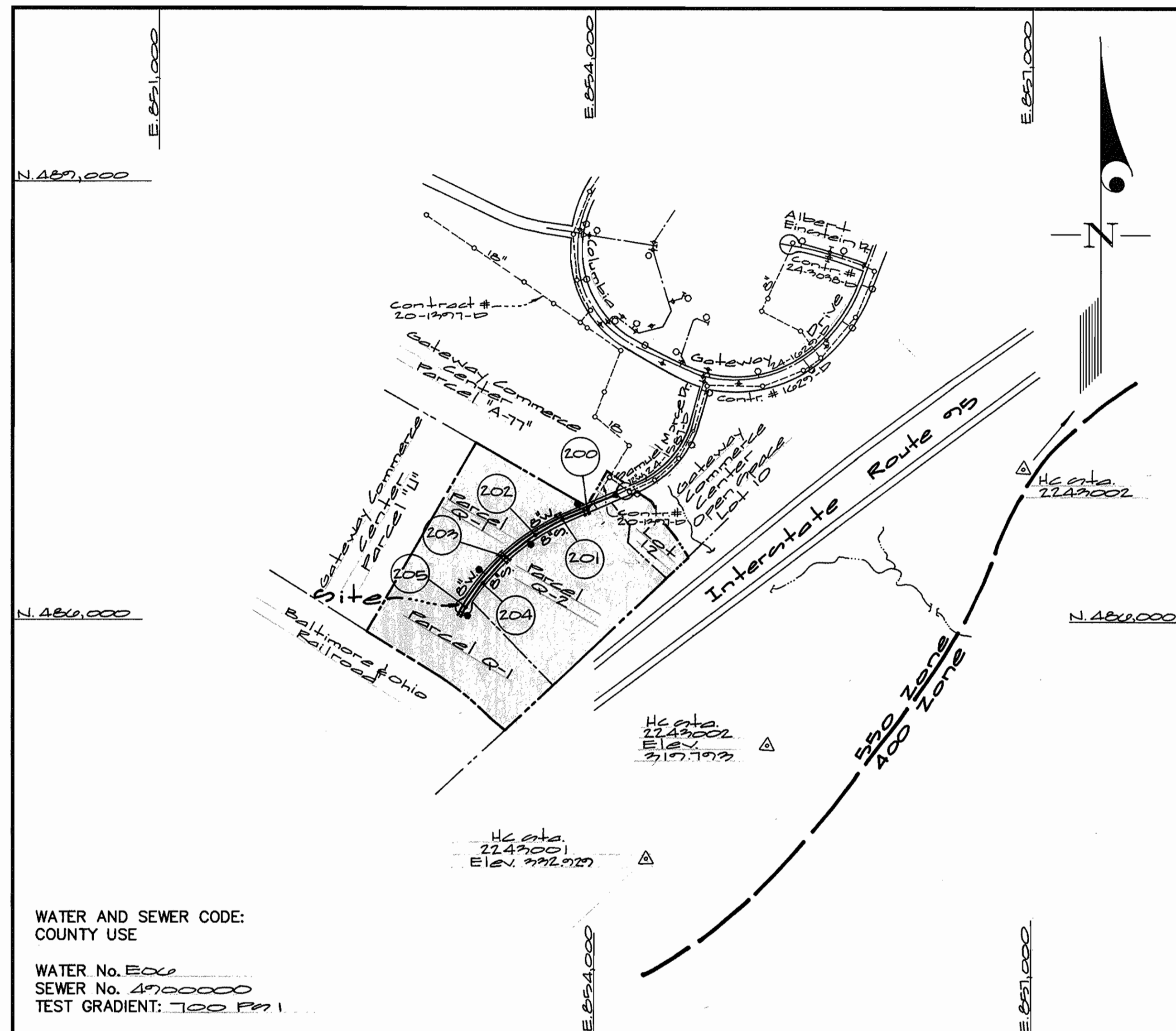


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" Sewer	1282 LF			
8" Stopper	5 Ea.			
4' Manholes	6 Ea.			
8" Water	1477 LF			
6" Water	143 LF			
8" Valve	4 Ea.			
6" Valve	4 Ea.			
8" x 8" T	2 Ea.			
8" x 6" FHT	4 Ea.			
Fire Hydrants	4 Ea.			
8" x 6" Crown	1 Ea.			
12" x 8" Reducer	1 Ea.			

