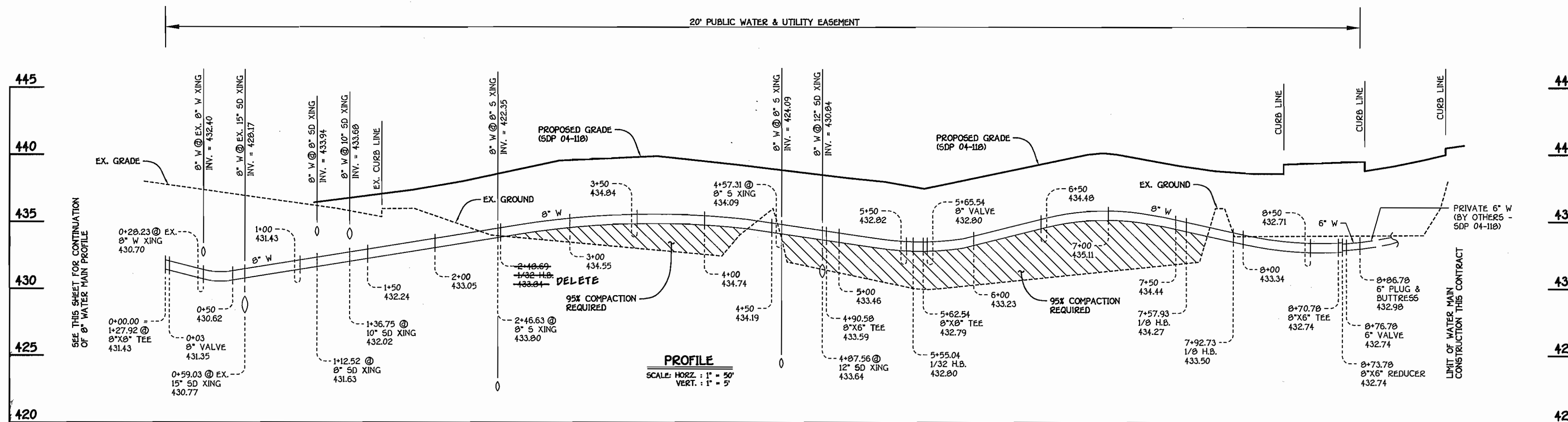
SCALE AS SHOWN
SHEET 2 OF 3

K:\SDS\PROJ\61770 New Cedar Lane School\dwg\61770 Final Water Main Extension.dwg, 6/2/04, 10:16:49 AM



WATER MAIN TABULATION CHART			
W.M. STATION	APPURTENANCE	NORTHING	EASTING
8" WATER MAINS			
0+00.00	8" X 8" TAPPING SLEEVE	542041.26	1336579.06
0+03.00	8" TAPPING VALVE	542041.71	1336576.09
0+03.97	P.C. (CRIMP RADIUS = 380.00')	542041.85	1336575.13
0+64.42	P.T. (CRIMP RADIUS = 380.00')	542055.61	1336516.34
1+27.92	8" X 8" TEE	542074.94	1336455.85
1+66.19	8" X 6" F.H. TEE	542086.59	1336419.40
1+69.19	8" VALVE	542087.51	1336416.54
1+79.19	8" PLUG & BUTTRESS	542090.55	1336407.02
8" WATER MAINS			
0+00.00	8" X 8" TEE	542074.94	1336455.85
0+03.00	8" VALVE	542077.80	1336456.77
2+48.89	1/32 H.B.	542311.70	1336531.95
4+90.58	8" X 6" F.H. TEE	542552.43	1336555.63
5+55.04	1/32 H.B.	542616.58	1336561.95
5+62.54	8" X 8" TEE	542623.72	1336564.24
5+65.54	8" VALVE	542624.64	1336561.38
7+57.93	1/8 H.B.	542683.41	1336578.18
7+92.73	1/8 H.B.	542687.50	1336547.24
8+70.78	8" X 6" F.H. TEE	542593.18	1336323.40
8+73.78	8" X 6" REDUCER	542590.32	1336322.48
8+76.78	6" VALVE	542587.44	1336321.56
8+86.78	6" PLUG & BUTTRESS	542577.95	1336318.51

8" WATER MAIN



8" WATER MAIN

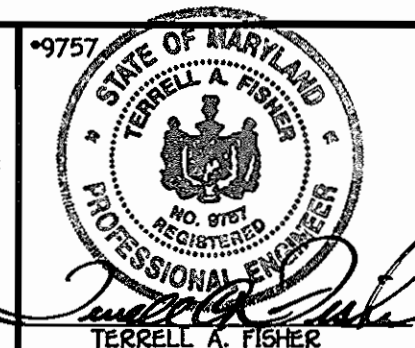
AS BUILT
DATE: FEBRUARY 2005

CONTRACT NO. 44-4195-D
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AT THE FULTON CAMPUS
WATER MAIN EXTENSIONS
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ELICOTT CITY, MARYLAND 21042
(410) 461-2295



DESIGNED BY: M.D.T.
DRAWN BY: M.D.T.
CHECKED BY: P.W.K.
DATE: JUNE, 2004
BY NO. 30
REVISION: Added 1/32 H.B.

WATER MAINS
PROFILES

60' SCALE MAP NO. 41/46 BLOCK NO. 20 & 21/2 & 3
F.C.C. WORK ORDER NO. 81770
FILE NAME: FINAL WATER MAINS PROFILES SH 3

**CEDAR LANE PROGRAM AT THE FULTON CAMPUS
WATER MAIN EXTENSIONS**
CONTRACT NO. 44-4195-D
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
3 OF 3