GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF CONSTRUCTION INSPECTION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST (5) FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THE PLANS.

MISS UTILITY	1-800-257-7777
C&P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	313-4900
AT&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS & ELECTRIC CO.	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533

4. PROJECT BACKGROUND:

   LOCATION: KINGSBRIDGE ROAD, 1000'± WEST OF BRECONSHIRE ROAD.
   TAX MAP: 23 LOTS 763-773 & 785 ZONING: R-20
   TOTAL TRACT AREA:
   NUMBER OF PROPOSED LOTS: 11 BUILDABLE, 1 OPEN SPACE
   PREVIOUS DPZ REFERENCES: S-86-19, P88-100, F88-124, F-88-207, F-91-17, S-94-26, F95-09 & F95-117, P-96-04
5. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
6. TOPOGRAPHY SHOWN IS AT TWO FOOT CONTOUR INTERVALS AND WAS DETERMINED BY PHOTOGRAMMETRIC DATA SERVICES THE SURVEY WAS DONE USING AERIAL PHOTOGRAPHY ON 4/19/94.
7. HORIZONTAL AND VERTICAL CONTROLS WERE ESTABLISHED USING HOWARD COUNTY CONTROL POINTS 230-40001 AND 231-40002.
8. LIGHT POLES AND FIXTURES FOR STREET LIGHTS SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III, ROADS AND BRIDGES.
9. WATER AND SEWER FOR THIS PROJECT IS PUBLIC AND WILL BE CONSTRUCTED UNDER CONTRACT NUMBER 24- . THE SYSTEM IS WITHIN THE LITTLE PATUXENT DRAINAGE AREA.
10. STORMWATER MANAGEMENT PROVIDED BY ON SITE FACILITY, OPEN SPACE LOT 784 (F-95-117).
11. THERE IS NO FLOODPLAIN EASEMENT WHICH IMPACTS THE LOTS UNDER THIS SUBMISSION.
12. WETLANDS DELINEATION WAS PERFORMED BY EXPLORATION RESEARCH, INC. ON 5/25/94.
13. A TRAFFIC STUDY WAS PERFORMED BY THE TRAFFIC GROUP, INC. ON 2/11/94.
14. A NOISE STUDY WAS NOT REQUIRED FOR THIS SUBDIVISION.
15. A GEOTECHNICAL REPORT WAS PREPARED BY HILLIS-CARNES ENGINEERING ASSOC., INC. ON 7/19/94.
16. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM BEST AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF CONSTRUCTION. ANY DISCREPANCIES MUST BE COMMUNICATED TO THE ENGINEER FOR POSSIBLE RE-DESIGN.
17. ALL PIPE ELEVATIONS SHOWN ARE INVERTS.

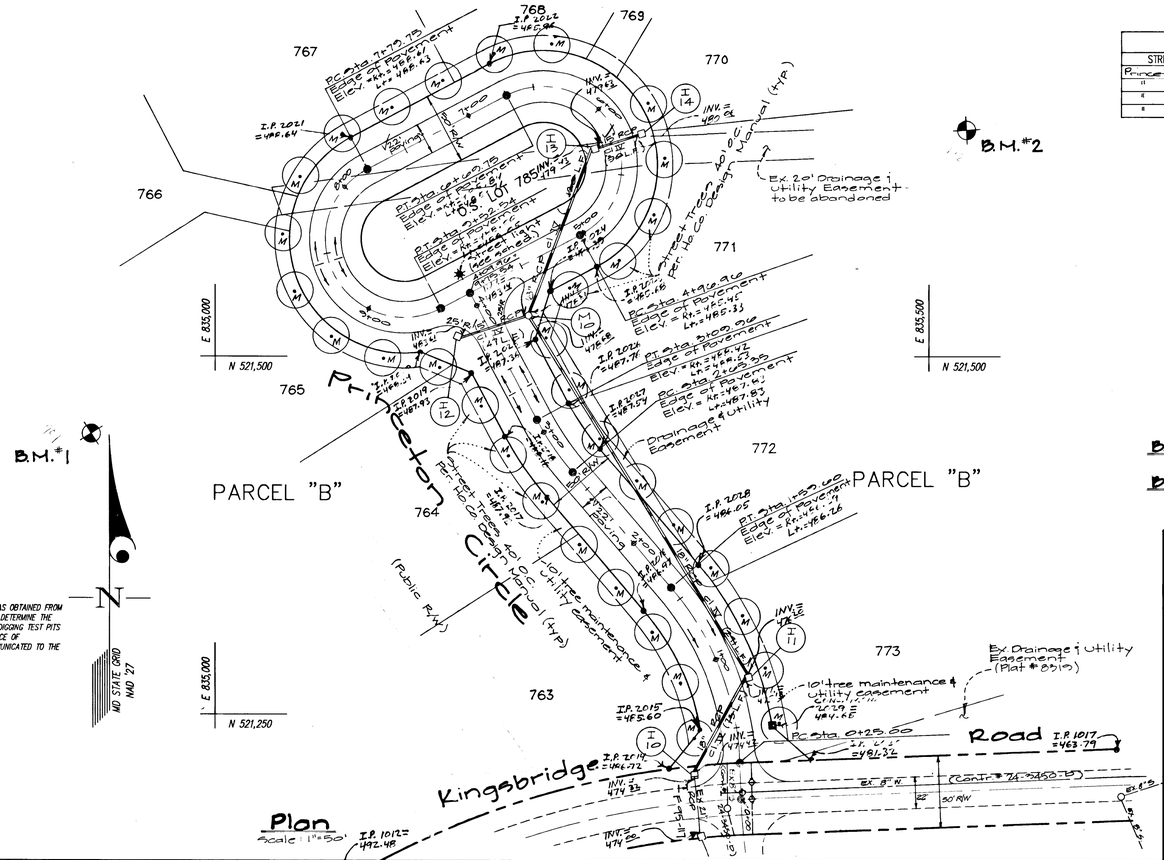
Approved: Howard County Dept. of Public Works

