

GENERAL NOTES

PART I

- 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 IN OCTOBER, 2019 BY BENCHMARK ENGINEERING, 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. 46FB AND NO. 47AA.
ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE 3605 AND 3626.
- 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 TUNNELS 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 THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF 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 DRAWING, 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.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED 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 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
BCE (CONTRACTOR SERVICES).....410-637-8713
BCE (EMERGENCY).....410-885-0123
BUREAU OF UTILITIES.....410-313-4900
COLONIAL PIPELINE CO.....410-795-1390
METS UTILITY.....1-800-287-7777
STATE HIGHWAY ADMINISTRATION.....410-531-5533
VERIZON.....1-800-743-0033
- 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.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-1450 AT LEAST FIVE WORKING DAYS BEFORE OPER 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(c) OF THE HOWARD COUNTY CODE.

PART II WATER

- ALL WATER MAINS TO BE PVC C900 DR18 UNLESS OTHERWISE NOTED.
- 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 THE 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 PVC C900 WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
- FOR PVC C900 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 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, SEVENTEEN (17) POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. TWELVE (12) POUND 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 AND 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. THE CONTRACTOR SHALL USE A VIBRATORY PLATE COMPACTOR OR OTHER APPROVED MEANS TO THOROUGHLY COMPACT THE FINE STONE ON BOTH SIDES 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 DEFLECTION 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 CERTAINTED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL.
- 5-DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR18 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DR18 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 INSTALL 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 STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EDIA IRON, INC. OR APPROVED EQUAL.

PART III SEWER

- 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 PVC 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 65-52, 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.

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

Alexander Butcher
HOWARD SOIL CONSERVATION DISTRICT
09/28/22
DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER F-22-030.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Cheryl
9-23-22
DATE
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Chad
10-6-22
DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

ITEMS	QUANTITIES ESTIMATED	ASBUILT		
		QUANTITIES	TYPE	MANU/SUPPLIER
8" WATER (PVC900 DR18)	1477 LF	1474	PLASTIC	WESTLAKE
12" WATER (PVC900 DR18)	366 LF	367	PLASTIC	WESTLAKE
6" FIRE HYDRANT, TEE & VALVE	4	4	DUCTILE	MUELLER
1.5" VHC	1470 LF	1509	COPPER	MUELLER
12" VALVE	1 LF	1	DUCTILE	MUELLER
8" VALVE	3	3	DUCTILE	MUELLER
1" METER VAULT	49	49	CONCRETE	HORNE CONCRETE
12"x8" TEE	1	1	DUCTILE	TYLER/UNION
8"x8" TEE	1	1	DUCTILE	TYLER/UNION
8" CAP AND BUTTRESS	2	2	CONCRETE	TYLER/UNION
12" CAP AND BUTTRESS	1	1	CONCRETE	TYLER/UNION
6" PVC SDR-35 SEWER	1470 LF	1452	PLASTIC	WESTLAKE
MANHOLES	14	14	CONCRETE	CONTRACTORS PRECAST
4" SHC	1458 LF	1542	PLASTIC	WESTLAKE
CLEANOUTS	49	49	CONCRETE	HORNE CONCRETE
8" DIP SEWER	659 LF	652	PLASTIC	WESTLAKE

NAME OF UTILITY CONTRACTOR: **CCS**
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

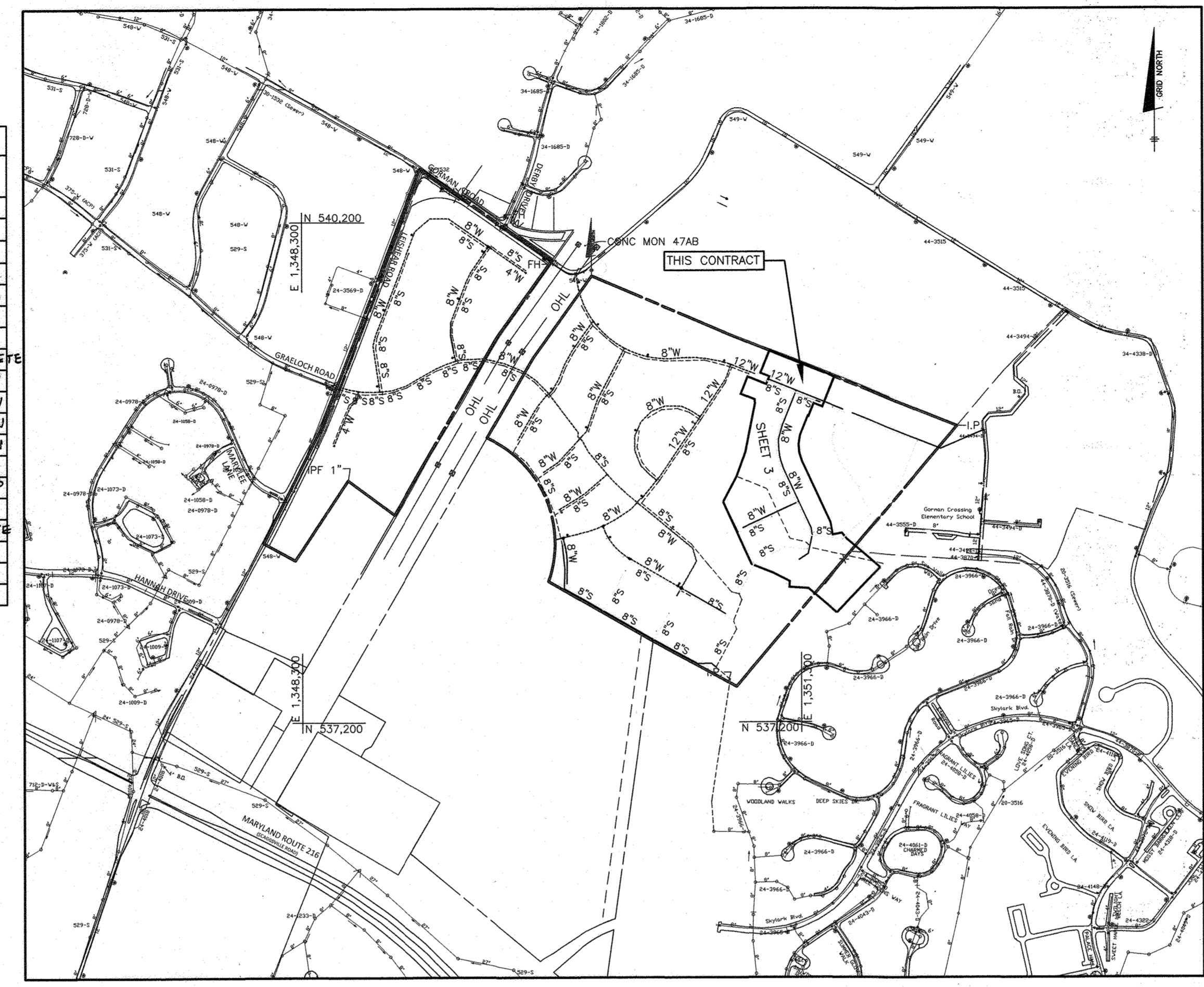
NOTE:
ALL WATER HOUSE CONNECTIONS ARE TO BE 1.5" WITH A 1" METER (OUTSIDE SETTING).
ALL SEWER HOUSE CONNECTIONS SHALL BE 4" PVC.

