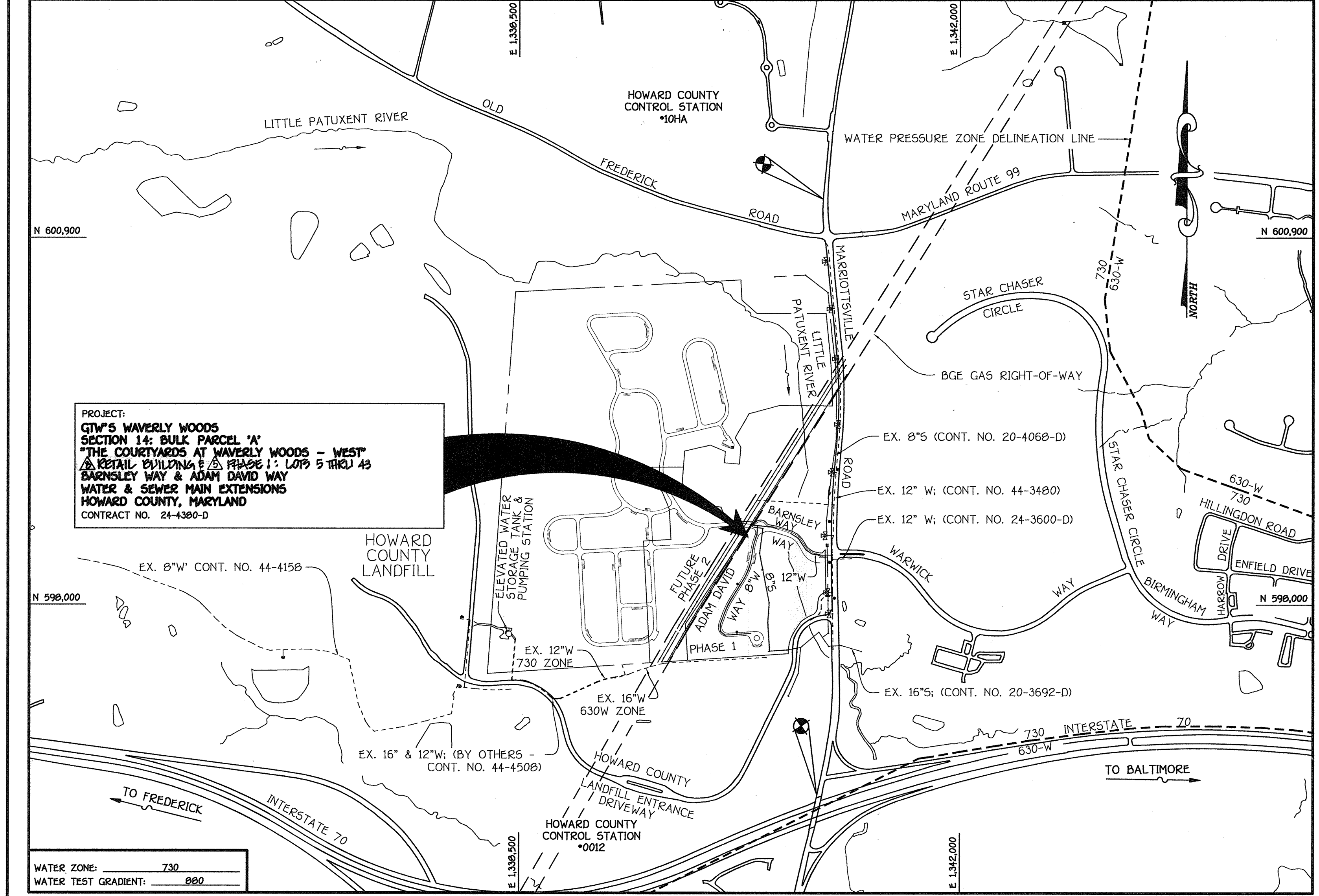


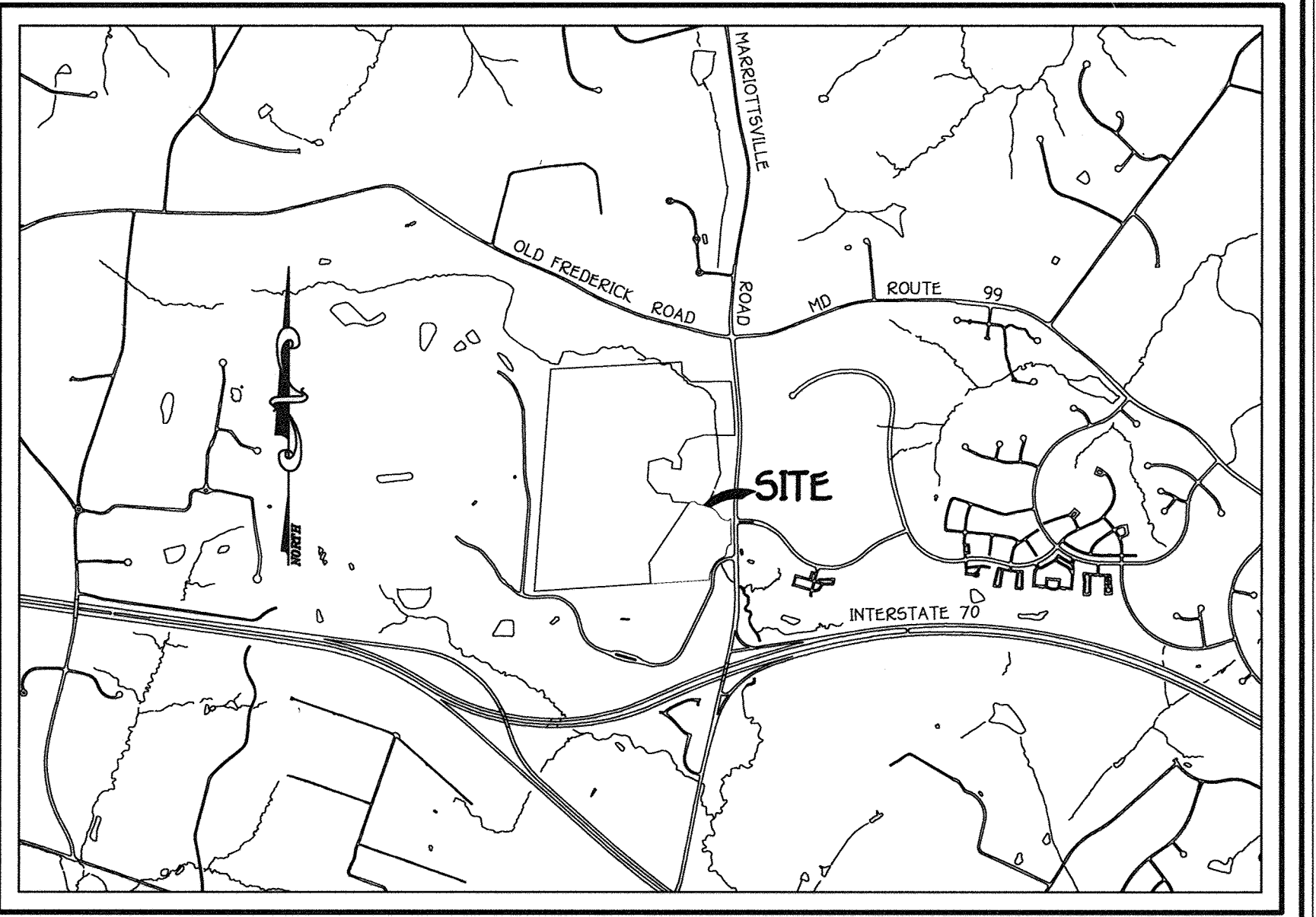
QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" PVC	1,177 LF	1,149 LF	PVC	BRS/EM EAGLE
MANHOLES	7 EACH	6 EA	PRECAST CONC	ATLANTIC
8" PLUG	3 EACH	3 EA		
12" WATER	700 LF	481 LF	C900 PVC	JM EAGLE
8" WATER	1,108 LF	777 LF	C900 PVC	JM EAGLE
6" WATER	192 LF	89 LF	C400 PVC	JM EAGLE
4" WATER	210 LF	210 LF	SDR 35	North American
1-1/2" WATER	450 LF	452 LF	K-COPPER	CAMBRIDGE LEE
12"X12" TAPPING SLEEVE & VALVE	1 EACH	1 EA	STAINLESS STEEL	FORD METER BOX
12"X6" TEE	1 EACH	1 EA	EPOXY DIP	STAR PIPE/BRS
12"X6" TEE	1 EACH	1 EA	EPOXY DIP	STAR PIPE/BRS
8"X6" TEE	2 EACH	2 EA	EPOXY DIP	STAR PIPE/BRS
12" VALVE	1 EACH	1 EA	1 RSGV	MUELLER/BRS
8" VALVE	2 EACH	2 EA	1 RSGV	MUELLER/BRS
6" VALVE	3 EACH	3 EA	1 RSGV	MUELLER/BRS
1/8" H.B.	3 EACH	2 EA	EPOXY DIP	STAR PIPE
1/16" H.B.	7 EACH	7 EA	EPOXY DIP	
1/32" H.B.	4 EACH	4 EA	EPOXY DIP	
4" H.B.	1 EACH	1 EA	PVC	
2" DEFLECTION COUPLING	12 EACH	12 EA	PVC	
4" DEFLECTION COUPLING	5 EACH	5 EA	PVC	
FIRE HYDRANT	4 EACH	4 EA	DUCTILE	MUELLER/BRS
12" PLUG & BUTTRESS	1 EACH	1 EA	EPOXY COATED DIP	STAR PIPE
8" PLUG & BUTTRESS	1 EACH	1 EA	EPOXY COATED DIP	STAR PIPE
OUTSIDE METER SETTING	22 EACH	22 EA		BRS/AY McDONALD
CABLE TEST STATION	4 EACH	4 EA	CONCRETE VAULT FRAME COVER	HOENE CONCRETE VESTAL MFG



