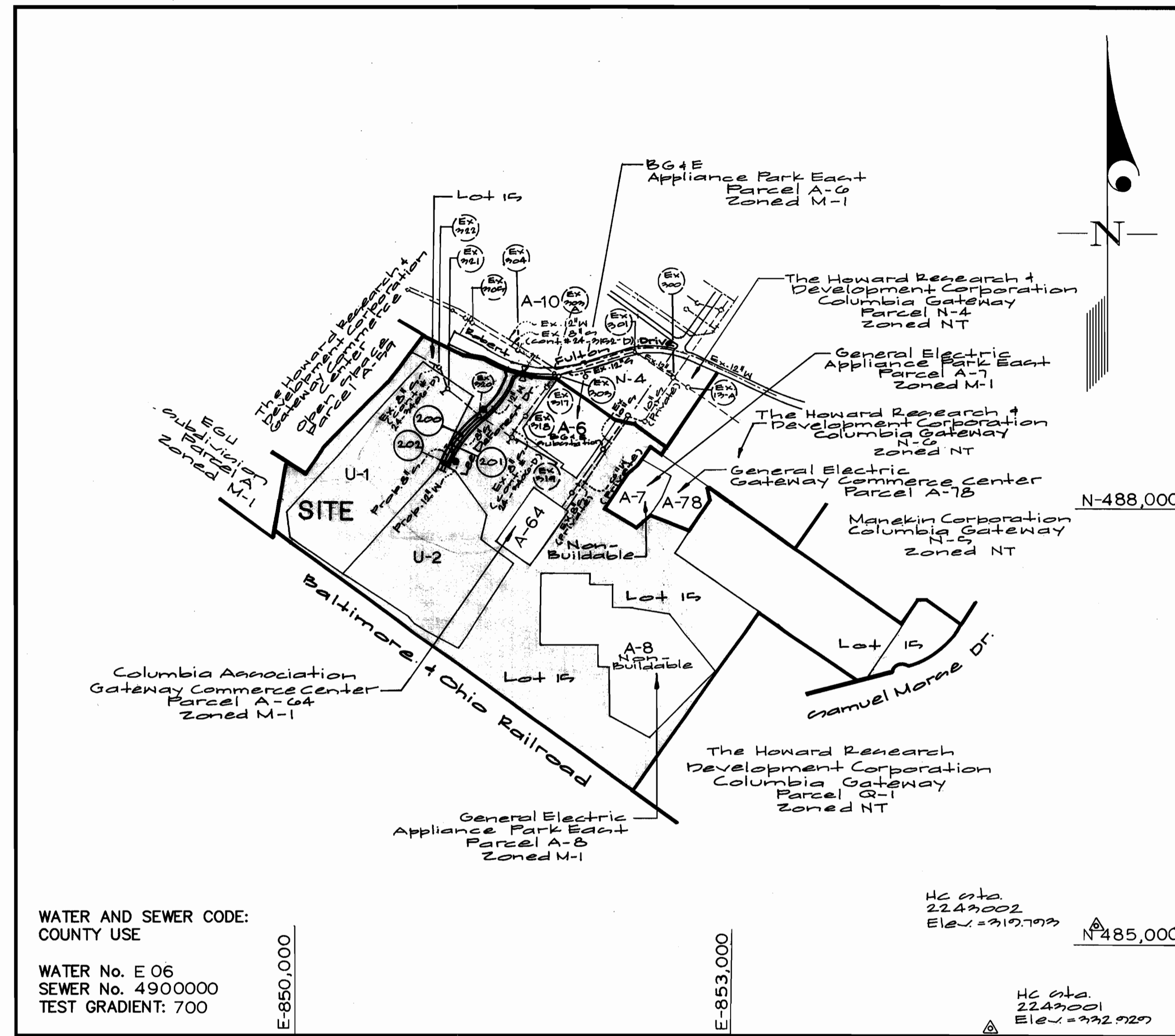


QUANTITIES			
ITEMS	QUANTITIES ESTIMATED	AS-BUILT	
		QUANTITIES	MANUFACTURER/SUPPLIER
B' Meter	200LF		
B' Stopper	2 Ea.		
4' Manholes	2 Ea.		
4' Drop Manholes (Type A)	1 Ea.		
12" Water (DIP)	1000LF		
B' Water (DIP)	55LF		
U" Water (DIP)	44LF		
B' Valve	1 Ea.		
U" Valve	2 Ea.		
12" x B' Tee	1 Ea.		
12" x U" FHT	2 Ea.		
Fire Hydrant	2 Ea.		
12" 1/2 Bend	2 Ea.		
12" cap	1 Ea.		
B' cap	1 Ea.		
12" Valve	1 Ea.		
NAME OF UTILITY CONTRACTOR:			

