

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT	QUANTITIES	SUPPLIER
8" PVC 508-35	839 LF.		564	LB WATER
8" CL 52 D.I.P.	- LF.		257	LB WATER
4" SHC	554 LF.		578	LB WATER
MANHOLES	5 EACH		5	CPC
CLEAN-OUTS	18 EACH		21	CPC
8" W 500 PVC DR-18	987 LF.		989	NATIONAL PIPE
8" W 500 PVC DR-18	87 LF.		65	NATIONAL PIPE
1-1/2" WRC	653 LF.		657	LB WATER
1/8" H.B.	4 EACH		4	LB WATER
1/32" V.B.	-		-	-
1" DEFLECTION COUPLING	4 EACH		4	-
2" DEFLECTION COUPLING	2 EACH		2	-
3" DEFLECTION COUPLING	2 EACH		2	-
12" X 8" TAPPING SLEEVE	1 EACH		1	LB WATER
8" TAPPING VALVE	1 EACH		1	LB WATER
8" VALVE	1 EACH		3	LB WATER
8" VALVE	3 EACH		3	LB WATER
FIRE HYDRANT	3 EACH		3	LB WATER
CONTINUITY TEST STATION	3 EACH		3	LB WATER
OUTSIDE METER SETTING	18 EACH		18	LB WATER

BENCHMARK INFORMATION
 B.M.#1 - HOWARD COUNTY CONTROL STATION #0023 - HORIZONTAL - (NA'83)
 (LOCATED ALONG THE WEST SIDE OF CENTENNIAL LANE, APPROX. 92' SOUTHEAST FROM THE CORNER OF CENTENNIAL HIGH SCHOOL & APPROX. 69' WEST OF CENTENNIAL LANE PAVING)
 N 577,373.143
 E 1,349,751.273
 ELEVATION = 479.248 - VERTICAL - (NAVD '86)

B.M.#2 - HOWARD COUNTY CONTROL STATION #30AB - HORIZONTAL - (NA'83)
 (LOCATED ALONG THE WEST SIDE OF CENTENNIAL LANE, APPROX. 5.4' BEHIND THE GUARD RAIL AND APPROX. 47.5' NORTH WEST FROM THE END OF THE GUARD RAIL)
 N 573,239.369
 E 1,349,547.546
 ELEVATION = 361.900 - VERTICAL - (NAVD '86)

PRIVATE WELL & PRIVATE SEPTIC SYSTEM CHART				
PARCEL NO.	ADDRESS	OWNER	ABANDON WELL	ABANDON SEPTIC
05	4509 CENTENNIAL LANE	ROBERT & HELEN SPEDDEN	ON PUBLIC	YES

NOTE: WATER METERS WILL NOT BE RELEASED BY HOWARD COUNTY TO ANY NEW BUILDING UNTIL THE EXISTING WELLS AND SEPTIC SYSTEMS HAVE BEEN ABANDONED IN ACCORDANCE WITH HOWARD COUNTY HEALTH DEPARTMENT REGULATIONS AND THE EXISTING BUILDINGS ARE CONNECTED TO THE PUBLIC WATER AND SEWER MAINS.
 Contact Howard County Utilities prior to shutting off any valves.

DEVELOPER'S CERTIFICATION
 I, the undersigned, 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 DEMAND NECESSARY.

Paul W. Kuebel; FOR:
 Centennial Reserve, LLC
 SIGNATURE OF DEVELOPER
 07-28-20
 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. Kuebel
 SIGNATURE OF ENGINEER
 07/28/20
 DATE

SEDIMENT 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 ROAD CONSTRUCTION PLANS, F-20-010

Paul W. Kuebel; FOR:
 Centennial Reserve, LLC
 SIGNATURE OF DEVELOPER
 07-28-20
 DATE

F-20-010

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

APPROVED:
 John R. Dutton 8/19/20
 HOWARD SOIL CONSERVATION DISTRICT
 DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

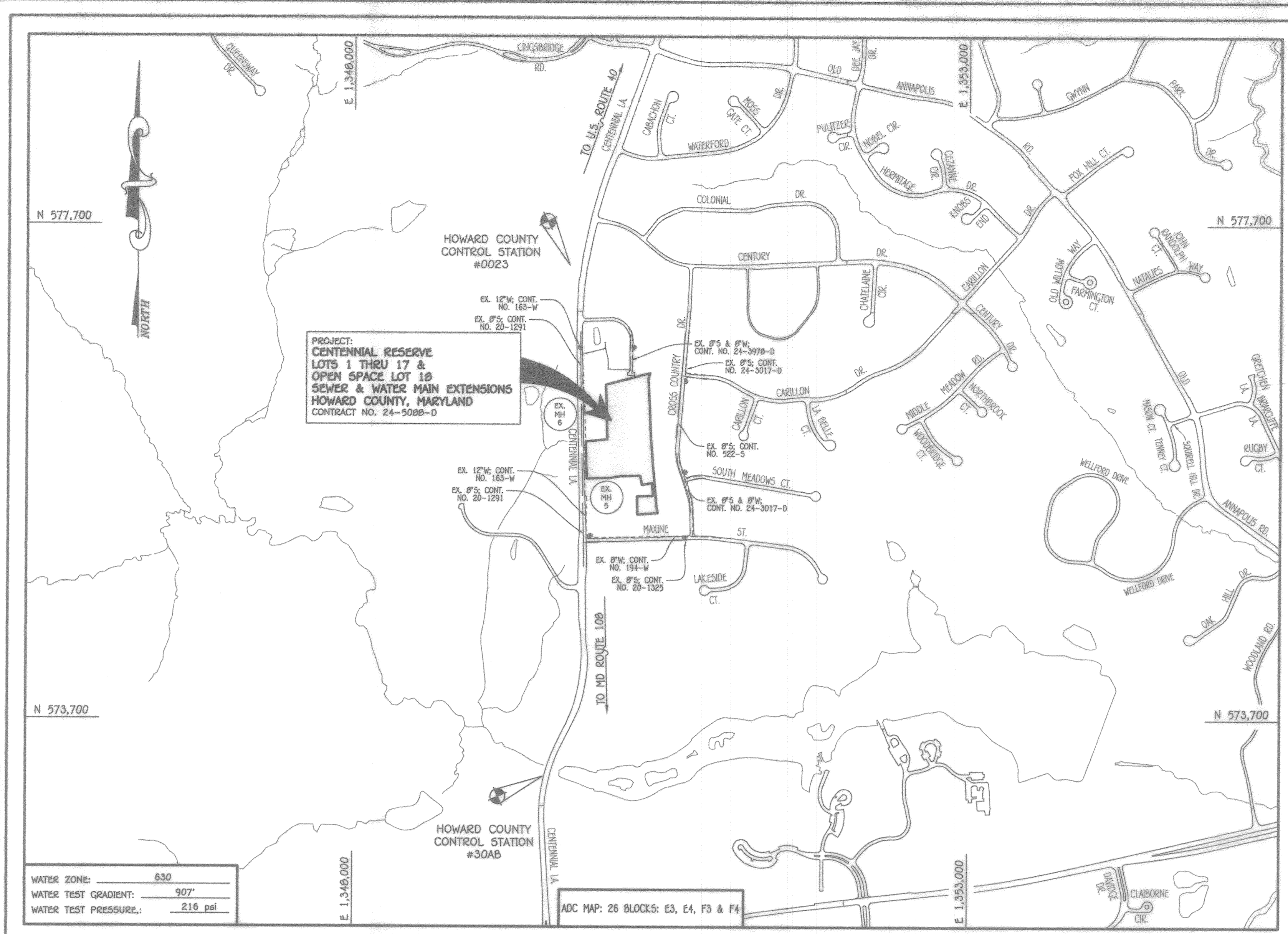
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 12043 EXPIRATION DATE 5/7/18/22.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 18272 GAITHERSBURG NATIONAL PkE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2899

