

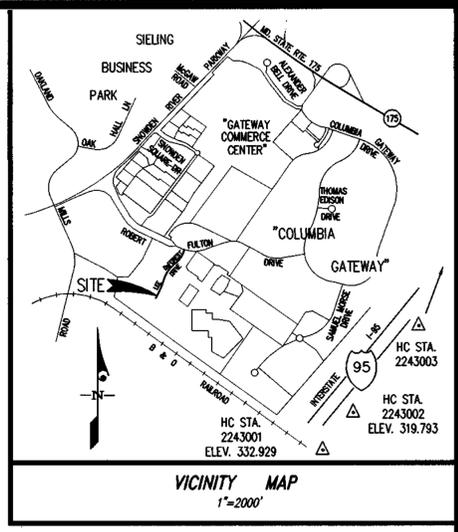
GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standard and specifications if applicable.
- The contractor shall notify the Department of Public Works, Bureau of Engineering, Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation work.
- Site area: 28.5213 acres.
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography is shown per mass grading plans GP-00-61 prepared by Gutschick, Little & Weber, P.A.
- Coordinates and bearings are based upon the MD State plan system (NAD '27).
- Water and sewer shown is public.
- All existing water is per Contract No. 24-3152-D. All existing sewer is per Contract No. 24-3406-D.
- All existing public storm drain is per F-92-15.
- Use trench bedding class "C" for storm drains.
- Project background: See Dept. of Planning & Zoning File Numbers: P-86-22, S-84-44, S-85-28, F-86-127, F-86-182, F-87-63, WP-98-130, F-96-76, F-00-74, FDP Phase 236-A-1, and F 01-189.
- Recording reference: Plat No. 1490D
- Existing utilities are based on approved design plans for construction and field location by Gutschick, Little & Weber, P.A.
- There is no floodplain within the disturbed area of this site.
- There are no wetlands within the disturbed area of this site.
- A minimum of 20' shall be maintained between any street light and any tree.
- A traffic study is not required for this extension.
- Stormwater Management for the proposed improvements is provided by a regional facility. The facility provides both quantity and quality management for the road extension and the future development on the individual parcels. An update to the Stormwater Management Report was provided under F 00-74.
- This project is exempt from the Forest Conservation Requirements of Subtitle 12 per Section 16.1202 (b)(1)(iv) which states that a planned unit development (New Town) which has Preliminary Plan approval and 50% or more of the land is recorded and substantially developed before 12/31/92.
- Landscaping requirements for the parcels created by this submission will be satisfied at the Site Development Plan stage.

COLUMBIA GATEWAY PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE

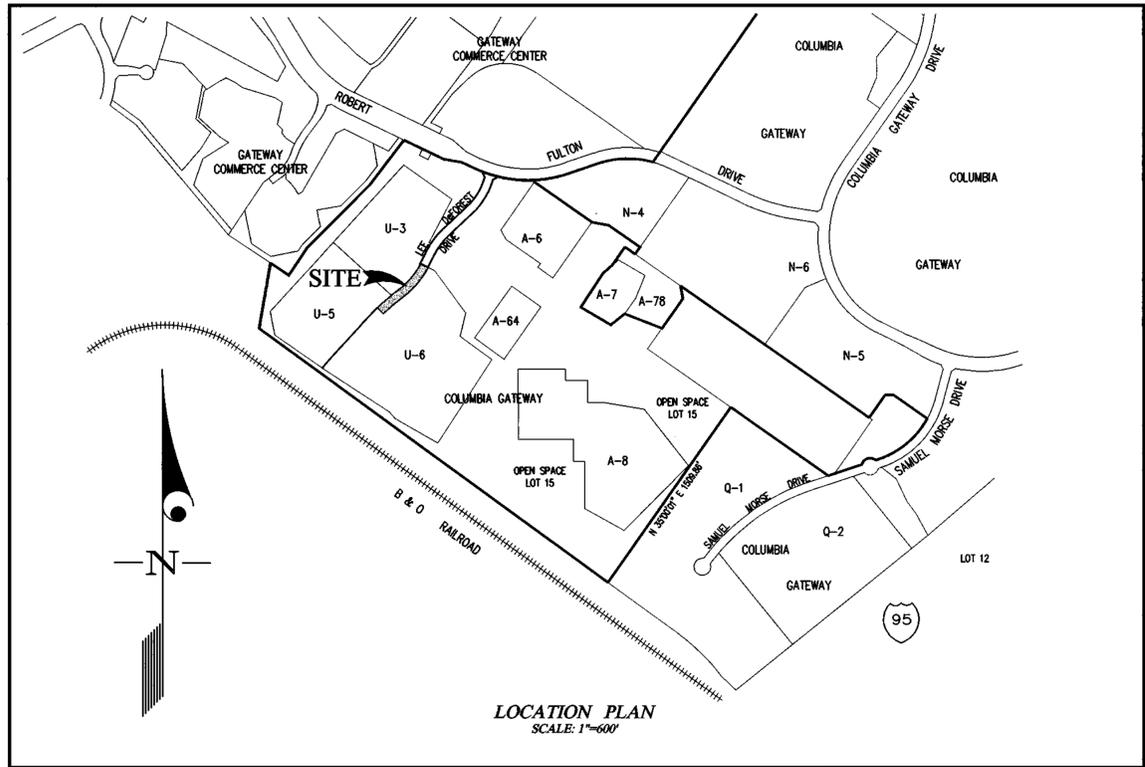
LEE DeFOREST DRIVE

STATION 8 + 37.80 TO STATION 12 + 90.00



LEGEND

--- 336 ---	Existing Contour
— 336 —	Proposed Contour
— — —	Existing Curb & Gutter
— — —	Reverse Curb & Gutter
— — —	Proposed Curb & Gutter
— — —	Proposed Bituminous Curb
☆	Existing Street Light
☆	Proposed Street Light
---	Existing Storm Drain
---	Proposed Storm Drain
---	Existing Paving
---	Proposed Paving
---	Existing Paving (to be removed)
Ⓢ	Top of Curb Elevation
---	Existing Treadline
---	Existing Sewer Main
---	Existing Water Main
---	Existing Gas Main
---	Wetland Buffer



INDEX OF SHEETS

- Cover Sheet
- Lee DeForest Drive Plan and Profile
- Grading Plan/Drainage Area Map
- Storm Drain Profiles/Road Details
- Sediment Control Plan/Notes and Details

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways Date 9/25/01

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development Date 9/25/01
 Chief, Development Engineering Division Date 9/25/01



GLW GUTSCHICK LITTLE & WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK BURTNSVILLE, MARYLAND 20866 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186	PREPARED FOR: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 PH: 410-992-6089 ATTN: MR. BOB JENKINS	COVER SHEET COLUMBIA GATEWAY PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE	SCALE AS SHOWN	ZONING NT	G. L. W. FILE NO. 91055
	DATE August, 2001	TAX MAP - GRID 43 / 7 & 42 / 11 & 12	SHEET 1 OF 5	HOWARD COUNTY, MARYLAND	

STREET LIGHT SCHEDULE			
LOCATION	LAMP TYPE	MOUNTING	POLE TYPE
Lee DeForest Drive @ Sta. 12+83.27' Lt.	250 Watts HPS	12' Arm Single	30' Bronze Fiberglass

STREET TREE SCHEDULE				
SYMBOL	NAME (BOTANICAL/COMMON)	SIZE	QUANTITY	REMARKS
(1)	Acer Saccharum/Green Mountain Sugar Maple	2-2 1/2" cal	23	B&B Heavy Heads

(1) Existing street tree provided under F-00-74.

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
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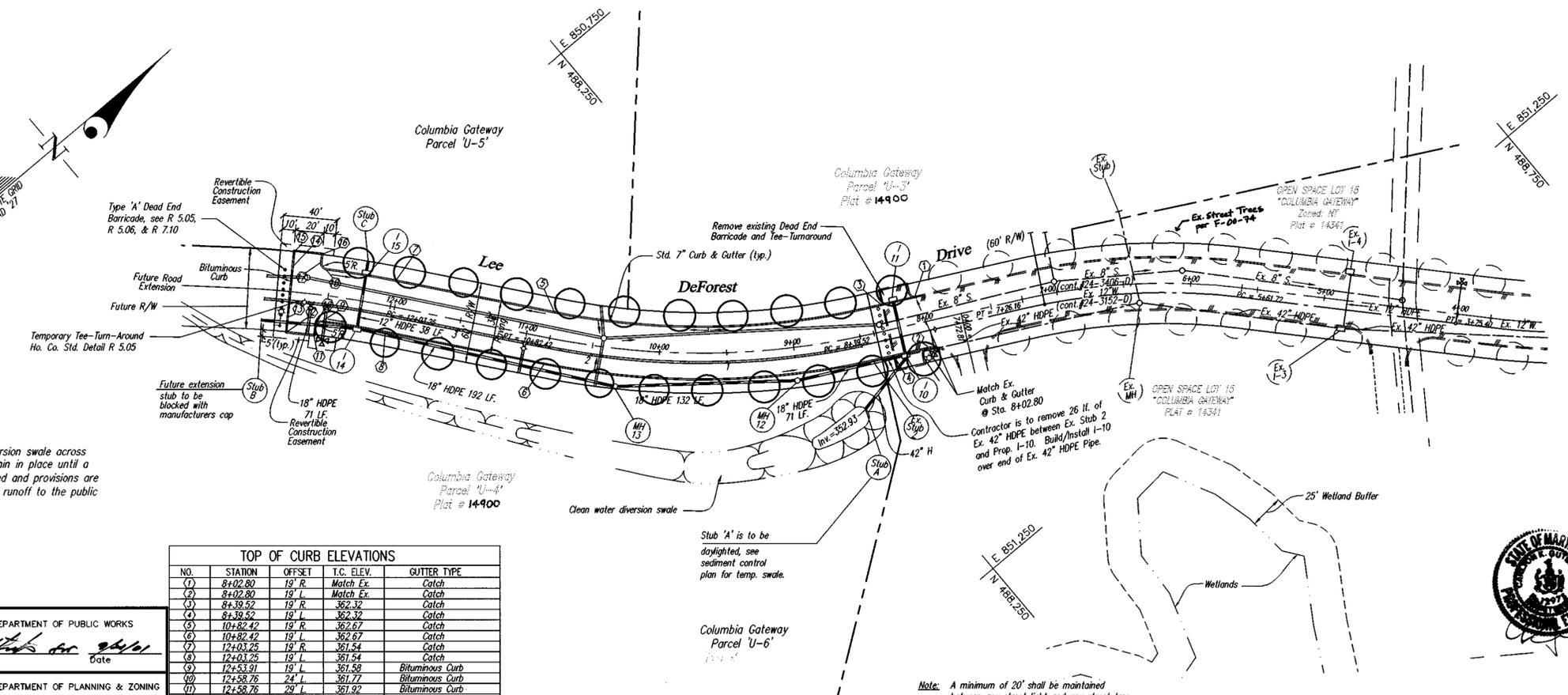
ROAD CONSTRUCTION PLANS
COLUMBIA GATEWAY
LEE DEFOREST DRIVE
 STATION 8+37.80 TO STATION 12+90.00

ELECTION DISTRICT No.
 HOWARD COUNTY, MARYLAND

PREPARED FOR:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044
 ATTN: MR. BOB JENKINS
 PH: 410-992-6089