NAME OF UTILITY CONTRACTOR: _____

SURVEY AND DRAFTING DIV. CHECKBOX: _____ AS-BUILT DATE: _____

TYPE OF BUILDING	Office & Commercial
NUMBER OF UNITS	-0-
NUMBER OF S.H.C.'s	5 (Future)
NUMBER OF W.H.C.'s	5 (Future)
DRAINAGE AREA	Dorney
TREATMENT PLANT	Little Patuxent Water Reclamation Plant



WATER AND SEWER CODE:
COUNTY USE

WATER No. E06
SEWER No. 4700000
TEST GRADIENT: 100 Fm 1

VICINITY MAP
SCALE: 1"=600'

CONTRACT No. 24-3717-D
Columbia Gateway
Parcels "Q-1", "Q-2" & "U" & Lots 11 & 12
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

GENERAL NOTES

- PART I**
- 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.
 - All horizontal controls are based on Maryland State Coordinates [North American Datum 1927 (NAD '27)].
 - All vertical controls are based on U.S.G.S. data.
 - All pipe elevations shown are invert elevations.
 - Clear all utilities by a minimum of 6'. Clear all poles by 2'-0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for 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.
 - 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.
 - Where test pits have been made on existing utilities, they are noted by the symbol \oplus 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.
 - Contractor shall notify the following utility companies or agencies at least (5) working days before starting work shown on these plans:

State Highway Administration	531-5533
BGE Contractor Services	850-4620
BGE Under Ground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Howard County Department of Public Works Bureau of Utilities	313-4900
 - 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.
 - Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
 - The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five (5) working days before any open cut of any County road or boring/jacking operation on County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirement per Section 18.114(a) of the Howard County Code.
- PART II - WATER**
- All water mains to be D.I.P. Class 52 unless otherwise noted.
 - Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
 - Valves adjacent to tees shall be strapped to tees.
 - All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
 - Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with the Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
 - The contractor shall not operate any water main valves on the existing water system.
 - All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
 - For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1' connection with a 3/4" meter.
- PART III - SEWER**
- All sewer mains shall be DIP or P.V.C. unless otherwise noted.
 - All manholes shall be 4'-0" inside diameter unless otherwise noted.
 - Force mains shall be D.I.P. only.
 - Manholes shown with 12" and 16" walls are for brick manholes only.
 - Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on drawings.
 - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Drawings Plan F-22-24, Drawings for Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

Deugh Simmons 1/4/99
SIGNATURE DATE
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED: *John R. Robertson* 1/4/99
HOWARD S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Ruth Berman 12-18-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF ZONING PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
John R. Robertson 1/5/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3309 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20886
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

