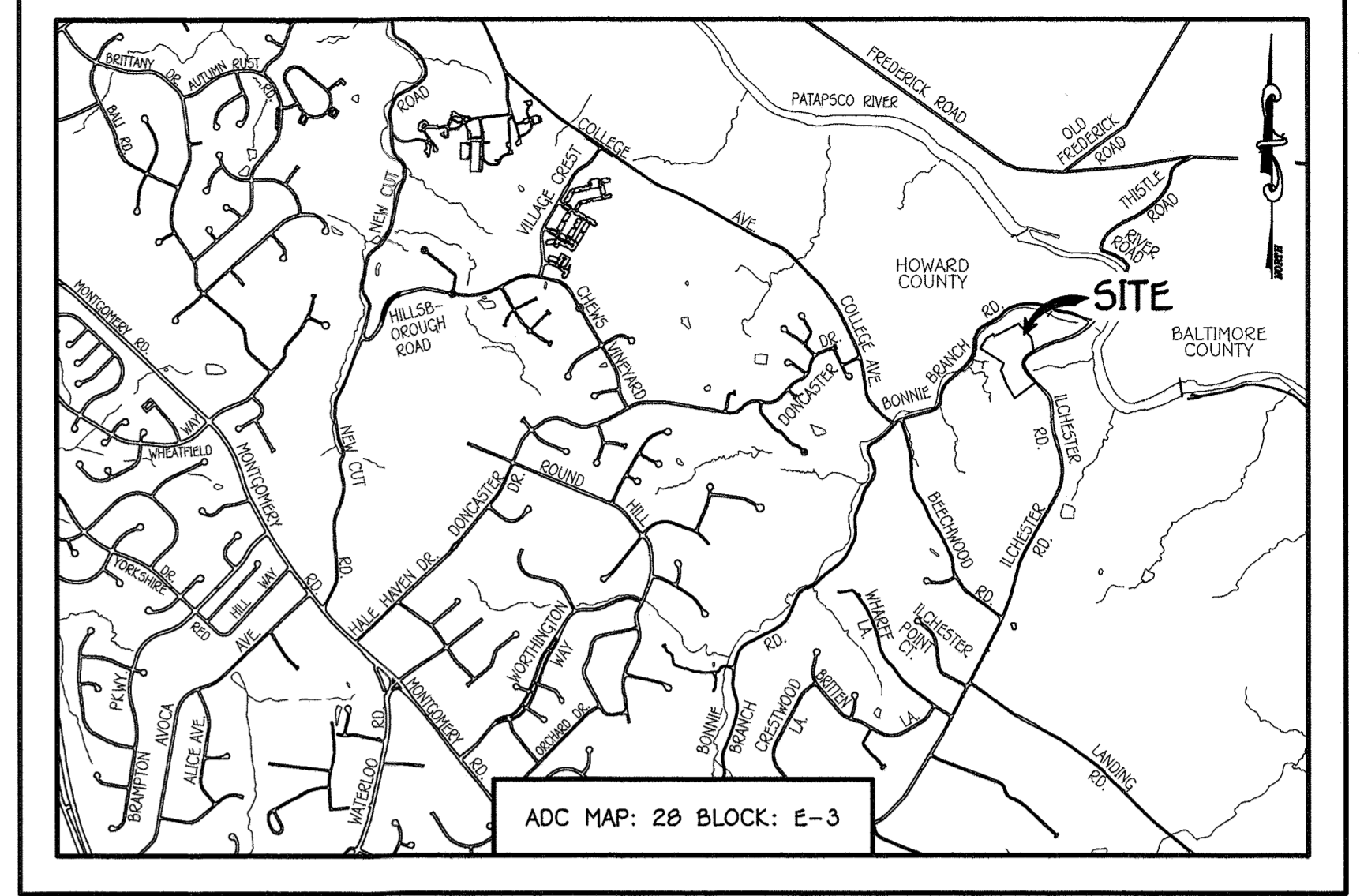
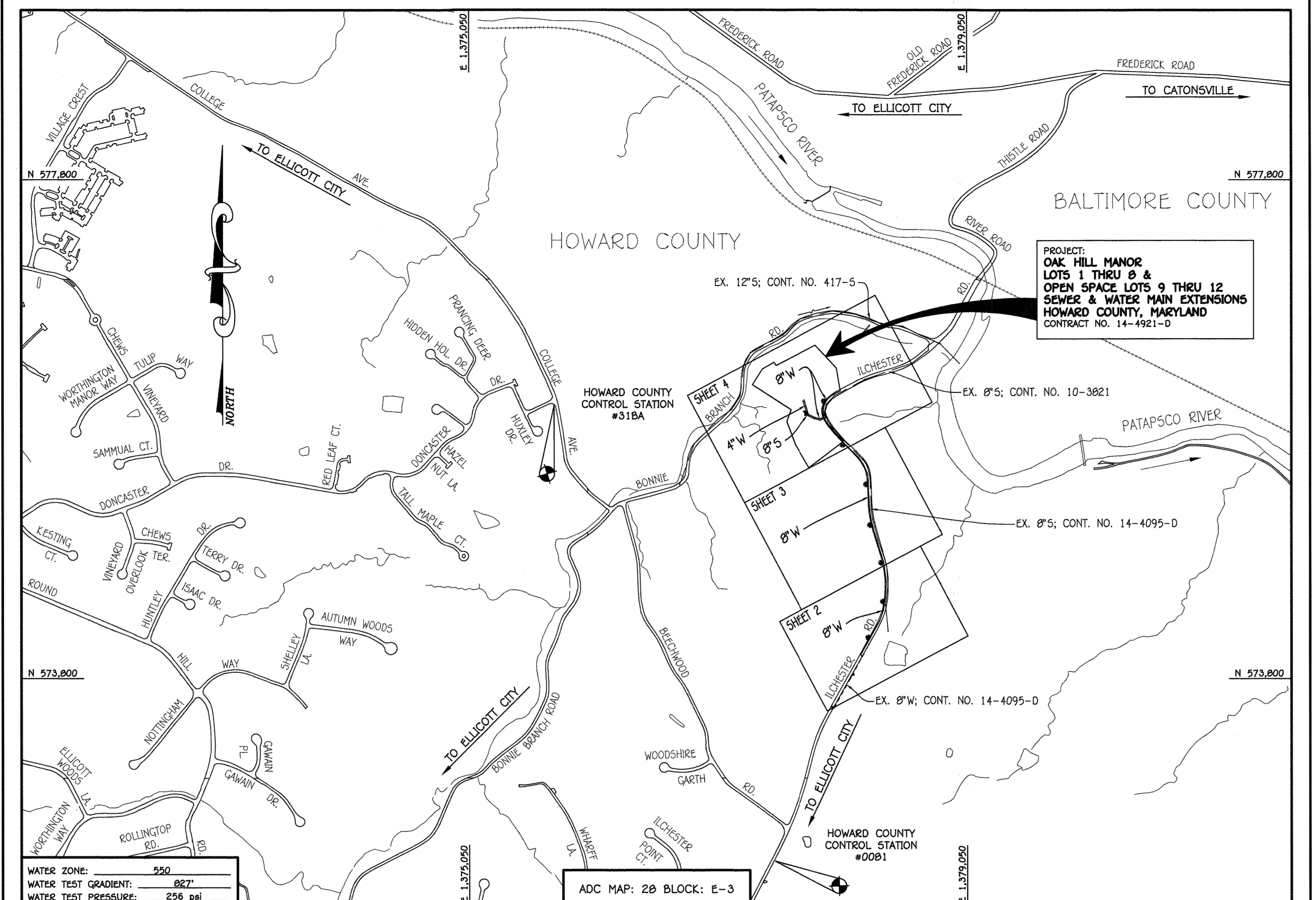


QUANTITIES		AS-BUILT		
ITEM	ESTIMATED	QUANTITIES	TYPE	SUPPLIER
Ø 5" C900; 50R-35	316 L.F.			
Ø 4" C900; 50R-35	237 L.F.			
STANDARD MANHOLES	4 EACH			
TYPE 'B' DROP MANHOLE	1 EACH			
CLEAN CUTS	Ø EACH			
Ø 10" PVC; DR-14	2,538 L.F.			
Ø 8" PVC; DR-14	119 L.F.			
Ø 6" PVC; DR-14	119 L.F.			
1-1/2" WHC	150 L.F.			
3" H.D.C.	Ø EACH			
2" H.D.C.	1 EACH			
1/8" H.B.	3 EACH			
1/16" H.B.	3 EACH			
1/32" H.B.	12 EACH			
Ø 1/2" TAPPING SLUEVE	1 EACH			
Ø 1/2" TEE	1 EACH			
Ø 1/2" F.H. TEE	Ø EACH			
Ø TAPPING VALVE	1 EACH			
Ø VALVE	Ø EACH			
Ø VALVE	Ø EACH			
FIRE HYDRANT	Ø EACH			
CONTINUITY TEST STATION	Ø EACH			
SINGLE OUTSIDE METER SETTING	6 EACH			
TWIN OUTSIDE METER SETTING	1 EACH			
Ø PLUG & BUTTRESS	1 EACH			
Ø PLUG & BUTTRESS	1 EACH			
Ø 1/2" REDUCER	1 EACH			
EX. 4" SHC (REMOVAL)	37 L.F.			



PRIVATE WELL & PRIVATE SEPTIC SYSTEM CHART										
<table border="1"> <thead> <tr> <th>PARCEL NO.</th> <th>ADDRESS</th> <th>OWNER</th> <th>ABANDON WELL</th> <th>ABANDON SEPTIC</th> </tr> </thead> <tbody> <tr> <td>618</td> <td>4472 ILICHESTER ROAD</td> <td>MS. EVA J. NELSON</td> <td>YES</td> <td>ON PUBLIC SEWER</td> </tr> </tbody> </table>	PARCEL NO.	ADDRESS	OWNER	ABANDON WELL	ABANDON SEPTIC	618	4472 ILICHESTER ROAD	MS. EVA J. NELSON	YES	ON PUBLIC SEWER
PARCEL NO.	ADDRESS	OWNER	ABANDON WELL	ABANDON SEPTIC						
618	4472 ILICHESTER ROAD	MS. EVA J. NELSON	YES	ON PUBLIC SEWER						
NOTE: WATER METERS WILL NOT BE RELEASED BY HOWARD COUNTY TO ANY NEW BUILDING UNTIL THE EXISTING WELL HAS BEEN ABANDONED IN ACCORDANCE WITH HOWARD COUNTY HEALTH DEPARTMENT REGULATIONS AND THE EXISTING BUILDINGS ARE CONNECTED TO THE PUBLIC WATER AND SEWER MAINS.										

