

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT	QUANTITIES	SUPPLIER
8" CW C900 PVC DR-18	867 L.F.	867 L.F.		National P&P
6" CW C900 PVC DR-18	54 L.F.	54 L.F.		National P&P
18" X 8" TAPPING SLEEVE	2 EACH	2 EACH		Mueller Co.
8" X 8" TEE	1 EACH	1 EACH		Mueller Co.
8" X 8" F.H. TEE	4 EACH	3		Mueller Co.
8" TAPPING VALVE	2 EACH	2		Mueller Co.
8" VALVE	2 EACH	2		Mueller Co.
6" VALVE	3 EACH	3		Mueller Co.
1/8" H.B.	3 EACH	3		National P&P
1/16" H.B.	1 EACH	1		National P&P
6" BLIND FLANGE	1 EACH	1		JCM
8" PLUG & BUTTRESS	1 EACH	1		Mueller Co.
FIRE HYDRANT	3 EACH	3		Mueller Co.
CONTINUITY TEST STATION	3 EACH	3		FUS Foundry

BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #4281 - HORIZONTAL - (NAD '83)
 (LOCATED ALONG THE WEST SIDE OF GUILFORD ROAD, WEST OF SASSAFRAS COURT,
 APPROX. 39.8' WEST OF LIGHT POLE AND 3.1' BEHIND BACK OF CURB)
 N 547,820.225
 E 1,351,171.619
 ELEVATION = 375.811 - VERTICAL - (NAVD '86)

B.M.#2 - HOWARD COUNTY CONTROL STATION #4282 - HORIZONTAL - (NAD '83)
 (LOCATED ALONG THE SOUTH SIDE OF GUILFORD ROAD, ACROSS FROM BLUE SEA DR. &
 APPROX. 63.8' EAST OF C&P #8.)
 N 546,946.791
 E 1,352,118.600
 ELEVATION = 331.463 - VERTICAL - (NAVD '86)

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT
 - NOTIFY H&S UTILITY (1-800-257-7777) TWO (2) FULL BUSINESS DAYS BEFORE STARTING WORK. NOTIFY THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410-313-1855) 24 HOURS BEFORE STARTING WORK AND NOTIFY THE BALTIMORE GAS AND ELECTRIC COMPANY (410-291-5739) FIVE (5) WORKING DAYS PRIOR TO STARTING WORK.
 - INSTALL ALL PERIMETER CONTROLS ASSOCIATED WITH PHASE 1 WORK. INSTALL SCE WITH WASH RACK. INSTALL PERIMETER SUPER SILT FENCE, TREE PROTECTION FENCE AND PERIMETER CONSTRUCTION FENCING. (2 DAYS)
 - BEGIN DEMOLITION OF EXISTING FRONT BUILDING SECTION (EAST SIDE OF BUILDING). (4 MONTHS)
 - DEMOLISH EXISTING CURB AND GUTTER AT EXISTING BUS LOOP. ROUGH GRADE FRONT OF BUILDING TO ESTABLISH LAY DOWN AREA FOR ALL TRUCKS. EXISTING PAVING MAY REMAIN INSTALLED. TEMPORARY MODULAR CLASSROOM BUILDING. (3 MONTHS)
 - INSTALL WATER LINES UP TO CONNECTION TO EXISTING FIRE HYDRANT (WEST SIDE) AND INSTALL WATER LINES ON THE EAST SIDE. (1 MONTH)
 - DEMO CURB AND GUTTER AND PAVING AT EXISTING PARKING AREA AND SERVICE AREA. INSTALL STORM DRAINS AND STRUCTURES AND PRIVATE SEWER AND GRADE PHASE 1 BUILDING AREA. INSTALL TEMPORARY BARRICADES ALONG TEMPORARY BUS LOOP. BEGIN CONSTRUCTION OF SCHOOL BUILDING ADDITION AND RENOVATION - MULTIPLE PHASES. (18 MONTHS)
 - CONSTRUCT STORMWATER MANAGEMENT FACILITIES AND REAR ADDITION TO BUILDING AND REAR SITE ACCESS AND RETAINING WALL. (6 MONTHS)
 - INSTALL REMAINING WATER MAIN AND FIRE HYDRANT (WEST REAR CORNER), INSTALL REMAINING STORM DRAIN AND FILTERRA STRUCTURE AND COMPLETE REMAINING CURB AND GUTTER, BASE AND TOP PAVING, SIDEWALKS AND INSTALL ALL PLANTINGS AND LANDSCAPING AT FRONT OF SCHOOL BUILDING. (1 MONTH)
 - FINALIZE STABILIZATION THROUGHOUT SITE. REMOVE ALL SEDIMENT CONTROL MEASURES WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEEDING. (1 WEEK)
- EROSION AND SEDIMENT CONTROL NOTE:**
- THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON ALL SEDIMENT CONTROL DEVICES AND PRACTICES ON A DAILY BASIS AND IMMEDIATELY AFTER EACH RAINFALL.
 - MORE DETAILED SEQUENCE OF CONSTRUCTION PROVIDED ON SDP-96-18.

DEVELOPER'S CERTIFICATION

" I 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 AGENCIES DEEMED NECESSARY."

