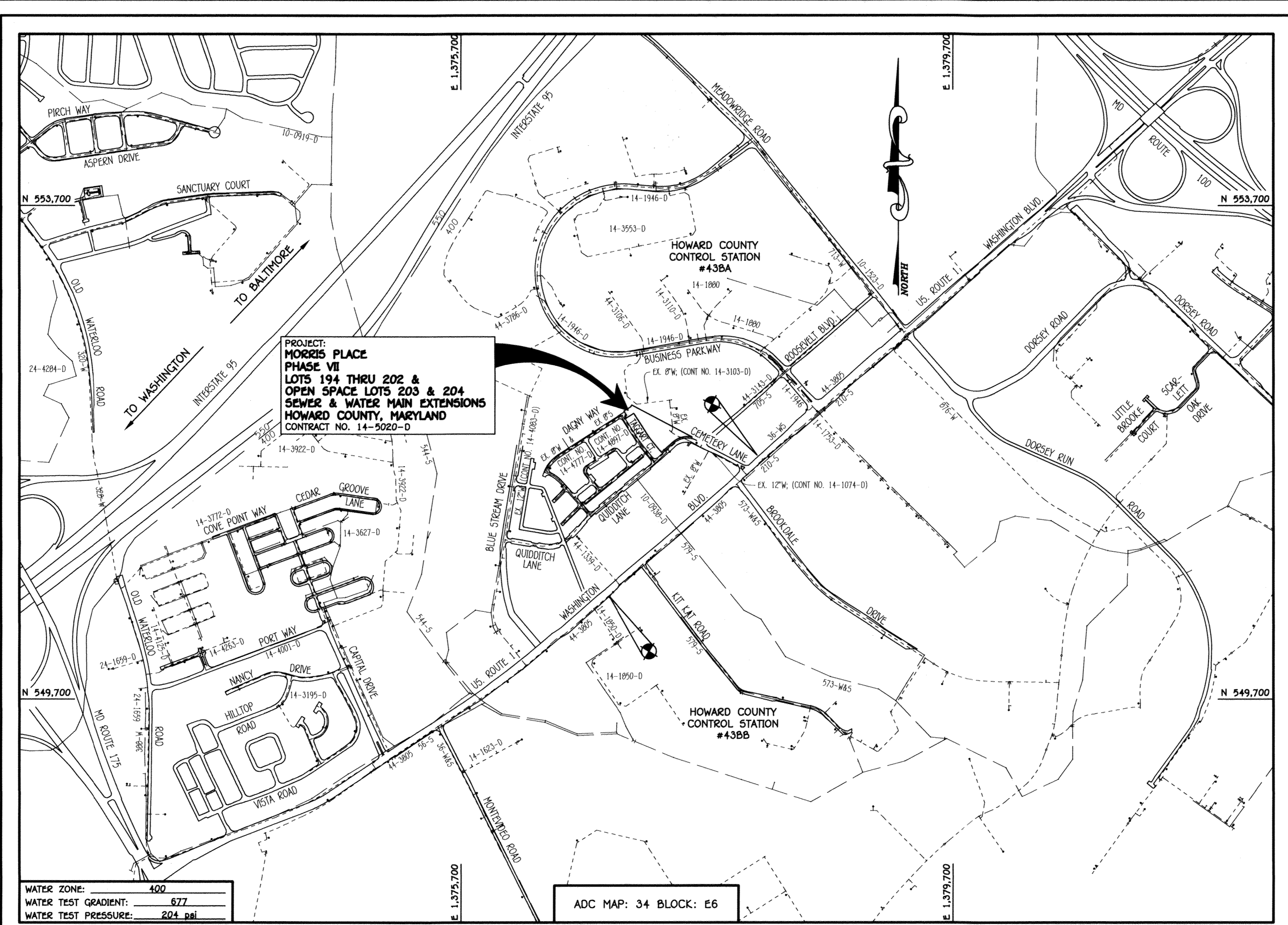


QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" PVC SDR-35	191 L.F.	167	SDR-35	NORTH AMERICAN PIPE
4" PVC SDR-35	130 L.F.	109	SDR-35	NORTH AMERICAN PIPE
CLEAN-OUTS	9 EACH	9		
MANHOLES	1 EACH	1		
TYPE 'A' DROP MANHOLES	1 EACH	1		
6" x 6" PVC DR-18	130 L.F.	132	C-900	NORTH AMERICAN PIPE
18" x 24" 15#	1 EACH	1		TYLER UNION
6" VALVE	1 EACH	1		MUELLER
6" x 6" F.H. TEE	1 EACH	1		TYLER UNION
6" VALVE	1 EACH	1		MUELLER
6" PLUG & BUTTRESS	1 EACH	1		HARCO
1-1/2" W.H.C.	04 L.F.	06		MUELLER
1/16" V.B.	2 EACH	2		TYLER UNION
THIN OUTSIDE METER SETTING	4 EACH	4		MUELLER
SINGLE OUTSIDE METER SETTING	1 EACH	1		MUELLER
FIRE HYDRANT	1 EACH	1		MUELLER
CONTINUITY TEST STATION	1 EACH	1		
12" x 18" PVC DR-18	26 L.F.	26		NORTH AMERICAN PIPE
VIC H.P.	1 EACH	1		
NAME OF UTILITY CONTRACTOR: C.C.S. INC.				
SURVEY & DRAFTING DIVISION AS-BUILT DATE:				

**BENCHMARK INFORMATION**

B.M.#1 - HOWARD COUNTY CONTROL STATION #438A - HORIZONTAL - NAD '83  
 (LOCATED IN FRONT F #7561 OLD WASHINGTON ROAD, APPROX. 4.2' BEHIND FIRE HYDRANT & APPROX. 2.9' BEHIND EDGE OF PAVING)  
 N 550,234.2018  
 E 1,376,909.2090  
 ELEVATION = 209.296 - VERTICAL - (NAVD '80)

B.M.#2 - HOWARD COUNTY CONTROL STATION #438B - HORIZONTAL - (NAD '83)  
 (LOCATED ALONG OLD WASHINGTON ROAD, APPROX. 350' SOUTH OF KIT KAT ROAD, ALONG EAST BOUND PAVING EDGE)  