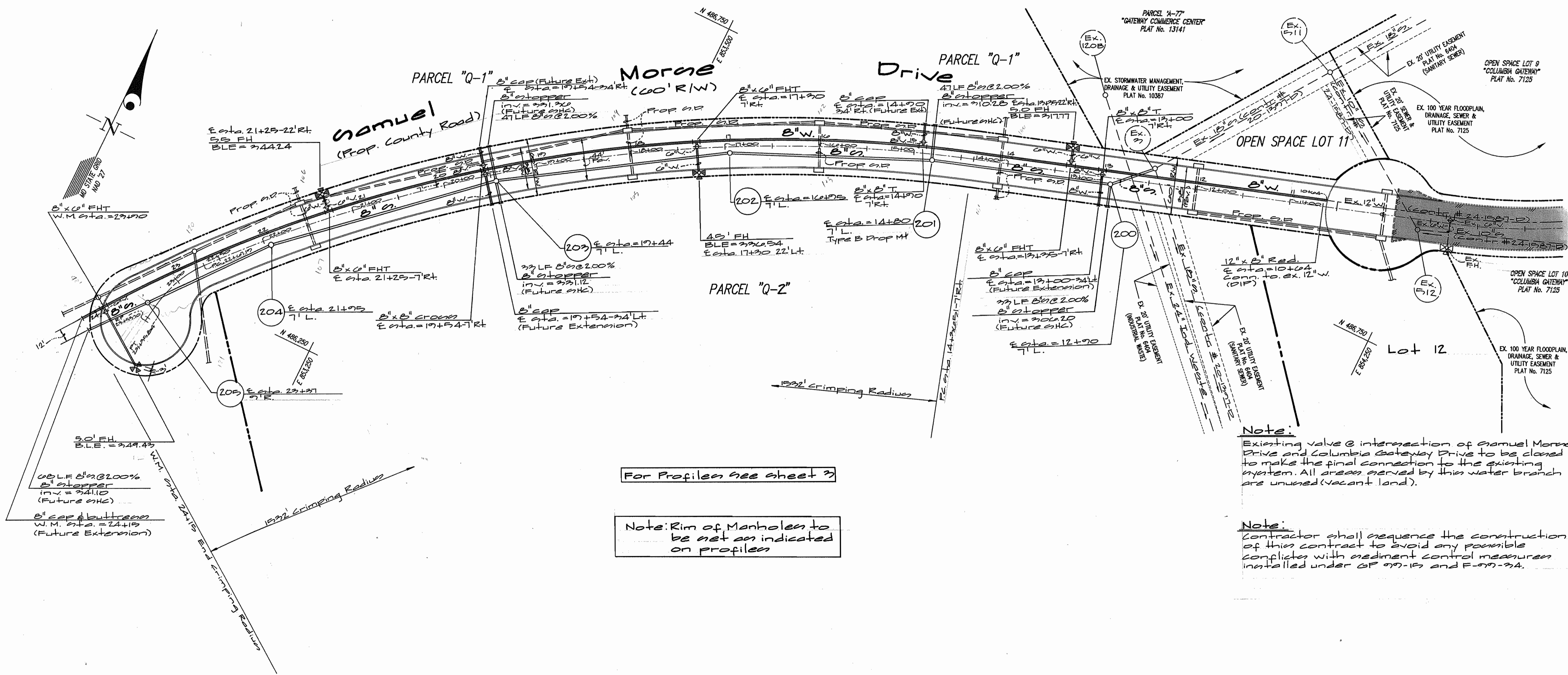


DES: WSL				
DRN: WSL				
CHK:				
DATE:	BY	NO	REVISION	DATE

Title sheet
600' SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 17

Columbia Gateway
Parcels "Q-1", "Q-2", "U" and Lots 11 & 12
Election District No. 6 Howard County, Maryland
Contract No. 24-3717-D

GLW FILE No. 97-150
SCALE AS SHOWN
SHEET 1 OF 22



For Profiles see sheet 3

Note: Rim of Manholes to be set as indicated on profiles

Note: Existing valve @ intersection of Samuel Morse Drive and Columbia Gateway Drive to be closed to make the final connection to the existing system. All areas served by this water branch are unused (vacant land).

Note: Contractor shall sequence the construction of this contract to avoid any possible conflicts with sediment control measures installed under GP 07-15 and F-07-34.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
12-18-98

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
1/5/99

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3809 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20886
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