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

TYPE OF BUILDING	Commercial
NUMBER OF UNITS	N/A Bulk Parcel
NUMBER OF S.H.C.'s	2 (1-Exit Parcel U-1) 1 (1-Prop. Parcel U-1)
NUMBER OF W.H.C.'s	1
DRAINAGE AREA	Little Patuxent
TREATMENT PLANT	Little Patuxent Water Reclamation Plant



VICINITY MAP
SCALE: 1"=600'

CONTRACT No. 24-3812-D
Columbia Gateway
Parcel 'U-1', 'U-2' and Open Space Lot 15

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 1983 (NAD '83)].
 - 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 [circle with cross] 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 and 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-55-74; Drawings 6 thru 13 for Sediment & Erosion Control, + GP 00-01

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

Chief Simmons 2/3/00
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

APPROVED: [Signature] 2/3/00
HOWARD S.C.D. DATE

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

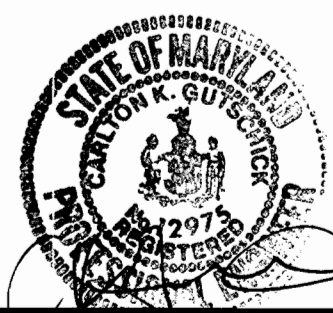
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Robert Baerman 1-28-00
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 2/4/00
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 20886
TEL: 301-421-4024 BAL: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186



