		QUANTITI		
ПЕМ	ESTIMATED		A5-BUILT	
4 1 4-1 1	20111 11 11 22	QUANTITIES	TYPE	SUPPLIER
8"5; PVC 5DR-35	1,541 LF.	1.555 LF	SpR-35	NATIONAL PIPE
4"5; PVC 5DR-35	727 L.F.	600 LF	50R-35	61 00
CLEAN-OUTS	30 EACH	29 EA.	CONC. BLOCK	PRISM PRECAST
MANHOLE	12 EACH	12 EA.	CONCRETE	Contractors Pr
8"W; C900 PVC DR-18	1,163 L.F.	1100 LF	PR-18 C-900	NATIONAL PIPE
6"W; C900 PVC DR-18	330 L.F.	313 LF	DR-18 C-900	00 00
1-1/2" WHC	GG4 L.F.	CGOLF	K COPPER	Cambridge Lee
3° H.D.C.	1 EACH	IEA.	PVC	CERTAINTEED PIPE
1/8 H.B.	3 EACH	3 EA.	DIP	TYLER UNION
1/16 H.B.	5 EACH	SEA.	DIP	00 00
1/32 H.B.	1 EACH	I EA.	pip	## A *
8" X8" TEE	2 EACH	2 E A .	DIB	00
8"X6" TEE	4 EACH	4 EA.	12112	6-3 19
8" VALVE	5 EACH	5 EA.	DIP	american flow cont
6" VALVE	4 EACH	4 EA.	PIP	
8" PLUG & BUTTRESS	2 EACH	2 EA.	BIB	TYLER UNION
6" PLUG & BUTTRESS	1 EACH	I EA.	piP	00 00
FIRE HYDRANT	3 EACH	3 EA.	B 84 B	AMERICAN BARLING
CONTINUITY TEST STATION	3 EACH	BEA.	CONCRETE	YESTAL MANUFACT
SINGLE OUTSIDE METER SETTING	27 EACH	27 EA.	FORD CUSTO	n FORD
				/
NAME OF UTILITY C	ONTRACTOR: %	ITILITIES UN	LIMITED	
5URVEY & DRAFTIN	G DIVISION AS-	BUILT DATE: 10	110/18	

B.M.#1 - HOWARD COUNTY CONTROL STATION #47H2 - HORIZONTAL - NAD '83) (LOCATED ALONG ALL SAINTS ROAD, APPROX. 1/4 MILE EAST OF ROUTE 216; ROUGHLY 2.89' OFF THE EDGE OF PAVING) N 529.706.429 E 1,355,445,341 ELEVATION = 256.093 - VERTICAL - (NAVD '88) - HOWARD COUNTY CONTROL STATION #47GE - HORIZONTAL - (NAD '83) (LOCATED ALONG OLD SCAGGSVILLE ROAD, BETWEEN POWER POLES, #375251 & #31000. APPROX. 2.5' OFF EDGE OF PAVING, IN FRONT OF HOUSE #9160. N 529,044.964

DON/ATE VIELL O DON/ATE CEDITO CVCTENA CLINOT

PR	ZIVATE WELL &	PRIVATE SEPTIC	SYSTEM C	HARI
PARCEL NO.	ADDRE55	OWNER	ABANDON WELL	ABANDON SEPTIC
359	9147 RIVER HILL ROAD	DAVID & TERRY ASHBY	YE5	YE5
359	9151 RIVER HILL ROAD	KATHLEEN WOODWARD	N/A	YE5
361	9130 RIVER HILL ROAD	THOMAS KUCKUDA & WIFE	N/A	YE5
362	9140 RIVER HILL ROAD	PATRICK & SARA PEPLOWSKI	N/A	YE5
474	9150 RIVER HILL ROAD	TIMOTHY McDONALD	YE5	YE5

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 WHICH ARE TO REMAIN, ARE CONNECTED THE PUBLIC WATER AND SEWER MAINS

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

BENCHMARK INFORMATION

ELEVATION = 335.756 - VERTICAL - (NAVD '88)