Howard Shirk for — 6-27-96
Chief, Bureau of Highways — Date

Approved: Howard County Dept. of Planning & Zoning

Gloria Lemmonyi — 7/2/96
Chief, Div. of Land Development & Research — Date

Chief, Development Engineering Div. — 7/2/96 Date



℄ CURVE DATA

STREET NAME	P.C. STA.	P.C.C. STA.	P.T. STA.	RADIUS	ARC	TANGENT	CHORD	BEARING	DELTA
Princeton Circle	0+25.00	none	1+59.60	200.00'	134.60'	69.96'	132.08'	N 21°23'25" W	38°33'39"
" "	2+65.35	none	3+09.96	200.00'	44.61'	22.40'	44.52'	N 34°16'48" W	12°46'52"
" "	4+96.96	6+69.75	7+47.75	55.00'	172.79'	———	110.00'	N 27°53'22" W	180°00'00"
" "	7+47.75	none	9+52.54	55.00'	172.79'	———	110.00'	S 27°53'22" E	180°00'00"

Includes As-Built 12-9-97

STREET TREE SCHEDULE

SYMBOL	NAME (BOTANICAL/COMMON)	SIZE	QUANTITY	REMARKS
M	ACER SACHARUM 'GREEN MOUNTAIN' SUGAR MAPLE	2-2½" CAL.	33	B&B HEAVY HEAD

Street Light Placement Note: A 20' min distance shall be maintained between any trees and a light and 5' min. between a fire hydrant and a light. For open section Roads the street light shall be placed 5' from edge of roadway.

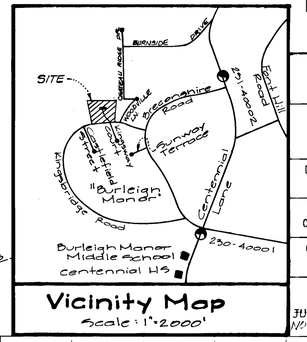
STREET LIGHT SCHEDULE

LOCATION	LAMP TYPE	MOUNTING	POLE TYPE
4+10 15' Left	100 Watt High Pressure Sodium Vapor	Post-Top Traditionaire	14' black Fiberglass

Benchmarks

B.M.#1 - Traverse Sta. 9+91 ½" rebar with "TRAV." cap. Elev. = 507.33

B.M.#2 - Traverse Sta. 9+12 ½" rebar with "TRAV." cap Elev. = 466.02



Vicinity Map
Scale: 1"=2000'

