

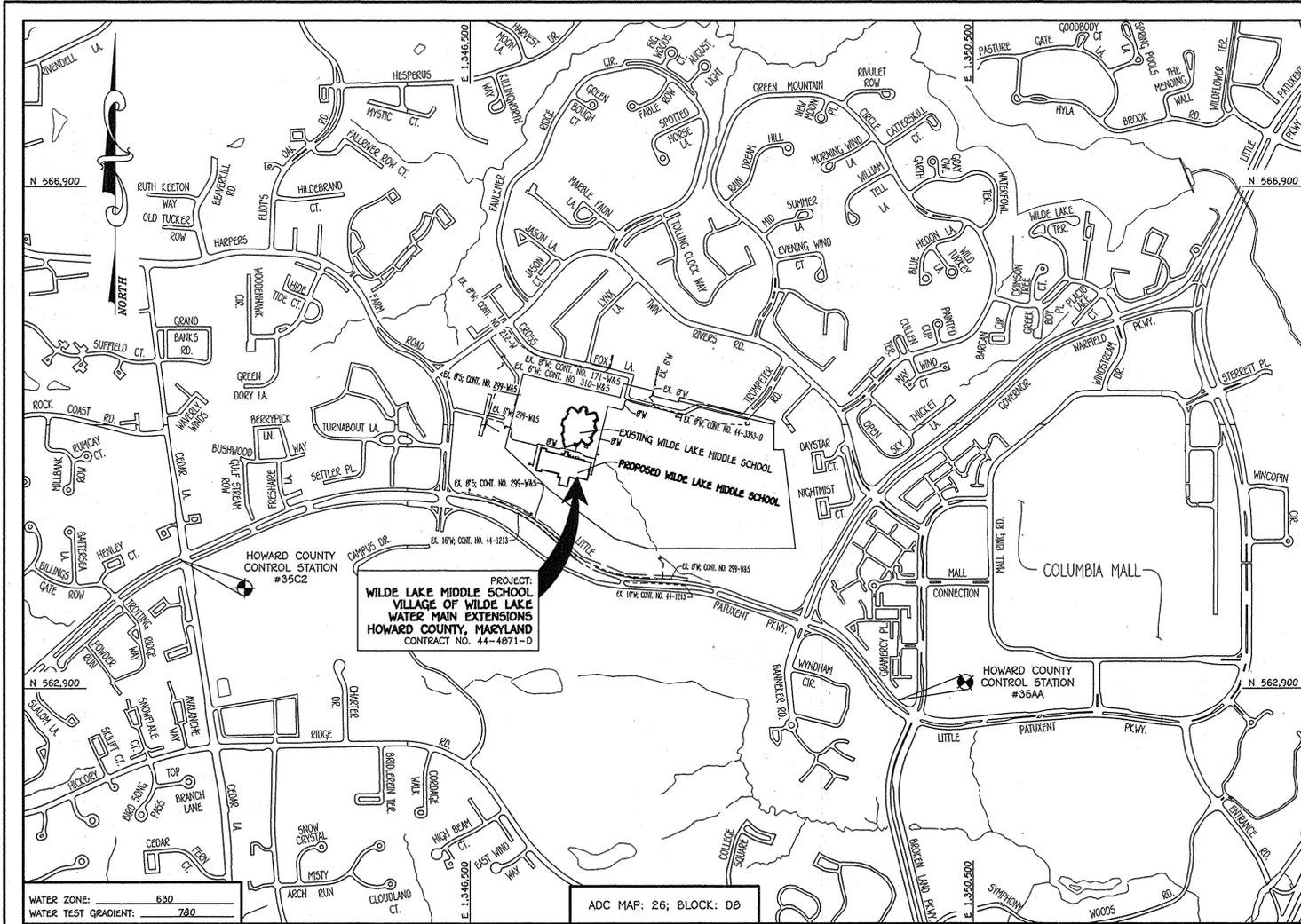
| QUANTITIES              |            |            |      |          |
|-------------------------|------------|------------|------|----------|
| ITEM                    | ESTIMATED  | AS-BUILT   |      |          |
|                         |            | QUANTITIES | TYPE | SUPPLIER |
| 8" CW C900 PVC 02-18    | 1,997 L.F. |            |      |          |
| 6" CW C900 PVC 02-18    | 121 L.F.   |            |      |          |
| 1-1/2" WVC              | 10 L.F.    |            |      |          |
| 8" VALVE                | 7 EACH     |            |      |          |
| 6" VALVE                | 3 EACH     |            |      |          |
| 8" X 8" TAPPING SLEEVE  | 1 EACH     |            |      |          |
| 6" X 6" TAPPING SLEEVE  | 1 EACH     |            |      |          |
| 8" TAPPING VALVE        | 1 EACH     |            |      |          |
| 6" TAPPING VALVE        | 1 EACH     |            |      |          |
| 1/8" H.B.               | 13 EACH    |            |      |          |
| 1/16" H.B.              | EACH       |            |      |          |
| 8" X 8" TEE             | 4 EACH     |            |      |          |
| 6" X 6" TEE             | 3 EACH     |            |      |          |
| 8" PLUG & BUTTRESS      | 4 EACH     |            |      |          |
| 6" PLUG & BUTTRESS      | 1 EACH     |            |      |          |
| 8" X 8" REDUCER         | 1 EACH     |            |      |          |
| FIRE HYDRANT            | 3 EACH     |            |      |          |
| CONTINUITY TEST STATION | 3 EACH     |            |      |          |
| OUTSIDE METER SETTING   | 1 EACH     |            |      |          |

