

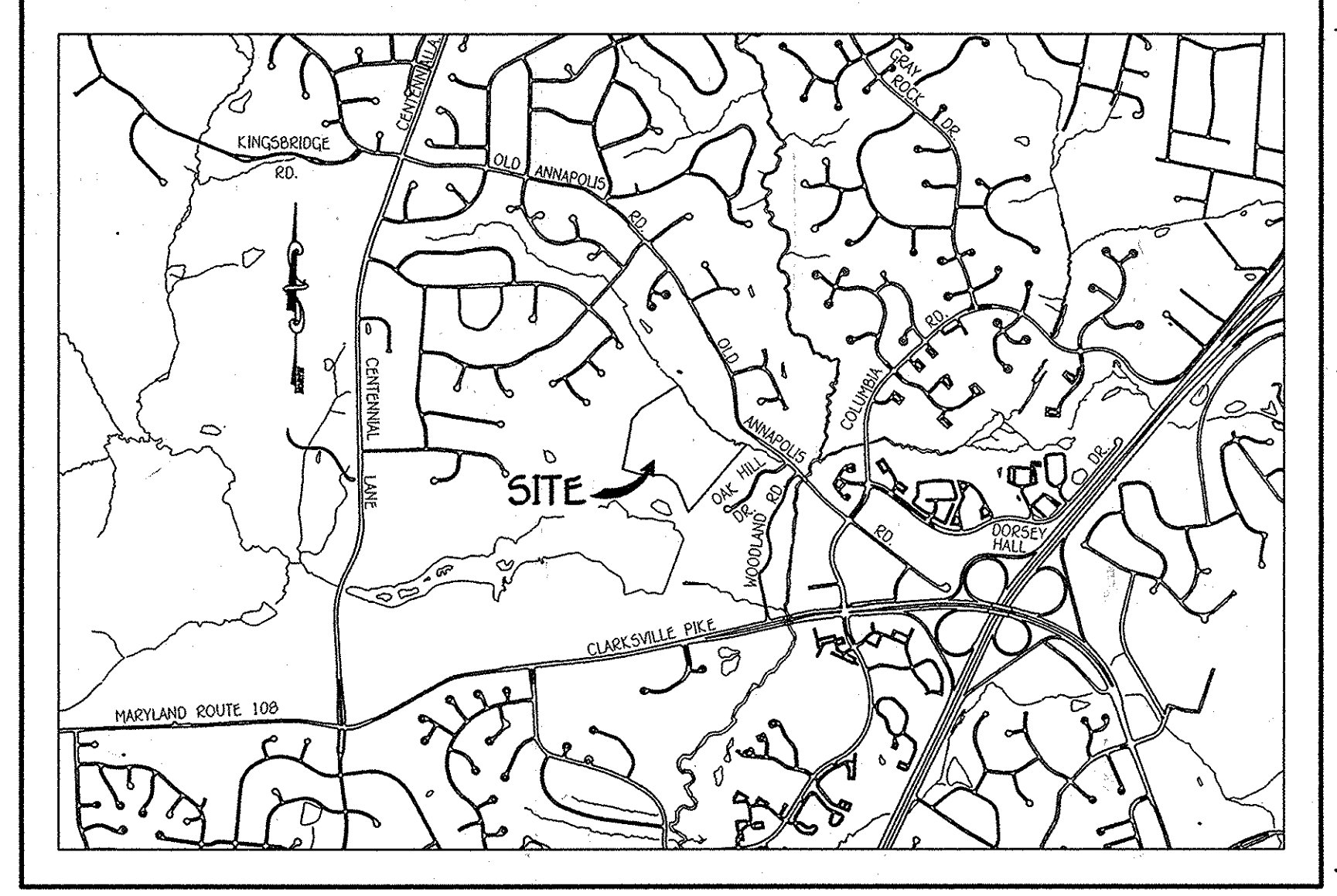
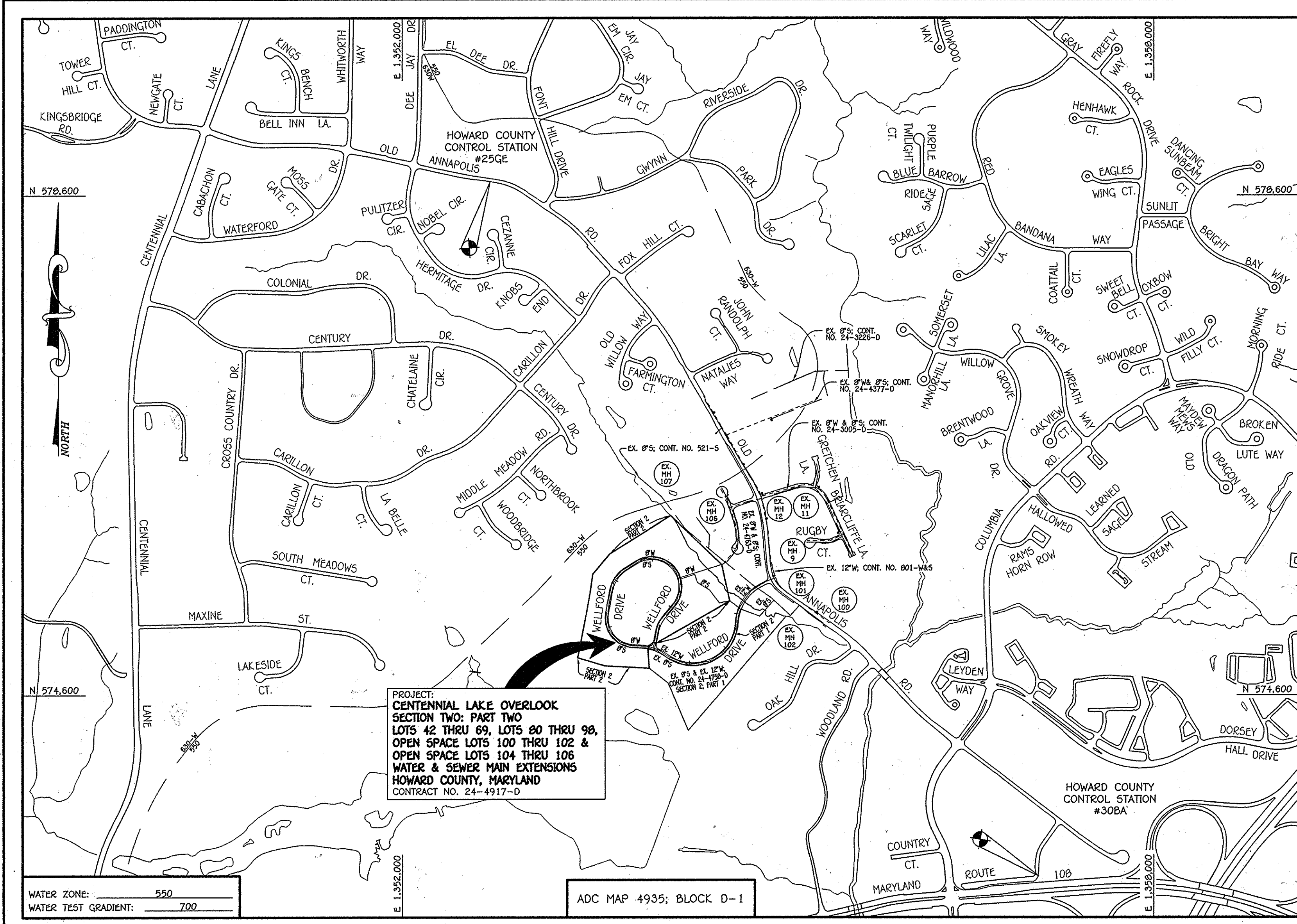
QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" S, C900 PVC DR-18	324 L.F.	324 L.F.	C900 PVC	National Pipe & Plastic
8" S, SDR-35	1,887 L.F.	1,887 L.F.	SDR-35	"
4" S	1,140 L.F.	1,140 L.F.	SDR-35	"
MANHOLES	25 EACH	25 EACH	Concrete	Contractors Precast
TYPE 'B' DROP MH	1 EACH	1 EACH	Concrete	"
CLEAN-OUTS	44 EACH	44 EACH	Concrete	"
8" W, HDPE SDR-11	250 L.F.	250 L.F.	SDR-11 HDPE	"
8" W, C900 PVC DR-18	1,983 L.F.	1,983 L.F.	C900	National Pipe & Plastic
8" W, C900 PVC DR-18	88 L.F.	88 L.F.	C900	"
1-1/2" WHC	1,256 L.F.	1,256 L.F.	Copper	Cambridge Lee
3" DEFLECTION COUPLING	6 EACH	4 EACH	PVC	Tyler/Union
1/16 H.B.	10 EACH	10 EACH	DIP	MJ12 Fittings
1/32 H.B.	10 EACH	10 EACH	DIP	MJ12 Fittings
8"x2" TEE	1 EACH	1 EACH	DIP M.J	Tyler/Union
8"x2" TEE	4 EACH	4 EACH	DIP M.J	"
8" VALVE	5 EACH	5 EACH	DIP	"
8" VALVE	4 EACH	4 EACH	DIP	Mueller
FIRE HYDRANT	4 EACH	4 EACH	DIP	Mueller
CONTINUITY TEST STATION	4 EACH	4 EACH	Concrete	Vestal
1" OUTSIDE METER SETTING	45 EACH	45 EACH	Concrete	AY McDonald
# WATER MAIN OVER CROSSING	1 LUMP SUM	1 LUMP SUM		

