

# Contract No. 24-3932-D

# COLUMBIA GATEWAY

## PARCEL Q4

## WATER & SEWER CONSTRUCTION PLANS

Howard County, Maryland Department of Public Works

### GENERAL NOTES

#### PART I

1. Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the engineer at the contractor's expense.
2. All horizontal controls are based on Maryland state coordinates (North American Datum of 1983 (NAD 83)).
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert elevations.
5. Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. The owner has contracted 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 bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
6. For details not shown on the drawings and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (latest edition). The contractor shall have a copy of Volume IV on the job.
7. Where test pits have been made on existing utilities, they are noted by the symbol at the location of the test pit. 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. Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration	531-5533
B&E CO. Contractor Services	850-4620
B&E CO. Under Ground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline CO.	795-1390
Howard County Department of Public Works	795-1390

9. Trees and shrubs are to be protected from damage to 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 line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
11. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any county road or boring/jacking operation in county roads 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 County code.

#### PART II - WATER

1. All water main to be D.I.P. Class 52 unless otherwise noted.
2. Tops of all water mains to have a minimum of 3'-1/2' 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 the 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 restrained and buttressed with concrete in accordance with standard details. Soil around the fire hydrant shall be compacted in accordance with section 1000 and 1005 of the standard specifications.
6. The contractor shall not operate any water main valves on the existing water system.
7. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
8. Sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter. Twin house connections will be 1 1/2" from main to "Y" fitting.

#### PART III - SEWER

1. All sewer mains shall be DIP AND F.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 covers, standard detail G5.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
6. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

QUANTITIES				
ITEM	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	216'			
6" WATER	74'			
6" VALVES	5			
8" x 6" TEE	5			
8" CAP	2			
8" 1/2 BEND	10			
FIRE HYDRANT	3			
8" SLEEVE & SPACER	2			
8" VALVE	6			
6" CAP	2			
8" x 8" TEE	2			
RELOC. EX. F.H.	1			
8" SEWER	40'			
1" A" DROP CONN.	1			
8" PLUG	1			
NAME OF UTILITY CONTRACTOR _____				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE _____				

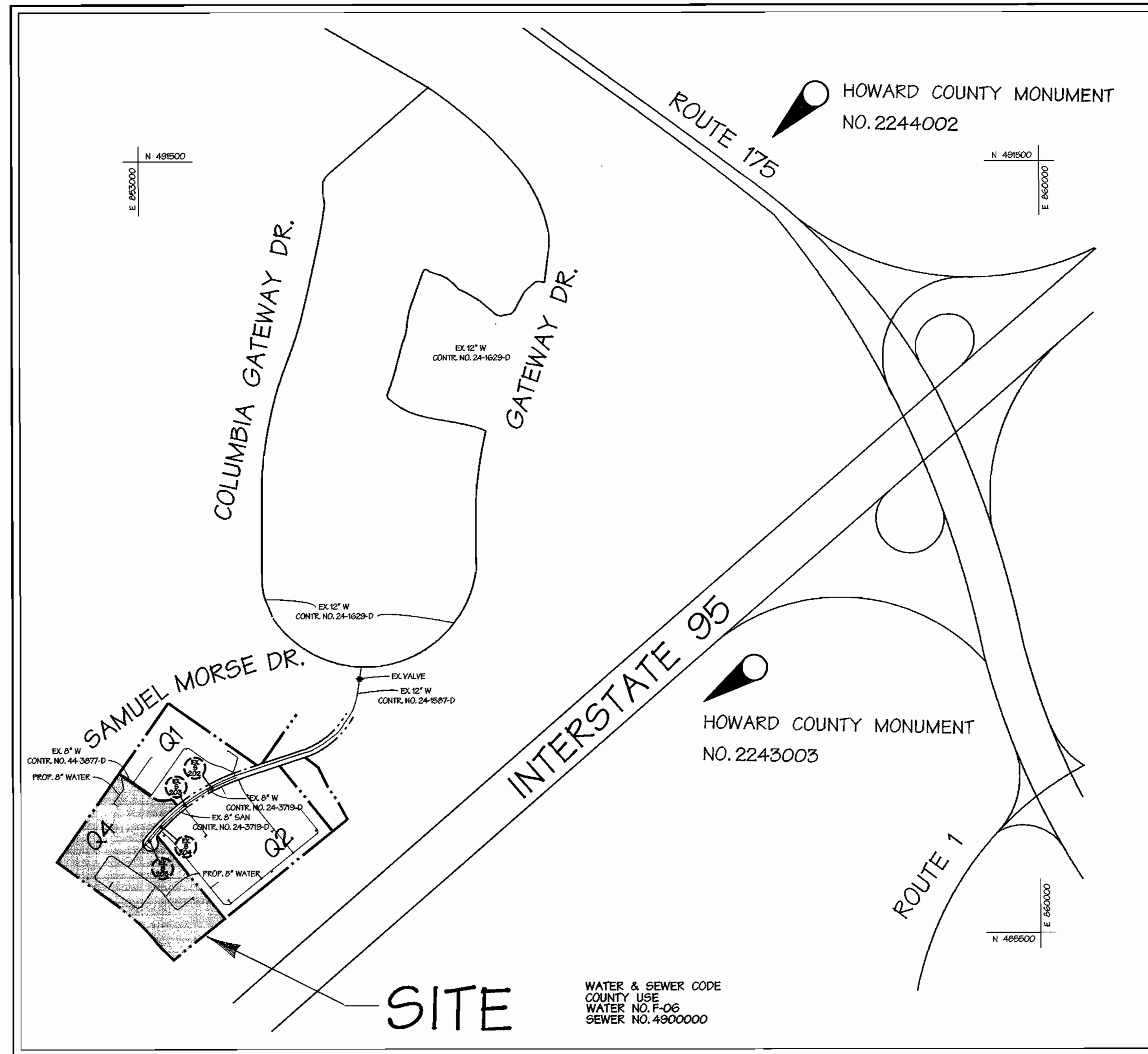
### BENCHMARK

#### DESCRIPTION

- NO. 2244002 - HOWARD COUNTY MONUMENT
- NO. 2243003 - HOWARD COUNTY MONUMENT

TYPE OF BUILDINGS:	OFFICE
NO. OF LOTS / PARCELS:	1
NO. OF WATER CONNECTIONS:	4
NO. OF SEWER CONNECTIONS:	1
DRAINAGE AREA:	DORSEY
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE, HOWARD COUNTY

SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	WATER & SEWER PLAN
3	WATER PLAN
4	WATER & SEWER PROFILE



### VICINITY MAP

SCALE: 1" = 600'

CONTRACT NO. 24-3932-D

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

*Jim Meyer* 2/22/01  
SIGNATURE DATE

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

*John R. Robertson* 2/22/01  
SIGNATURE DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH CONSTRUCTION PLANS SDP-01-53.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

**DMW**  
Daft-McCune-Walker, Inc.

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals



DESIGN BY:	
DRAWN BY:	
CHECKED BY:	
DATE:	
BY NO.	REVISION
	DATE

TITLE SHEET

600 SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

**Columbia Gateway**  
Office & Commercial Buildings  
Parcel Q4 - Columbia Gateway, 8th Election District, Howard County, Maryland

OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044

DEVELOPER: AAK IV, INC.  
8805 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045

CONTRACT NO. 24-3932-D

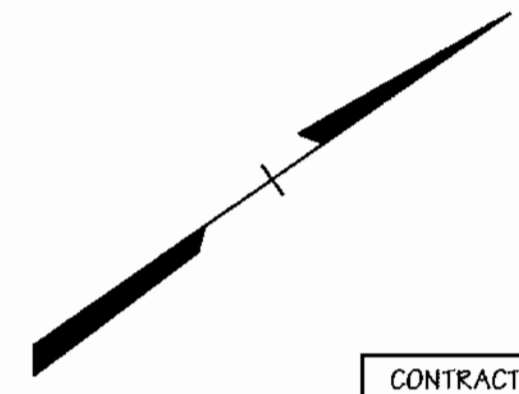
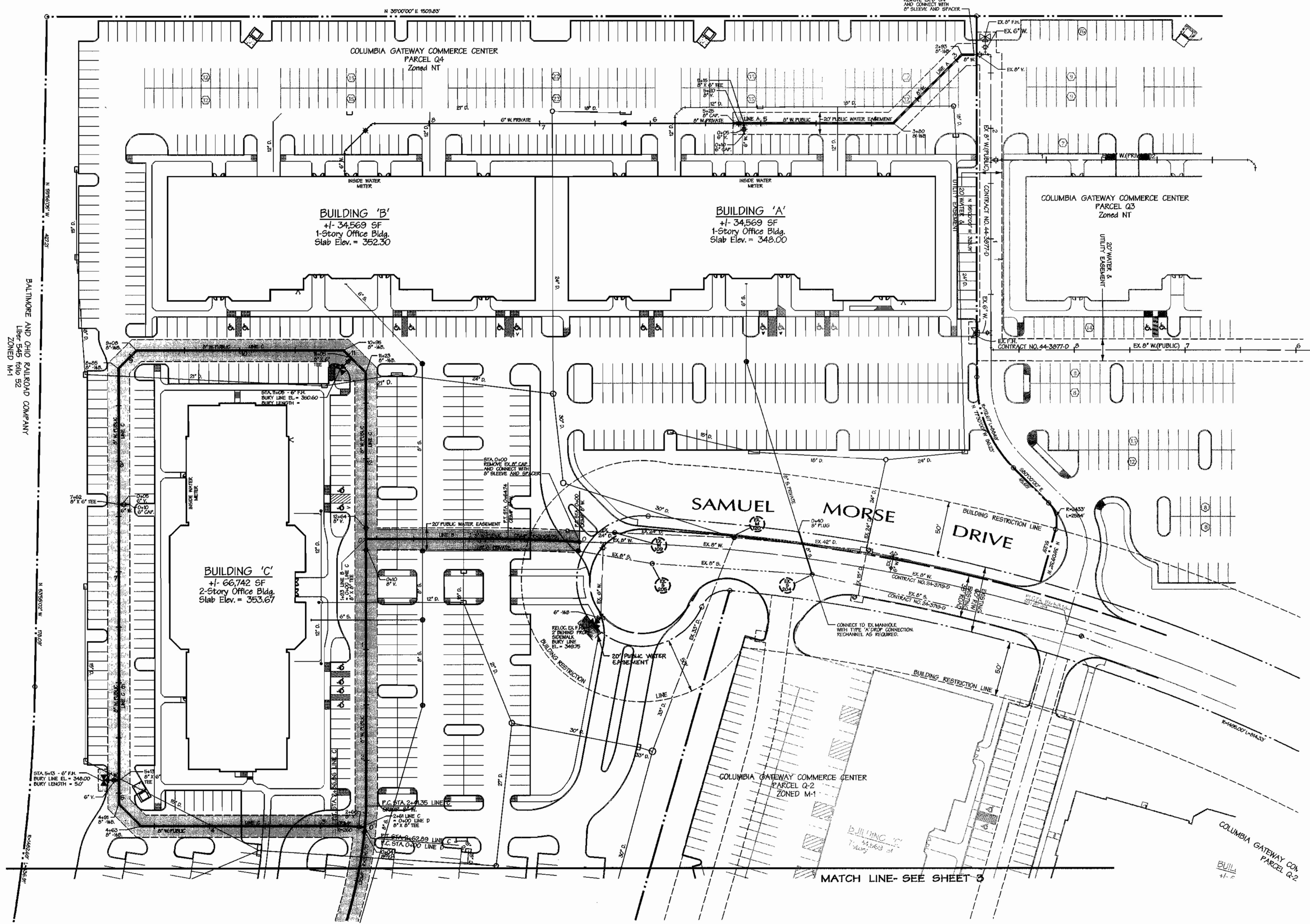
SCALE:

AS SHOWN

SHEET

1 of 4

ITEMS	COORDINATES		STATION
	NORTH	EAST	
LINE A			
8" WBEND	486,703.0	852,857.9	2+30
8" WBEND	486,626.8	852,873.1	3+80
8" X 6" TEE	486,586.3	852,796.6	5+18
8" VALVE	486,582.4	852,792.9	5+20
8" CAP	486,508.3	852,790.1	5+25
LINE B			
P.C. CRIMP 8" W.	486,177.3	853,020.0	0+00
P.T. CRIMP 8" W.	486,025.9	852,980.7	0+64
8" X 8" TEE	486,020.7	852,907.0	1+93
LINE C			
8" VALVE	486,085.0	852,955.2	0+10
P.C. CRIMP 8" W.	485,882.3	853,104.8	2+41
P.T. CRIMP 8" W.	485,871.0	853,119.1	2+62
8" X 8" TEE	485,871.0	853,119.1	2+61
8" VALVE	485,866.6	853,115.9	2+66
8" WBEND	485,705.4	853,003.1	4+83
8" WBEND	485,700.5	852,975.2	4+91
8" X 6" TEE	485,703.0	852,957.3	5+13
8" X 6" TEE	485,885.8	852,753.3	7+62
8" WBEND	485,926.3	852,652.7	8+85
8" WBEND	485,949.0	852,648.7	9+08
8" WBEND	486,102.1	852,755.9	10+35
8" X 6" TEE	486,103.9	852,765.8	11+05
8" WBEND	486,107.1	852,783.8	11+23
8" VALVE	486,026.5	852,898.9	12+54



CONTRACTOR TO TEST PIT TO DETERMINE ACTUAL LOCATION AND ELEVATION OF EXISTING 8" CAP PRIOR TO LAYING PIPE

NOTE: THE EXISTING VALVE AT THE INTERSECTION OF SAMUEL MORSE DRIVE AND COLUMBIA GATEWAY DRIVE TO BE CLOSED TO MAKE THE FINAL CONNECTION TO THE EXISTING SYSTEM.

T:\JUN 4 16:20:27 2001 M:\00089\00089W2

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert J. DeWitt* 1-71-01  
CHIEF - BUREAU OF UTILITIES - DATE

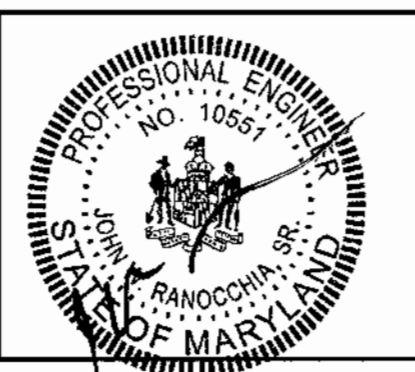
DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*John J. DeWitt* 2/6/01  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Daft-McCune-Walker, Inc.

A Team of Land Planners,  
Landscape Architects,  
Golf Course Architects,  
Engineers, Surveyors &  
Environmental Professionals

300 East Pennsylvania Avenue  
Towson, Maryland 21286  
(410) 296-3333  
Fax 296-4706



DESIGN BY:	DFM
DRAWN BY:	GPH
CHECKED BY:	
DATE:	
BY NO.	
REVISION	
DATE	

**WATER & SEWER PLAN**

600 SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

**Columbia Gateway**  
Office & Commercial Buildings

Parcel Q4 - Columbia Gateway, 6th Election District, Howard County Maryland

OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044

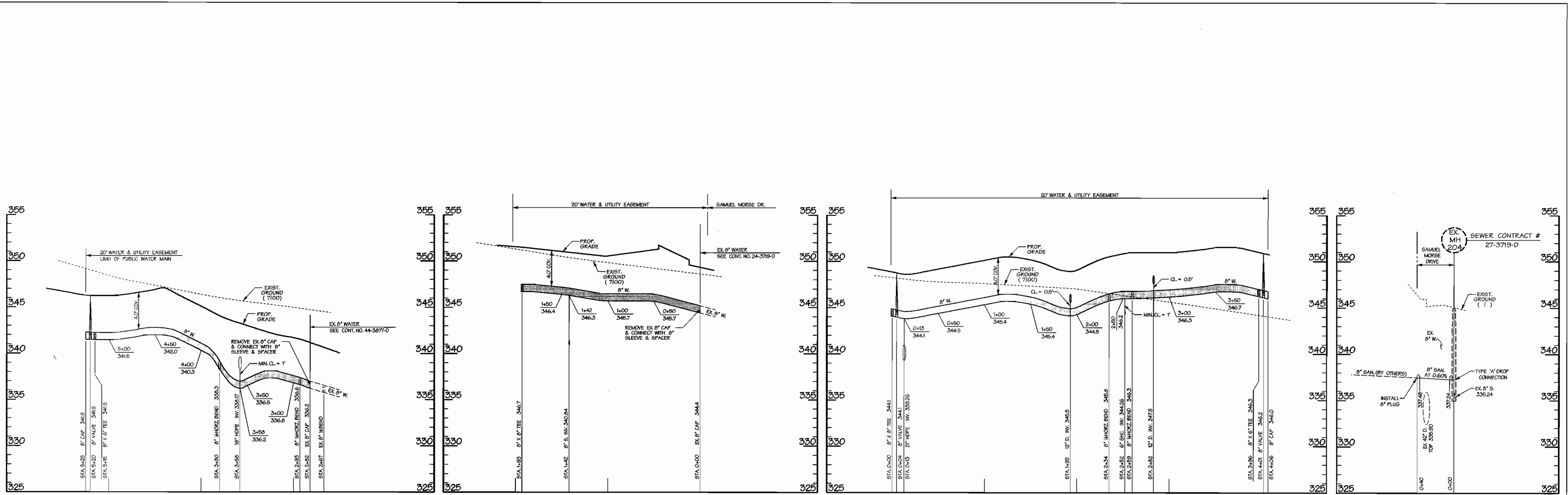
DEVELOPER: AAK IV, INC.  
8805 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045

CONTRACT NO. 24-3932-D

SCALE:  
1"=50'