DES: WSJ	
DRN: gt	
CHK: [Signature]	
DATE: Jan 2000	
BY NO REVISION	
DATE	

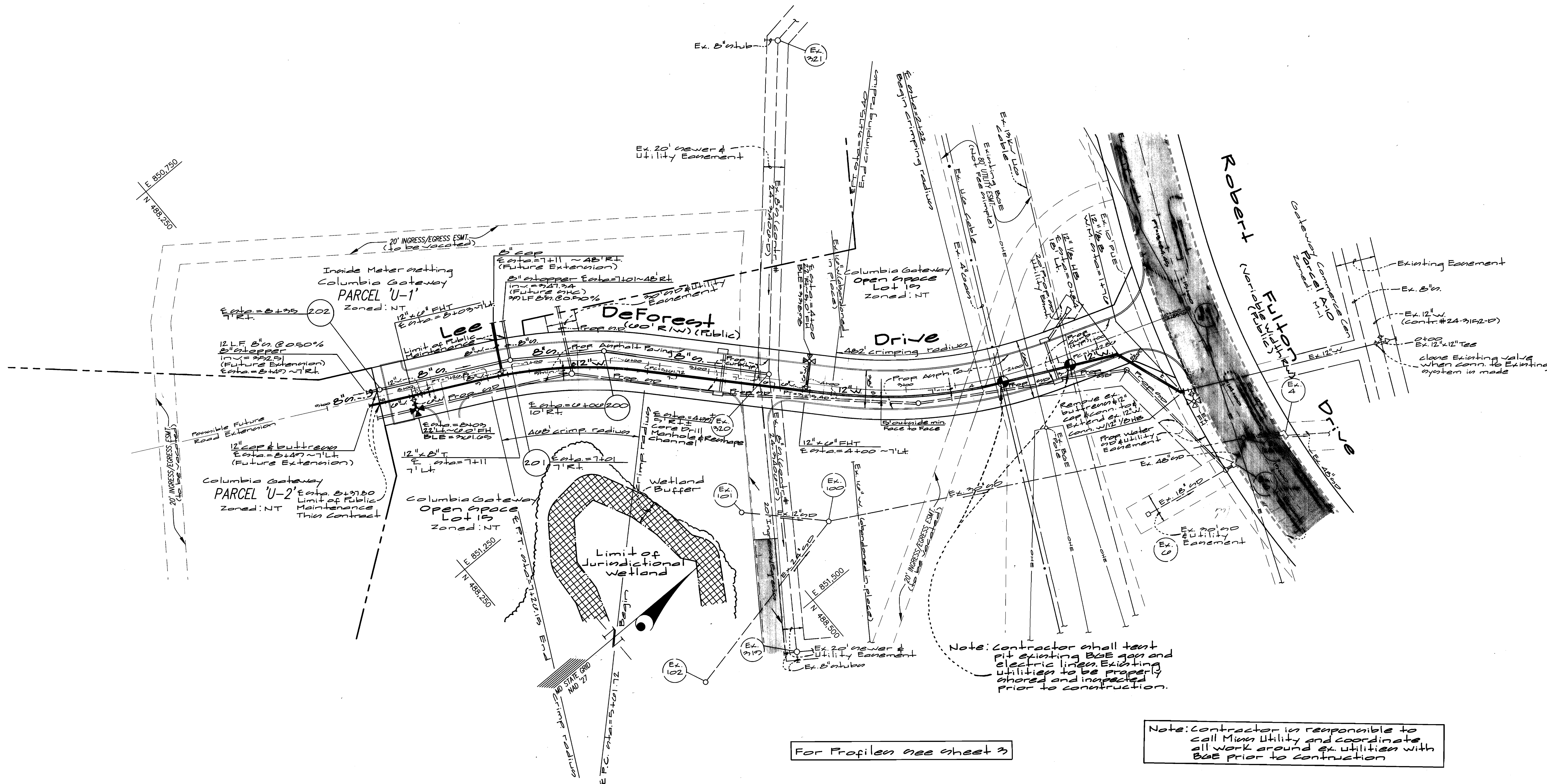
Title sheet

600' SCALE MAP NO. 42 BLOCK NO. 12

COLUMBIA GATEWAY
PARCEL 'U-1', 'U-2' AND OPEN SPACE LOT 15
ELECTION DISTRICT No. 6
CONTRACT No. 24-3812-D

GLW FILE No. 21-055

SCALE AS SHOWN
SHEET 1 OF 22



Note: Contractor shall test all existing BAE gas and electric lines. Existing utilities to be properly shored and inspected prior to construction.

Note: Contractor is responsible to call Miss Utility and coordinate all work around ex. utilities with BAE prior to construction.

For Profiles see sheet 3

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

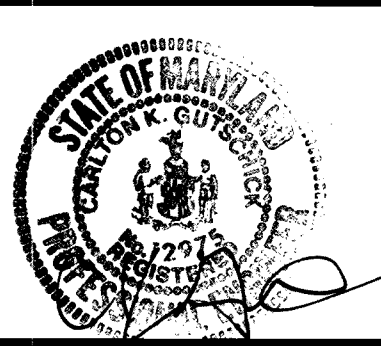
Note: Contractor shall sequence the construction of this contract to avoid any possible conflicts with sediment control measures installed under GP 20-01 and F-00-74

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
1-28-00
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
2/7/00
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