PROJECT: GTW'S WAVERLY WOODS SECTION 14: BULK PARCEL 'A' THE COURTYARDS AT WAVERLY WOODS - WEST RETAIL BUILDING & PHASE I: LOTS 5 THRU 43 BARNESLEY WAY & ADAM DAVID WAY WATER & SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4380-D

TYPE OF BUILDING: RESIDENTIAL SINGLE FAMILY DETACHED & TOWNHOUSE CONDOMINIUMS	NUMBER OF UNITS: 39
NO. OF WATER HOUSE CONNECTIONS: 22	NO. OF SEWER HOUSE CONNECTIONS: 2
SEWER SHED: LITTLE PATUXENT	TREATMENT PLANT: LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE, MARYLAND

VICINITY MAP SCALE: 1" = 600'



LOCATION MAP SCALE: 1" = 2000'

GENERAL NOTES

- 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 JULY, 2005 BY FISHER, COLLINS & CARTER, INC.
 - 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. 101A & NO. 0012.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD '83. VERTICAL CONTROLS SHOWN 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 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 PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (C) 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
 - BGE (CONSTRUCTION SERVICES) 410-850-4620
 - BGE (EMERGENCY) 410-685-1400
 - BUREAU OF UTILITIES 410-315-9900
 - COLONIAL PIPELINE CO. 410-795-1390
 - MISS UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-531-5533
 - VERIZON 1-800-743-0033/410-224-9210
- PART B: WATER MAIN GENERAL NOTES
- EXCEPT FOR THE 12"X12" TAPPING SLEEVE & VALVE ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS WITHIN THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - 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 15.11(h)(4) OF THE HOWARD COUNTY CODE.

BENCHMARK INFORMATION

B.M.-1 - HOWARD COUNTY CONTROL STATION #0012
 LOCATED ALONG THE WEST SIDE OF MARIOTTSTVILLE ROAD, JUST NORTH OF INTERSTATE 70
 N 596,502.7604 - HORIZONTAL = (NAD '83)
 E 1,340,864.3954 - HORIZONTAL = (NAD '83)
 ELEVATION = 486.7005 - VERTICAL = (NAD '83)

B.M.-2 - HOWARD COUNTY CONTROL STATION #001A
 LOCATED ALONG THE WEST SIDE OF MARIOTTSTVILLE ROAD, JUST NORTH OF OLD FREDERICK ROAD,
 APPROX. 21 WEST OF THE CENTERLINE OF ROAD
 N 601,206.59 - HORIZONTAL = (NAD '83)
 E 1,340,912.325 - HORIZONTAL = (NAD '83)
 ELEVATION = 485.8855 - VERTICAL = (NAD '83)

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 ARE DEEMED NECESSARY.

Paul W. Koedel, FOR:
 Waverly Woods Development Corporation 08-05-09
 SIGNATURE OF DEVELOPER DATE

QUANTITIES				
ITEM	EST.	QUANTITIES	AS-BUILT	SUPPLIER
Fire Hydrant	1 EA	1 EA	Duct	Mueller/BRS
Manhole Box	1 EA	1 EA	Duct	BRS
12" PVC TAPPING SLEEVE	1 EACH	2 EA	S.S.	Ford
6" DRINK VALVE	2 EACH	2 EA	S.S.	Ford
6" PLUG & BUTTRESS	1 EACH	1 EA	Duct	McSigma
6" PVC	10 LF	10 LF	C 900	National Pipe

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. Koedel, FOR:
 Waverly Woods Development Corporation 08-05-09
 SIGNATURE OF ENGINEER DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON F-09-057, S09-09-037 AND ON THESE PLANS.

Paul W. Koedel, FOR:
 Waverly Woods Development Corporation 08-05-09
 SIGNATURE OF DEVELOPER DATE

GP-09-020 WIDE LETTER OF AUTHORIZATION NUMBER: 20090902/09-NI-2005

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

APPROVED: [Signature] 8/26/09
 HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 24-4380-D

GTW'S WAVERLY WOODS

SECTION 14: BULK PARCEL 'A'

"THE COURTYARDS AT WAVERLY WOODS - WEST"

RETAIL BUILDING & PHASE I: LOTS 5 THRU 43
 BARNESLEY WAY & ADAM DAVID WAY
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

NOTE: REVISION '5A' IS THE 5TH REVISION REVISION PROCESSED FOR THE BULK PLAN SET

NO.	REVISION	DATE
1	RETAIL BUILDING SERVICE CONNECTION REVISION FROM 4" W. TO 6" W.	1/19/09
2	REMOVE QUANTITIES TO REFLECT WATER MAIN & SEWER MAIN CONNECTIONS TO INCLUDE PARCEL 'A' & REMOVE TITLE	4/19/09
3	AS-BUILT REVISIONS	5/17/11
4	REVISE QUANTITY FOR 1/2" WATER TO REFLECT TOWN WHICH	1/22/11
5	AT CONTRACT TITLE, REPLACE "UNITS 1-39" WITH "LOTS 5-43"	1/22/11
6	ADD WIDE LETTER OF AUTHORIZATION NUMBER	6/29/10
7	ADD GENERAL NOTE REQUIRING 1/2" WAD FOR ALL DWELLING UNITS	6/29/10
8	REVISE QUANTITY ADJUSTS FOR 6" PVC & 1 1/2" WATER	6/29/10
9	DELETE QUANTITY ITEMS & ADJUSTS FOR 6" PVC & 1" WATER	6/29/10

DESIGNED BY: B.C.R.	1/22/11
DRAWN BY: B.C.R.	1/22/11
CHECKED BY: P.W.K.	6/29/10
DATE: AUGUST, 2009	6/29/10
BY NO.	REVISION

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 (410) 461-2955

CONTRACT NO. 24-4380-D
 GTW'S WAVERLY WOODS
 SECTION 14: BULK PARCEL 'A'
 SUITE 102
 WAVERLY WOODS DEVELOPMENT CORPORATION
 5300 DORSEY HALL DRIVE
 ELLICOTT CITY, MARYLAND 21142
 PHONE: 443-367-0422