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

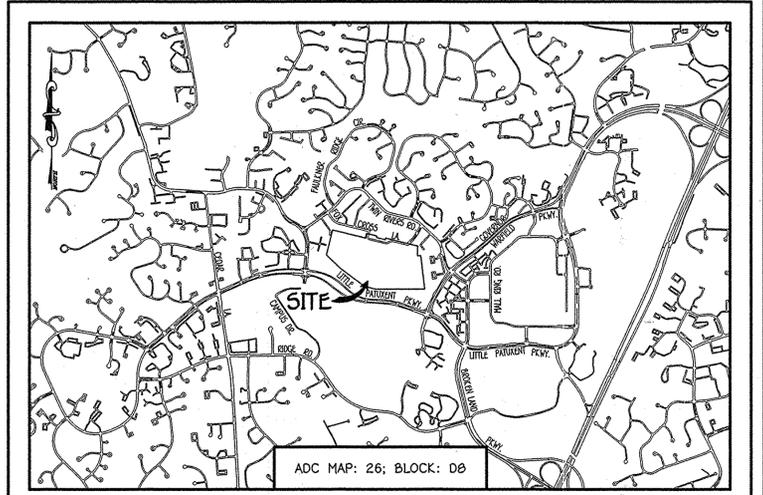
**BENCHMARK INFORMATION**

B.M.#1 - HOWARD COUNTY CONTROL STATION #35C2 - HORIZONTAL - (NAD '83)  
(LOCATED IN THE ISLAND NEAR THE INTERSECTION OF CEDAR LANE & LITTLE PATUXENT PARKWAY.  
APPROX. 4.56' BEHIND THE CURB AND 10' NORTH OF METAL POST)  
N 563,920.837  
E 1,344,204.123  
ELEVATION = 463.411 - VERTICAL - (NAVD '88)

B.M.#2 - HOWARD COUNTY CONTROL STATION #36AA - HORIZONTAL - (NAD '83)  
(LOCATED ALONG LITTLE PATUXENT PARKWAY NEAR THE INTERSECTION OF BROKEN LAND PARKWAY.  
APPROX. 1.5' BEHIND THE CURB AND 2' OFF EDGE OF SIDEWALK)  
N 562,304.895  
E 1,349,906.173  
ELEVATION = 359.173 - VERTICAL - (NAVD '88)



|  |   |  |
|--|---|--|
| TYPE OF BUILDING: PROPOSED MIDDLE SCHOOL                               | <b>LOCATION MAP</b><br>SCALE: 1" = 600' | PLAN REFERENCE NUMBERS:<br>F-15- (RECORD PLAT)<br>SDP-15-091 |
| NUMBER OF PARCELS: 1   |   |  |
| NO. OF WATER HOUSE CONNECTIONS: 1                                      |   |  |
| NO. OF SEWER HOUSE CONNECTIONS: N/A                                    |   |  |
| SEWER SHED: LITTLE PATUXENT  |   |  |
| TREATMENT PLANT: LITTLE PATUXENT RECLAMATION PLANT<br>SAVAGE, MARYLAND |   |  |



**GENERAL NOTES** SCALE: 1" = 2000'

- PART A:**
- 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.
  - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT MAY, 2013 BY FISHER, COLLINS & CARTER, INC.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 35C2 & NO. 36AA.
  - ALL VERTICAL CONTROLS ARE BASED ON NAVD '88 VERTICAL CONTROLS PROVIDED ON THE DRAWINGS.
  - 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 CONTRACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR 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 (circle with cross) 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:
 

|                              |                               |
|------------------------------|-------------------------------|
| ATAF                         | 1-800-252-1133                |
| BCE (CONTRACTOR SERVICES)    | 410-637-9713                  |
| BCE (EMERGENCY)              | 410-685-0123                  |
| BUREAU OF UTILITIES          | 410-313-4900                  |
| COLONIAL PIPELINE CO         | 410-759-1390                  |
| MISS UTILITY                 | 1-800-257-7777                |
| STATE HIGHWAY ADMINISTRATION | 410-531-5533                  |
| VERIZON                      | 1-800-743-0033 / 410-224-9210 |
- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AMVA C900 PVC, DE-18.
  - 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.
  - TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND PVC WATER MAINS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL.
  - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AMVA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
  - UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.
  - PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE BELL. AFTER ASSEMBLY OF THE JOINT, THE INSERTION LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF PVC PIPE.
  - ALL CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENT OF PVC WATER MAINS SHALL BE MADE WITH STANDARD SWEEPS, 3-DEGREE SWEEPS OR HIGH DEFLECTION COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED, WHERE HIGH DEFLECTION COUPLINGS OR 3-DEGREE SWEEPS ARE PERMITTED. THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20 FOOT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 3-DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
  - PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREES (1 1/2-DEGREE ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM 200 PSI MEETING THE REQUIREMENTS OF AMVA C900, SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL.
  - 3-DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR-18 MEETING THE REQUIREMENTS OF AMVA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DE-18 OR EQUAL.
  - WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 3-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AMVA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSERT DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE SPIGOTS OR PLAIN ENDS INTO THE PUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 3-DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER POSITION FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 NEGA-STOP, AS MANUFACTURED BY EBA IRON, INC. OR APPROVED EQUAL.
  - TO ACCOMMODATE A SPRINKLER SYSTEM, ALL RESIDENTIAL DWELLING UNITS SHALL HAVE A 1-1/2" WATER HOUSE CONNECTION WITH A 1" OUTSIDE METER SETTING, STD. DET. W-328.
- PART C: SEWER MAIN GENERAL NOTES**
- 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 WATER TIGHT FRAME AND COVER, STANDARD DETAIL C5.52, WHERE WATER TIGHT 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 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.

Paul W. Kriebel, FOR:  
HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10/24/14  
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. Kriebel, FOR:  
HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10/24/14  
SIGNATURE OF DEVELOPER DATE

SEDMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE SITE DEVELOPMENT PLAN, SDP-15-015.