DESIGNED BY: P.W.K.
 DRAWN BY: T.C.R.
 CHECKED BY: P.W.K.
 DATE: JULY, 2020

CHIEF, BUREAU OF UTILITIES
 8-6-2020
 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 8/26/20
 DATE



WATER ZONE:	630
WATER TEST GRADIENT:	.907'
WATER TEST PRESSURE:	216 psi

TYPE OF BUILDING:	RESIDENTIAL: SINGLE FAMILY DETACHED
NUMBER OF LOTS:	18 (1 OPEN SPACE)
NO. OF WATER HOUSE CONNECTIONS:	18
NO. OF SEWER HOUSE CONNECTIONS:	18
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT

LOCATION MAP
 SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:
 80-19-022
 80-19-001
 F-20-010(PUBLIC ROAD & RECORD PLAN)

CONTRACT NO. 24-5088-D

CENTENNIAL RESERVE

LOTS 1 THRU 17 &

OPEN SPACE

LOT 18

SEWER & WATER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

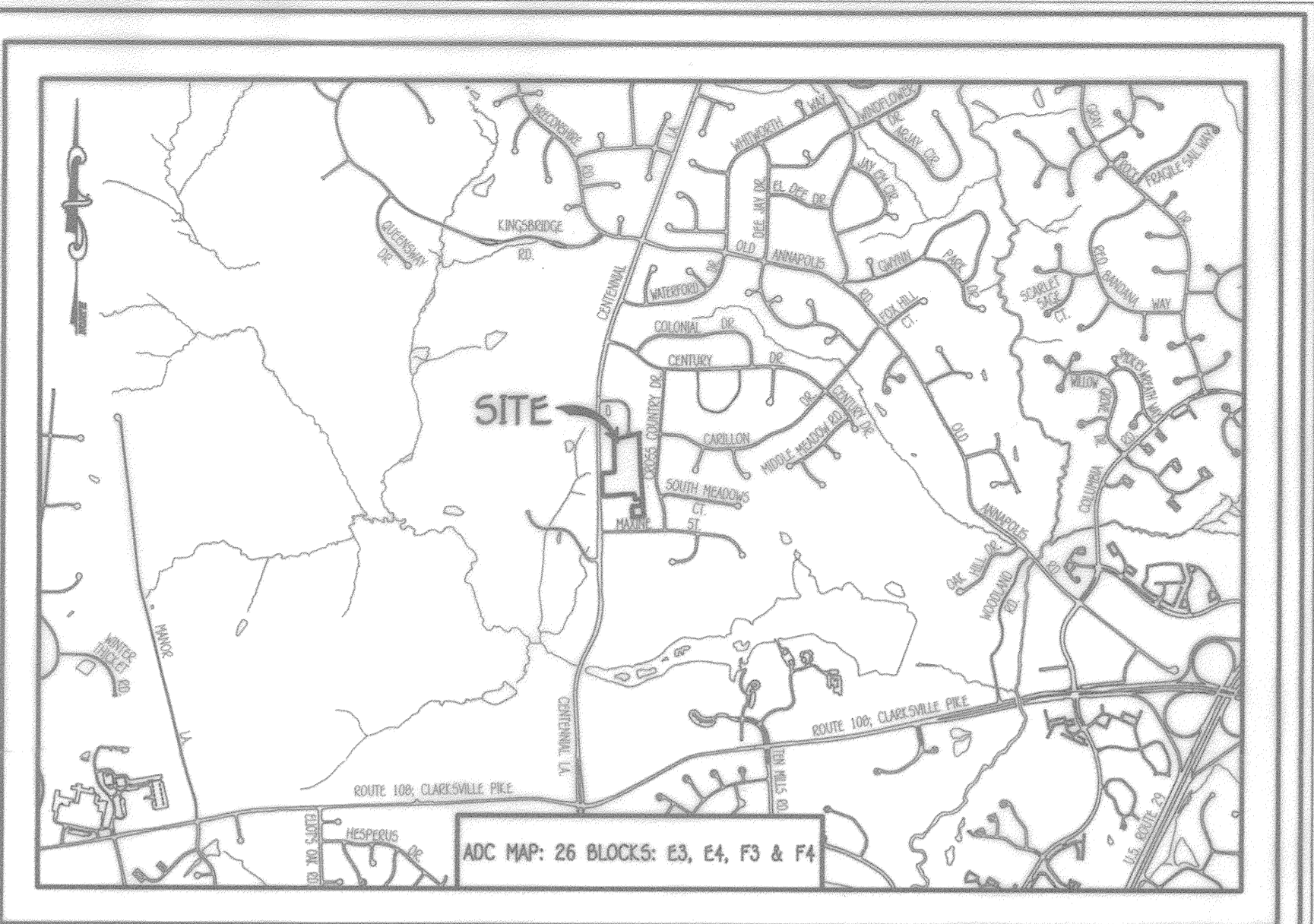
LEGEND	
SYMBOL	DESCRIPTION
---	EX. WATER MAIN
---	EX. SEWER MAIN
○	EX. SEWER MANHOLE
---	EX. SEWER, WATER & UTILITY EASEMENT
---	EX. FIRE HYDRANT
○	EX. VALVE
---	PROP. WATER MAIN
---	PROP. SEWER MAIN
○	PROP. SEWER MANHOLE
---	PROP. SEWER, WATER & UTILITY EASEMENT
---	PROP. WRC
---	PROP. SHC
---	PROP.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