 N 551,676.4075  
 E 1,376,100.3982  
 ELEVATION = 209.431 - VERTICAL - (NAVD '80)



WATER ZONE:	400
WATER TEST GRADIENT:	.677
WATER TEST PRESSURE:	204 psi

**LOCATION MAP**  
SCALE: 1" = 60'

TYPE OF BUILDING:	RESIDENTIAL - TOWNHOUSES
NUMBER OF LOTS:	9
NO. OF WATER HOUSE CONNECTIONS:	9
NO. OF SEWER HOUSE CONNECTIONS:	9
SEWER SHED:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WASTEWATER TREATMENT PLANT, CITY OF BALTIMORE

**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. Koebel, FOR:  
 BEAZER HOMES, LLC  
 SIGNATURE OF DEVELOPER  
 11/08/18  
 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  
 SIGNATURE OF ENGINEER  
 11-08-18  
 DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 300 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE SITE DEVELOPMENT PLAN, SDP-19-029.

Paul W. Koebel, FOR:  
 BEAZER HOMES, LLC  
 SIGNATURE OF DEVELOPER  
 11/08/18  
 DATE

SDP-19-029

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

APPROVED:  
 John R. Blanton  
 HOWARD SOIL CONSERVATION DISTRICT  
 11-19-18  
 DATE

LEGEND	
SYMBOL	DESCRIPTION
---	EX. WATER MAIN
---	EX. SEWER MAIN
○	EX. SEWER MANHOLE
○	EX. SEWER, WATER & UTILITY EASEMENT
○	EX. FIRE HYDRANT
○	EX. VALVE
---	PROP. WATER MAIN
---	PROP. SEWER MAIN
○	PROP. SEWER MANHOLE
---	PROP. SEWER, WATER & UTILITY EASEMENT
---	PROP. WHC
---	PROP. SHC
○	PROP. FIRE HYDRANT
○	PROP. VALVE