Paul W. Kriebel, FOR:  
HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10/24/14  
SIGNATURE OF DEVELOPER DATE

SDP-15-019

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

APPROVED: John R. L... 11/13/14  
HOWARD SOIL CONSERVATION DISTRICT DATE

**CONTRACT NO. 44-4871-D**

# WILDE LAKE MIDDLE SCHOOL

**VILLAGE OF WILDE LAKE**

## WATER MAIN EXTENSIONS

**HOWARD COUNTY, MARYLAND**

**DEVELOPER**  
HOWARD COUNTY PUBLIC SCHOOL SYSTEM  
10910 MARYLAND ROUTE 108  
ELLICOTT CITY, MARYLAND 21042  
ATTENTION: MR. SCOTT WASHINGTON  
410-313-6607

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

11/17/14 DATE

11/24/14 DATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A CIVIL ENGINEERING CONSULTANT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10702 BALTIMORE NATIONAL PIKE  
ELLICOTT CITY, MARYLAND 21042  
(410) 461-2995

DESIGNED BY: B.C.R.  
DRAWN BY: B.C.R.  
CHECKED BY: P.W.K.  
DATE: OCTOBER, 2014

BY NO. REVISION DATE

**WATER MAIN EXTENSIONS TITLE SHEET**

600' SCALE MAP NO. 29 BLOCK NO. 24  
F.C.C. WORK ORDER NO. 11055-3002  
FILE NAME: WATER MAIN EXTENSION PLAN

**WILDE LAKE MIDDLE SCHOOL**

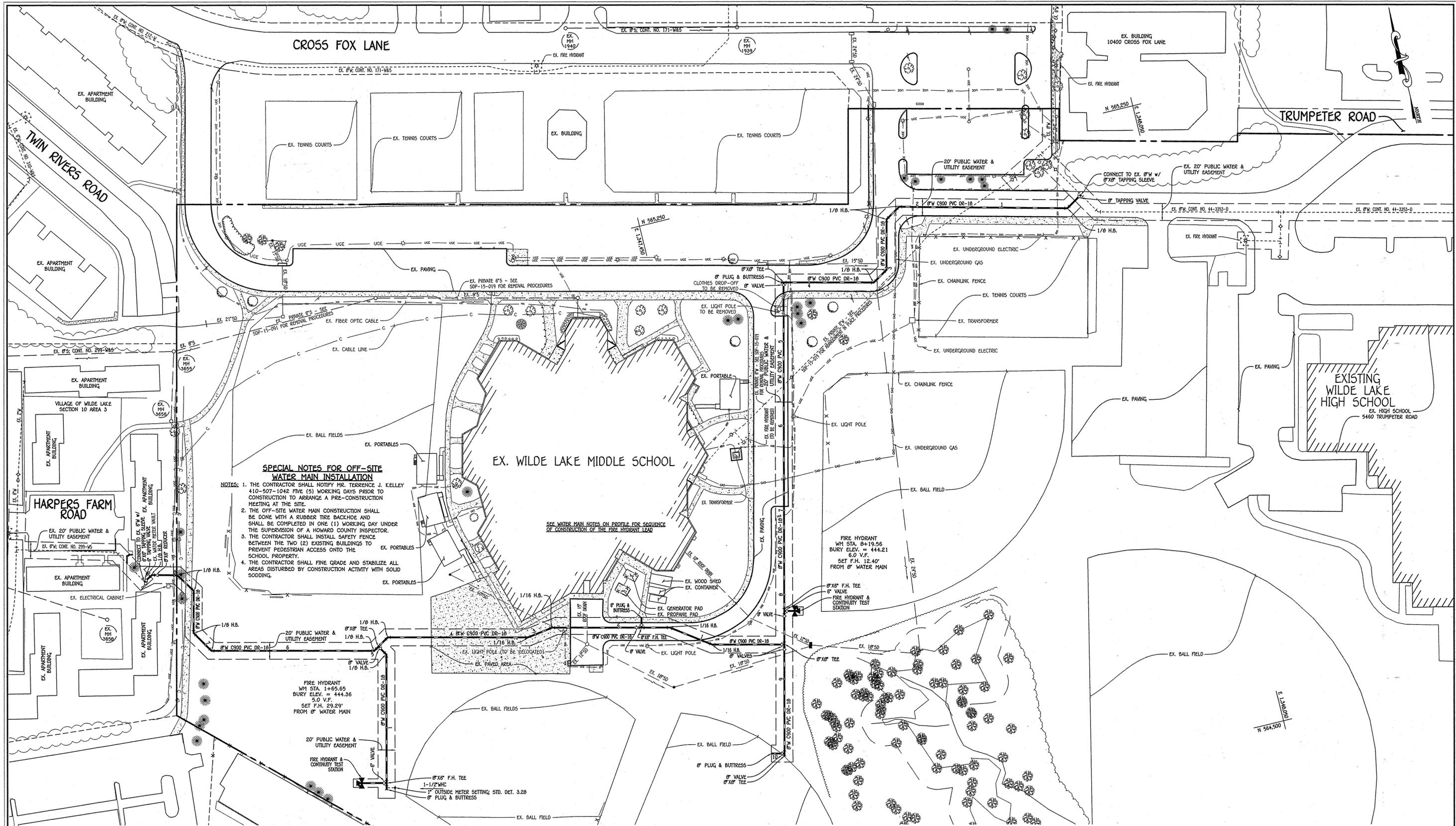
**VILLAGE OF WILDE LAKE**

**WATER MAIN EXTENSIONS**

CONTRACT NO. 44-4871-D  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 1 of 5

I:\2014\SDP\Engineering\Drawings\Water & Sewer\Contract\Plan\dwg\_10/22/2014\_10:03:00.dwg



**SPECIAL NOTES FOR OFF-SITE WATER MAIN INSTALLATION**

NOTES: 1. THE CONTRACTOR SHALL NOTIFY MR. TERRENCE J. KELLEY 410-507-1042 FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION TO ARRANGE A PRE-CONSTRUCTION MEETING AT THE SITE.