DESIGNED MCF
 DRAWN JAU/CADD
 CHECKED MAT/DEV
 DATE August, 2001

SCALE 1"=50'
 DRAWING 2 OF 5
 ZONING NT
 JOB No. 91055



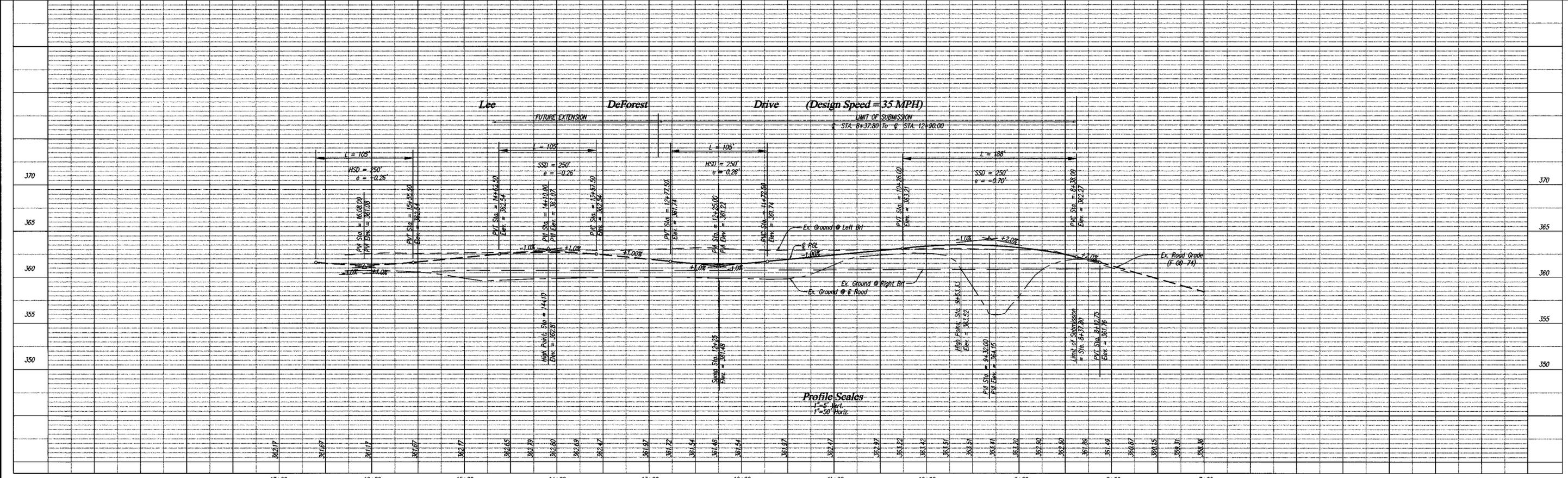
TOP OF CURB ELEVATIONS				
NO.	STATION	OFFSET	I.C. ELEV.	GUTTER TYPE
(1)	8+02.80	19' R	Match Ex.	Catch
(2)	8+02.80	19' L	Match Ex.	Catch
(3)	8+39.52	19' R	362.32	Catch
(4)	8+39.52	19' L	362.32	Catch
(5)	10+82.42	19' R	362.57	Catch
(6)	10+82.42	19' L	362.57	Catch
(7)	12+03.25	19' R	361.54	Catch
(8)	12+03.25	19' L	361.54	Catch
(9)	12+53.91	19' L	361.58	Bituminous Curb
(10)	12+58.76	24' L	361.77	Bituminous Curb
(11)	12+58.76	29' L	361.92	Bituminous Curb
(12)	12+78.00	29' L	362.08	Bituminous Curb
(13)	12+78.00	19' L	361.78	Bituminous Curb
(14)	12+78.00	19' R	361.78	Bituminous Curb
(15)	12+78.00	29' R	362.08	Bituminous Curb
(16)	12+58.76	29' R	361.92	Bituminous Curb
(17)	12+58.76	24' R	361.77	Bituminous Curb
(18)	12+53.91	19' R	361.58	Bituminous Curb

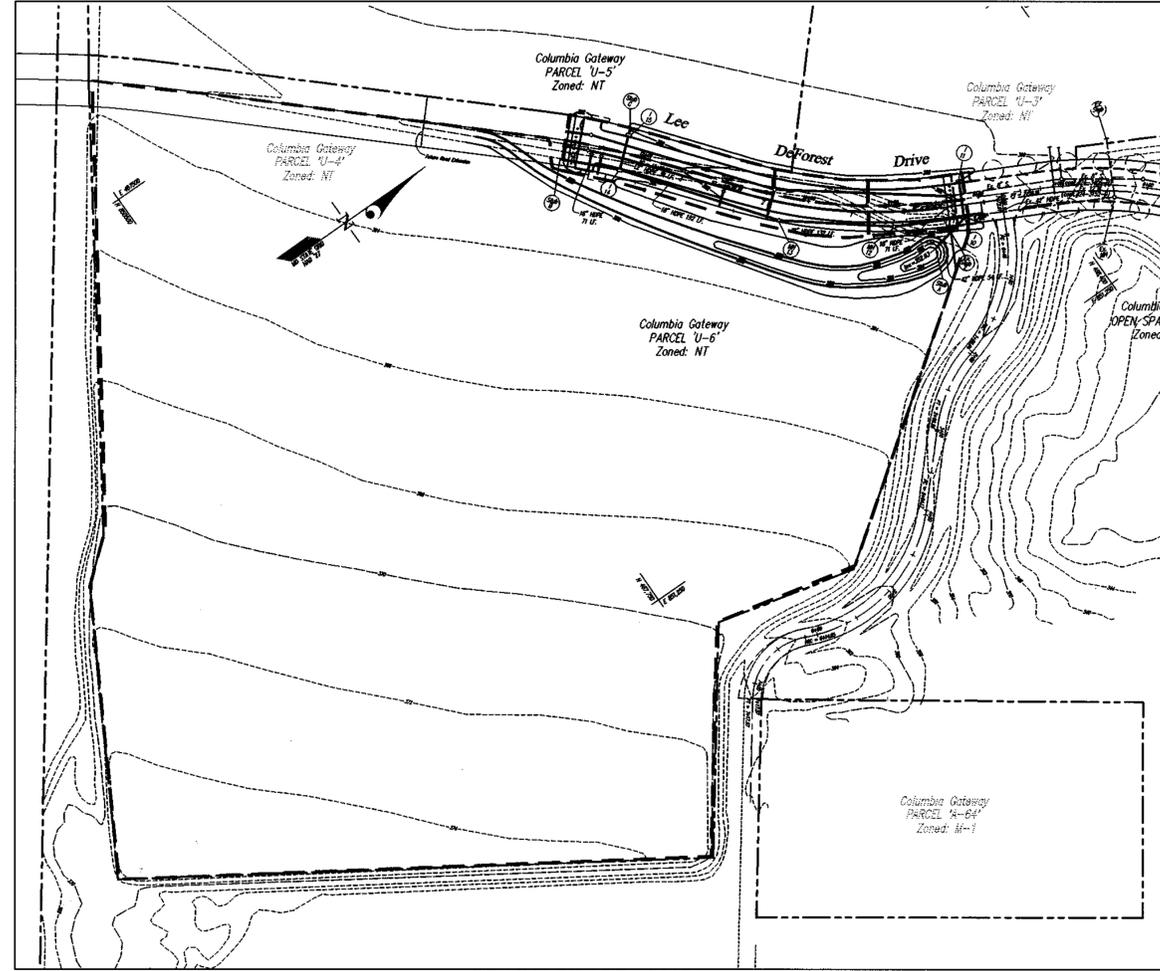
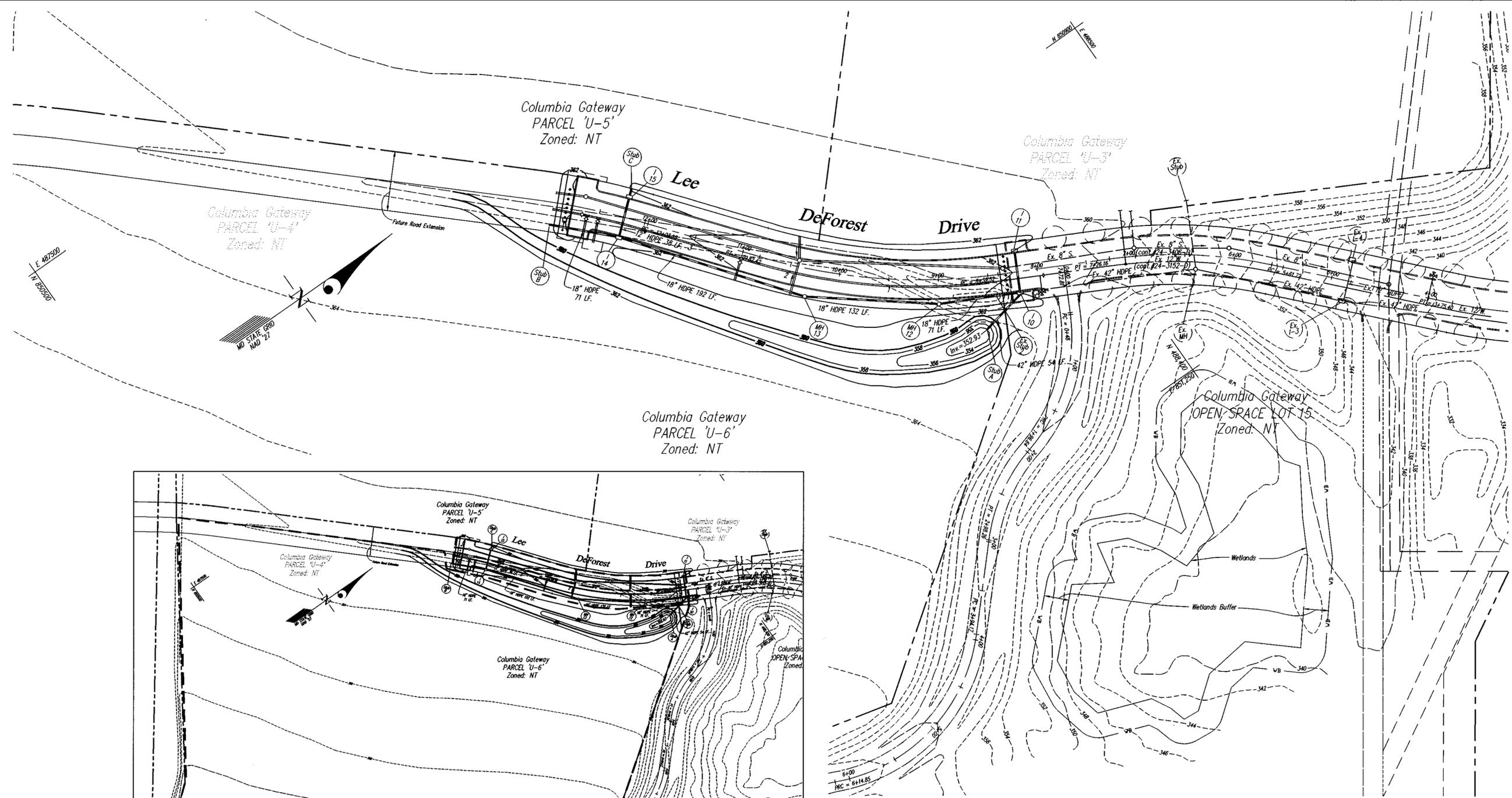
CURVE DATA							
STREET NAME	P.C. STA.	P.C.C. STA.	P.T. STA.	RADIUS	ARC	TANGENT	CHORD
LEE DEFOREST DRIVE	8+39.52	—	10+82.42	475.00	244.42	124.98	241.73
LEE DEFOREST DRIVE	12+03.25	—	13+20.86	475.00	164.43	83.05	163.61

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature]
 Chief, Bureau of Highways

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature]
 Chief, Division of Land Development

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature]
 Chief, Development Engineering Division MK





GRADING PLAN
Scale: 1"=50'

DRAINAGE AREA INFORMATION					
AREA	D.A.	GRASS	IMP.	% IMP.	C
I-10	0.12	0.06	0.06	50	0.31
I-11	0.12	0.06	0.06	50	0.31
I-14	0.39	0.18	0.21	54	0.52
I-15	0.39	0.18	0.21	54	0.52
STUB-A	17.40	-	-	-	0.85
STUB-B	0.59	0.28	0.3	52	0.51
STUB-C	0.37	-	-	-	0.72

