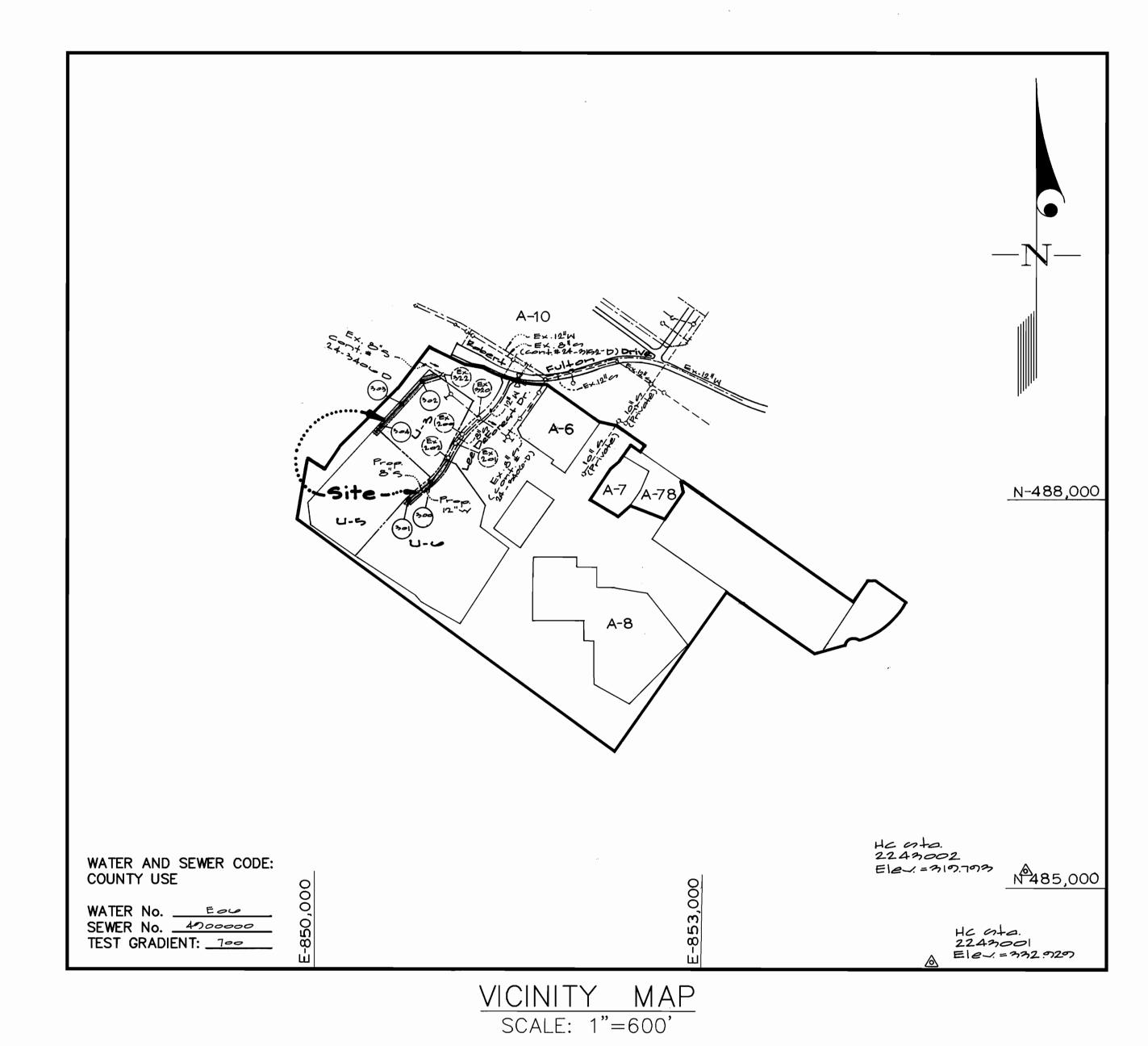
QUANTITIES							
	OLIANTITICS		AS-BL	JILT			
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER			
Bunewer	1222 I.f.						
B"atopper	2 ea.						
4 Manholen	5 ea.						
B'atopper 4' Manholea 4' Brop Monholea							
12" Water (DIP)	445 l.f.						
8" Water (DIP)	46 l.f.						
U"Water (DIP)	18 1.4.						
8" Value	2 e a.	_					
0" 1010	2 e a.						
12"×8"Tee	2 Ea.						
12"×0"=HT	1 ea.	-					
Fire Hydrant 12"/BBend	. 62.		_				
12" cap	l ea.						
21100	2 ea.	-					
B"CAP 12" Volve	l ea.						
				-			
_							
				-			
NAME OF UTILITY CONTRACTOR:							
	и		SURVEY AND DRAFTING DIV.	CHECKBOX:			
			AS-BUILT DATE:				



CONTRACT No. 24-3968 D

Columbia Gateway Parcels U-3, U-5 and U-0

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-01-200; Drawing 5 of 5 for Sediment & Erosion Control and these plans.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL

CONSERVATION SERVICE

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

SOIL CONSERVATION DISTRICT.

PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

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 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: maf DRN: jau DATE: 7/01 BY NO DATE 600' SCALE MAP NO. 42 BLOCK NO. 12 REVISION

Title oheet

COLUMBIA GATEWAY

Parcels U-3, U-5 and U-6 PLAT No. ELECTION DISTRICT No. 6

TYPE OF BUILDING commercia NUMBER OF UNITS 3 Bulk Parcelo NUMBER OF S.H.C.'s NUMBER OF W.H.C.'s Little Paturent DRAINAGE AREA Little Patuxent Water Reclamation Plant TREATMENT PLANT

GENERAL NOTES

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

- 2. Coordinates are based on NAD 27 Maryland coordinate system as projected by Howard Co. Geodetic Control Stations 2242002 and 2243003.
- 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 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.
- 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 \bigcirc 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 (5) working days before starting work shown on these plans:

State Highway Administration (410) 531-5533 BGE Contractor Services (410) 850-4620 BGE Under Ground Damage Control (410) 291-4607 1-800-257-7777 Miss Utility Colonial Pipeline Co. (410) 549-4120

Howard County Department of Public Works Bureau of Utilities 313-4900 1-800-446-5266 Verizon

- Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not 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 (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.

- 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 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.
- 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 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
- 7. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- 8. For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1' connection with a 3/4" meter.

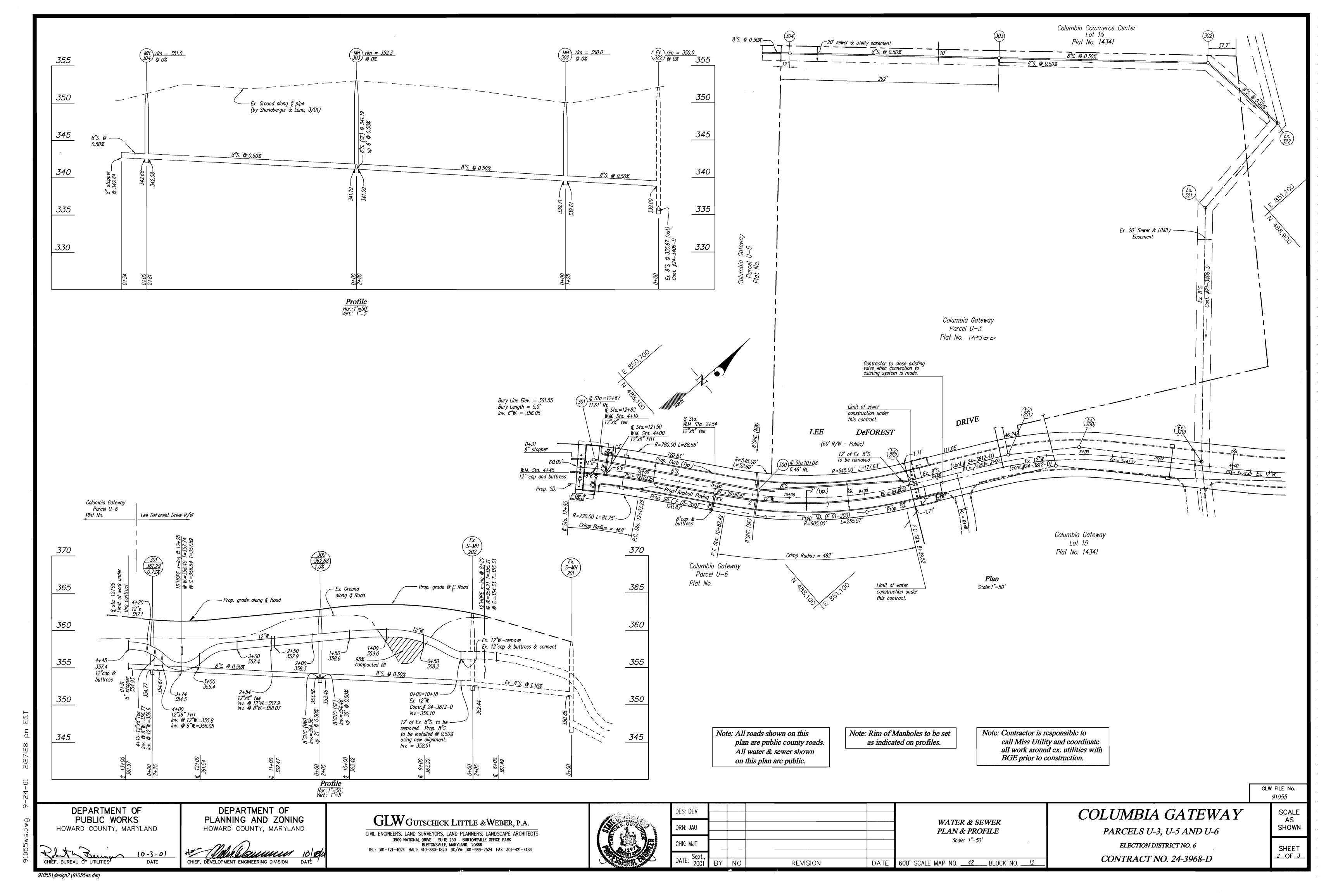
- All sewer mains shall be DIP and P.V.C. unless otherwise noted. All manholes shall be 4'-0" inside diameter unless otherwise noted. Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only. Manholes designated W.T. in plan and profile shall have watertight 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
- House(s) with the symbol "C.N.S." indicates that cellar cannot be