E 1.350.854.953

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

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 PLAN,

Paul W. Kpubel; FOR: CAND DESIGN & DEVELOPMENT, INC.
SIGNATURE OF DEVELOPER

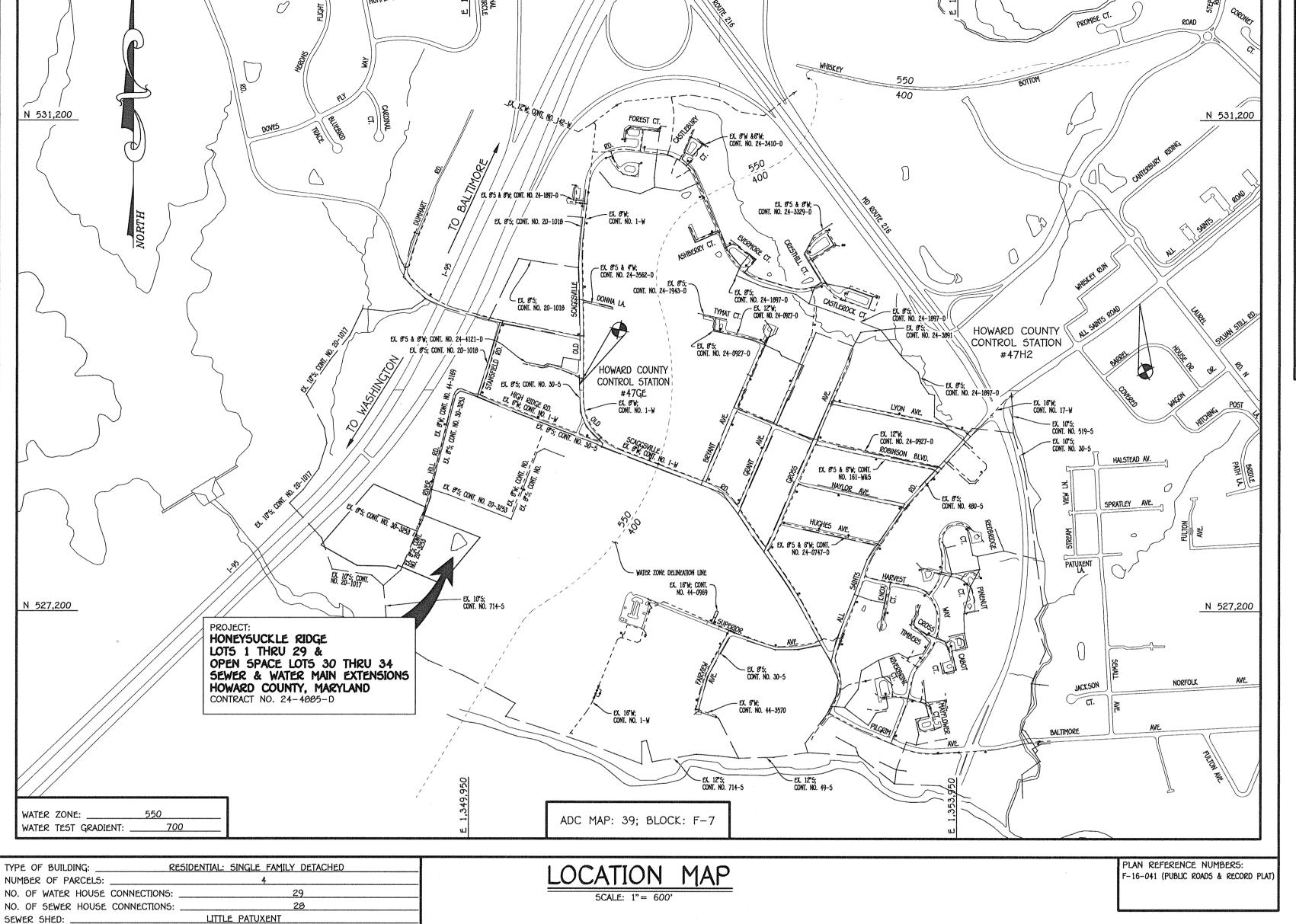
F - 16 - 041

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



LEGEND					
SYMBOL	DESCRIPTION				
	EX. WATER MAIN				
EX. SEWER MAIN					
O EX. SEWER MANHOLE					
EX. SEWER, WATER & UTILITY EASEMENT					
[姓] EX. FIRE HYDRANT					
→ EX. VALVE					
	PROP. WATER MAIN				
	PROP. SEWER MAIN				
•	PROP. SEWER MANHOLE				
weeking or your your stances.	PROP. SEWER, WATER & UTILITY EASEMENT				
	PROP. WHC				
•	PROP. SHC				
34	PROP. FIRE HYDRANT				
♦	PROP. VALVE				

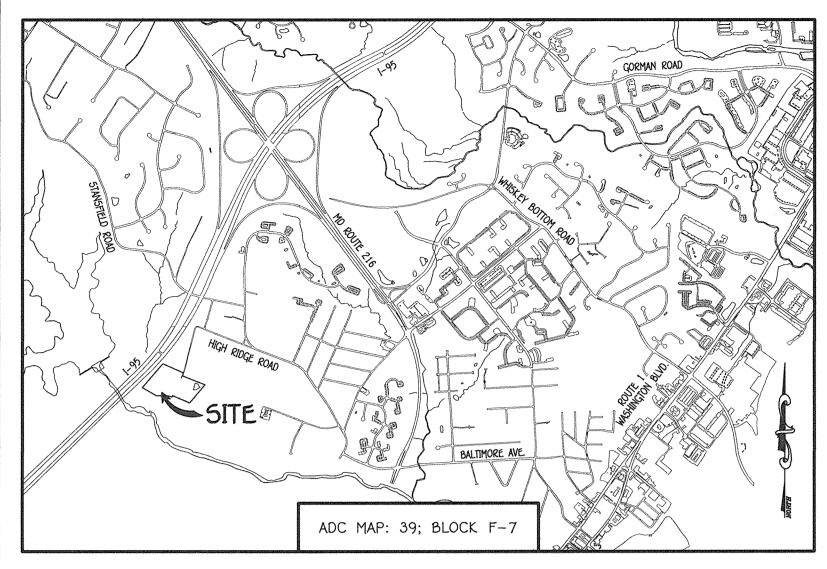
TREATMENT PLANT:



CONTRACT NO. 24-4885-D HONEYSUCKLE RIDGE

LOTS 1 THRU 29 & OPEN SPACE LOTS 30 THRU SEWER & WATER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND





GENERAL NOTES

- 1. 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 JANUARY, 2013 BY FISHER, COLLINS & CARTER, INC. . HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD '03/91' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 47H2 & NO. 47GE.

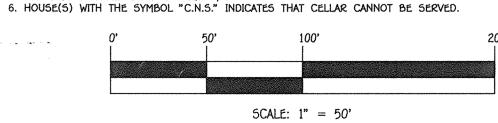
ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS

- 4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS. 5. CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-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
- 6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL 🚯 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. 8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE
 - STARTING WORK SHOWN ON THESE PLANS: 410-605-0123 BUREAU OF UTILITIES 410-313-4900 410-795-1390 1-800-257-7777 . . . *.* STATE HIGHWAY ADMINISTRATION 410-531-5533
- 9 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.
- 10. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN 11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE

APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD

- PART B: WATER MAIN GENERAL NOTES
- 1. ALL WATER MAINS SHALL BE AWWA C900 PVC; DR-10.
 2. TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- 3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES. 4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS
- 5. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS, ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN
- ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND PVC WATER MAINS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL. Ø. 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 HE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED. 9. 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. 10. 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. 11. 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 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 CERTAINTEED PVC HIGH DEFLECTION (HD)
- FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR-10 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (IPEX) BLUE BRUTE DR-10 OR EQUAL.
- 12. WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWWA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSERT DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE SPIGOTS OR PLAIN ENDS INTO THE PUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 5-DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL 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 EBAA IRON, INC. OR APPROVED EQUAL.
- 13. 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-3.20 OR W-3.32.
- PART C: <u>SEWER MAIN GENERAL NOTES</u>

 1. ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- 2. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED. 3. FORCE MAINS SHALL BE D.I.P. ONLY.
- 4. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY. 5. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52.
- WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.



CONTRACT NO. 24-4885-D HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

DEPARTMENT OF PLANNING AND ZONING

HOWARD COUNTY, MARYLAND

12.20.10

CHIEF, DEVELOPMENT ENGINEERING DIVISION MG

DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/16/10. FISHER, COLLINS & CARTER, INC. ENGINEERING CONSULTANTS & LAND SURVEYOR ELLICOTT CITY, MARYLAND 21042

HEREBY CERTIFY THAT THESE DOCUMENTS WERE

PREPARED OR APPROVED BY ME, AND THAT I AM A

LITTLE PATUXENT WATER RECLAMATION PLANT

SAVAGE, MARYLAND



	DESIGNED BY : B.C.R.					
	DRAWN BY : B.C.R.					5
	CHECKED BY : P.W.K.	fcc	Â	reage quanthies for 8°s & Manhaes	4/9/18	
Section 1	DATE :	FCC	\triangle	reage quantities for 4"5, 8"9, clean-outs, 8"W, Hb's & 8"Value	1/15/18	
-	NOVEMBER, 2016	ВY	NO.	REVISION	DATE	F