WELLINGTON FARMS

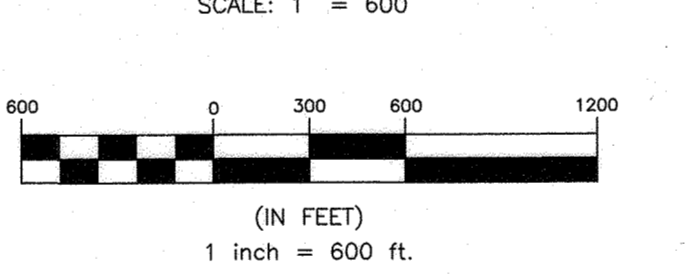
PHASE 2 SECTION 1

PUBLIC WATER AND PUBLIC SEWER PLANS

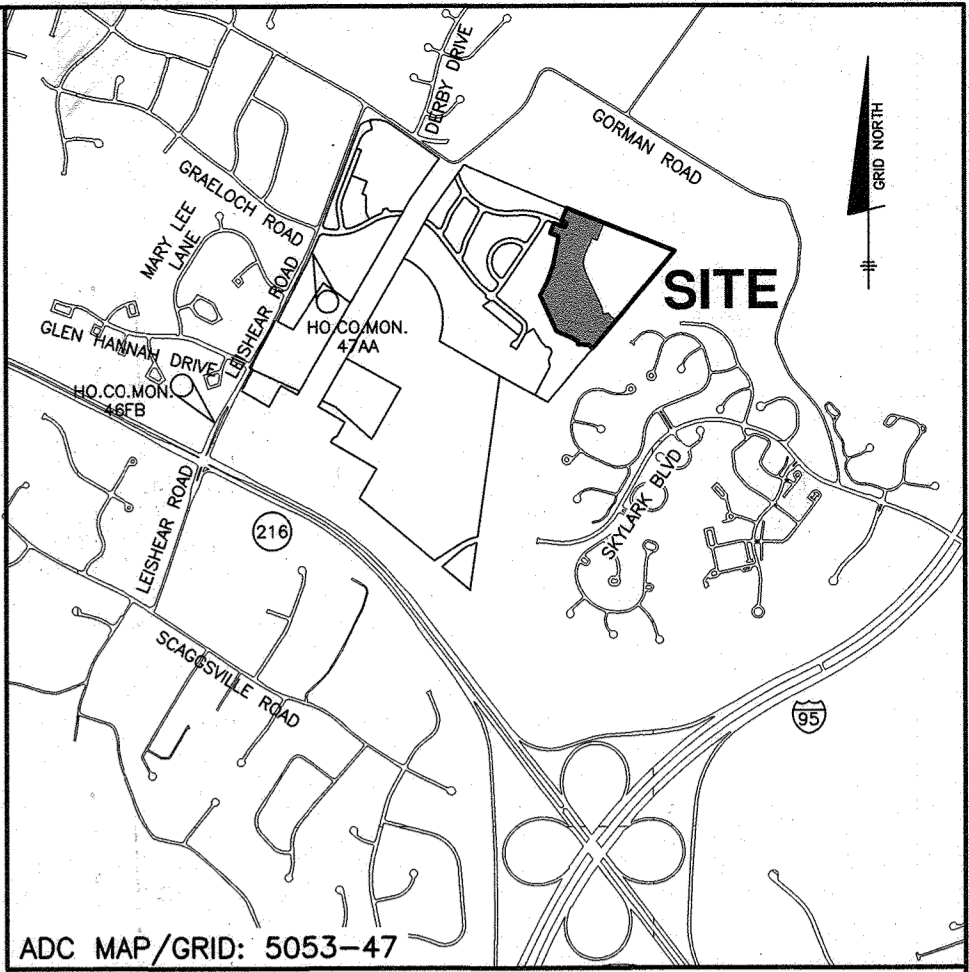
CONTRACT NO. 24-5139-D



LOCATION MAP



TYPE OF BUILDING:	RESIDENTIAL - SFD
NUMBER OF UNITS:	49
NUMBER OF SHC'S:	49
NUMBER OF TWHC'S:	0
NUMBER OF WHC'S (SINGLE):	49
DRAINAGE AREA:	HAMMOND BRANCH
TREATMENT PLANT:	LITTLE PATUXENT WRP
WATER ZONE:	550 SOUTH
TEST GRADIENT:	804
TEST PRESSURE:	192



VICINITY MAP
SCALE: 1" = 2000'

LEGEND

	EXIST. OVERHEAD ELECTRIC
	EXIST. OVERHEAD ELECTRIC TRANSMISSION LINES
	EXIST. OFFSITE WATER MAIN
	EXIST. OFFSITE SEWER MAIN
	EXIST. ONSITE WATER MAIN
	EXIST. ONSITE SEWER MAIN
	EXIST. ONSITE SEWER MANHOLE
	PROP. STORM DRAIN
	PROP. SEWER MAIN
	PROP. SEWER MANHOLE
	PROP. TERMINAL MANHOLE
	PROP. WATER MAIN
	PROP. FIRE HYDRANT
	PROP. VALVE
	PROP. CAP & BUTTRESS
	PROP. WATER HOUSE CONNECTION

SHEET INDEX

NO.	DESCRIPTION
1	TITLE SHEET
2	PHASING KEY SHEET
3	PUBLIC WATER AND SEWER PLAN
4	PUBLIC WATER AND SEWER PROFILE
5	PUBLIC WATER AND SEWER PROFILE

OWNER: ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELLCOTT CITY, MARYLAND 21042
410-720-3021

DEVELOPER: ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELLCOTT CITY, MARYLAND 21042
410-720-3021

Professional Certification: 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. 23290, Expiration Date: 6-30-2023.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Cheryl
9-23-22
DATE
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Chad
10-6-22
DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
3300 NORTH RIDGE ROAD SUITE 140 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BE-CIVILENGINEERING.COM



DESIGN: LDD				
DRAFT: LDD				
CHK: DBT				
DATE: 9.21.2022				
BY: WRA	AS BUILT	10/13/22		
NO.	REVISIONS	DATE		

PUBLIC WATER AND SEWER TITLE SHEET

600 SCALE MAP # _____ BLOCK: ---

WELLINGTON FARMS
PHASE 2 SECTION 1

TAX MAP: 46 - GRID: 6 - PARCEL: 163
ZONED: R-SC-MXD-3
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-5139-D

SCALE: AS SHOWN
SHEET NO. 1 OF 5



OWNER:
ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELLCOTT CITY, MARYLAND 21042
410-720-3021

DEVELOPER:
ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELLCOTT CITY, MARYLAND 21042
410-720-3021

MARYLAND AND VIRGINIA
MILK PRODUCERS
COOPERATIVE
ASSOCIATION, INC.
PARCEL 'E'
PLAT #20137
11.946 AC.

MARYLAND AND VIRGINIA
MILK PRODUCERS
COOPERATIVE ASSOCIATION, INC.
PARCEL 'B'
PLAT #20137
75.577 AC.

MARYLAND AND VIRGINIA
MILK PRODUCERS
COOPERATIVE ASSOCIATION, INC.
PARCEL 'B'
PLAT #20137
75.577 AC.

HOWARD RESEARCH AND
DEVELOPMENT CORP.
TM 47 PARCEL 837
5289 / 330
ZONED: PEC-MXD-3

Professional Certification: 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. 23296, Expiration Date: 6-30-2023.