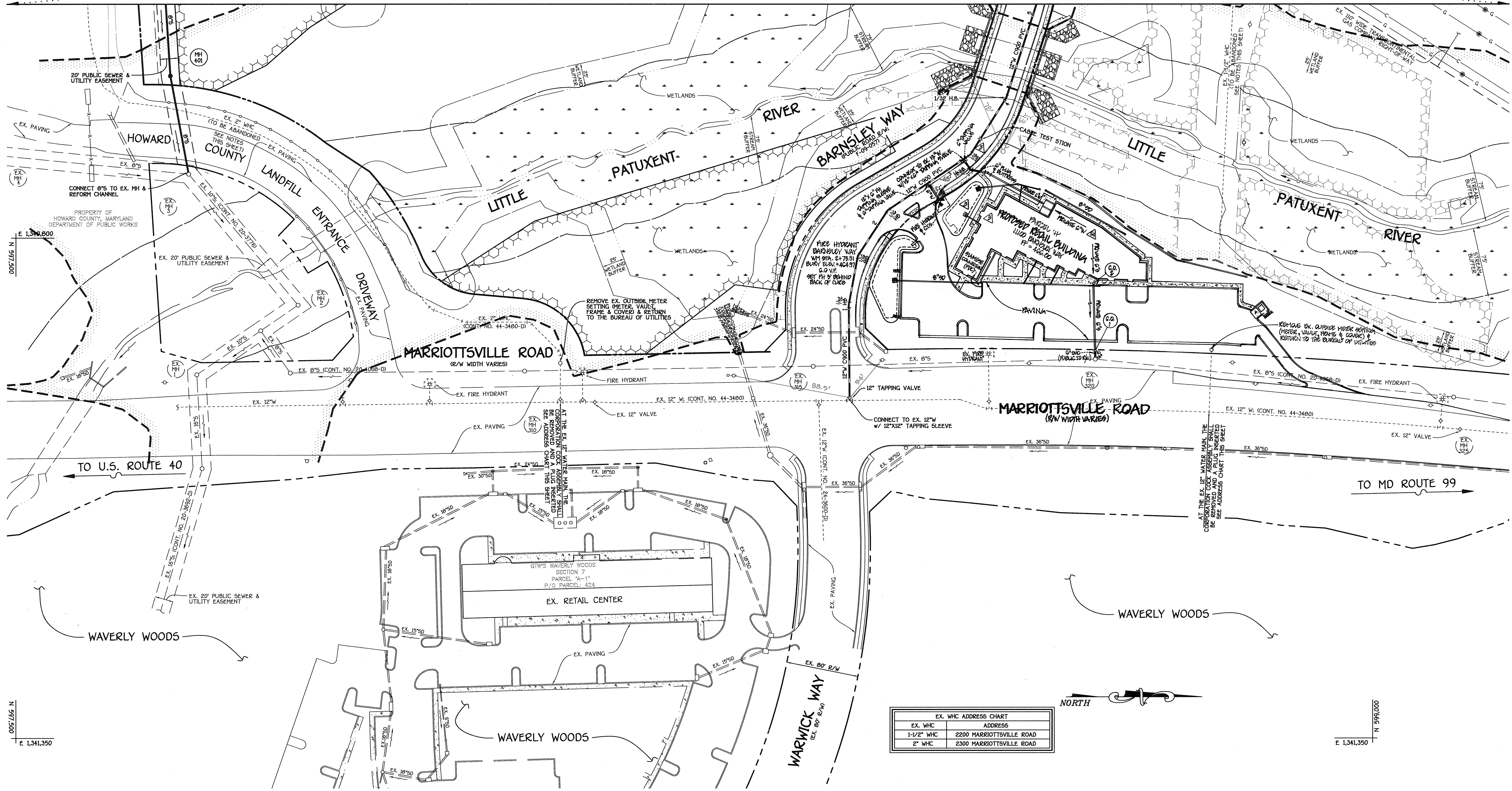
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 BARNESLEY WAY & ADAM DAVID WAY
 WATER & SEWER MAIN EXTENSIONS
 CONTRACT NO. 24-4380-D
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

WATER & SEWER MAINS
 TITLE SHEET

600' SCALE MAP NO. 16 BLOCK NO. 3 & 4
 F.C.C. WORK ORDER NO. 30770
 FILE NAME: WATER AND SEWER MAIN EXTENSION TITLE SHEET

SCALE AS SHOWN
 SHEET 1 OF 6

MATCHLINE 'AA': SEE SHEET 3



PLAN
SCALE: 1" = 50'

EX. WHC ADDRESS CHART	
EX. WHC	ADDRESS
1-1/2" WHC	2200 MARRIOTTVILLE ROAD
2" WHC	2300 MARRIOTTVILLE ROAD



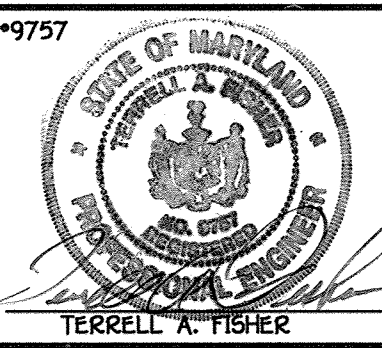
--- DENOTES 100-YEAR FLOODPLAIN

CONTRACT NO. 24-4300-D
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
THE COURTYARDS AT WAVERLY WOODS - WEST
RETAIL BUILDING & PHASE 1: LOTS 9 THRU 49
BARNESLEY WAY & ADAM DAVID WAY
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
E. C. Green
CHIEF, BUREAU OF UTILITIES

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

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2055



DESIGNED BY:	B.C.R.		
DRAWN BY:	B.C.R.	PCO	RETAIL BUILDING 900' CONNECTION REQUIRED FROM APN TO C/W
CHECKED BY:	P.H.K.	KCI	AS-BUILT REVISIONS
DATE:	AUGUST, 2009	PCO	AT CONTRACT TITLE, REPLACE "UNITS 1-99" WITH "LOTS 5-49"
BY:			

WATER & SEWER MAINS
PLAN
600' SCALE MAP NO. 16 BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770
FILE NAME: WATER AND SEWER MAIN EXTENSION PLAN