SEWER & WATER MAIN EXTENSIONS TITLE SHEET

600' SCALE MAP NO. _______ BLOCK NO. _____1 F.C.C. WORK ORDER NO. 12036-3002 FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-4885-D

SIXTH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

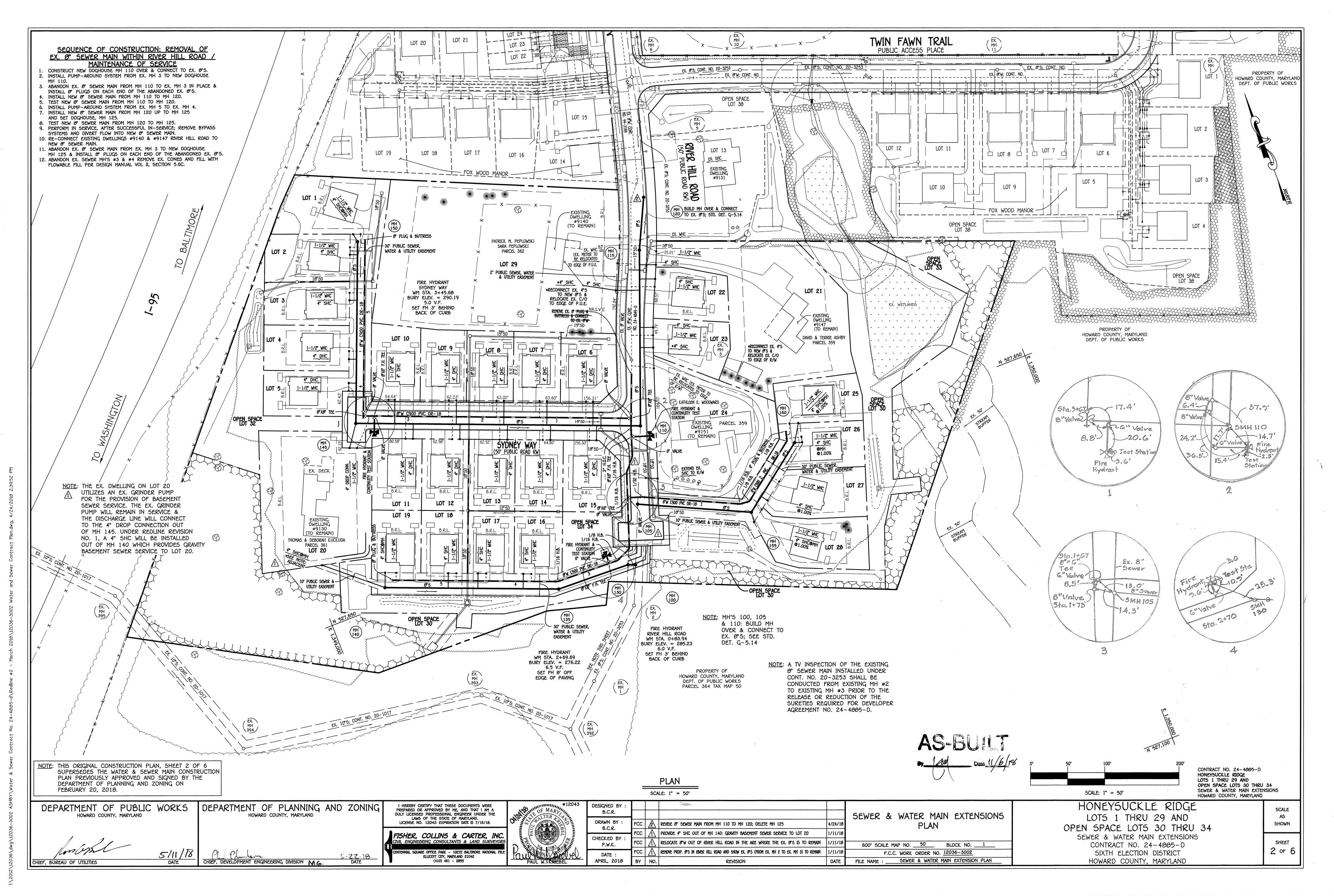
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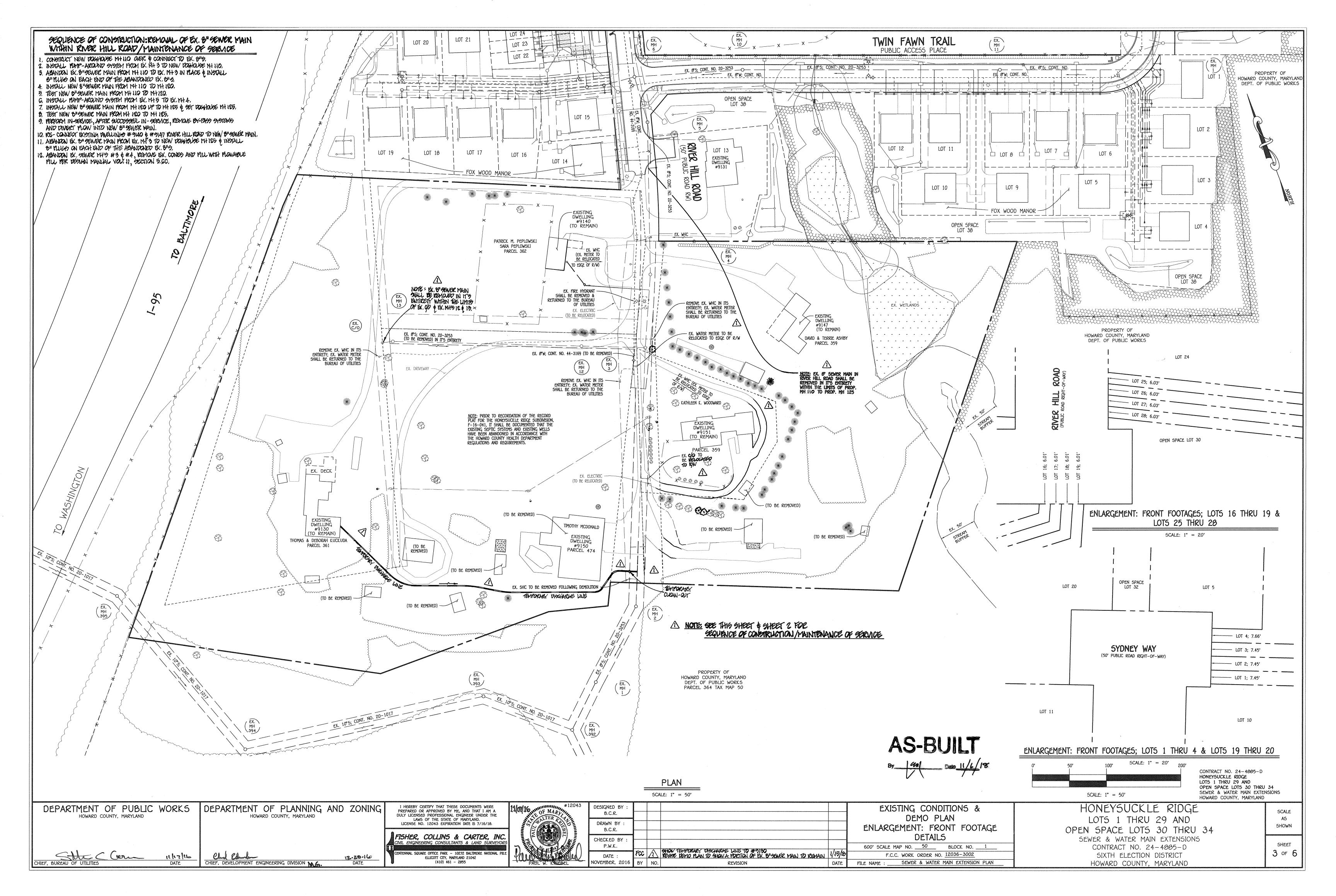
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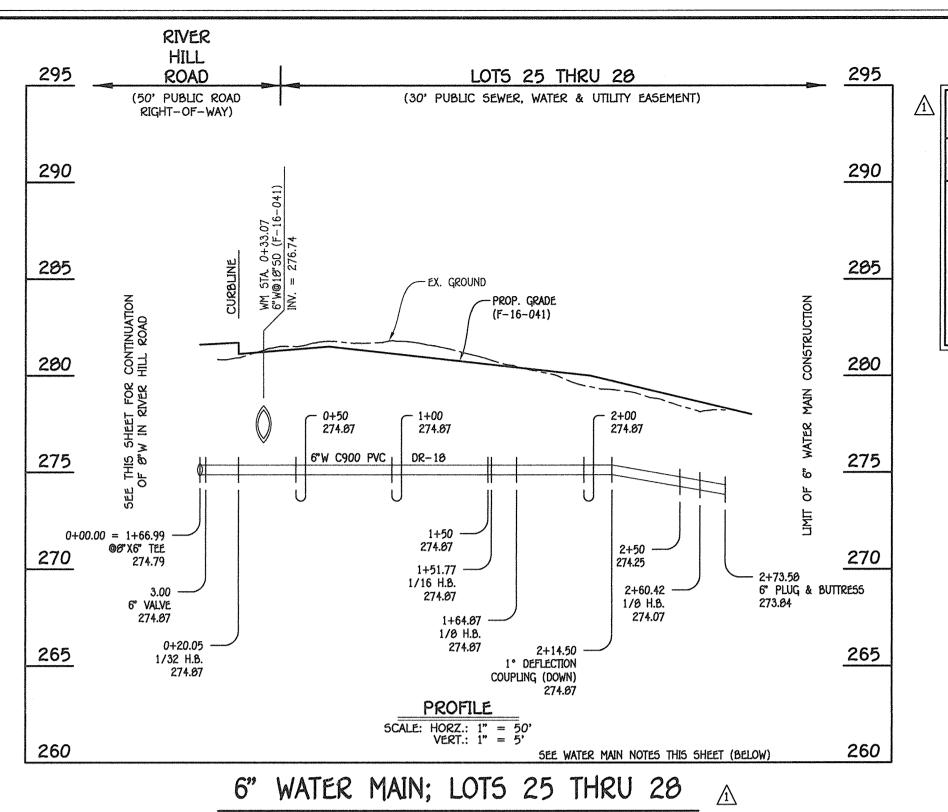
or 6