**BENCHMARK INFORMATION**

B.M.#1 - HOWARD COUNTY CONTROL STATION #25GE - HORIZONTAL - NAD '83  
 (LOCATED ALONG OLD ANNAPOLIS ROAD, ON THE SOUTH SIDE, JUST ACROSS THE STREET FROM HOUSE #9790 DRIVEWAY, APPROX. 1.6' OFF EDGE OF ROAD, AND 31.9' WEST OF POWER POLE #363182)  
 N 578,706.5244  
 E 1,352,699.6626  
 ELEVATION = 445.695 - VERTICAL - (NAVD '88)

B.M.#2 - HOWARD COUNTY CONTROL STATION #30BA - HORIZONTAL - (NAD '83)  
 (LOCATED NEAR THE FARMERS & MERCHANTS NATIONAL BANK PARKING LOT, JUST OFF OF OLD ROUTE 108, SET BEHIND THE GUARD RAIL, APPROX. 37.1' SW OFF POWER POLE #268713)  
 N 573,149.0939  
 E 1,357,083.1735  
 ELEVATION = 397.140 - VERTICAL - (NAVD '88)

SHEET INDEX	
SHEET 1	TITLE SHEET
SHEET 2	PLAN SHEET
SHEET 3	WATER PROFILE SHEET
SHEET 4	SEWER PROFILE SHEET
SHEET 5	SEWER PROFILE SHEET
SHEET 6	SEWER PROFILE SHEET
SHEET 7	SHC & WHC "AS-BUILT" CHARTS



**GENERAL NOTES** SCALE: 1" = 200'

- 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 MARCH, 2012 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 NO. 30BA & NO. 25GA.
- ALL VERTICAL CONTROLS ARE BASED ON NAVD '88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE 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 ANY POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (S) 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 PUG, 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 (CONTRACTOR SERVICES)	1-800-252-1133
BGE (CONTRACTOR SERVICES)	410-637-8713
BGE (EMERGENCY)	410-685-0123
BUREAU OF UTILITIES	410-313-4900
COLONIAL PIPELINE CO.	410-795-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-9533
VERICON	1-800-743-0933 / 410-224-9210
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE MAINS.
- 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 DW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

TYPE OF BUILDING: RESIDENTIAL - SINGLE FAMILY DETACHED	
NUMBER OF BUILDABLE LOTS:	47
NUMBER OF OPEN SPACE LOTS:	6
NO. OF WATER HOUSE CONNECTIONS:	45
NO. OF SEWER HOUSE CONNECTIONS:	44
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT SAVAGE, MD

**LOCATION MAP**  
SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:  
F-14-081  
ECP-12-053

# CONTRACT NO. 24-4917-D

## CENTENNIAL LAKE OVERLOOK

### SECTION TWO: PART TWO

#### LOTS 42 THRU 69, LOTS 80 THRU 98, OPEN SPACE LOTS 100 THRU 102 & OPEN SPACE LOTS 104 THRU 106 WATER & SEWER MAIN EXTENSIONS

#### HOWARD COUNTY, MARYLAND

**DEVELOPER'S CERTIFICATION**

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

*Paul W. Keibel* FOR: **05-07-15**  
 Signature of Developer  
 Beazer Homes Corporation 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. Keibel* FOR: **05/07/15**  
 Signature of Engineer  
 Beazer Homes Corporation DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 309 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE ROAD CONSTRUCTION PLANS, F-14-081.

*Paul W. Keibel* FOR: **05-07-15**  
 Signature of Developer  
 Beazer Homes Corporation DATE