OWNERS
 PARCEL 04
 LORNS HARRICK
 4489 CENTENNIAL LANE
 ELLICOTT CITY, MD 21042

PARCEL 05
 ROBERT & HELEN SPEDDEN
 5710 SAN GABRIEL DRIVE
 PENSACOLA, FL 32504

PARCEL 17A
 CHARLES & SHIRLEY HADRY
 10222 MAXINE STREET
 ELLICOTT CITY, MD 21042

DEVELOPER
 CENTENNIAL RESERVE, LLC
 7017 MANSIONING STRAUN WAY
 FULTON, MD 20799



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 SEPTEMBER, 2016 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 #0023 & #030AB.
 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 9'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
 - WHERE TEST FITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL 'E' AT THE LOCATIONS OF THE TEST FITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST FIT OR FITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK, FOR WHICH TEST FITS 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 1-800-292-1133
 BGE (CONTRACTOR SERVICES) 410-637-8713
 BGE (EMERGENCY) 410-689-0123
 BUREAU OF UTILITIES 410-313-4900
 COLONIAL PIPELINE CO 410-795-1990
 MESS UTILITY 1-800-251-7777
 STATE HIGHWAY ADMINISTRATION 410-531-5933
 VERIZON 1-800-743-0033 / 410-224-9210
- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AMVA 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 PLANS.
 - 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 1009 AND SECTION 1009 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. 2"DC 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 BE VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION. 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 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 AMVA C900. SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTANTIZED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL.
 - 5-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 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 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 HIGH DEFLECTION COUPLINGS OR 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 AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 2000 HEMA-STOP AS MANUFACTURED BY ERM BROW, INC. OR APPROVED EQUAL. TO ACCOMMODATE A SPENKLER 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

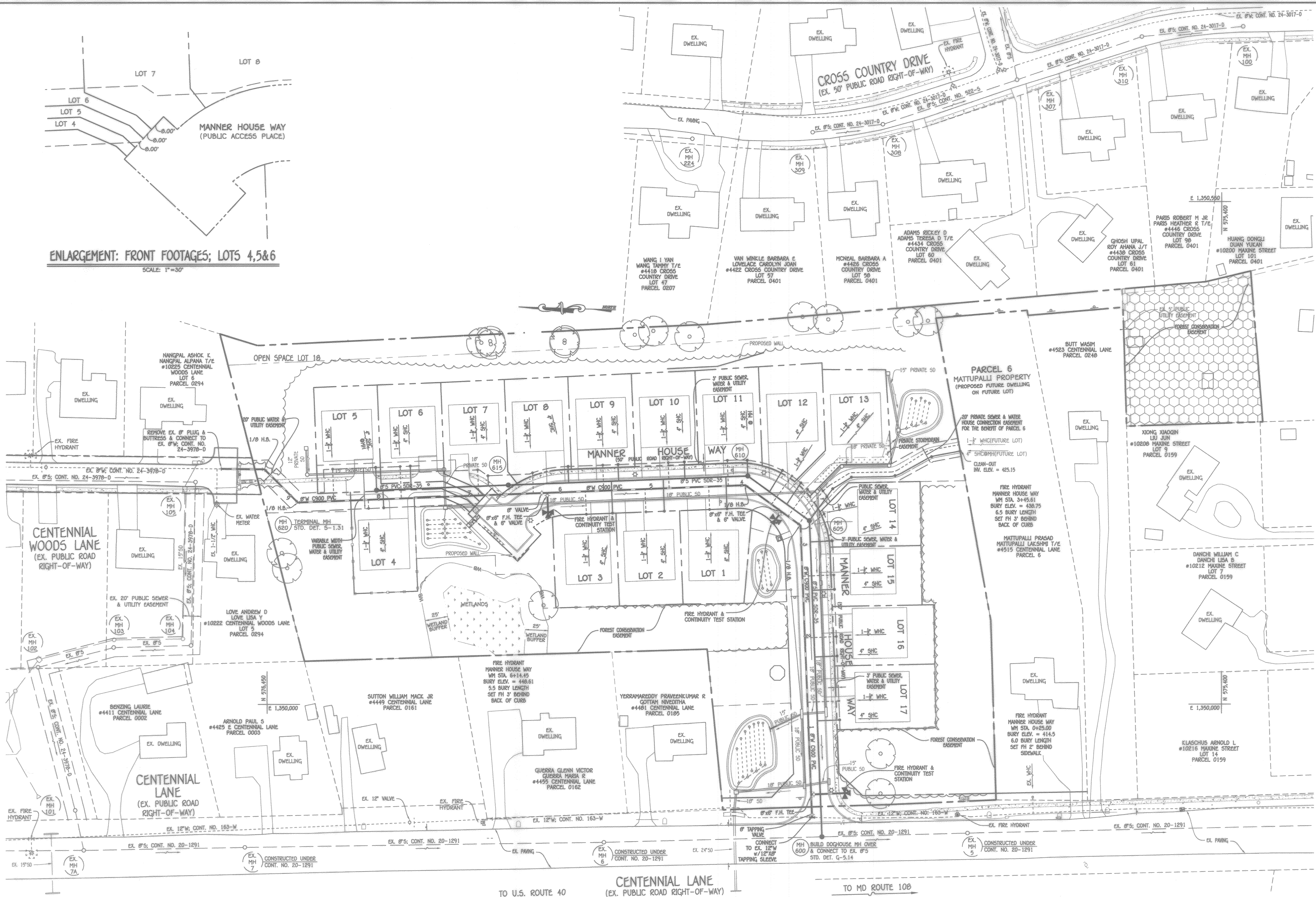
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BOXIC MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE 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 IN THE DRAWINGS.
- HOUSES(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