2. THE OFF-SITE WATER MAIN CONSTRUCTION SHALL BE DONE WITH A RUBBER TIRE BACKHOE AND SHALL BE COMPLETED IN ONE (1) WORKING DAY UNDER THE SUPERVISION OF A HOWARD COUNTY INSPECTOR.

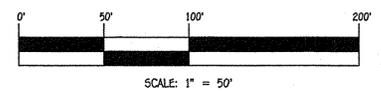
3. THE CONTRACTOR SHALL INSTALL SAFETY FENCE BETWEEN THE TWO (2) EXISTING BUILDINGS TO PREVENT PEDESTRIAN ACCESS ONTO THE SCHOOL PROPERTY.

4. THE CONTRACTOR SHALL FINE GRADE AND STABILIZE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY WITH SOLID SODDING.

EX. WILDE LAKE MIDDLE SCHOOL

EXISTING WILDE LAKE HIGH SCHOOL  
EX. HIGH SCHOOL  
5460 TRUMPETER ROAD

PLAN  
SCALE: 1" = 50'



CONTRACT NO. 44-4871-D  
WILDE LAKE MIDDLE SCHOOL  
VILLAGE OF WILDE LAKE  
WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Steve Cren*  
CHIEF, BUREAU OF UTILITIES  
DATE: 11/21/14

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*[Signature]*  
CHIEF, DEVELOPMENT-ENGINEERING DIVISION  
DATE: 11/21/14

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE BLDG. - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
(410) 461-2255



|              |               |
|--------------|---------------|
| DESIGNED BY: | B.C.R.        |
| DRAWN BY:    | B.C.R.        |
| CHECKED BY:  | P.W.K.        |
| DATE:        | OCTOBER, 2014 |
| BY NO.       |               |
| REVISION     |               |

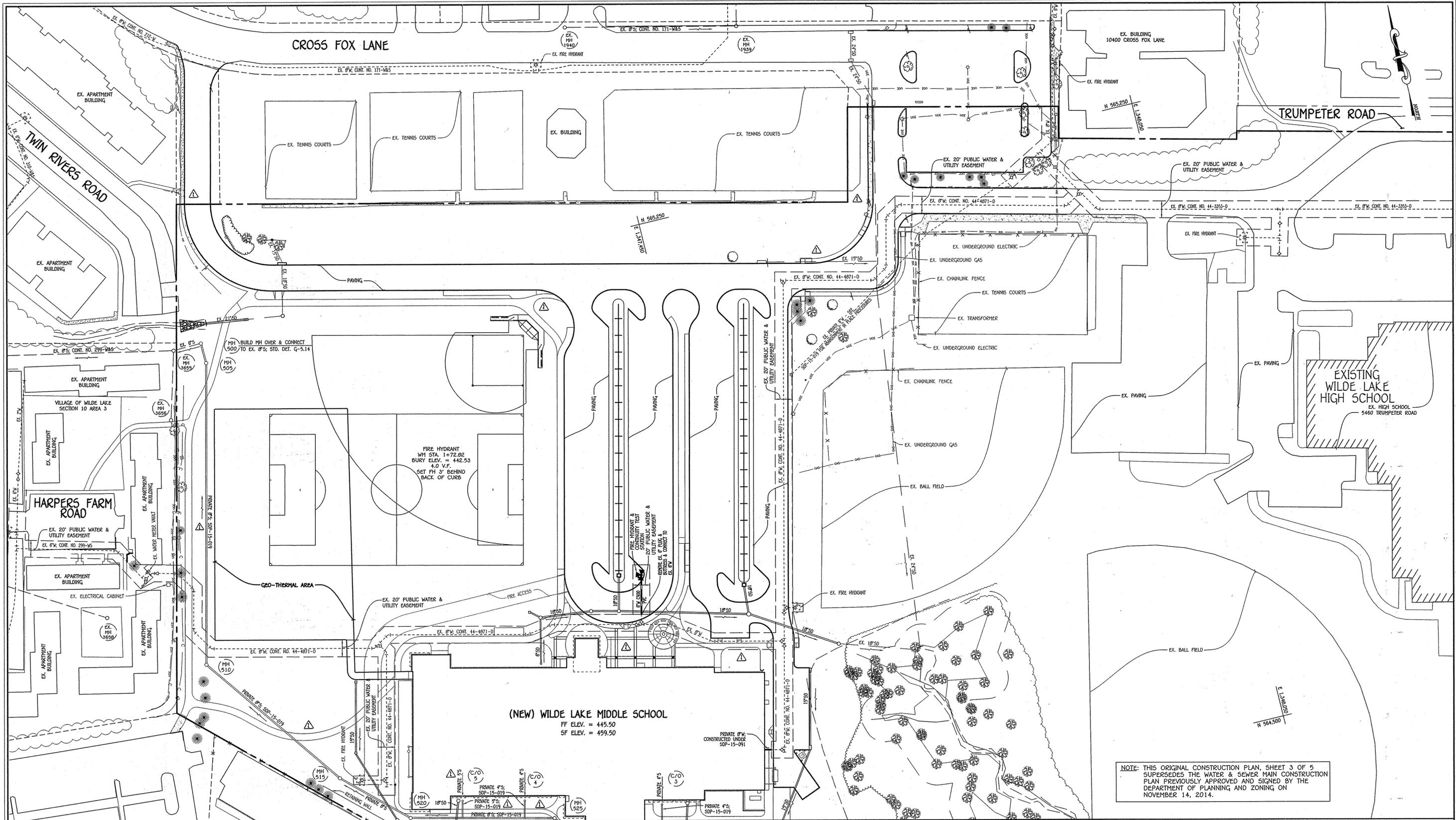
WATER MAIN EXTENSIONS  
PLAN: EXISTING CONDITIONS

600' SCALE MAP NO. 29 BLOCK NO. 24  
F.C.C. WORK ORDER NO. 11055-3002

FILE NAME: WATER MAIN EXTENSION PLAN

WILDE LAKE MIDDLE SCHOOL  
VILLAGE OF WILDE LAKE  
WATER MAIN EXTENSIONS  
CONTRACT NO. 44-4871-D  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 2 OF 5

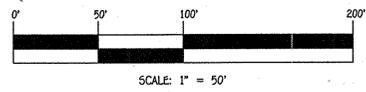


NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 5 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON NOVEMBER 14, 2014.

