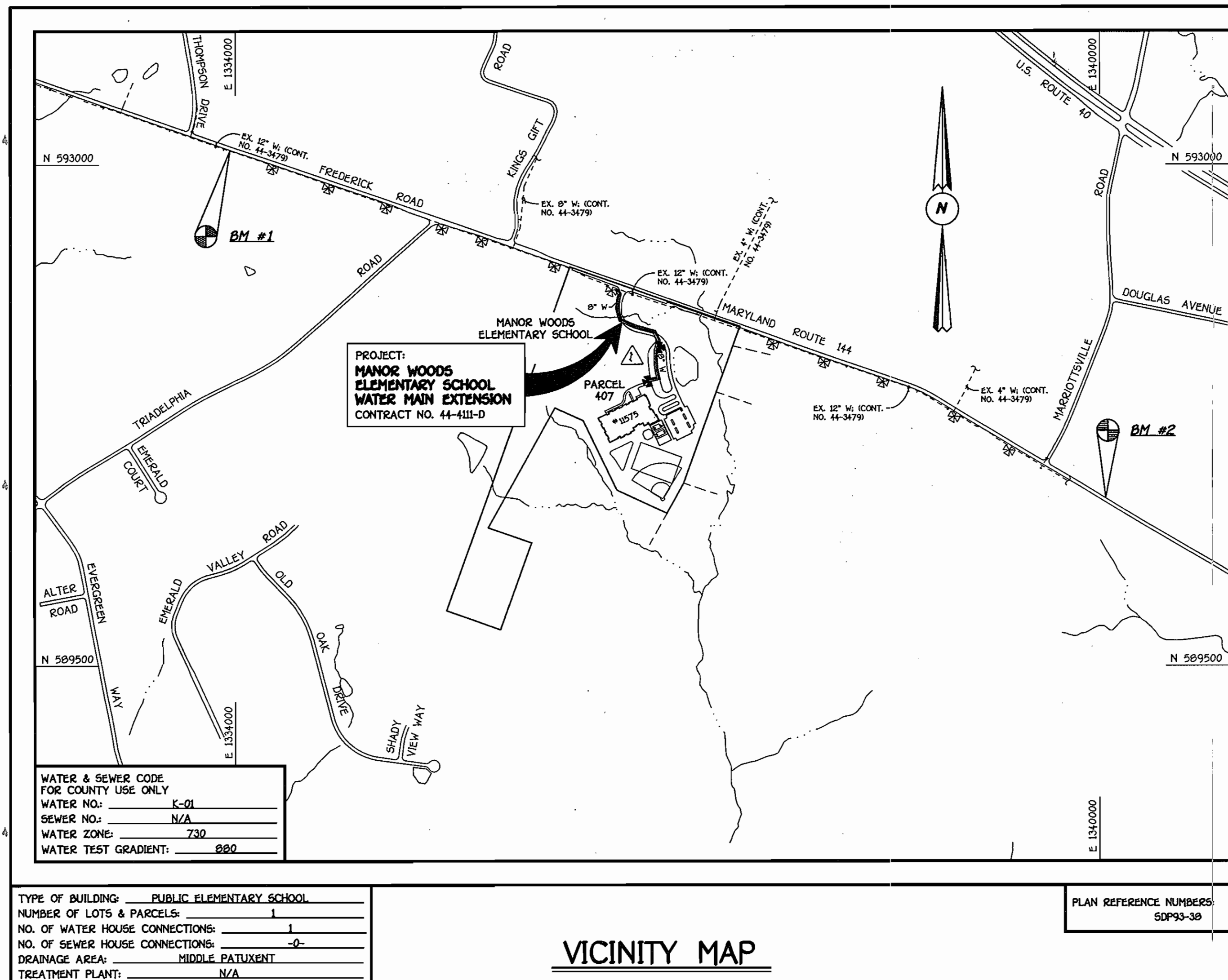


QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		MFGR
		QUANTITIES	TYPE	
8" WATER	899 L.F.	899	D.I.P. CLASS 52	TYLER PIPE
6" WATER	30 L.F.	19	"	"
FIRE HYDRANT	2 EACH	2	"	MUELLER
8" VALVE	2 EACH	2	"	"
6" VALVE	3 EACH	3	"	"
8" X 8" TEE	2 EACH	2	"	TYLER PIPE
8" X 6" TEE	3 EACH	3	"	"
1/8" H.B.	5 EACH	5	"	"
1/32" H.B.	2 EACH	2	"	"
8" PLUG & BUTTRESS	3 EACH	3	"	"
6" PLUG & BUTTRESS	1 EACH	1	"	TYLER PIPE