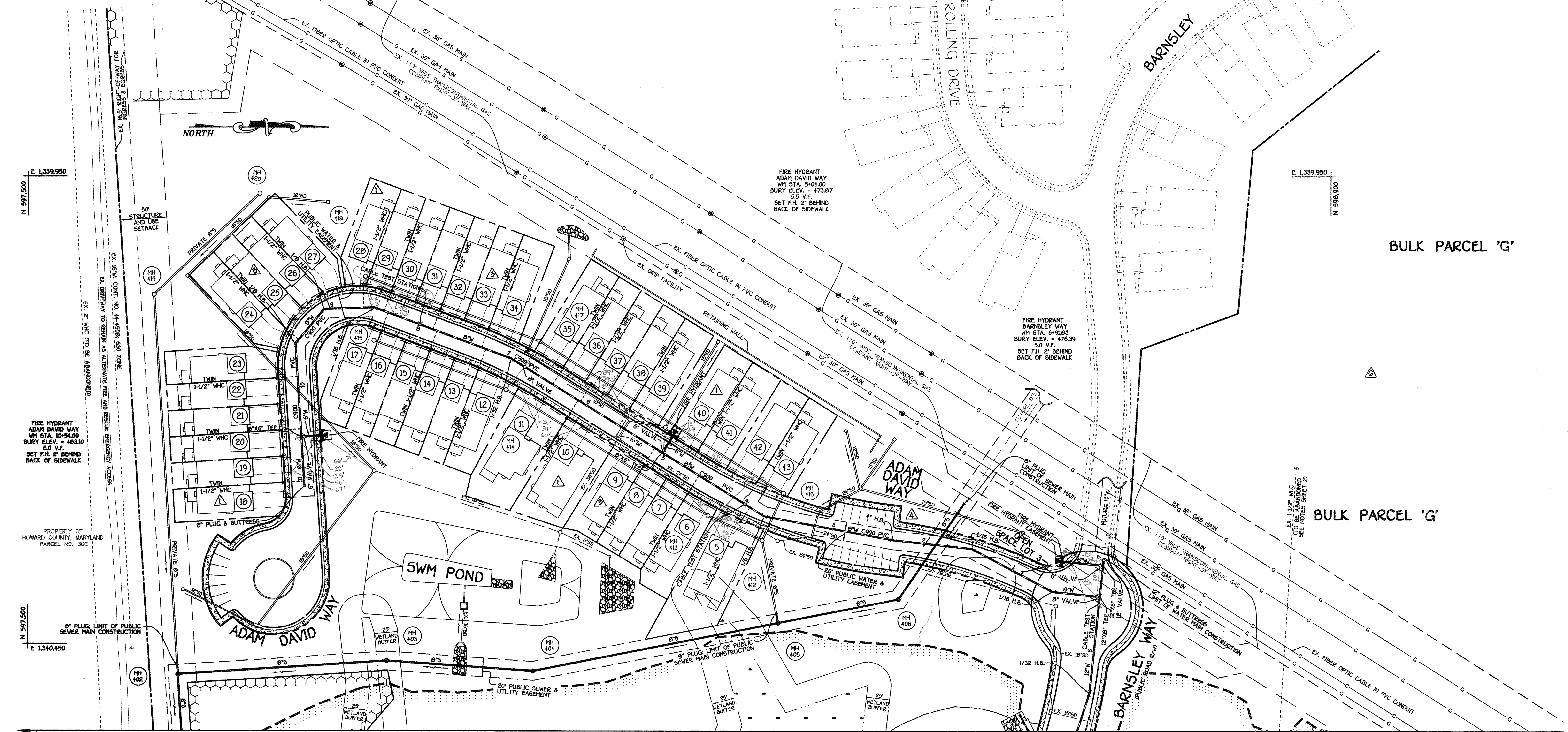
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
THE COURTYARDS AT WAVERLY WOODS - WEST
RETAIL BUILDING & PHASE 1: LOTS 9 THRU 49
BARNESLEY WAY & ADAM DAVID WAY
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4300-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 of 6

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BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100-YEAR FLOODPLAIN

1. NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS OR 100-YEAR FLOODPLAIN.
2. PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
3. DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
4. PLACE HEAVY EQUIPMENT ON TIS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN.
5. REPAIR AND MAINTAIN ANY SEVERABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
6. RECTIFY ANY NONTIDAL WETLANDS, WETLAND, WETLAND BUFFERS, WATERWAYS OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
7. ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES:
ANNUAL RYE GRASS (*Lolium multiflorum*)
MILLET (*Setaria fabiana*)
BARLEY (*Hordeum sp.*)
OATS (*Avena sp.*)
RYE (*Secale cereale*)
THESE SPECIES WILL ALLOW FOR STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF THE NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION, KENTUCKY STATE RESERVE. SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
8. AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST-CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
9. TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM.
USE 1 WATERES IN STREAM WORK SHALL BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.
10. STORMWATER RUNOFF FROM IMPERIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO WATERWAYS.
11. CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.



MATCHLINE 'AA': SEE SHEET 2
PLAN
SCALE: 1" = 50'

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON AUGUST 26, 2009.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DATE: 1/29/11
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

DATE: 2/3/11
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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

14201 BALSORE NATIONAL PARK
ELICOTT CITY, MARYLAND 21117
(410) 461-2995

STATE OF MARYLAND
LAND SURVEYOR

TERRELL FISHER

DESIGNED BY:	DATE:	REVISION	DATE
PCC	1/29/10	1	1/29/10
PCC	3/17/11	2	3/17/11
PCC	1/21/11	3	1/21/11
PCC	1/21/11	4	1/21/11
PCC	1/21/11	5	1/21/11
PCC	1/21/11	6	1/21/11

WATER & SEWER MAINS PLAN

600' SCALE MAP NO. 16 BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770
FILE NAME: WATER AND SEWER MAIN EXTENSION PLAN

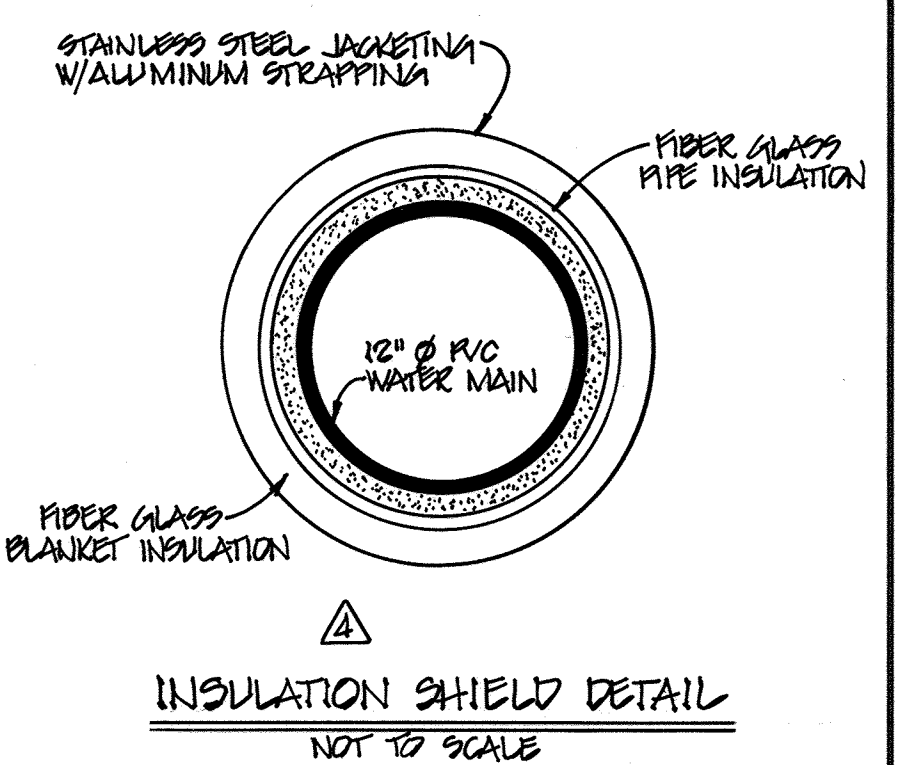
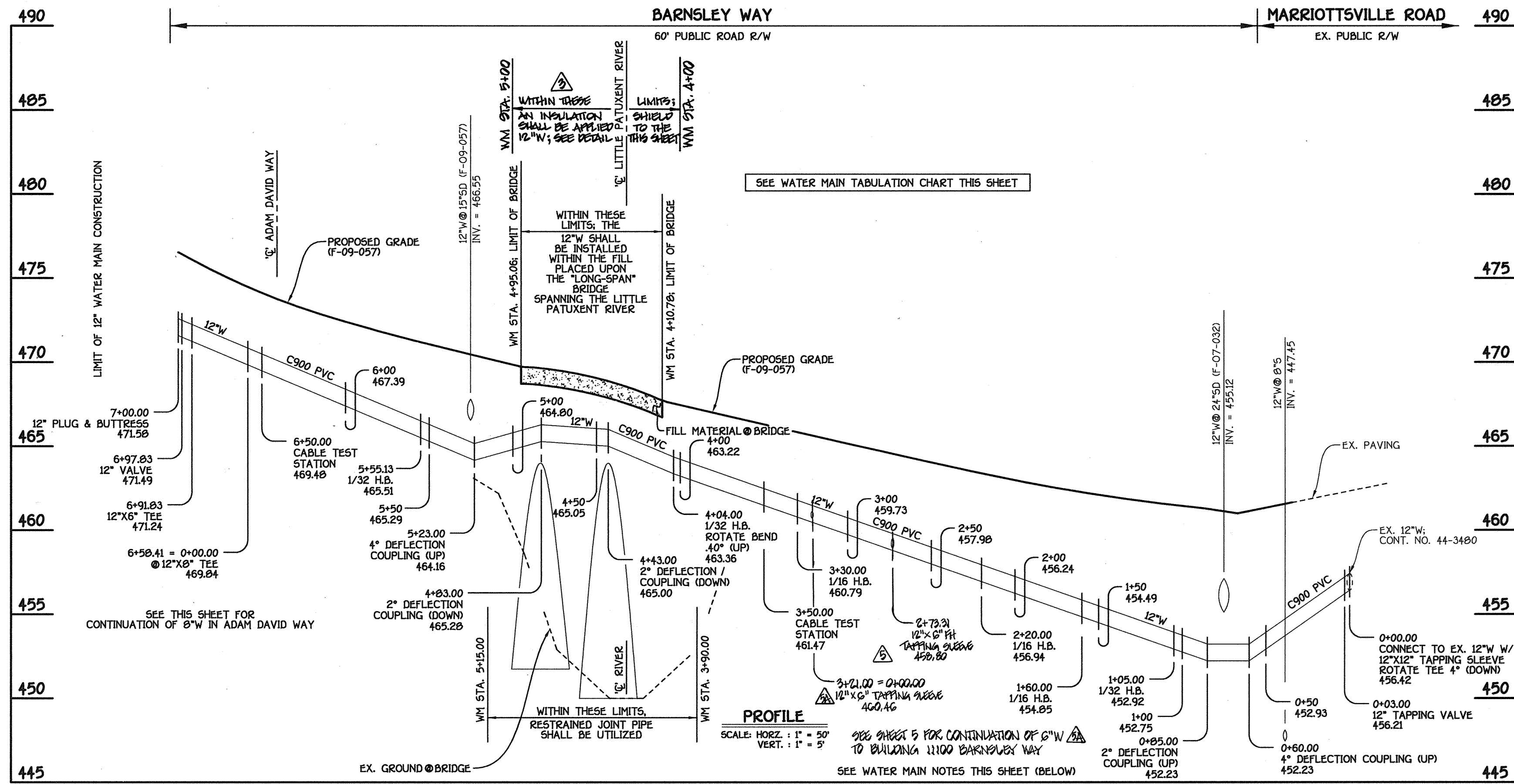
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
RETAIL BUILDING & PHASE 1: LOTS 5 THRU 45
BARNESLEY WAY & ADAM DAVID WAY
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4380-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 6