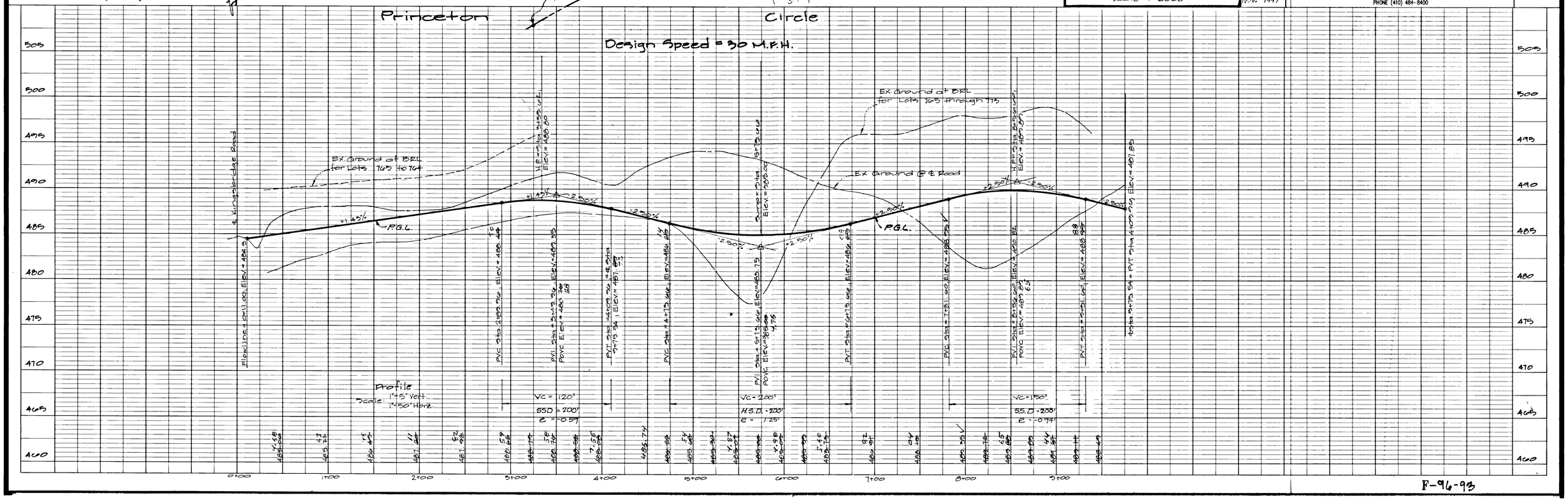
GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 BALT.: (410) 880-1820 NO.VA. (301) 989-2524 FAX: (301) 421-4186

DESIGNED	DEV
DRAWN	CAD/MCF
CHECKED	DEV
DATE	JUNE 1996 ~~NOV. 1997~~

ROAD CONSTRUCTION PLANS
KINGSBRIDGE @ BURLEIGH MANOR
LOTS 763-778 & 785
A RESUBDIVISION OF PARCELS 'A' & 'B'
ELLICOTT CITY ELECTION DISTRICT No. 2
HOWARD COUNTY, MARYLAND

OWNER
GREENEBAUM & ROSE ASSOC., INC.
1829 REISTERSTOWN ROAD
SUITE 410, WOODHOLME CENTER
BALTIMORE, MARYLAND 21208
PHONE (410) 484-8400

SCALE	1"=50'
DRAWING	1 OF 5
ZONING	R-20
JOB No.	94008



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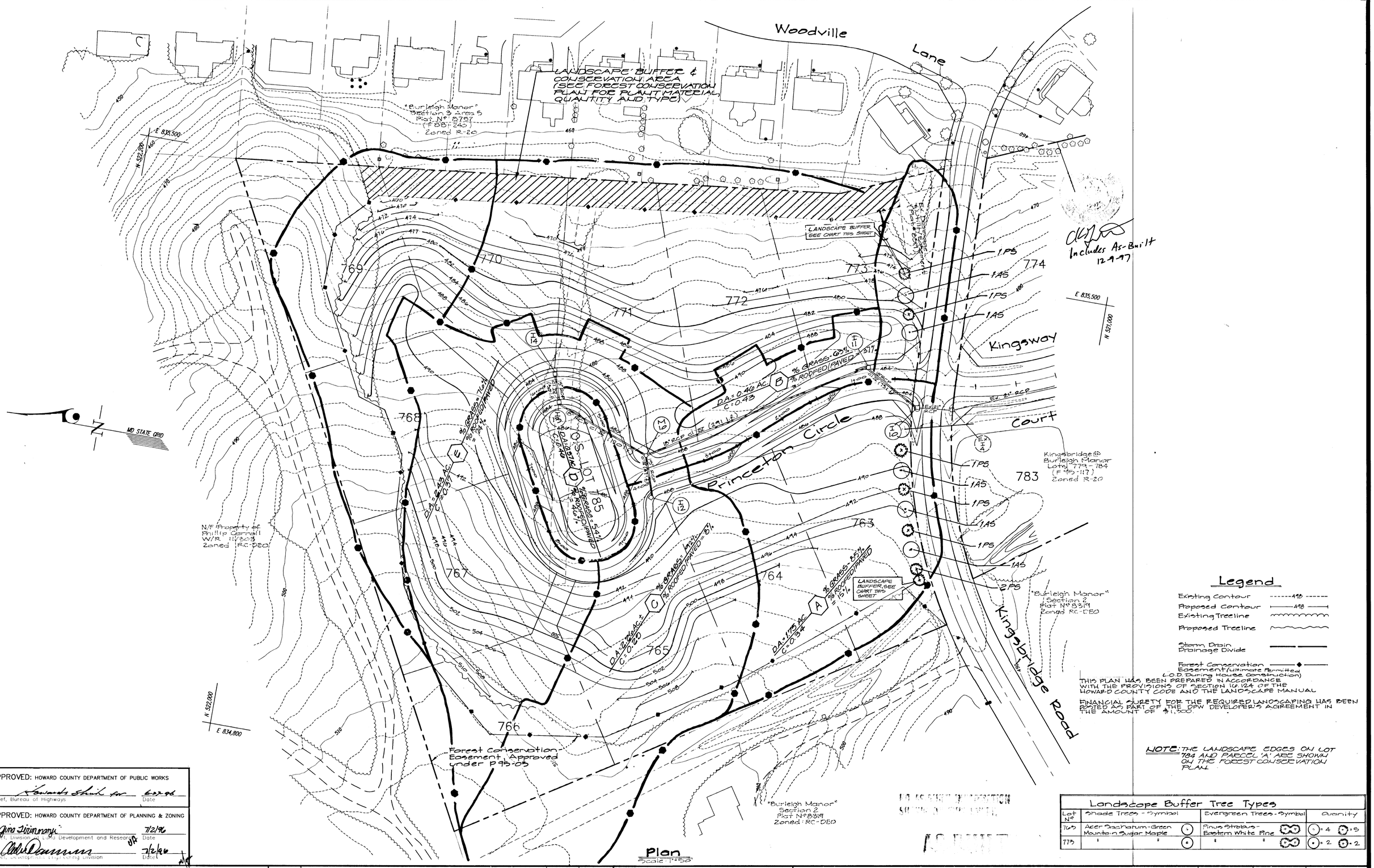
F-96-93