# CONTRACT NO. 14-5020-D

# MORRIS PLACE

## PHASE VII

# LOTS 194 THRU 202 &

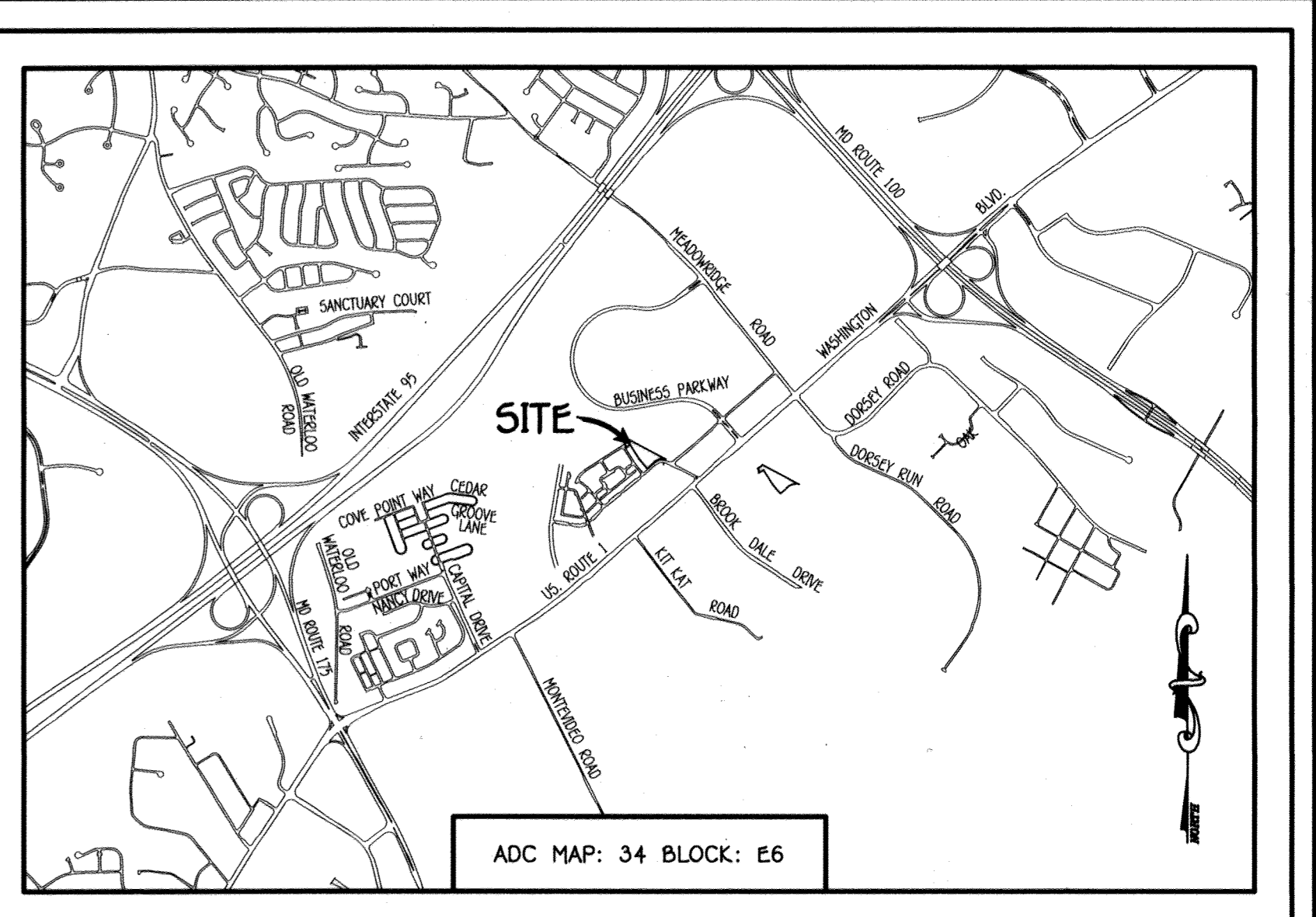
# OPEN SPACE LOTS 203 & 204

## SEWER & WATER MAIN EXTENSIONS

## HOWARD COUNTY, MARYLAND

**AS-BUILT**  
By *[Signature]* Date 7/19/19

**OWNER / DEVELOPER**  
 BEAZER HOMES, LLC  
 8965 GUILFORD ROAD  
 SUITE 290  
 COLUMBIA, MD 21046  
 PHONE: 410-720-5071