MATCHLINE: SEE SHEET 4

PLAN

SCALE: 1" = 50'



CONTRACT NO. 44-4871-D  
 WILDE LAKE MIDDLE SCHOOL  
 VILLAGE OF WILDE LAKE  
 WATER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 DATE: 4/28/15

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 DATE: 4-28-15

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.  
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10222 BALTIMORE NATIONAL PIKE  
 ELIOTT CITY, MARYLAND 21042  
 (410) 461-2895



|              |             |
|--------------|-------------|
| DESIGNED BY: | B.C.R.      |
| DRAWN BY:    | B.C.R.      |
| CHECKED BY:  | P.W.K.      |
| DATE:        | APRIL, 2015 |
| BY:          | NO.         |
| REVISION:    |             |

**WATER MAIN EXTENSIONS  
 PLAN: PROPOSED CONDITIONS**

600' SCALE MAP NO. 29 BLOCK NO. 24  
 F.C.C. WORK ORDER NO. 11055-3002  
 FILE NAME: WATER MAIN EXTENSION PLAN

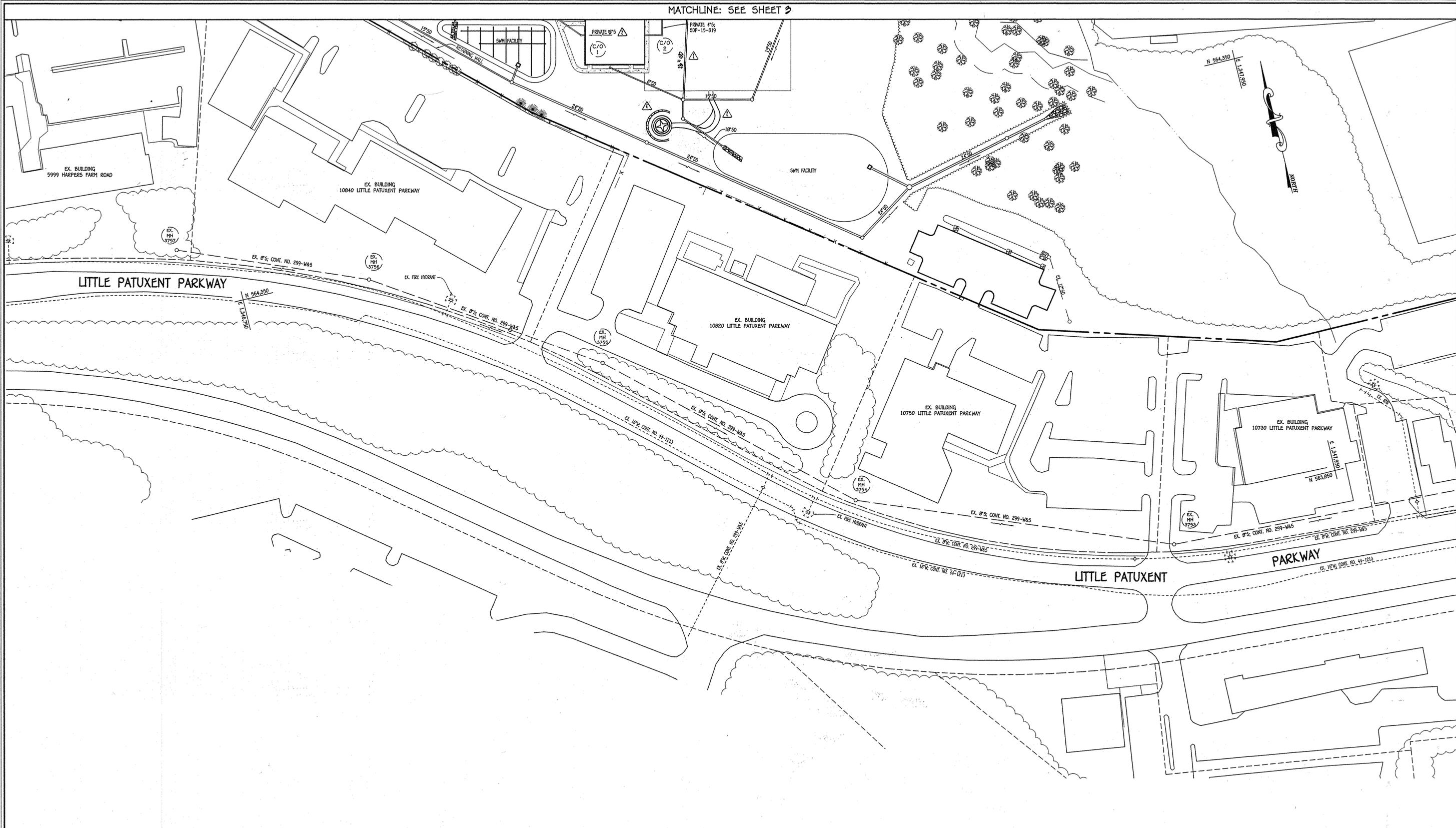
**WILDE LAKE MIDDLE SCHOOL  
 VILLAGE OF WILDE LAKE**

WATER MAIN EXTENSIONS  
 CONTRACT NO. 44-4871-D  
 FIFTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 3 OF 5

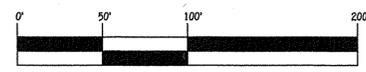
I:\2015\11055-3001 Water & Sewer Contract Planning, 4/15/2015 2:54:17 PM  
 I:\2015\11055-3001 Water & Sewer Contract No. 44-4871-D\Finals\Redline 1 - January 2015\11055-3001 Water & Sewer Contract Planning, 4/15/2015 2:54:17 PM