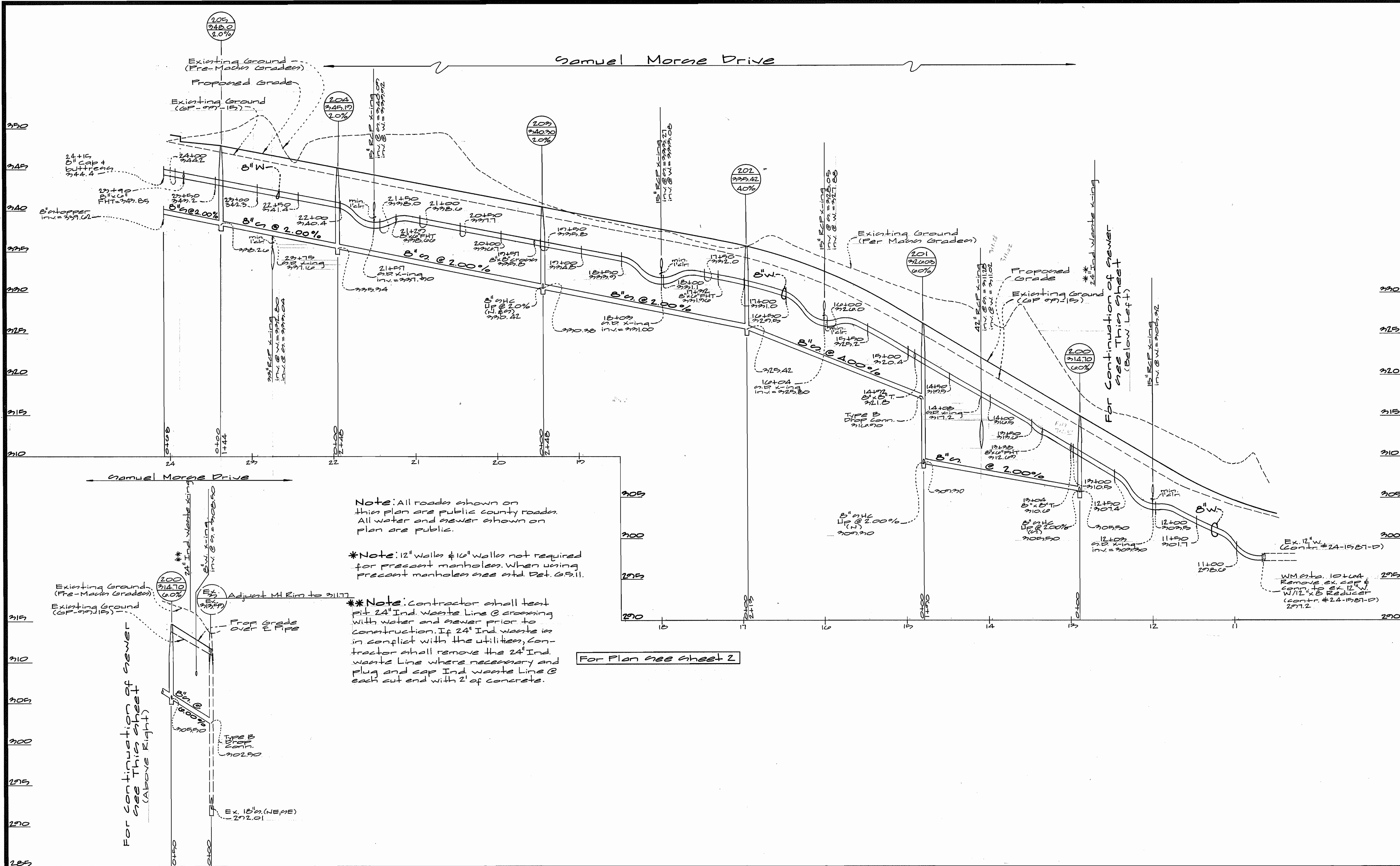


DES: WBJ				
DRN: WBJ				
CHK:				
DATE:	BY	NO	REVISION	DATE

Water & Sewer Plan
Scale: 1" = 50'
600' SCALE MAP NO. 42443 BLOCK NO. 1247

Columbia Gateway
Parcels "Q-1", "Q-2", "U" and Lots 11 & 12
Election District No. 00 Howard County, Maryland
Contract No. 24-3717-D

SCALE AS SHOWN
SHEET 2 OF 3



Note: All roads shown on this plan are public county roads. All water and sewer shown on plan are public.

*Note: 12" walls & 16" walls not required for precast manholes. When using precast manholes see std. Det. 65.11.

**Note: Contractor shall test pit 24" Ind. Waste Line @ crossing with water and sewer prior to construction. If 24" Ind. Waste is in conflict with the utilities, Contractor shall remove the 24" Ind. Waste Line where necessary and plug and cap Ind. Waste Line @ each cut end with 2' of concrete.

For Plan see sheet 2

For continuation of sewer see this sheet (Above Right)

For continuation of sewer see this sheet (Below Left)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert W. Bennett 12-18-78
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

William J. ... 1/5/79
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



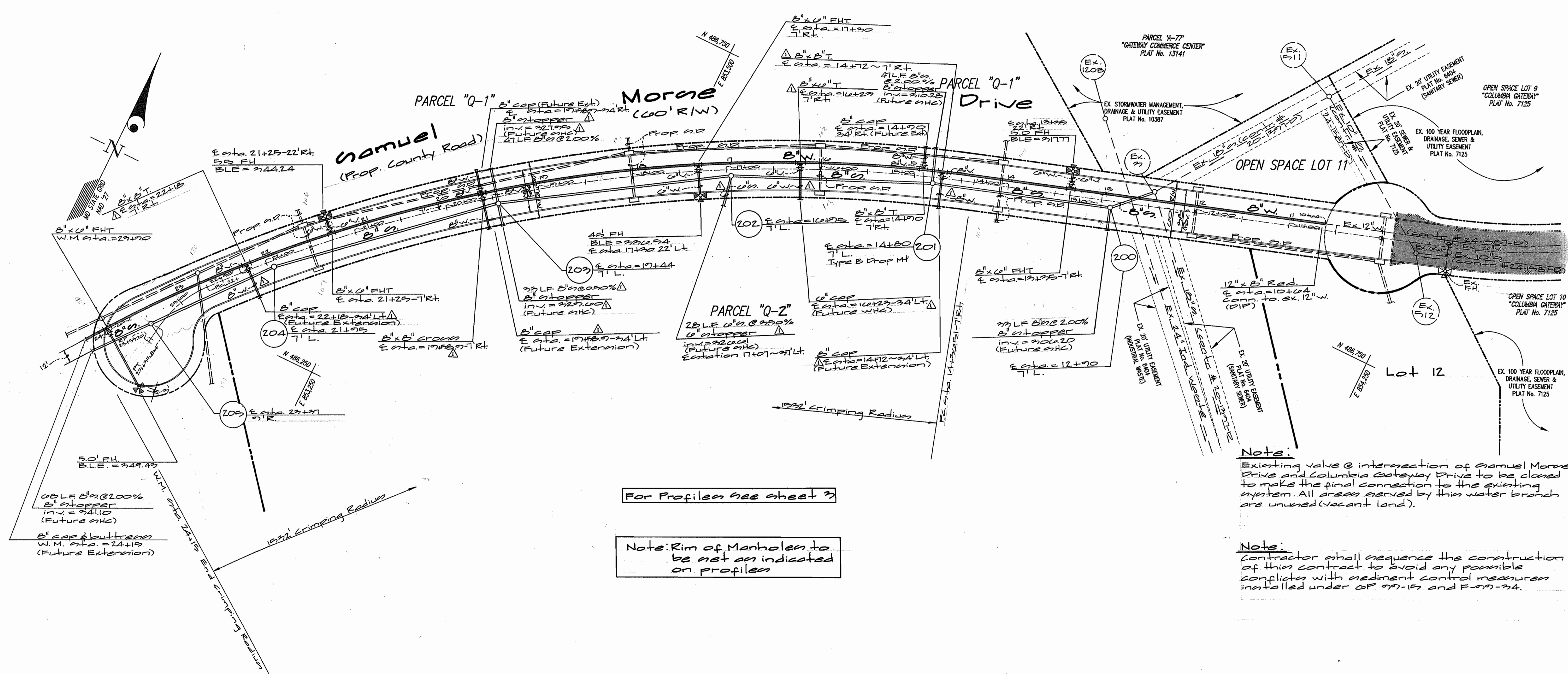
DES: W62J					
DRN: W62J					
CHK:					
DATE:	BY	NO	REVISION	DATE	