SCALE

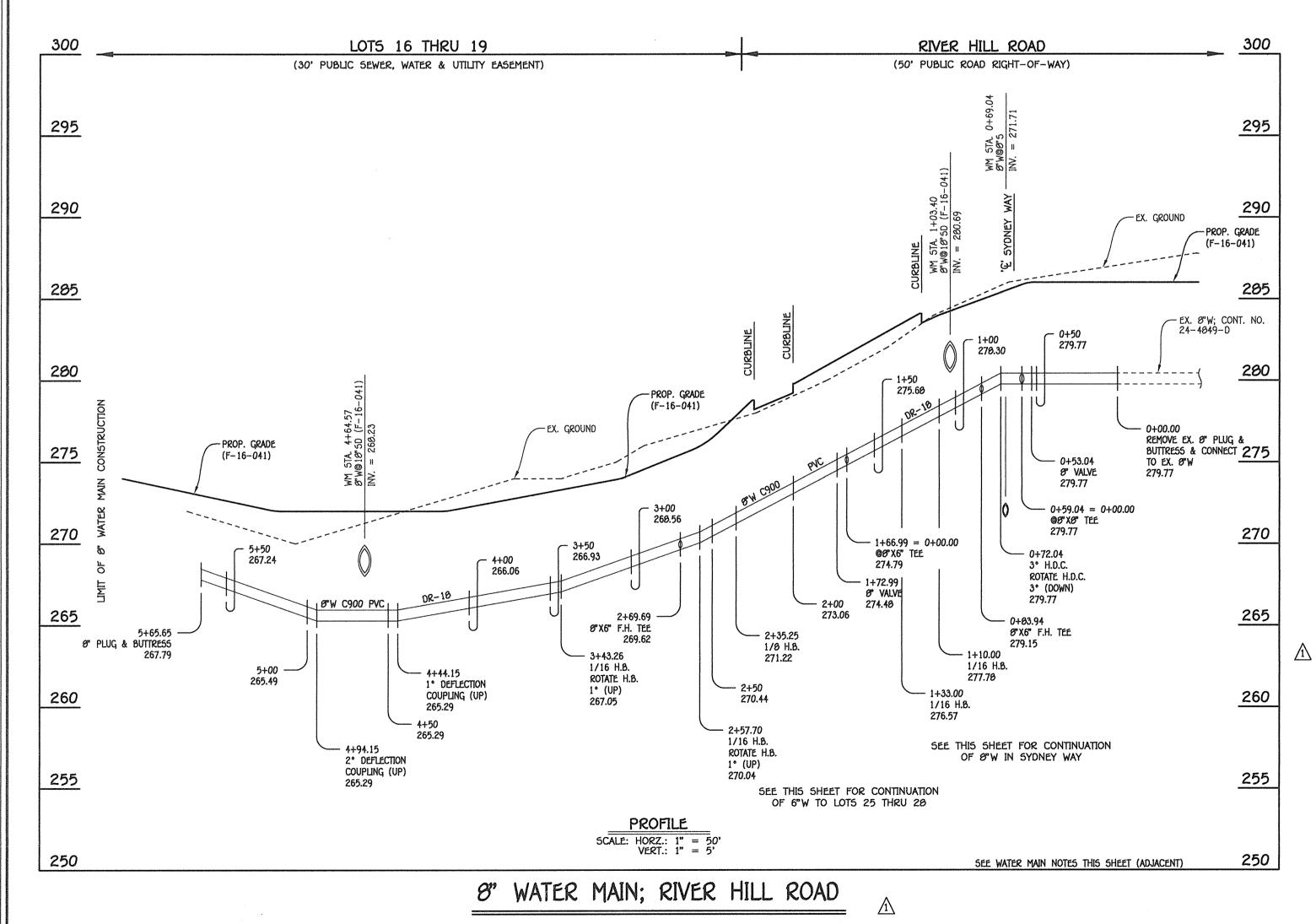
A5

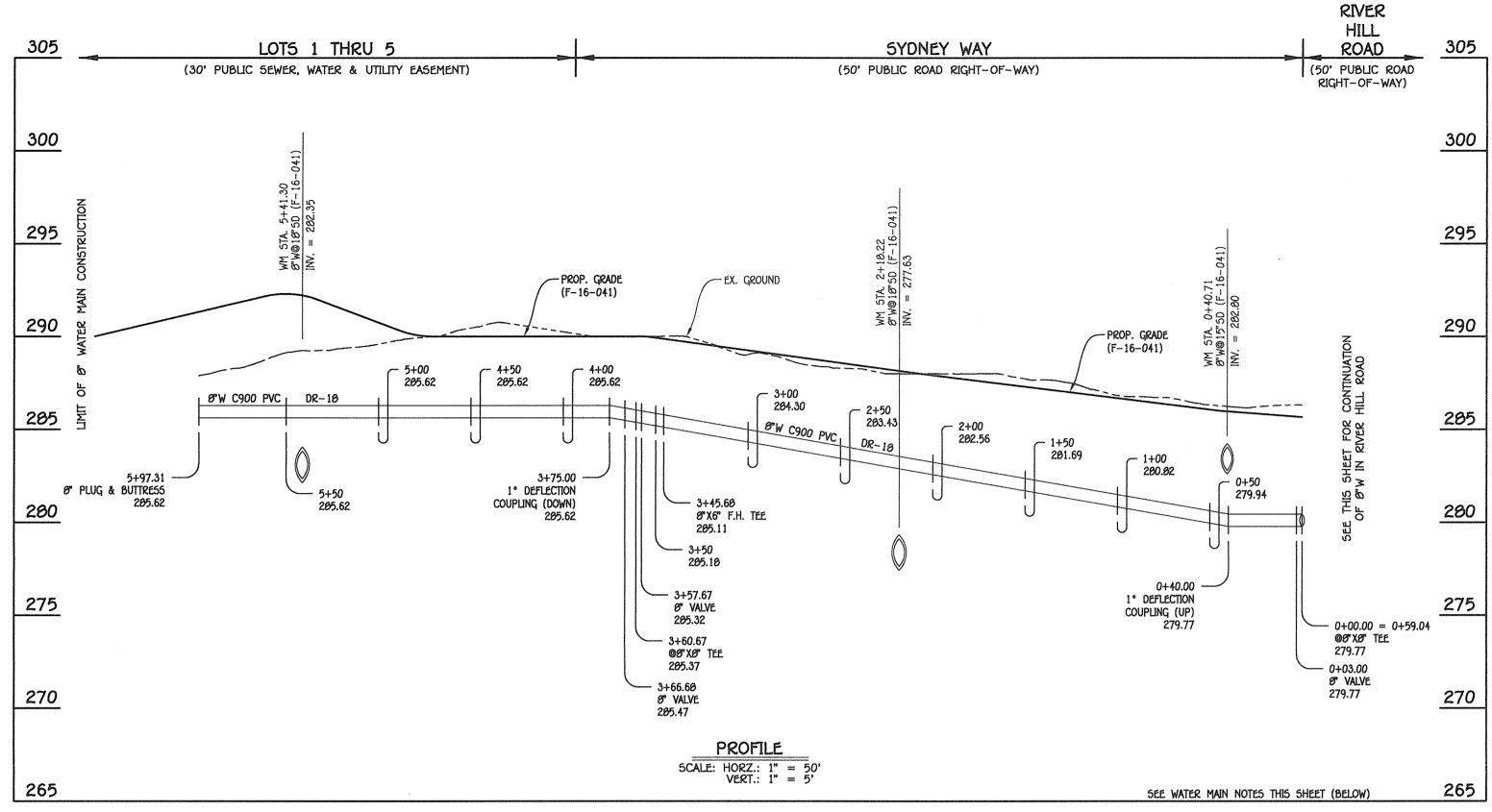






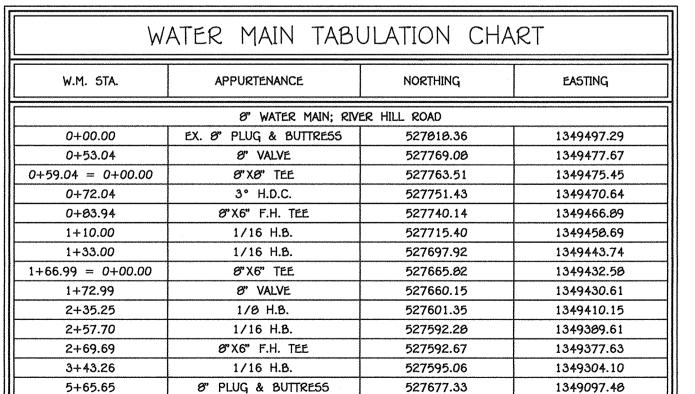
WA	ATER MAIN TAB	ULATION CHA	RT		
W.M. 5TA.	APPURTENANCE	NORTHING	EASTING		
6" WATER MAIN; LOTS 25 THRU 20					
0+00.00 = 1+66.99	Ø"X6" TEE	527665.02	1349432.58		
0+03.00 6" VALVE		527664.88	1349435.42		
0+20.05	1/32 H.B.	527659.51	1349451.60		
1+51.77	1/16 H.B.	527603.31	1349570.74		
1+64.07	1/8 H.B.	527602.04	1349503.70		
2+60.42	1/0 H.B.	527659.40	1349660.21		
2+73.58	6" PLUG & BUTTRESS	527672.14	1349663.50		





8" WATER MAIN; SYDNEY WAY & LOTS 1 THRU 5

WATER MAIN TABULATION CHART					
W.M. STA.	APPURTENANCE	NORTHING	EASTING		
8" WATER MAIN; SYDNEY WAY & LOTS 1 THRU 5					
0+00.00 = 0+59.04	8" X8" TEE	527763.51	1349475.45		
0+03.00	8° VALVE	527764.62	1349472.66		
3+45.60	Ø"X6" F.H. TEE	527891.39	1349154.30		
3+57.60	8° VALVE	527895.83	1349143.15		
3+60.60	Ø"XØ" TEE	527096.94	1349140.36		
3+66.60	8° VALVE	527902.52	1349142.58		
5+97.31	8" PLUG & BUTTRESS	520116.79	1349227.91		



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 4 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 20, 2016.