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 9/25/01
 Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature] 9/25/01
 Chief, Division of Land Development Date

[Signature] 9/25/01
 Chief, Development Engineering Division Date

DRAINAGE AREA MAP
Scale: 1"=100'



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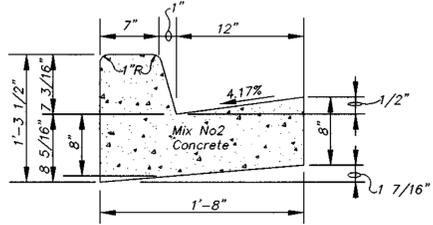
GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

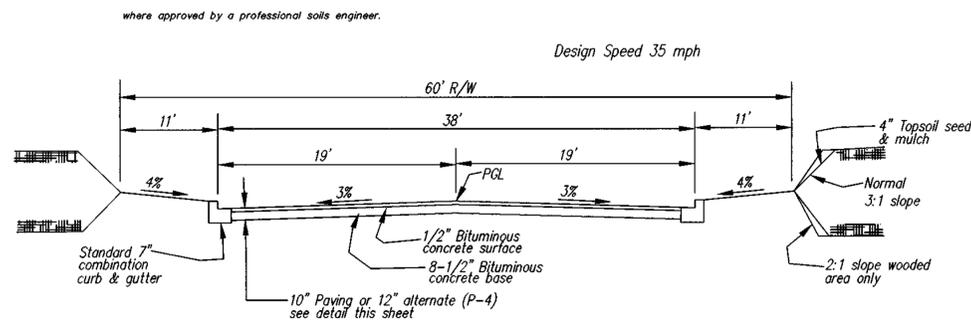
PREPARED FOR:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-992-6089
 ATTN: MR. BOB JENKINS

GRADING PLAN/DRAINAGE AREA MAP
COLUMBIA GATEWAY
PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NT	91055
DATE	TAX MAP - GRID	SHEET
August, 2001	43 / 7 & 42 / 11 & 12	3 OF 5



Standard 7" Combination Curb & Gutter
N.T.S.

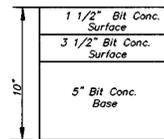


Typical Section - Lee DeForest Drive

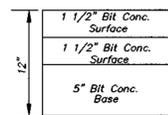
Station 8+37.50 to 12+90.00
N.T.S.

Pipe Schedule			
size	type	quantity (l.f.)	Remarks
12"	HDPE	48'	
15"	HDPE	38'	
18"	HDPE	458'	
42"	HDPE	54'	

Structure Schedule									
No.	Type	Width (inside)	Top Elevation		Invert Elevation		St'd Detail	Locations	Remarks
			Upper	Lower	In	Out			
I-10	A-10 Inlet	4'-0"	361.92	---	353.58 / 354.08	351.48 / 351.58	Ho. Co. S.D. 4.41	@ 8+20, 19L	
I-11	A-5 Inlet	3'-0"	361.92	---	---	354.46	Ho. Co. S.D. 4.40	@ 8+20, 19R	
I-14	A-10 Inlet	3'-0"	361.51	---	356.36 / 355.86	355.76	Ho. Co. S.D. 4.41	@ 12+25, 19L	
I-15	A-10 Inlet	3'-0"	361.51	---	357.09	356.74	Ho. Co. S.D. 4.41	@ 12+25, 19R	
M-12	St'd Manhole	4'-0"	363.45	---	354.06	353.96	Ho. Co. G. 5.12	@ 12+25, 19R	
M-13	St'd Manhole	4'-0"	363.13	---	354.96	354.86	Ho. Co. G. 5.12	@ 12+25, 19R	
Stub A	---	---	---	---	---	352.93	---	See Plan	
Stub B	---	---	---	---	---	356.20	---	See Plan	
Stub C	---	---	---	---	---	357.14	---	See Plan	



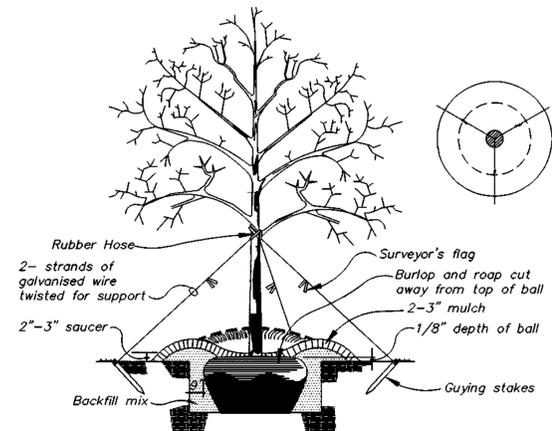
P-4 Full Depth Bituminous Concrete
N.T.S.



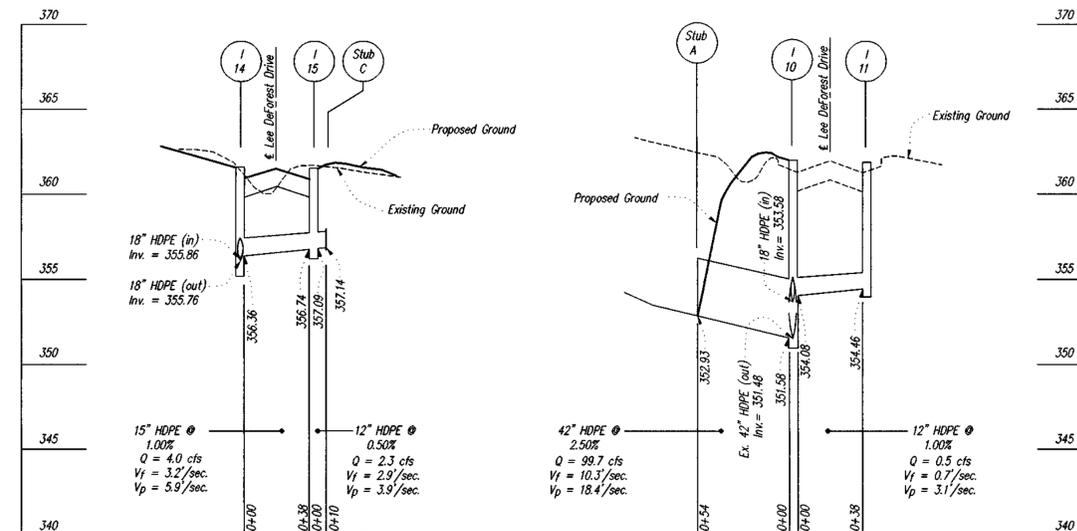
P-4 Granular Base (Alternate)
N.T.S.

Paving Sections
N.T.S.

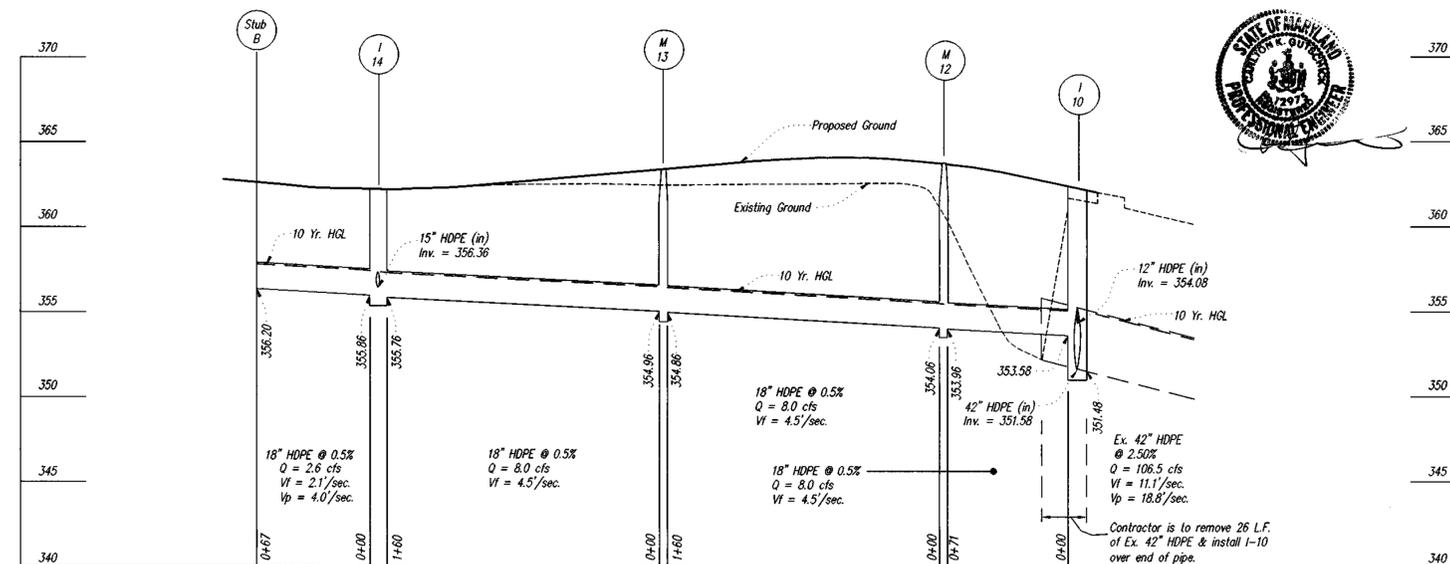
Note: Other equivalent paving sections may be permitted where approved by a professional soils engineer.



Typical Tree Guying Detail
N.T.S.



PROFILES
Scale: 1"=50' Horiz.
1"=5' Vert.



PROFILES
Scale: 1"=50' Horiz.
1"=5' Vert.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 Date 9/25/01

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development
 Date 9/25/01

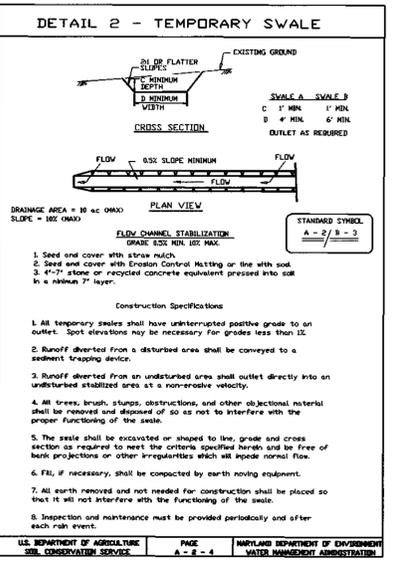
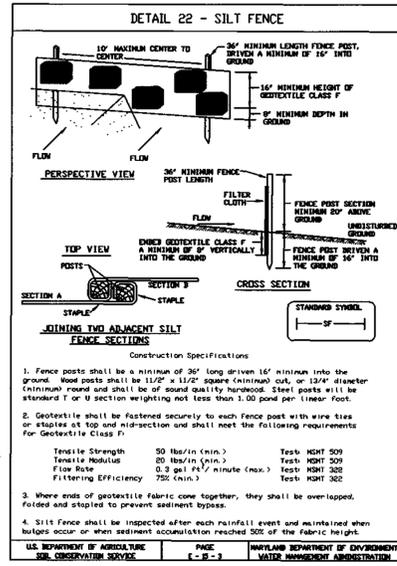
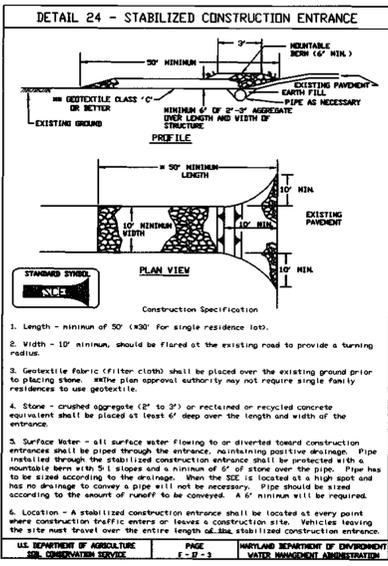
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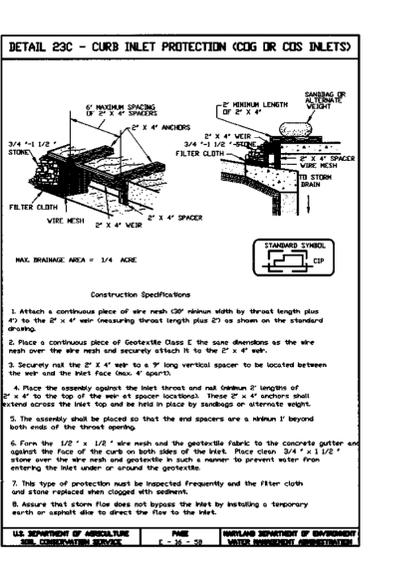
PREPARED FOR:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-992-6089
 ATTN: MR. BOB JENKINS