Water & Sewer Profiles
Profile scales:
Horizontal: 1" = 50'
Vertical: 1" = 5'

600' SCALE MAP NO. 42-43 BLOCK NO. 12-1

Columbia Gateway
Parcel 1, 2, 4 & Lots 11 & 12
Election District No. 0 Howard County, Maryland
Contract No. 24-3717-D

SCALE AS SHOWN
SHEET 22 OF 22



For Profiles see sheet 3

Note: Rim of Manholes to be set as indicated on profiles

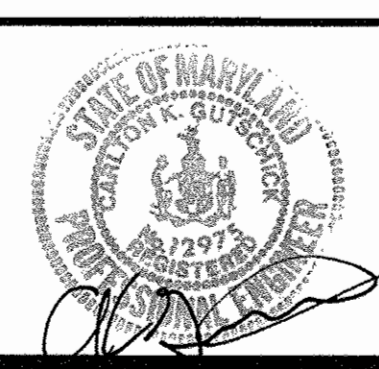
Note:
Existing valve @ intersection of Samuel More Drive and Columbia Gateway Drive to be closed to make the final connection to the existing system. All areas served by this water branch are unused (vacant land).

Note:
Contractor shall sequence the construction of this contract to avoid any possible conflicts with sediment control measures installed under GP 99-15 and F-99-34.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
12-18-98

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
1/5/99

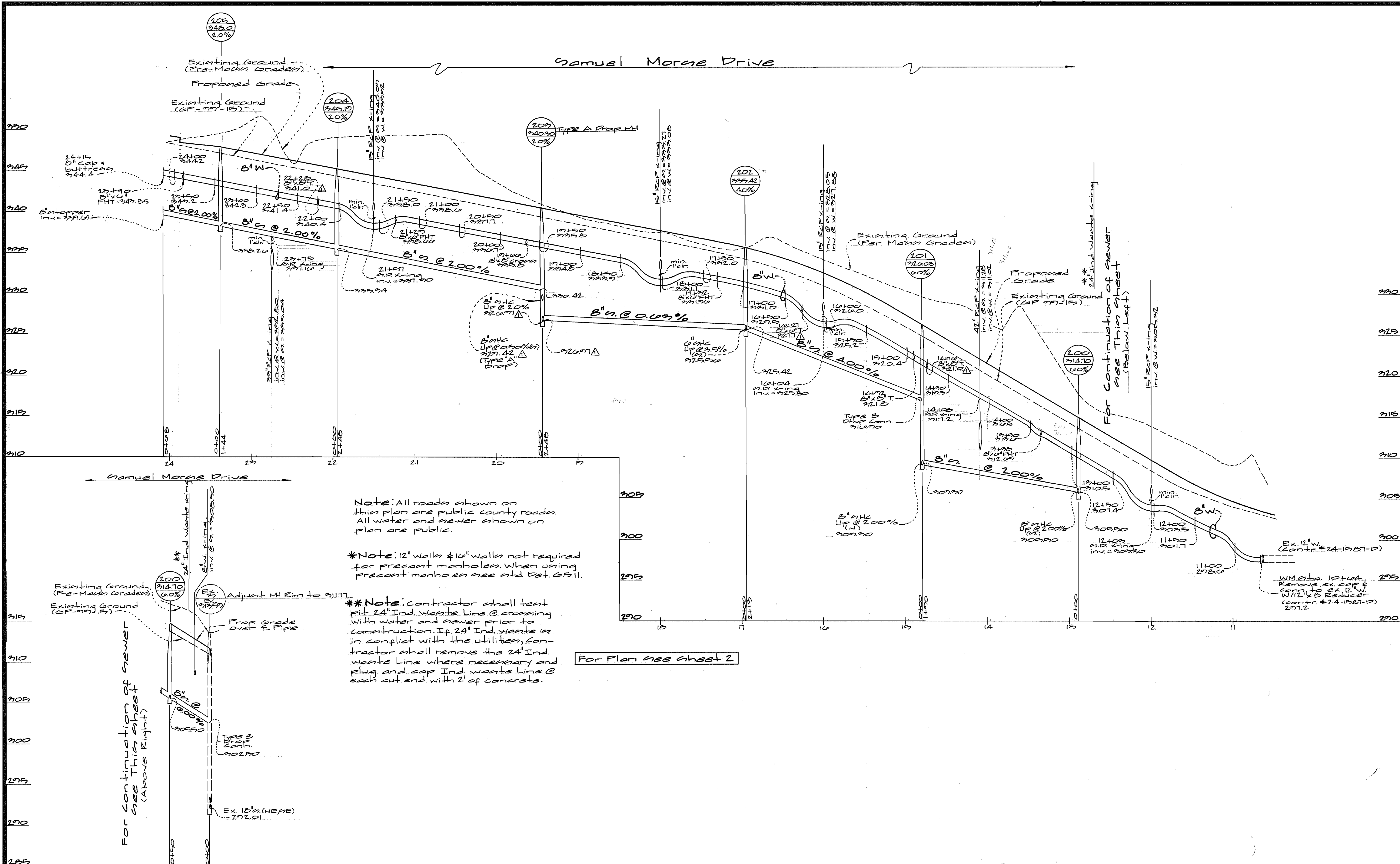
GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONTOWNE OFFICE PARK
BURTONTOWNE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-959-2524 FAX: 301-421-4186