SCALE: 1" = 50'

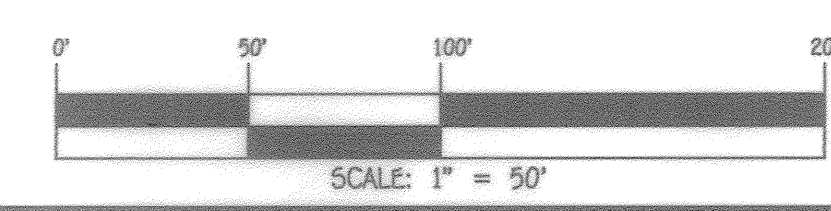
CONTRACT NO. 24-5088-D
 CENTENNIAL RESERVE
 LOTS 1 THRU 17 &
 OPEN SPACE LOT 18
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES 8-6-2020 DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION 8/26/20 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 5/7/18/22. FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 18272 GAITHERSBURG NATIONAL PkE ELICOTT CITY, MARYLAND 21042 (410) 461-2899	DESIGNED BY: P.W.K. DRAWN BY: T.C.R. CHECKED BY: P.W.K. DATE: JULY, 2020	BY NO. _____ REVISION _____ DATE _____	SEWER & WATER MAIN EXTENSIONS TITLE SHEET 600' SCALE MAP NO. 30 BLOCK NO. 1 F.C.C. WORK ORDER NO. 30501 FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	CENTENNIAL RESERVE LOTS 1 THRU 17 & OPEN SPACE LOT 18 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-5088-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND AS SHOWN SHEET 1 OF 4
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ENLARGEMENT: FRONT FOOTAGES; LOTS 4,5&6
SCALE: 1"=30'



PLAN
SCALE: 1" = 50'



CONTRACT NO. 24-5088-D
CENTENNIAL RESERVE
LOTS 1 THRU 17 &
OPEN SPACE LOT 18
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, BUREAU OF UTILITIES

8-5-2020
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

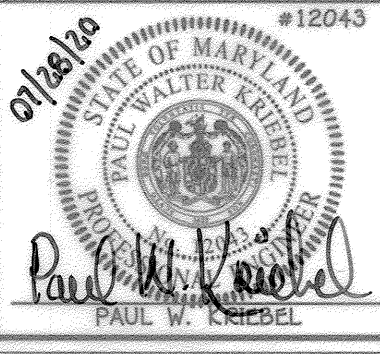
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION

8-26-20
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 7/16/22.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL FIRE
ELICOTT CITY, MARYLAND 21040
(410) 461-9955

[Signature]
PAUL W. CARROLL



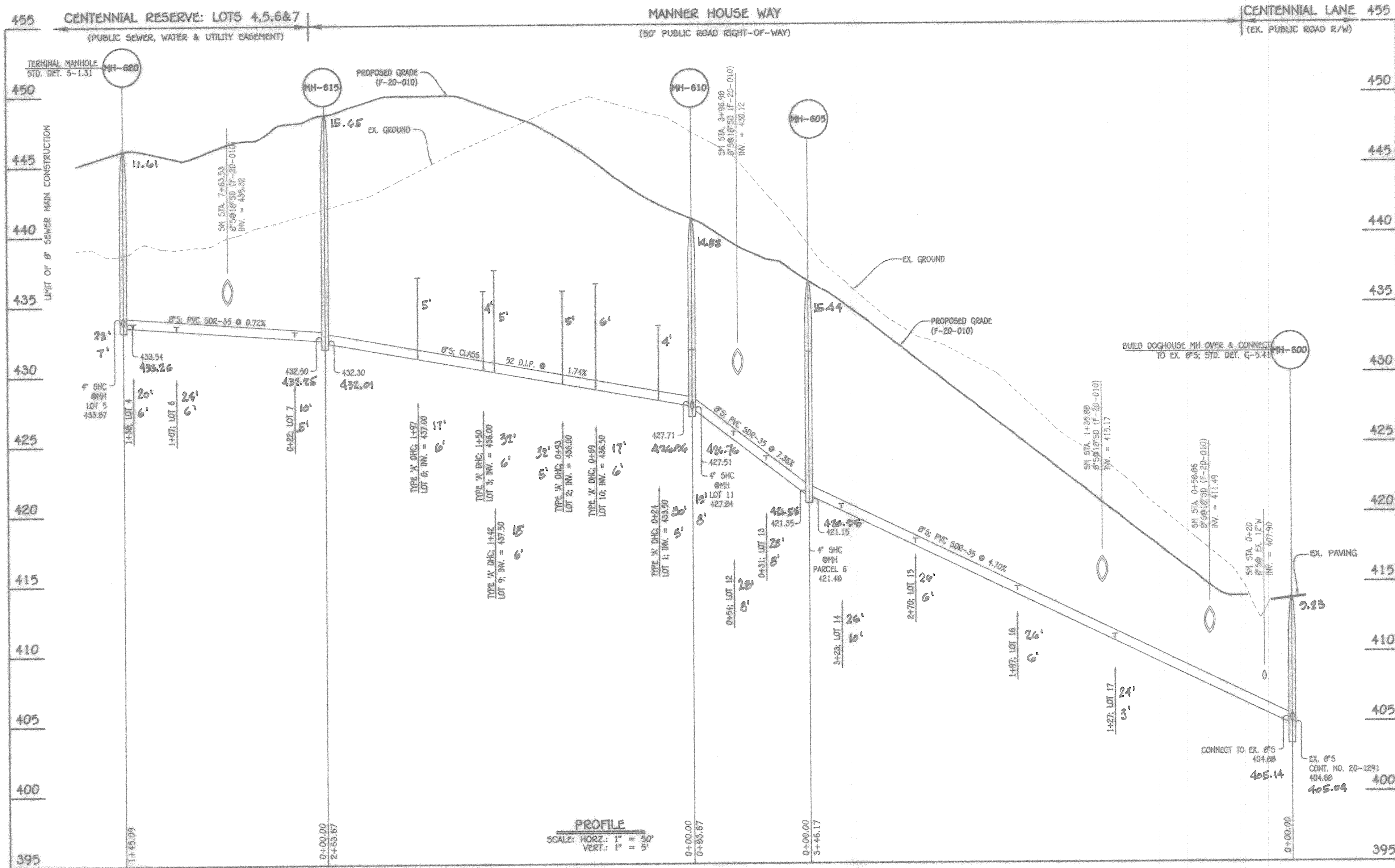
DESIGNED BY:	P.W.K.
DRAWN BY:	T.C.R.
CHECKED BY:	P.W.K.
DATE:	JULY, 2020
BY NO.	
REVISION	