Signature: *[Signature]* DATE: 5-27-2020

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."

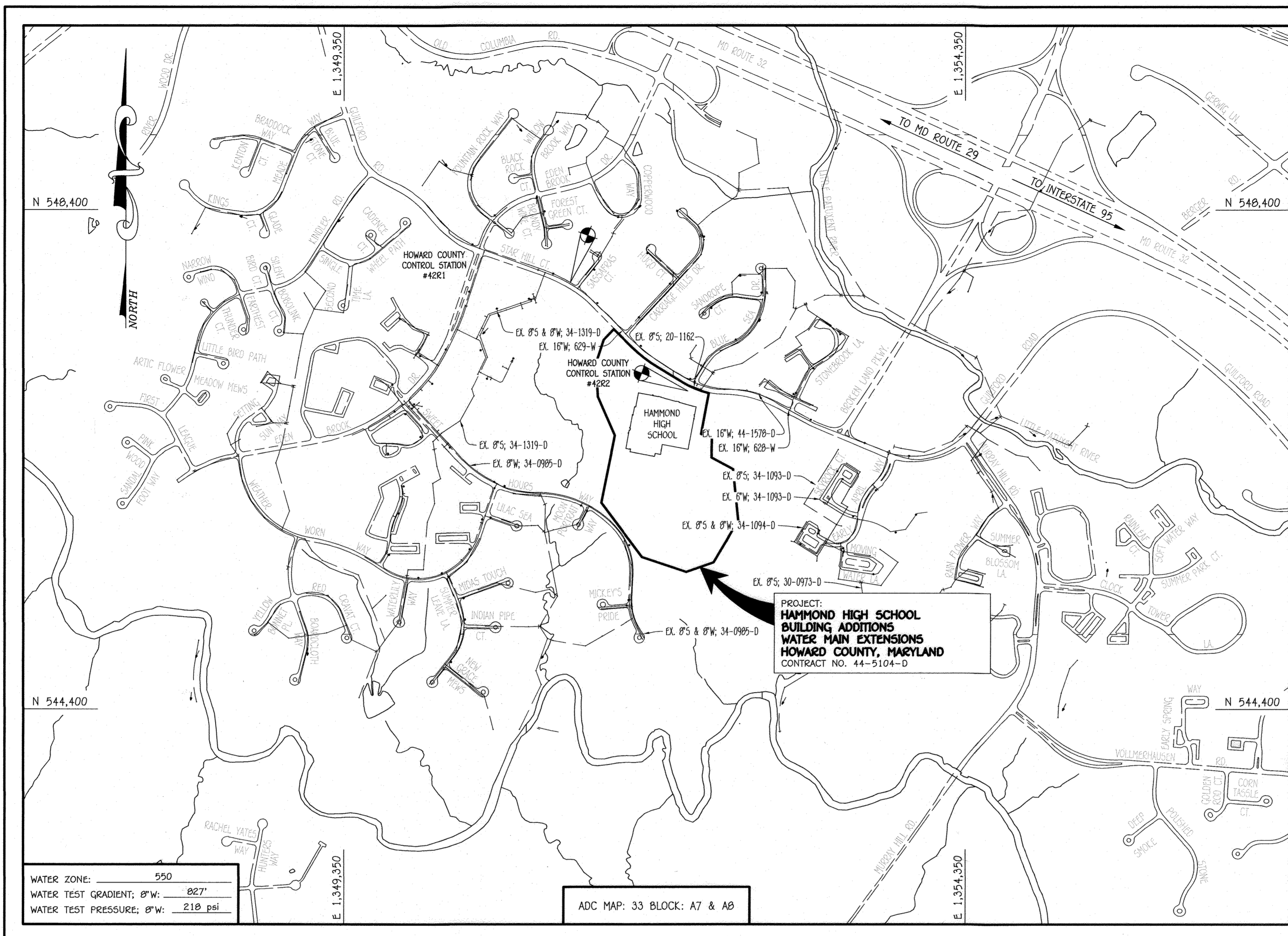
Signature: *[Signature]* DATE: 05/21/20

SDP-96-18 (REDLINE)

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

APPROVED: *[Signature]* DATE: 5/27/20

HOWARD SOIL CONSERVATION DISTRICT



LOCATION MAP
SCALE: 1" = 600'