SHEET  
2 of 4



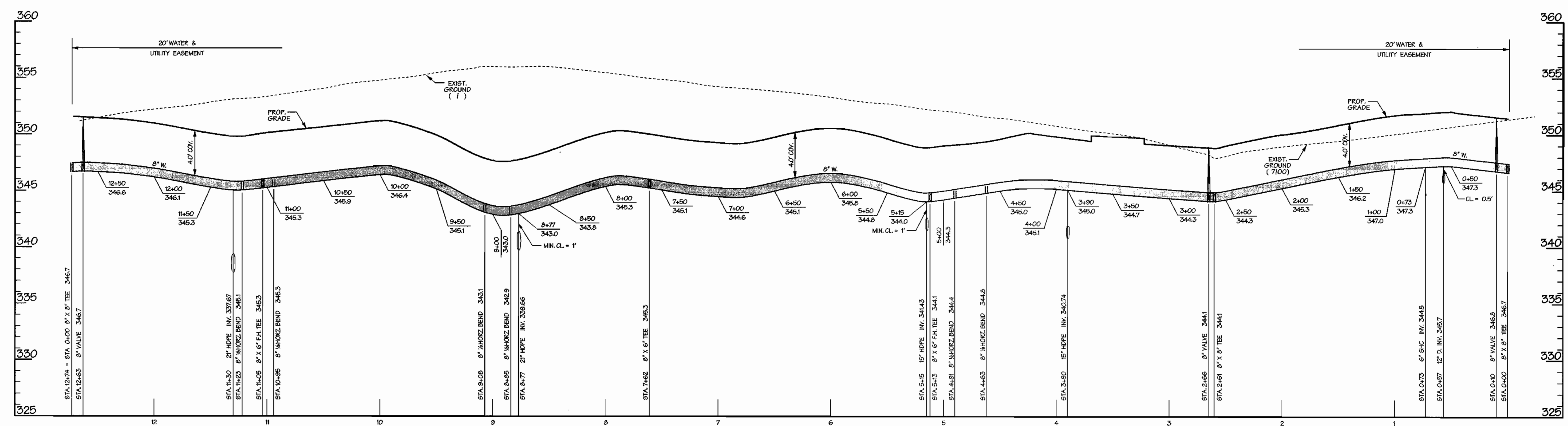


PUBLIC WATER PROFILE LINE 'A'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

PUBLIC WATER PROFILE LINE 'B'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

PUBLIC WATER PROFILE LINE 'D'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

PUBLIC SEWER  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'



PUBLIC WATER PROFILE LINE 'C'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

TIN JAN 4 16:26:06 2001 N:\00089\00089M4

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
R. J. ... 1-31-01  
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
  
... 2/8/01  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Daft-McCune-Walker, Inc.  
A Team of Land Planners,  
Landscape Architects,  
Township, Maryland 21286  
(410) 296-3333  
Fax 296-4705



DESIGN BY:	DFM		
DRAWN BY:	GPH		
CHECKED BY:			
DATE:			
BY	NO.	REVISION	DATE

**WATER & SEWER PROFILES**  
600 SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

**Columbia Gateway**  
Office & Commercial Buildings  
Parcel C4 - Columbia Gateway, 6th Election District, Howard County Maryland  
OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
1075 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044  
DEVELOPER: AAK IV, INC.  
808 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045  
CONTRACT NO. 24-3932-D

SCALE: 1"=50'  
SHEET 4 of 4

# Contract No. 24-3932-D

# COLUMBIA GATEWAY

## PARCEL Q4

## WATER & SEWER CONSTRUCTION PLANS

Howard County, Maryland Department of Public Works

### GENERAL NOTES

#### PART I

1. Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the engineer at the contractor's expense.
2. All horizontal controls are based on Maryland state coordinates (North American Datum of 1983 (NAD 83)).
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert elevations.
5. Clear all utilities by a minimum of 6". Clear all poles by 2' - 0" minimum or tunnels as required. The owner has contracted 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 bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
6. For details not shown on the drawings and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (latest edition). The contractor shall have a copy of Volume IV on the job.
7. Where test pits have been made on existing utilities, they are noted by the symbol at the location of the test pit. 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. Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration	531-5533
BC&E CO. Contractor Services	850-4620
BC&E CO. Under Ground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline CO.	795-1390
Howard County Department of Public Works	795-1390

9. Trees and shrubs are to be protected from damage to 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 line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
11. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any county road or boring/lacking operation in county roads 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 County code.

#### PART II - WATER

1. All water main to be D.I.P. Class 52 unless otherwise noted.
2. Tops of all water mains to have a minimum of 3'-1/2' 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 the 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 restrained and buttressed with concrete in accordance with standard details. Soil around the fire hydrant shall be compacted in accordance with section 1000 and 1005 of the standard specifications.
6. The contractor shall not operate any water main valves on the existing water system.
7. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
8. Sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter. Twin house connections will be 1 1/2" from main to "Y" fitting.

#### PART III - SEWER

1. All sewer mains shall be D.I.P. AND 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 covers, standard detail G5.52. Where watertight manhole frame and cover is used, set top of frame 1" - 6" above finished grade unless otherwise noted on the drawings.
6. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

ITEM	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	2270'			
6" WATER	90'			
6" VALVES	6			
8" x 6" TEE	6			
8" CAP	3			
8" 1/2 BEND	8			
FIRE HYDRANT	4			
8" SLEEVE & SPACER	2			
8" VALVE	6			
6" CAP	2			
8" x 8" TEE	3			
RELOC. EX. F.H.	1			
8" SEWER	40'			
1" DROP CONN.	1			
8" PLUG	1			