Includes As-Built 12-9-97

Legend

- Existing Contour ------498------
- Proposed Contour ——498——
- Existing Treeline
- Proposed Treeline
- Storm Drain
- Drainage Divide
- Forest Conservation Easement (Ultimate Permitted L.O.D. During House Construction)

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF $11,300.

NOTE: THE LANDSCAPE EDGES ON LOT 784 AND PARCEL 'A' ARE SHOWN ON THE FOREST CONSERVATION PLAN.

Landscape Buffer Tree Types

Lot No	Shade Trees - Symbol	Evergreen Trees - Symbol	Quantity
769	Acer Saccharum - Green Mountain Sugar Maple	Pinus Strobus - Eastern White Pine	4 / 5
773	"	"	2 / 2

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways — Date 6-27-96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development and Research — Date 7/2/96
Chief, Development Engineering Division — Date 7/2/96

Plan
Scale 1"=50'

GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK – BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. DEV | DRN. TMG | CHK. DEV

DATE	REVISION	BY	APP'R.
10-29-96	REV. FOREST CONS. PLANTING LOCATION & REV. FOREST CONS. EASM'T.	HCJ	

PREPARED FOR:
GREENEBAUM & ROSE ASSOC., INC.
1829 REISTERSTOWN ROAD
SUITE 410, WOODHOLME CENTER
BALTIMORE, MARYLAND 21208
PHONE (410) 484-8400

Drainage Area Delineations, Mass Grading & Landscaping Plan

KINGSBRIDGE @ BURLEIGH MANOR

LOTS 763-778 & 785
A RESUBDIVISION OF PARCELS 'A' & 'B'

ELLICOTT CITY ELECTION DISTRICT No. 2 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	R-20	94008
DATE	TAX MAP No.	SHEET
~~JUNE 1996~~ NOV., 1997	23	2 OF 5

F-96-93

721

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."

C K Gupta — 12-20-95
Date

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."

C K Gupta
Includes As-Built 12-9-97

Mark D. Corbett — 3-27-96
Signature of Developer/Builder — Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

J. A. Warfield Jr. — 6/26/96
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 — 6/26/96
Howard S.C.D. — Date

Legend

- Existing Contour ------498------
- Proposed Contour ——498——
- Existing Treeline
- Proposed Treeline
- Forest Conservation Easement (Ultimate Permitted L.O.D. during House construction)
- Super Silt Fence ——SSF——
- Silt Fence ——SF——
- Stone Construction Entrance
- Earth Dike ——E.D.——
- Limit of Disturbance ——L.O.D.——
- Inlet Protection I.P.
- TPF x——x TPF x Tree Protection Fence
- Prop. Drainage Area
- Ex. Drainage Area

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Howard Shik for — 6-27-96
Chief, Bureau of Highways — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Gina Summary — 7/2/96
Director of Planning and Zoning — Date

Chief, Development Engineering Division — 7/2/96 — Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK – BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186
DES. DEV | DRN. GT/MCF | CHK. DEV

DATE	REVISION	BY	APP'R.
10-28-96	REV LOCATION OF FOREST CONS. EASMT, TPF, LOD & TREELINE	HKB	

PREPARED FOR:
GREENEBAUM & ROSE ASSOC., INC.
1829 REISTERSTOWN ROAD
SUITE 410, WOODHOLME CENTER
BALTIMORE, MARYLAND 21208
PHONE (410) 484-8400