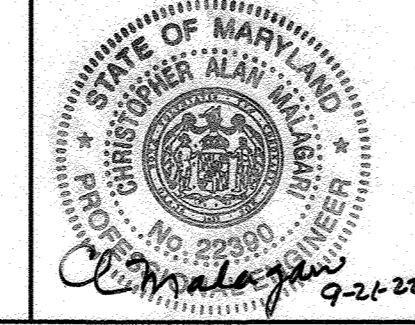
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 9-23-22
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature] 10-6-22
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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3300 N. RIDGE ROAD SUITE 140A ELLCOTT CITY, MARYLAND 21043
(P) 410-465-8105 (F) 410-465-6644
WWW.BEI-ONLINEENGINEERING.COM



DESIGN:	DBT/LDD				
DRAFT:	DBT/LDD				
CHK:	DBT				
DATE:	9.21.2022	BY:	NO.	REVISIONS	DATE

PHASING KEY SHEET

600 SCALE MAP: _____ BLOCK: _____

WELLINGTON FARMS
Phase 2 Section 1

TAX MAP: 46 - GRID: 6 - PARCEL: 163
ZONED: R-20-MXD-3 / R-SC-MXD-3
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-5139-D

SCALE:
AS SHOWN

SHEET NO.
2 OF 5

NOTE:
 CONTRACT 24-5137-D MUST BE CONSTRUCTED AND
 IN-SERVICE FOR WATER MAIN EXTENSION UNDER THIS
 CONTRACT. CONTRACT 24-5140-D CONNECTS INTO
 CONTRACT 24-3494-D FOR REDUNDANT WATER FEED TO
 CONTRACT 24-5139-D

8" V MCGILL CT.
 STA. 0+03

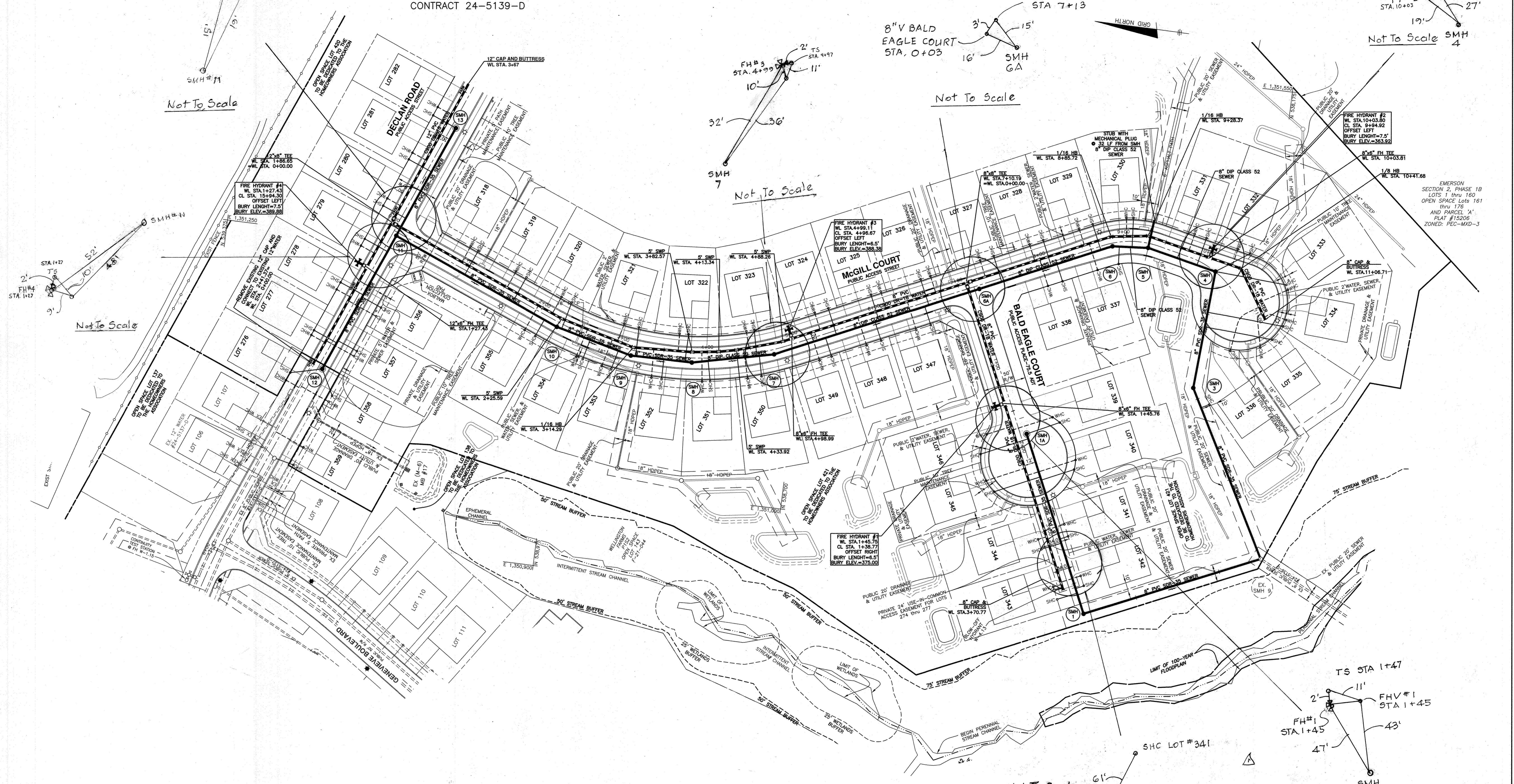
12" DECLAN RD.
 STA. 1+89

8" V MCGILL CT.
 STA. 7+13

8" V BALD
 EAGLE COURT
 STA. 0+03

FH #2
 STA. 10+03

Not To Scale SMH 4



Not To Scale

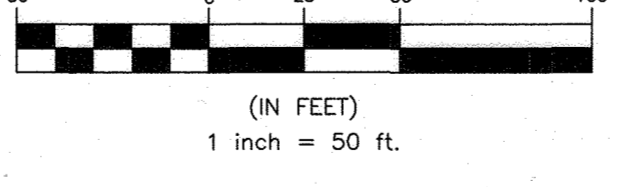
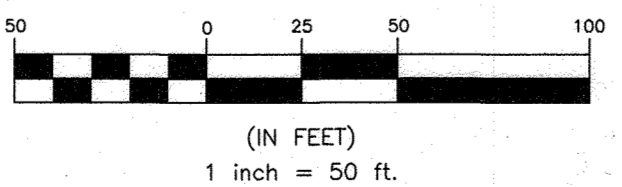
Not To Scale

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OWNER:
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DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

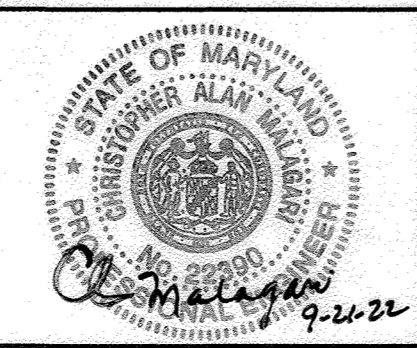
9-20-22

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

10-6-22

BENCHMARK
 ENGINEERS • LAND SURVEYORS • PLANNERS

ENGINEERING, INC.
 3300 NORTH RIDGE ROAD • SUITE 140 • ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BEI-CIVILENGINEERING.COM