SEWER & WATER MAIN EXTENSIONS
PLAN &
ENLARGEMENT: FRONT FOOTAGES

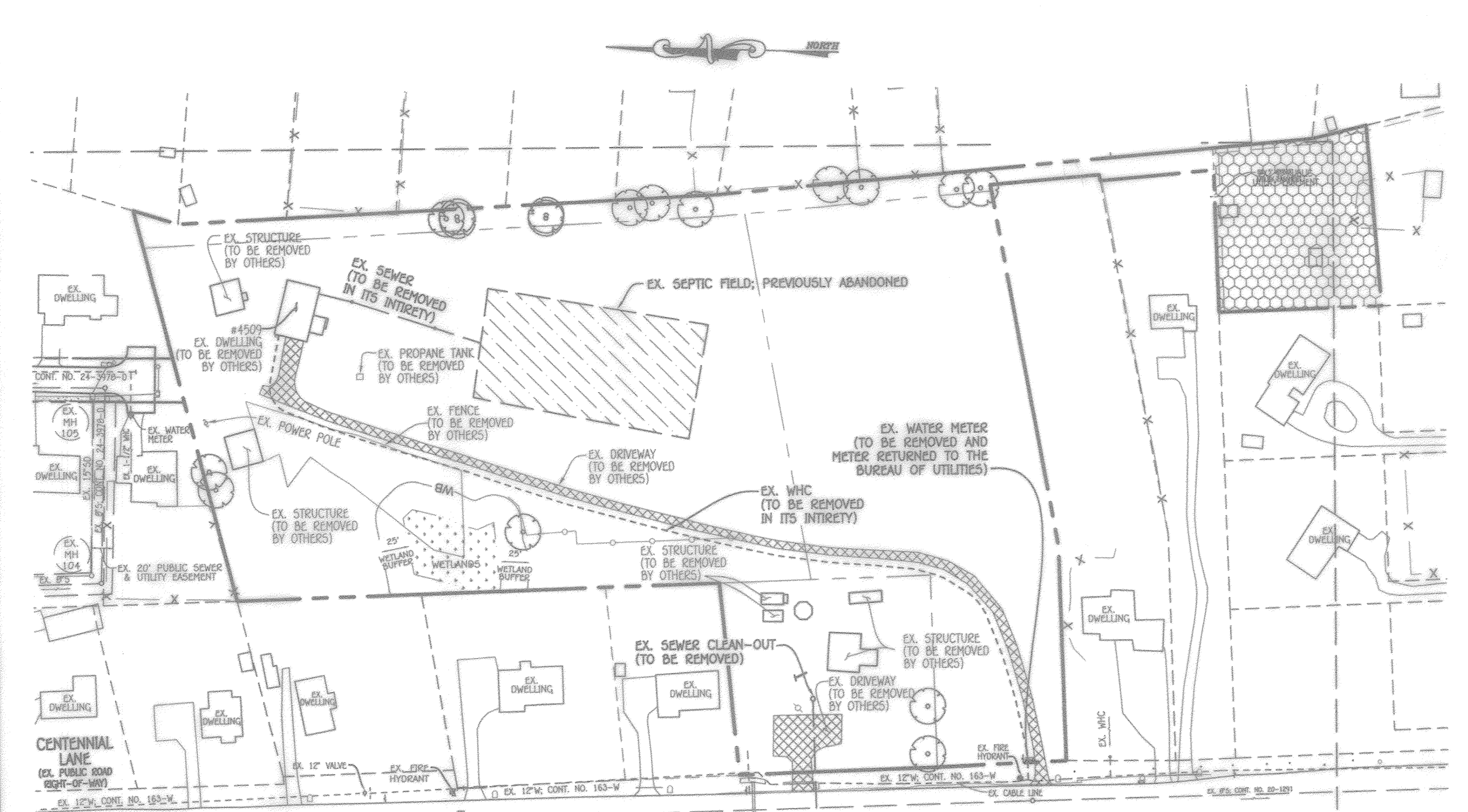
600' SCALE MAP NO. 30 BLOCK NO. 1
F.C.C. WORK ORDER NO. 30501
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