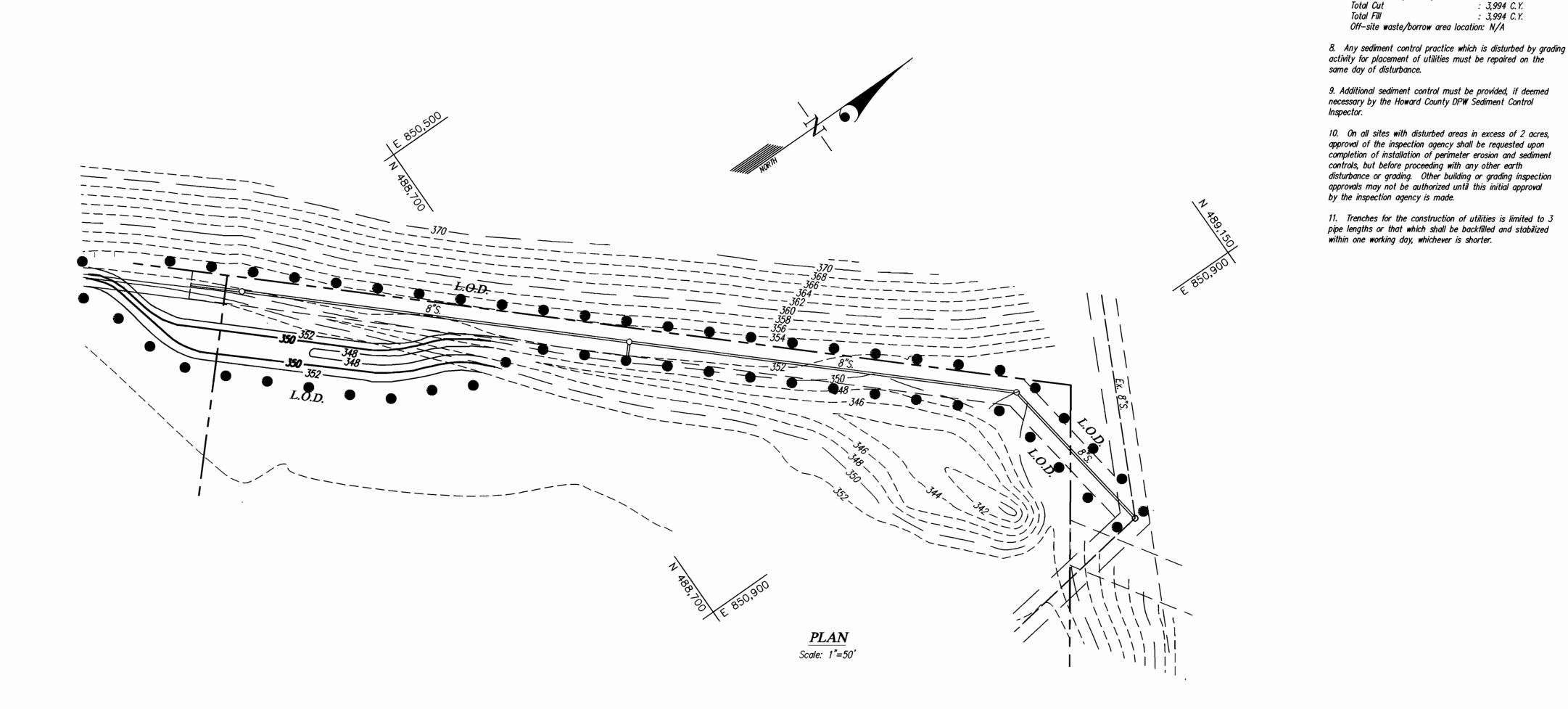
GLW FILE No. 91-055

> Scale AS Showr Sheet

1 of 3

CONTRACT No. 24-3968 D





TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

SEDIMENT CONTROL NOTES

County Office of Inspection and Permits prior to the

2. All vegetative and structural practices are to be installed according to the provisions of this plan and

are to be in conformance with the 1994 MARYLAND

3. Following initial soil disturbance or redisturbance,

permanent or temporary stabilization shall be completed

within: a) 7 calendar days for all perimeter sediment

control structures, dikes and perimeter slopes and all slopes

areater than 3:1, b) 14 days as to all other disturbed or

4. All sediment traps/basins shown must be fenced and warning

signs posted around their perimeter in accordance with Vol.

1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm

5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND

CONTROL for permanent seedings, sod, temporary seeding

Temporary stabilization, with mulch alone, can only be done

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County

Area to be vegetatively stabilized : 0.61 AC.

Off-site waste/borrow area location: N/A

: 7.43 AC. (Par. U-3)

: 0 AC.

: 3,994 C.Y.

: 3,994 C.Y.

when recommended seeding dates do not allow for proper

germination and establishment of grasses.

Total Area of Site (Gross)

Area Disturbed (for grading)

Area to be roofed or paved

STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND

start of any construction. (410) 313-1855.

SEDIMENT CONTROL.

graded areas on the project site.

and mulching (Sec. G).

Sediment Control Inspector.