DESIGN: LDD					
DRAFT: LDD					
CHK: DBT					
DATE: 9.21.2022					
BY: WRA	NO. 1	AS BUILT		10/13/23	
REVISIONS					

PUBLIC WATER AND SEWER PLAN

600 SCALE MAP #xx

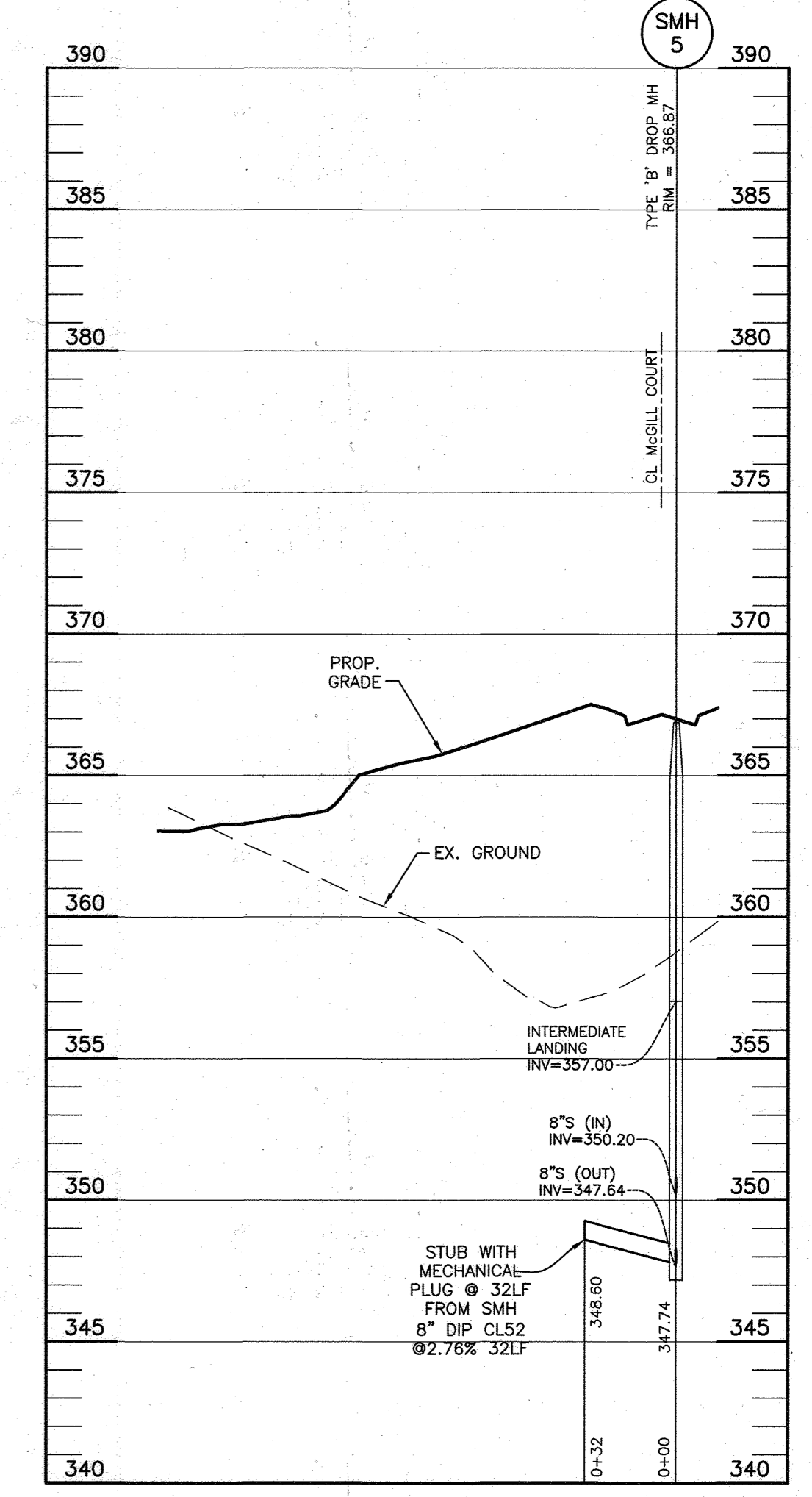
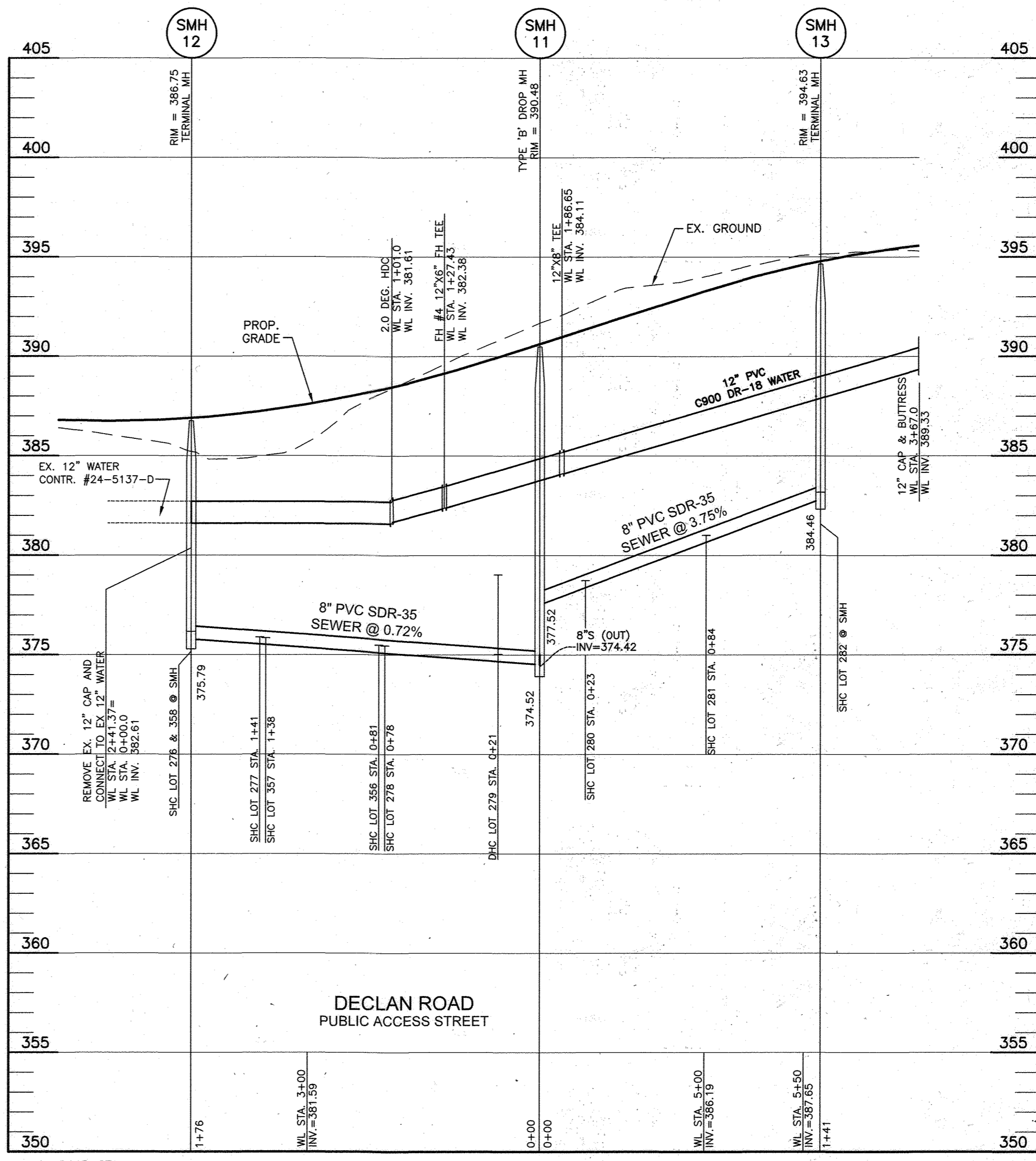
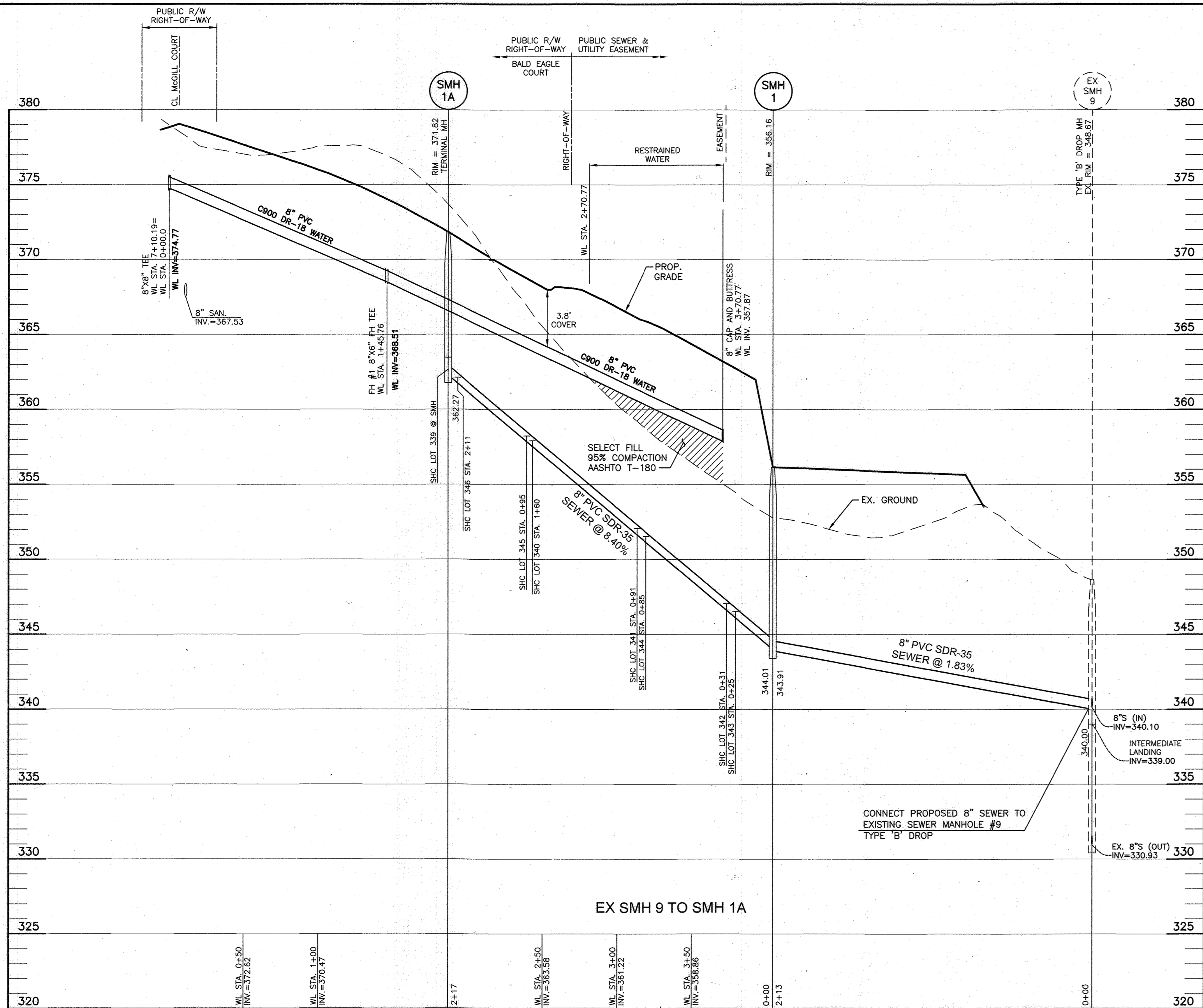
WELLINGTON FARMS
 PHASE 2 SECTION 1