NAME OF UTILITY CONTRACTOR \_\_\_\_\_  
SURVEY AND DRAFTING DIVISION AS-BUILT DATE \_\_\_\_\_

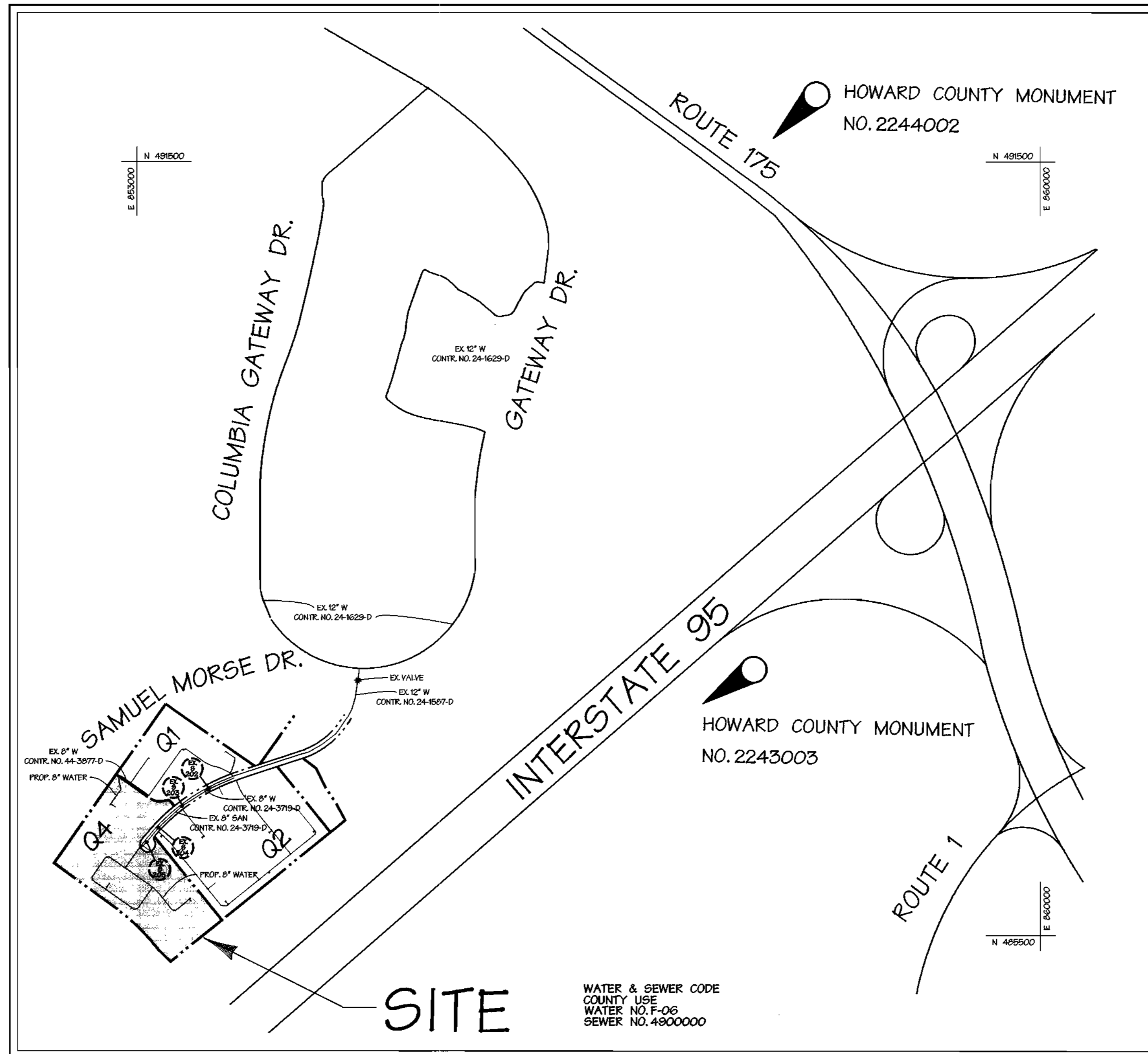
### BENCHMARK

#### DESCRIPTION

- NO. 2244002 - HOWARD COUNTY MONUMENT  
NO. 2243003 - HOWARD COUNTY MONUMENT

TYPE OF BUILDINGS:	OFFICE
NO. OF LOTS / PARCELS	1
NO. OF WATER CONNECTIONS:	4
NO. OF SEWER CONNECTIONS:	1
DRAINAGE AREA:	DORSEY
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE, HOWARD COUNTY

SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	WATER & SEWER PLAN
3	WATER PLAN
4	WATER & SEWER PROFILE



### VICINITY MAP

SCALE: 1" = 600'  
CONTRACT NO. 24-3932-D

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

*Jim Meyer* 2/22/01  
SIGNATURE DATE

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

*John R. Robertson* 2/22/01  
SIGNATURE DATE

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH CONSTRUCTION PLANS SDP-01-53.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND



**DMW**  
Daft-McCune-Walker, Inc.  
A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals  
200 East Pennsylvania Avenue  
Towson, Maryland 21286  
(410) 296-3333  
Fax 296-4706



DESIGN BY:	DMW 1	EXTEND 8" W. ADD FH. REVISE FH. LOCATION	7/12/01
DRAWN BY:			
CHECKED BY:			
DATE:			

BY	NO.	REVISION	DATE

TITLE SHEET

**Columbia Gateway**  
Office & Commercial Buildings  
Parcel Q4 - Columbia Gateway, 6th Election District, Howard County, Maryland