STORM DRAIN PROFILES & ROAD DETAILS
 COLUMBIA GATEWAY
 PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE

SCALE: AS SHOWN
 ZONING: NT
 G. L. W. FILE NO.: 91055
 DATE: August, 2001
 TAX MAP - GRID: 43 / 7 & 42 / 11 & 12
 SHEET: 4 OF 5

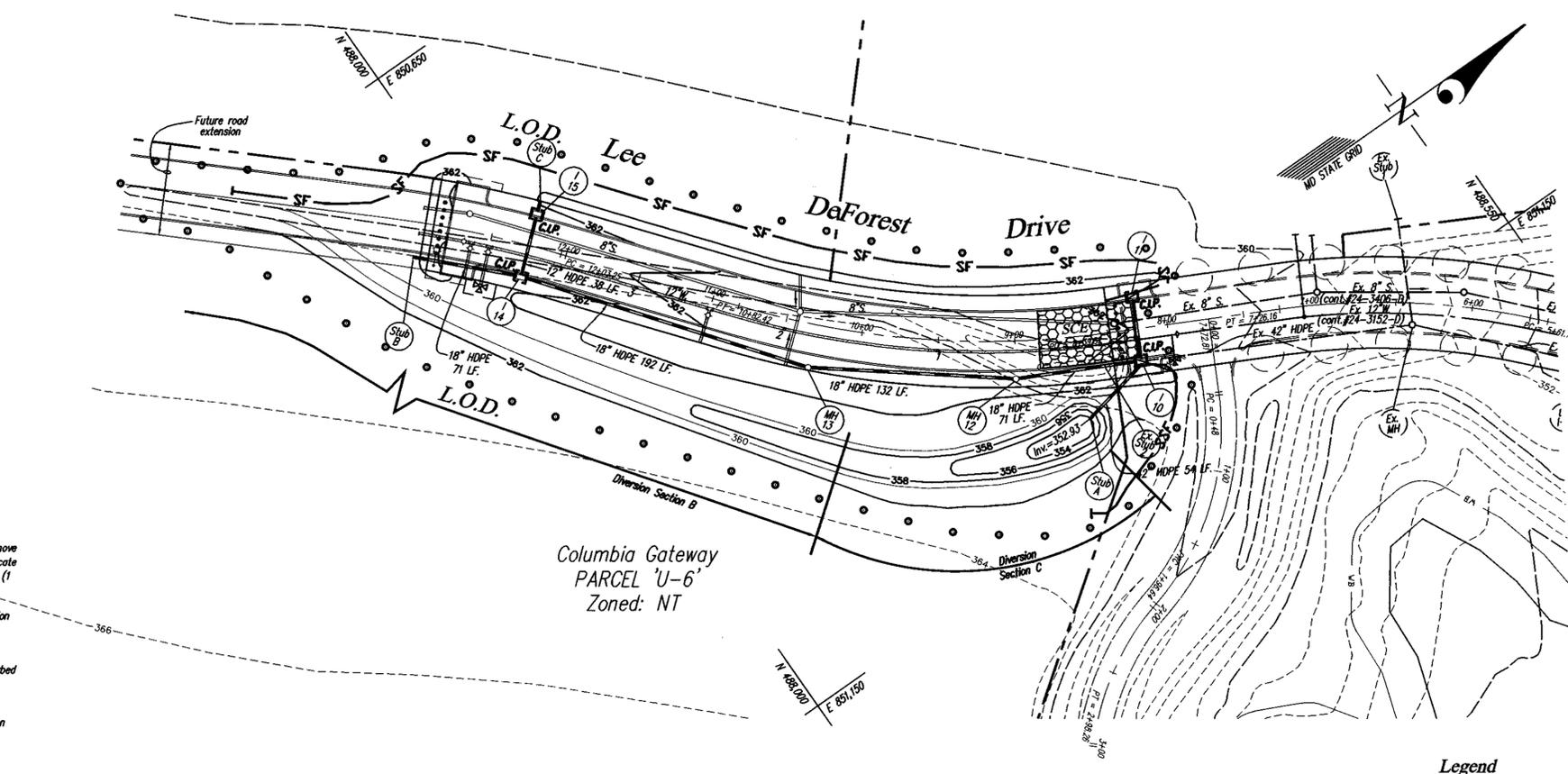
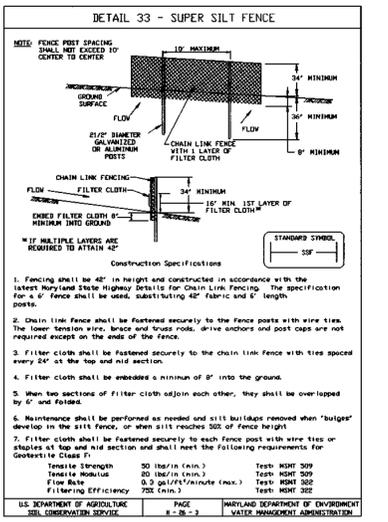


Dust Control
Definition: Controlling dust blowing and movement on construction sites and roads.
Purpose: To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.
Conditions Where Practice Applies: This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.
Specifications:
 1. Mulches - See standards for vegetative stabilization with mulches only mulch should be crimped or locked to prevent blowing.
 2. Vegetative Cover - See standards for temporary vegetative cover.
 3. Traps - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before and blowing starts. Begin placing on windward side of site. Clod-type traps spaced about 10' apart, spring-loaded frames, and similar traps are examples of equipment which may produce the desired effect.
 4. Irrigation - This is generally done as an emergency treatment. Site is irrigated with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point that runoff begins to flow.
 5. Barriers - Solid board fences, all fences, snow fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angle to prevailing currents of air at intervals of about ten times their height are effective in controlling soil blowing currents that will keep surface moist. May need treatment.
 6. Calcium Chloride - Apply at rates that will keep surface moist. May need treatment.
Permanent Methods
 1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with seed. Existing trees or large shrubs may afford valuable protection if left in place.
 2. Topsoil - Covering with less erodible soil material. See standards for top soil.
 3. Stone - Cover surface with crushed stone or gravel.
References:
 1. Agriculture Handbook 346, Wind Erosion Factors in the United States and Their Use in Predicting Soil Loss.
 2. Agriculture Information Bulletin 354, How to Control Wind Erosion, USDA, ARS.

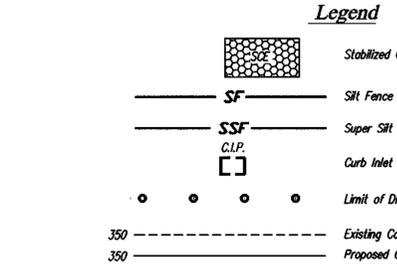
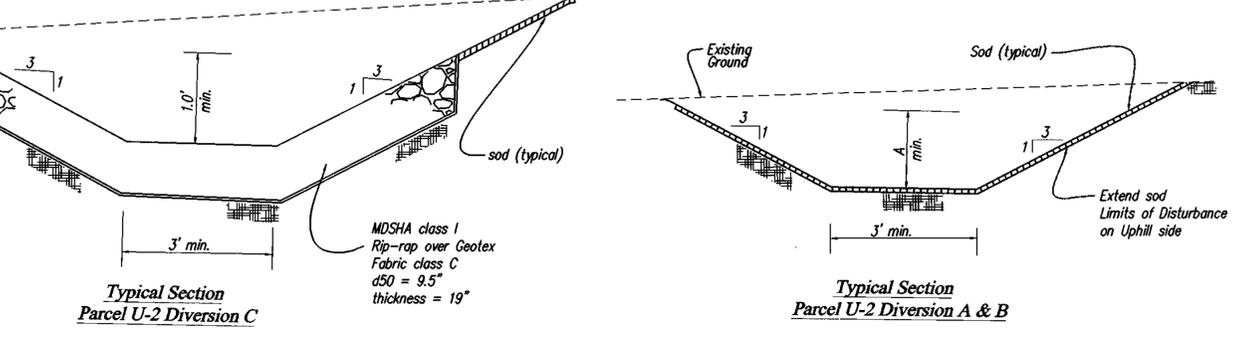


SEDIMENT CONTROL NOTES
 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 313-1855.
 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 3. Following initial soil disturbance or redistribution, 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 around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. 6).
 Temporary stabilization, with mulch alone, can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 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.
 7. Site Analysis:
 Total Area of Site (Gross) : 28,524 AC
 Area Disturbed (by grading) : 2,282 AC
 Area to be roofed or paved : 0,422 AC
 Area to be vegetatively stabilized : 1,882 AC
 Total Cut : 4,250 C.Y.
 Total Fill : 4,250 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 redistributed 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 ryegrass (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 needed.
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 uniform fertilizer (9 lbs/1000 sq ft).
 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) 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.



SEQUENCE OF CONSTRUCTION NOTES
 1. Obtain grading permit and arrange on-site pre-construction meeting with Sediment Control Inspector. (1 day)
 2. Install Stabilized Construction Entrance and Silt Fence as shown on these plans. Remove 26 l.f. portion of 42" HDPE pipe and install Storm Drain from 1-10 to Stub-A. Relocate Diversion Swale to run along the south side of Lee DeForest Drive and into Stub-A. (1 Week)
 3. After S.O.C. item #2 has been completed, rough grade the site and begin construction of the Water and Sewer and construct the remainder of the Storm Drain system. (2 Weeks)
 4. Install curb & gutter and base pave the road. Fine grade the site and stabilize disturbed areas with grass, seed and mulch. (2 weeks)
 5. When areas draining to the sediment control devices have been stabilized, obtain permission from the S.C.I. to remove the sediment control devices except for Diversion Swale, which is to remain after construction, and stabilize as necessary. (3 days)
 6. Install surface paving and street trees. (1 week)
 7. Remove any remaining sediment control devices and stabilize as necessary. (2 days)



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 Date: 9/24/01
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development
 Date: 9/25/01
 Chief, Development Engineering Division

DEVELOPER'S/BUILDER'S CERTIFICATE
 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 by the HSCD.
 Signature of Developer/Builder: *Robt Oculi*
 Date: 8-20-01
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 District.
 Signature: *Jim M. Gies*
 Date: 9/16/01
 Natural Resources Conservation Service
 Signature: *John R. Reuter*
 Date: 9/16/01
 Howard S.C.D.