WATER MAIN NOTES: 1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18. 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION. 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH

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

SCALE: 1" = 50'

CONTRACT NO. 24-4885-D HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-4885-D

A5 SHOWN

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

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 7/16/10. FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS al square office park — 10272 Baltimore National Pik Ellicott city, maryland 21042 (410) 461 — 2055

HEREBY CERTIFY THAT THESE DOCUMENTS WERE

B.C.R. DRAWN BY B.C.R. CHECKED BY P.W.K. REVISE WATER PROFILES FOR RIVER HILL ROAD AND LOTS 25 THRU 20 JANUARY, 2018 BY NO. REVISION

WATER MAIN EXTENSIONS PROFILES, CHARTS & NOTES

DATE FILE NAME : _

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGNED BY

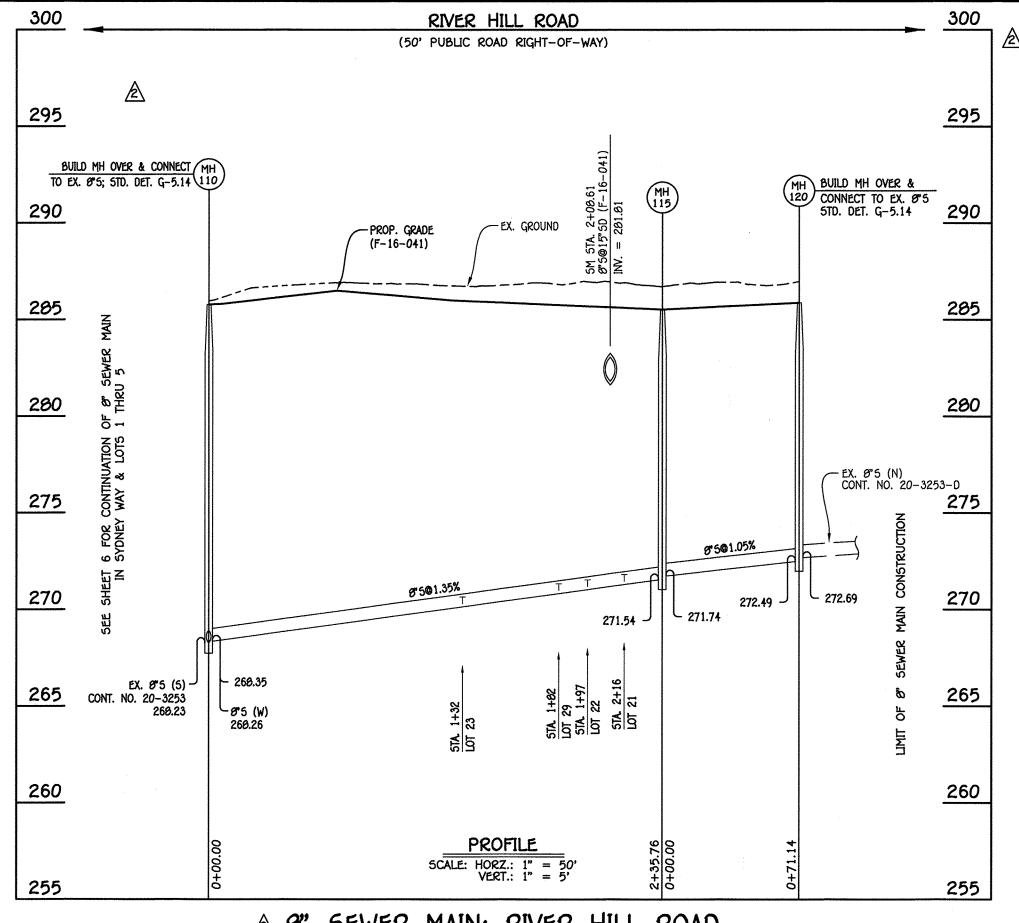
F.C.C. WORK ORDER NO. 12036-3002 SEWER & WATER MAIN EXTENSION PLAN 4 of 6

MANHOLE TABULATION CHART				
NO.	NORTHING	EASTING	RIM ELEVATION	
100	527577.93	1349410.07	276.28	
130	527581.92	1349400.76	276.00	
135	527585.12	1349302.03	272.95	
140	527671.69	1349004.63	272.87	

SEWER HOUSE CONNECTION CHART							
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.	F.F.	
	MH 135 TO MH 140						
0+48 RT.	16	265.98	266.38	270.68	273.05	284.20	
1+09 RT.	17	266.41	266.91	271.11	273.05	284.20	
1+49 RT.	18	266.70	267.10	271.40	273.05	284.20	
@MH 240 RT.	19	267.47	267.87	272.17	273.85	284.20	
@MH 240 RT.	20	267.47	269.27	274.77	N/A	286.97	

HOWARD COUNTY, MARYLAND

5.22.18 DATE



28	SEWER	MAIN;	KIVEK	HILL	KUAU

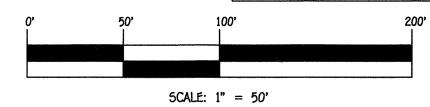
MANHOLE TABULATION CHART						
NO.	NORTHING	EASTING	RIM ELEVATION			
110	527750.05	1349482.21	205.72			
115	527969.91	1349567.27	285.53			
120	528033.98	1349590.20	285.88			

	SEWER HOUSE CONNECTION CHART						
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.	F.F.	
	MH 105 TO MH 110						
0+35 RT.	24	267.55	268.07	273.77	N/A	282.42	
	MH 110 TO MH 115						
1+32 RT.	23	270.30	270.66	275.16	279.44	289.92	
1+82 LT.	29	270.98	271.66	277.36	N/A	289.23	
1+97 RT.	22	271.18	271.58	276.00	278.66	289.00	
2+16 RT.	21	271.44	271.86	280.96	N/A	203.31	