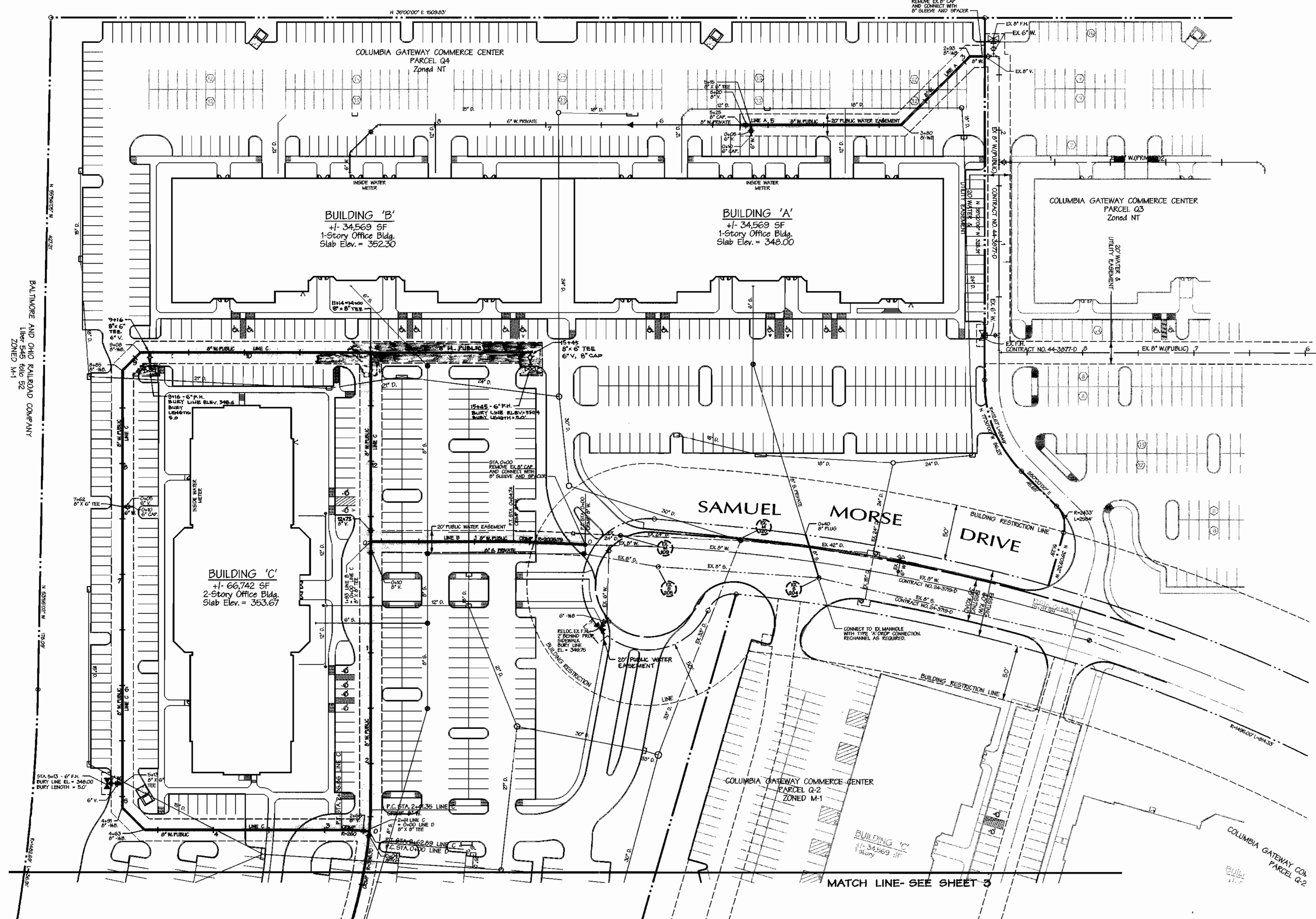
OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044

DEVELOPER: AAK IV, INC.  
8805 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045

CONTRACT NO. 24-3932-D

SCALE: AS SHOWN  
SHEET 1 of 4

ITEMS	COORDINATES		STATION
	NORTH	EAST	
LINE A			
8" WBEND	486,713.0	852,857.9	2+83
8" WBEND	486,626.8	852,873.1	3+80
8" X 6" TEE	486,596.3	852,796.6	5+15
8" VALVE	486,512.4	852,792.9	5+20
8" CAP	486,508.3	852,790.1	5+25
LINE B			
P.C. CRIMP 8" W.	486,177.3	853,020.0	0+00
P.T. CRIMP 8" W.	486,125.9	852,980.7	0+64
8" X 8" TEE	486,020.7	852,907.0	1+93
LINE C			
8" VALVE	486,015.0	852,995.2	0+10
P.C. CRIMP 8" W.	485,882.3	853,104.8	2+41
P.T. CRIMP 8" W.	485,871.0	853,119.1	2+62
8" X 8" TEE	485,871.0	853,119.1	2+61
8" VALVE	485,866.6	853,115.9	2+66
8" WBEND	485,705.4	853,003.1	4+63
8" WBEND	485,700.5	852,975.2	4+91
8" X 6" TEE	485,713.0	852,967.3	5+15
8" X 6" TEE	485,855.8	852,753.3	7+62
8" WBEND	485,926.3	852,652.7	8+85
8" WBEND	485,949.0	852,648.7	9+08
8" X 6" TEE	486,103.9	852,766.8	9+16
8" X 6" TEE	486,107.1	852,783.8	11+14
8" VALVE	486,026.5	852,898.9	12+78
8" X 6" TEE, 8" CAP			15+45



CONTRACTOR TO TEST PIT TO DETERMINE ACTUAL LOCATION AND ELEVATION OF EXISTING 8" CAP PRIOR TO LAYING PIPE

NOTE: THE EXISTING VALVE AT THE INTERSECTION OF SAMUEL MORSE DRIVE AND COLUMBIA GATEWAY DRIVE TO BE CLOSED TO MAKE THE FINAL CONNECTION TO THE EXISTING SYSTEM.

The Job: 4-16-2017 2001 AN0006900083WZ

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Ruth Dawkins* 1-21-01  
CHIEF - BUREAU OF UTILITIES - DATE

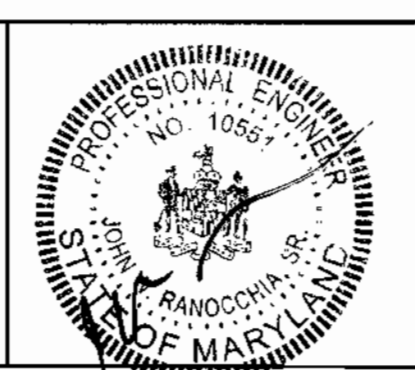
DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*John J. DeMunn* 2/6/10  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Daft-McCune-Walker, Inc.

A Team of Land Planners,  
Landscape Architects,  
Township, Maryland 21286  
(410) 296-3333  
Fax 296-4706

A Team of Land Planners,  
Landscape Architects,  
Golf Course Architects,  
Engineers, Surveyors &  
Environmental Professionals



DESIGN BY:	DFM	1	EXTEND 8" W, ADD R.H., REVISE P.H. LOCATION	7-12-01
DRAWN BY:	GPH			
CHECKED BY:				
DATE:				
BY NO.			REVISION	DATE