MATCHLINE: SEE SHEET 3



PLAN

SCALE: 1" = 50'



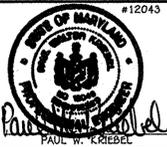
SCALE: 1" = 50'

CONTRACT NO. 44-4871-0  
 WILDE LAKE MIDDLE SCHOOL  
 VILLAGE OF WILDE LAKE  
 WATER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 Date: 11/11/14

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 Date: 11/11/14

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 12043 EXPIRATION DATE 5/7/16/18.  
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTINELA SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FIRE  
 BLICOTT CITY, MARYLAND 21042  
 (410) 461-2895



|              |               |
|--------------|---------------|
| DESIGNED BY: | B.C.R.        |
| DRAWN BY:    | B.C.R.        |
| CHECKED BY:  | P.W.K.        |
| DATE:        | OCTOBER, 2014 |
| BY:          | NO.           |
| REVISION:    |               |

**WATER MAIN EXTENSIONS  
 PLAN: PROPOSED CONDITIONS**

600' SCALE MAP NO. 29 BLOCK NO. 24  
 F.C.C. WORK ORDER NO. 11095-3002  
 FILE NAME: WATER MAIN EXTENSION PLAN

**WILDE LAKE MIDDLE SCHOOL  
 VILLAGE OF WILDE LAKE**  
 WATER MAIN EXTENSIONS  
 CONTRACT NO. 44-4871-0  
 FIFTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 4 OF 5

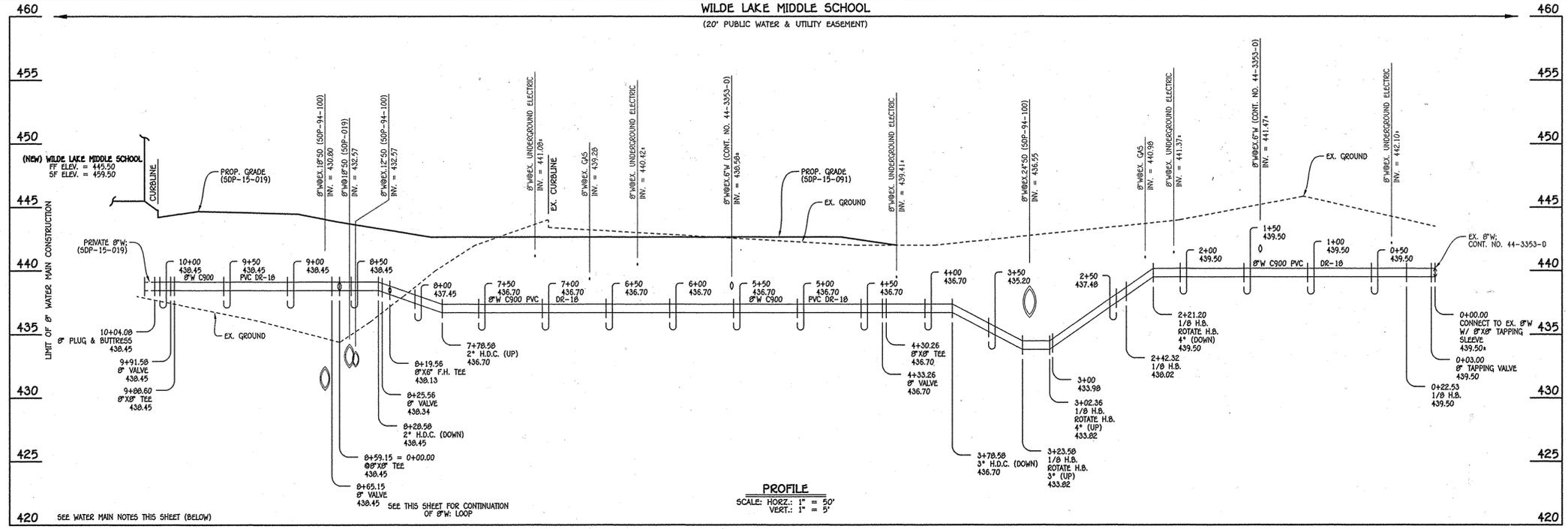
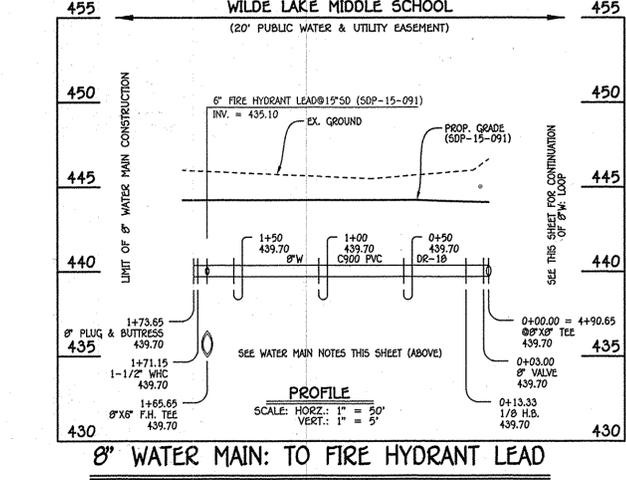
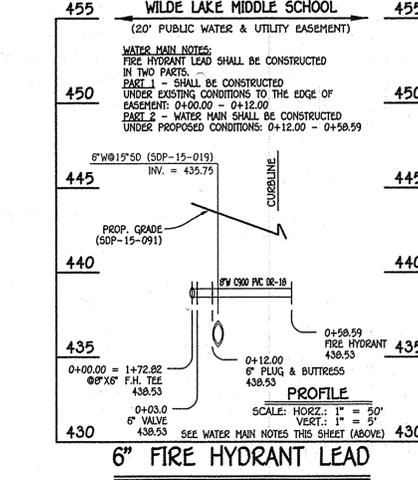
I:\2014\11095\Engineering\Drawings\Water & Sewer\Contract\Plan.dwg, 10/22/2014 10:49:03 AM