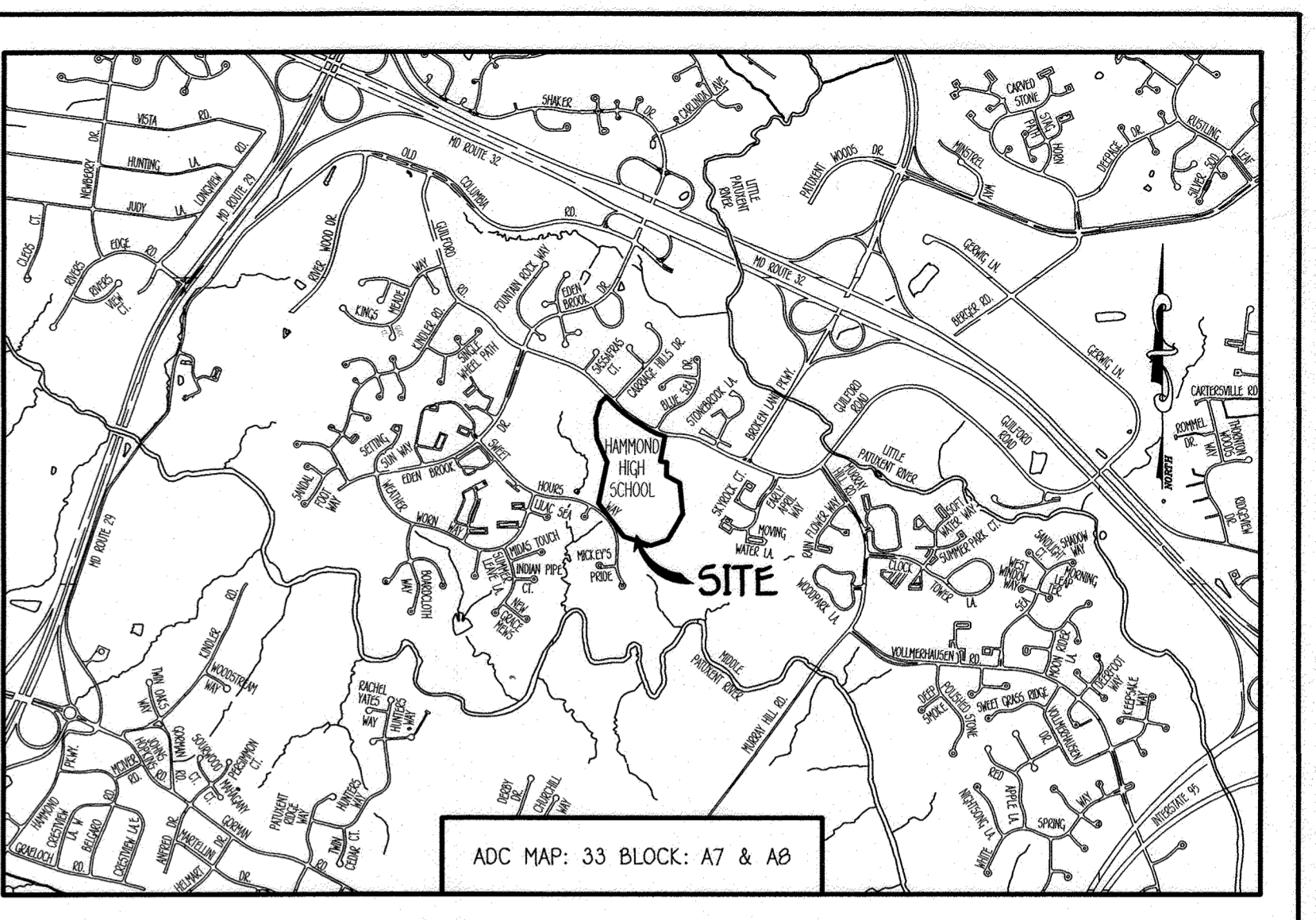
TYPE OF BUILDING:	EXISTING HIGH SCHOOL (BUILDING ADDITIONS)
NUMBER OF PARCELS:	1
NO. OF WATER HOUSE CONNECTIONS:	N/A
NO. OF SEWER HOUSE CONNECTIONS:	N/A
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WASTEWATER RECLAMATION PLANT; SAVAGE MARYLAND

PLAN REFERENCE NUMBERS:
SDP-96-18 (REDLINE)

CONTRACT NO. 44-5104-D HAMMOND HIGH SCHOOL BUILDING ADDITIONS WATER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

CONSTRUCTION MANAGER
J. VINTON SCHAFER & SONS
1309-Q CONTINENTAL DRIVE
ABINGDON, MD 21009
410-335-3000

OWNER / DEVELOPER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
9020 MENDENHALL COURT
SUITE 100
COLUMBIA, MARYLAND 21045
410-313-5605
Attn: Mr. DAN LUBLEY
ACTING DIRECTOR, SCHOOL PLANNING & CONSTRUCTION



VICINITY MAP
SCALE: 1" = 200'

- GENERAL NOTES**
- 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 OCTOBER, 2017 & AUGUST, 2018 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. 4281 & NO. 4282.
ALL VERTICAL CONTROLS ARE BASED ON NAVD '86. 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'. MINIMUM 6" TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE AGREEMENTS 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 (S) 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) 410-637-8713
 BGE (EMERGENCY) 410-689-0123
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINE CO 410-313-1390
 MISS 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(a) OF THE HOWARD COUNTY CODE.

- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AWWA C900 PVC, DR-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 AWWA 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 HARNESSSES. 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 SPIGOT INTO 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 DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION (HD) COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED, EXCEPT HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEPS ARE PERMITTED. THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20 FOOT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP. TAKING CARE NOT TO USE COMPRESSION 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 AWWA C900. SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTYPE PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL.
 - FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR-18 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (EPX) BLUE BRUTE DR-18 OR EQUAL.
 - WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWWA 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 5-DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOPS 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 MEGA-STOP, AS MANUFACTURED BY EBA IRON, INC. OR APPROVED EQUAL.
 - TO ACCOMMODATE A SPINBLESS SYSTEM, ALL RESIDENTIAL DWELLING UNITS SHALL HAVE A 1-1/2" WATER HOUSE CONNECTION WITH A 1" OUTSIDE METER SETTING; STD. DET. W-3.28.