DES: W6J			
DRN: W6J			
CHK:			
DATE:	BY	NO	REVISION

Water & Sewer Plan
Scale: 1" = 50'
600' SCALE MAP NO. 42443 BLOCK NO. 12#7

Columbia Gateway
Parcels "Q-1", "Q-2", "U" and Lots 11 & 12
Election District No. 6 Howard County, Maryland
Contract No. 24-3717-D
SCALE AS SHOWN
SHEET 2 OF 3



Note: All roads shown on this plan are public county roads. All water and sewer shown on plan are public.

*Note: 12" walls & 10" walls not required for precast manholes. When using precast manholes see std Det. G.S.11.

**Note: Contractor shall test pit 24" Ind. Waste Line @ crossing with water and sewer prior to construction. If 24" Ind. waste is in conflict with the utilities, Contractor shall remove the 24" Ind. waste line where necessary and plug and cap Ind. waste line @ each cut end with 2' of concrete.

For Plan see sheet 2

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

R. L. Bannan 12-18-78
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

John P. ... 1/5/79
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-820-1820 DC/VA: 301-989-2524 FAX: 301-421-4188



DES: WEL			
DRN: WEL			
CHK:			
DATE:	BY	NO	REVISION

Water & Sewer Profiles
Profile scales:
Horizontal: 1" = 50'
Vertical: 1" = 5'

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

Columbia Gateway
Parcela "Q-1", "Q-2", "U" & Lots 11 & 12
Election District No. 0 Howard County, Maryland
Contract No. 24-3719-D