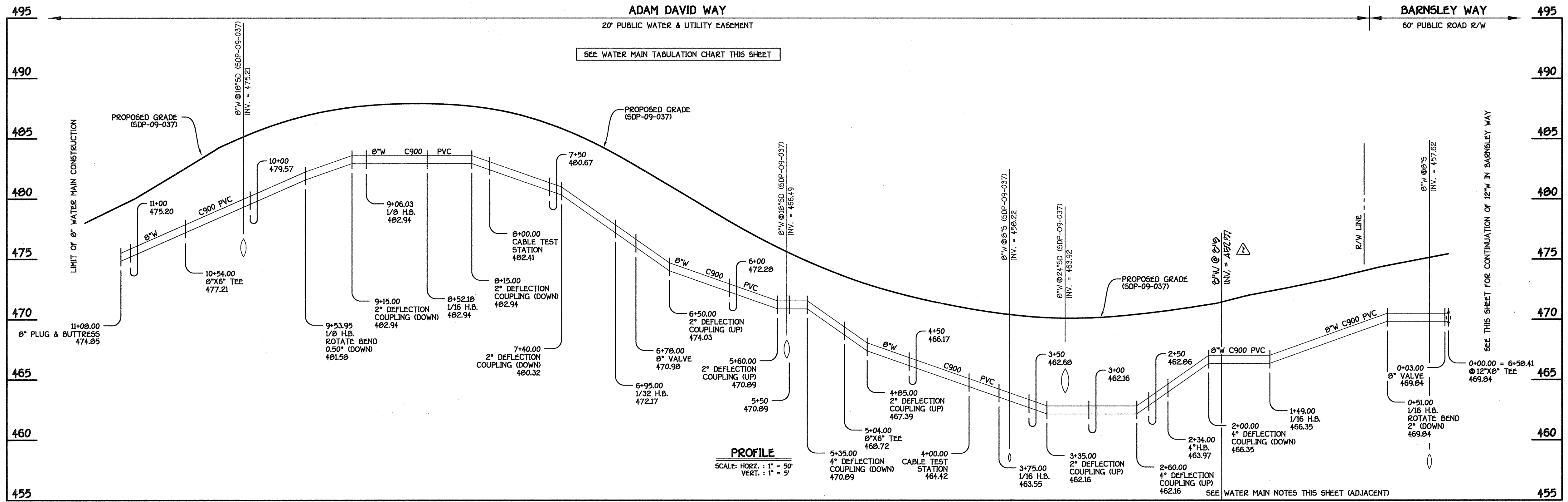
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GTW'S WAVERLY WOODS WEST - BULK PARCEL 'A'

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
12" WATER MAIN: BARNESLEY WAY			
0+00.00	12"x12" TAPPING SLEEVE	598421.83	1340978.53
0+03.00	12" TAPPING VALVE	598421.81	1340975.53
1+05.00	1/32 H.B.	598420.94	1340873.53
1+60.00	1/16 H.B.	598430.97	1340819.46
2+20.00	1/16 H.B.	598463.95	1340789.33
3+30.00	1/16 H.B.	598555.34	1340709.11
3+50.00	CABLE TEST STATION	598566.03	1340691.21
4+04.00	1/32 H.B.	598594.92	1340645.58
5+55.13	1/32 H.B.	598641.45	1340501.79
6+50.00	CABLE TEST STATION	598651.37	1340407.44
6+56.41	12"x6" TEE	598652.25	1340399.08
6+91.83	12"x6" TEE	598655.74	1340365.84
6+97.83	12" VALVE	598656.37	1340359.87
7+00.00	12" PLUG & BUTTRESS	598656.60	1340357.72
8+78.31	12"x6" PH TAPPING SLEEVE	598670.24	1340739.66
9+21.00 = 0+00.00	12"x4" TAPPING SLEEVE	598547.86	1340719.16



12" WATER MAIN: BARNESLEY WAY



WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: ADAM DAVID WAY			
0+00.00	12"x8" TEE	598652.25	1340399.08
0+03.00	8" VALVE	598649.26	1340398.77
0+51.00	1/16 H.B.	598601.53	1340393.75
1+49.00	1/16 H.B.	598514.91	1340347.91
2+34.00	4" H.B.	598430.40	1340338.76
3+75.00	1/16 H.B.	598291.73	1340313.24
4+00.00	CABLE TEST STATION	598270.47	1340300.08
5+04.00	8"x6" TEE	598182.03	1340245.37
6+78.00	8" VALVE	598034.06	1340153.81
6+95.00	1/32 H.B.	598019.60	1340144.87
8+00.00	CABLE TEST STATION	597921.11	1340108.48
8+52.18	1/16 H.B.	597872.17	1340090.39
9+06.03	1/8 H.B.	597818.34	1340092.14
9+53.95	1/8 H.B.	597787.60	1340128.90
10+54.00	8"x6" TEE	597794.04	1340228.74
11+00.00	8" PLUG & BUTTRESS	597797.52	1340282.63

- WATER MAIN NOTES:
- EXCEPT FOR THE 12"x12" TAPPING SLEEVE & VALVE, WM STA. 0+00.00 TO WM STA. 0+03.00, BARNESLEY WAY, ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE.
 - 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.
 - DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
 - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