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 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER. STANDARD DETAIL C5.52.
- WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Signature: *[Signature]* DATE: 5/29/2020
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Signature: *[Signature]* DATE: 6.8.20
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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. 12243 EXPIRATION DATE IS 7/15/22.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 10720 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2955

PAUL W. KESSEL
PAUL W. KESSEL

DESIGNED BY: D.T.A.
DRAWN BY: D.T.A.
CHECKED BY: P.W.K.
DATE: MAY, 2020

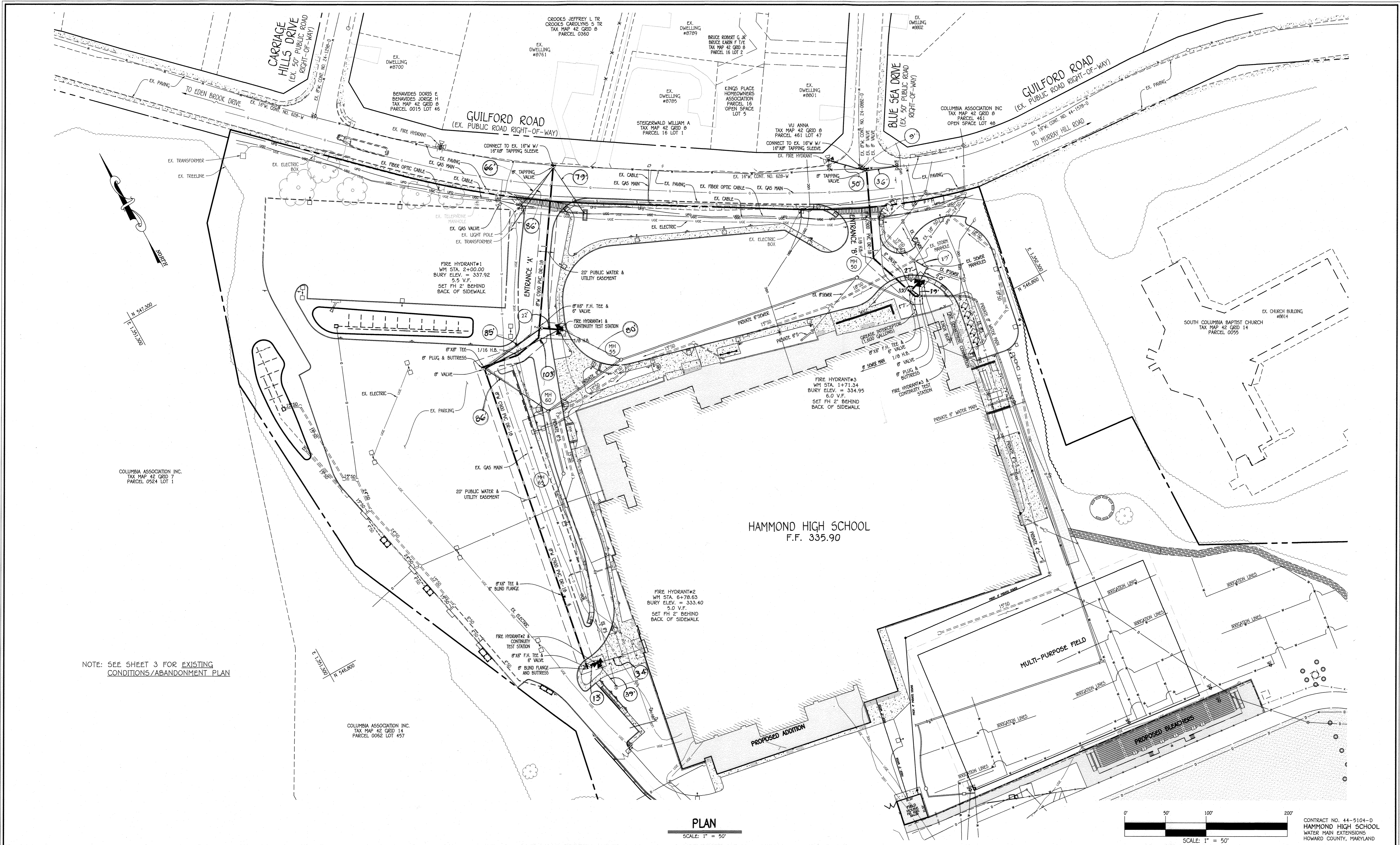
WRA As Built "Quantities"
BY NO. REVISION DATE