NAME OF UTILITY CONTRACTOR: IACOBONI
SURVEY & DRAFTING DIVISION AS-BUILT DATE:



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 89.
- 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) 410-850-1620
 BGE (UNDERGROUND DAMAGE CONTROL) 410-787-9068
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINE CO 410-799-1390
 MISS UTILITY 1-800-257-7777
 STATE HIGHWAY ADMINISTRATION 410-531-5533
 VERIZON 1-800-743-0033/410-224-9210

PART II: WATER

- ALL WATER MAINS SHALL BE D.I.P. OR P.V.C. 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.

PART III: SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.92. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

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.

Signature of Developer: Wm. P. [Signature] DATE: 1/13/04

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.

Signature of Engineer: Paul W. Koebel DATE: 01-13-04

Reviewed for HOWARD COUNTY S.C.D. Name: Janet [Signature] Date: 5/13/04
 and meets Technical Requirements
 Signature: [Signature] Date: 5/13/04
 USDA, NATURAL RESOURCES CONSERVATION SERVICE

WATER & SEWER CODE FOR COUNTY USE ONLY	
WATER NO.:	K-01
SEWER NO.:	N/A
WATER ZONE:	730
WATER TEST GRADIENT:	0.20

TYPE OF BUILDING:	PUBLIC ELEMENTARY SCHOOL
NUMBER OF LOTS & PARCELS:	1
NO. OF WATER HOUSE CONNECTIONS:	1
NO. OF SEWER HOUSE CONNECTIONS:	0
DRAINAGE AREA:	MIDDLE PATUXENT
TREATMENT PLANT:	N/A

PLAN REFERENCE NUMBERS: SDP-93-38

VICINITY MAP

SCALE: 1"=600'

BENCHMARK INFORMATION

B.M. #1 - HOWARD COUNTY CONTROL STATION 16DC
 N 593,095.513
 E 1333,961.777
 ELEV. = 529.509'
 B.M. #2 - HOWARD COUNTY CONTROL STATION 16HD
 N 590,674.771
 E 1340,043.586
 ELEV. = 512.209'

CONTRACT No. 44-4111-D
MANOR WOODS
ELEMENTARY SCHOOL
WATER MAIN EXTENSION
HOWARD COUNTY, MARYLAND

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

Signature: Jim Meyer DATE: 1/30/04
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

Signature: John R. Robinson DATE: 1/30/04
 HOWARD SOIL CONSERVATION DISTRICT

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

Approved: John R. Robinson DATE: 6/31/06
 Howard S.C.D.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SDP-93-38 (redline) SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON THESE PLANS.

Signature of Developer: Wm. P. [Signature] DATE: 1/13/04

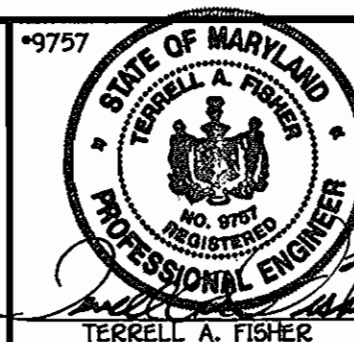
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Signature: [Signature] DATE: 1-27-04
 CHIEF, BUREAU OF UTILITIES

Signature: [Signature] DATE: 2/4/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELLEICOTT CITY, MARYLAND 21042
 4101 401 - 2955



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

REVISIONS:
 1. ASBUILT DATA
 2. REVISE VICINITY MAP & QUANTITIES TO REFLECT WM REV.