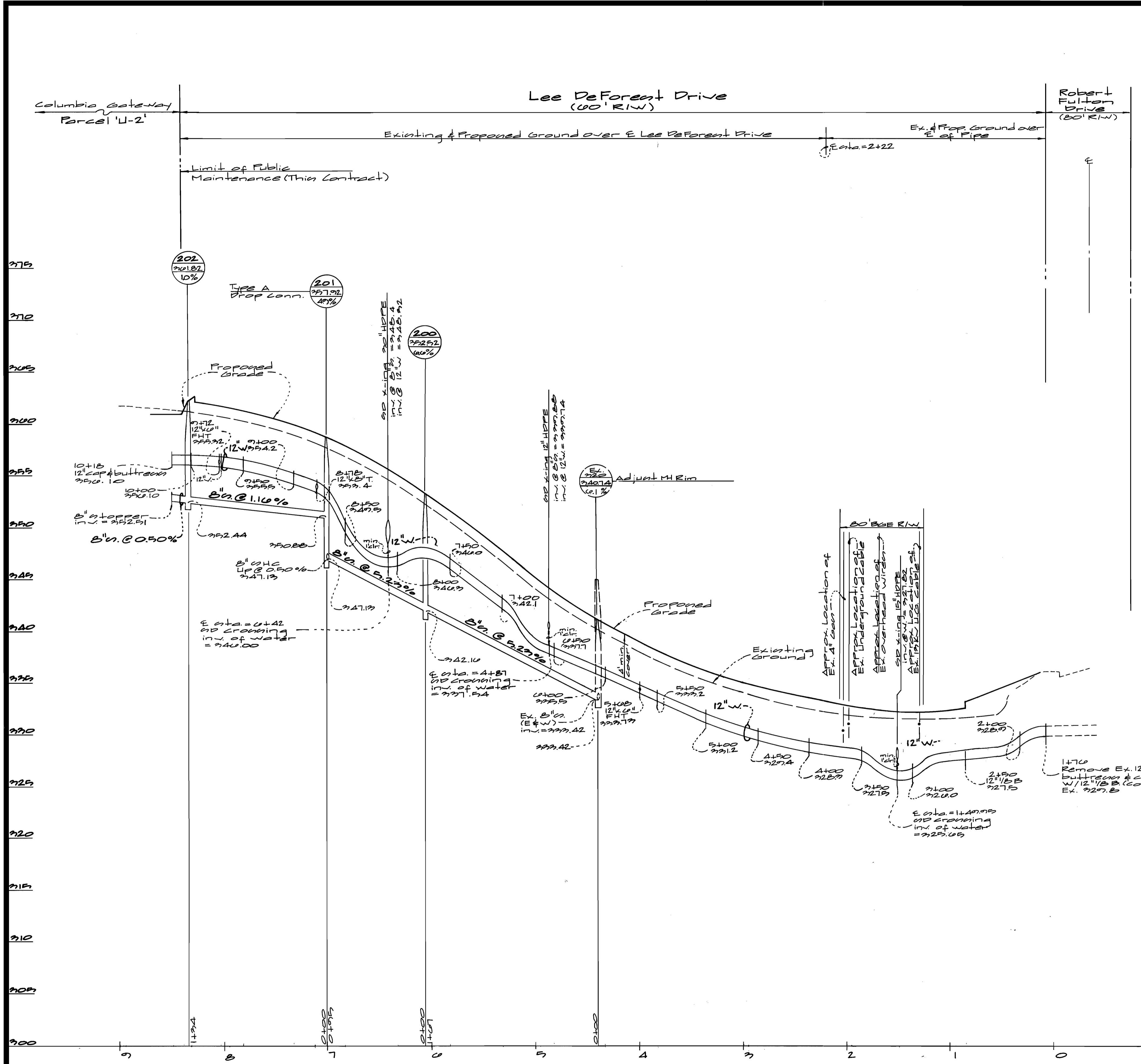


DES: was				
DRN: was				
CHK: rot				
DATE: Jan 2000				
BY	NO	REVISION	DATE	

Water & sewer Plan
Scale: 1" = 50'
600' SCALE MAP NO. 42 BLOCK NO. 12

COLUMBIA GATEWAY
PARCEL 'U-1', 'U-2' AND OPEN SPACE LOT 15
ELECTION DISTRICT No. 6
CONTRACT No. 24-3812-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 this plan are public.

For Plan see sheet 2

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert W. Bevinger
CHIEF, BUREAU OF UTILITIES

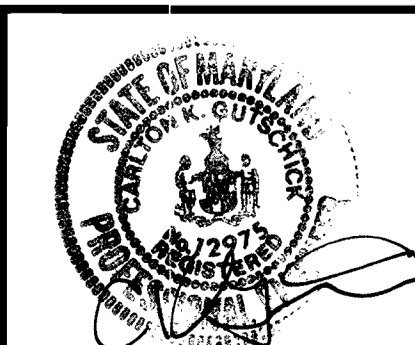
1-28-00
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION

2/16
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: wsl					
DRN: wsl					
CHK: <i>rot</i>					
DATE: Jan. 2000	BY	NO	REVISION	DATE	