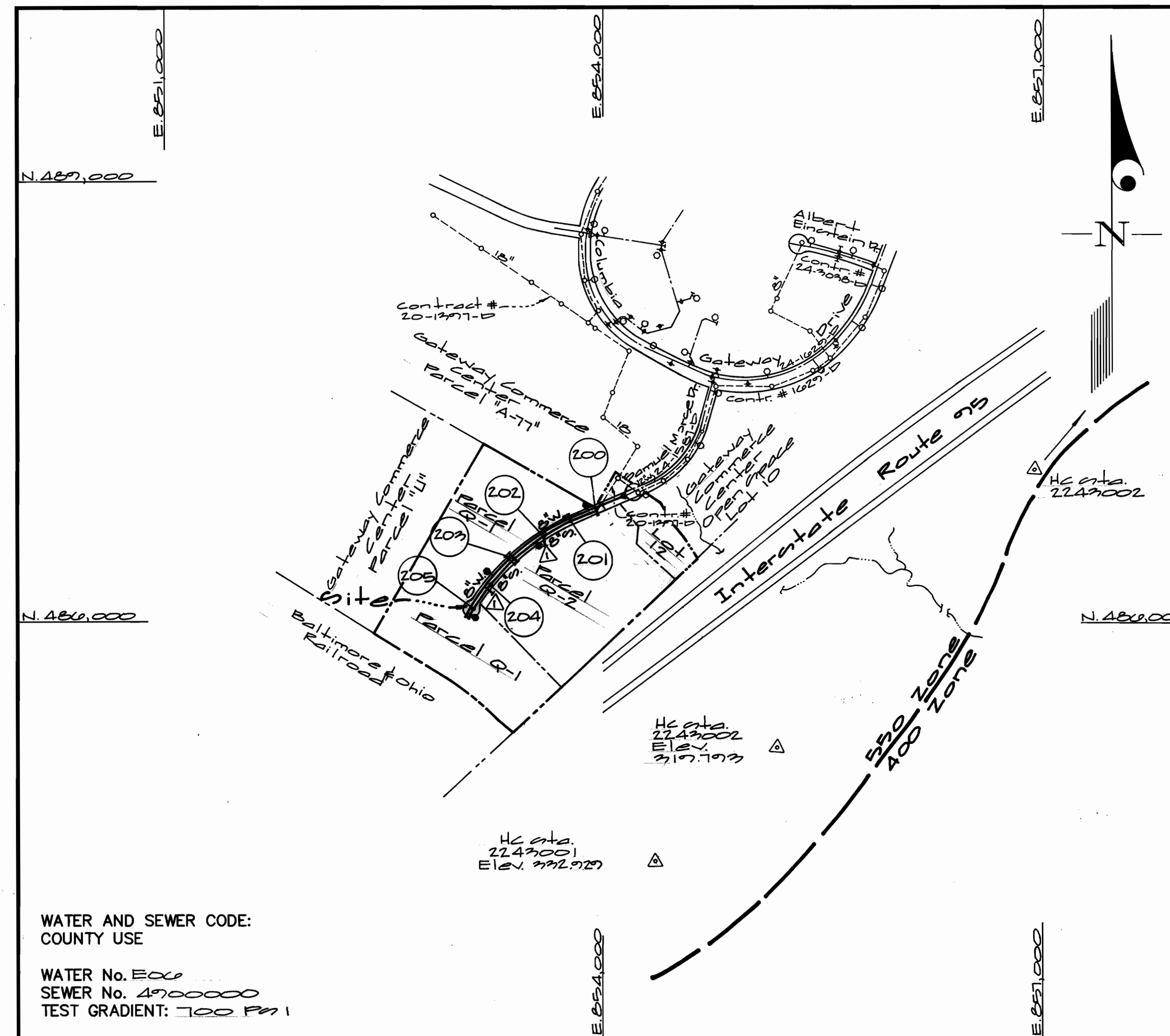
SCALE AS SHOWN
SHEET 22 OF 22

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
6" sewer	1202 LF	1302	P.V.C.	J.M. MANUFACTURING
6" stopper	5 EA.	5	P.V.C.	J.M. MANUFACTURING
4" Manholes	6 EA.	6	CONCRETE	FREDRICK PRECAST
6" sewer	28 LF			
6" stopper	1 EA.			
6" water	1517 LF	1511	D.I.P.	GRIFFIN PIPE
6" water	177 LF	166	D.I.P.	GRIFFIN PIPE
6" valve	5 EA.	4	GATE	MUELLER
6" valve	5 EA.	4	GATE	MUELLER
6" x 6" FHT	2 EA.	4	CAST	GRIFFIN
6" x 6" FHT	4 EA.	4	CAST	GRIFFIN
Fire Hydrants	4 EA.	4	CASTIRON	MUELLER CO
6" x 6" Crown	1 EA.	1	CAST	GRIFFIN
12" x 6" Reducer	1 EA.	1	CAST	GRIFFIN
6" x 6" T	1 EA.			

NAME OF UTILITY CONTRACTOR:

SURVEY AND DRAFTING DIV. CHECKBOX: AS-BUILT DATE:

TYPE OF BUILDING	Office & Commercial
NUMBER OF UNITS	- 0 -
NUMBER OF S.H.C.'s	0 (Future)
NUMBER OF W.H.C.'s	7 (Future)
DRAINAGE AREA	Dorney
TREATMENT PLANT	Little Patuxent Water Reclamation Plant



VICINITY MAP
SCALE: 1"=600'

WATER AND SEWER CODE:
COUNTY USE
WATER No. E00
SEWER No. A7000000
TEST GRADIENT: 100 FM 1

GENERAL NOTES

- PART I**
- 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.
 - All horizontal controls are based on Maryland State Coordinates [North American Datum 1927 (NAD '27)].
 - All vertical controls are based on U.S.C.S. data.
 - All pipe elevations shown are invert elevations.
 - Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for 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.
 - 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.
 - 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.
 - Contractor shall notify the following utility companies or agencies at least (5) working days before starting work shown on these plans:
 - State Highway Administration 531-5533
 - BGE Contractor Services 850-4620
 - BGE Under Ground Damage Control 787-9068
 - Miss Utility 1-800-257-7777
 - Colonial Pipeline Co. 795-1390
 - Howard County Department of Public Works Bureau of Utilities 313-4900
 - 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.
 - Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
 - The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five (5) working days before any open cut or any County road or boring/jacking operation on County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirement per Section 18.114(a) of the Howard County Code.

- PART II - WATER**
- All water mains to be D.I.P. Class 52 unless otherwise noted.
 - Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
 - Valves adjacent to tees shall be strapped to tees.
 - All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
 - Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with the Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
 - The contractor shall not operate any water main valves on the existing water system.
 - All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
 - For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1' connection with a 3/4" meter.

- PART III - SEWER**
- All sewer mains shall be DIP or P.V.C. unless otherwise noted.
 - All manholes shall be 4' -0" inside diameter unless otherwise noted.
 - Force mains shall be D.I.P. only.
 - Manholes shown with 12" and 16" walls are for brick manholes only.
 - Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on drawings.
 - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

CONTRACT No. 24-3719-D
Columbia Gateway
Parcels "Q-1", "Q-2" & "U" & Lots 11 & 12

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Drawings Plan F-99-2-4; Drawings for Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

Cleof Simmons 1/4/99
SIGNATURE DATE

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED: *John R. Roberts* 1/4/99
HOWARD S.C.D. DATE

GLW FILE No. 97-190

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. Bunn 12-18-98
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Cleof Simmons 1/5/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