WATER ZONE:	550
WATER TEST GRADIENT:	Ø 27"
WATER TEST PRESSURE:	255 psi

TYPE OF BUILDING:	RESIDENTIAL - SINGLE FAMILY DETACHED DWELLINGS
NUMBER OF LOTS:	Ø BUILDABLE (4 OPEN SPACE)
NO. OF WATER HOUSE CONNECTIONS:	Ø
NO. OF SEWER HOUSE CONNECTIONS:	Ø
SEWER SHED:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WASTEWATER TREATMENT PLANT CITY OF BALTIMORE

PLAN REFERENCE NUMBERS:	<ul style="list-style-type: none"> EQ-15-043 F-19-003 (SUPPLEMENTAL PLAN & RECORD PLAN)
-------------------------	---

CONTRACT NO. 14-4921-D

OAK HILL MANOR

LOTS 1 THRU 8 &

OPEN SPACE

LOTS 9 THRU 12

SEWER & WATER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #0081 - HORIZONTAL - (NAD 83)
 (LOCATED ALONG THE SOUTH WEST INTERSECTION OF COLLEGE AVE. & DONCASTER ROAD AND APPROX. 53.65' FROM BGE POLE 451713; NEAR OUR LADY OF PERPETUAL HELP SCHOOL YARD)
 N 572,335.365
 E 1,377,504.013
 ELEVATION = 477.922 - VERTICAL - (NAVD '08)

B.M.#2 - HOWARD COUNTY CONTROL STATION #318A - HORIZONTAL - (NAD 83)
 (LOCATED ALONG THE SOUTH WEST INTERSECTION OF COLLEGE AVE. & DONCASTER DRIVE, APPROX. 10.4' NORTH OF SEWER MANHOLE AND 55' SOUTH OF FIRE HYDRANT ACROSS THE STREET)
 N 575,967.808
 E 1,375,729.885
 ELEVATION = 576.098 - VERTICAL - (NAVD '08)

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

DEVELOPER'S CERTIFICATION

I HAVE HEREBY CERTIFIED 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: Ms. Eva J. Nelson 11/01/19
 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 11-01-19
 SIGNATURE OF ENGINEER DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

11-13-19 DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

12-17-19 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 IS 7/16/20.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21043
 (410) 481 - 2255

DESIGNED BY: B.C.R.
 DRAWN BY: B.C.R.
 CHECKED BY: P.W.K.
 DATE: NOVEMBER, 2019

OWNER / DEVELOPER
 MS. EVA J. NELSON
 4472 ILICHESTER ROAD
 ELICOTT CITY, MARYLAND 21043-6836
 443-253-7535

SEWER & WATER MAIN EXTENSIONS
 TITLE SHEET

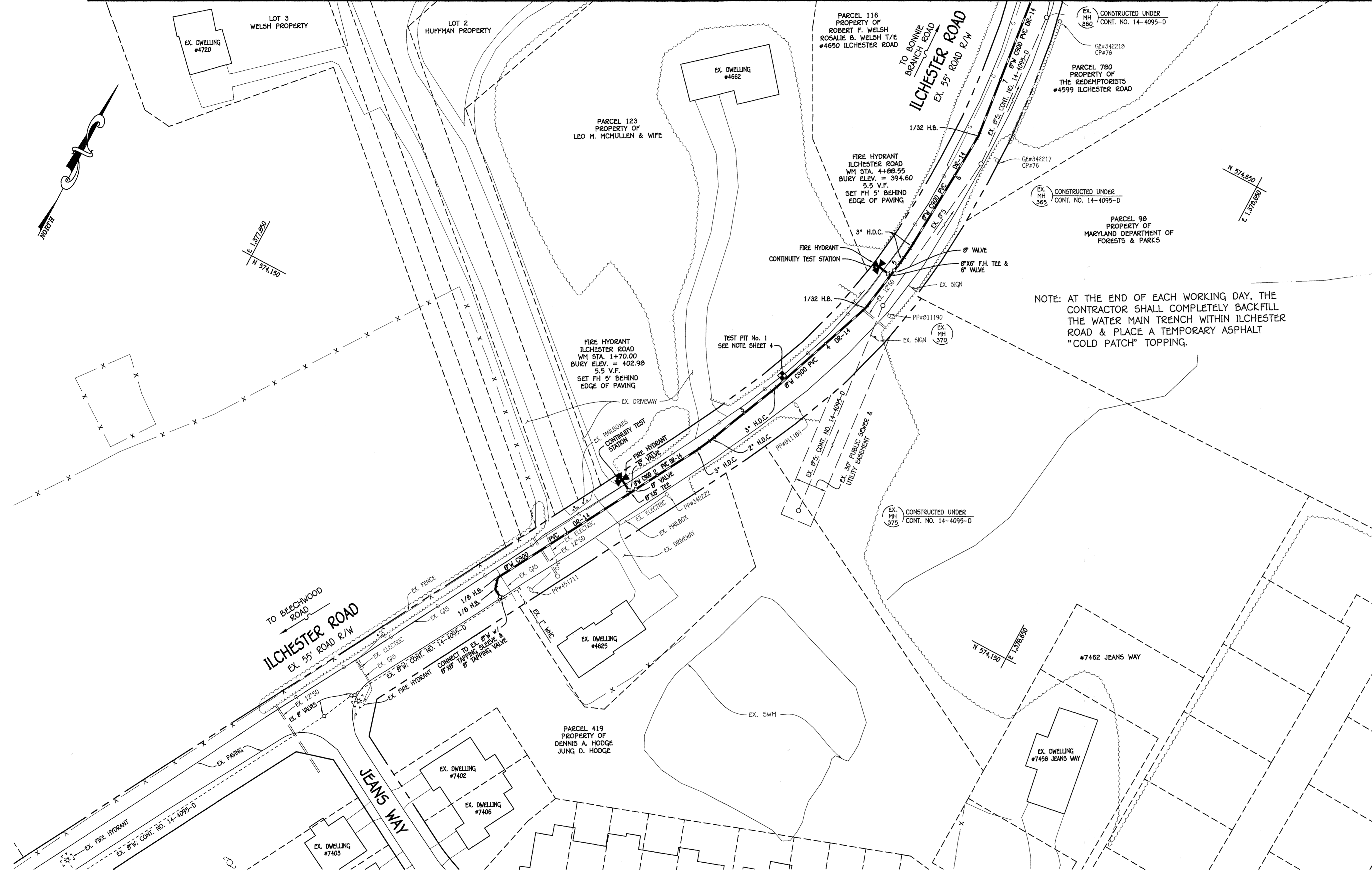
OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 CONTRACT NO. 14-4921-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50'

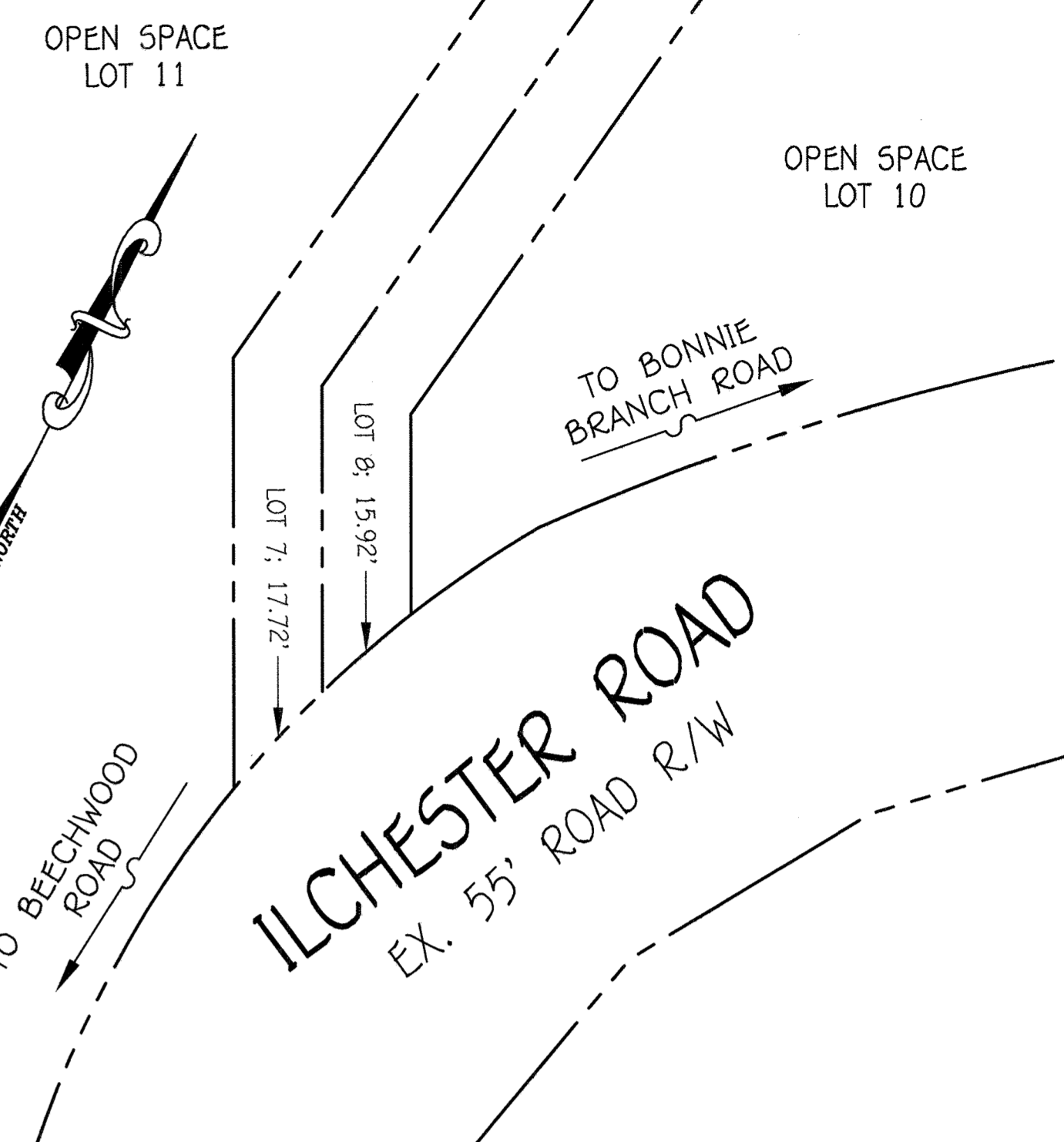
CONTRACT NO. 14-4921-D
 OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 10