**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 OCTOBER, 2007 BY FISHER, COLLINS & CARTER, INC.
  - HORIZONTAL AND VERTICAL SURVEYS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '83/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 438A & NO. 438B.
  - ALL VERTICAL CONTROLS ARE BASED ON NAVD '80. 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 CONTRACTOR 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 MADE 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 MADE 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                |
| BEZ (CONTRACTOR SERVICES)    | 410-657-8713                  |
| BOE (EMERGENCY)              | 410-699-0123                  |
| BUREAU OF UTILITIES          | 410-313-4900                  |
| COLUMBIA PIPELINE CO         | 410-799-1399                  |
| DESS 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 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 TREES SHALL BE STRAPPED TO TREES.
  - 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 1009 OF THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - TRACE 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 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 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 HOOK 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, WHERE 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 COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
  - PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREES (1-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 CERTAINTED 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 (PEX) 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 PIPE, THE CONTRACTOR SHALL INSERT ASSEMBLY FOR THE PERMANENT 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 STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE RESTRAINT SPRINGS TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBM IRON, 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-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" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERSTOP FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERSTOP FRAME AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL INDICATES THAT CELLAR CANNOT BE SERVED.

CONTRACT NO. 14-5020-D  
 MORRIS PLACE  
 PHASE VII  
 LOTS 194 THRU 202 &  
 OPEN SPACE LOTS 203 & 204  
 SEWER & WATER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]*  
 CHIEF, BUREAU OF UTILITIES  
 11-19-18  
 DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

*[Signature]*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 12-5-18  
 DATE

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 5/7/18/20.

FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10725 BALTIMORE NATIONAL PIKE  
 ELIOTT CITY, MARYLAND 21116  
 (410) 461-2292

DESIGNED BY:  
 B.C.R.

DRAWN BY:  
 B.C.R.

CHECKED BY:  
 P.W.K.