**WATER & SEWER PLAN**

600 SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

**Columbia Gateway**  
Office & Commercial Buildings

Parcel Q4 - Columbia Gateway, 6th Election District, Howard County Maryland

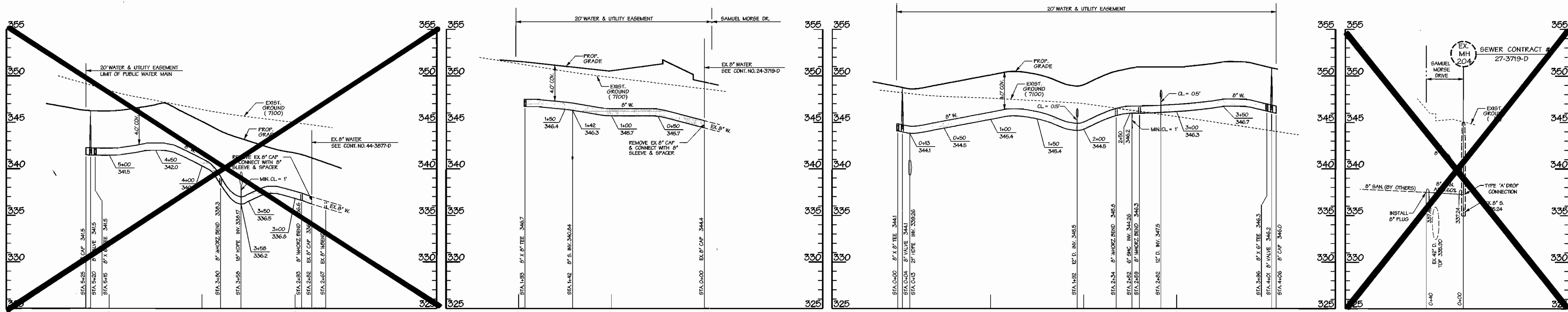
OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044

DEVELOPER: AAK IV, INC.  
8806 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045

CONTRACT NO. 24-3932-D

SCALE:  
1"=50'

SHEET  
2 of 4

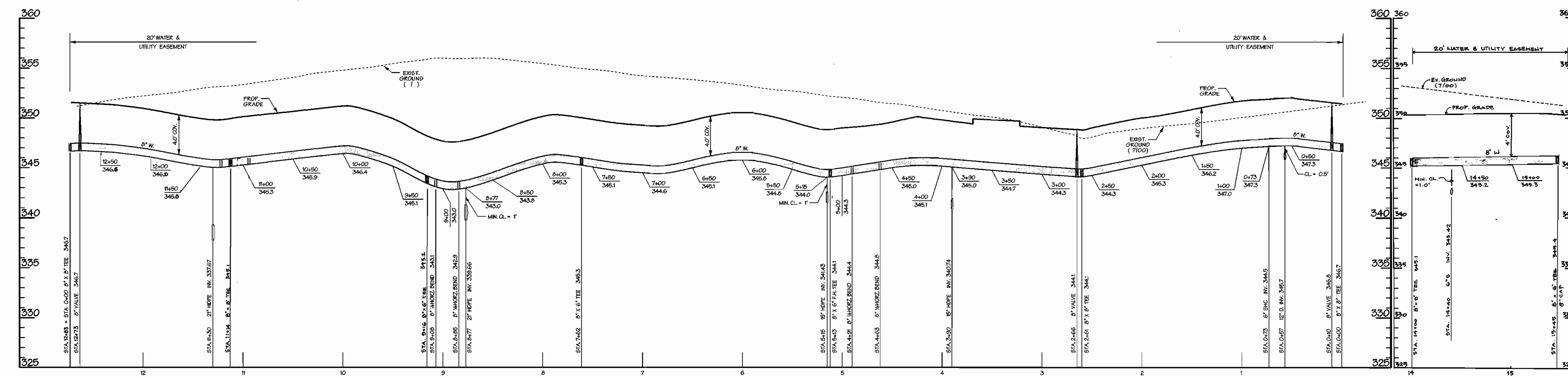


PUBLIC WATER PROFILE LINE 'A'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

PUBLIC WATER PROFILE LINE 'B'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

PUBLIC WATER PROFILE LINE 'D'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

PUBLIC SEWER  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'



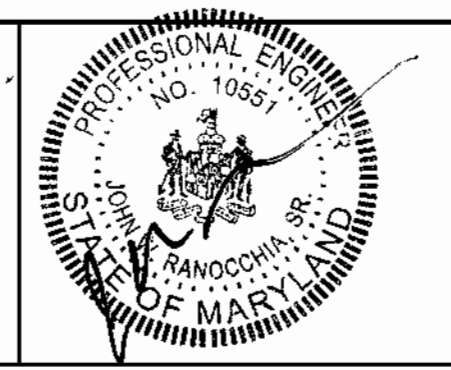
PUBLIC WATER PROFILE LINE 'C'  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

Thu Jan 4 16:26:06 2001 W:\00089\00089M4

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
Ralph [Signature] 1-31-01  
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
  
[Signature] 2/6/01  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Daft-McCune-Walker, Inc.  
A Team of Land Planners,  
Landscape Architects,  
Township, Maryland 21286  
(410) 296-3333  
Fax 296-4705



DESIGN BY:	DFM	DATE:	7-12-01
DRAWN BY:	GPH		
CHECKED BY:			
BY NO.		REVISION	

WATER & SEWER PROFILES  
600 SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