| WATER MAIN TABULATION CHART               |                        |           |            |
|---|------------------------|-----------|------------|
| W.M. STA.                                 | APPURTENANCE           | NORTHING  | EASTING    |
| 8" WATER MAIN TO WILDE LAKE MIDDLE SCHOOL |                        |           |            |
| 0+00.00                                   | 8" X 8" TAPPING SLEEVE | 565162.23 | 1347965.57 |
| 0+03.00                                   | 8" TAPPING VALVE       | 565160.68 | 1347963.01 |
| 0+22.53                                   | 1/8" H.B.              | 565150.57 | 1347946.30 |
| 2+21.20                                   | 1/8" H.B.              | 565199.37 | 1347753.71 |
| 2+42.32                                   | 1/8" H.B.              | 565180.48 | 1347735.61 |
| 3+02.36                                   | 1/8" H.B.              | 565130.16 | 1347721.35 |
| 3+23.58                                   | 1/8" H.B.              | 565119.15 | 1347703.21 |
| 4+30.26                                   | 8" X 8" TEE            | 565144.49 | 1347599.58 |
| 4+33.26                                   | 8" VALVE               | 565141.58 | 1347598.87 |
| 8+19.56                                   | 8" X 6" F.H. TEE       | 564766.17 | 1347507.80 |
| 8+25.56                                   | 8" VALVE               | 564760.34 | 1347506.36 |
| 8+59.15 = 0+00.00                         | 8" X 8" TEE            | 564727.70 | 1347498.46 |
| 8+65.15                                   | 8" VALVE               | 564721.87 | 1347497.03 |
| 9+88.60                                   | 8" X 8" TEE            | 564601.90 | 1347467.94 |
| 9+91.58                                   | 8" VALVE               | 564602.60 | 1347465.03 |
| 10+04.08                                  | 8" PLUG & BUTTRESS     | 564605.55 | 1347452.88 |

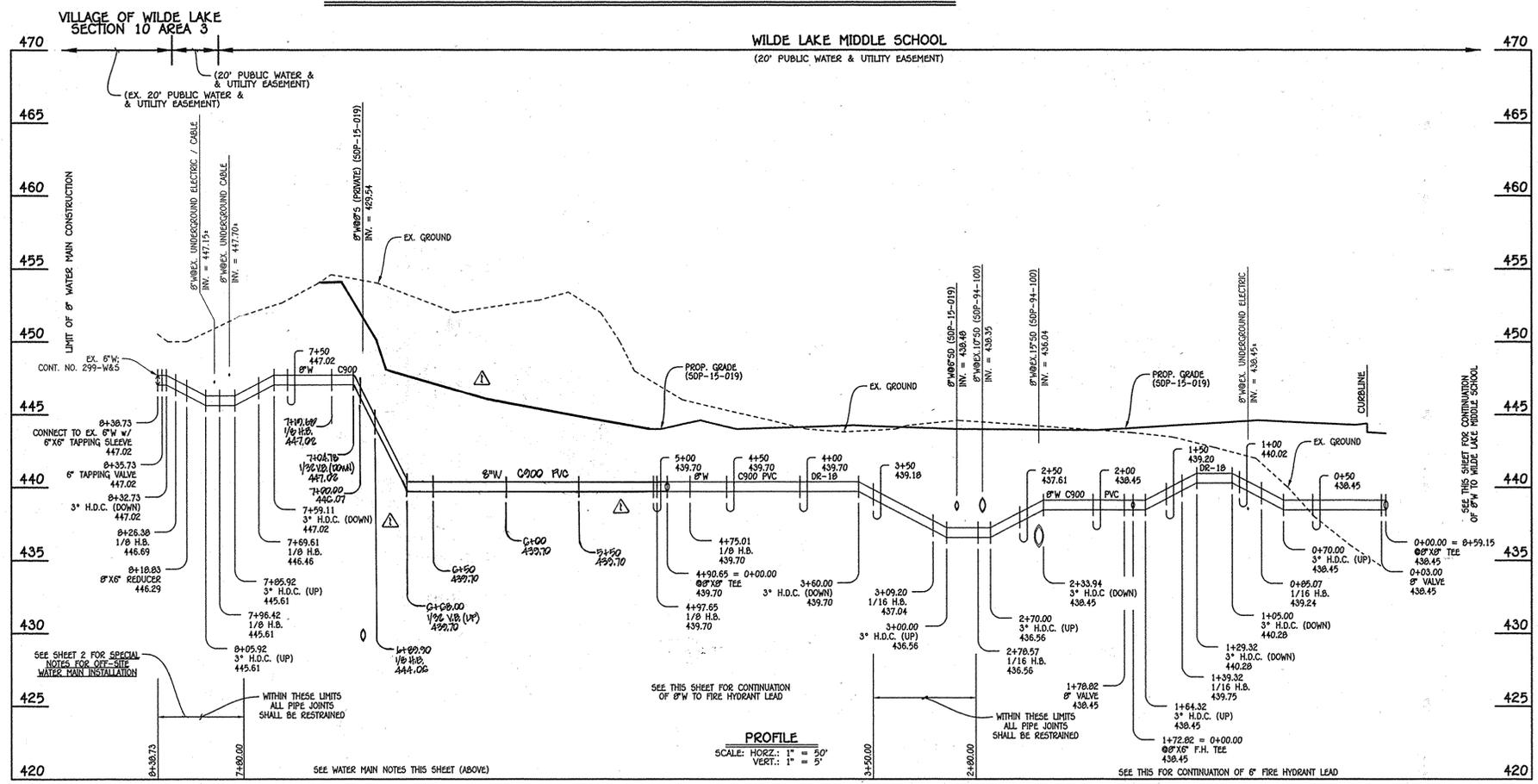
| WATER MAIN TABULATION CHART |                        |           |            |
|-----------------------------|------------------------|-----------|------------|
| W.M. STA.                   | APPURTENANCE           | NORTHING  | EASTING    |
| 8" WATER MAIN: LOOP         |                        |           |            |
| 0+00.00 = 8+59.15           | 8" X 8" TEE            | 564727.70 | 1347498.46 |
| 0+03.00                     | 8" VALVE               | 564728.40 | 1347495.55 |
| 0+05.07                     | 1/16" H.B.             | 564747.75 | 1347415.79 |
| 1+39.32                     | 1/16" H.B.             | 564779.38 | 1347371.71 |
| 1+72.82                     | 8" X 6" F.H. TEE       | 564787.31 | 1347339.17 |
| 1+78.82                     | 8" VALVE               | 564788.73 | 1347333.34 |
| 2+78.57                     | 1/16" H.B.             | 564812.34 | 1347236.44 |
| 3+09.20                     | 1/16" H.B.             | 564807.93 | 1347206.11 |
| 4+75.01                     | 1/8" H.B.              | 564847.31 | 1347045.04 |
| 4+90.85 = 0+00.00           | 8" X 8" TEE            | 564839.20 | 1347031.68 |
| 4+97.85                     | 1/8" H.B.              | 564835.56 | 1347025.69 |
| 6+09.90                     | 1/8" H.B.              | 564881.22 | 1346838.94 |
| 7+19.68                     | 1/8" H.B.              | 564906.88 | 1346823.47 |
| 7+59.61                     | 1/8" H.B.              | 564955.17 | 1346835.33 |
| 7+96.42                     | 1/8" H.B.              | 564977.77 | 1346820.92 |
| 8+18.83                     | 8" X 6" REDUCER        | 564983.30 | 1346799.19 |
| 8+26.38                     | 1/8" H.B.              | 564985.16 | 1346791.88 |
| 8+35.73                     | 6" TAPPING VALVE       | 564980.60 | 1346783.71 |
| 8+38.73                     | 6" X 6" TAPPING SLEEVE | 564979.14 | 1346781.09 |