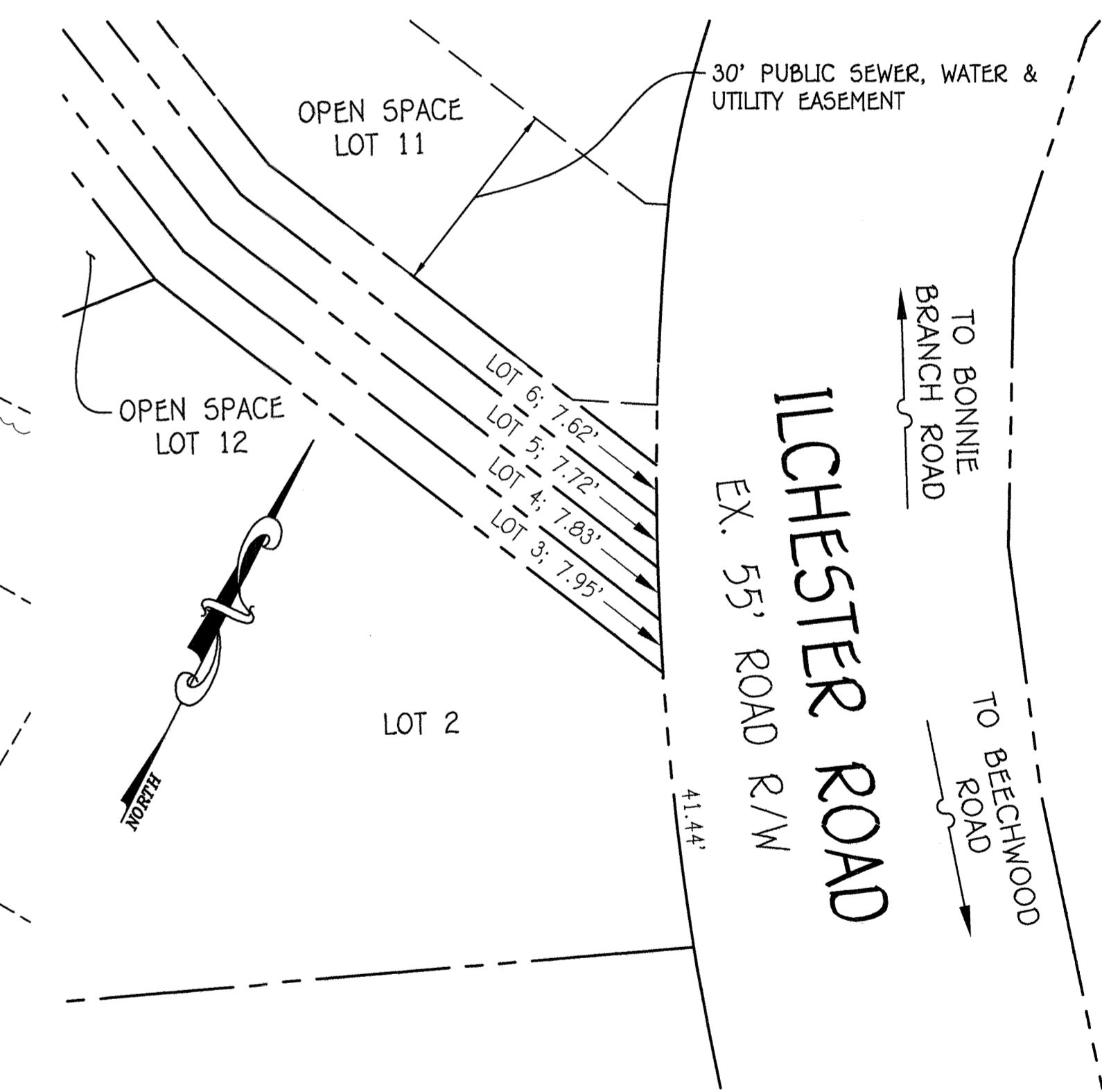
MATCH LINE: SEE SHEET 3 OF 10



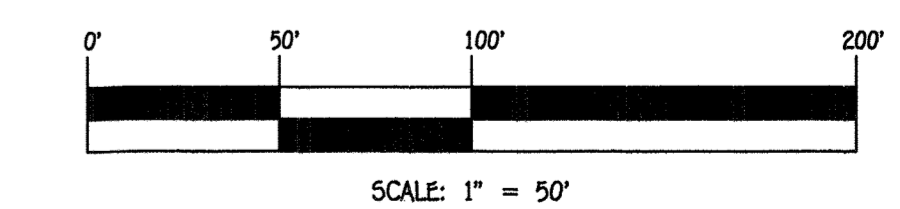
PLAN
SCALE: 1" = 50'



ENLARGEMENT: FRONT FOOTAGES; LOTS 7 & 8
SCALE: 1" = 20'



ENLARGEMENT: FRONT FOOTAGES; LOTS 3 THRU 6
SCALE: 1" = 20'

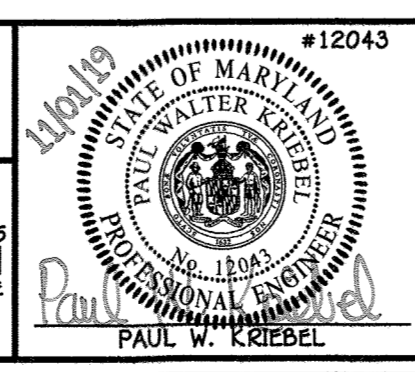


CONTRACT NO. 14-4921-D
OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
11-13-19
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
12-17-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10222 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21046
(410) 461-2295

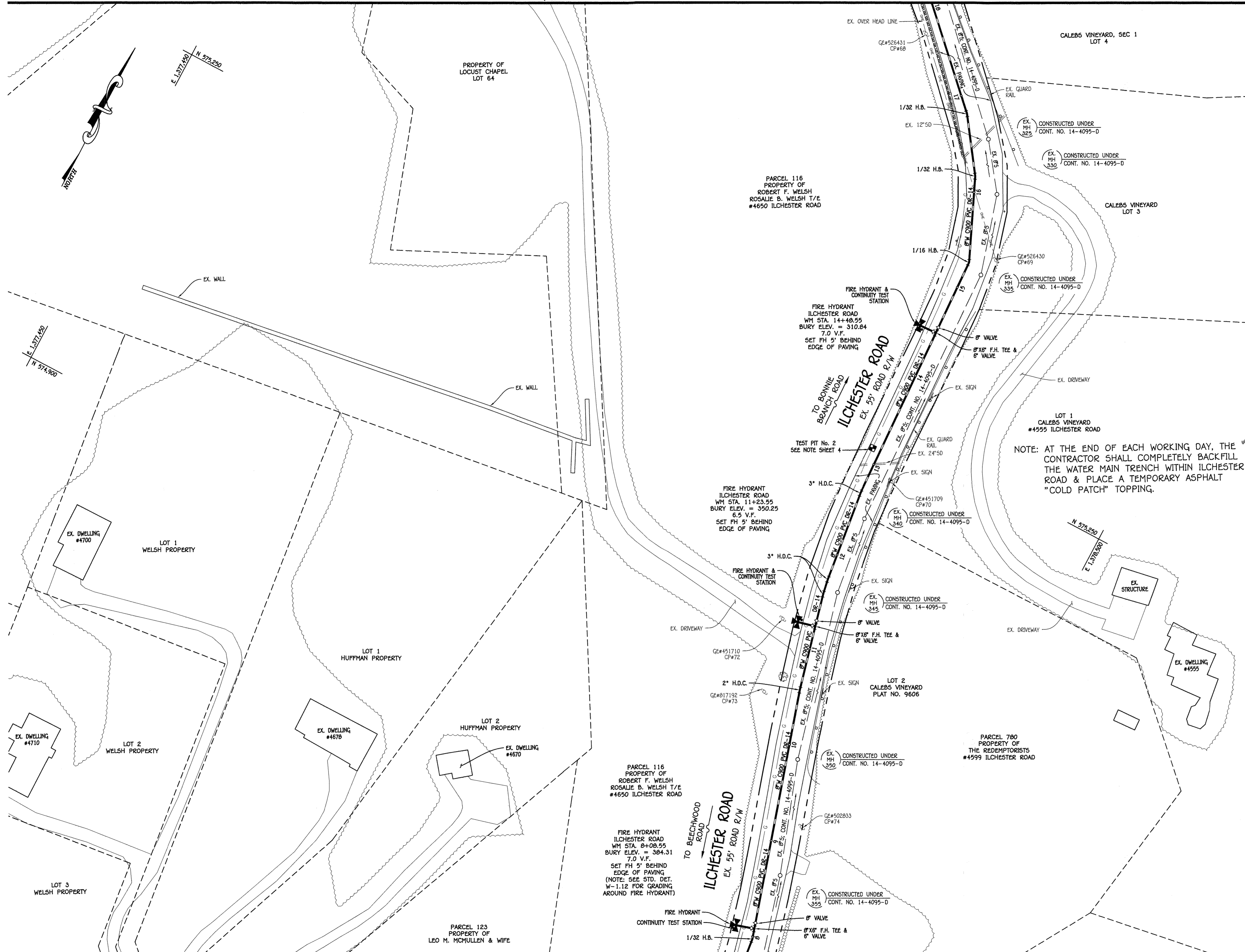


DESIGNED BY:	B.C.R.				
DRAWN BY:	B.C.R.				
CHECKED BY:	P.W.K.				
DATE:	NOVEMBER, 2019	BY NO.		REVISION	

SEWER & WATER MAIN EXTENSIONS
PLAN & FRONT FOOTAGE
ENLARGEMENTS
600' SCALE MAP NO. 31 BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 14-4921-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 2 OF 10

MATCH LINE: SEE SHEET 4 OF 10

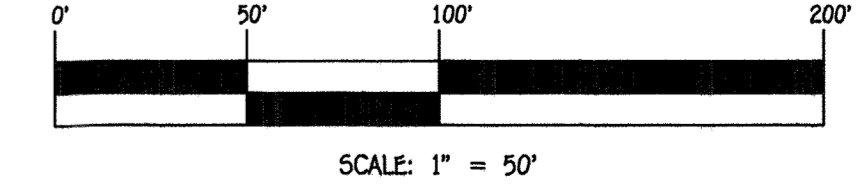


NOTE: AT THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL COMPLETELY BACKFILL THE WATER MAIN TRENCH WITHIN ILCHESTER ROAD & PLACE A TEMPORARY ASPHALT "COLD PATCH" TOPPING.