CENTENNIAL RESERVE
LOTS 1 THRU 17 &
OPEN SPACE LOT 18
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5088-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

AS SHOWN
SHEET 2 OF 4



8" SEWER MAIN: MH 600 TO MH 615; MANNER HOUSE WAY



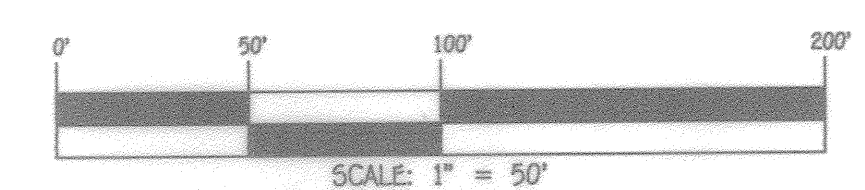
ABANDONMENT PLAN
SCALE: 1" = 100'

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
600	575639.37	1349095.11	413.89
605	575653.33	1350201.00	436.59
610	575921.21	1350249.93	442.39
615	576184.66	1350239.72	447.95
620	576329.66	1350234.09	449.15

NOTE: SET MH RIMS FLUSH W/PROPOSED OR EXISTING GRADE, AS APPLICABLE

SEWER HOUSE CONNECTION CHART						
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.	F.F.
MH 600 TO MH 605						
1+27 RT.	17 @ 1.00%	411.02	411.25	415.05	415.10	424.90
1+97 RT.	16	414.31	414.77	419.67	420.45	430.25
2+70 RT.	15	417.74	418.20	423.20	426.00	435.80
3+23 RT.	14	420.23	420.71	425.91	428.72	438.52
MMH 605	PARCEL 6 (1.00%)	423.23	423.95	429.35	429.40	439.20
MH 605 TO MH 610						
0+31 RT.	13	423.80	424.36	429.36	433.67	443.47
0+54 RT.	12	425.49	426.05	431.05	433.89	443.69
MMH 610	11	427.84	428.18	433.18	437.41	447.21
MH 610 TO MH 615						
0+24 LT.	1(DHC)	433.50	434.20	439.20	439.38	449.18
0+69 RT.	10(DHC)	436.50	436.86	441.76	442.36	452.16
0+93 LT.	2(DHC)	436.00	436.70	441.60	442.97	452.77
1+42 LT.	9(DHC)	437.50	437.86	442.76	444.47	454.27
1+50 LT.	3(DHC)	436.00	436.70	442.00	443.79	453.59
1+97 RT.	8(DHC)	437.00	437.36	442.46	444.26	454.06
MH 615 TO MH 620						
0+22 RT.	7	432.64	433.03	438.23	441.27	451.07
1+07 RT.	6	433.26	433.64	438.44	440.07	449.87
1+38 LT.	4	433.66	434.06	438.86	439.22	449.02
MMH 615 RT.	5(@ 1.00%)	433.87	433.97	438.82	438.62	448.42

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE			
LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	5027 MANNER HOUSE WAY	SCM TO WHC-1 - 21'	SHC TO SMH-600 - 43'
2	5031	SCM TO WHC-2 - 21'	SHC TO SHC-10 - 61'
3	5035	SCM TO WHC-3 - 41'	SHC TO SHC-9 - 54'
4	5040	SCM TO WHC-4 - 43'	SHC TO SMH-620 - 21'
5		SCM TO WHC-5 - 28'	SHC TO SMH-620 - 21'
6	5046	SCM TO WHC-6 - 12'	SHC TO SMH-620 - 41'
7	5044	SCM TO WHC-7 - 12'	SHC TO SMH-605 - 21'
8	5040	SCM TO WHC-8 - 41'	SHC TO FHT - 51'
9	5036	SCM TO WHC-9 - 17'	SHC TO SHC-3 - 58'
10	5032	SCM TO WHC-10 - 20'	SHC TO SHC-2 - 61'
11	5028	SCM TO WHC-11 - 22'	SHC TO SMH-610 - 20'
12	5024	SCM TO WHC-12 - 19'	SHC TO SMH-610 - 38'
13	5020	SCM TO WHC-13 - 18'	SHC TO SMH-610 - 50'
14	5012	SCM TO WHC-14 - 31'	SHC TO SMH-605 - 34'
15	5008	SCM TO WHC-15 - 15'	SHC TO S-B - 11'
16	5004	SCM TO WHC-16 - 21'	SHC TO S-B - 73'
17	5000	SCM TO WHC-17 - 19'	SHC TO S-B - 18'
PARCEL 6		SCM TO WHC-18 - 6'	SHC TO MH - 78'



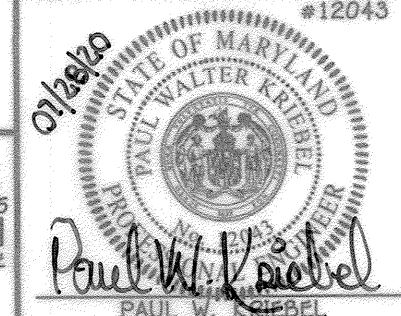
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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10272 BALDORNE NATIONAL PARK
BELTSVILLE CITY, MARYLAND 21142
(410) 461-2299



DESIGNED BY:	P.W.K.
DRAWN BY:	T.C.R.
CHECKED BY:	P.W.K.
DATE:	JULY, 2020
BY NO.	
REVISION	

SEWER MAIN EXTENSION
PROFILE, CHARTS, "AS-BUILT" TABLE
& ABANDONMENT PLAN

600' SCALE MAP NO.	30	BLOCK NO.	1
F.C.C. WORK ORDER NO.	30901		
FILE NAME:	SEWER & WATER MAIN EXTENSION PLAN		

CENTENNIAL RESERVE
LOTS 1 THRU 17 &
OPEN SPACE LOT 18
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5088-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