TAX MAP: 46 - GRID: 6 - PARCEL: 163
 ZONED: R-SC-MXD-3
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-5139-D

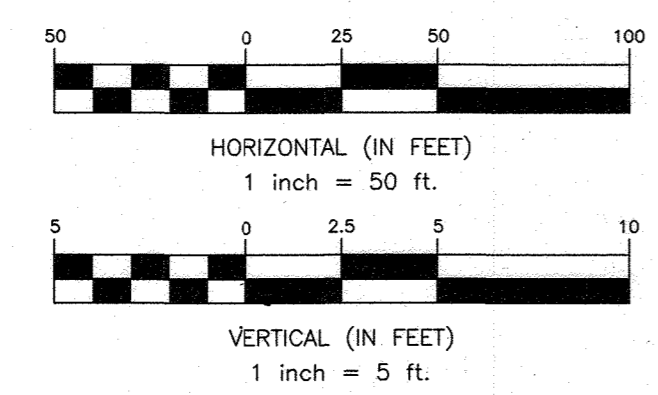
SCALE:
 AS SHOWN

SHEET NO.
 3 OF 5



APPURTENANCE	WL STA.	NORTHING	EASTING
8"X8" TEE	0+00.00	538520.53	1351285.37
8"X6" FH TEE	1+45.76	538459.32	1351153.08
8" CAP & BUTTRESS	3+70.77	538364.83	1350948.88
12" CAP REMOVAL	0+00.00	539256.25	1351098.38
2.0 DEG HDC	1+01.00	539218.56	1351192.27
12"X6" FH TEE	1+27.43	539208.77	1351216.64
12"X8" TEE	1+86.65	539186.72	1351271.59
12" CAP & BUTTRESS	3+67.00	539119.37	1351439.37

NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	REMARKS
EX SMH 9	48" MH	N538143.6113, E1351012.3842	331.75(8") 331.98(8")	EX. 330.73	EX. 348.67	HO. CO. STD. G-5.12	TYPE 'B' DROP
1	48" MH	N538338.0282, E1350924.2774	344.01(8")	343.91(8")	356.16	HO. CO. STD. G-5.12	
1A	48" MH	CL STA. 1+80.00 Bald Eagle Court, OFFSET 7.00 LEFT	362.27(8")	371.82	371.82	HO. CO. STD. G-5.12	
3	48" MH	N538245.3492, N1351198.0974	345.97(8")	345.87(8")	362.00	HO. CO. STD. G-5.12	
4	48" MH	CL STA. 10+08.74 McGill Court, OFFSET 0.22 LEFT	347.09(8")	346.99(8")	362.58	HO. CO. STD. G-5.12	
5	48" MH	CL STA. 9+25.19 McGill Court, OFFSET 5.27 RIGHT	347.71(8") 350.20(8")	347.67(8")	366.87	HO. CO. STD. G-5.12	TYPE 'B' DROP
6	48" MH	CL STA. 8+81.80 McGill Court, OFFSET 3.55 RIGHT	354.60(8")	354.50(8")	369.40	HO. CO. STD. G-5.12	
6A	48" MH	CL STA. 7+20.10 McGill Court, OFFSET 4.24 RIGHT	367.52(8")	367.42(8")	378.82	HO. CO. STD. G-5.12	
7	48" MH	CL STA. 4+72.25 McGill Court, OFFSET 5.52 RIGHT	369.76(8")	369.66(8")	387.95	HO. CO. STD. G-5.12	
8	48" MH	CL STA. 3+77.94 McGill Court, OFFSET 5.27 RIGHT	370.54(8")	370.44(8")	386.15	HO. CO. STD. G-5.12	
9	48" MH	CL STA. 3+08.10 McGill Court, OFFSET 6.60 RIGHT	371.30(8")	371.20(8")	383.49	HO. CO. STD. G-5.12	
10	48" MH	CL STA. 2+17.94 McGill Court, OFFSET 5.71 RIGHT	372.20(8")	372.10(8")	382.79	HO. CO. STD. G-5.12	
11	48" MH	CL STA. 16+42.46 Declan Road, OFFSET 5.00 RIGHT	377.52(8") 374.52(8")	377.42(8")	390.48	HO. CO. STD. G-5.12	TYPE 'B' DROP
12	48" MH	CL STA. 14+66.92 Declan Road, OFFSET 5.00 RIGHT	375.79(8")	375.79(8")	386.75	HO. CO. STD. G-5.12	
13	48" MH	CL STA. 18+12.12 Declan Road, OFFSET 5.00 RIGHT	384.46(8")	384.46(8")	394.63	HO. CO. STD. G-5.12	