7. Site Analysis:

Total Cut

Total Fill

1. A minimum of 24 hours notice must be given to the Howard Seedbed Preparation: Loosen upper three inches of soil by raking,

discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

Seeding: For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

- 1) Preferred Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 unreaform fertilizer (9 lbs/1000 sq ft).
- 2) Acceptable Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland 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

ENGINEER'S CERTIFICATE

"I 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

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation

Howard Soil Conservation District

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

Natural Resources Conservation Service

GLW FILE No. 91055

9-25-01

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DEPARTMENT OF PLANNING AND ZONING

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 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: DEV					
DRN: JAU					SEDIMENT CONTROL PLAN FOR SEWER EXTENSION
CHK: MJT					Scale: 1"=50'
DATE, Sept.,					
DATE: 3ept., 2001	BY	NO	REVISION	DATE	600' SCALE MAP NO. <u>42</u> BLOCK NO

COLUMBIA GATEWAY

PARCELS U-3, U-5 AND U-6

ELECTION DISTRICT NO. 6

CONTRACT NO. 24-3968-D

SHEET <u>_3_</u> OF__3

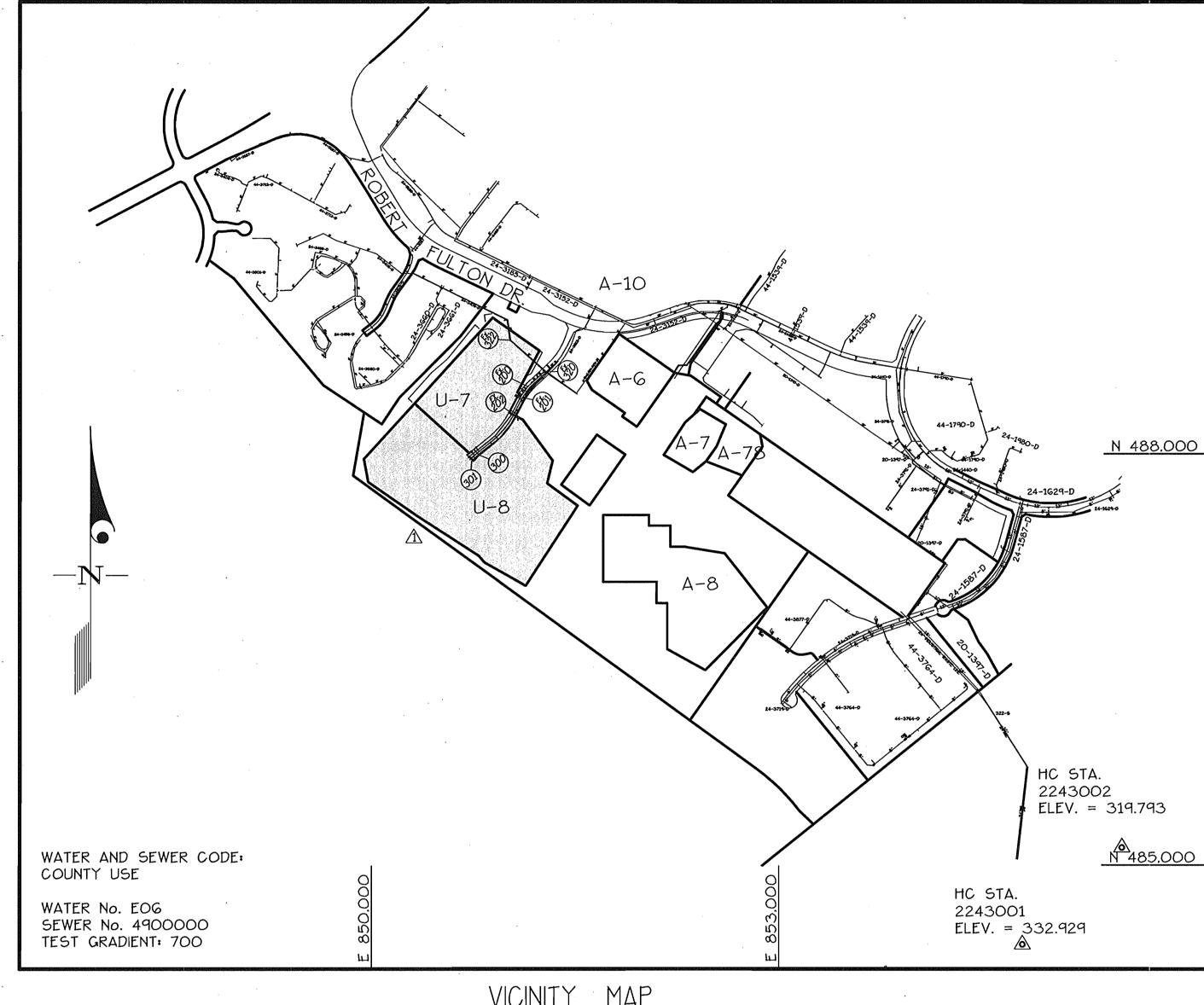
SCALE

AS

SHOWN

BENCH MARK DESCRIPTIONS

	Q	UANTITIES			
	OLIANITITIC	AS-BUILT			
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER	
8' SEWER	⚠ 433 L.F.				
8' STOPPER	<u> </u>				
4' MANHOLES	<u> </u>				
4' DROP MANHOLES					
400 1111 (1111)	445.1.5	,			
12" WATER (DIP)	445 L.F.				
8' WATER (DIP)	<u> </u>				
6' WATER (DIP)	18 L.F.			,	
8' VALVE	<u>↑</u> 3 EA.				
6' VALVE	2 EA.				
12' x 8' TEE	1 EA.				
12' x 6' FHT	1 EA.				
FIRE HYDRANT 12' 1/8 BEND					
	1 EA.				
12' CAP					
8' CAP	△ 3 EA. 1 EA.				
12° VALVE	1 LA.				
	***************************************	,			
	•			,	
NAME OF UTILITY O	CONTRACTOR:				
TALL OF UTILITY C	ZOTINACTON:		1	·····	
			SURVEY AND DRAFTING DIV.	CHECKBOX:	
				AS-BULT DATE:	