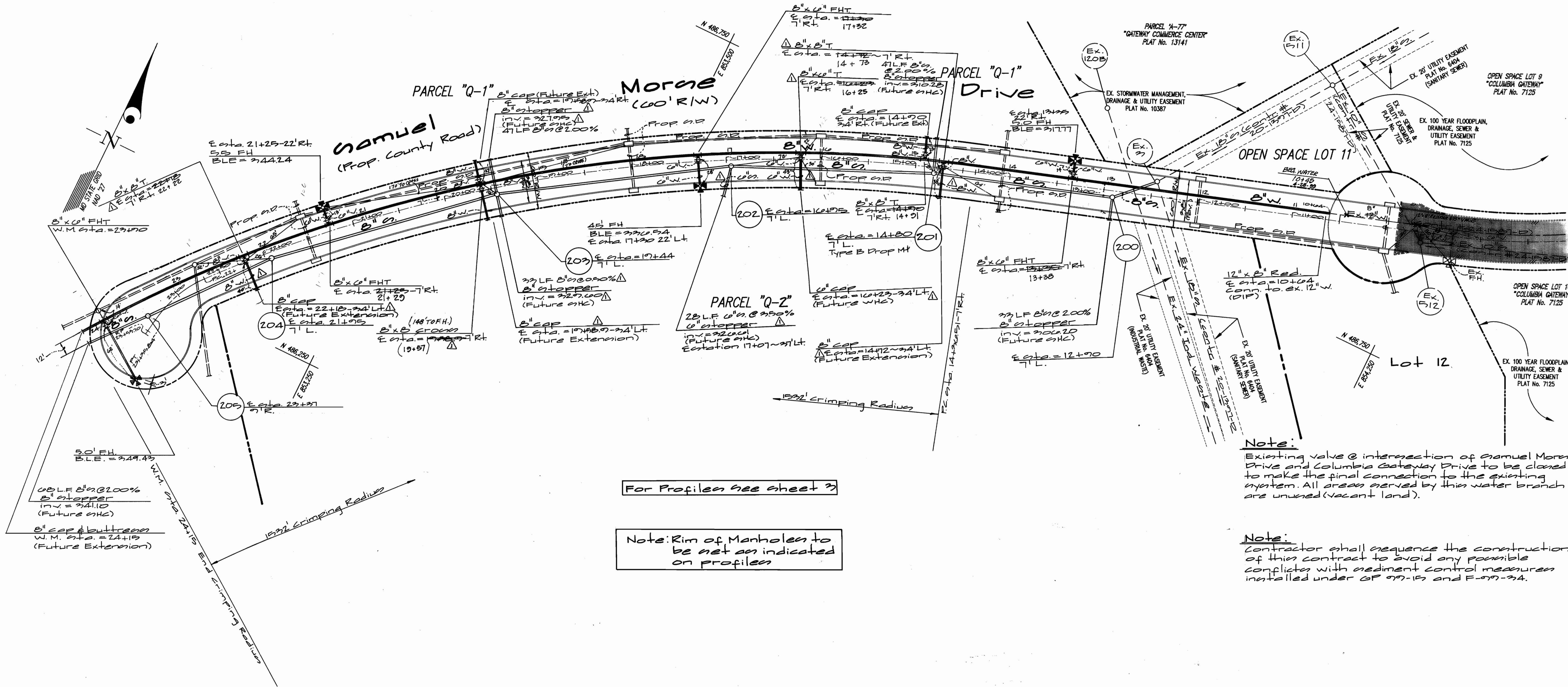
GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: WGS			
DRN: WGS			
CHK: WGI	2	AS-BUILT CONDITIONS ADDED TO PLAN	6/99
DATE: WGS		add items to quantities & rev quantities	9/2/99
BY: NO		REVISION	DATE

Title sheet
600' SCALE MAP NO. 42 & 43 BLOCK NO. 12 & 7

Columbia Gateway
Parcels "Q-1", "Q-2", "U" and Lots 11 & 12
Election District No. 6 Howard County, Maryland
Contract No. 24-3719-D
SHEET 1 OF 32



For Profiles see sheet 3

Note: Rim of Manholes to be set as indicated on profiles

Note:
Existing valve @ intersection of Samuel Morris Drive and Columbia Gateway Drive to be closed to make the final connection to the existing system. All areas served by this water branch are unsewered (vacant land).

Note:
Contractor shall sequence the construction of this contract to avoid any possible conflicts with sediment control measures installed under CP 09-15 and F-09-34.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
12-18-98
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
1/5/99
DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20886
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: WBJ				
DRN: WBJ				
CHK: K.R.I.	Z	ASBUILT CONDITIONS ADDED TO PLAN	6/00	
DATE: WBJ	Δ	REVISED WATER BRANCH CONN. TO EXISTING WATER BRANCH FOR PARCEL Q-2	5/21/00	
BY: NO		REVISION	DATE	

Water & Sewer Plan
Scale: 1" = 50'
600' SCALE MAP NO. 42443 BLOCK NO. 12-17

Columbia Gateway
Parcels "Q-1", "Q-2", "U" and Lots 11 & 12
Election District No. 6 Howard County, Maryland
Contract No. 24-3717-D
SCALE AS SHOWN
SHEET 2 OF 3