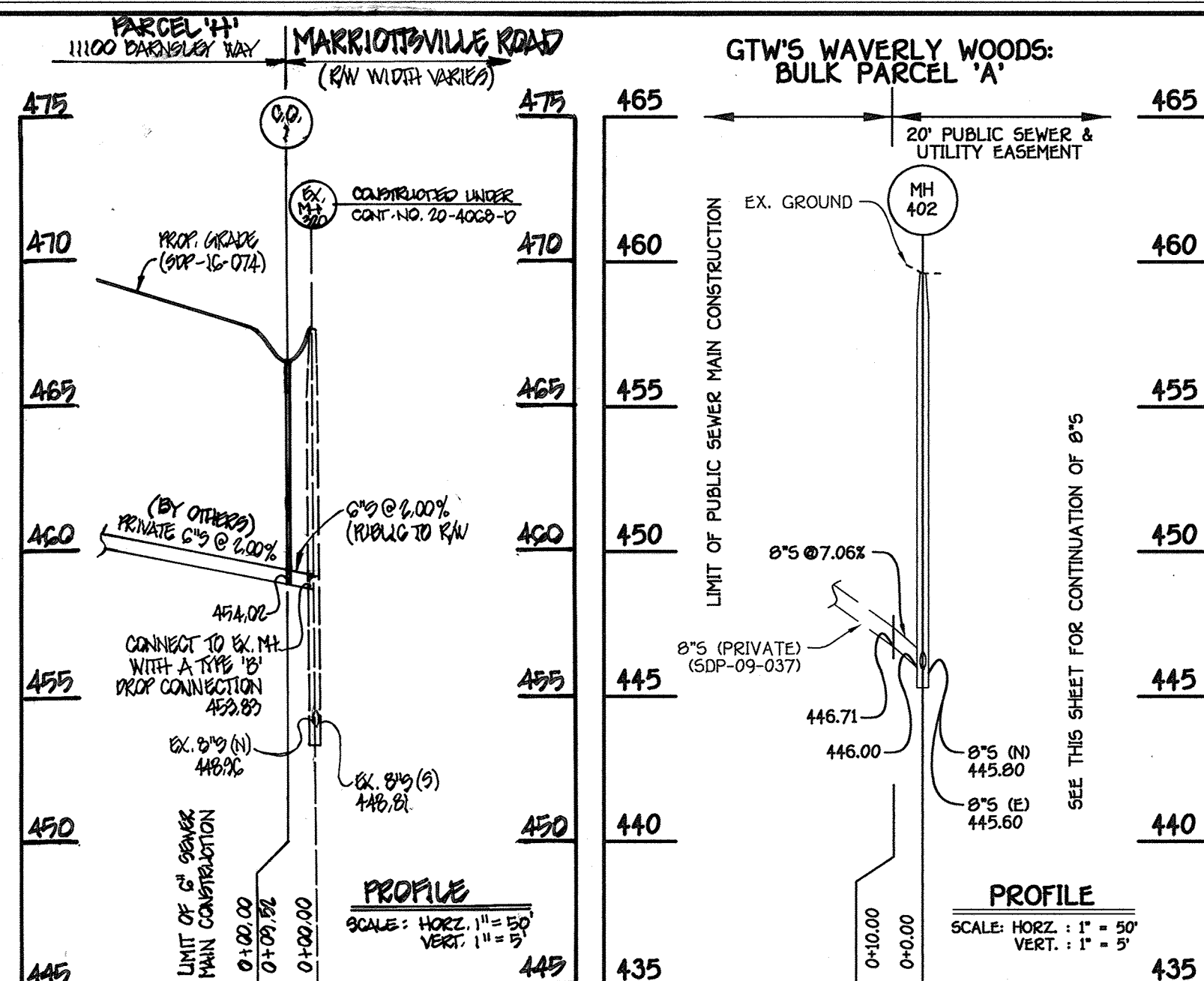
CONTRACT NO. 24-4380-D
 GTW'S WAVERLY WOODS
 SECTION 14: BULK PARCEL 'A'
 THE COURTYARDS AT WAVERLY WOODS - WEST
 ADAM DAVID WAY & BARNESLEY WAY
 WATER & SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND CHIEF, BUREAU OF UTILITIES DATE: 02/10/09	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 02/10/09	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK ELICOTT CITY, MARYLAND 21042 (410) 481-2895	9757 STATE OF MARYLAND TERRELL A. FISHER	DESIGNED BY: POC B.C.R. DRAWN BY: POC B.C.R. CHECKED BY: P.W.K. DATE: AUGUST, 2009 BY NO.	RETAIL BUILDING SERVICE CONNECTION REMOVED FROM 4" W TO 6" W WITHIN THE 12" W PROFILE, ADD 12"x6" PH TAPPING SLEEVE & 12"x4" TAPPING SLEEVE TO SERVICE PROPOSED RETAIL BUILDING & SERVICE TIE WITHIN THE 12" W PROFILE, INDICATE LIMITS OF INSULATION SHIELD AT CONTRACT TITLE, REPLACE "UNITS 1-20" WITH "LOTS 5-13" INDICATE & DENOTE REVISION LOCATION OF 8" W CROSSING AT 8" W	1/19/09 11/20/08 1/24/11 1/24/11 02/10/09	WATER MAINS PROFILES & CHARTS 600' SCALE MAP NO. 15 BLOCK NO. 3 & 4 F.C.C. WORK ORDER NO. 30770 FILE NAME: WATER MAIN EXTENSION PROFILE	GTW'S WAVERLY WOODS SECTION 14: BULK PARCEL 'A' THE COURTYARDS AT WAVERLY WOODS - WEST ADAM DAVID WAY & BARNESLEY WAY WATER & SEWER MAIN EXTENSIONS CONTRACT NO. 24-4380-D THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 4 OF 6
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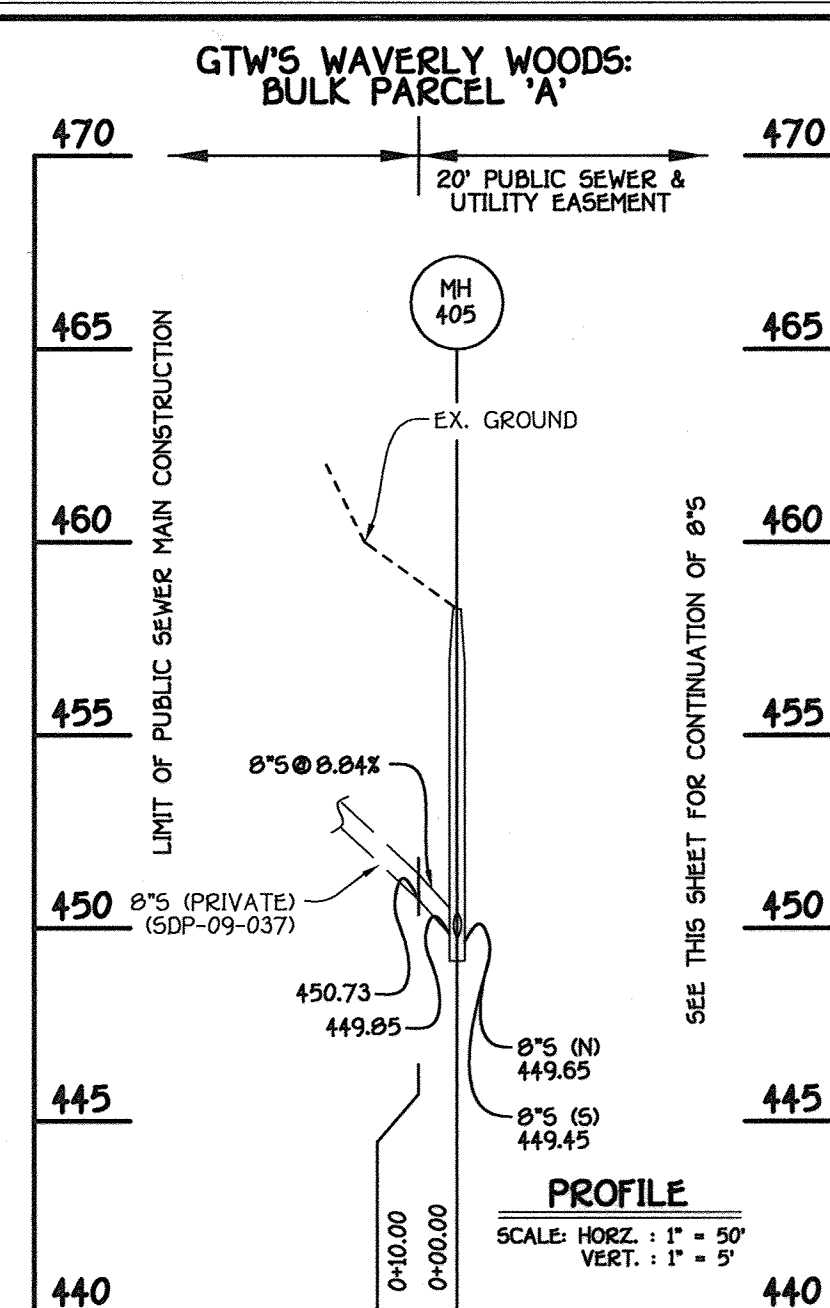
WATER MAIN TABULATION CHART			
WATER MAIN STATION	APPEARANCE	NORTHING	EASTING
4" WATER SERVICE CONNECTION			
0+00.00	18" X4" TAPPING SLEEVES	598547.96	1340719.12
0+08.00	4" TAPPING VALVE	598549.54	1340719.61
0+18.00	1/8" H.B.	598555.49	1340724.44
0+24.00	4" PLUG & BUTTRESS	598565.92	1340723.92