SCALE: 1" = 600'

CONTRACT No. 24-3968-D COLUMBIA GATEWAY PARCELS "U-7" + "U-8"

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

COMMERCIAL TYPE OF BUILDING ⚠ 2 BULK PARCELS NUMBER OF UNITS NUMBER OF S.H.C.'s \triangle 2 NUMBER OF W.H.C.'s A 3 LITTLE PATUXENT DRAINAGE AREA LITTLE PATUXENT WATER TREATMENT PLANT RECLAMATION PLANT

GENERAL NOTES

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 NAVD 88.

ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

CLEAR ALL UTILITIES BY A MINIMUM OF 12". 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 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:

1-800-252-1133 STATE HIGHWAY ADMINISTRATION 410-531-5533 BGE CONTRACTOR SERVICES 410-850-4620 BGE UNDER GROUND DAMAGE CONTROL 410-291-4607 MISS UTILITY 1-800-257-7777 COLONIAL PIPELINE CO. 410-549-4120

BUREAU OF UTILITIES 410-313-4900 1-800-446-5266

TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT 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.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD 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 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 INSTALLED 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 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.

ALL SEWER MAINS SHALL BE DIP AND P.V.C. UNLESS OTHERWISE NOTED. ALL MANHOLES SHALL BE 4' -O" 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 COVER. STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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

NOTE: THIS REDLINE SUPERCEEDES THE PREVIOUSLY APPROVED SUBMISSION DATED 7/01.

GLW FILE #91-055 WATER + SEWER FINAL

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL MEASURES WILL BE

DISTRICT AND MEETS TECHNICAL

SOIL CONSERVATION DISTRICT.

CHIÈF. BUREAU OF UTILITIES

CONTROL.

REQUIREMENT.

IMPLEMENTED IN ACCORDANCE WITH SECTION 219

OF THE SPECIFICATIONS + WITH RAOD DRAWINGS PLAN F 01-200; FOR SEDIMENT + EROSION

REVIEWED FOR HOWARD SOIL CONSERVATION

U.S.D.A. NATURAL RESOURCES

CONSERVATION SERVICE

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

> DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GLW GUTSCHICKLITTLE&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 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



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	· DES:					
	DDN. wei/kla					TITLE SHEET
	DRN: wsj/klp					TITLE STILLT
	CHK: 15t.					
	JULY	MJT	\triangle	REVISED THE NO. OF HOUSE CONECTIONS, QUANTITIES AND VICINITY MAP.	07/15/04	
	DATE: 2004	BY	NO	REVISION	DATE	600' SCALE MAP NO. 36 BLOCK NO. 18