Sediment Control Plan

KINGSBRIDGE @ BURLEIGH MANOR

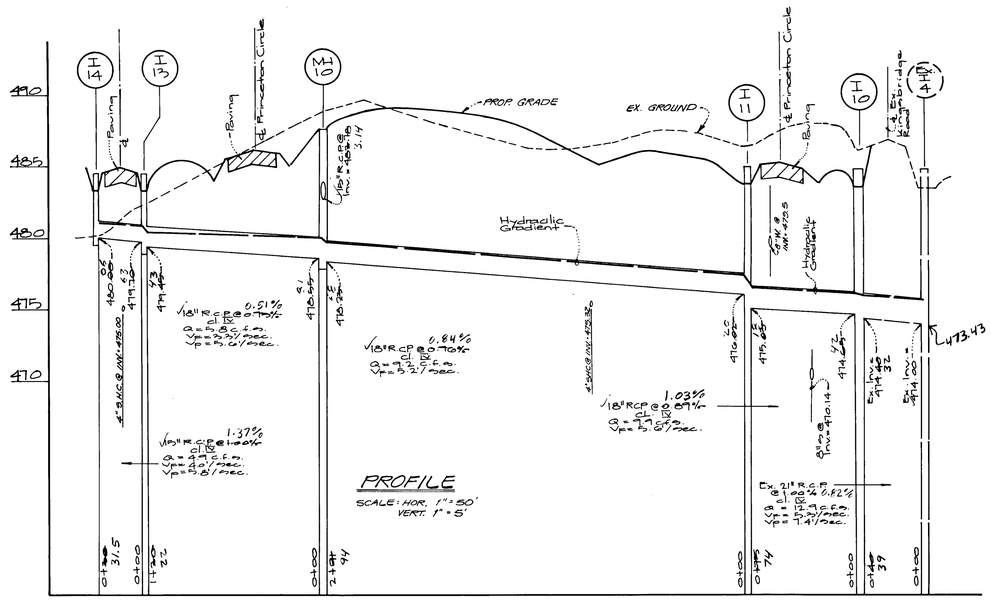
LOTS 763-778 & 785
A RESUBDIVISION OF PARCELS 'A' & 'B'

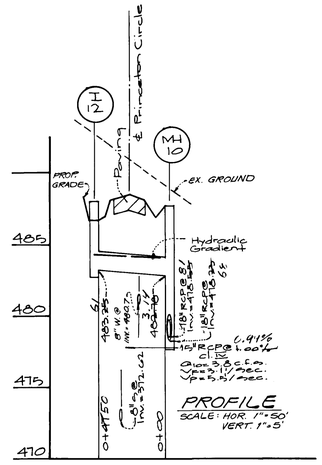
ELLICOTT CITY ELECTION DISTRICT No. 2 — HOWARD COUNTY, MARYLAND

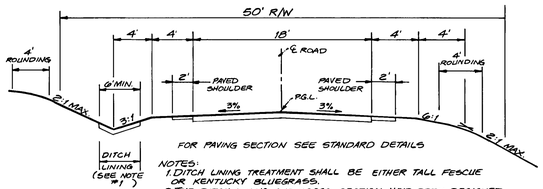
SCALE	ZONING	G. L. W. FILE No.
1" = 50'	R-20	94008
DATE	TAX MAP No.	SHEET
~~JUNE 1996~~ NOV. 1997	23	3 OF 5

F-96-93

721





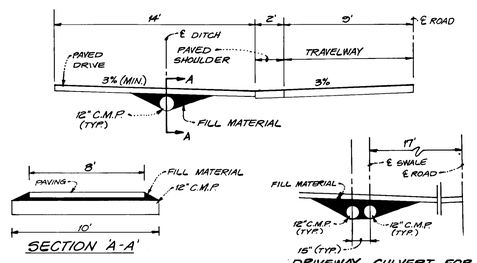


FOR PAVING SECTION SEE STANDARD DETAILS

NOTES:
1. DITCH LINING TREATMENT SHALL BE EITHER TALL FESCUE OR KENTUCKY BLUEGRASS.
2. THE DITCH LINING AND CROSS SECTION HAVE BEEN DESIGNED IN ACCORDANCE WITH THE STORM DRAINAGE DESIGN MANUAL. IF FIELD CONDITIONS REQUIRE ANY DEVIATION FROM THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR MODIFICATIONS, WHICH WILL REQUIRE APPROVAL OF THE HCDPW.

OPEN SECTION - RR, RC, R-20 & R-ED ZONING

NOT TO SCALE



DRIVEWAY CULVERT DETAIL

NO SCALE

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
2. Arrange for an on-site meeting with County Sediment Control Inspector.
3. Install stone construction entrance and temporary pipe.
4. Make modifications to the riser structure approved under F-95-117 as shown on Sheet 4.

PHASE ONE CONSTRUCTION - SEE DETAIL FOR INITIAL GRADING AND SEDIMENT CONTROL - SHEET 5.