WATER MAIN
 TITLE SHEET

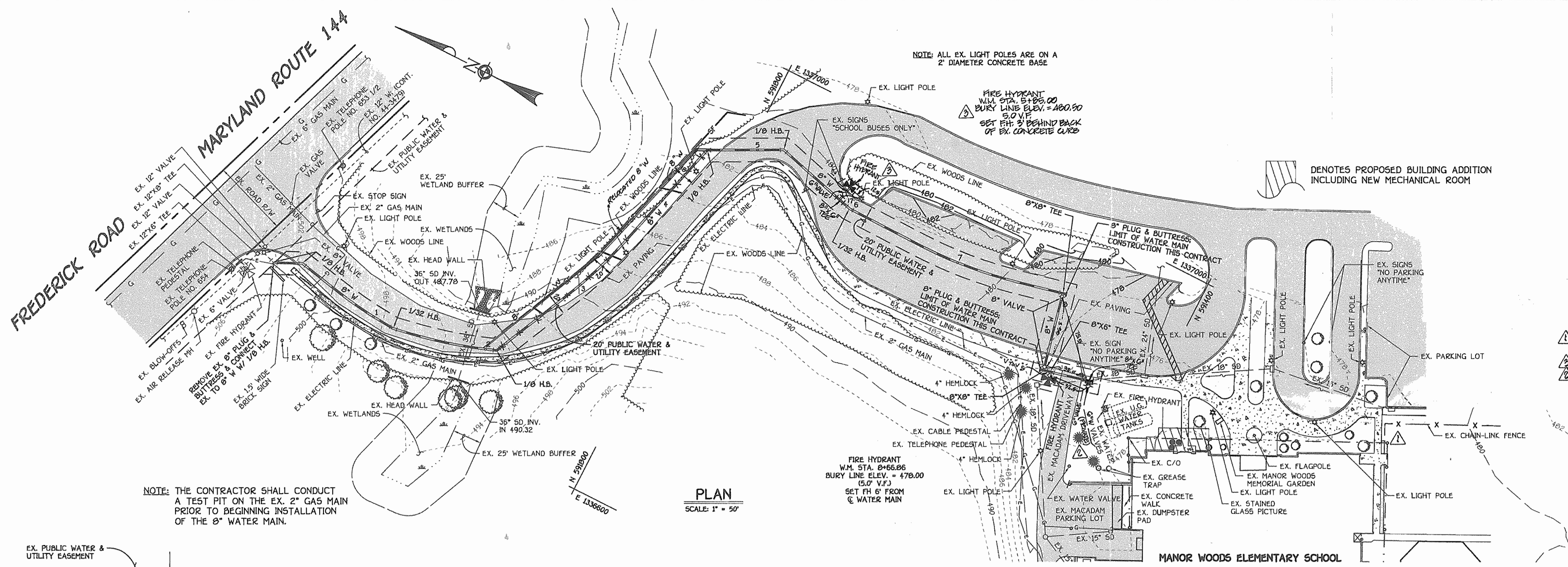
600' SCALE MAP NO. 16 BLOCK NO. 14
 F.C.C. WORK ORDER NO. 40378
 FILE NAME: FINAL WATER MAINS TITLE SH

MANOR WOODS ELEMENTARY SCHOOL
WATER MAIN EXTENSION
 CONTRACT NO. 44-4111-D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