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

600' SCALE MAP NO. 42 BLOCK NO. 12

COLUMBIA GATEWAY
PARCEL 'U-1', 'U-2' AND OPEN SPACE LOT 15
ELECTION DISTRICT No. 6
CONTRACT No. 24-3812-D

SCALE AS SHOWN
SHEET 22 OF 22

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" sewer	270 LF	486 LF	SDR 35	J.M. HEG/A-1 PIPE INC.
8" stopper	2 EA	2 EA	SDR 35	" " " "
4" Manholes	2 EA	2 EA	PRECAST 4.0	ATLANTIC CONCRETE PRODUCTS
4" Drop Manholes (Type A)	1 EA	1 EA	PRECAST 4.0	ATLANTIC CONCRETE PRODUCTS
12" Water (DIP)	1000 LF	820 LF	CLASS 52	ATLANTIC STATES/A-1 PIPE
8" Water (DIP)	55 LF	55 LF	CLASS 52	" " " "
8" Water (DIP)	44 LF	41 LF	CLASS 52	" " " "
8" Valve	1 EA	1 EA	M/J GATE	MUELLER/A-1 PIPE
12" Valve	2 EA	2 EA	M/J GATE	" " " "
12" Tee	1 EA	1 EA	DIP MJCL 52	TYLER PIPE/A-1 PIPE
12" x 8" FHT	2 EA	2 EA	DIP MJCL 52	" " " "
Fire Hydrant	2 EA	2 EA	AWNAC 60 8.5	MUELLER/A-1 PIPE
12" x 8" Bend	2 EA	2 EA	CLASS 52 DIP	TYLER PIPE/A-1 PIPE
12" cap	1 EA	1 EA	CLASS 52 DIP	" " " "
8" cap	1 EA	1 EA	CLASS 52 DIP	" " " "
12" Valve	1 EA	1 EA	M/J GATE	MUELLER/A-1 PIPE
8" x 8" BEND	0	2 EA	CLASS 52 DIP	TYLER PIPE/A-1 PIPE

NAME OF UTILITY CONTRACTOR: GAINES AND COMPANY, INC.

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

TYPE OF BUILDING	Commercial
NUMBER OF UNITS	N/A Bulk Parcel
NUMBER OF S.H.C.'s	2 (1- Exst Parcel U-1) 1 (1- Prop Parcel U-2)
NUMBER OF W.H.C.'s	1
DRAINAGE AREA	Little Patuxent
TREATMENT PLANT	Little Patuxent Water Reclamation Plant

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 1983 (NAD '83)].
 - 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 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