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
401	597670.68	1340621.71	454.15
402	597661.69	1340482.40	459.60
403	597886.02	1340467.92	458.00
404	598043.14	1340478.88	458.00
405	598306.71	1340427.30	458.25
406	598435.87	1340402.02	462.00
8" PLUG	598506.00	1340299.09	---

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



WHC AS-BUILT DATA		
FROM	TO	DIST (FT)
MH 412 STA 3+75 OFFSET LT.	LOT # 5 WHC (SINGLE)	45'
LOT # 5 WHC	LOT # 6 & 7 WHC (TW.)	85'
LOT # 6 & 7 WHC (TW.)	6" WTR VLN @ STA 5+00	55'
LOT # 8 & 9 WHC (TW.)	6" WTR VLN @ STA 5+00	30'
LOT # 8 & 9 WHC (TW.)	MH 413	93'
LOT # 10 & 11 WHC (TW.)	LOT # 10 & 11 WHC (TW.)	99'
LOT # 10 & 11 WHC (TW.)	MH 414	60'
MH 414	LOT # 12 & 13 WHC (TW.)	38'
6" WTR VLN @ STA. 6+75	LOT # 12 & 13 WHC (TW.)	52'
6" WTR VLN @ STA. 6+75	MH 417	32'
LOT # 14 & 15 WHC (TW.)	MH 415	52'
LOT # 14 & 15 WHC (TW.)	LOT # 16 & 17 WHC (TW.)	66'
LOT # 16 & 17 WHC (TW.)	MH 415	15'
LOT # 18 & 19 WHC (TW.)	PH@ADAMDAVIDWAY@STA.10+50	67'
LOT # 18 & 19 WHC (TW.)	6" WTR VLN @ STA.10+50	57'
LOT # 20 & 21 WHC (TW.)	LOT # 22 & 23 WHC (TW.)	85'
LOT # 20 & 21 WHC (TW.)	6" WTR VLN @ STA.10+50	25'
LOT # 20 & 21 WHC (TW.)	PH@ADAMDAVIDWAY@STA.10+50	50'
6" WTR VLN @ STA.10+50	LOT # 22 & 23 WHC (TW.)	51'
LOT # 22 & 23 WHC (TW.)	PH@ADAMDAVIDWAY@STA.10+50	78'



WHC AS-BUILT DATA		
FROM	TO	DIST (FT)
LOT # 24 & 25 WHC (TW.)	MH 415	93'
LOT # 24 & 25 WHC (TW.)	MH 418	100'
LOT # 26 & 27 WHC (TW.)	MH 415	75'
LOT # 26 & 27 WHC (TW.)	MH 418	46'
LOT # 28 WHC (SINGLE)	MH 418	8'
LOT # 28 WHC (SINGLE)	MH 419	60'
LOT # 29 & 30 WHC (TW.)	MH 418	32'
LOT # 29 & 30 WHC (TW.)	MH 415	54'
CEL-TEST STA @ STA. 8+00	LOT # 31 & 32 WHC (TW.)	87'
LOT # 31 & 32 WHC (TW.)	MH 418	89'
LOT # 31 & 32 WHC (TW.)	LOT # 33 & 34 WHC (TW.)	55'
LOT # 33 & 34 WHC (TW.)	MH 417	54'
LOT # 35 & 36 WHC (TW.)	MH 417	31'
LOT # 37 WHC (SINGLE)	LOT # 35 & 36 WHC (TW.)	36'
LOT # 37 WHC (SINGLE)	LOT # 38 & 39 WHC (TW.)	49'
LOT # 38 & 39 WHC (TW.)	PH@ADAMDAVIDWAY@STA.5+00	53'
PH@ADAMDAVIDWAY@STA.5+00	LOT # 40 & 41 WHC (TW.)	30'
LOT # 40 & 41 WHC (TW.)	LOT # 42 & 43 WHC (TW.)	72'
LOT # 42 & 43 WHC (TW.)	MH 416	32'
LOT # 42 & 43 WHC (TW.)	MH 412	62'

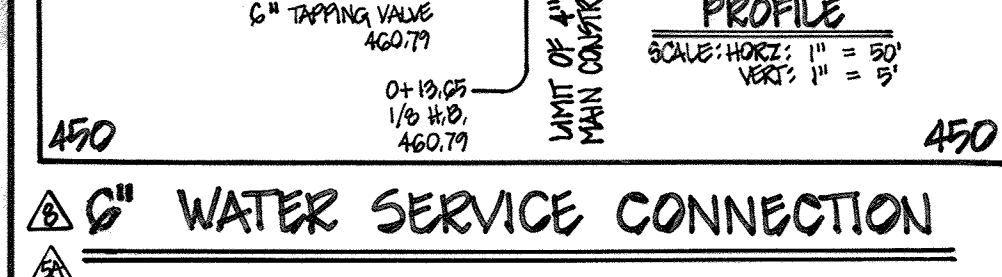
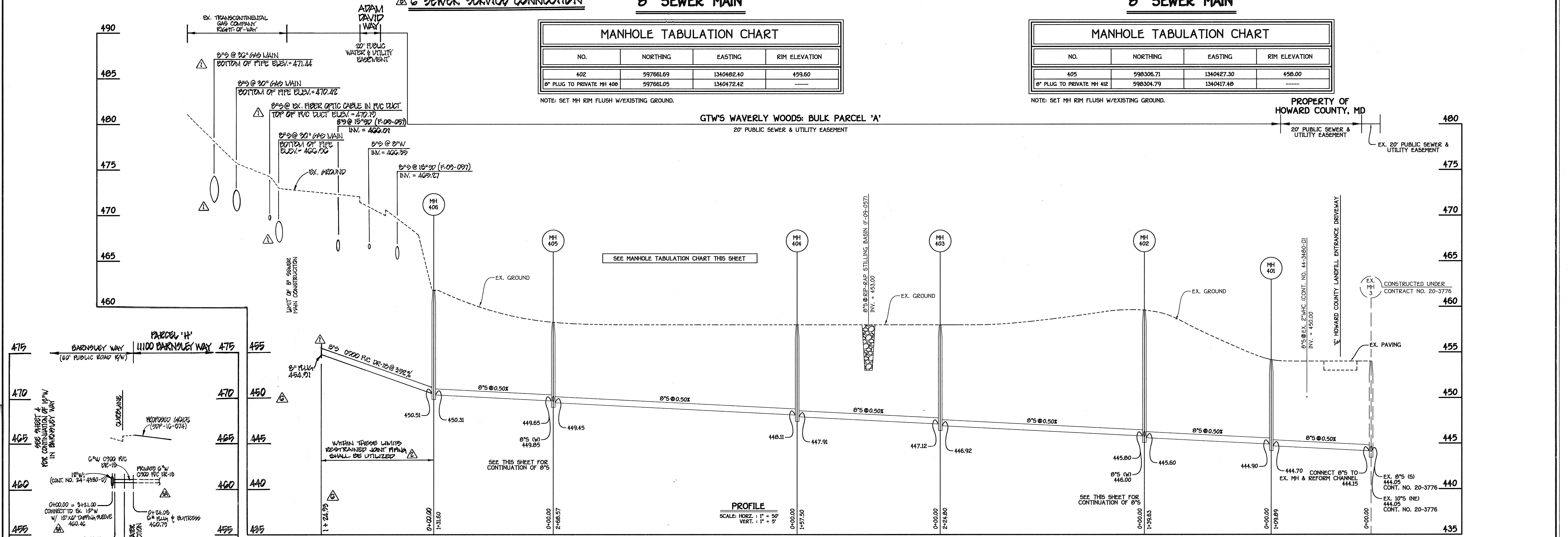
8" SEWER SERVICE CONNECTION **8" SEWER MAIN**