F-14-081  
 MDE TRACKING #2013602051/13-NT-3305

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

APPROVED: *John R. Robertson* 6/4/15  
 HOWARD SOIL CONSERVATION DISTRICT DATE

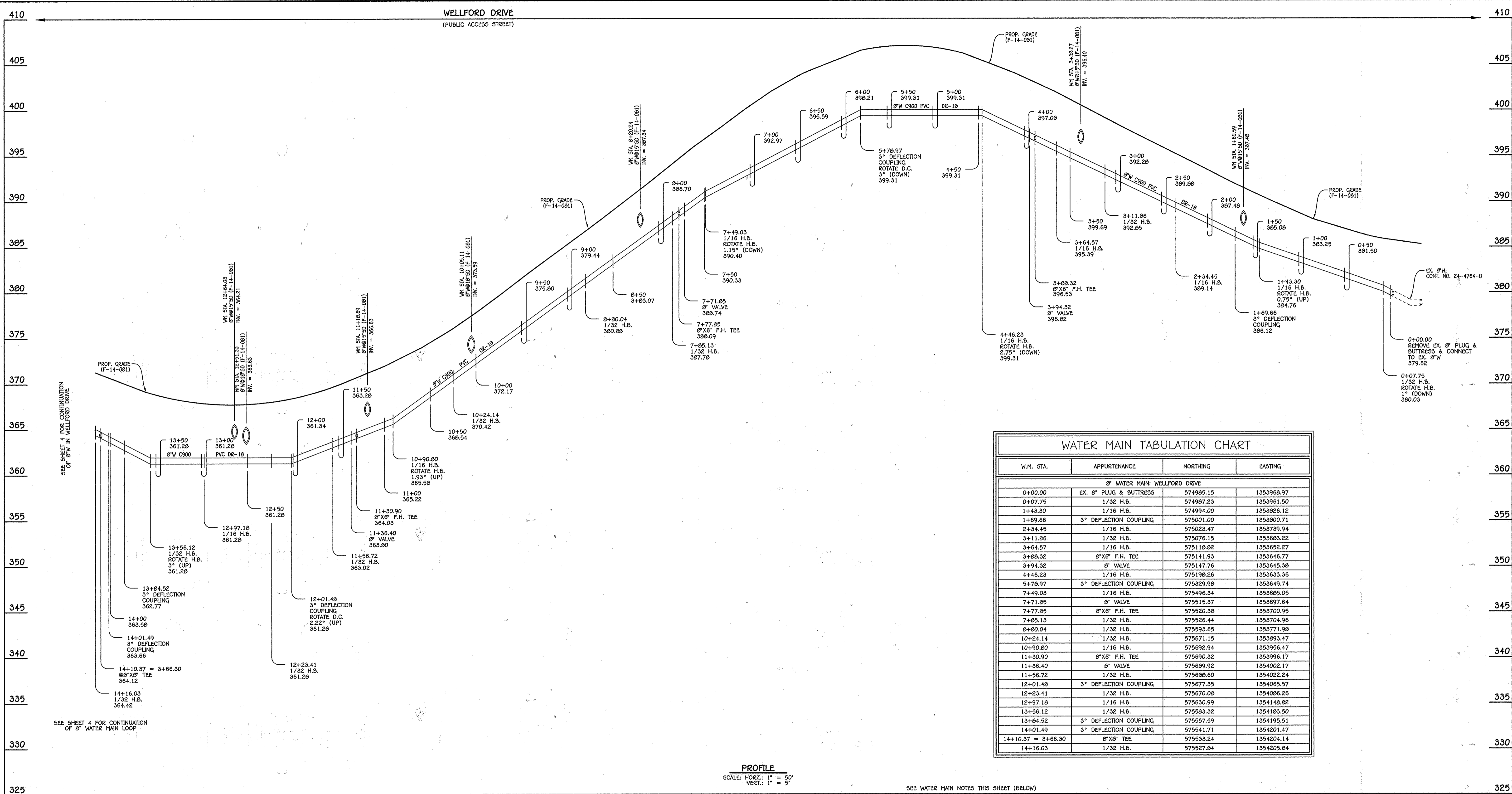
LEGEND	
---	EX. WATER MAIN
---	EX. SEWER MAIN
o	EX. SEWER MANHOLE
---	EX. WATER, SEWER & UTILITY EASEMENT
---	EX. FIRE HYDRANT
o	EX. VALVE
---	PROP. WATER MAIN
---	PROP. SEWER MAIN
o	PROP. SEWER MANHOLE
---	PROP. WATER, SEWER & UTILITY EASEMENT
---	PROP. WHC
---	PROP. SHC
---	PROP. FIRE HYDRANT
o	PROP.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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Sita C. Coen</i> 5/19/15 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND <i>Paul W. Keibel</i> 6-12-15 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	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 7/16/16. <b>FISHER, COLLINS &amp; CARTER, INC.</b> CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELICOTT CITY, MARYLAND 21046 (410) 461-2895 	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: MAY, 2015 BY NO. REVISION DATE	<b>WATER &amp; SEWER MAIN EXTENSIONS TITLE SHEET</b> 600' SCALE MAP NO. 30 BLOCK NO. 2 F.C.C. WORK ORDER NO. 11042-3001 FILE NAME: WATER & SEWER MAIN EXTENSION PLAN	<b>CENTENNIAL LAKE OVERLOOK</b> SECTION TWO: PART TWO LOTS 42 THRU 69, LOTS 80 THRU 98, OPEN SPACE LOTS 100 THRU 102 & OPEN SPACE LOTS 104 THRU 106 WATER & SEWER MAIN EXTENSIONS CONTRACT NO. 24-4917-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 7
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WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: WELLFORD DRIVE			
0+00.00	EX. 8" PLUG & BUTTRESS	574985.15	1353968.97
0+07.75	1/32 H.B.	574987.23	1353961.50
1+43.30	1/16 H.B.	574994.00	1353826.12
1+69.66	3" DEFLECTION COUPLING	575001.00	1353800.71
2+34.45	1/16 H.B.	575023.47	1353739.94
3+11.86	1/32 H.B.	575076.15	1353683.22
3+64.57	1/16 H.B.	575118.82	1353652.27
3+88.32	8" X 6" F.H. TEE	575141.93	1353646.77
3+94.32	8" VALVE	575147.76	1353645.38
4+46.23	1/16 H.B.	575198.26	1353633.36
5+78.97	3" DEFLECTION COUPLING	575329.98	1353649.74
7+49.03	1/16 H.B.	575496.34	1353685.05
7+71.85	8" VALVE	575515.37	1353697.64
7+77.85	8" X 6" F.H. TEE	575520.38	1353700.95
7+85.13	1/32 H.B.	575526.44	1353704.96
8+80.04	1/32 H.B.	575593.65	1353771.98
10+24.14	1/32 H.B.	575671.15	1353893.47
10+90.80	1/16 H.B.	575692.94	1353956.47
11+30.90	8" X 6" F.H. TEE	575690.32	1353996.17
11+36.40	8" VALVE	575689.92	1354002.17
11+56.72	1/32 H.B.	575688.60	1354022.24
12+01.48	3" DEFLECTION COUPLING	575677.35	1354065.57
12+23.41	1/32 H.B.	575670.08	1354086.26
12+97.18	1/16 H.B.	575630.99	1354148.82
13+56.12	1/32 H.B.	575583.32	1354183.50
13+84.52	3" DEFLECTION COUPLING	575557.99	1354195.51
14+01.49	3" DEFLECTION COUPLING	575541.71	1354201.47
14+10.37 = 3+66.30	8" X 8" TEE	575533.24	1354204.14
14+16.03	1/32 H.B.	575527.84	1354205.84

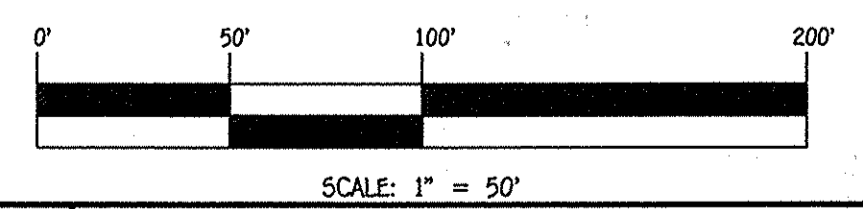
PROFILE  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

SEE WATER MAIN NOTES THIS SHEET (BELOW)

**8" WATER MAIN: WELLFORD DRIVE**

NOTE: A COMPLETE SECTION OF 20' LENGTH WATER MAIN PIPE SHALL BE CENTERED UNDER ALL STORM DRAIN CROSSINGS.

- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE AWMA C900 PVC PIPE; DR-18 (EXCEPT THE STREAM CROSSING)
  - ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II - WATER AND SEWER STANDARDS FOR AWMA C900 PVC WATER PIPE INSTALLATION.
  - DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED HIGH DEFLECTION COUPLINGS.
  - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

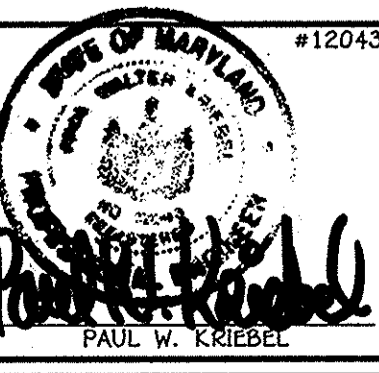


CONTRACT NO. 24-4917-D  
CENTENNIAL LAKE OVERLOOK  
SECTION TWO: PART TWO  
LOTS 42 THRU 69, LOTS 80 THRU 98, OPEN SPACE LOTS 100 THRU 102 & OPEN SPACE LOTS 104 THRU 106  
WATER & SEWER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
S. C. C. [Signature]  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
[Signature]  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

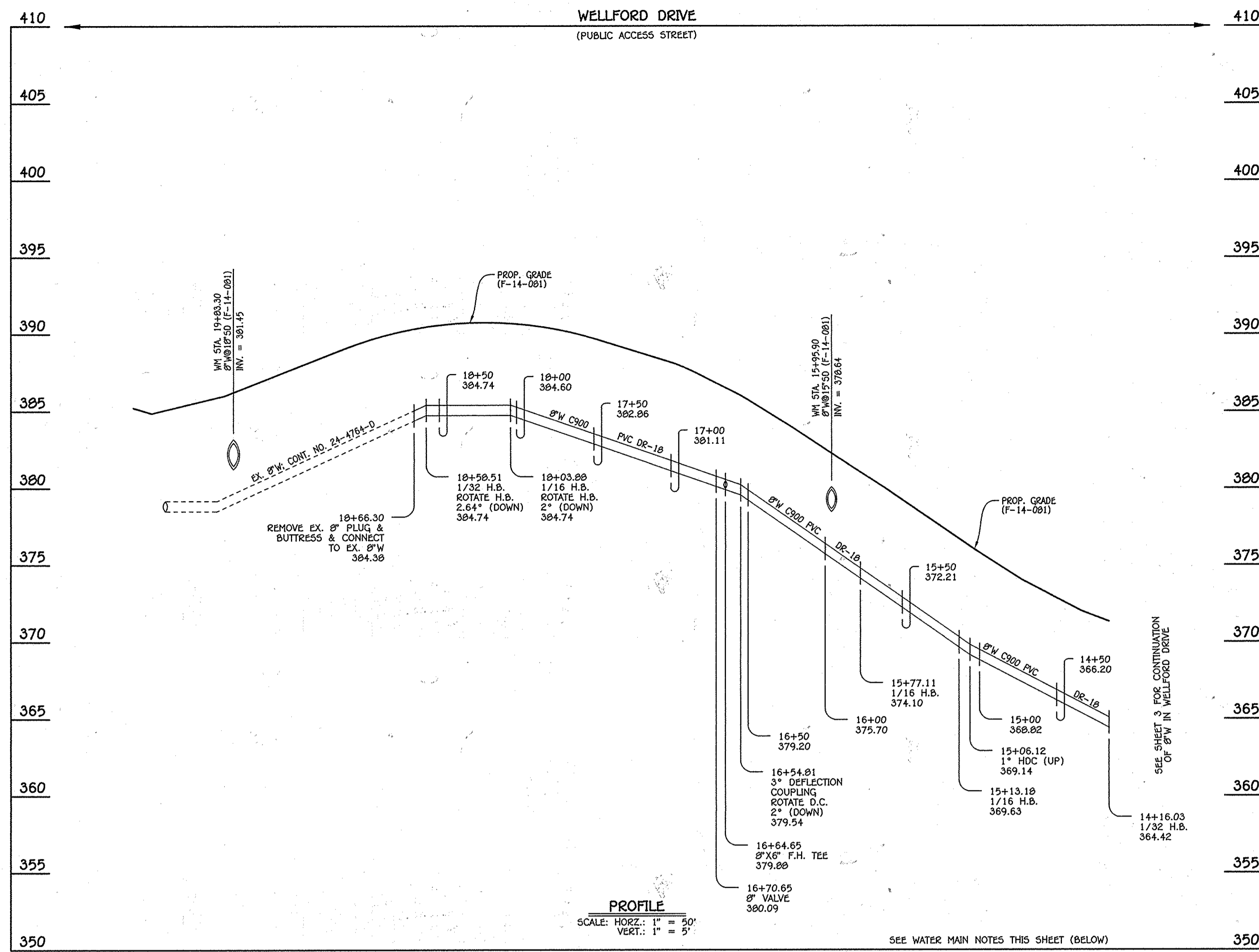
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LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.  
**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21040  
(410) 461-2895



DESIGNED BY: [Blank]  
DRAWN BY: [Blank]  
CHECKED BY: [Blank]  
DATE: MAY, 2015  
BY NO. [Blank] REVISION [Blank] DATE [Blank]

**WATER MAIN EXTENSION  
PROFILE, CHART & NOTES**  
600' SCALE MAP NO. 30 - BLOCK NO. 2  
F.C.C. WORK ORDER NO. 11042-3001  
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

**CENTENNIAL LAKE OVERLOOK**  
SECTION TWO: PART TWO  
LOTS 42 THRU 69, LOTS 80 THRU 98, OPEN SPACE LOTS 100 THRU 102 & OPEN SPACE LOTS 104 THRU 106  
WATER & SEWER MAIN EXTENSIONS  
CONTRACT NO. 24-4917-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE AS SHOWN  
SHEET 3 OF 7