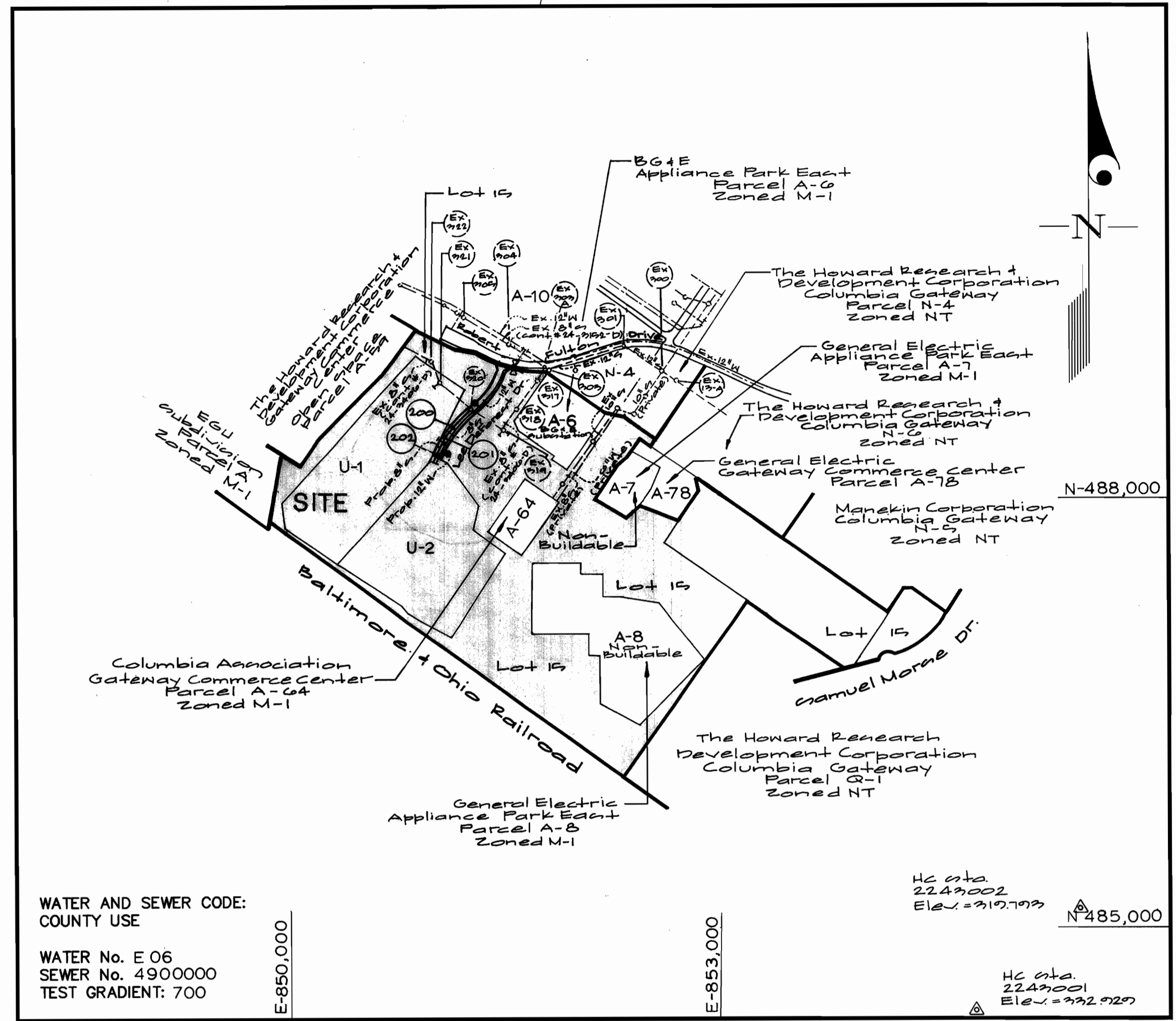
- Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
- Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the 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 D.I.P. and 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.



VICINITY MAP
SCALE: 1"=600'

CONTRACT No. 24-3812-D

Columbia Gateway
Parcel 'U-1', 'U-2' and Open Space Lot 15

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-20-74; Drawings 2 thru 12 for Sediment & Erosion Control. 4/28/00-2/1

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

Chief Simmons 2/3/00
SIGNATURE DATE

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

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

John R. [Signature] 2/3/00
APPROVED DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert [Signature] 1-28-00
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature] 2/1/00
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: WSJ	
DRN: gt	
CHK: mt	
DATE: Jan 2000	
BY: 1	AS-BUILT CONDITIONS ADDED TO PLAN 10/07/00
NO	REVISION
	DATE