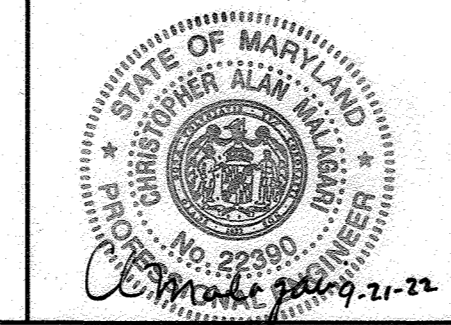


OWNER: ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELLCOTT CITY, MARYLAND 21042
410-720-3021

DEVELOPER: ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELLCOTT CITY, MARYLAND 21042
410-720-3021

Professional Certification. 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. 22396, Expiration Date: 6-30-2023.

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS
3300 NORTH RIDGE ROAD SUITE 140 • ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BE-CIVILENGINEERING.COM



DESIGN: LDD	
DRAFT: LDD	
CHK: DBT	
DATE: 9.21.2022	
BY: NO.	
REVISIONS	
DATE	

PUBLIC WATER AND SEWER PROFILES

600 SCALE MAP # xx BLOCK: ---

WELLINGTON FARMS PHASE 2 SECTION 1

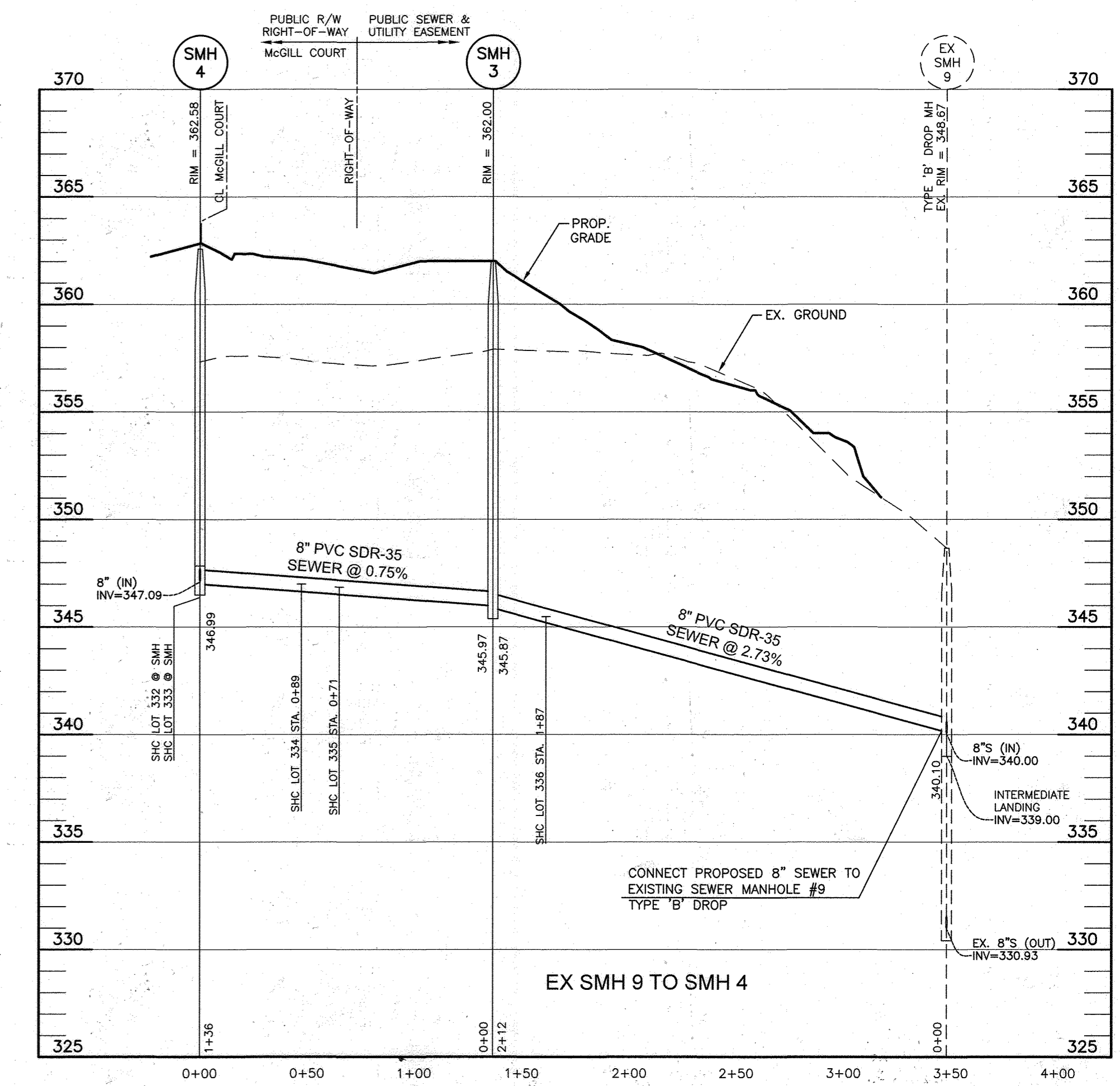
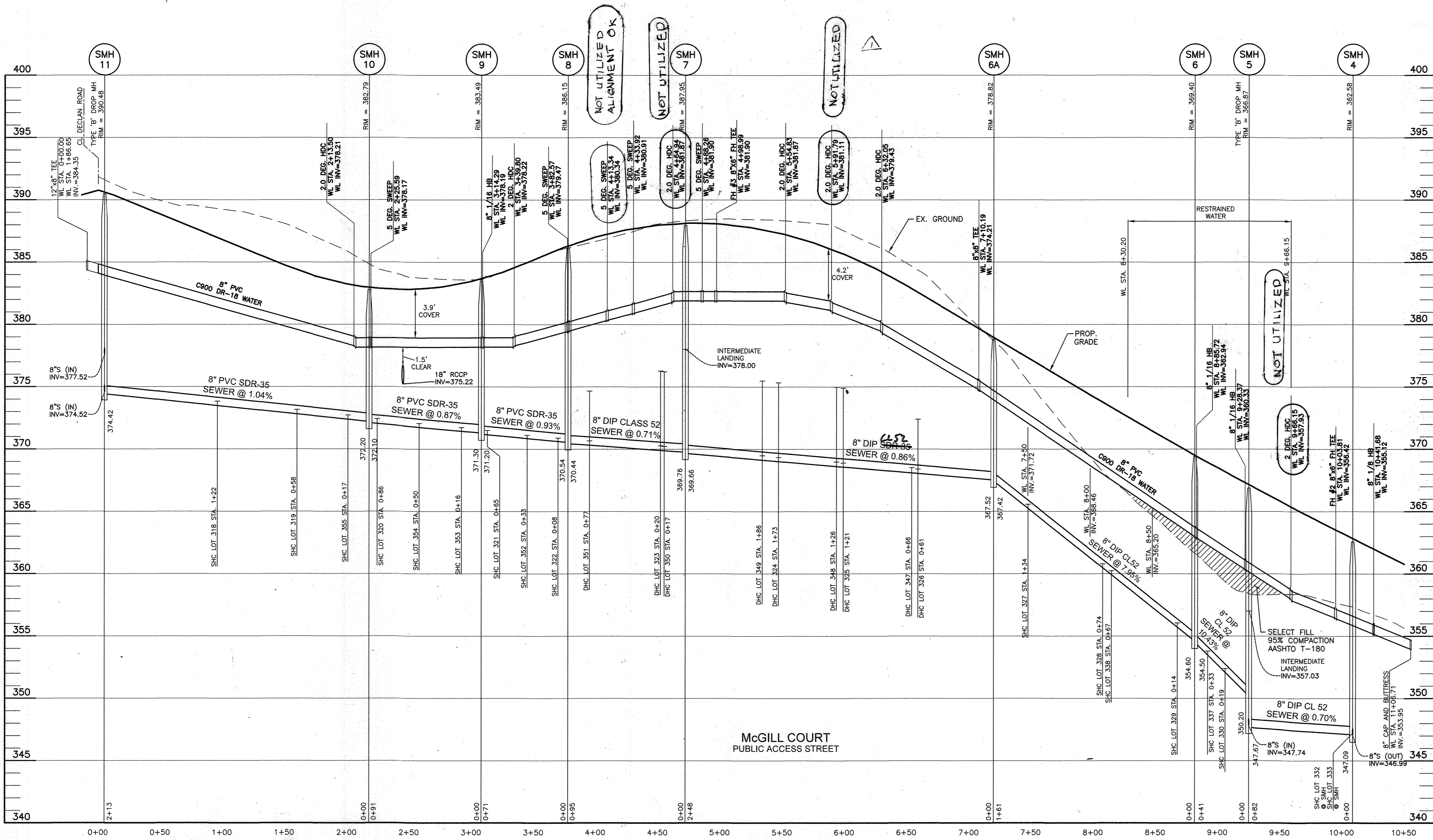
TAX MAP: 46 - GRID: 6 - PARCEL: 163
ZONED: R-SC-MXD-3
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-5139-D