**WATER MAIN EXTENSIONS
TITLE SHEET**

600' SCALE MAP NO. 42 BLOCK NO. 14
F.C.C. WORK ORDER NO. 10015
FILE NAME: WATER MAINS EXTENSION PLAN

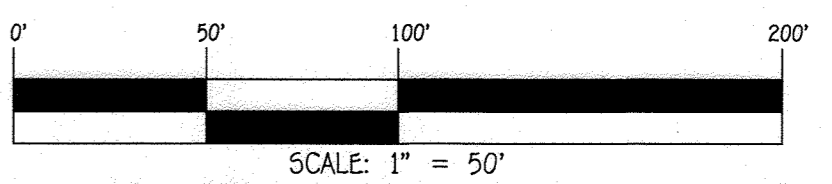
**HAMMOND HIGH SCHOOL
WATER MAIN EXTENSIONS
CONTRACT NO. 44-5104-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND**

SCALE AS SHOWN
SHEET 1 OF 4



PLAN

SCALE: 1" = 50'

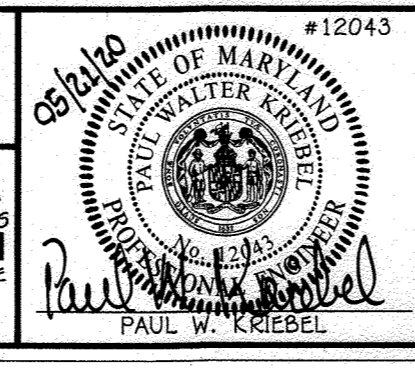


CONTRACT NO. 44-5104-D
 HAMMOND HIGH SCHOOL
 WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief, Bureau of Utilities

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 Chief, Development Engineering Division

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 7/16/20.
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2255



DESIGNED BY: D.T.A.
 DRAWN BY: D.T.A.
 CHECKED BY: P.W.K.
 DATE: MAY, 2020
 WRA: "As Built" Dimensions
 DATE: 1/4/24
 BY: NO. REVISION

WATER MAIN EXTENSIONS PLAN
 600' SCALE MAP NO. 42 BLOCK NO. 14
 F.C.C. WORK ORDER NO. 10016
 FILE NAME: WATER MAINS EXTENSION PLAN