Title sheet

600' SCALE MAP NO. 42 BLOCK NO. 12

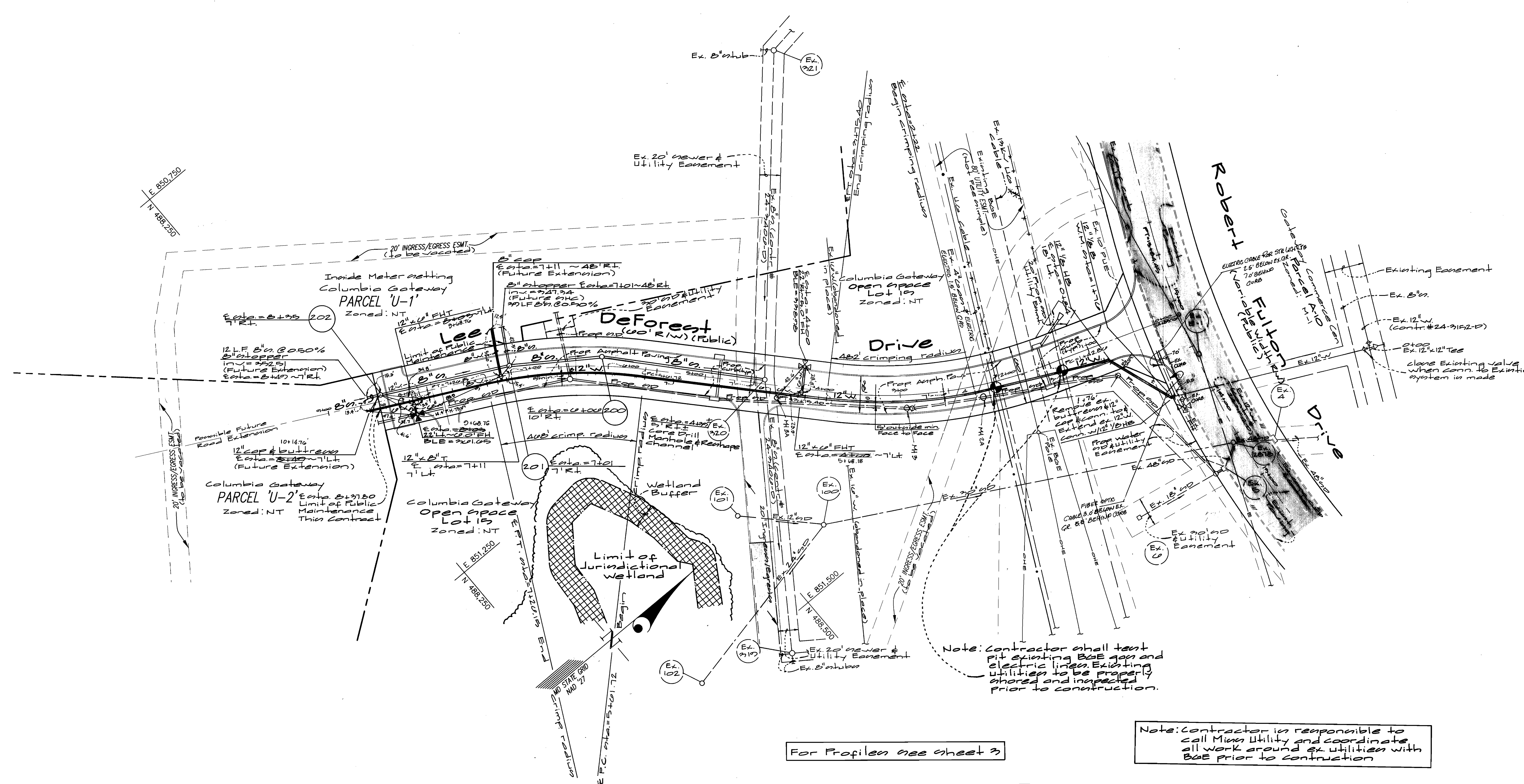
COLUMBIA GATEWAY
PARCEL 'U-1', 'U-2' AND OPEN SPACE LOT 15

ELECTION DISTRICT No. 6
CONTRACT No. 24-3812-D

GLW FILE No. 21-055

SCALE AS SHOWN

SHEET 1 OF 2



Note: Contractor shall test pit existing B&E gas and electric lines. Existing utilities to be properly shored and inspected prior to construction.