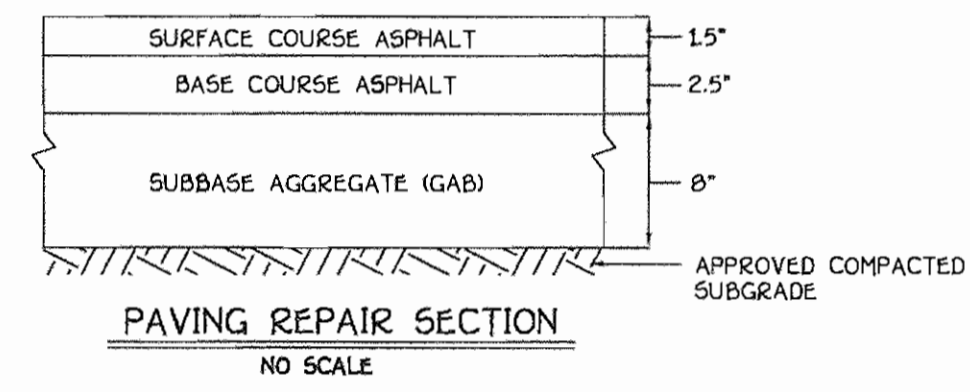
SCALE AS SHOWN

SHEET 1 OF 3

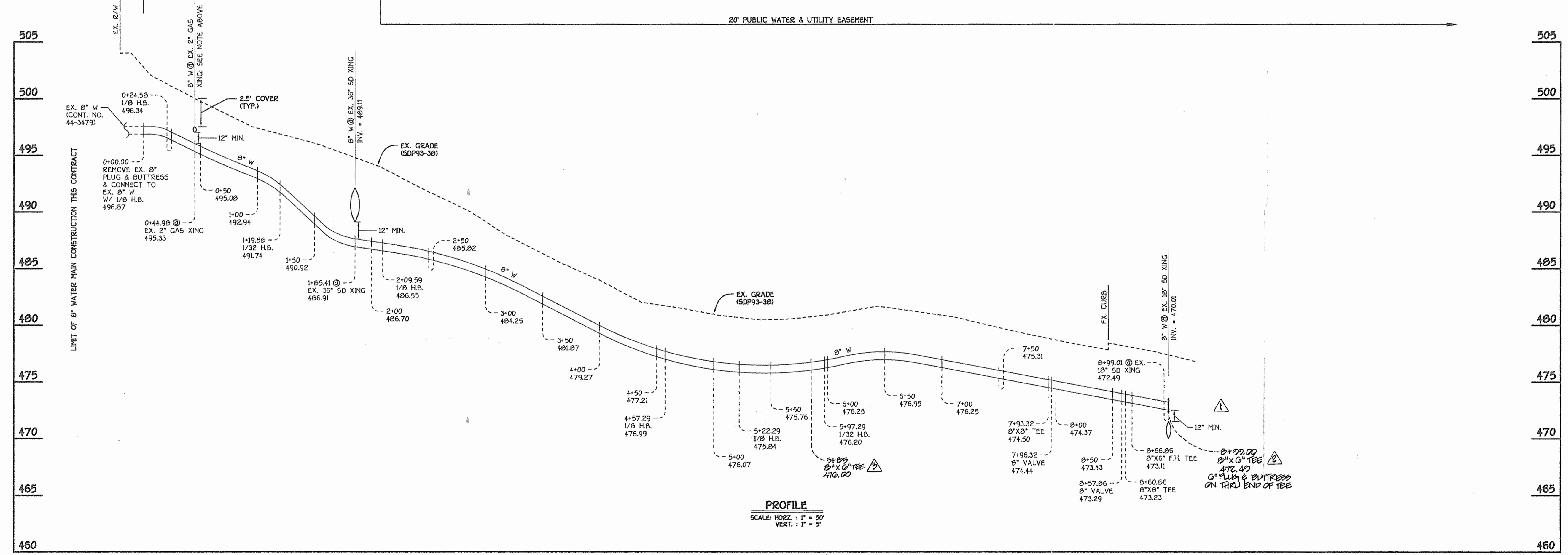
CONTRACT NO. 44-4111-D
 MANOR WOODS ELEMENTARY SCHOOL
 WATER MAIN EXTENSION
 HOWARD COUNTY, MARYLAND