SCALE: AS SHOWN

SHEET NO. 4 OF 5

Lot Number	Invert @ main	DHC?	DHC standpipe length/height	Invert @ R/W or esmt line	Minimum Cellar Elevation	Basement Floor
276	376.12			376.84	380.74	383.15
277	375.71			376.27	380.17	383.72
278	375.25			375.81	379.71	384.86
279	374.67	YES	4.0	379.25	383.15	386.58
280	378.74			379.30	383.20	388.49
281	381.01			381.57	385.47	390.34
282	383.17			383.73	387.63	391.60
318	373.64			374.24	378.16	383.00
319	372.97			373.57	377.49	383.00
320	372.41			373.01	376.93	378.65
321	371.50			372.12	376.04	378.26
322	370.89			371.49	375.39	381.19
323	370.23	YES	6.0	376.79	380.65	382.76
324	369.34	YES	6.0	375.92	379.84	382.53
325	368.89	YES	6.0	375.47	379.35	381.01
326	368.39	YES	4.0	372.97	376.85	378.23
327	365.56			366.14	370.06	373.51
328	360.79			361.37	365.29	370.35
329	356.05			356.83	360.55	366.77
330	352.39			353.03	356.93	363.66
331	347.65			348.27	352.17	359.12
332	347.84			348.72	352.60	357.27
333	347.24			348.88	352.60	355.82
334	346.99			348.73	352.79	354.71
335	346.73			347.83	351.93	353.85
336	345.50			345.66	349.40	354.07
337	353.78			354.14	358.12	364.97
338	360.72			361.10	365.04	368.66
339	363.46			364.20	368.22	368.52
340	357.93			358.67	362.77	362.84
341	352.07			352.23	356.31	360.22
342	347.08			347.24	351.32	357.58
343	346.53			346.97	351.07	357.58
344	351.55			351.99	356.09	360.22
345	358.24			359.32	363.12	362.84
346	362.13			362.65	366.67	369.02
347	376.57			376.97	380.77	378.95
348	368.96	YES	6.0	375.42	379.34	380.65
349	369.46	YES	6.0	375.86	379.78	381.88
350	370.21	YES	6.0	376.63	380.49	381.74
351	370.65	YES	4.0	375.07	378.93	380.82
352	371.12			371.54	375.40	378.90
353	371.73			372.13	375.99	377.12
354	372.06			372.50	376.44	376.57
355	372.55			372.93	376.87	377.67
356	375.27			375.63	379.55	382.20
357	375.68			376.04	379.96	381.05
358	376.12			376.68	380.60	380.48
359	375.85			376.13	379.93	380.48

All SHC's are at a 2.0% unless otherwise noted.
All Drop connections are Ho.Co.Std. S-2.12 Type 'A'



LOT NUMBER	DIMENSION 1	DIMENSION 2
276	SMH 21 101'	SMH 12 28'
277	SMH 12 40'	FHV #4 35'
278	SMH 12 102'	FHV #4 36'
279	FHV #4 20'	SMH #13 36'
280	SMH 13 57'	12" V 1+89 21'
281	12" V 1+89 73'	SMH 25 65'
282	SMH 25 30'	SMH 24 114'
318	I-125 19'	SMH 11 97'
319	SMH 10 66'	I-125 53'
320	SMH 10 34'	I-125 112'
321	SMH 8 72'	SMH 7 32'
322	SMH 8 30'	SMH 7 70'
323	FHV 3 4+96 37'	FHV #3 48'
324	FHV 3 4+96 51'	FHV #3 38'
325	FHV #3 103'	FHV 3 4+96 102'
326	8" V 7+13 56'	8" V BALD EAGLE 54'
327	SMH 6A 42'	8" V 7+13 42'
328	SMH 6 82'	SMH 6A 70'
329	SMH 6 36'	SMH 5 71'
330	SMH 6 39'	SMH 5 39'
331	SMH 4 43'	FHV 2 24'
332	SMH 4 45'	FHV 2 47'
333	SMH 4 87'	FHV 2 73'
334	SMH 4 92'	FHV 2 116'
335	SMH 4 102'	SDMH 51 23'
336	SDMH 51 62'	SMH 3 26'
337	SMH 6 22'	SMH 5 37'
338	SMH 6 70'	SMH 6A 97'
339	FHV 1 1+45 58'	SMH 1A 44'

LOT NUMBER	DIMENSION 1	DIMENSION 2
340	FHV #1 1+45 114'	SMH 1A 70'
341	SMH 1 04'	4" V BLOWOFF 61'
342	SMH 1 36'	4" V BLOWOFF 26'
343	SMH 1 37'	4" V BLOWOFF 13'
344	SMH 1 31'	4" V BLOWOFF 50'
345	SMH 1A 75'	FHV #1 1+45 102'
346	SMH 1A 57'	FHV #1 1+45 64'
347	8" V 7+13 66'	8" V BALD EAGLE 62'
348	FHV 3 4+99 106'	FHV 3 4+99 103'
349	FHV 3 4+99 58'	FHV 3 4+99 51'
350	FHV 3 4+99 62'	FHV 3 4+99 56'
351	SMH 8 32'	SMH 7 96'
352	SMH 8 48'	SMH 7 45'
353	SMH 9 30'	SMH 10 80'
354	SMH 9 56'	SMH 10 43'
355	SMH 10 28'	I-125 100'
356	FHV 4 1+27 51'	FHV #4 1+25 98'
357	FHV 4 1+27 99'	SMH 12 47'
358	SMH 21 58'	SMH 12 33'
359	SMH 21 30'	SMH 12 100'