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
402	597661.69	1340482.40	459.60
8" PLUG TO PRIVATE MH 408	597661.05	1340472.42	---

NOTE: SET MH RIM FLUSH W/EXISTING GROUND.

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
405	598306.71	1340427.30	458.00
8" PLUG TO PRIVATE MH 412	598304.79	1340417.48	---

NOTE: SET MH RIM FLUSH W/EXISTING GROUND.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK, 10275 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21117
(410) 461-2855

DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: AUGUST, 2009

WATER & SEWER MAINS NOTES, PROFILES & CHARTS
600' SCALE MAP NO. 16 BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770
FILE NAME: SEWER MAIN EXTENSION PROFILE

GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
THE COURTYARDS AT WAVERLY WOODS - WEST
RETAIL BUILDING & PHASE 1: LOTS 5 THRU 43
BARNESLEY WAY & ADAM DAVID WAY
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

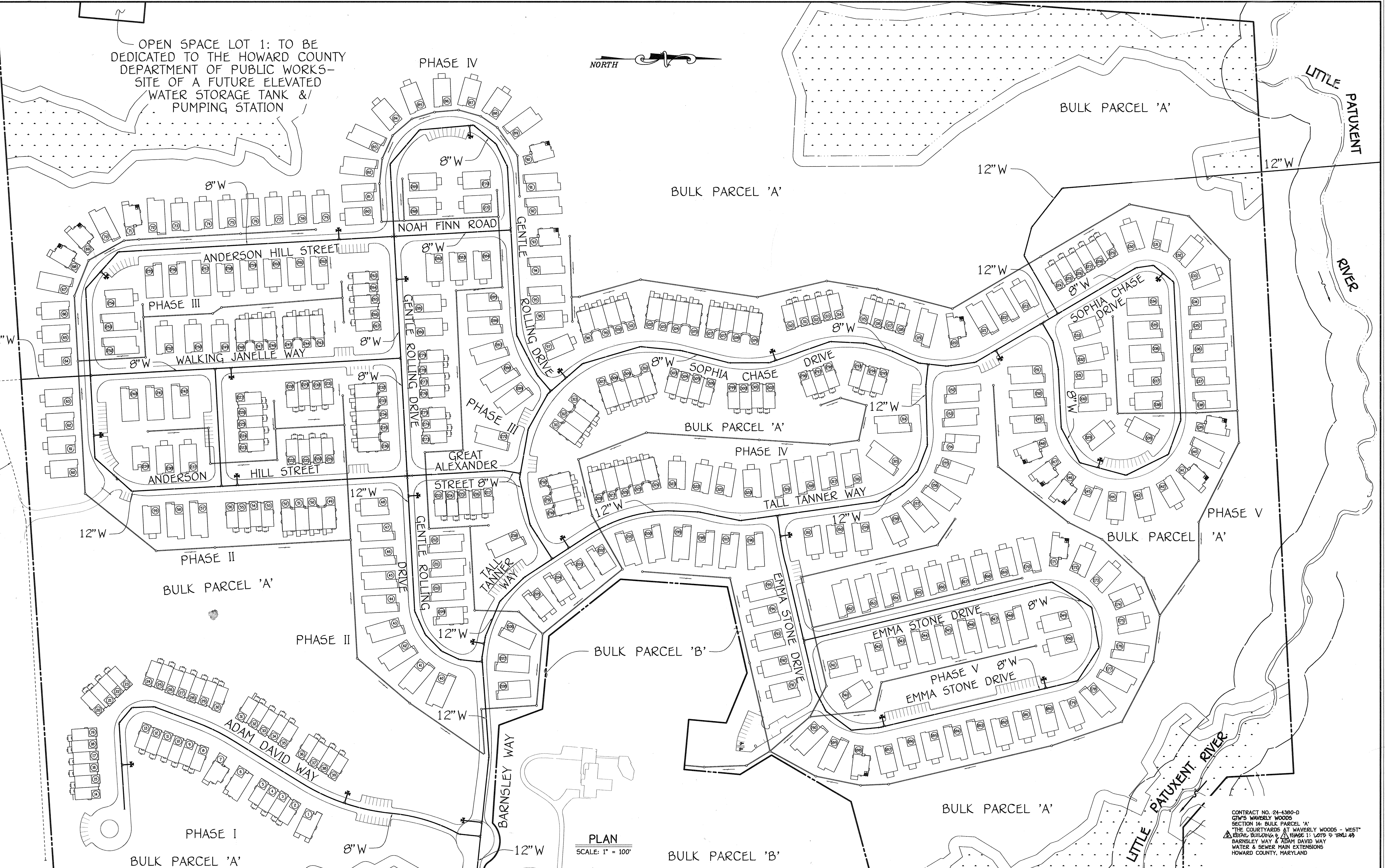
SCALE AS SHOWN
SHEET 5 OF 6

OPEN SPACE LOT 1: TO BE DEDICATED TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS- SITE OF A FUTURE ELEVATED WATER STORAGE TANK & PUMPING STATION



12" W; CONTRACT NO. 44-4508
730 ZONE

16" W; CONTRACT NO. 44-4508
630W ZONE



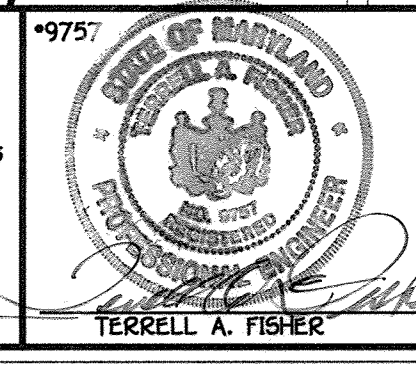
PLAN
SCALE: 1" = 100'

CONTRACT NO. 24-4300-D
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
THE COURTYARDS AT WAVERLY WOODS - WEST
REPAIR BUILDING & PHASE 1: LOTS 15 THRU 49
BARNESLEY WAY & ADAM DAVID WAY
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
C. Chen
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
M. Williams
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2000



DESIGNED BY:	B.C.R.		
DRAWN BY:	B.C.R.		
CHECKED BY:	P.W.K.		
DATE:	AUGUST, 2009		
BY:			
NO.			
REVISION			
DATE			

WATER MAIN EXTENSIONS
OVERVIEW
600' SCALE MAP NO. 16 BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770
FILE NAME: WATER MAIN EXTENSION PHASING

GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
THE COURTYARDS AT WAVERLY WOODS - WEST
REPAIR BUILDING & PHASE 1: LOTS 15 THRU 49
BARNESLEY WAY & ADAM DAVID WAY
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 24-4300-D
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
6 OF 6

K:\SDSK\PROJ\30770 GTW WEST\DWG\SITE DEVELOPMENT PLAN\30770 Water Phasing Plan.dwg, 8/3/2009 3:36:09 PM