	SEWER HOUSE CONNEC	CTION AS-BUILT LOCATION	ON TABLE
LOT NUMBER	ADDRE55	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1		SMH 150 13.3 Ft.	1-13 68.0 Ft.
2		5MH150 19.3 Ft.	I-13 47.7 Ft.
3		SMH 150 76.2 Ft.	1-13 41.0 Ft.
4			FIRE HYDRANT VALVE 84'FT
5			FHV 57.3 Ft.
6		I-6 21.0Ft.	
7		1-6 74.0 Ft.	1-5 80,5 Ft.
8		WHC Lots 11.3 Ft.	WHC LOT 13 54.4 Ft.
9		WHC Lot 8 56.5 Ft.	WHC Let 9 52.3 Ft.
10		FH 52.0 Ft.	FAV 36.4 Ft.
11		WHC Lot 12 53.1 Ft.	FH 52.7 Ft.
12		WHC Lot 9 55.7 Ft.	WHC Lot 12 9.9 Ft.
13		WHC Lot 8 52-8 Ft.	WHC Lot 13 12.0 Ft.
14		1-5 70.4 Ft.	I-6 78.2 Ft.
15		1-5 75.0 Ft.	I-6 37.5 Ft.
16		I-7 85.2 Ft.	5MH 135 53.7 Ft.
17		I-7 43.4 Ft.	WHE Lot 17 11.6 Ft.
18		1-7 48.5 FA	WHIC Lot 18 11.4 Ft.
19		SMH 140 21.3 Ft.	WHC Lot 19 13.9 Ft.
20		SMH :40 92.2 Ft.	SHE Lot 19 88.3 Ft.
21		M-2 36.3Ft.	1-1 21.5 Ft.
22		M-2 56.0 Ft.	WHC Lot 21 35.2 Ft.
23		1-1 78.0Ft.	I-11 64.4 Ft.
24		5MH110 75.9 Ft.	SMH 105 49.1 Ft.
25		WHC Lot 20 19.5 Ft.	SMH 160 27.5 Ft.
26		5MH 160 11.6 Ft.	WHC Lot 25 29.0 Ft.
27		SMH 155 27.0 Ft.	WHC Lot 27 14.6 Ft.
28		SMH 155 16.3 Ft.	WHC Lot 28 23.0 Ft.
29		1-2 31.6 Ft.	SMH 115 58.4 Ft.

	WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE							
LOT NUMBER	ADDRESS		LOCATION DI	MENSION 1	LOCATION D	IMENSION 2		
1			5MH 150	22.2 Ft.	I-13	74.0 Ft.		
2			SMH 150	10.9 Ft.	1-13	54.0 Ft.		
3			5 MH 150	67.0 Ft.	I-13	35. O Ft,		
4			SMH 145	98.3計	F.H.V.	93.7 Ft.		
5			SMH 145	45.6 Ft.	F. H.V.	48.4 Ft.		
6			I-6	26.2 Ft.	1-5	42.0 Ft.		
7			I-6	84.8 Ft.	1-5	90.3Ft.		
8			SHC Lot 8	11.3 Ft.	WHCLotis	92.3Ft.		
9			WHCLot 8	62.3 Ft.	5HC Lot 8			
10			FIRE HYDRAN		F. H.V.	29.2 Ft.		
11			WHC Lot 12	63.0 Ft.	F.H	42.8 Ft.		
12			WHC Lot 9	52.3 Ft.	WHC Lot 19			
13			WHC Lot B	52.9 Ft.	SHC Lot 8	54.3 Ft.		
14	<i>'</i>		2-5	79.0 Ft.	I-6	85.8Ft.		
15			1-6	38.9 Ft	I-5	20.6 Ft.		
16			1-7	94.4 Ft.	SMH 135	43.7 Ft.		
17			1-7	46.4 Ft.	WHC Lot 18	40.3 Ft,		
18			1-7	42.5 Pt.	SHC Lot 18	11.3 Ft.		
19			SMH 140	26.2 Ft.	SHCLOT 19	14.0 Ft.		
20			F, H.	31.4 Ft.	SMH 145	31.1 Ft.		
21			MH 2	21.2 Ft.	1-1	22.054.		
22			1-2	44,0 H.	I-1	24.4 Ft.		
23			I-11	61.8 Ft.	1-2	93.6 Ft.		
24			SMH 110	74.6 Ft.	F, H.	86.3 Ft-		
25			SMH 160	23.0 Ft.	WHC Let 26	22.0 7-4-		
26			WHC LOT 25	22.0 Ft.	SMH 160	12.2 Ft,		
27			5MH 155	54.0 Ft,	5MH 160	56.3 Ft.		
28			SMH 155	14.6 Ft	WHCLot 27			
29			SMH 155	25.9 Ft;	WHC Lot 21	51.3 Ft.		

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 5 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON FEBRUARY 20, 2018.



CONTRACT NO. 24-4005-D HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

Chief, Development Engineering Division M.G. HIEF, BUREAU OF UTILITIES

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 7/16/18. FISHER, COLLINS & CARTER, INC. AL SQUARE OFFICE PARK — 10272 BALTIMORE NATIONAL ELLICOTT CITY, MARYLAND 21042 (410) 461 — 2055

#12043	DESIGNED BY : B.C.R.					,	
Tagas de la companya	DRAWN BY : B.C.R.						
P SUPPLY OF SU	FCC		REVISE & SEWER MAIN PROFILE; RIVER HILL ROAD & CHARTS	4.	/24/18	ĺ	
	CHECKED BY : P.W.K.	FCC	Λ	ADD SHC CHART FOR LOTS 21-24 & 29	1.	/11/18	ŀ
	DATE :	FCC	Λ	REMOVE SECTION OF SEWER PROFILE FOR RIVER HILL ROAD	1.	/11/18	ŀ
BEL	APRIL, 2016	ΒY	NO.	REVISION		DATE	
	1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 10						=

SEWER MAIN EXTENSIONS PROFILES, CHARTS & "AS-BUILT" LOCATION TABLES

F.C.C. WORK ORDER NO. 12036-3002

FILE NAME : SEWER & WATER MAIN EXTENSION PLAN

HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-4885-D SIXTH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