HAMMOND HIGH SCHOOL
 WATER MAIN EXTENSIONS
 CONTRACT NO. 44-5104-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 4

NOTE: SEE SHEET 3 FOR EXISTING CONDITIONS/ABANDONMENT PLAN

COLUMBIA ASSOCIATION INC.
 TAX MAP 42 GRID 7
 PARCEL 0524 LOT 1

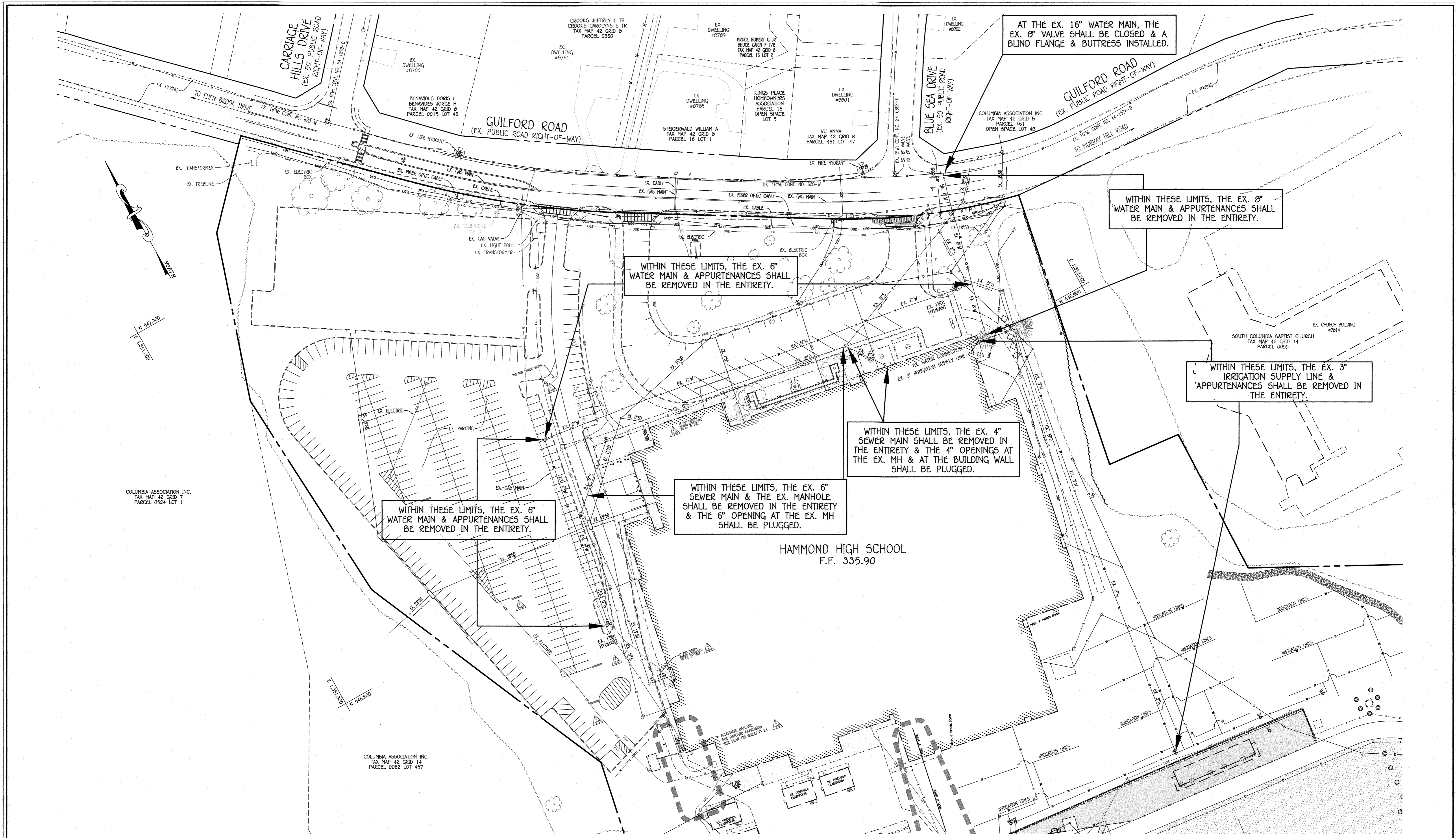
COLUMBIA ASSOCIATION INC.
 TAX MAP 42 GRID 14
 PARCEL 0056 LOT 457

FIRE HYDRANT#1
 WM STA. 2+00.00
 BURY ELEV. = 337.92
 5.5' V.F.
 SET FH 2' BEHIND BACK OF SIDEWALK

FIRE HYDRANT#2
 WM STA. 6+78.63
 BURY ELEV. = 333.40
 5.0' V.F.
 SET FH 2' BEHIND BACK OF SIDEWALK

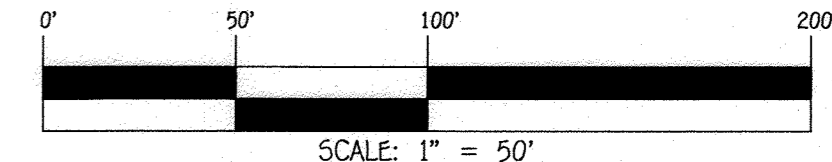
FIRE HYDRANT#3
 WM STA. 1+71.34
 BURY ELEV. = 334.95
 6.0' V.F.
 SET FH 2' BEHIND BACK OF SIDEWALK

HAMMOND HIGH SCHOOL
 F.F. 335.90



EXISTING CONDITIONS/ABANDONMENT PLAN

SCALE: 1" = 50'



CONTRACT NO. 44-5104-D
HAMMOND HIGH SCHOOL
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, BUREAU OF UTILITIES

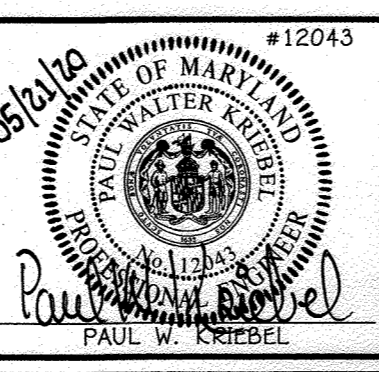
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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 7/15/20.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTRAL SQUARE OFFICE PARK - 10720 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895



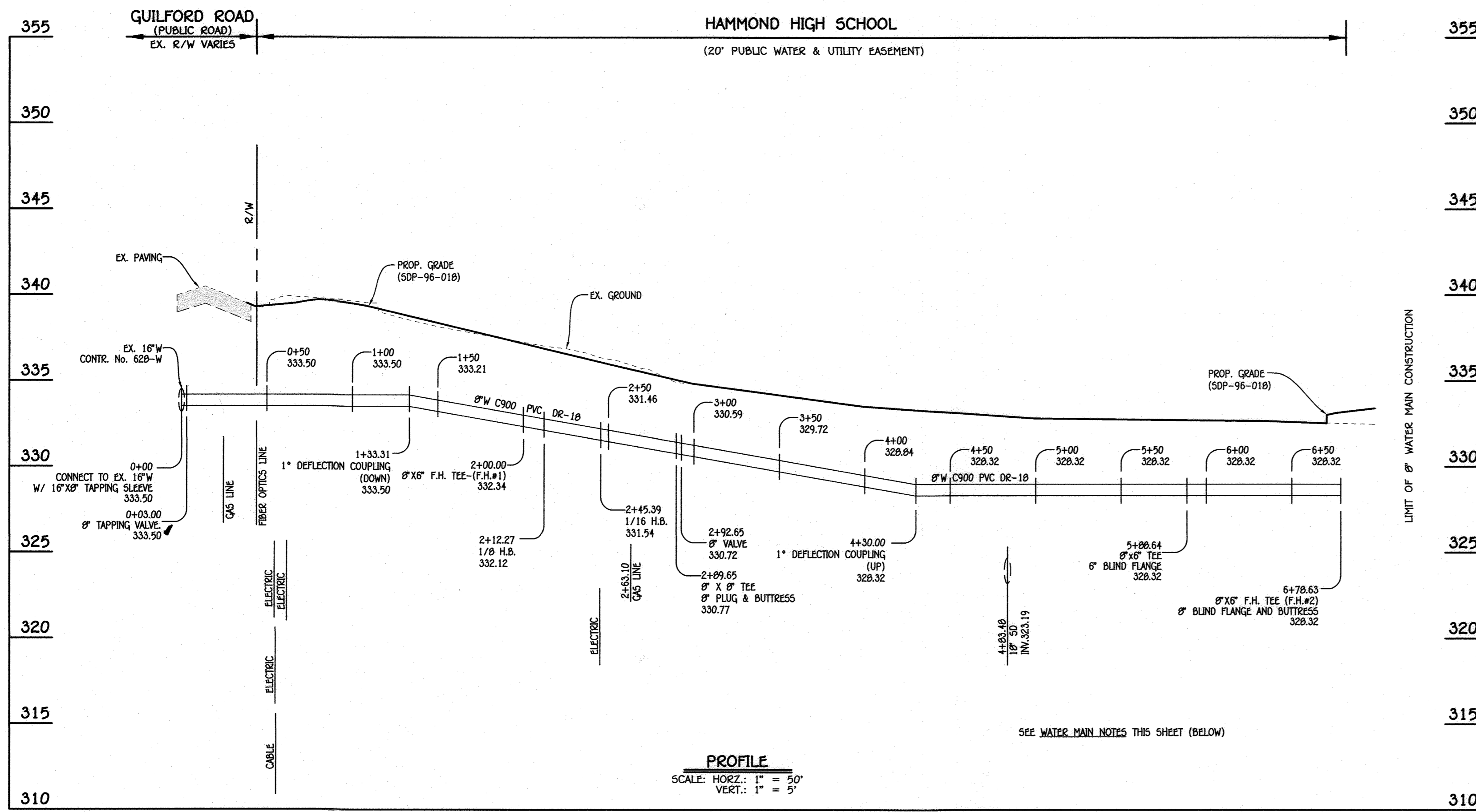
DESIGNED BY:	D.T.A.
DRAWN BY:	D.T.A.
CHECKED BY:	P.W.K.
DATE:	MAY, 2020
BY NO.	
REVISION	
DATE	