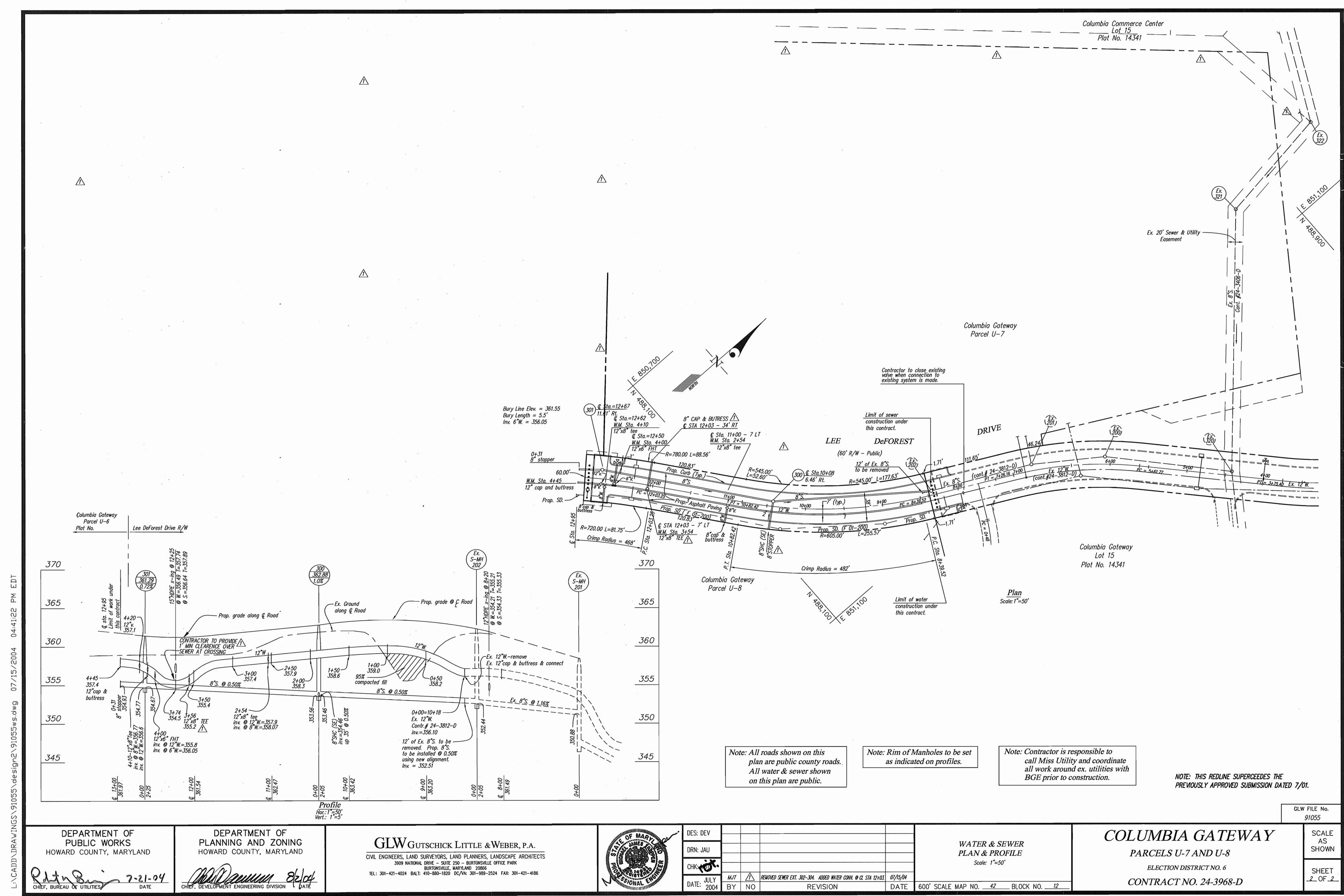
COLUMBIA GATEWAY

PARCELS U-7 & U-8 ELECTION DISTRICT No. 6 CONTRACT No. 24-3968-D

SHEET 1 OF 2

SCALE

AS SHOWN



91055\design2\91055ws.dwg

BENCH MARK DESCRIPTIONS

	C	QUANTITIES			
	OLIANITITIES		AS-E	BUILT	
ITEMS	QUANTITIES ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER	
8' SEWER	1 433 L.F.	530	SDR 35	IM MANUFACTURING	
8' STOPPER	⚠ 3 EA.			,	
4' MANHOLES	<u> </u>	2		ATLANTIL CONCRETE PROD.	
4' DROP MANHOLES					
401 WATER COIDS	445 L.F.	117	41.50	c premist more 40	
12' WATER (DIP)		447	CL 52	GRIFFIN PIPE LD.	
8' WATER (DIP)		90 30	<i>n</i>	"	
G' WATER (DIP)	18 L.F.	3		1,11,170	
8' VALVE	<u>↑</u> 3 EA.	2	GATE	MULLER CO.	
6' VALVE	2 EA.	1	MJGATE	MIGATE / MULLER	
12' x 8' TEE	1 EA.	2	MI TEE	TYLER "	
12' x 6' FHT	1 EA.				
FIRE HYDRANT	_			MULLER CO.	
12. 1/8 BEND	1.54				
12' CAP	1 EA.				
8 CAP 12 VALVE	1 EA.		GATE	MULLER CO.	
NAME OF UTILITY CON	NTRACTOR:				
			SURVEY AND DRAFTING DIV.	CHECKBOX:	

N 488,000 HC STA. 2243002 ELEV. = 319.793N 485.000 WATER AND SEWER CODE: COUNTY USE HC STA. WATER No. EOG 2243001 SEWER No. 4900000 ELEV. = 332.929TEST GRADIENT: 700

SCALE: 1" = 600'

CONTRACT No. 24-3968-D COLUMBIA GATEWAY PARCELS "U-7" + "U-8"

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

COMMERCIAL TYPE OF BUILDING 1 2 BULK PARCELS NUMBER OF UNITS NUMBER OF S.H.C.'s A 2 NUMBER OF W.H.C.'s A 3 LITTLE PATUXENT DRAINAGE AREA LITTLE PATUXENT WATER TREATMENT PLANT RECLAMATION PLANT

GENERAL NOTES

- 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. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES [NORTH AMERICAN DATUM 1927 (NAD '27)].
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON
- 5. CLEAR ALL UTILITIES BY A MINIMUM OF 12". 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 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 igoplus 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:

1-800-252-1133 410-531-5533 STATE HIGHWAY ADMINISTRATION 410-850-4620 410-291-4607 1-800-257-7777 410-549-4120

COLONIAL PIPELINE CO. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 410-313-4900 BUREAU OF UTILITIES 1-800-446-5266

- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT 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
- 11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD 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 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
- 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 INSTALLED 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
- 6. 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.

- 1. ALL SEWER MAINS SHALL BE DIP AND P.V.C. UNLESS OTHERWISE NOTED. ALL MANHOLES SHALL BE 4' -O" 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 COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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.

NOTE: THIS REDLINE SUPERCEEDES THE PREVIOUSLY APPROVED SUBMISSION DATED 7/01.