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3900 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20866
 TEL: 301-421-4024 FAX: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

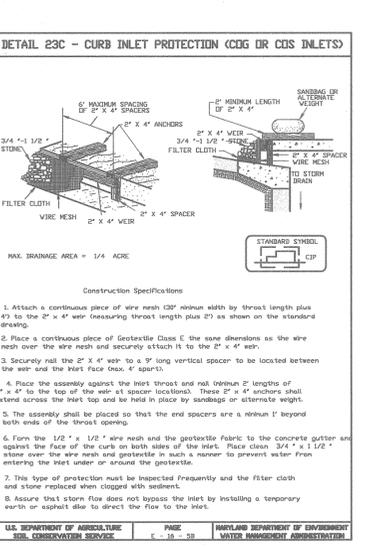
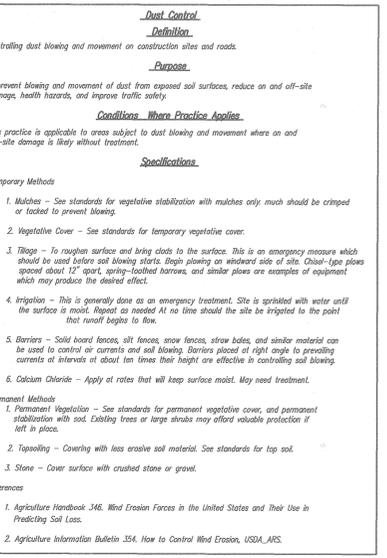
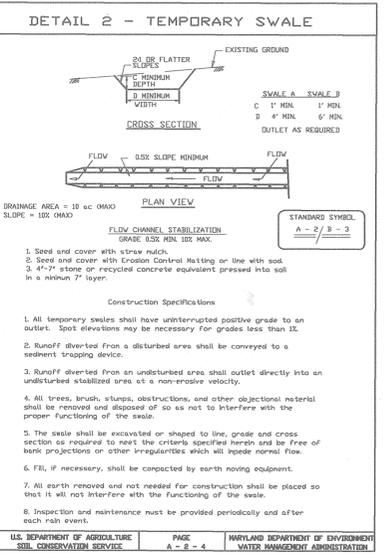
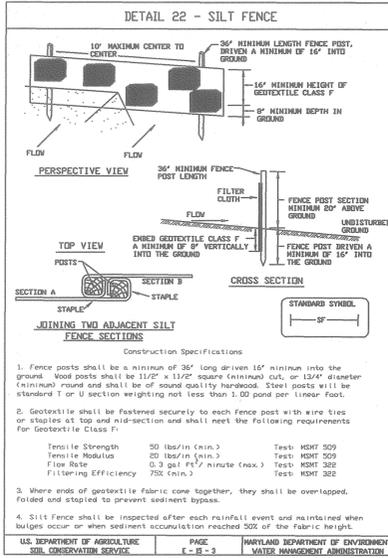
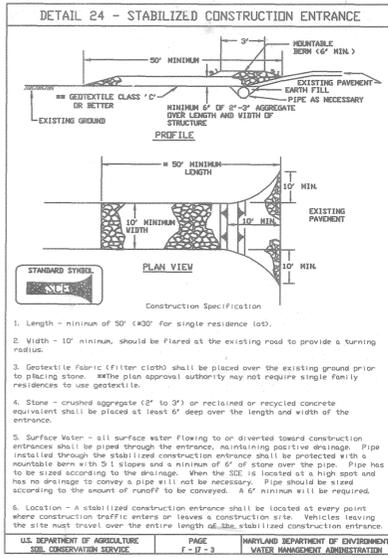
PREPARED FOR:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-992-6089
 ATTN: MR. BOB JENKINS

SEDIMENT CONTROL PLAN
COLUMBIA GATEWAY
PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DEFOREST DRIVE

SCALE: 1" = 50'
 ZONING: NT
 G. L. W. FILE NO.: 91055
 DATE: August, 2001
 TAX MAP - GRID: 43 / 7 & 42 / 11 & 12
 SHEET: 5 OF 5

HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 6
 F-01-200

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SEDIMENT CONTROL NOTES

- 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.
- 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.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within:
 - 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1.
 - 14 days to all other disturbed or graded areas on the project site.
- 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 Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. 6). Temporary stabilization, with mulch alone, can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:

Total Area of Site (Gross)	: 28.52± AC
Area Disturbed (for grading)	: 2.28± AC
Area to be roofed or paved	: 0.48± AC
Area to be vegetatively stabilized	: 1.88± AC
Total Cut	: 4,250 C.Y.
Total Fill	: 4,250 C.Y.
Off-site waste/borrow area location:	N/A
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- 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.
- 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 redistributed where a short-term vegetative cover is needed.

Seeded 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 ryegrass (3.2 lbs/1000 sq ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (0.7 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 unrattled, 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 needed.

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

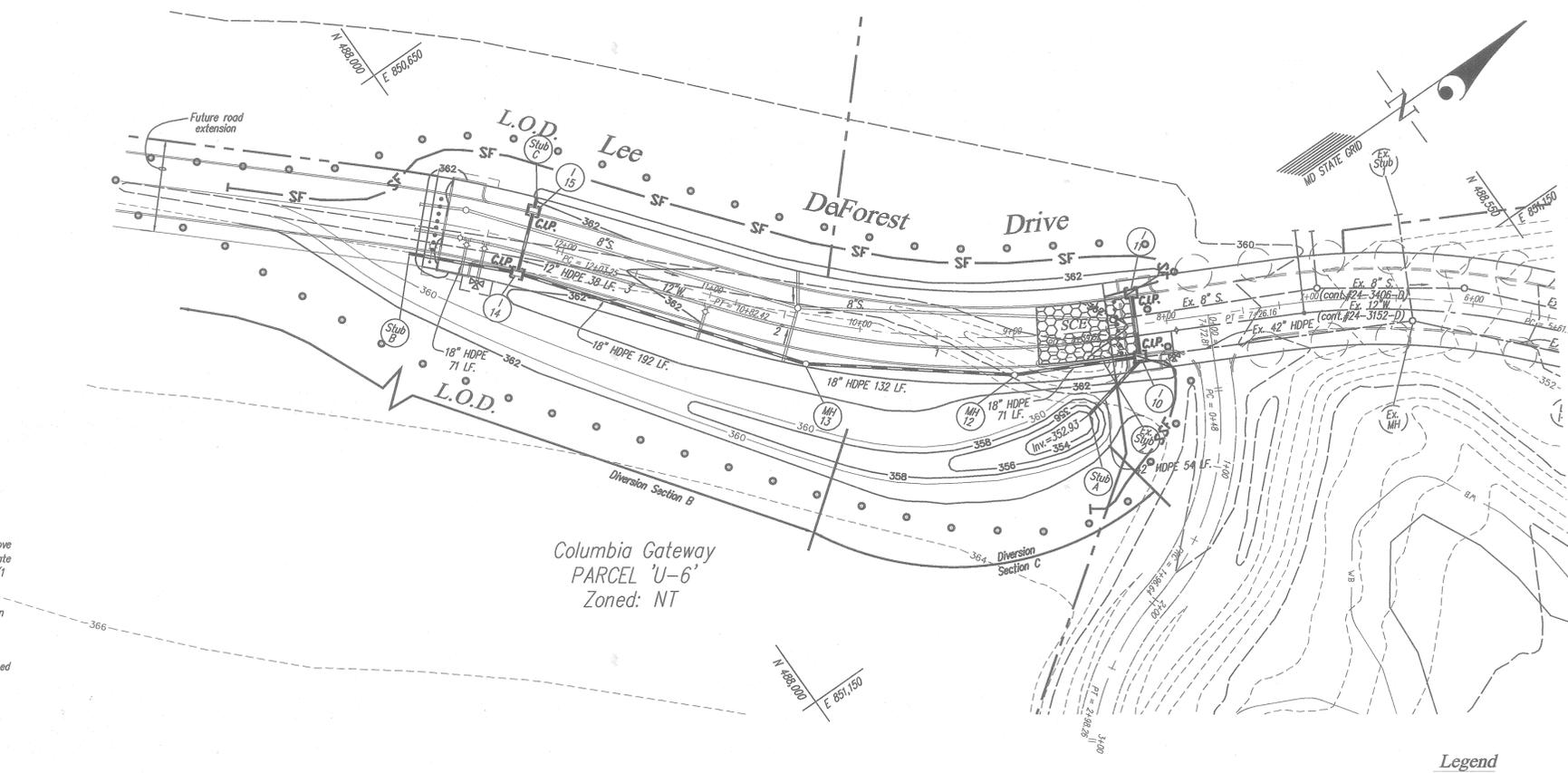
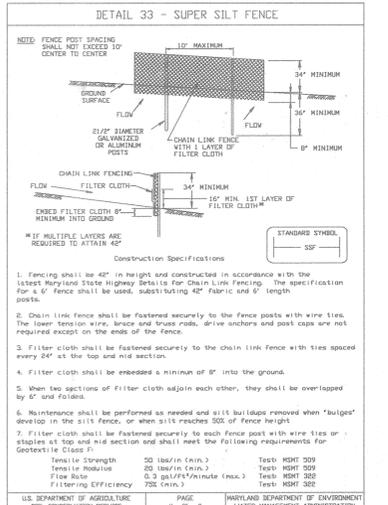
Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- 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 ureaform fertilizer (9 lbs/1000 sq ft).
- 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.

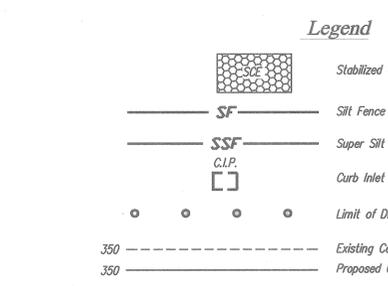
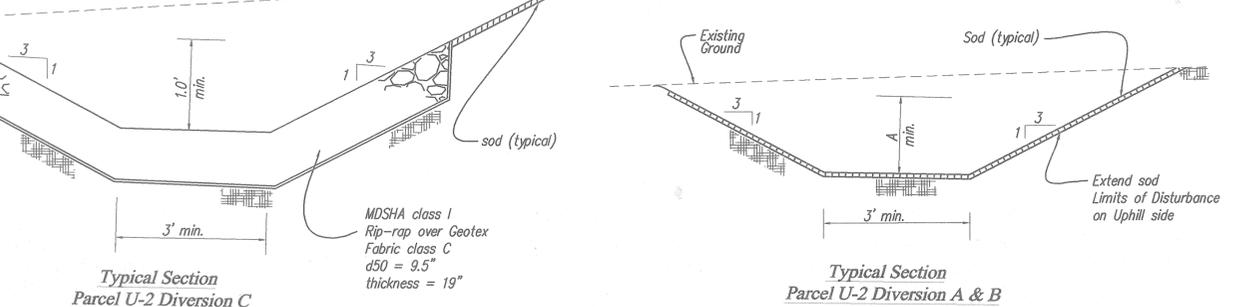
Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher,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

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



SEQUENCE OF CONSTRUCTION NOTES

- Obtain grading permit and arrange on-site pre-construction meeting with Sediment Control Inspector. (1 day)
- Install Stabilized Construction Entrance and Silt Fence as shown on these plans. Remove 26 L.F. portion of 42" HDPE pipe and install Storm Drain from I-10 to Stub-A. Relocate Diversion Swale to run along the south side of Lee DeForest Drive and into Stub-A. (1 Week)
- After S.O.C. item #2 has been completed, rough grade the site and begin construction of the Water and Sewer and construct the remainder of the Storm Drain system. (2 Weeks)
- Install curb & gutter and base pave the road. Fine grade the site and stabilize disturbed areas with grass, seed and mulch. (2 weeks)
- When areas draining to the sediment control devices have been stabilized, obtain permission from the S.C.I. to remove the sediment control devices except for Diversion Swale, which is to remain after construction, and stabilize as necessary. (3 days)
- Install surface paving and street trees. (1 week)
- Remove any remaining sediment control devices and stabilize as necessary. (2 days)



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways Date: 9/24/01

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development Date: 9/28/01

Chief, Development Engineering Division Date: 9/25/01

PREPARED FOR:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-992-8089
 ATTN: MR. BOB JENKINS

SEDIMENT CONTROL PLAN

COLUMBIA GATEWAY

PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE

ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NT	91055
DATE	TAX MAP - GRID	SHEET
August, 2001	43 / 7 & 42 / 11 & 12	5 OF 5

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 by the HSCD.

Robt. Oculi 8-20-01
 Signature of Developer/Builder Date

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 District.