1. Construct Sediment Trap Number One, and in-stream stone dike.
2. Install silt fence and earth dikes as shown.
3. Clear and grub site within the limits of the installed earth dikes/silt fence.
4. Rough grade site within the limits of the installed earth dike/silt fence as shown on Sheet 5. Construct storm drains and other utilities and install inlet protection devices. The contractor shall inspect the sediment control devices on a daily basis and make any necessary repairs. NOTE: Contractor shall provide positive drainage from Kingsway Circle to Trap No. 1 until storm drains are functioning.
5. Contractor shall follow the temporary seeding notes in order to stabilize the area disturbed under Phase One of the construction.

PHASE TWO CONSTRUCTION

1. Construct silt fence as shown on Sheet 3.
2. Backfill Sediment Trap Number One as shown on Sheet 3, and remove phase one silt fence with permission of the Inspector.
2. Clear and grub the remaining area within the limit of disturbance.
3. Rough grade the remainder of the site and remove earth dikes installed in Phase One.
4. Fine grade site and install base paving.
5. Stabilize all disturbed area, within both Phase One and Two, in accordance with the Permanent Seeding Notes and flush storm drain systems. Contractor will be responsible for any damage to the existing Stormwater Management Facility and must make the necessary repairs, and conversions to the riser structure in order to conform to approved F-95-117.
6. After all areas draining to the sediment control devices have been stabilized and permission has been granted by the Sediment Control Inspector, remove those devices, grade remaining areas and stabilize in accordance with the Permanent Seeding Notes.
7. Install surface course paving.
8. With permission from the Inspector, remove the remaining sediment control devices and go home.

Structure Schedule

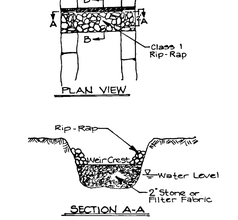
Nº	Type	Width (inside)	Top Elev. upper	Top Elev. lower	Inv. Elev. upper	Inv. Elev. lower	Std. Detail	Locations	Remarks
I-14	'K' Inlet	——	——	484.59 / 484.59	——	480.00 / 480.00	Ho.Co.S.D.4.12	℄Sta.5+73.66 17' Right	
I-13	" "	——	——	484.59 / 484.59	479.76 / 479.76	479.26 / 479.26	" "	℄Sta.5+73.66 17' Left	
I-12	" "	——	——	487.87 / 487.87	——	483.36 / 483.36	" "	℄Sta.7+87.10 23.5' Left	
I-11	" "	——	——	480.92 / 480.92	476.02 / 476.02	475.06 / 475.06	" "	℄Sta.0+80.05 17' Right	
I-10	" "	——	——	484.75 / 484.75	478.25 / 478.25	474.30 / 474.30	" "	℄Sta.0+19.0 52.5' Left	
M-10	Std. Manhole	4'-0"	——	481.59 / 481.59	3.14 / 3.14	478.59 / 478.59	Ho.Co. G.5.01	℄Sta.3+78.0 28.0' Right	

PIPE SCHEDULE

SIZE	CLASS	LENGTH
15" R.C.P.	IV	77
18" R.C.P.	IV	484

STREET NAME & ℄ STATION LIMIT

STREET NAME & ℄ STATION LIMIT	TYPE OF TRAFFIC	A	B	C	D	R/W	ZONING	E	DESIGN SPEED	PAVING SECTION
0+00 - 9+75.54	Local	—	—	—	—	50'	R-20	—	30 MPH	P-2



I. Description

The work encompasses the installation of an in-stream stone dike to be used as a sediment filtering device for streams that generally carry wet weather flow.

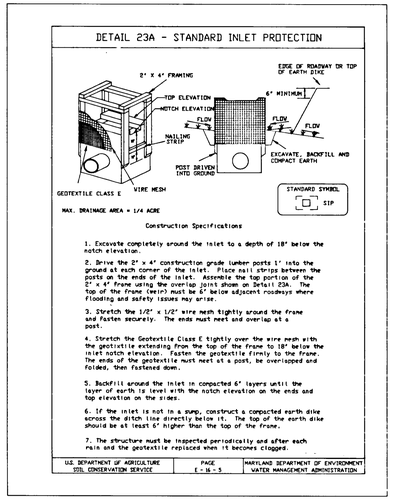
II. Material Specifications

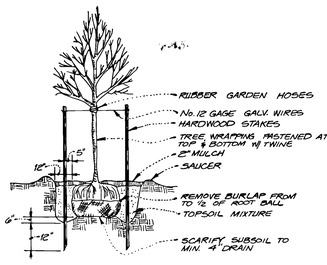
1. Small Riprap - 8-12 inch washed stone and gravel shall be used.
2. Filter Fabric - The filter cloth shall be a woven or non-woven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydrocarbons, mildew, and rot resistant. A one foot layer of 2" washed stone may be used instead of filter fabric.
3. Gabion Baskets - Class 1 gabion baskets shall meet the requirements listed in WPDS.2.