GLW FILE #91-055 WATER + SEWER FINAL

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

IEF. BURIEAU OF UTILITIES

PLANNING AND ZONING HOWARD COUNTY, MARYLAND

OPMENT ENGINEERING DIVISION

DEPARTMENT OF

TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: ——					
DRN: wsj/klp					TITLE SHEET
	KCI MJT	<u>A</u>	AS-BUILT DATA ADDED REVISED THE NO. OF HOUSE CONECTIONS, QUANTITIES AND VICINITY MAP.	11 <i>/26 0 4</i> 07/15/04	
DATE: JULY 2004	BY	NO	REVISION	DATE	600' SCALE MAP NO. 36 BLOCK NO. 18

COLUMBIA GATEWAY

PARCELS U-7 & U-8 ELECTION DISTRICT No. 6 CONTRACT No. 24-3968-D

SHEET 1 OF 2

AS

SHOWN

BGE CONTRACTOR SERVICES BGE UNDER GROUND DAMAGE CONTROL MISS UTILITY PRICE BID FOR CONSTRUCTION OF THE MAIN.

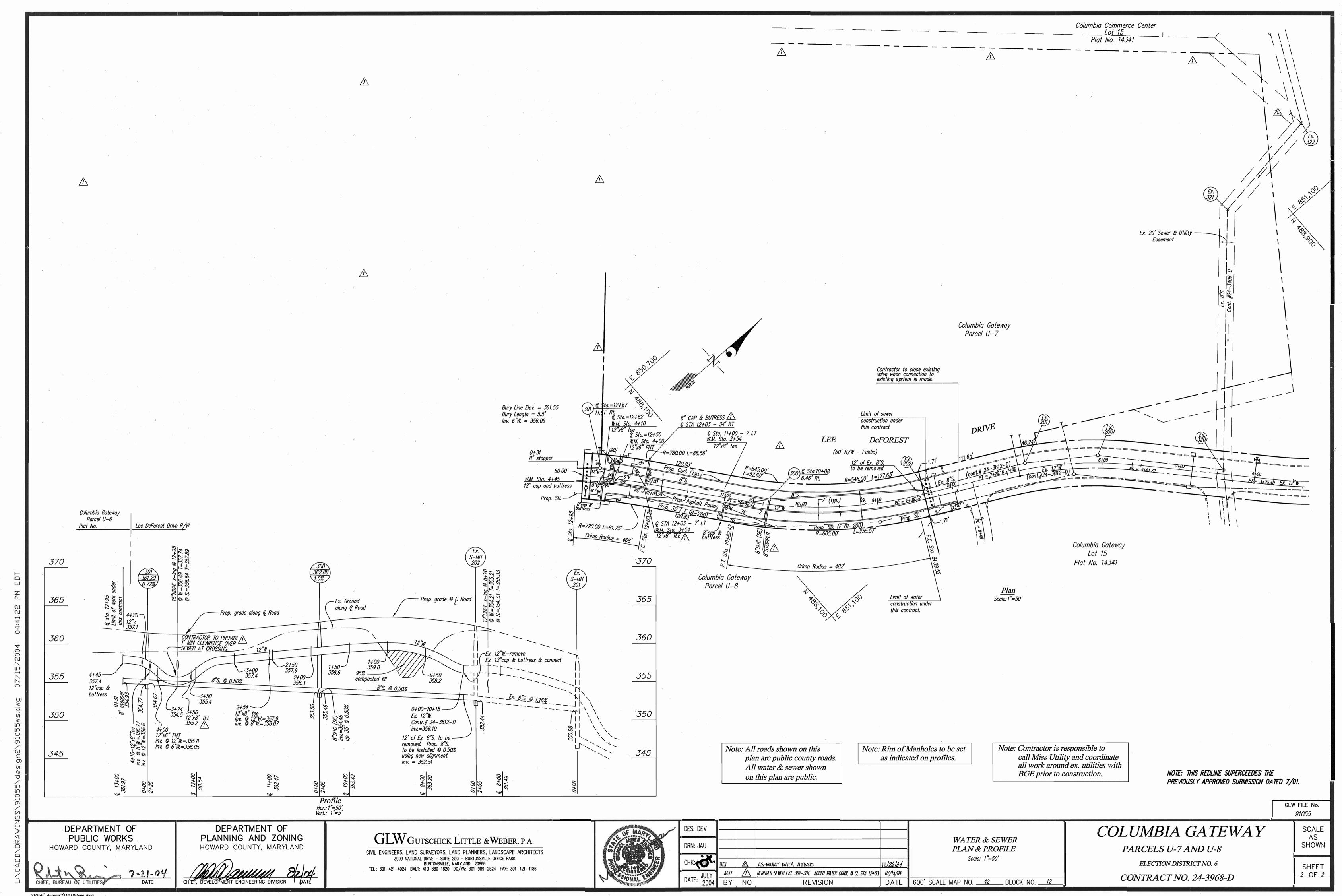
SEDIMENT CONTROL MEASURES WILL BE

IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS + WITH RAOD DRAWINGS PLAN F 01-200; FOR SEDIMENT + EROSION REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