**8" WATER MAIN: WELLFORD DRIVE**

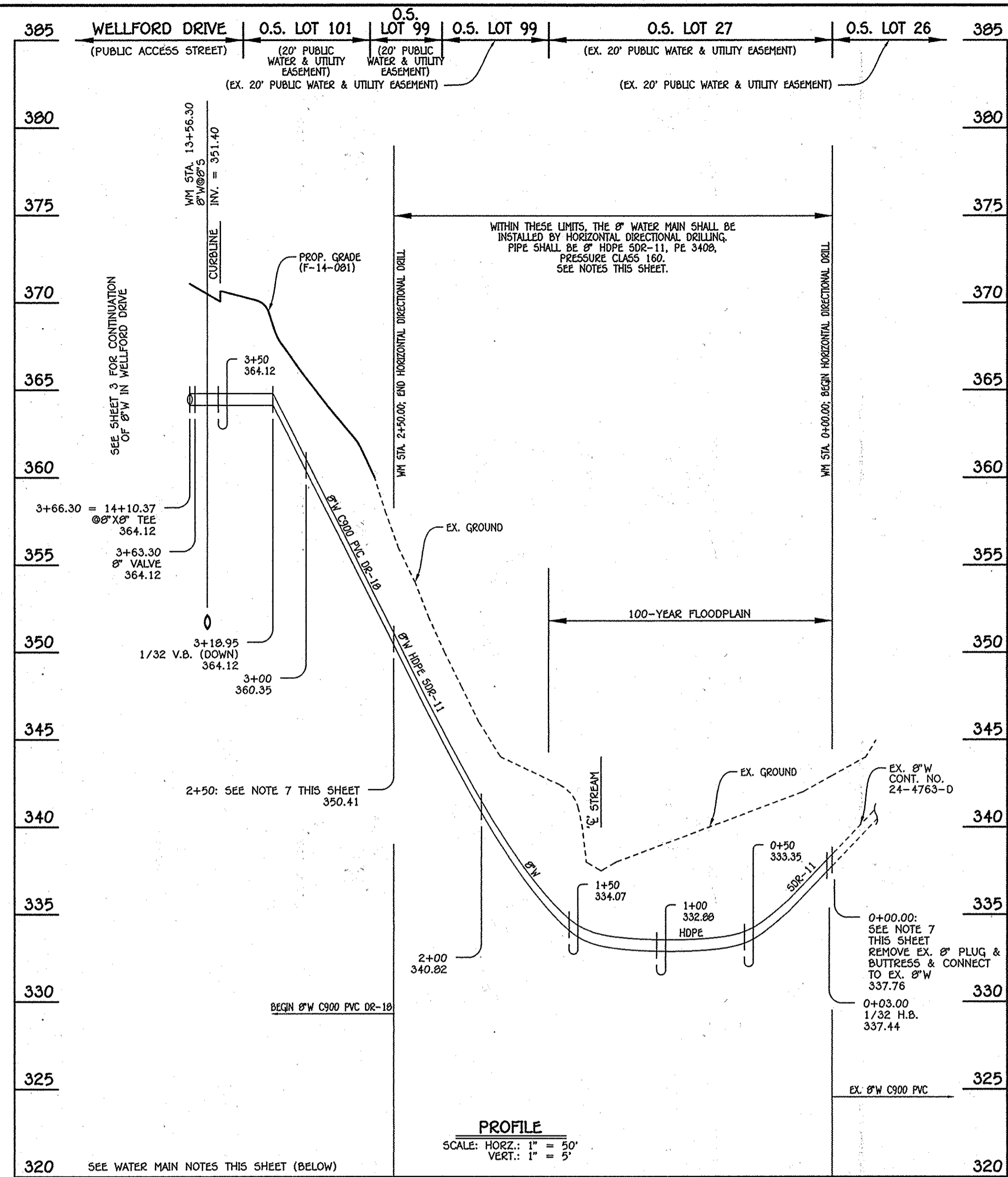
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: WELLFORD DRIVE			
15+13.18	1/16 H.B.	575431.00	1354213.69
15+77.11	1/16 H.B.	575369.35	1354196.77
16+54.81	3" DEFLECTION COUPLING	575306.73	1354150.78
16+64.65	8" X 6" F.H. TEE	575299.20	1354144.44
16+70.65	8" VALVE	575294.61	1354140.58
18+03.88	1/16 H.B.	575192.70	1354054.77
18+58.51	1/32 H.B.	575141.59	1354035.46
18+66.30	EX. 8" PLUG & BUTTRESS	575133.93	1354034.02

**8" WATER MAIN: HORIZONTAL DIRECTIONAL DRILL**

- NOTES:**
1. THE MANUFACTURE AND INSTALLATION OF HDPE PRESSURE PIPE SHALL MEET THE LATEST REQUIREMENTS OF AWWA C906, POLYETHYLENE (PE) PRESSURE PIPE AND FITTINGS, 4 INCH THROUGH 63 INCH FOR WATER DISTRIBUTION AND TRANSMISSION.
  2. ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA C906 STANDARD SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE.
  3. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT.
  4. ALL HDPE PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
  5. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH COUNTY DESIGN STANDARDS FOR PVC WATER PIPE INSTALLATION.
  6. METALLIC FITTINGS AND APPURTENANCES SHALL BE CATHODICALLY PROTECTED.
  7. AT THE TERMINATIONS OF THE HORIZONTAL DIRECTIONAL DRILL, THE 8" HDPE WATER MAIN SHALL BE ANCHORED AND RESTRAINED TO PREVENT ANY SEPARATION FROM THE CONNECTING / CONTINUING 8" WATER MAIN EXTENSION.
  8. THE 20' PUBLIC WATER AND UTILITY EASEMENT ASSOCIATED WITH THE 8" WATER MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING SHALL BE CLEARED OF ALL TREES AND GRADED TO ALLOW VEHICULAR ACCESS BY THE BUREAU OF UTILITIES FOR FUTURE MAINTENANCE OF THE WATER MAIN.

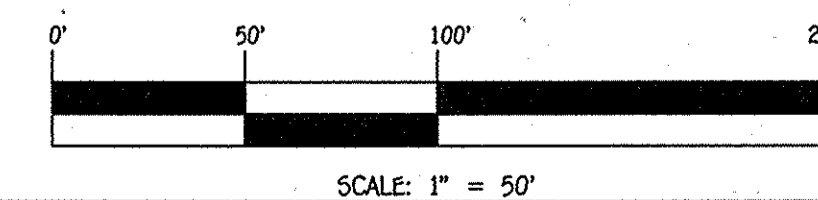
- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18 (EXCEPT THE STREAM CROSSING)
  2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER 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.

**NOTE:** A COMPLETE SECTION OF 20' LENGTH WATER MAIN PIPE SHALL BE CENTERED UNDER ALL STORM DRAIN CROSSINGS.



**8" WATER MAIN LOOP: EX. 8" W TO WELLFORD DRIVE**

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN LOOP: EX. 8" W TO WELLFORD DRIVE			
0+00.00	EX. 8" PLUG & BUTTRESS	575643.80	1354253.31
0+03.00	1/32 H.B.	575642.37	1354250.67
3+63.30	8" VALVE	575534.14	1354207.00
3+66.30 = 14+10.37	8" X 6" TEE	575533.24	1354204.14

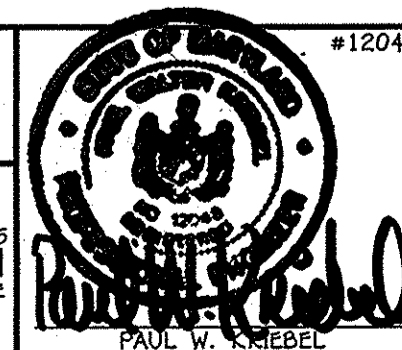


CONTRACT NO. 24-4917-D  
CENTENNIAL LAKE OVERLOOK  
SECTION TWO: PART TWO  
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CONTRACT NO. 24-4917-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

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LICENSE NO. 12043 EXPIRATION DATE IS 7/16/16.