MATCH LINE: SEE SHEET 2 OF 10

PLAN

SCALE: 1" = 50'



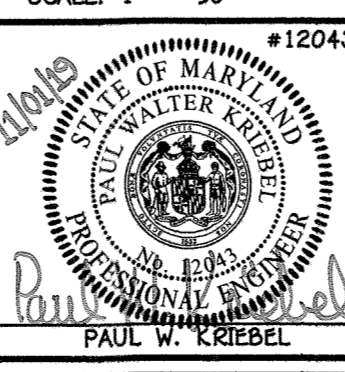
SCALE: 1" = 50'

CONTRACT NO. 14-4921-D
OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & 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

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FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21036
(410) 461-2295



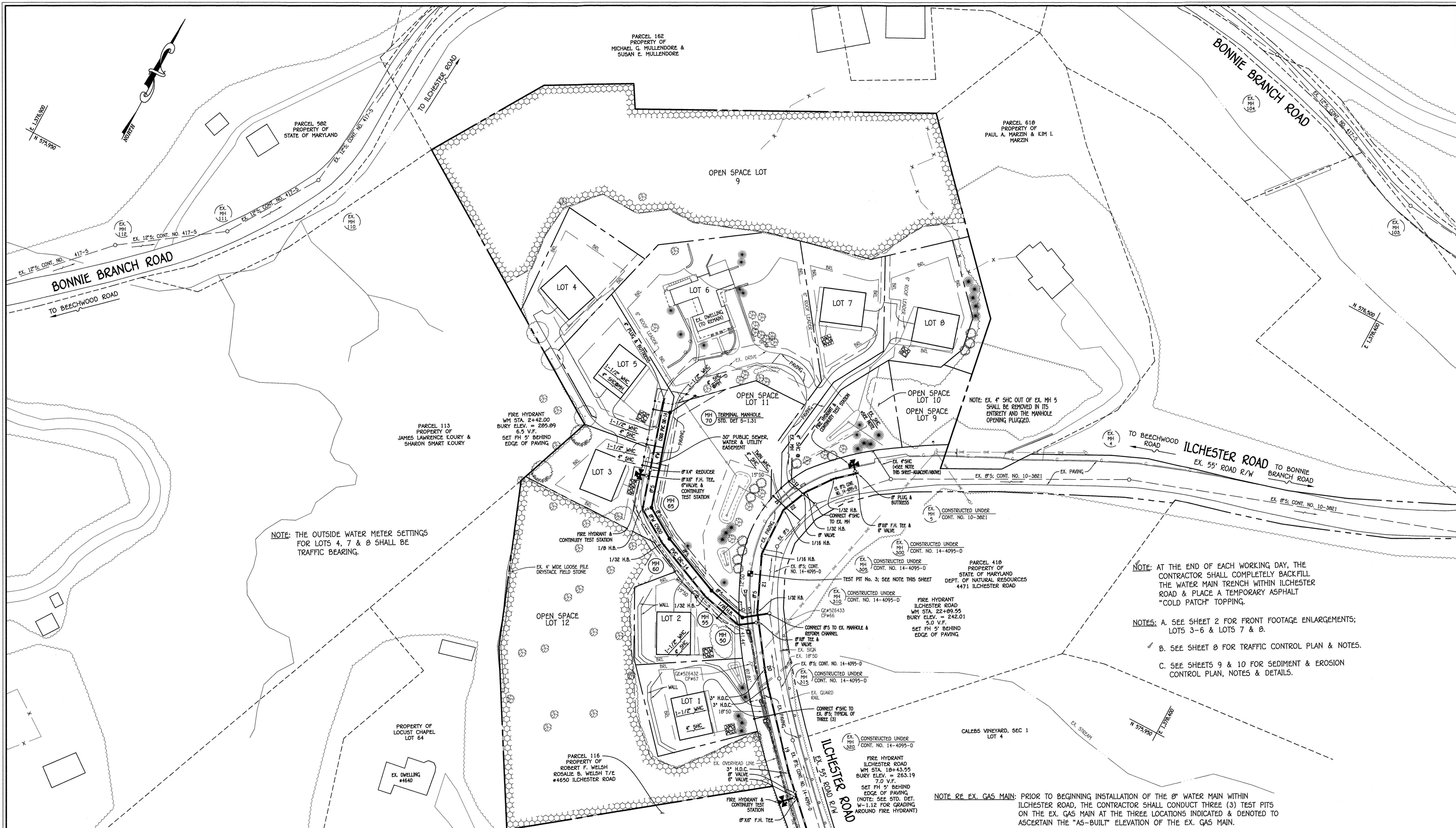
DESIGNED BY:	B.C.R.				
DRAWN BY:	B.C.R.				
CHECKED BY:	P.W.K.				
DATE:	NOVEMBER, 2019	BY NO.		REVISION	

SEWER & WATER MAIN EXTENSIONS PLAN	
600' SCALE MAP NO. 31	BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020	
FILE NAME:	SEWER & WATER MAIN EXTENSION PLAN

OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 14-4921-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 10

I:\2013\13020\Engineering\Drawings\Water & Sewer Contract Plan.dwg, 1:1



NOTE: THE OUTSIDE WATER METER SETTINGS FOR LOTS 4, 7 & 8 SHALL BE TRAFFIC BEARING.

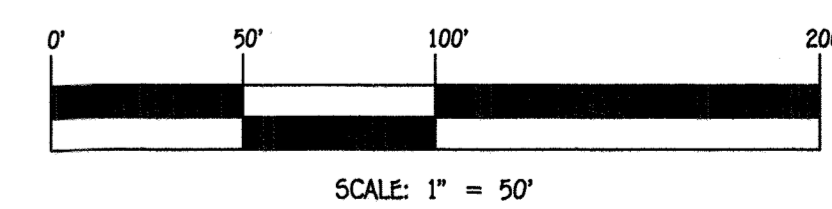
NOTE: AT THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL COMPLETELY BACKFILL THE WATER MAIN TRENCH WITHIN ILCHESTER ROAD & PLACE A TEMPORARY ASPHALT "COLD PATCH" TOPPING.

- NOTES: A. SEE SHEET 2 FOR FRONT FOOTAGE ENLARGEMENTS; LOTS 3-6 & LOTS 7 & 8.
 B. SEE SHEET 8 FOR TRAFFIC CONTROL PLAN & NOTES.
 C. SEE SHEETS 9 & 10 FOR SEDIMENT & EROSION CONTROL PLAN, NOTES & DETAILS.

NOTE RE EX. GAS MAIN: PRIOR TO BEGINNING INSTALLATION OF THE 8" WATER MAIN WITHIN ILCHESTER ROAD, THE CONTRACTOR SHALL CONDUCT THREE (3) TEST PITS ON THE EX. GAS MAIN AT THE THREE LOCATIONS INDICATED & DENOTED TO ASCERTAIN THE "AS-BUILT" ELEVATION OF THE EX. GAS MAIN.

MATCH LINE: SEE SHEET 3 OF 10

PLAN
 SCALE: 1" = 50'

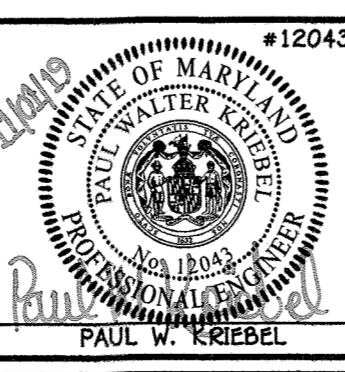


CONTRACT NO. 14-4921-D
 OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 CHIEF, BUREAU OF UTILITIES
 DATE: 11-13-19

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 12.17.19

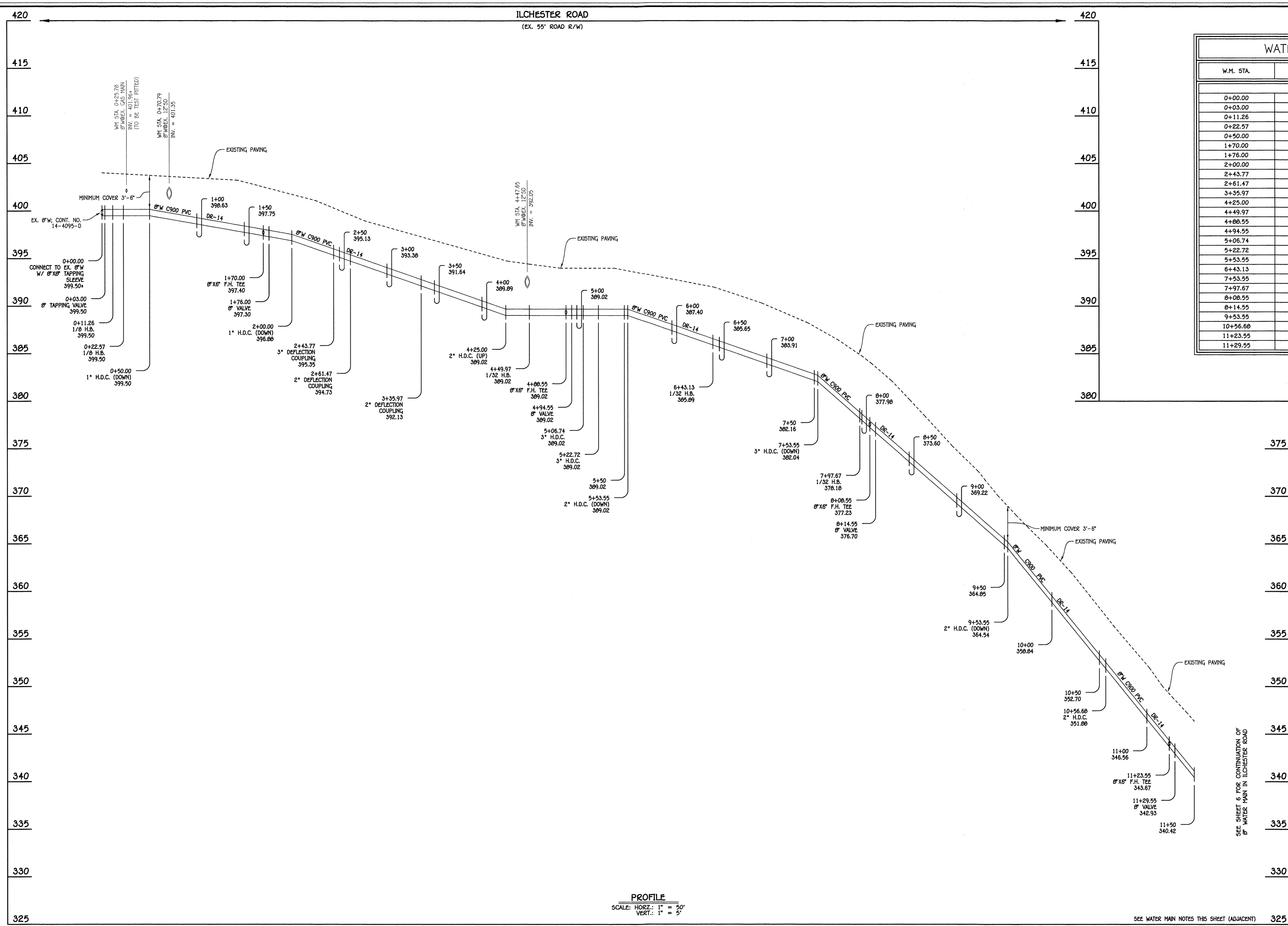
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FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2295



DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	NOVEMBER, 2019
BY NO.	
REVISION	
DATE	

SEWER & WATER MAIN EXTENSIONS PLAN	
600' SCALE MAP NO. 31	BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020	
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	

OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 CONTRACT NO. 14-4921-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 4 of 10

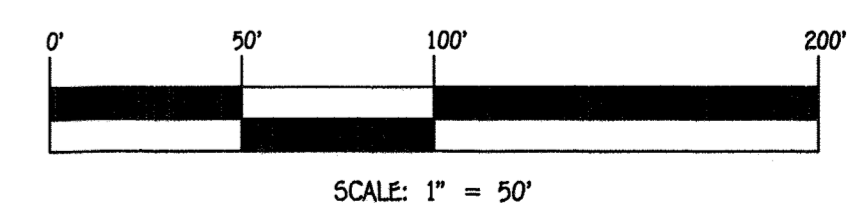


WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: ILCHESTER ROAD			
0+00.00	8" X 8" TAPPING SLEEVE	573976.59	1378207.32
0+03.00	8" TAPPING VALVE	573978.06	1378204.70
0+11.26	1/8" H.B.	573982.10	1378197.50
0+22.57	1/8" H.B.	573993.00	1378194.45
0+50.00	1" H.D.C. (DOWN)	574016.91	1378207.89
1+70.00	8" X 8" F.H. TEE	574121.51	1378266.70
1+76.00	8" VALVE	574126.74	1378269.64
2+00.00	1" H.D.C. (DOWN)	574147.66	1378281.41
2+43.77	3" H.D.C.	574185.81	1378302.86
2+61.47	2" H.D.C.	574201.72	1378310.60
3+35.97	2" H.D.C.	574270.13	1378340.12
4+25.00	2" H.D.C. (UP)	574353.55	1378371.22
4+49.97	1/32" H.B.	574376.95	1378379.94
4+88.55	8" X 8" F.H. TEE	574415.01	1378386.23
4+94.55	8" VALVE	574420.94	1378387.21
5+06.74	3" H.D.C.	574432.96	1378389.20
5+22.72	3" H.D.C.	574448.84	1378390.96
5+53.55	2" H.D.C. (DOWN)	574479.62	1378392.72
6+43.13	1/32" H.B.	574569.06	1378397.83
7+53.55	3" H.D.C. (DOWN)	574678.71	1378384.89
7+97.67	1/32" H.B.	574722.53	1378379.72
8+08.55	8" X 8" F.H. TEE	574732.92	1378376.48
8+14.55	8" VALVE	574738.65	1378374.70
9+53.55	2" H.D.C. (DOWN)	574871.37	1378333.40
10+56.68	2" H.D.C.	574969.84	1378302.75
11+23.55	8" X 8" F.H. TEE	575034.63	1378286.19
11+29.55	8" VALVE	575040.44	1378284.70

PROFILE
 SCALE: HORIZ.: 1" = 50'
 VERT.: 1" = 5'

8" WATER MAIN: ILCHESTER ROAD

- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-14.
 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 HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

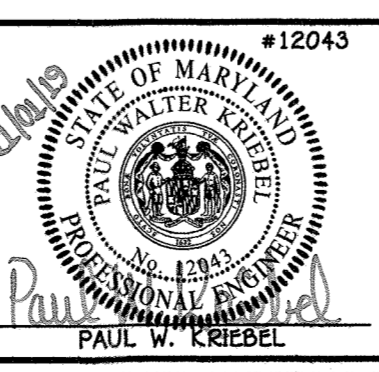


CONTRACT NO. 14-4921-D
 OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES DATE: 11-13-19	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 12-17-19
---	---

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 7/18/20.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLSWORTH CITY, MARYLAND 21042
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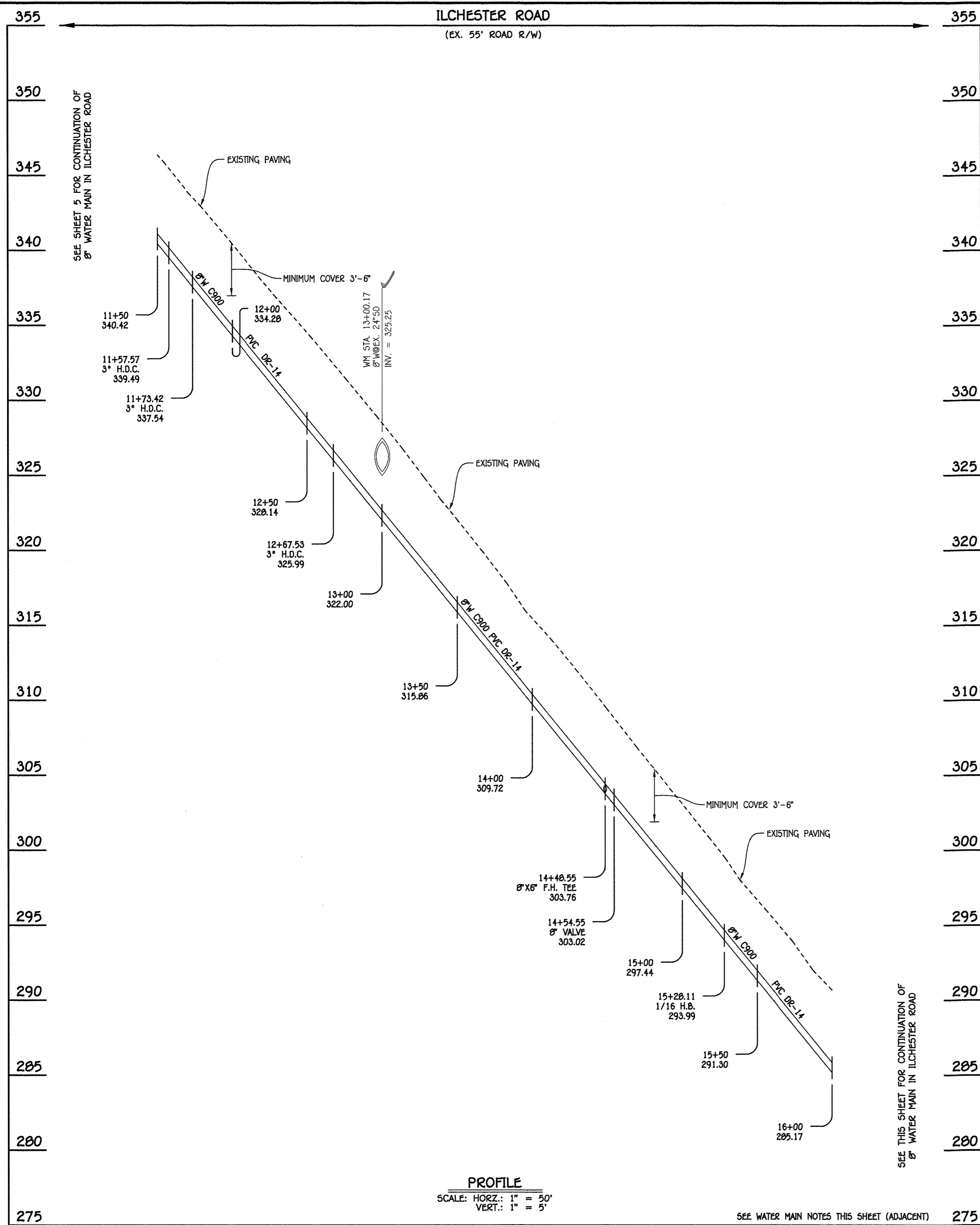


DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
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DATE:	NOVEMBER, 2019
BY NO.	
REVISION	
DATE	