WATER MAIN TABULATION CHART			
W.M. STATION	APPURTENANCE	NORTHING	EASTING
0+00.00	CONNECT TO EX. 8" W. 1/8 H.B.	592114.97	1336655.75
0+24.58	1/8 H.B.	592092.73	1336666.22
0+59.58	P.C. (CRIMP RADIUS = 380')	592058.43	1336659.23
1+09.58	P.T. (CRIMP RADIUS = 380')	592008.93	1336652.48
1+19.58	1/32 H.B.	591998.95	1336651.79
1+33.24	P.C. (CRIMP RADIUS = 380')	591985.51	1336654.22
1+99.34	P.T. (CRIMP RADIUS = 380')	591921.82	1336671.58
2+09.59	1/8 H.B.	591912.20	1336675.12
2+86.14	P.C. (CRIMP RADIUS = 380')	591880.13	1336744.63
3+52.29	P.T. (CRIMP RADIUS = 380')	591857.77	1336806.80
4+57.29	1/8 H.B.	591830.95	1336906.31
5+22.29	1/8 H.B.	591773.14	1336938.03
5+97.29	1/32 H.B.	591700.63	1336918.87
6+64.05	P.C. (CRIMP RADIUS = 380')	591633.87	1336918.24
7+54.32	P.T. (CRIMP RADIUS = 380')	591544.34	1336928.06
7+93.32	8" X 8" TEE	591506.36	1336936.87
7+96.32	8" VALVE	591505.68	1336933.95
8+57.86	8" VALVE	591491.76	1336873.99
8+60.86	8" X 8" TEE	591491.08	1336871.07
8+66.86	8" X 6" F.H. TEE	591485.23	1336872.43
8+85.00	8" X 6" TEE	591712.50	1336922.01
8+99.00	8" X 6" TEE	591454.04	1336880.14



- RESTORATION NOTES**
- AREAS DISTURBED BEYOND THE LIMITS OF PAVING SHALL BE RESTORED IN ACCORDANCE WITH THE REQUIREMENTS INCLUDED ON SHEET 3 OF 3.
 - BITUMINOUS CONCRETE PAVING REPAIR SHALL BE IN ACCORDANCE WITH THE PAVING REPAIR SECTION INCLUDED ON THIS SHEET & IN ACCORDANCE WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - CONCRETE SIDEWALK & CONCRETE CURB & GUTTER REPAIR SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. DISTURBED SIDEWALK & CURB & GUTTER SHALL BE REMOVED BACK TO THE NEXT CONSTRUCTION JOINT.



8" WATER MAIN

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 1-27-04 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND DATE: 2/4/04 CHIEF, DEVELOPMENT ENGINEERING DIVISION	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLEOTT CITY, MARYLAND 21842 (410) 461-2000 TERRELL A. FISHER	DESIGNED BY: M.D.T. DRAWN BY: K.C.I. CHECKED BY: P.W.K. DATE: JANUARY, 2004	REVISIONS: <table border="1"> <tr><td>1</td><td>ADDUCT DATA</td><td>8/28/04</td></tr> <tr><td>2</td><td>INDICATE 8" X 6" TEES FOR ADDITIONAL FIRE HYDRANT</td><td>9/24/04</td></tr> <tr><td>3</td><td>REVISE LOCATION OF 8" X 6" TEE & INDICATE PRIVATE G.W.</td><td>9/24/04</td></tr> <tr><td>4</td><td>ELIMINATE 8" WATER PRIVATE G.W. CONNECTION TO SCHOOL</td><td>9/24/04</td></tr> </table>	1	ADDUCT DATA	8/28/04	2	INDICATE 8" X 6" TEES FOR ADDITIONAL FIRE HYDRANT	9/24/04	3	REVISE LOCATION OF 8" X 6" TEE & INDICATE PRIVATE G.W.	9/24/04	4	ELIMINATE 8" WATER PRIVATE G.W. CONNECTION TO SCHOOL	9/24/04	WATER MAINS PLAN & PROFILE 800' SCALE MAP NO. 16 BLOCK NO. 14 F.C.C. WORK ORDER NO. 40378 FILE NAME: FINAL WATER MAINS PLAN & PROFILE SHT. 2	CONTRACT NO. 44-4111-D MANOR WOODS ELEMENTARY SCHOOL WATER MAIN EXTENSION HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 2 OF 3
1	ADDUCT DATA	8/28/04																
2	INDICATE 8" X 6" TEES FOR ADDITIONAL FIRE HYDRANT	9/24/04																
3	REVISE LOCATION OF 8" X 6" TEE & INDICATE PRIVATE G.W.	9/24/04																
4	ELIMINATE 8" WATER PRIVATE G.W. CONNECTION TO SCHOOL	9/24/04																