AS SHOWN
SHEET 3 OF 4

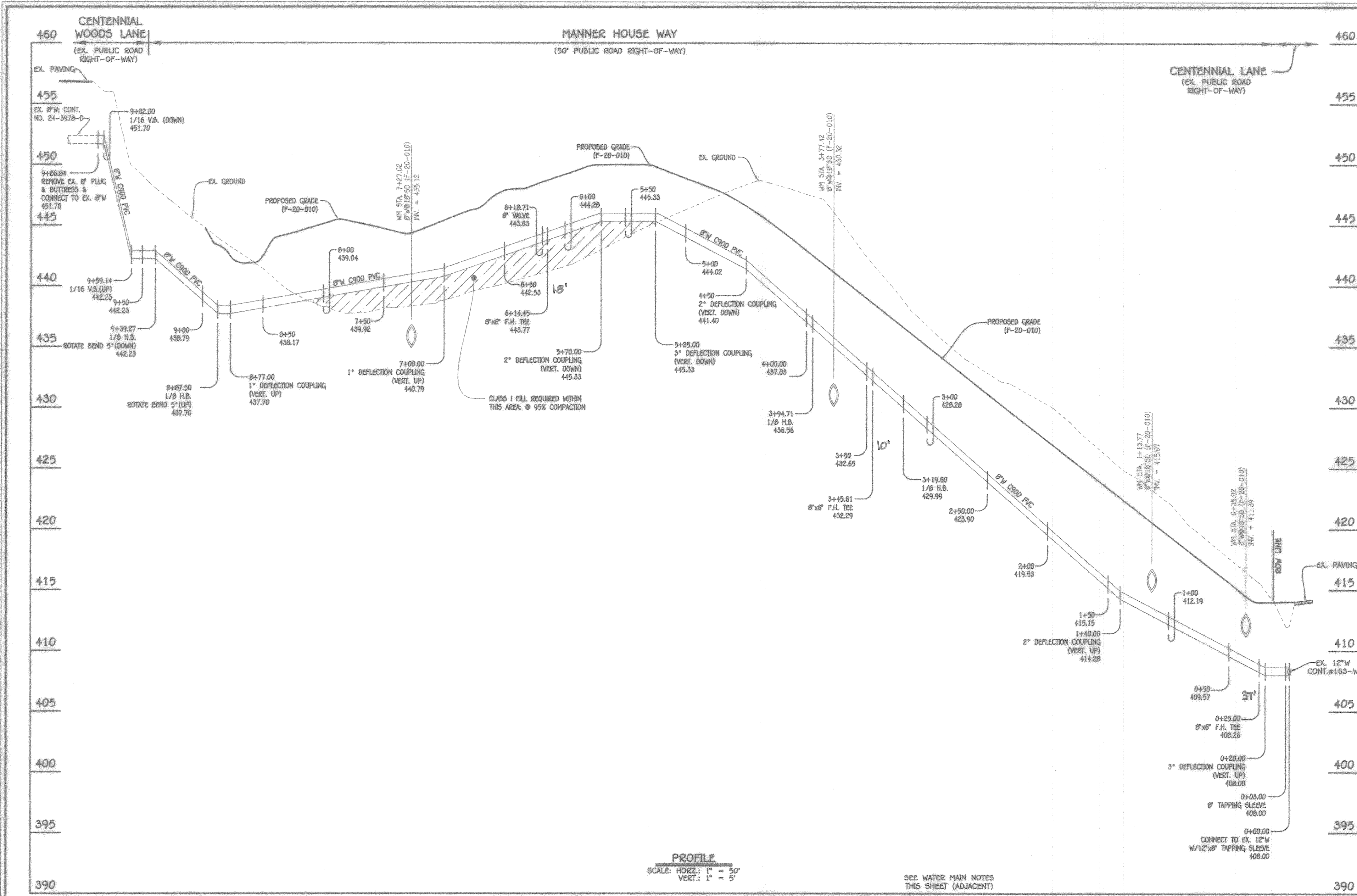
8-5-2020
DATE

8-26-20
DATE

CHIEF, BUREAU OF UTILITIES

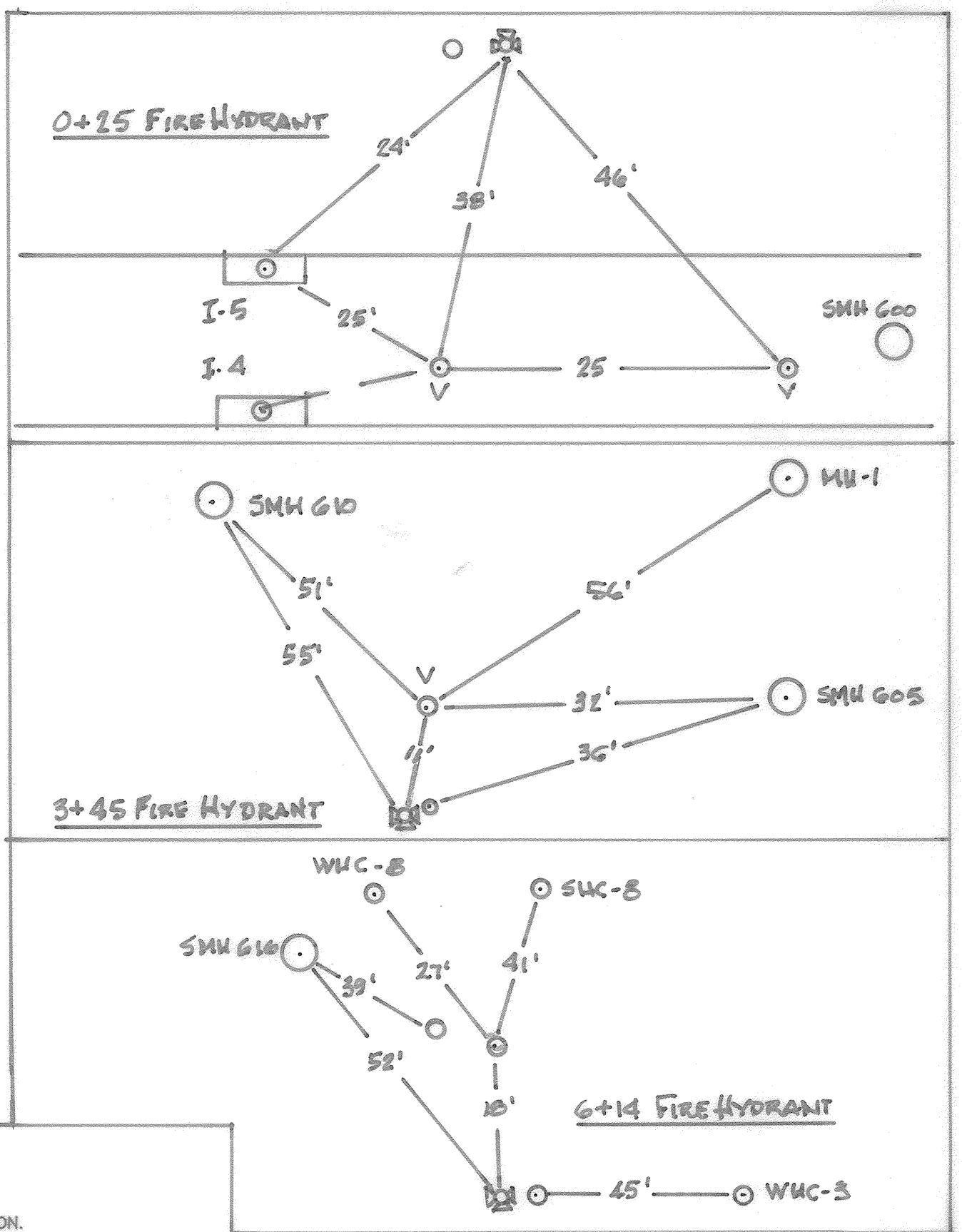
CHIEF, DEVELOPMENT ENGINEERING DIVISION

H:\Drawings\30501 Centennial Lane - Spooling\DWG\SEWER & WATER\Contract No. 24-5088-D\Final\30501 Final Sewer and Water Connect Plan.dwg, Profile Sheet 3, 7/22/2020 11:34:15 AM, 11



8" WATER MAIN: MANNER HOUSE WAY

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: MANNER HOUSE WAY			
0+00.00	12" X 8" TAPPING SLEEVE	575850.24	1349876.41
0+03.00	8" TAPPING SLEEVE	575850.36	1349879.40
0+25.00	8" X 8" F.H. TEE	575851.24	1349901.44
3+19.60	1/8" H.B.	575863.13	1350195.75
3+47.35	8" X 8" F.H. TEE	575884.19	1350211.01
3+94.71	1/8" H.B.	575923.95	1350239.82
6+14.45	8" X 8" F.H. TEE	576141.78	1350231.37
6+18.71	8" VALVE	576147.78	1350231.14
8+87.50	1/8" H.B.	576416.36	1350220.73
9+39.27	1/8" H.B.	576453.15	1350257.16
9+86.04	CONNECT TO EX. 8" W	576500.71	1350257.68



- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE: DE-18.
 - 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-TIED PVC HIGH DEFLECTION COUPLINGS.
 - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE			
LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	5027 MANNER HOUSE WAY	WUC TO SMH - 60 - 81'	WUC TO I-7 -
2	5031	WUC TO SVC - 2 - 21'	WUC TO WUC - 10 - 40'
3	5035	WUC TO SVC - 3 - 40'	WUC TO -