DESIGNED BY : B.C.R.  
DRAWN BY : B.C.R.  
CHECKED BY : P.M.K.  
DATE : MAY, 2015

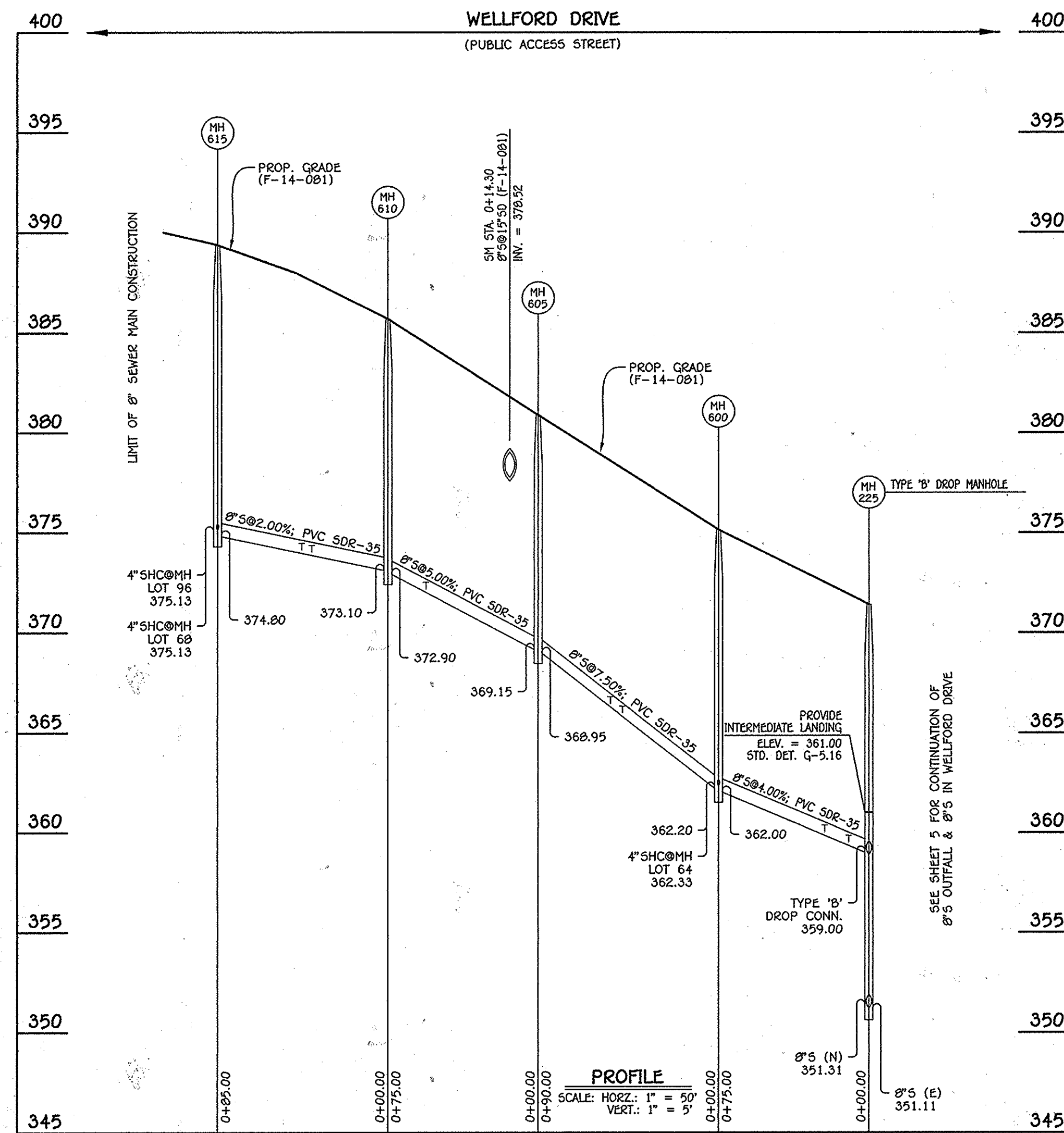
**WATER MAIN EXTENSIONS  
PROFILES, CHARTS & NOTES**

600' SCALE MAP NO. 30 BLOCK NO. 2  
F.C.C. WORK ORDER NO. 11042-3001  
FILE NAME : WATER & SEWER MAIN EXTENSION PLAN

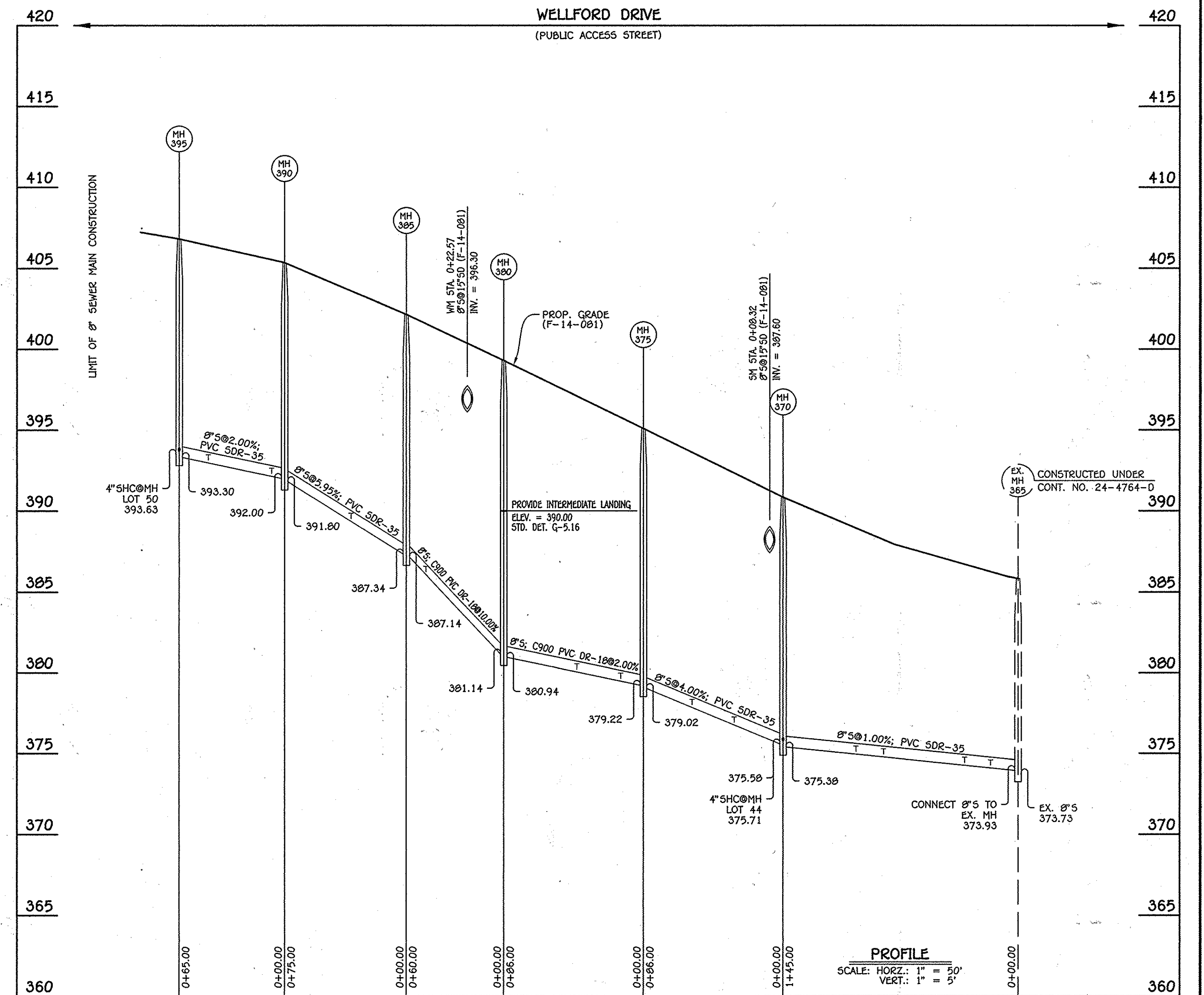
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CONTRACT NO. 24-4917-D  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 7