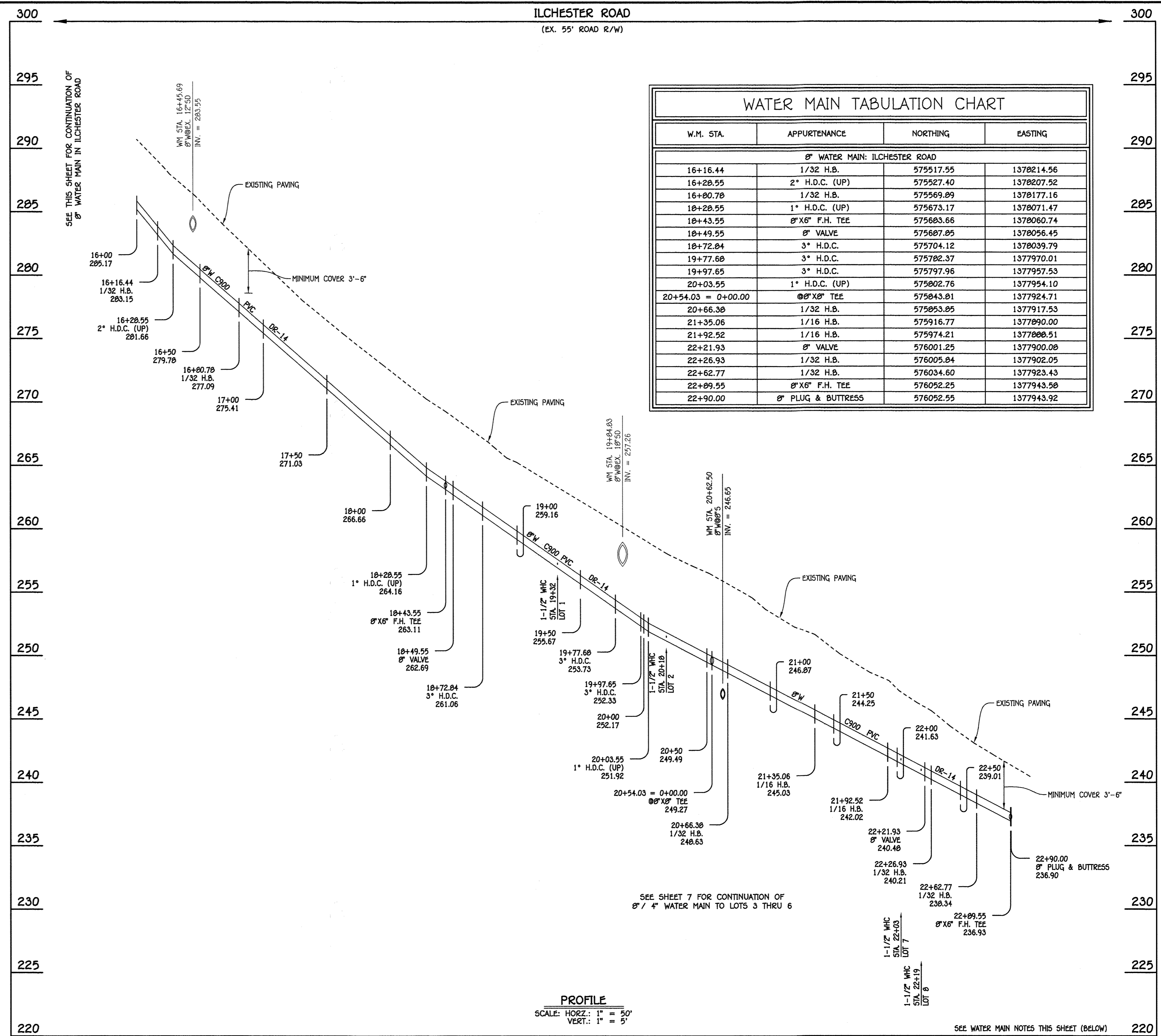
WATER MAIN EXTENSION PROFILE, CHART & NOTES	
600' SCALE MAP NO. 31	BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020	
FILE NAME:	SEWER & WATER MAIN EXTENSION PLAN

OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 CONTRACT NO. 14-4921-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 5 of 10



W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: ILCHESTER ROAD			
11+57.57	3" H.D.C.	575067.59	1378277.76
11+73.42	3" H.D.C.	575083.10	1378274.91
12+67.53	3" H.D.C.	575176.53	1378263.07
14+48.55	8" X6" F.H. TEE	575357.35	1378254.27
14+54.55	8" VALVE	575363.34	1378253.97
15+28.11	1/16 H.B.	575436.81	1378250.40

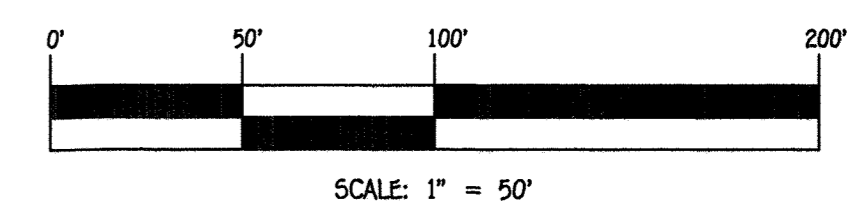


W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: ILCHESTER ROAD			
16+16.44	1/32 H.B.	575517.55	1378214.56
16+28.55	2" H.D.C. (UP)	575527.40	1378207.52
16+80.78	1/32 H.B.	575569.89	1378177.16
18+28.55	1" H.D.C. (UP)	575673.17	1378071.47
18+43.55	8" X6" F.H. TEE	575683.66	1378060.74
18+49.55	8" VALVE	575687.85	1378056.45
18+72.84	3" H.D.C.	575704.12	1378039.79
19+77.68	3" H.D.C.	575782.37	1377970.01
19+97.65	3" H.D.C.	575797.96	1377954.50
20+03.55	1" H.D.C. (UP)	575802.76	1377954.10
20+54.03 = 0+00.00	8" X8" TEE	575843.81	1377924.71
20+66.38	1/32 H.B.	575853.85	1377917.53
21+35.06	1/16 H.B.	575916.77	1377890.00
21+92.52	1/16 H.B.	575974.21	1377888.51
22+21.93	8" VALVE	576001.25	1377900.08
22+26.93	1/32 H.B.	576005.84	1377902.05
22+62.77	1/32 H.B.	576034.60	1377923.43
22+89.55	8" X6" F.H. TEE	576052.25	1377943.58
22+90.00	8" PLUG & BUTTRESS	576052.55	1377943.92

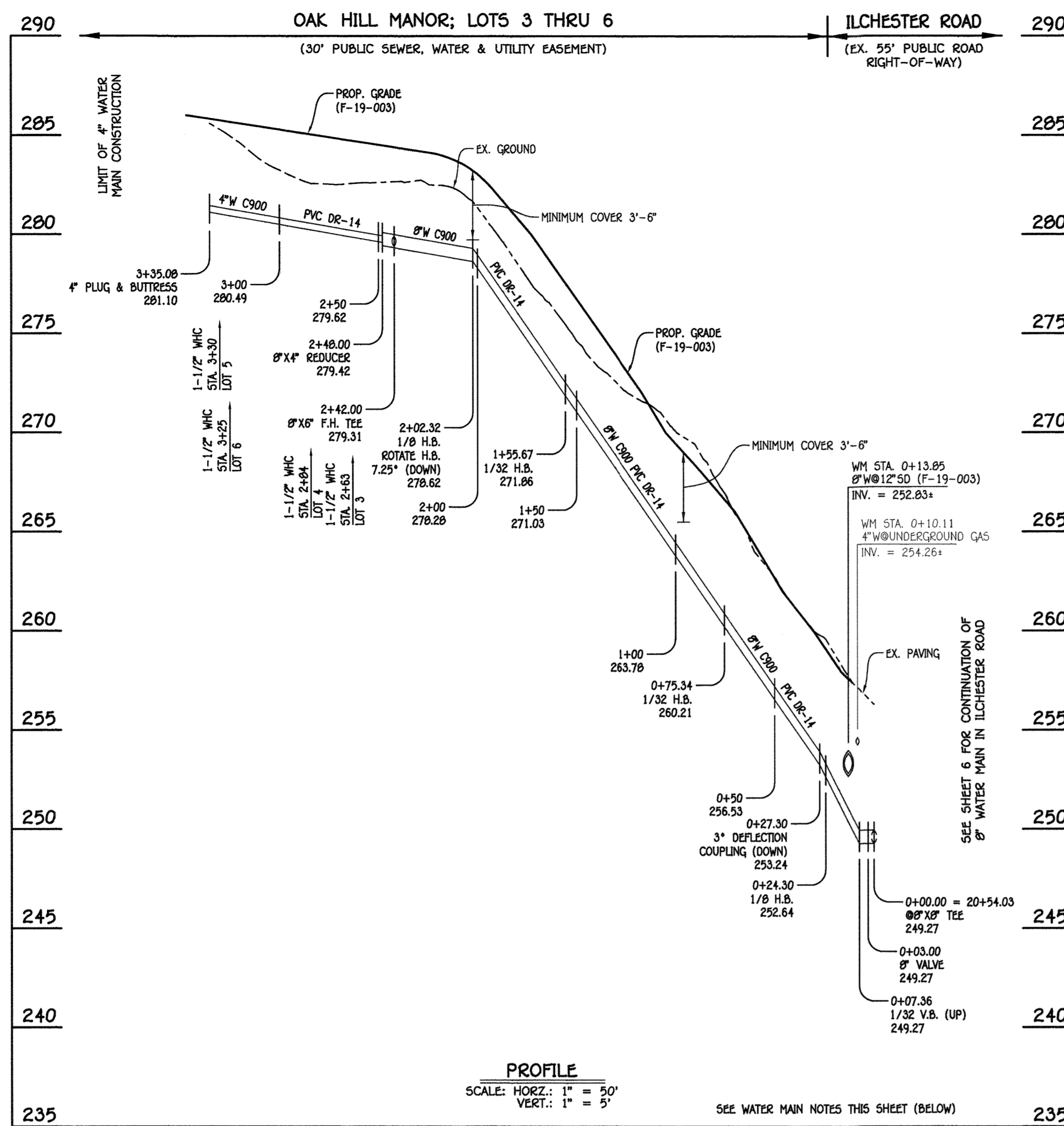
8" WATER MAIN: ILCHESTER ROAD

8" WATER MAIN: ILCHESTER ROAD

- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-14.
 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.