III. Construction Requirements

1. Structure to be installed in-stream as first order of business to trap sediment generated during construction activities.
2. The top width of the dike is to be from 2-4 feet.
3. The distance between the dike and the disturbance is to be determined by flow rate of the waterway.
4. Gabion baskets may be used in lieu of small riprap as indicated by alternative section.
5. Structure is to remain in place until all disturbed areas have been stabilized in accordance with an approved sediment and erosion control plan.
6. Entrapped sediment is to be excavated periodically and disposed of in a SCD approved disposal area outside the 100-year floodplain unless otherwise approved on the plans by the NRA.
7. Structure can be removed once approved by inspecting authority.

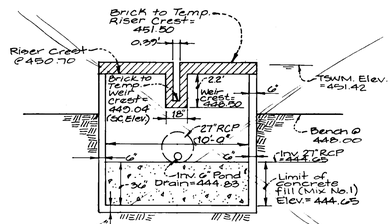
WATER RESOURCES ADMINISTRATION	IN-STREAM STONE DIKE	Approved On 1/24/86 Chief, Waterway Permits	WPD 1.2





TYPICAL TREE GUYING

No Scale



MODIFICATIONS TO EXISTING RISER STRUCTURE FOR SEDIMENT CONTROL & TEMP. S.W.M.

SCALE: 1" = 5'

AS-BUILT

Includes As-Built 12-9-97

GUTSCHICK LITTLE & WEBER, P.A.	DATE	REVISION	BY	APP'R.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS				
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866				
TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186				

PREPARED FOR:
Greenebaum & Rose Assoc., Inc.
1829 Reisterstown Rd
Suite 410 Woodholme Center
Baltimore, Maryland 21208
Phone (410) 484-8400

STORM DRAIN PROFILES & DETAILS

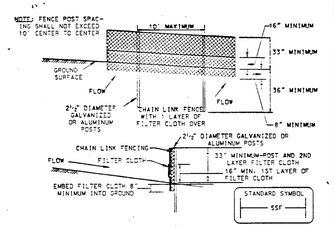
Kingsbridge @ Burleigh Manor
Lots 769-778 & 785
A Resubdivision of Parcels A & B
Ellicott City Election District No. 2. Howard County, Md.

DES.: DEV	SCALE AS SHOWN	ZONING R-20	G.L.W. FILE No. 94-008
DRN.: GT/MCF	DATE JUNE, 1996 NOV., 1997	TAX MAP No. 23	SHEET 4 OF 5
CHK.: DEV			

F-96-93

721

DETAIL 33 - SUPER SILT FENCE



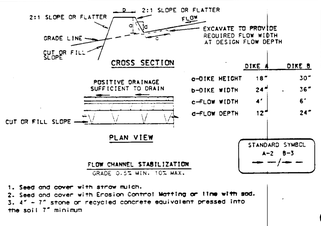
Construction Specifications

Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used, substituting 42 inch fabric and 6 foot length posts.

1. The poles do not need to set in concrete.
2. Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24' at the top and mid section.
4. Filter cloth shall be embedded a minimum of 6" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H - M - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

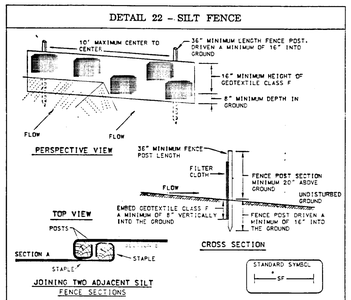
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 11 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 - SILT FENCE



Construction Specifications

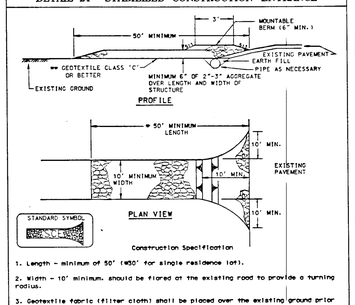
1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - M - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