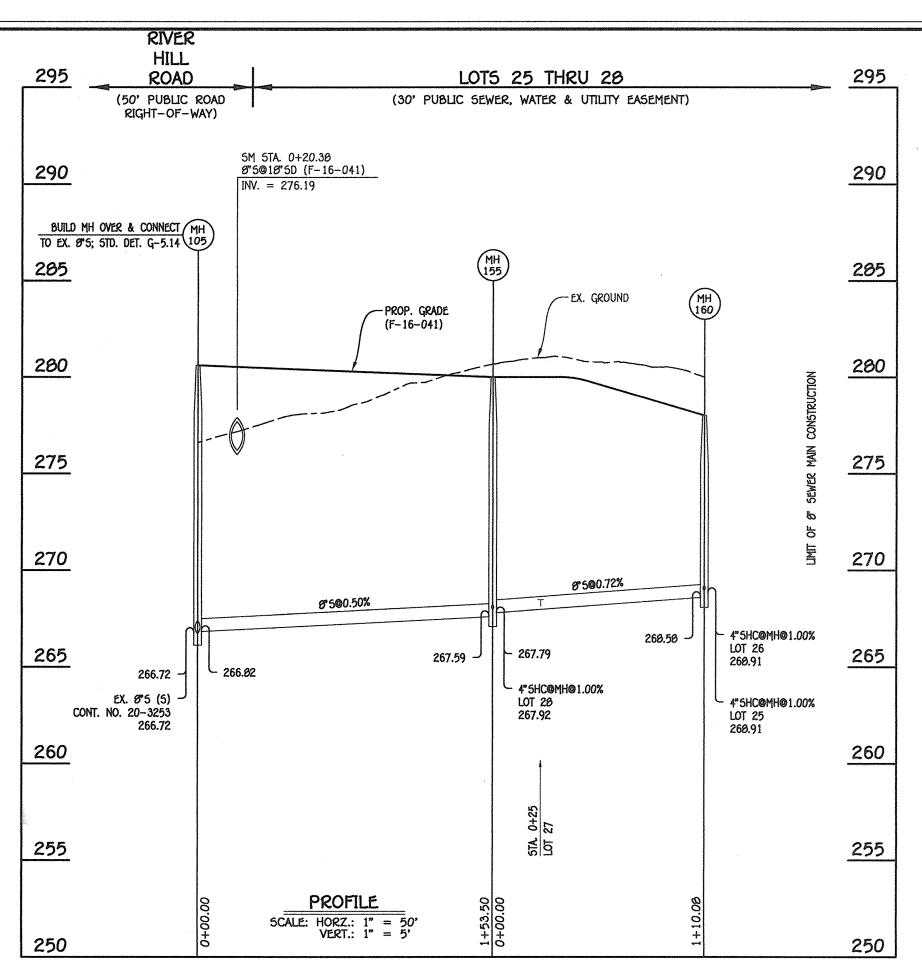
SHOWN SHEET

5 of 6

JLWLK I	YAIN; DYDINEY	WAY & LO	15 1 INKU
<u> </u>	IANHOLE TABI	JLATION CHA	ART
NO. NORTHING		T	<u> </u>
NO.	NORTHING	EASTING	RIM ELEVATION
NO.	NORTHING 527749.55	EASTING 1349403.45	RIM ELEVATION

	SEWER H	HOUSE C	ONNECT	ION CH	ART	
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.	F.F.
		MH 110	TO MH 145			
0+59 LT.	15 (DHC)	274.50	274.90	279.30	280.78	291.26
0+64 RT.	6 (DHC)	274.50	275.14	279.54	280.46	290.94
1+21 LT.	14 (DHC)	275.00	275.40	279.80	280.97	291.45
1+26 RT.	7 (DHC)	275.00	275.64	280.04	201.25	291.73
1+79 LT.	13 (DHC)	275.50	275.90	280.30	281.10	291.58
1+04 RT.	Ø (DHC)	276.00	276.64	281.04	201.97	292.45
2+43 LT.	12 (DHC)	276.50	276.90	281.30	282.40	292.88
2+48 RT.	9 (DHC)	277.00	277.64	282.04	263.19	293.67
3+06 LT.	11 (DHC)	277.50	277.90	282.30	283.12	293.60
3+31 RT.	10 (DHC)	278.00	278.64	283.04	283.94	294.42
@MH 145 LT.	20 (DROP CONN.)	279.50	280.18	286.08	N/A	206.97
		MH 145	TO MH 150			
0+54 LT.	5 (DHC)	278.00	278.20	283.00	283.93	294.41
0+86 LT.	4 (DHC)	278.50	278.70	283.50	284.88	295.36
1+65 LT.	3	277.22	277.42	282.22	284.06	293.54
2+26 LT.	2	278.44	278.64	263.44	284.33	294.81
@MH 150 LT.	1	278.95	279.19	283.49	284.33	294.81

Z. Z0.18 DATE

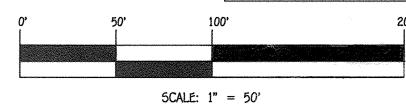


△ 8" SEWER MAIN; LOTS 25 THRU 28

MANHOLE TABULATION CHART							
NO.	NORTHING	EASTING	RIM ELEVATION				
105	527652.92	1349442.13	280.60				
155	527587.43	1349580.96	280.00				
160	527653.50	1349669.01	278.00				

	SEWER H	OUSE C	ONNECT	ION CHA	ART	
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	8.E.	F.F.
		MH 105	TO MH 155			
@MH 155 RT.	28 (@1.00%)	267.92	268.06	271.81	272.86	283.34
		MH 155	TO MH 160			<u> </u>
0+25 RT.	27 (@1.00%)	268.14	268.24	271.89	272.44	282.92
@MH 160 RT.	26 (@1.00%)	268.91	269.01	271.81	272.04	282.52
@MH 160 CEN.	25 (@1.00%)	268.91	269.18	272.03	272.04	282.52

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 6 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON DECEMBER 20, 2016.



CONTRACT NO. 24-4805-D HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

HONEYSUCKLE RIDGE LOTS 1 THRU 29 AND OPEN SPACE LOTS 30 THRU 34 SEWER & WATER MAIN EXTENSIONS CONTRACT NO. 24-4885-D

SHOWN

DEPARTMENT OF PUBLIC WORKS

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 IS 7/16/10. FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS NIAL SQUARE OFFICE PARK — 10272 BALTIMORE NATIONAL PIK ELLICOTT CITY, MARYLAND 21042 (410) 461 — 2055



DESIGNED BY

B.C.R. DRAWN BY : B.C.R. CHECKED BY : PCC A REVISE SLOPE MY 110 TO MY US P.W.K. FCC 1 REVISE SEWER MAIN PROFILES & CHARTS FOR SYDNEY WAY AND LOTS 25 THRU 28 JANUARY, 2018 BY NO. **REVISION**

SEWER MAIN EXTENSIONS PROFILES & CHARTS 600' SCALE MAP NO. _______ BLOCK NO. _____1 F.C.C. WORK ORDER NO. 12036-3002

FILE NAME : SEWER & WATER MAIN EXTENSION PLAN

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET 6 of 6