EXISTING CONDITIONS/ABANDONMENT PLAN	
600' SCALE MAP NO. 42	BLOCK NO. 14
F.C.C. WORK ORDER NO. 10016	
FILE NAME: WATER MAINS EXTENSION PLAN	

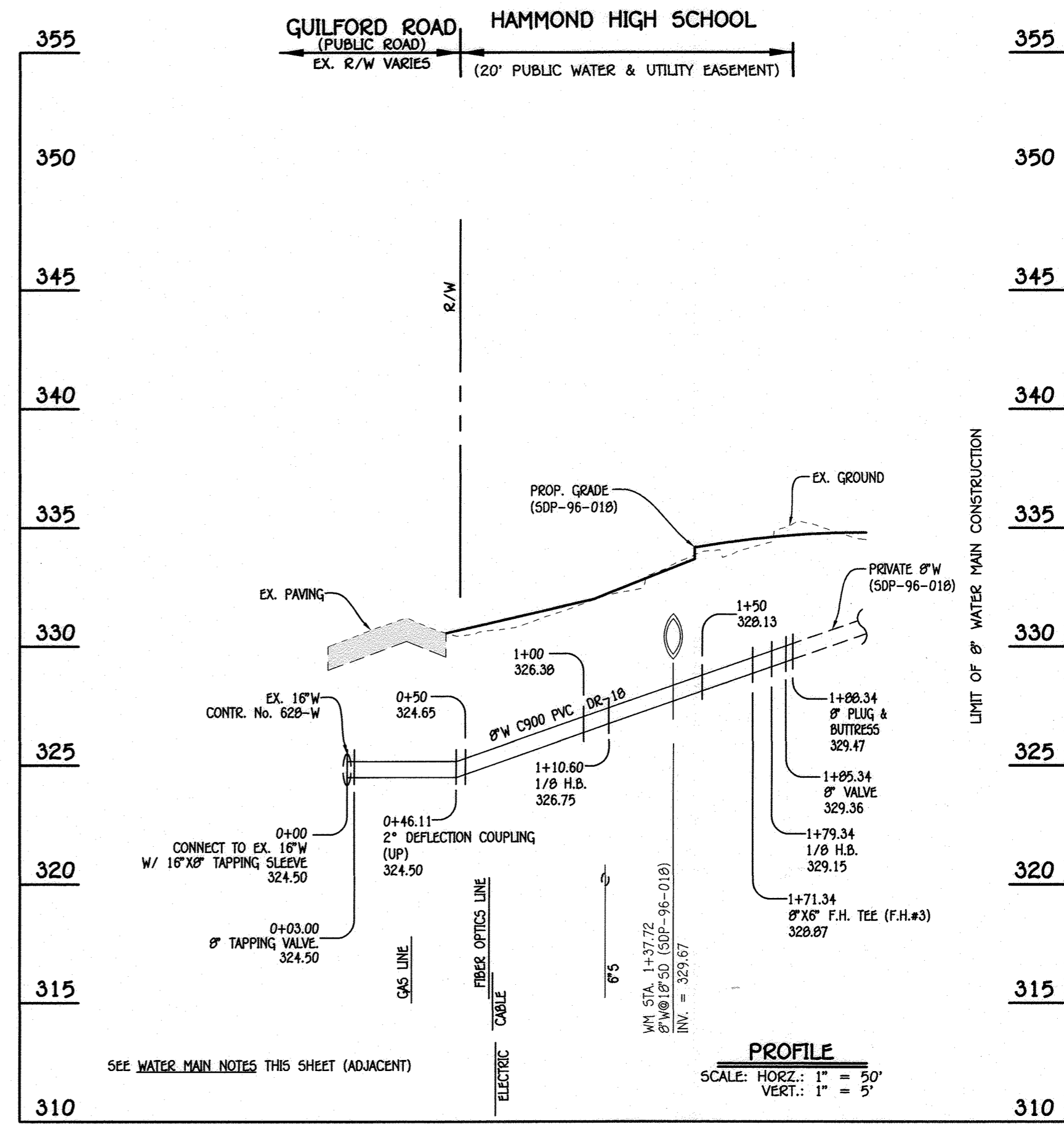
HAMMOND HIGH SCHOOL
WATER MAIN EXTENSIONS
CONTRACT NO. 44-5104-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 4