8" SEWER MAIN: WELLFORD DRIVE - MH 225 TO MH 615



8" SEWER MAIN: WELLFORD DRIVE - EX. MH 365 TO MH 395

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
225	57526.74	1354216.01	371.40
600	575452.49	1354227.37	375.14
605	575365.06	1354206.02	380.00
610	575304.43	1354161.08	385.68
615	575239.06	1354107.54	389.38

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

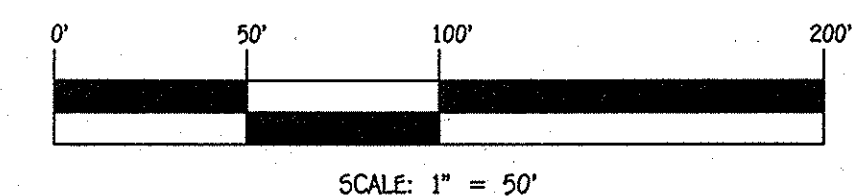
SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.
MH 225 TO MH 600					
0+10 RT.	93	359.57	360.19	364.79	366.50
0+22 LT.	63	360.05	360.53	364.93	366.50
①MH 600 LT.	64	362.33	362.73	367.23	368.50
MH 600 TO MH 605					
0+48 LT.	65	365.97	366.43	370.93	371.50
0+54 RT.	94	366.42	367.06	371.46	372.50
MH 605 TO MH 610					
0+56 LT.	66	372.12	372.50	376.90	377.50
MH 610 TO MH 615					
0+38 RT.	95	374.03	374.69	379.19	384.50
0+43 LT.	67	374.13	374.57	379.97	379.50
①MH 615 RT.	96	375.13	375.85	380.45	384.40
①MH 615 LT.	68	375.13	375.77	380.17	380.50

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
370	574984.53	1353815.08	390.84
375	575014.81	1353734.58	394.99
380	575073.33	1353671.56	399.28
385	575124.71	1353640.59	402.15
390	575197.68	1353623.22	405.35
395	575262.22	1353630.93	406.82

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.
MH 365 TO MH 370					
0+17 RT.	80	374.27	374.93	379.33	380.50
0+33 LT.	42	374.43	374.83	379.43	379.50
0+83 RT.	81	374.93	375.61	380.01	382.50
1+00 LT.	43	375.10	375.50	380.10	381.50
①MH 370 LT.	44	375.71	376.11	380.81	383.50
MH 370 TO MH 375					
0+30 RT.	82	376.95	377.61	382.11	386.50
0+56 LT.	45	377.99	378.43	383.03	385.50
MH 375 TO MH 380					
0+14 LT.	46	379.67	380.09	384.59	387.50
0+41 RT.	83	380.21	381.01	385.51	391.50
MH 380 TO MH 385					
0+48 LT.	47	386.11	386.53	391.03	391.50
MH 385 TO MH 390					
0+34 LT.	48	389.53	389.99	394.59	395.50
MH 390 TO MH 395					
0+08 LT.	49	392.33	392.75	397.15	397.50
0+47 RT.	84	393.11	393.73	399.23	411.62 *
①MH 395 LT.	50	393.63	394.09	398.29	399.50

\* DENOTES FIRST FLOOR ELEV.



CONTRACT NO. 24-4917-D  
CENTENNIAL LAKE OVERLOOK  
SECTION TWO: PART TWO  
LOTS 42 THRU 69, LOTS 80 THRU 98, OPEN SPACE LOTS 100 THRU 102 & OPEN SPACE LOTS 104 THRU 106  
WATER & SEWER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

6.12.15

CHIEF, BUREAU OF UTILITIES

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. 12043 EXPIRATION DATE IS 7/16/16.

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21036  
(410) 461-2295

PAUL W. KRIBBEL

DESIGNED BY: B.C.R.

DRAWN BY: B.C.R.

CHECKED BY: P.W.K.

DATE: MAY, 2015

SEWER MAIN EXTENSIONS  
PROFILES & CHARTS

600' SCALE MAP NO. 30 BLOCK NO. 2

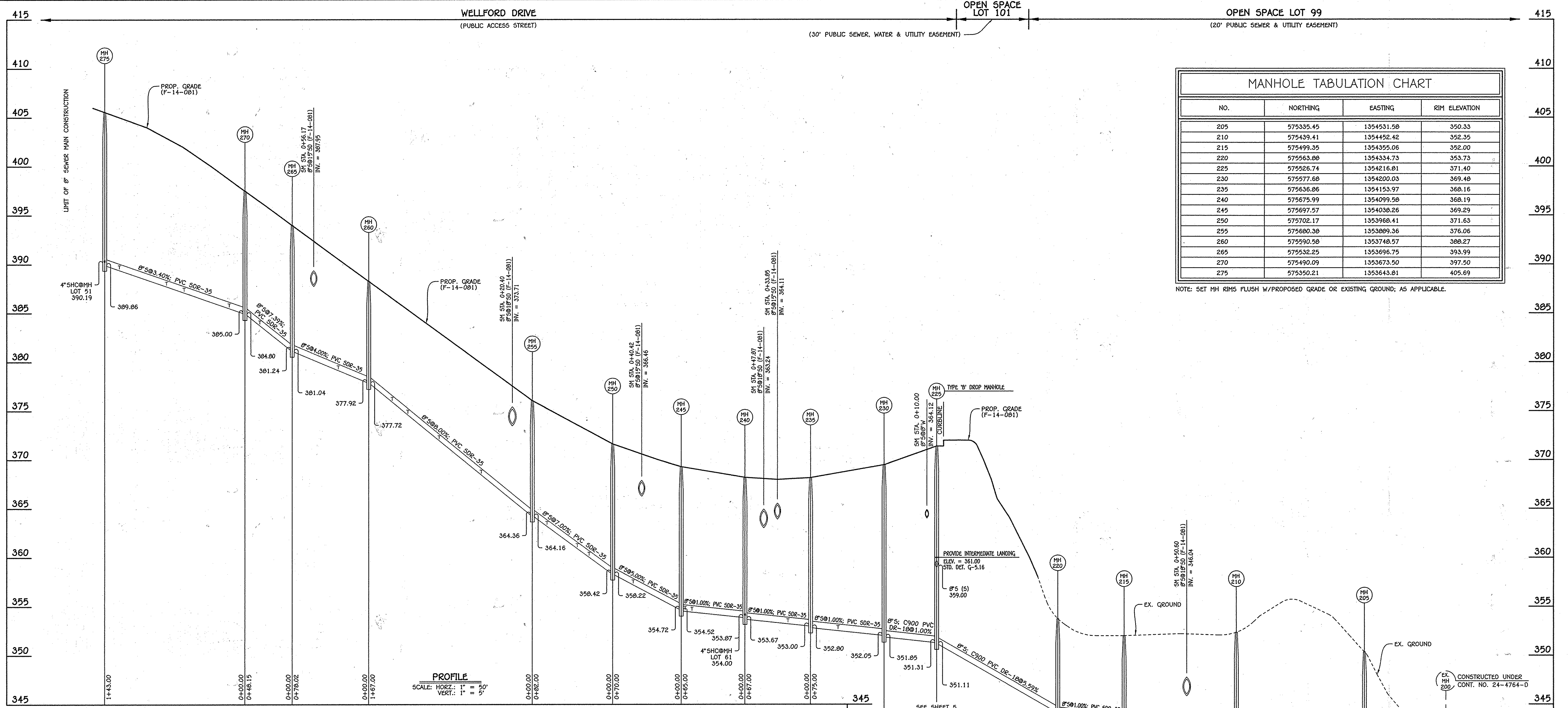
F.C.C. WORK ORDER NO. 11042-3001

FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

CENTENNIAL LAKE OVERLOOK  
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SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 5 OF 7