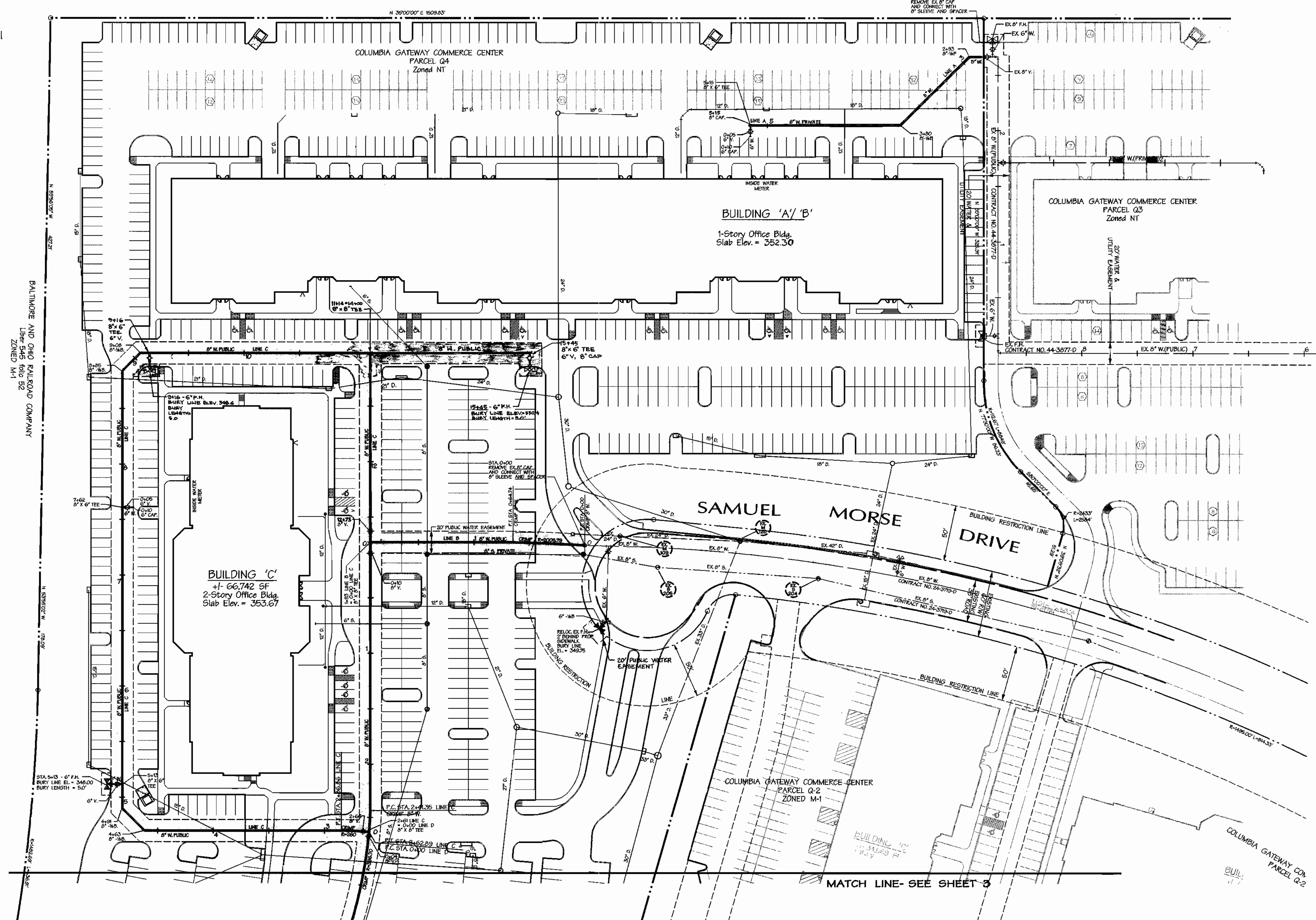
**Columbia Gateway**  
Office & Commercial Buildings  
Parcel Q4 - Columbia Gateway, 6th Election District, Howard County Maryland  
OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044  
DEVELOPER: AAK IV, INC.  
8805 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045  
CONTRACT NO. 24-3932-D  
SCALE: 1"=50'  
SHEET 4 of 4

Thu Jan 4 16:26:06 2001 W:\00089\00089M4





WATER MAIN STRUCTURE SCHEDULE			
ITEMS	COORDINATES		STATION
	NORTH	EAST	
LINE A			
8" WBEND	486,713.0	852,857.9	2+83
8" WBEND	486,625.8	852,873.1	3+80
8" X 6" TEE	486,316.3	852,795.6	5+15
8" VALVE	486,512.4	852,792.9	5+20
8" CAP	486,508.3	852,790.1	5+25
LINE B			
P.C. CRIMP 8" W.	486,177.3	853,020.0	0+00
P.T. CRIMP 8" W.	486,125.9	852,980.7	0+64
8" X 6" TEE	486,020.7	852,907.0	1+93
LINE C			
8" VALVE	486,015.0	852,915.2	0+10
P.C. CRIMP 8" W.	485,882.3	853,104.8	2+41
P.T. CRIMP 8" W.	485,871.0	853,119.1	2+62
8" X 6" TEE	485,871.0	853,119.1	2+61
8" VALVE	485,866.6	853,115.9	2+66
8" WBEND	485,705.4	853,003.1	4+63
8" WBEND	485,700.5	852,975.2	4+91
8" X 6" TEE	485,713.0	852,957.3	5+13
8" X 6" TEE	485,895.8	852,753.3	7+62
8" WBEND	485,926.3	852,652.7	8+85
8" WBEND	485,949.0	852,648.7	9+08
8" X 6" TEE	486,103.9	852,765.8	9+16
8" X 6" TEE	486,107.1	852,763.8	11+14
8" VALVE	486,026.5	852,886.9	12+73
8" X 6" TEE, 8" CAP			15+45



CONTRACTOR TO TEST PIT TO DETERMINE ACTUAL LOCATION AND ELEVATION OF EXISTING 8" CAP PRIOR TO LAYING PIPE

NOTE:  
THE EXISTING VALVE AT THE INTERSECTION OF SAMUEL MORSE DRIVE AND COLUMBIA GATEWAY DRIVE TO BE CLOSED TO MAKE THE FINAL CONNECTION TO THE EXISTING SYSTEM.

Thu Jan 4 16:20:27 2001 1100089100089W2

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert Danner* 1-71-01  
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*Michael Danner* 2/10/01  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
Daft-McCune-Walker, Inc.  
A Team of Land Planners,  
Landscape Architects,  
Township, Maryland 21286  
(410) 296-3333  
Fax 296-4705

A Team of Land Planners,  
Landscape Architects,  
Golf Course Architects,  
Engineers, Surveyors &  
Environmental Professionals



DESIGN BY:	DMW	1	EXTEND 8" W, ADD P.H., REVISE P.H. LOCATION	7-12-01
DRAWN BY:	DMW	2	ELIMINATE SEWER, PUBLIC WATER AND BACK OF BUILDING A, B	10/23/01
CHECKED BY:				
DATE:				
BY	NO.	REVISION	DATE	

**WATER & SEWER PLAN**

600 SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

**Columbia Gateway**  
Office & Commercial Buildings

Parcel Q4 - Columbia Gateway, 6th Election District, Howard County Maryland

OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044

DEVELOPER: AAK IV, INC.  
8805 COLUMBIA 100 PKWY  
SUITE 101  
COLUMBIA, MD 21045

CONTRACT NO. 24-3932-D

SCALE:  
1"=50'

SHEET  
2 of 4

Thu Jan 4 16:20:27 2001 1100089100089W2