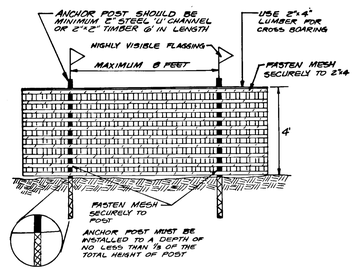


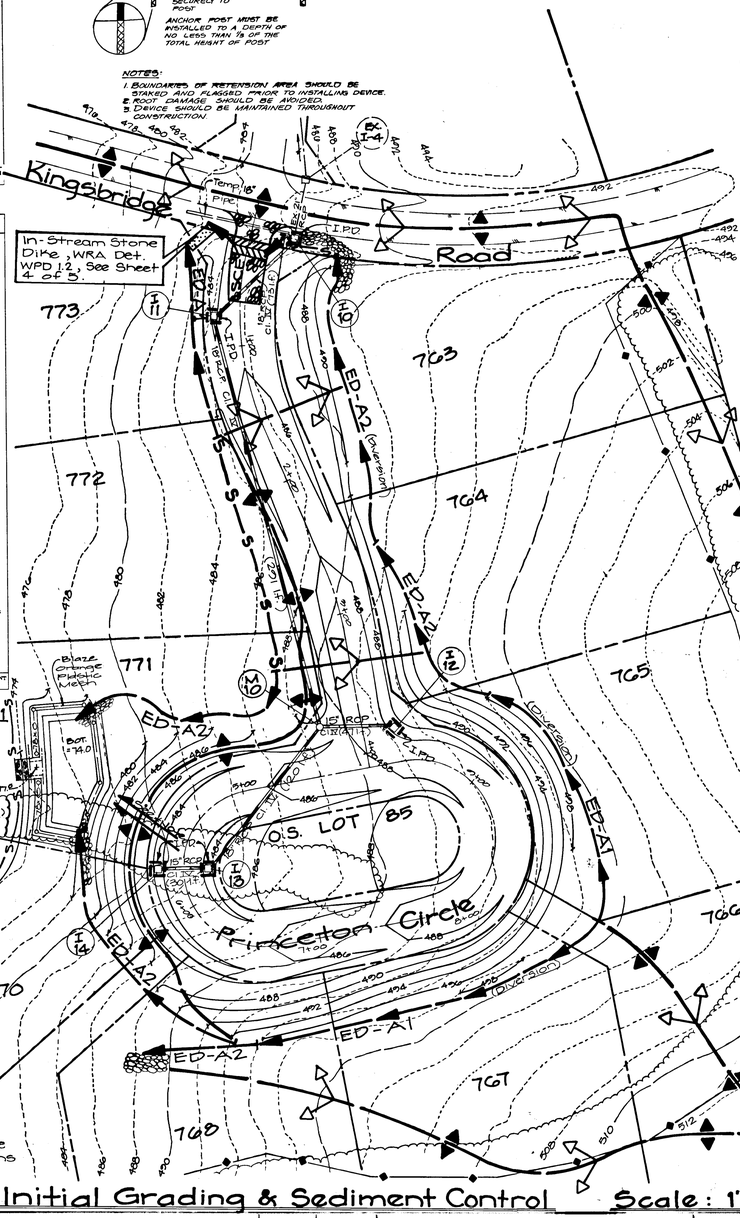
Construction Specification

1. Length - minimum of 50' (*50' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

BLAZE ORANGE PLASTIC MESH





Detail for Initial Grading & Sediment Control Scale: 1"=50'

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. (301) 992-2437
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 1983 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 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51), sod (Sec. 54), temporary seedings (Sec. 50) and mulching (Sec. 52). 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	: 15.42	Acres
Area Disturbed	: 7.44	Acres
Area to be roofed or paved	: 0.49	Acres
Area to be vegetatively stabilized	: 6.95	14.93 Acres
Total Cut	: 3160	Cu. Yds.
Total Fill	: 3160	Cu. Yds.
Off-site waste/borrow area location:		

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.

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 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.

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 November 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 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

Note: The Landscape Edges on Lot 784 and Parcel 'A' are Shown on The Forest Conservation Plan.

Trap No. 1 : Stone Outlet Sediment Trap, ST-II, Detail 9

Drainage Area : 1.84 Ac.
Storage Required : 6624 c.f.
Storage Provided : 8118 c.f.
Weir Length : 20.0'
Outfall Length : 10.0'
Channel Depth : 1.0'
Wet Storage : 3508 c.f.
Limit of Wet Stor. : 475.5
Weir Crest Elev. : 477.0
Bottom Elev. : 474.0
Top of Dam : 478.0
Cleanout Elev. : 474.75
Depth : 3.0'

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

J. M. Warfield Jr. 6/26/96
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 6/26/96
Howard S.C.D. 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."

3-27-96
Date

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."

Signature of Developer/Builder 3-27-96 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways Date 6-27-96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development and Research Date 7/2/96

Chief, Development Engineering Division Date 7/2/96

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.
10-28-96	REV. FOREST CONSV. EASEMENT	HKJ	

PREPARED FOR :
GREENEBAUM & ROSE ASSOC., INC.
1829 REISTERSTOWN ROAD
SUITE 410, WOODHOLME CENTER
BALTIMORE, MARYLAND 21208
PHONE (410) 484-8400

Sediment Control Notes & Details

KINGSBRIDGE @ BURLEIGH MANOR

LOTS 763-778 & 784
A RESUBDIVISION OF PARCELS 'A' & 'B'

ELLICOTT CITY ELECTION DISTRICT No. 2 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
N/A	R/20	94-008
DATE	TAX MAP No.	SHEET
JUNE 1996 REV. 1997	23	5 OF 5

F-96-93