Jim M. Yuz 9/10/01
 Natural Resources Conservation Service Date

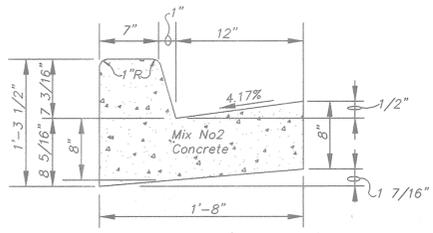
This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John R. Robertson 9/10/01
 Howard S.C.D. 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 BALR: 410-880-1820 DC/MC: 301-989-2524 FAX: 301-421-4186

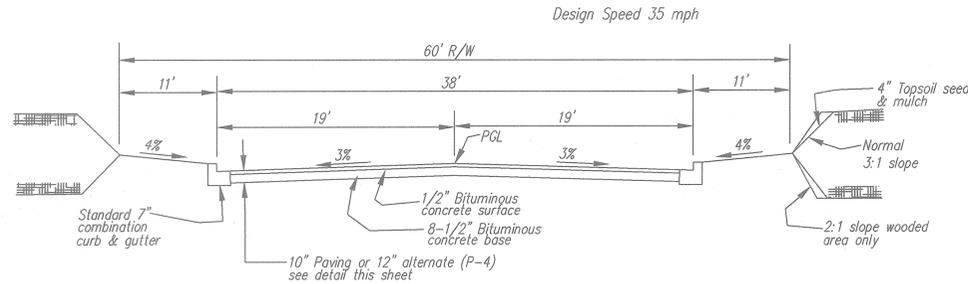
DATE	REVISION	BY	APP'R.

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Standard 7" Combination Curb & Gutter
N.T.S.

where approved by a professional soils engineer.

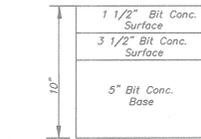


Typical Section - Lee DeForest Drive

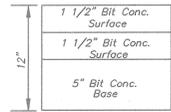
Station 8+37.50 to 12+90.00
N.T.S.

Pipe Schedule			
size	type	quantity (l.f.)	Remarks
12"	HDPE	48'	
15"	HDPE	38'	
18"	HDPE	458'	
42"	HDPE	54'	

Structure Schedule									
No.	Type	Width (inside)	Top Elevation		Invert Elevation		St'd Detail	Locations	Remarks
			Upper	Lower	In	Out			
I-10	A-10 Inlet	4'-0"	361.92	361.92	355.86	355.86	Ho. Co. S.D. 4.41	8+20, 19L	
I-11	A-5 Inlet	3'-0"	361.92	361.92	354.46	354.46	Ho. Co. S.D. 4.40	8+20, 19R	
I-14	A-10 Inlet	3'-0"	361.92	361.92	355.76	355.76	Ho. Co. S.D. 4.41	12+25, 19L	
I-15	A-10 Inlet	3'-0"	361.92	361.92	357.09	357.09	Ho. Co. S.D. 4.41	12+25, 19R	
M-12	St'd Manhole	4'-0"	363.45	363.45	354.06	354.06	Ho. Co. C 5.12	12+25-19R, 14+00 L1-2	
M-13	St'd Manhole	4'-0"	363.43	363.43	354.98	354.98	Ho. Co. C 5.12	12+25-19R, 14+00 L1-2	
Stub A					353.97	353.97		See Plan	
Stub B					356.20	356.20		See Plan	
Stub C					357.14	357.14		See Plan	



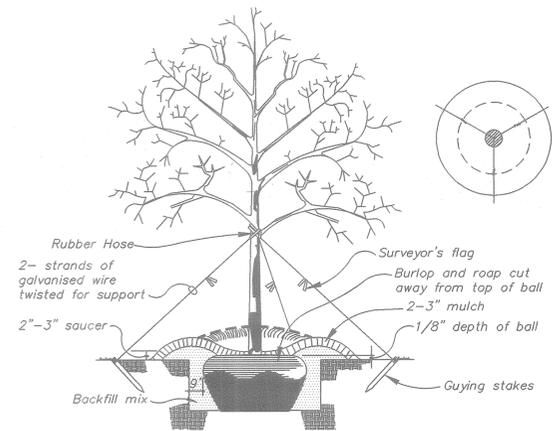
P-4 Full Depth Bituminous Concrete
N.T.S.



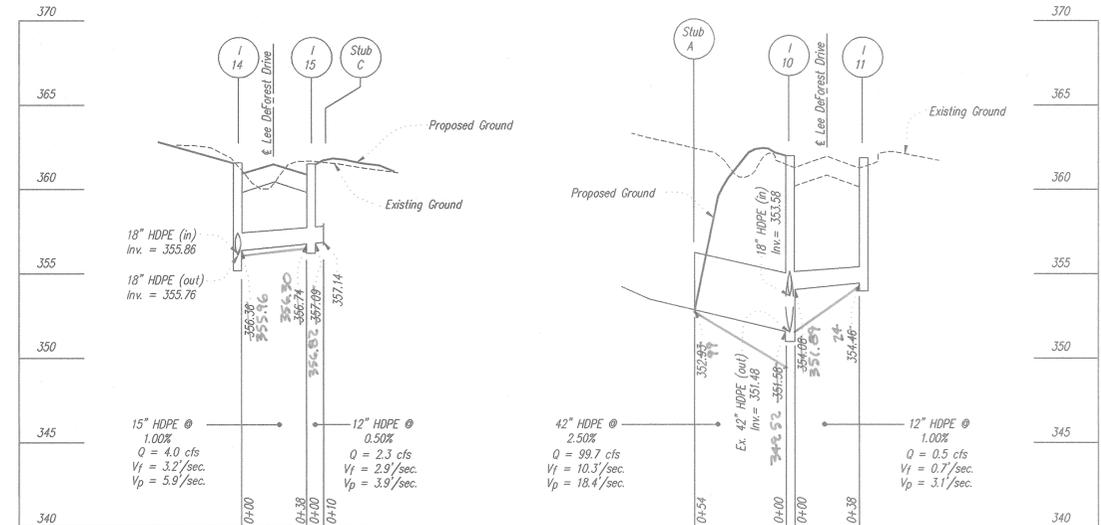
P-4 Granular Base (Alternate)
N.T.S.

Paving Sections

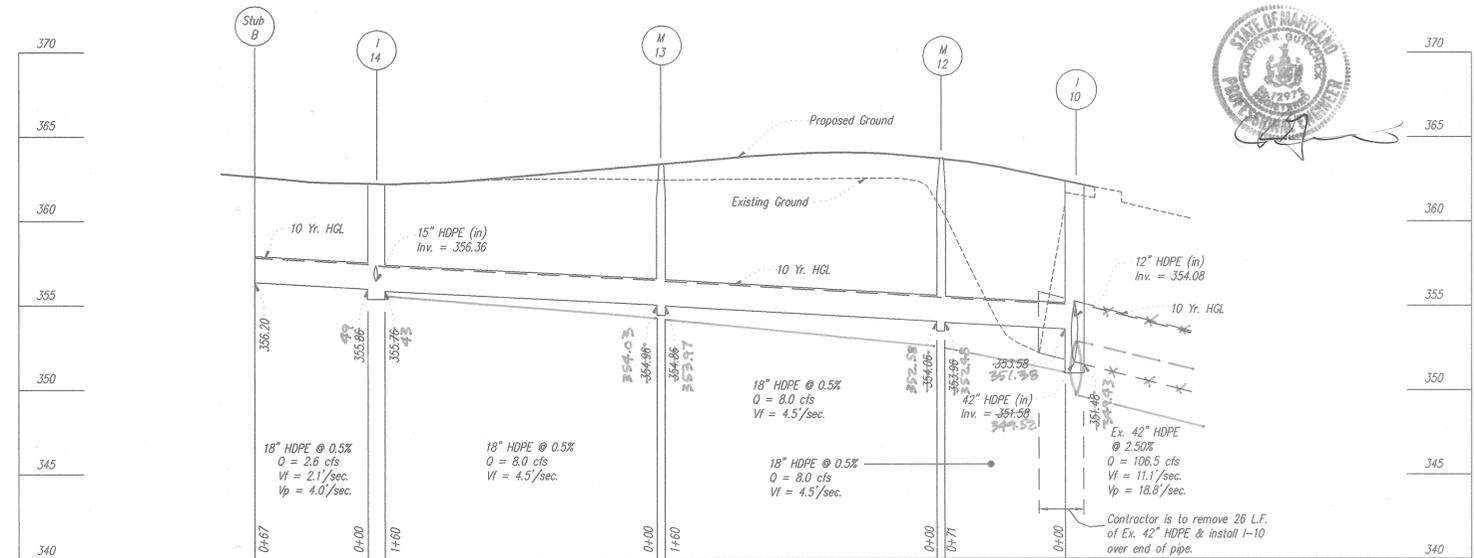
Note: Other equivalent paving sections may be permitted where approved by a professional soils engineer.



Typical Tree Guying Detail
N.T.S.



PROFILES
Scale: 1"=50' Horiz.
1"=5' Vert.



PROFILES
Scale: 1"=50' Horiz.
1"=5' Vert.

ROAD & STORM DRAIN AS-BUILT

G. SCOTT SHANABERGER
PROF. L.S.# 10819
SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MARYLAND 21043

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development
Chief, Development Engineering Division