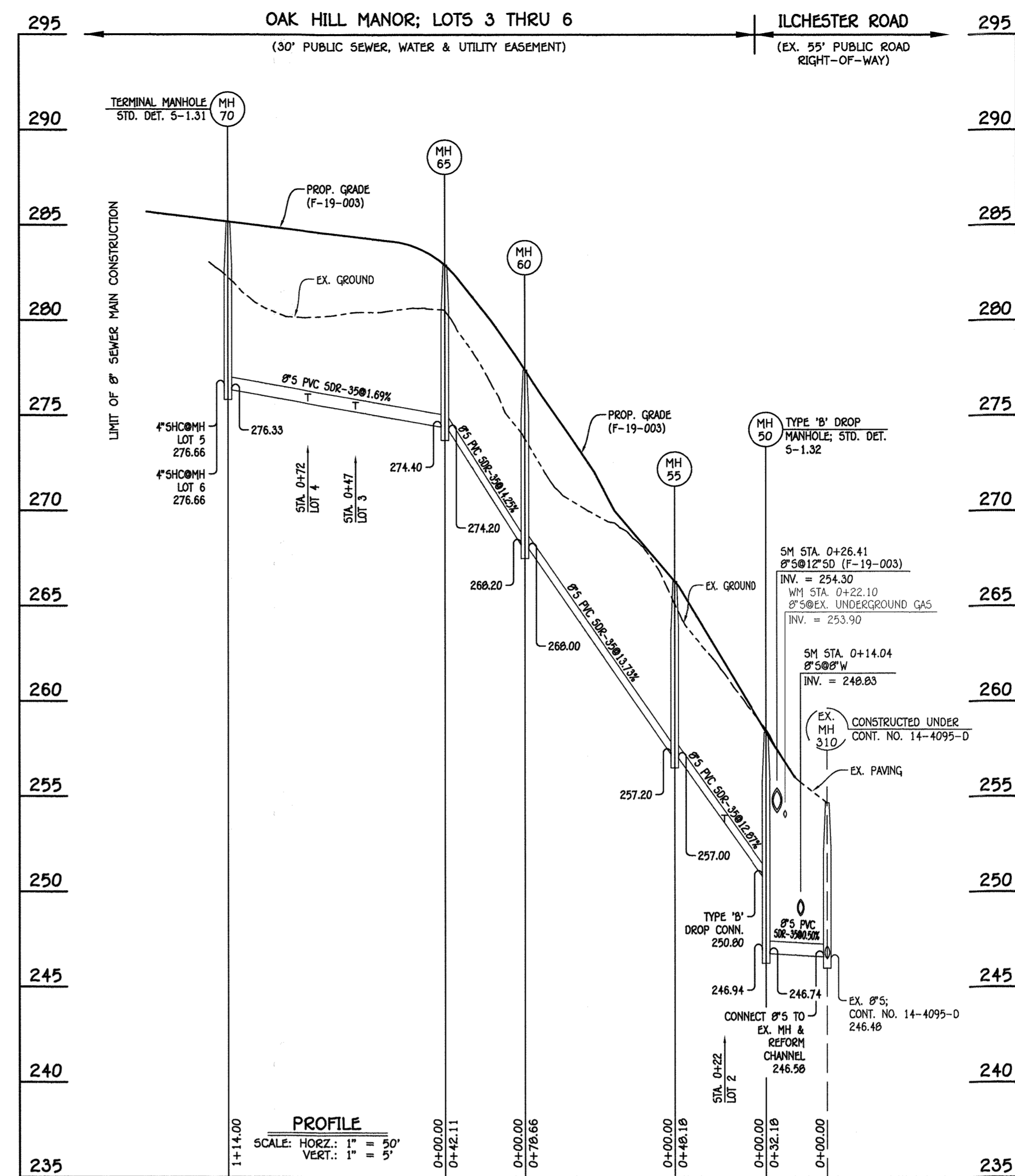
<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 11-13-19 CHIEF, BUREAU OF UTILITIES</p>	<p>DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 12-17-19 CHIEF, DEVELOPMENT ENGINEERING DIVISION</p>	<p>I HEREBY CERTIFY THAT THESE DOCUMENTS 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.</p> <p>FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS</p> <p>CENTRAL SQUARE OFFICE PARK - 10270 BALTIMORE NATIONAL PIKE ELLSWORTH CITY, MARYLAND 21036 (410) 461-2995</p>	<p>DESIGNED BY: B.C.R.</p> <p>DRAWN BY: B.C.R.</p> <p>CHECKED BY: P.W.K.</p> <p>DATE: NOVEMBER, 2019</p>	<p style="text-align: center;">WATER MAIN EXTENSION PROFILES, CHARTS & NOTES</p> <p>600' SCALE MAP NO. 31 BLOCK NO. 4</p> <p>F.C.C. WORK ORDER NO. 13020</p> <p>FILE NAME: SEWER & WATER MAIN EXTENSION PLAN</p>	<p style="text-align: center;">OAK HILL MANOR LOTS 1 THRU 8 & OPEN SPACE LOTS 9 THRU 12 SEWER & WATER MAIN EXTENSIONS</p> <p>CONTRACT NO. 14-4921-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN</p> <p>SHEET 6 of 10</p>
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8" / 4" WATER MAIN: LOTS 3 THRU 6

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" / 4" WATER MAIN: LOTS 3 THRU 6			
0+00.00 = 20+54.03	8" X 6" TEE	575843.81	1377924.71
0+03.00	8" VALVE	575842.07	1377922.27
0+07.36	1/32 V.B. (UP)	575839.53	1377918.73
0+24.30	1/8 H.B.	575829.67	1377904.95
0+27.30	3" H.D.C. (DOWN)	575830.33	1377902.03
0+75.34	1/32 H.B.	575840.97	1377895.18
1+55.67	1/32 H.B.	575872.22	1377781.18
2+02.32	1/8 H.B.	575896.83	1377741.55
2+42.00	8" X 6" F.H. TEE	575934.78	1377726.96
2+48.00	8" X 4" REDUCER	575940.52	1377728.21
3+35.00	4" PLUG & BUTTRESS	576023.79	1377702.77

- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-14.
 - 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.
 - DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
 - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

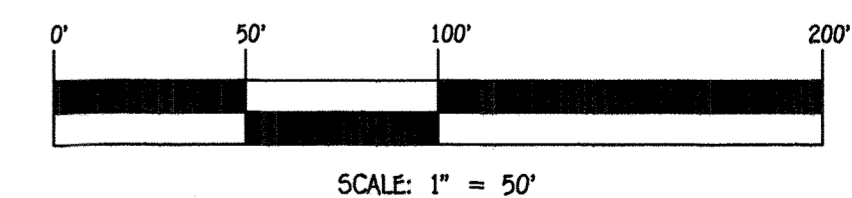


8" SEWER MAIN: LOTS 3 THRU 6

NO.	NORTHING	EASTING	RIM ELEVATION
50	575839.86	1377905.24	258.36
55	575850.52	1377898.26	266.28
60	575881.13	1377785.79	277.39
65	575903.34	1377750.02	282.90
70 (TERMINAL)	576012.37	1377716.71	285.18

NOTE: SET MH RIMS FLUSH W/ PROPOSED GRADE.

STATION	LOT	ELEVATION AT MAIN	ELEVATION EDGE OF EASEMENT	M.C.E.	B.E.	F.F.
MH 50 TO MH 55						
0+22 LT.	2	253.80	254.20	259.20	274.83	284.98
MH 65 TO MH 70 (TERMINAL)						
0+47 LT.	3	275.36	275.76	280.46	291.23	301.38
0+72 LT.	4	275.79	276.19	284.99	293.06	303.21
8" MH 70 LT.	5	276.66	277.06	281.86	285.70	295.86
8" MH 70 CEN.	6	276.66	277.02	283.72		287.22
EX. MH 300 TO EX. MH 305						
8" EX. MH 300 RT.	8	238.51	239.35	248.45	264.31	274.46
0+26 RT.	7	239.86	240.72	249.82	265.56	274.71
EX. MH 310 TO EX. MH 315						
0+34 RT.	2	248.71	249.49	254.99	274.83	284.98
EX. MH 315 TO EX. MH 320						
0+40 RT.	1	253.33	254.11	259.61	277.83	287.98



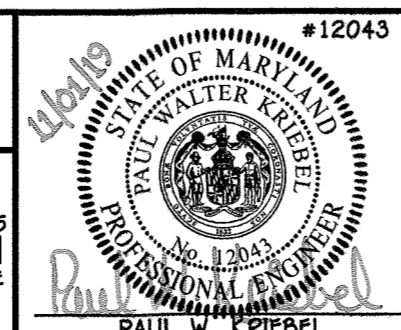
CONTRACT NO. 14-4921-D
OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/22.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21046
(410) 461 - 2295



DESIGNED BY :
B.C.R.
DRAWN BY :
B.C.R.
CHECKED BY :
P.M.K.
DATE :
NOVEMBER, 2019

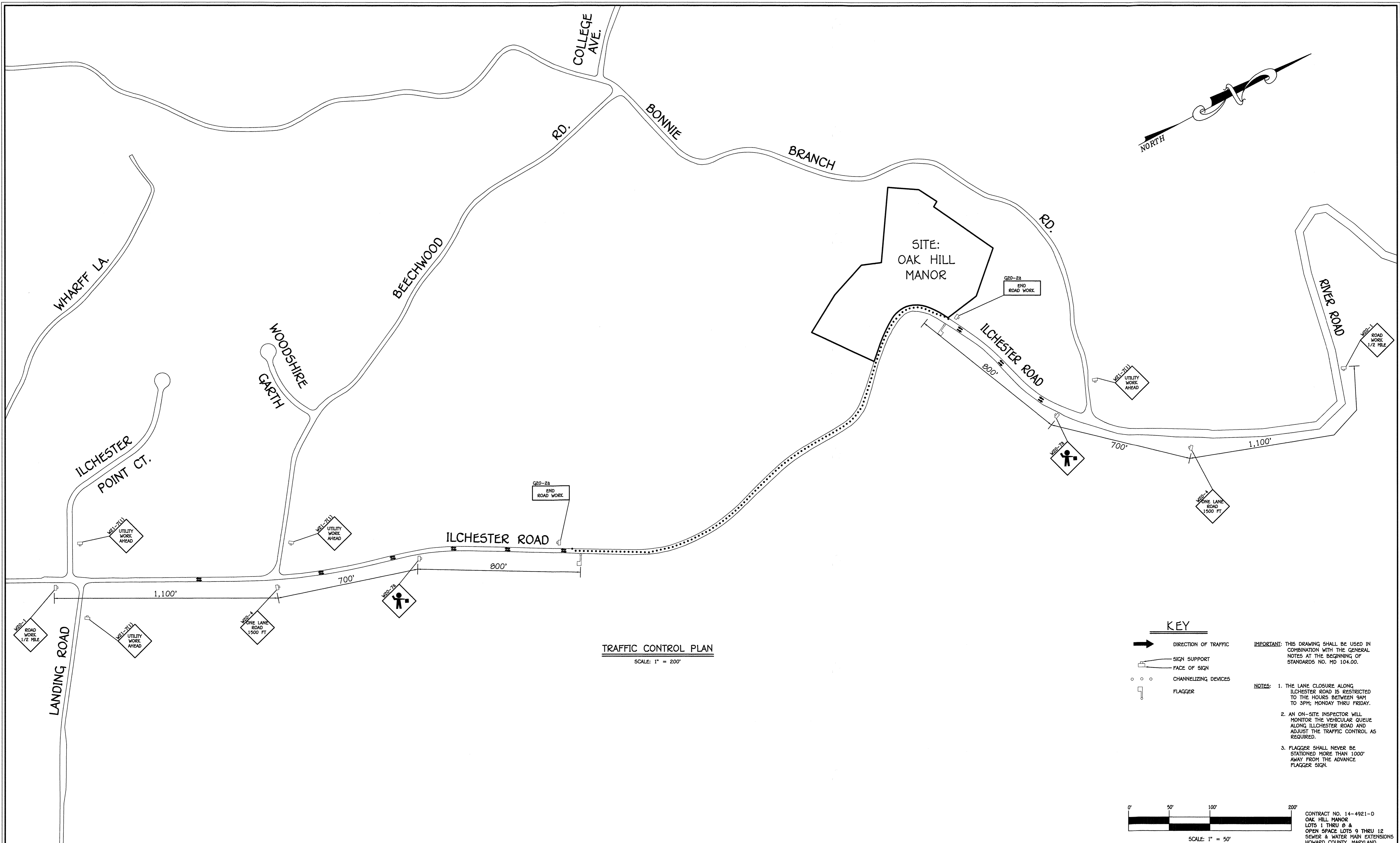
BY NO. REVISION DATE

SEWER & WATER MAIN EXTENSIONS
PROFILES, CHARTS & NOTES

600' SCALE MAP NO. 31 BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020
FILE NAME : SEWER & WATER MAIN EXTENSION PLAN

OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 14-4921-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 7 OF 10



TRAFFIC CONTROL PLAN
SCALE: 1" = 200'

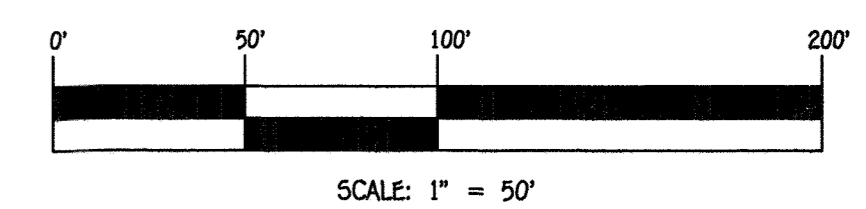
KEY

DIRECTION OF TRAFFIC
 SIGN SUPPORT
 FACE OF SIGN
 CHANNELIZING DEVICES
 FLAGGER

IMPORTANT: THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES AT THE BEGINNING OF STANDARDS NO. MD 104.00.

NOTES:

1. THE LANE CLOSURE ALONG ILCHESTER ROAD IS RESTRICTED TO THE HOURS BETWEEN 9AM TO 3PM; MONDAY THRU FRIDAY.
2. AN ON-SITE INSPECTOR WILL MONITOR THE VEHICULAR QUEUE ALONG ILCHESTER ROAD AND ADJUST THE TRAFFIC CONTROL AS REQUIRED.
3. FLAGGER SHALL NEVER BE STATIONED MORE THAN 1000' AWAY FROM THE ADVANCE FLAGGER SIGN.

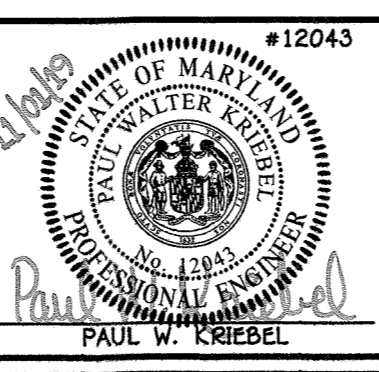


CONTRACT NO. 14-4921-D
OAK HILL MANOR
LOTS 1 THRU 8 &
OPEN SPACE LOTS 9 THRU 12
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 11-03-19	DATE: 12-17-19

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY 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 - 11272 BALTIMORE NATIONAL PIKE
 ELLSWORTH CITY, MARYLAND 21042
 (410) 481-2295

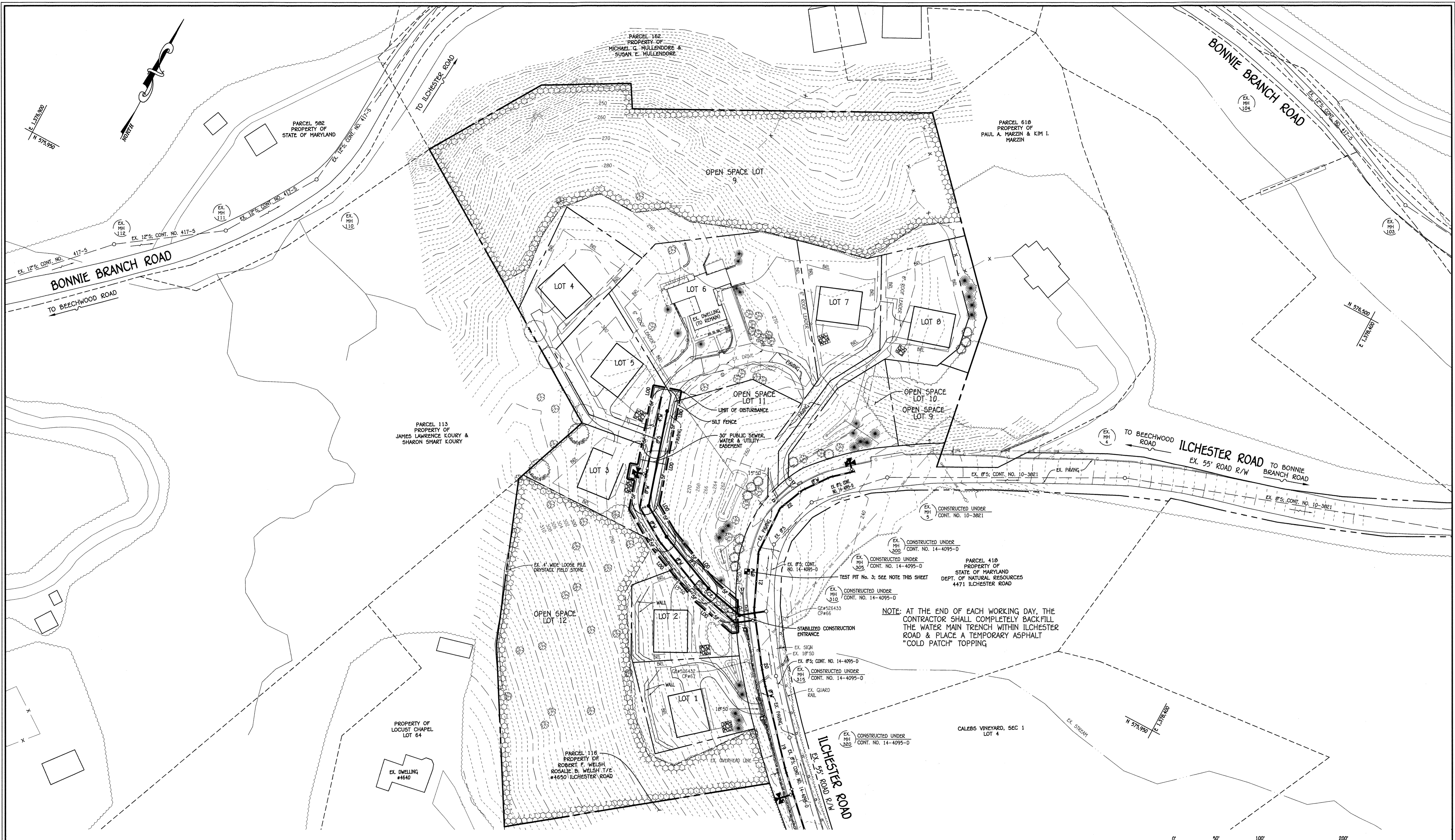


DESIGNED BY:	
B.C.R.	
DRAWN BY:	
B.C.R.	
CHECKED BY:	
P.W.K.	
DATE:	
NOVEMBER, 2019	
BY NO.	
REVISION	
DATE	

TRAFFIC CONTROL PLAN	
600' SCALE MAP NO. 31	BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020	
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	

OAK HILL MANOR LOTS 1 THRU 8 & OPEN SPACE LOTS 9 THRU 12 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 14-4921-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 8 OF 10
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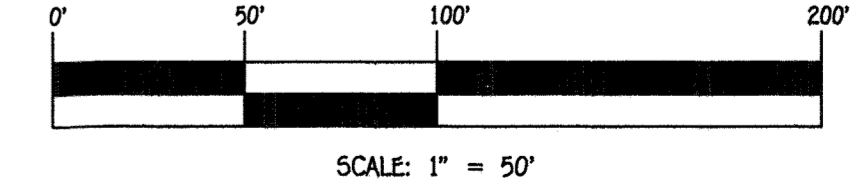
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PLAN

SCALE: 1" = 50'

NOTE: SEE SHEET 10 FOR SEDIMENT & EROSION CONTROL NOTES & DETAILS.

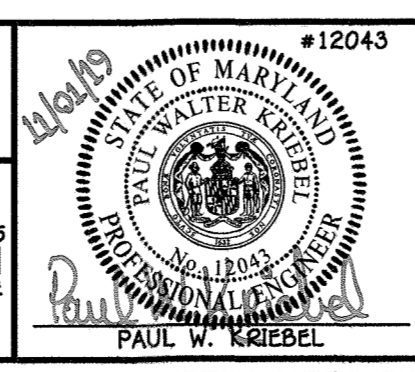


CONTRACT NO. 14-4921-D
 OAK HILL MANOR
 LOTS 1 THRU 8 &
 OPEN SPACE LOTS 9 THRU 12
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION

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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
 ELLOTT CITY, MARYLAND 21116
 (410) 481-2295



DESIGNED BY:	B.C.R.				
DRAWN BY:	B.C.R.				
CHECKED BY:	P.W.K.				
DATE:	NOVEMBER, 2019	BY	NO.	REVISION	DATE

SEDIMENT & EROSION CONTROL PLAN	
600' SCALE MAP NO. 31	BLOCK NO. 4
F.C.C. WORK ORDER NO. 13020	
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OAK HILL MANOR LOTS 1 THRU 8 & OPEN SPACE LOTS 9 THRU 12 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 14-4921-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
SCALE AS SHOWN	SHEET 9 OF 10