I:\2010\10016\Engineering\Drawings\10016 Sewer & Water Contract Plan.dwg, Plan Sheet 3, 1:1



8" WATER MAIN: ENTRANCE 'A'

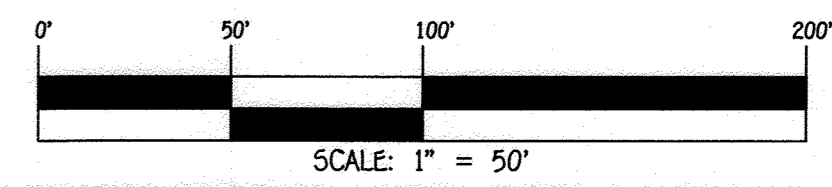


8" WATER MAIN: ENTRANCE 'B'

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: ENTRANCE 'A'			
0+00.00	16"X8" TAPPING SLEEVE	547,210.03	1,351,844.76
0+03.00	8" TAPPING VALVE	547,207.55	1,351,843.08
1+33.31	1" DEFLECTION COUPLING (DOWN)	547,099.80	1,351,769.78
2+00.00	8"X6" F.H. TEE (F.H.#1)	547,044.66	1,351,732.27
2+12.27	1/8" H.B.	547,034.52	1,351,725.36
2+45.39	1/16" H.B.	547,028.57	1,351,692.78
2+89.65	8"X8" TEE	547,036.48	1,351,649.24
2+92.65	8" VALVE	547,033.53	1,351,648.70
4+30.00	1" DEFLECTION COUPLING (UP)	546,898.39	1,351,624.16
5+88.64	8"X6" TEE	546,742.31	1,351,595.81
6+78.63	8"X6" F.H. TEE (F.H.#2)	546,653.76	1,351,579.73

- 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-TIEED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: ENTRANCE 'B'			
0+00.00	16"X8" TAPPING SLEEVE	547,017.65	1,352,177.83
0+03.00	8" TAPPING VALVE	547,014.92	1,352,176.57
0+46.11	2" DEFLECTION COUPLING (UP)	546,975.76	1,352,158.55
1+10.60	1/8" H.B.	546,917.17	1,352,131.60
1+71.34	8"X6" F.H. TEE (F.H.#3)	546,899.45	1,352,150.51
1+79.34	1/8" H.B.	546,851.85	1,352,153.01
1+85.34	8" VALVE	546,849.12	1,352,158.35
1+88.34	8" PLUG & BUTTRESS	546,847.76	1,352,161.02



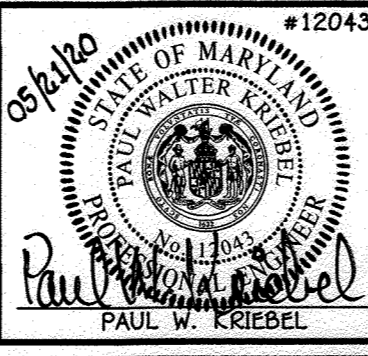
CONTRACT NO. 44-5104-D
HAMMOND HIGH SCHOOL
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
5/29/2020

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
6.8.20

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. 18043 EXPIRATION DATE IS 7/15/20.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 11270 BALTIMORE NATIONAL PIKE
ELIZOFT CITY, MARYLAND 21042
(410) 461-2895



DESIGNED BY: D.T.A.
DRAWN BY: D.T.A.
CHECKED BY: P.W.K.
DATE: MAY, 2020

WATER MAIN EXTENSIONS PROFILES & CHARTS

600' SCALE MAP NO. 42 BLOCK NO. 14
F.C.C. WORK ORDER NO. 10016
FILE NAME: WATER MAINS EXTENSION PLAN

HAMMOND HIGH SCHOOL
WATER MAIN EXTENSIONS
CONTRACT NO. 44-5104-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 4

I:\2010\10016\Engineering\Divgs\10016 Sewer & Water Contract No. 44-5104-D\Finals\10016 Sewer & Water Contract Plan.dwg Profile Sheet 4, 1:1