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: 301-421-4188

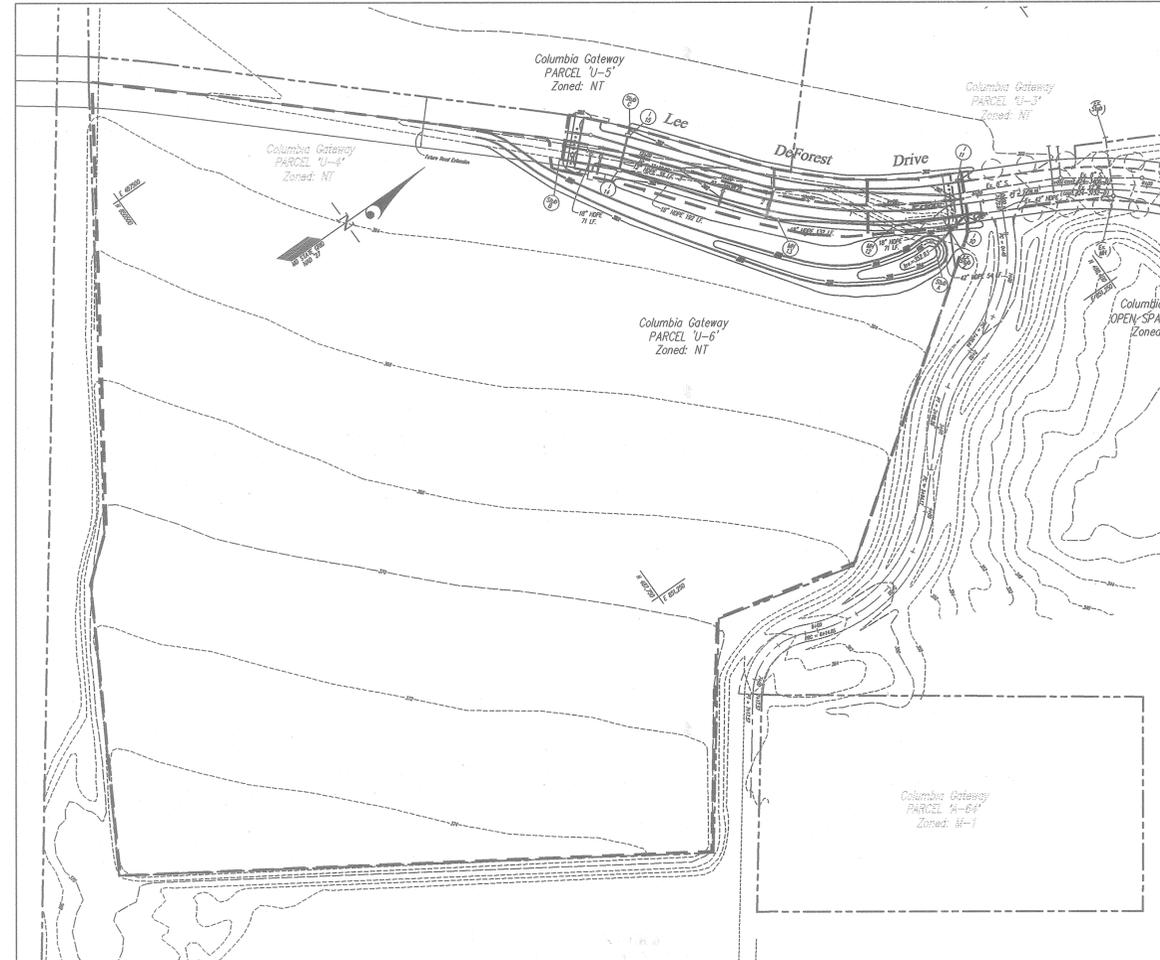
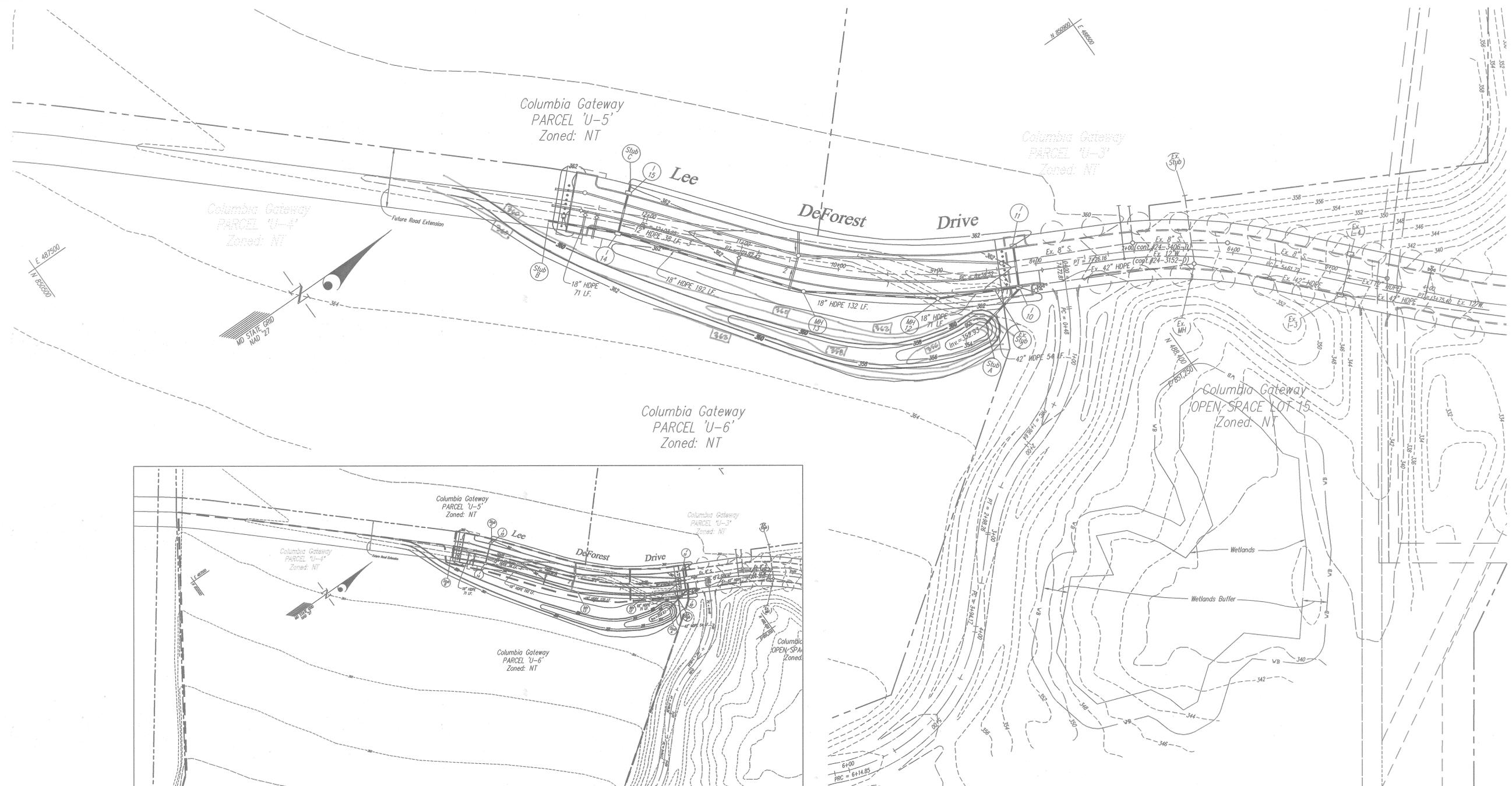
\\DRAWINGS\91055\DESIGN2\91055SD1.DWG DES. MCF DRN. JAU/CHK. DEV/ MJT

DATE	REVISION	BY	APP'R.

PREPARED FOR:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044
PH: 410-392-6089
ATTN: MR. BOB JENKINS

STORM DRAIN PROFILES & ROAD DETAILS
COLUMBIA GATEWAY
PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	91055
DATE	TAX MAP - GRID	SHEET
August, 2001	43 / 7 &	4 OF 5



GRADING PLAN
Scale: 1"=50'

DRAINAGE AREA INFORMATION					
AREA	D.A	GRASS	IMP.	% IMP.	C
I-10	0.12	0.06	0.06	50	0.51
I-11	0.12	0.06	0.06	50	0.51
I-14	0.39	0.18	0.21	54	0.52
I-15	0.39	0.18	0.21	54	0.52
STUB-A	17.40	-	-	-	0.65
STUB-B	0.58	0.28	0.3	52	0.51
STUB-C	0.37	-	-	-	0.72

ROAD & STORM DRAIN AS-BUILT
 G. SCOT SHANBERGER DATE
 PROF. L.S. # 10841
 SHANBERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MARYLAND 21043

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 Date: 9/25/01

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development
 Date: 9/25/01

Chief, Development Engineering Division
 Date: 9/25/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
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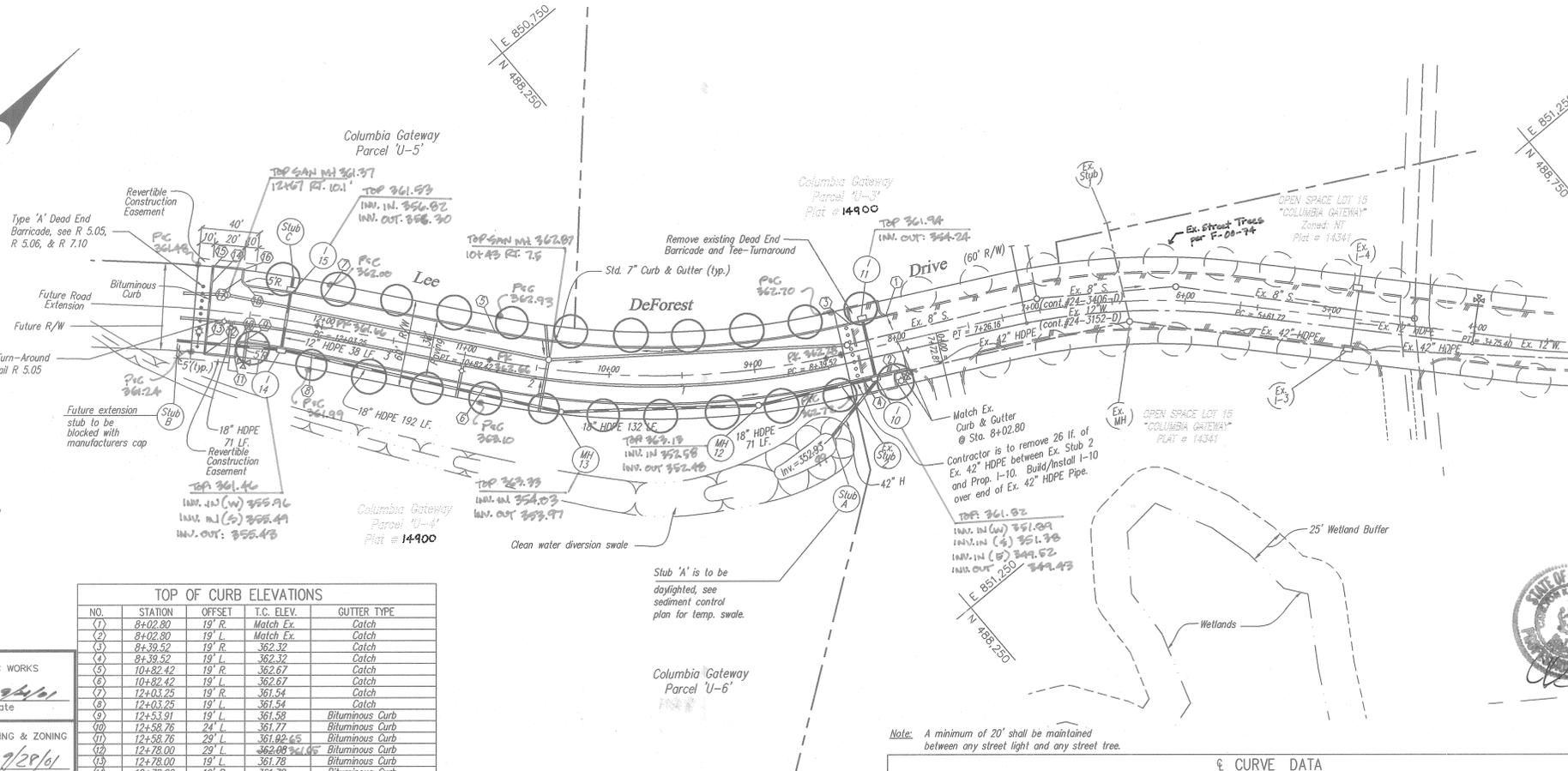
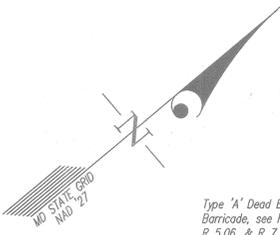
DATE	REVISION	BY	APP'R.

PREPARED FOR:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-992-6089
 ATTN: MR. BOB JENKINS

GRADING PLAN/DRAINAGE AREA MAP
COLUMBIA GATEWAY
PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE
 ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NT	91055
DATE	TAX MAP - GRID	SHEET
August, 2001	43 / 7 & 42 / 11 & 12	3 OF 5

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Note: The clean water diversion swale across Parcel U-6 will remain in place until a site plan is submitted and provisions are made to convey the runoff to the public storm drain system.

TOP OF CURB ELEVATIONS				
NO.	STATION	OFFSET	T.C. ELEV.	GUTTER TYPE
(1)	8+02.80	19' R	Match Ex.	Catch
(2)	8+02.80	19' L	Match Ex.	Catch
(3)	8+39.52	19' R	362.32	Catch
(4)	8+39.52	19' L	362.32	Catch
(5)	10+82.42	19' R	362.67	Catch
(6)	10+82.42	19' L	362.67	Catch
(7)	12+03.25	19' R	361.54	Catch
(8)	12+03.25	19' L	361.54	Catch
(9)	12+53.91	19' L	361.58	Bituminous Curb
(10)	12+58.76	24' L	361.77	Bituminous Curb
(11)	12+58.76	29' L	361.92-45	Bituminous Curb
(12)	12+78.00	29' L	362.08-16	Bituminous Curb
(13)	12+78.00	19' L	361.78	Bituminous Curb
(14)	12+78.00	19' R	361.78	Bituminous Curb
(15)	12+78.00	29' R	362.08-16	Bituminous Curb
(16)	12+58.76	29' R	361.92-45	Bituminous Curb
(17)	12+58.76	24' R	361.77	Bituminous Curb
(18)	12+53.91	19' R	361.58	Bituminous Curb

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature]
 Chief, Bureau of Highways Date: 9/24/01

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature]
 Chief, Division of Land Development Date: 9/25/01

Note: A minimum of 20' shall be maintained between any street light and any street tree.