| WATER MAIN TABULATION CHART         |                    |           |            |
|-------------------------------------|--------------------|-----------|------------|
| W.M. STA.                           | APPURTENANCE       | NORTHING  | EASTING    |
| 8" WATER MAIN: TO FIRE HYDRANT LEAD |                    |           |            |
| 0+00.00 = 4+90.85                   | 8" X 8" TEE        | 564839.20 | 1347031.68 |
| 0+03.00                             | 8" VALVE           | 564836.63 | 1347033.23 |
| 0+13.33                             | 1/8" H.B.          | 564827.80 | 1347038.59 |
| 1+65.65                             | 8" X 6" F.H. TEE   | 564679.81 | 1347002.53 |
| 1+71.15                             | 1-1/2" WHC         | 564674.46 | 1347001.23 |
| 1+73.65                             | 8" PLUG & BUTTRESS | 564672.04 | 1347000.65 |

| WATER MAIN TABULATION CHART |                    |           |            |
|-----------------------------|--------------------|-----------|------------|
| W.M. STA.                   | APPURTENANCE       | NORTHING  | EASTING    |
| 6" FIRE HYDRANT LEAD        |                    |           |            |
| 0+00.00 = 1+72.82           | 8" X 6" F.H. TEE   | 564787.31 | 1347339.17 |
| 0+03.00                     | 6" VALVE           | 564790.22 | 1347339.88 |
| 0+12.00                     | 6" PLUG & BUTTRESS | 564798.97 | 1347342.01 |
| 0+58.59                     | 8" X 6" F.H. TEE   | 564844.24 | 1347353.04 |



- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE, DR-18.
  2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
  3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
  4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Chief, Bureau of Utilities: *Steve C. Com* 11/11/14

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

Chief, Development Engineering Division: *M.G.* 11/11/14

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 18243 EXPIRATION DATE 5/7/16/16.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CONTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
BELTSVILLE CITY, MARYLAND 21104  
(410) 461-2995



DESIGNED BY: B.C.R.  
DRAWN BY: B.C.R.  
CHECKED BY: P.W.K.  
DATE: OCTOBER, 2014

REVISION PORTION OF WATER MAIN PROFILE TO REFLECT REPROVED DEMAND AHEAD

WATER MAIN EXTENSIONS  
PLAN: PROPOSED CONDITIONS

600' SCALE MAP NO. 29 BLOCK NO. 24  
F.C.C. WORK ORDER NO. 11095-3002

FILE NAME: WATER MAIN EXTENSION PLAN

WILDE LAKE MIDDLE SCHOOL  
VILLAGE OF WILDE LAKE  
WATER MAIN EXTENSIONS  
CONTRACT NO. 44-4871-D  
FIFTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE: 1" = 50'

CONTRACT NO. 44-4871-D  
WILDE LAKE MIDDLE SCHOOL  
VILLAGE OF WILDE LAKE  
WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 5 OF 5

I:\2014\1055\Engineering\Orga\Water & Sewer Contract Planing, 10/30/2014 1:42:29 PM