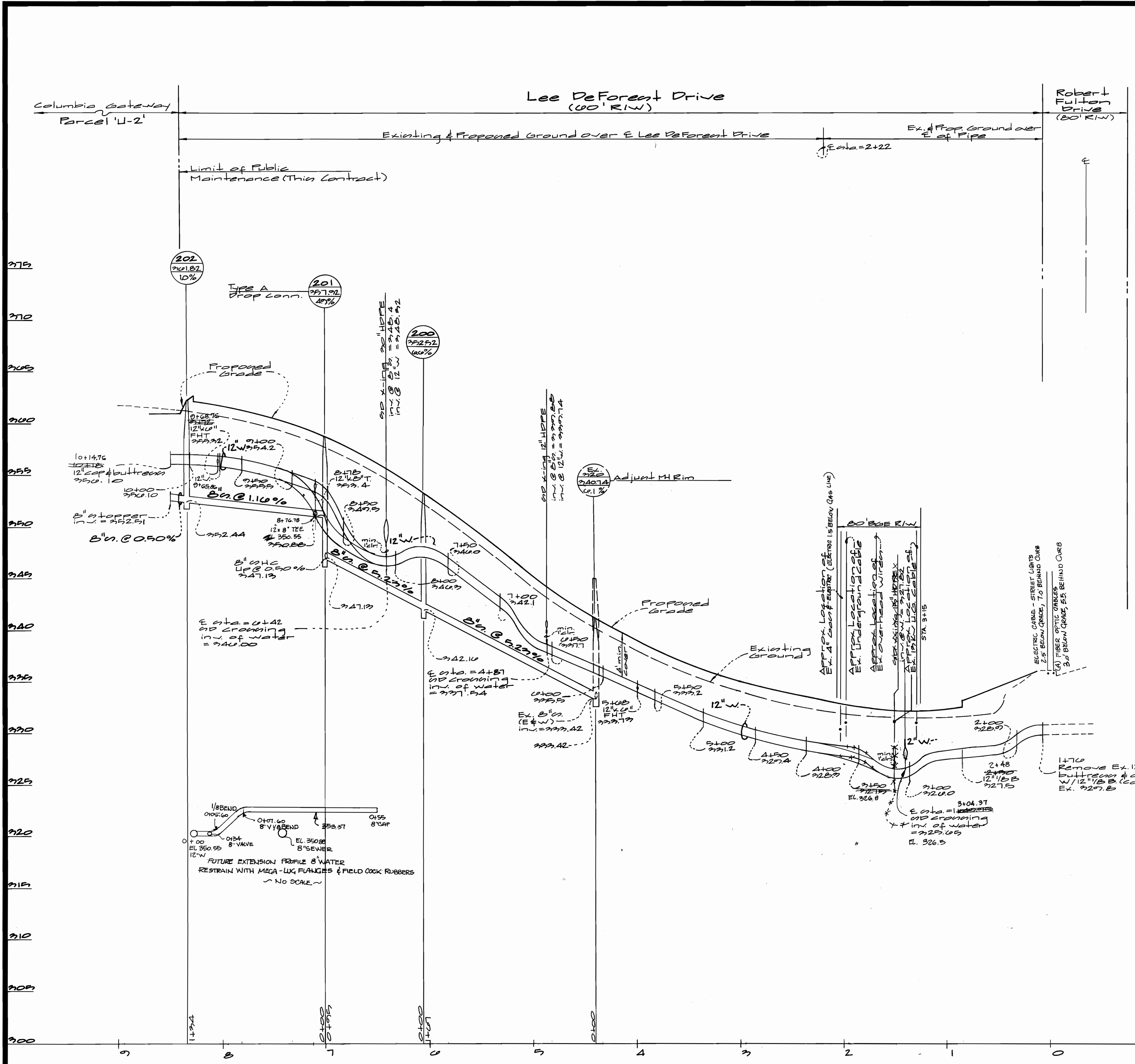
Note: Contractor is responsible to call Miss Utility and coordinate all work around ex. utilities with B&E prior to construction.

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

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

For Profiles see sheet 3

Note: Contractor shall sequence the construction of this contract to avoid any possible conflicts with sediment control measures installed under GP 00-01 and F-00-74



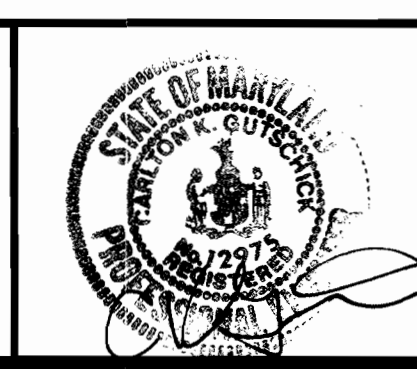
Note: All roads shown on this Plan are public county roads. All water and sewer shown on this plan are public.

For Plan see sheet 2

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert W. Bevington
CHIEF, BUREAU OF UTILITIES
1-28-00
DATE

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

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3929 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: wsl					
DRN: wsl					
CHK: [Signature]					
DATE: 2/20/00	K&I: 1	ASBUILT CONDITIONS ADDED TO PLAN	1/16/00		
BY: NO		REVISION	DATE		

Water & Sewer Profiles
Scale:
Horizontal: 1" = 50'
Vertical: 1" = 5'
600' SCALE MAP NO. 42 BLOCK NO. 12

COLUMBIA GATEWAY
PARCEL U-1, U-2 AND OPEN SPACE LOT 15
ELECTION DISTRICT No. 6
CONTRACT No. 24-2812-D

SCALE AS SHOWN
SHEET 22 OF 22