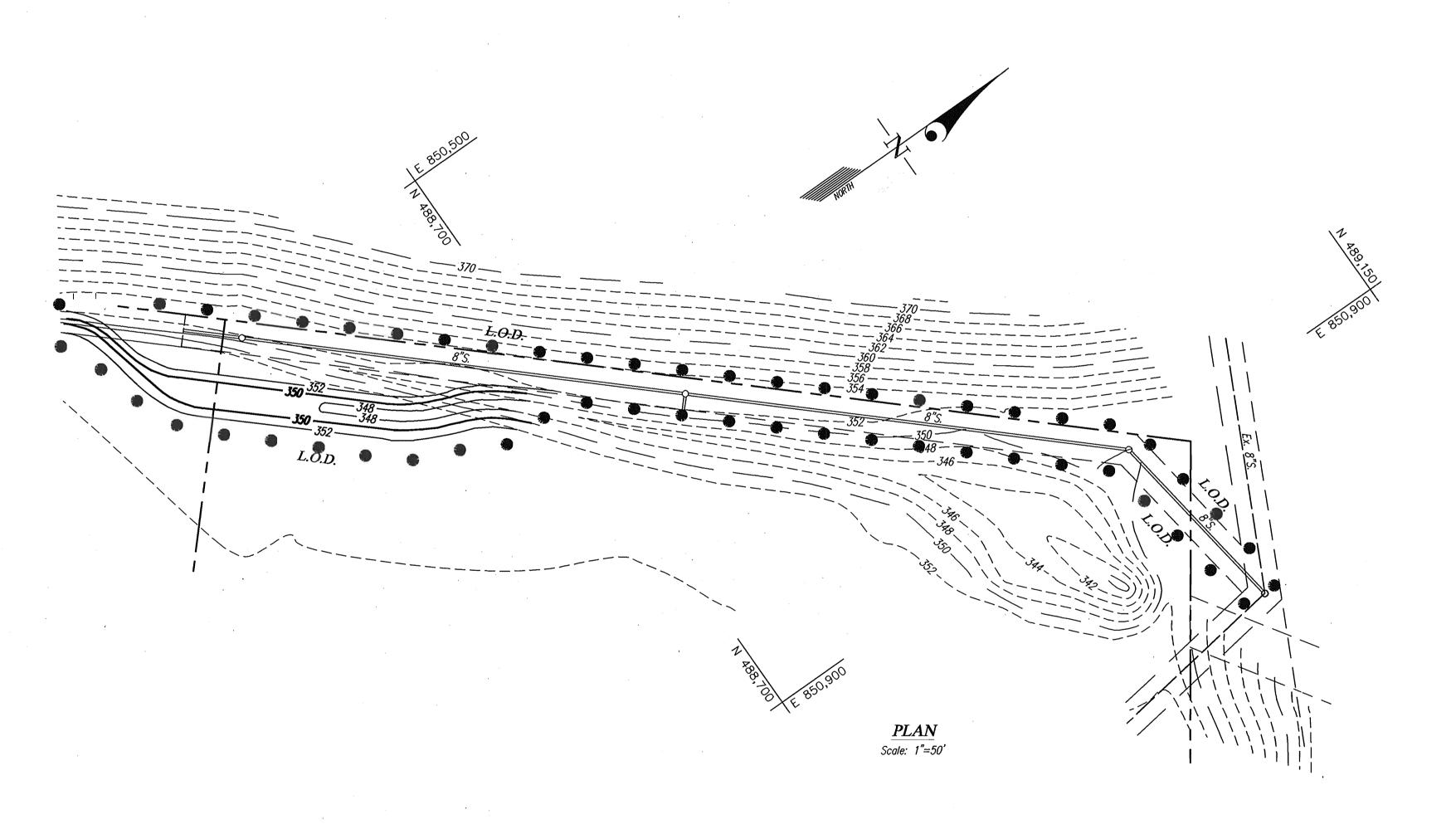
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

> GLW GUTSCHICKLITTLE&WEBER, P.A. CIVIL ENGINEERS. LAND SURVEYORS. LAND PLANNERS. LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866



91055\design2\91055ws.dwg



SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 313-1855.

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be fenced and warning signs posted cround their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm

5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. G). Temporary stabilization, with mulch alone, can only be done when recommended seeding dates do not allow for proper

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

germination and establishment of grasses.

7. Site Analysis: Total Area of Site (Gross) : 7.43 AC. (Par. U-3) Area Disturbed (for grading) : 0.61 AC. Area to be roofed or paved : O AC. Area to be vegetatively stabilized : 0.61 AC. Total Cut : 3,994 C.Y. Total Fill : 3,994 C.Y. Off-site waste/borrow area location: N/A

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

11. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within one working day, whichever is shorter.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking. discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

Seeding: For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless previously loosened).

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

> 1) Preferred – Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 Ibs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 unreaform fertilizer (9 lbs/1000 sq ft).

2) Acceptable – Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 Ibs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq

ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personne; involved in the construction project will have a Certificate of Attendance at a Maryland 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 HSCD."

ENGINEER'S CERTIFICATE

"I 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

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation

Howard Soil Conservation District

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

Natural Resources Conservation Service

GLW FILE No. 91055

Date

SCALE

AS

SHOWN

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

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 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



DES: DEV	<u></u>				
DRN: JAU					SEDIMENT CONTROL PLAN FOR SEWER EXTENSION
CHK: MJT					Scale: 1"=50'
DATE: Sept., 2001	BY	NO	REVISION	DATE	600' SCALE MAP NO

PARCELS U-3, U-5 AND U-6

ELECTION DISTRICT NO. 6

CONTRACT NO. 24-3968-D

COLUMBIA GATEWAY

SHEET <u>3</u> OF _3