CURVE DATA							
STREET NAME	P.C. STA.	P.C.C. STA.	P.T. STA.	RADIUS	ARC	TANGENT	CHORD
LEE DEFOREST DRIVE	8+39.52	---	10+82.42	475.00	244.42	124.98	241.73
LEE DEFOREST DRIVE	12+03.25	---	13+20.86	475.00	164.43	83.05	163.61

STREET LIGHT SCHEDULE			
LOCATION	LAMP TYPE	MOUNTING	POLE TYPE
Lee DeForest Drive @ Sta. 12+83.27' Lt.	250 Watts HPS	12' Arm Single	30' Bronze Fiberglass

STREET TREE SCHEDULE				
SYMBOL	NAME (BOTANICAL/COMMON)	SIZE	QUANTITY	REMARKS
○	Acer Saccharum/Green Mountain Sugar Maple	2-2 1/2" cal.	23	B&B Heavy Heads
○	Existing street tree provided under F 00-74.			



GLW GUTSCHICK LITTLE & WEBER, P.A.
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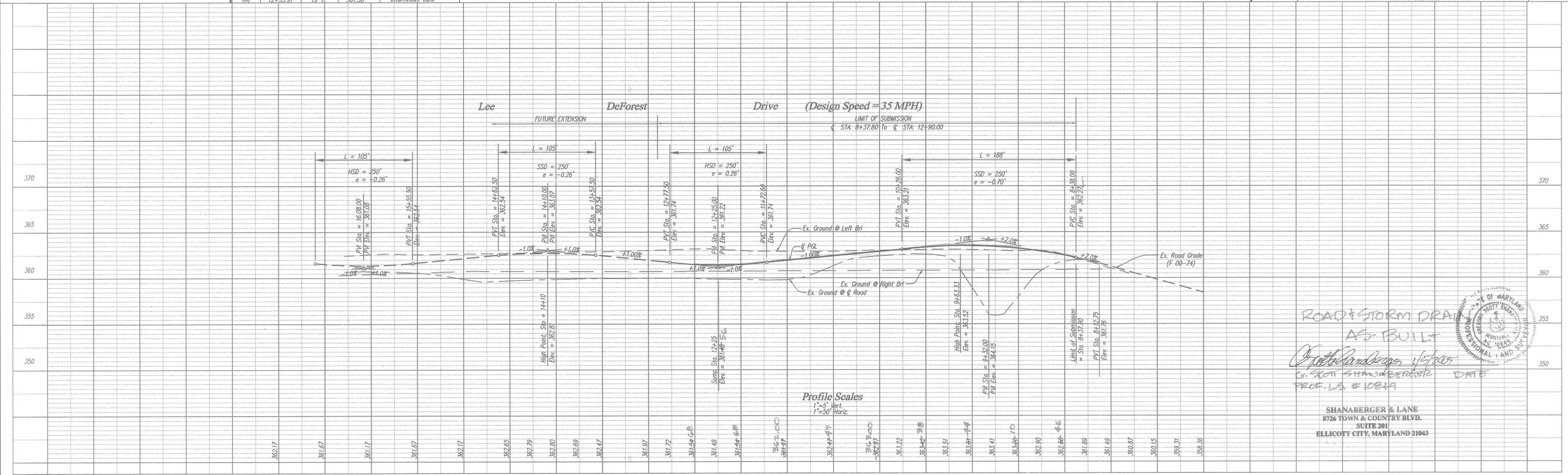
ROAD CONSTRUCTION PLANS
COLUMBIA GATEWAY
LEE DEFOREST DRIVE
 STATION 8+37.80 TO STATION 12+90.00

ELECTION DISTRICT No. HOWARD COUNTY, MARYLAND

PREPARED FOR: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATRIOT PARKWAY
 COLUMBIA, MD 21044
 ATTN: MR. BOB JENKINS
 PH: 410-992-6089

DESIGNED: MCF
 DRAWN: JAU/CADD
 CHECKED: MJT/DEV
 DATE: August, 2001

SCALE: 1"=50'
 DRAWING: 2 OF 5
 ZONING: NT
 JOB No.: 91055



ROAD & STORM DRAIN AS-BUILT
[Signature]
 G. SCOTT SHANABERGER
 PROF. L.S. # 10819

SHANABERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MARYLAND 21043



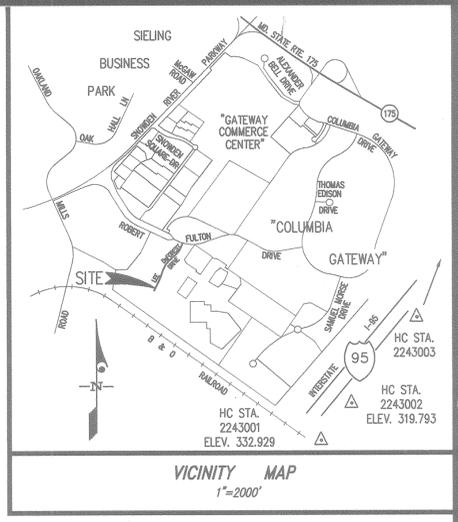
GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standard and specifications if applicable.
- The contractor shall notify the Department of Public Works, Bureau of Engineering, Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation work.
- Site area: 28.5213 acres.
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography is shown per mass grading plans GP-00-61 prepared by Gutschick, Little & Weber, P.A.
- Coordinates and bearings are based upon the MD State plan system (NAD '27).
- Water and sewer shown is public.
- All existing water is per Contract No. 24-3152-D. All existing sewer is per Contract No. 24-3406-D.
- All existing public storm drain is per F-92-15.
- Use trench bedding class "C" for storm drains.
- Project background: See Dept. of Planning & Zoning File Numbers: P-86-22, S-84-44, S-85-28, F-86-127, F-86-182, F-87-63, WP-98-130, F-96-76, F-00-74, FDP Phase 236-A-1, and F 01-189.
- Recording reference: Plat No. 14-10-D
- Existing utilities are based on approved design plans for construction and field location by Gutschick, Little & Weber, P.A.
- There is no floodplain within the disturbed area of this site.
- There are no wetlands within the disturbed area of this site.
- A minimum of 20' shall be maintained between any street light and any tree.
- A traffic study is not required for this extension.
- Stormwater Management for the proposed improvements is provided by a regional facility. The facility provides both quantity and quality management for the road extension and the future development on the individual parcels. An update to the Stormwater Management Report was provided under F 00-74.
- This project is exempt from the Forest Conservation Requirements of Subtitle 12 per Section 16.1202 (b)(1)(iv) which states that a planned unit development (New Town) which has Preliminary Plan approval and 50% or more of the land is recorded and substantially developed before 12/31/92.
- Landscaping requirements for the parcels created by this submission will be satisfied at the Site Development Plan stage.

COLUMBIA GATEWAY PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE

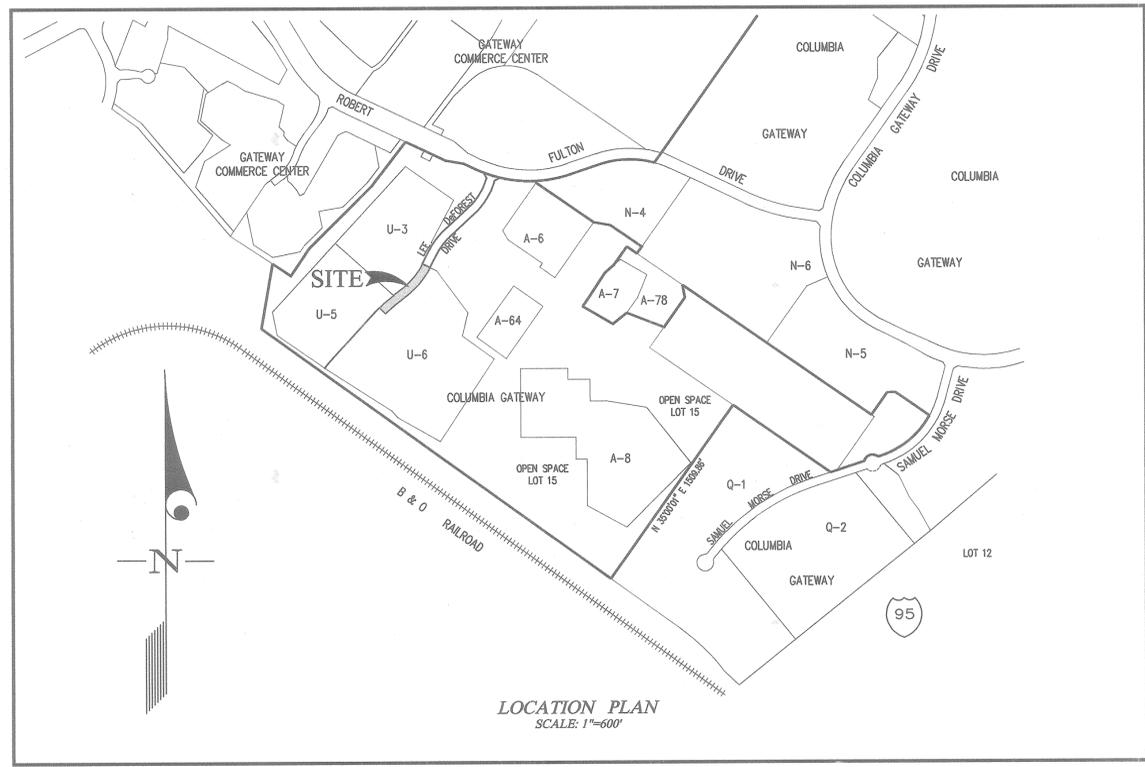
LEE DeFOREST DRIVE

STATION 8 + 37.80 TO STATION 12 + 90.00



LEGEND

	Existing Contour
	Proposed Contour
	Existing Curb & Gutter
	Reverse Curb & Gutter
	Proposed Curb & Gutter
	Proposed Bituminous Curb
	Existing Street Light
	Proposed Street Light
	Existing Storm Drain
	Proposed Storm Drain
	Existing Paving
	Proposed Paving
	Existing Paving (to be removed)
	Top of Curb Elevation
	Existing Tree Line
	Existing Sewer Main
	Existing Water Main
	Existing Gas Main
	Wetland Buffer



INDEX OF SHEETS

- Cover Sheet
- Lee DeForest Drive Plan and Profile
- Grading Plan/Drainage Area Map
- Storm Drain Profiles/Road Details
- Sediment Control Plan/Notes and Details

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways *[Signature]* Date 9/25/01

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development *[Signature]* Date 9/28/01
 Chief, Development Engineering Division *[Signature]* Date 9/25/01

ROAD & STORM DRAIN
 AS-BUILTS
 SCOT SHANBERGER DATE
 PROF. L.S. # 10249
 SHANBERGER & LANE
 8700 TOWN & COUNTRY BLVD.
 SUITE 701
 ELLICOTT CITY, MARYLAND 21043



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

DATE	REVISION	BY	APP'R.

PREPARED FOR:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATRIENT PARKWAY
 COLUMBIA, MD 21044
 PH: 410-692-6089
 ATTN: MR. BOB JENKINS

COVER SHEET
COLUMBIA GATEWAY
 PARCEL 'U-5' AND 'U-6' AND THE EXTENSION OF LEE DeFOREST DRIVE
 ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	91055
DATE	TAX MAP - GRID	SHEET
August, 2001	43 / 7 & 42 / 11 & 12	1 OF 5