DATE:  
 NOVEMBER, 2018

NO.	REVISION	DATE
1	REVISE QUANTITIES BASED ON SEWER & WATER ALIGNMENT SHIFT	9/29/19

SEWER & WATER MAIN EXTENSIONS  
 TITLE SHEET

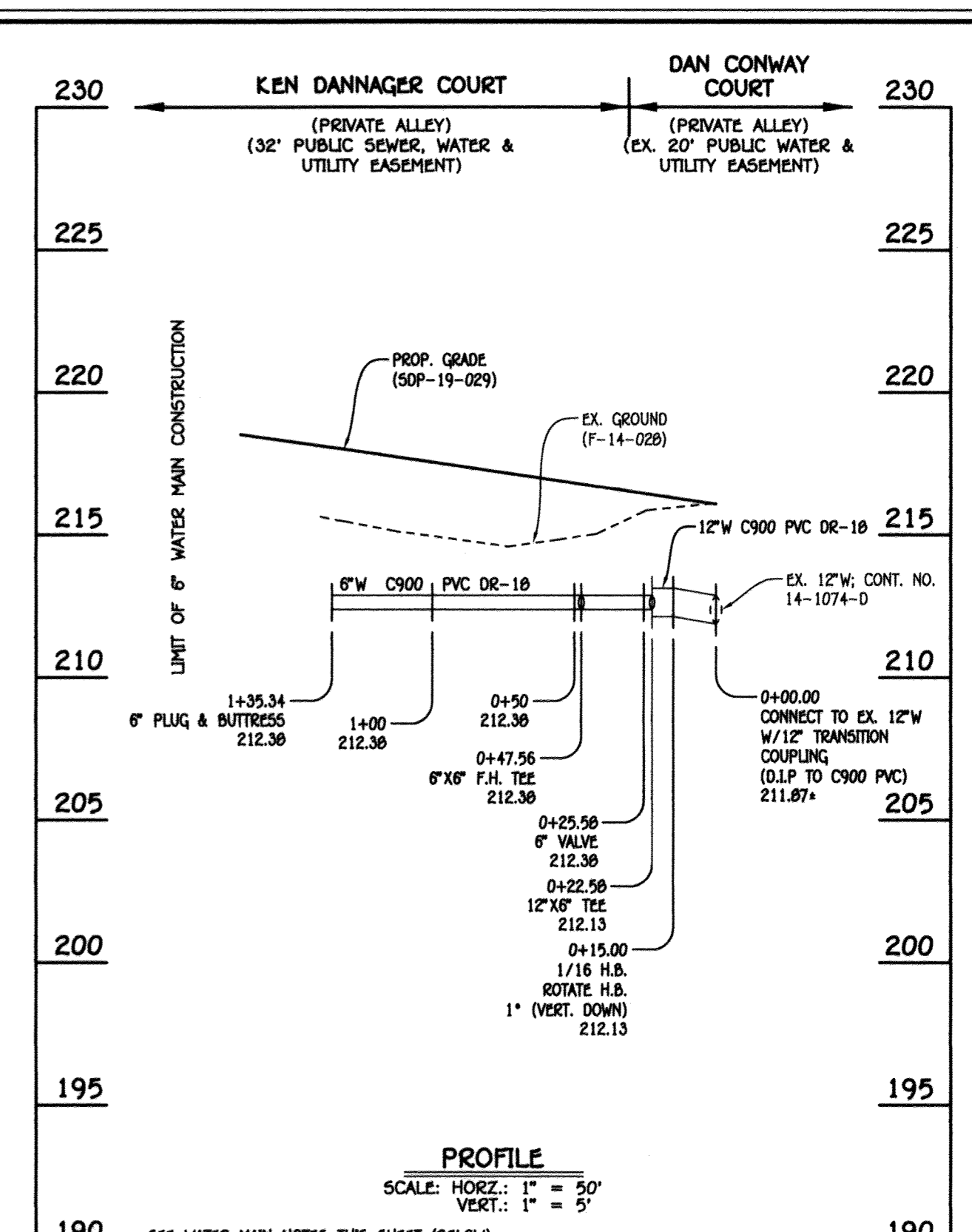
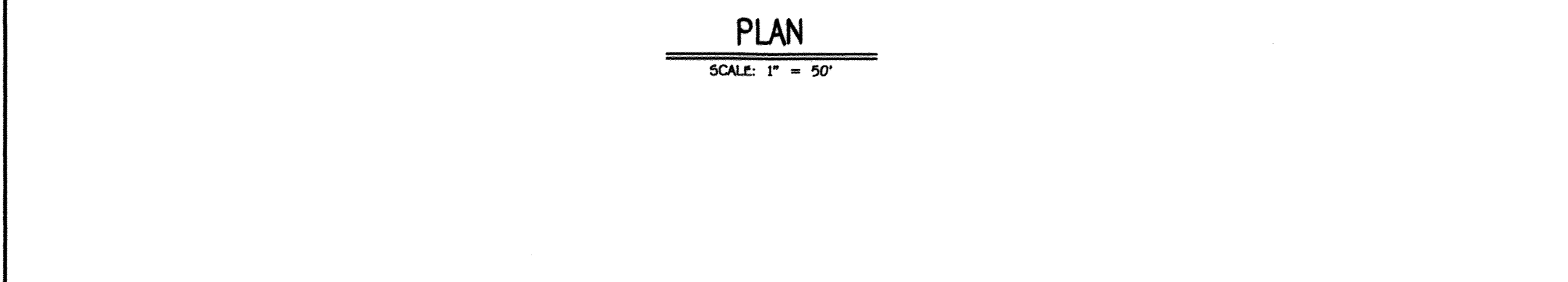
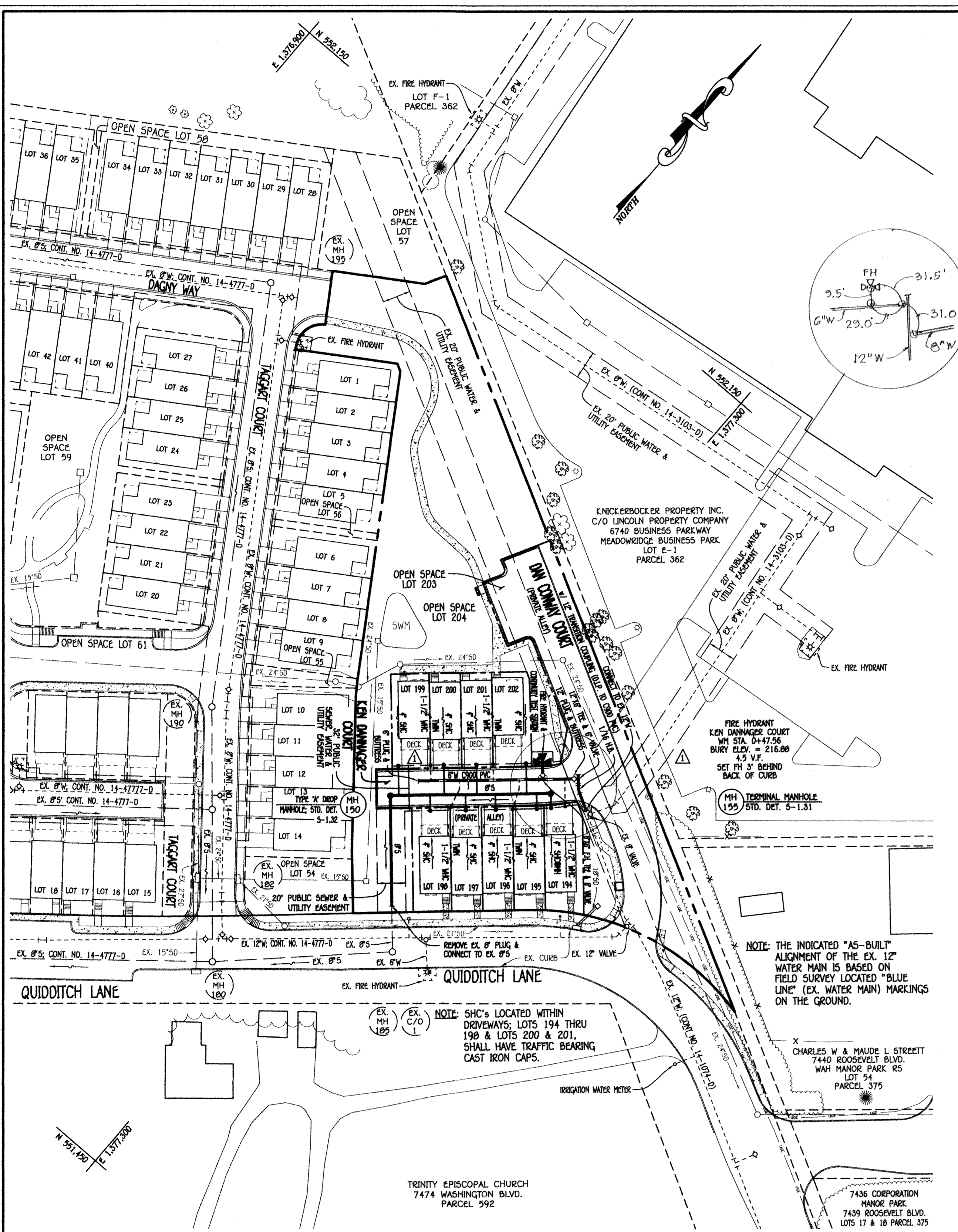
600' SCALE MAP NO. 43 BLOCK NO. 4  
 F.C.C. WORK ORDER NO. 07033

FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

MORRIS PLACE  
 PHASE VII  
 LOTS 194 THRU 202 &  
 OPEN SPACE LOTS 203 & 204  
 SEWER & WATER MAIN EXTENSIONS  
 CONTRACT NO. 14-5020-D  
 FIRST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 2



8" SEWER MAIN: KEN DANNAGER COURT; LOTS 194 THRU 202

12" & 6" WATER MAIN: KEN DANNAGER COURT; LOTS 194 THRU 202

NO.	NORTHING	EASTING	RIM ELEVATION
150	551779.06	1577291.27	217.95
155 (TERMINAL)	551854.64	1577375.99	215.30

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

W.M. STA.	APPURTENANCE	NORTHING	EASTING
0+00.00	CONNECT TO EX. 12" W/12" TRANSITION COUPLING	551862.00	1577402.00
0+15.00	1/16 H.B.	551869.37	1577389.02
0+22.50	12" X6" TEE	551875.07	1577384.00
0+25.50	6" VALVE	551873.05	1577381.76
0+47.56	6" X6" F.H. TEE	551856.53	1577365.20
1+35.34	6" PLUG & BUTTRESS	551800.45	1577299.46

STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	SLAB
MH 150 TO MH 155					
0+06 LT.	199	206.40	206.82	211.02	219.40
0+28 RT.	198	206.56	206.78	210.98	218.48
0+38 LT.	200	206.63	207.05	211.25	219.40
0+53 RT.	197	206.74	206.96	211.16	218.48
0+61 LT.	201	206.80	207.22	211.42	219.40
0+74 RT.	196	206.89	207.11	211.31	217.01
0+96 LT.	202	207.05	207.47	211.67	219.40
1+03 RT.	195	207.10	207.32	211.52	217.01
1+03 RT.	194	207.33	207.55	211.75	217.01

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
194	7701 KEN DANNAGER COURT	FH 0+33.35	SMH-155 15.5
195	7703 KEN DANNAGER COURT	FH 0+33.35	SMH-155 29.0
196	7705 KEN DANNAGER COURT	FH 0+33.35	SMH-155 29.0
197	7707 KEN DANNAGER COURT	FH 0+33.35	SMH-155 71.5
198	7709 KEN DANNAGER COURT	FH 0+33.35	SMH-155 71.5
199	7710 KEN DANNAGER COURT	FH 0+33.35	SMH-155 85.5
200	7708 KEN DANNAGER COURT	FH 0+33.35	SMH-155 85.5
201	7706 KEN DANNAGER COURT	FH 0+33.35	SMH-155 44.0
202	7704 KEN DANNAGER COURT	FH 0+33.35	SMH-155 44.0

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
194	7701 KEN DANNAGER COURT	SMH-155 14.5	FH 0+33.35 34.5
195	7703 KEN DANNAGER COURT	SMH-155 17.5	FH 0+33.35 35.0
196	7705 KEN DANNAGER COURT	SMH-155 40.0	FH 0+33.35 47.0
197	7707 KEN DANNAGER COURT	SMH-155 61.0	FH 0+33.35 64.5
198	7709 KEN DANNAGER COURT	SMH-155 84.5	FH 0+33.35 85.5
199	7710 KEN DANNAGER COURT	SMH-155 74.0	FH 0+33.35 99.5
200	7708 KEN DANNAGER COURT	SMH-155 76.5	FH 0+33.35 69.0
201	7706 KEN DANNAGER COURT	SMH-155 55.5	FH 0+33.35 46.5
202	7704 KEN DANNAGER COURT	SMH-155 27.0	FH 0+33.35 11.0

- WATER MAIN NOTES:
1. ALL WATER MAINS SHALL BE ANWA C900 PVC PIPE, DR-10.
  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 ANWA 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.

**AS-BUILT**  
By *[Signature]* Date 7/19/19

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 2 SUPERSEDES THE SEWER & WATER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 5, 2018.

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. 12045 EXPIRATION DATE IS 7/18/20. <b>FISHER, COLLINS &amp; CARTER, INC.</b> CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE BLVD. SUITE 2104E BLOOMINGTON, MD 21042 (410) 481-2899	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: MAY, 2019	REVISIONS: REVISE SEWER & WATER PROFILES AND CHARTS PER ALIGNMENT SHIFT 5/15/19 REVISE SEWER & WATER ALIGNMENT BASED ON ROAD 6' NORTH SHIFT 5/15/19	600' SCALE MAP NO. 43 BLOCK NO. 4 F.C.C. WORK ORDER NO. 07053 FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	CONTRACT NO. 14-5020-D MORRIS PLACE PHASE VII LOTS 194 THRU 202 & OPEN SPACE LOTS 203 & 204 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 14-5020-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 2 OF 2
---	---	--	--	---	--	---	--------------------------------