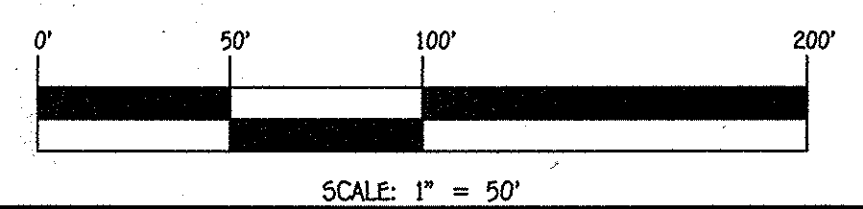
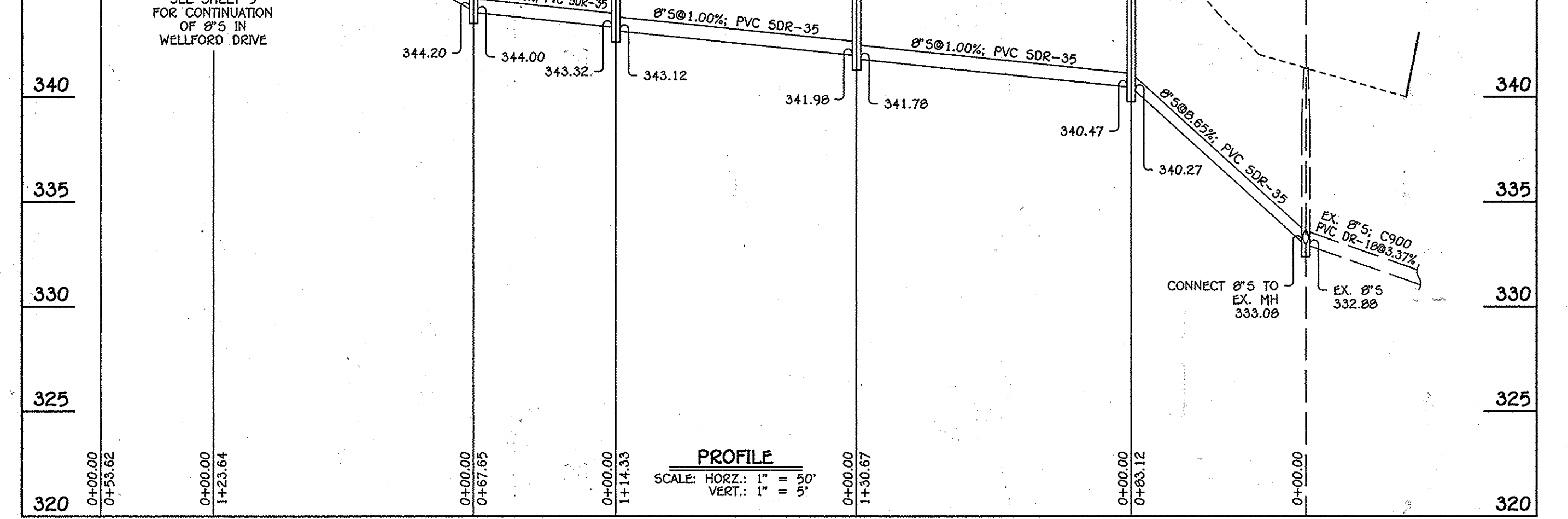
MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
205	575335.45	1354531.58	350.35
210	575439.41	1354492.42	352.35
215	575499.35	1354355.06	352.00
220	575563.88	1354334.73	353.73
225	575526.74	1354216.81	371.40
230	575577.68	1354200.03	369.48
235	575636.86	1354153.97	368.16
240	575675.99	1354099.58	368.19
245	575697.57	1354038.26	369.29
250	575702.17	1353968.41	371.63
255	575680.38	1353889.36	376.06
260	575590.58	1353748.57	388.27
265	575532.25	1353696.75	393.99
270	575490.09	1353673.50	397.50
275	575350.21	1353643.81	405.69

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE OR EXISTING GROUND; AS APPLICABLE.

**8" SEWER MAIN OUTFALL: WELLFORD DRIVE - EX. MH 200 TO MH 275**

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.
MH 230 TO MH 235					
0+47 LT.	92	352.69	353.33	357.73	363.50
MH 235 TO MH 240					
0+23 RT.	62	353.40	353.84	358.14	359.50
0+24 RT.	61	354.00	354.42	358.92	359.50
MH 240 TO MH 245					
0+54 LT.	91	354.58	355.24	359.64	366.50
0+61 RT.	60	354.65	355.07	359.57	361.50
MH 245 TO MH 250					
0+49 RT.	59	357.34	357.78	362.28	363.50
MH 250 TO MH 255					
0+24 RT.	58	360.27	360.73	365.23	366.50
0+36 LT.	90	361.11	361.71	366.11	368.50
0+67 RT.	57	363.28	363.74	368.34	370.50

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	B.E.
MH 255 TO MH 260					
0+52 LT.	89	368.69	369.33	373.69	374.50
0+95 RT.	56	372.13	372.57	377.27	377.50
1+27 LT.	88	374.69	375.33	379.69	381.00
1+43 RT.	55	375.97	376.41	381.11	382.50
MH 260 TO MH 265					
0+31 RT.	54	379.33	379.79	384.29	384.50
MH 265 TO MH 270					
0+33 LT.	87	383.85	384.53	388.87	391.50
MH 270 TO MH 275					
0+16 RT.	53	385.71	386.15	390.55	394.50
0+62 LT.	86	387.28	387.92	392.32	393.50
0+80 RT.	52	387.89	388.33	392.73	396.50
1+28 LT.	85	389.52	390.20	394.70	399.50
0+27 RT.	51	390.19	390.59	395.09	398.50



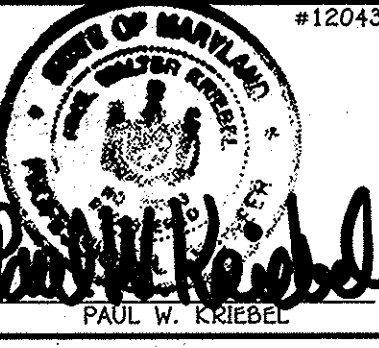
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HOWARD COUNTY, MARYLAND  
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DATE: 6.12.15

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DESIGNED BY: B.C.R.  
DRAWN BY: B.C.R.  
CHECKED BY: P.M.K.  
DATE: MAY, 2015

**SEWER MAIN EXTENSION PROFILE & CHARTS**

600' SCALE MAP NO. 30 BLOCK NO. 2  
F.C.C. WORK ORDER NO. 11042-3001  
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

**CENTENNIAL LAKE OVERLOOK**  
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SCALE AS SHOWN  
SHEET 6 OF 7