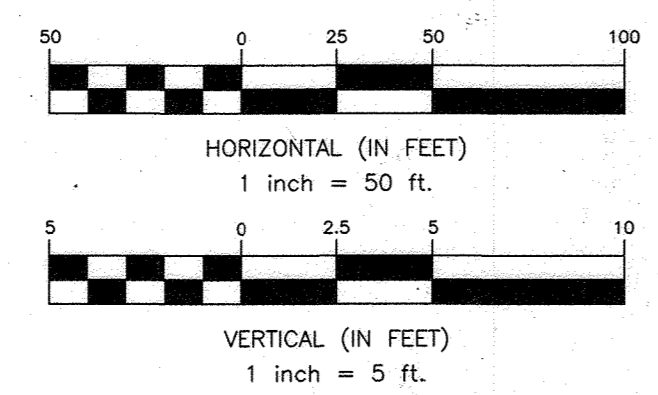
APPURTENANCE	WATER LINE STATION	NORTHING	EASTING
2.0 DEG. HDC	WL STA.2+13.50	538989.1654	1351190.6291
5 DEG. SWEEP	WL STA.2+25.59	538977.8896	1351186.0079
8" 1/16 HB	WL STA.3+14.29	538892.2314	1351163.3402
2 DEG. HDC	WL STA.3+39.80	538866.7492	1351164.4910
5 DEG. SWEEP	WL STA.3+82.57	538824.0240	1351168.4888
5 DEG. SWEEP	WL STA.4+13.34	538793.5314	1351170.5974
5 DEG. SWEEP	WL STA.4+33.92	538773.4528	1351175.1047
2.0 DEG. HDC	WL STA.4+64.94	538743.9005	1351184.5335
5 DEG. SWEEP	WL STA.4+88.26	538721.6802	1351191.6176
8"x6" FH TEE	WL STA.4+98.99	538711.9533	1351196.1539
2.0 DEG. HDC	WL STA.5+54.83	538661.3445	1351219.7425
2.0 DEG. HDC	WL STA.5+91.79	538627.8426	1351235.3561
2.0 DEG. HDC	WL STA.6+32.05	538591.3490	1351252.3842
8"x8" TEE	WL STA.7+10.19	538520.5292	1351285.3702
8" 1/16 HB	WL STA.8+85.72	538361.2154	1351359.0661
8" 1/16 HB	WL STA.9+28.37	538318.9993	1351365.1285
2 DEG. HDC	WL STA.9+66.15	538282.0763	1351357.1090
8"x6" FH TEE	WL STA.10+03.81	538245.2733	1351349.1293
8" 1/8 HB	WL STA.10+25.44	538208.2552	1351341.1239

LOT NUMBER	DIMENSION 1	DIMENSION 2
276	SMH 21 95'	SMH 12 44'
277	SMH 12 41'	FHV #4 1+27 101'
278	SMH 12 93'	FHV #4 1+27 43'
279	FHV #4 1+27 18'	SMH 13 41'
280	SMH 13 42'	12" V 1+89 25'
281	12" V 1+89 81'	SMH 25 58'
282	SMH 25 31'	SMH 24 103'
283	I-125 28'	SMH 11 87'
284	SMH 10 74'	I-125 40'
285	SMH 10 33'	I-125 99'
286	SMH 8 88'	SMH 7 36'
287	SMH 8 34'	SMH 7 61'
288	FHV 3 4+99 49'	FHV 3 4+99 58'
289	FHV 3 4+99 34'	FHV 3 4+99 54'
290	8" V 7+13 102'	8" V BALD EAGLE 99'
291	8" V 7+13 46'	8" V BALD EAGLE 44'
292	SMH 6A 82'	8" V 7+13 28'
293	SMH 6 76'	SMH 6A 77'
294	SMH 6 44'	SMH 5 54'
295	SMH 6 35'	SMH 5 54'
296	SMH 4 53'	FHV 2 10+03 42'
297	SMH 4 36'	FHV 2 10+03 33'
298	SMH 4 84'	FHV 2 10+03 97'
299	SMH 4 100'	SDMH 51 23'
300	SDMH 51 24'	SMH 4 72'
301	SMH 6 32'	SMH 5 62'
302	SMH 6 88'	SMH 6A 78'
303	SMH 1A 37'	FHV 1 1+45 60'
304	SMH 1A 65'	FHV 1 1+45 106'
305	SMH 1 107'	4" V BLOWOFF 73'
306	SMH 1 47'	4" V BLOWOFF 28'
307	SMH 1 49'	4" V BLOWOFF 9'

LOT NUMBER	DIMENSION 1	DIMENSION 2
344	SMH 1 102'	4" V BLOWOFF 62'
345	SMH 1A 69'	FHV 1+45 70'
346	FHV 1+45 33'	FHV 1+45 40'
347	8" V 7+13 82'	8" V BALD EAGLE 78'
348	FHV 3 4+99 91'	FHV 3 4+99 87'
349	FHV 3 4+99 50'	FHV 3 4+99 41'
350	FHV 3 4+99 74'	FHV 3 4+99 70'
351	SMH 8 21'	SMH 9 88'
352	SMH 8 49'	SMH 7 36'
353	SMH 9 37'	SMH 10 70'
354	SMH 9 63'	SMH 10 43'
355	SMH 10 37'	I-125 90'
356	FHV 4 1+27 61'	FHV 4 1+27 66'
357	SMH 12 40'	FHV 4 1+27 106'
358	SMH 21 90'	SMH 12 39'
359	SMH 21 35'	SMH 12 74'

OWNER: ESC WELLINGTON, L.C.
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410-720-3021

DEVELOPER: ESC WELLINGTON, L.C.
5074 DORSEY HALL DRIVE, SUITE 205
ELICOTT CITY, MARYLAND 21042
410-720-3021



Professional Certification: 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. 23390, Expiration Date: 6-30-2023.

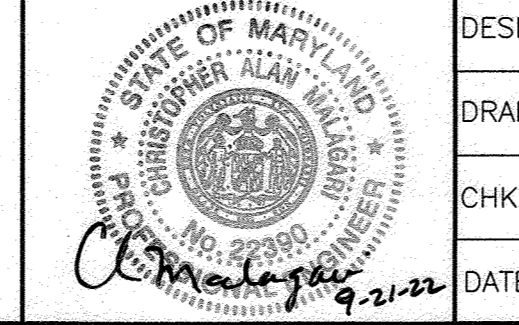
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES
DATE: 9-23-22

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10-6-22

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
3300 NORTH RIDGE ROAD SUITE 140 • ELICOTT CITY, MARYLAND 21043
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DESIGN: LDD	
DRAFT: LDD	
CHK: DBT	
DATE: 9.21.2022	
BY: WRA	AS BUILT
NO. 10/13/23	
REVISIONS	
DATE	

PUBLIC WATER AND SEWER PROFILES

600 SCALE MAP # xx

WELLINGTON FARMS
PHASE 2 SECTION 1

TAX MAP: 46 - GRID: 6 - PARCEL: 163
ZONED: R-SC-MXD-3
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-5139-D

SCALE: AS SHOWN

SHEET NO. 5 OF 5