4	5040	WUC TO SMH - 620 - 23'	WUC TO SVC - 4 - 17'
5		WUC TO MH - 2 - 28'	WUC TO SVC - 5 - 48'
6	5045	WUC TO SVC - 5 - 28'	WUC TO SVC - 6 - 18'
7	5049	WUC TO MH - 4 - 36'	WUC TO SVC - 7 - 12'
8	5040	WUC TO SVC - 5 - 40'	WUC TO PH VALVE - 21'
9	5039	WUC TO SVC - 3 - 54'	WUC TO SVC - 8 - 17'
10	5032	WUC TO SVC - 2 - 54'	WUC TO SVC - 10 - 20'
11	5028	WUC TO SVC - 11 - 28'	WUC TO SMH - 60 - 30'
12	5024	WUC TO SVC - 12 - 18'	WUC TO SMH - 610 - 47'
13	5020	WUC TO SVC - 13 - 10'	WUC TO SMH - 610 - 65'
14	5018	WUC TO SVC - 14 - 30'	WUC TO SMH - 605 - 21'
15	5008	WUC TO SVC - 15 - 16'	WUC TO I-8 - 12'
16	5004	WUC TO SVC - 16 - 21'	WUC TO I-8 - 50'
17	5000	WUC TO SVC - 17 - 12'	WUC TO I-7 - 16'
PARCEL 6		WUC TO MH - 3 - 76'	WUC TO SVC - 1-6 - 6'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

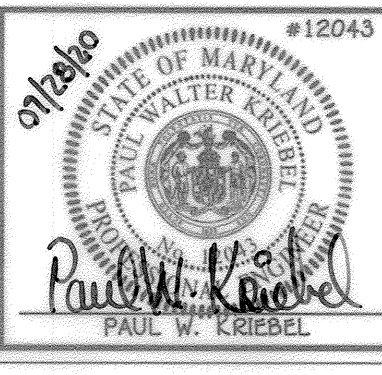
[Signature] 8-6-2020
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature] 8-26-20
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. 12943 EXPIRATION DATE IS 7/16/22.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2899



DESIGNED BY: P.W.K.
DRAWN BY: T.C.R.
CHECKED BY: P.W.K.
DATE: JULY, 2020

WATER MAIN EXTENSION PROFILE, TABULATION CHART, NOTES & "AS-BUILT" TABLE

600' SCALE MAP NO. 30 BLOCK NO. 1
F.C.C. WORK ORDER NO. 30501
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

CENTENNIAL RESERVE
LOTS 1 THRU 17 &
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SHEET 4 OF 4