

TABLE 6

**COST FOR PROJECTS RECOMMENDED IN THE  
UPPER ROCK CREEK MASTER PLAN AMENDMENT  
ROADS**

Facility Type, Name and Location	Project Description	CIP Status	Estimated Project Cost (1984 Dollars)
<b>ROADS</b>			
F-9	Intercounty Connector From Redland Road (P-7) to Plan Boundary (North Branch of Rock Creek, R/W 300', Paving Width 6 Lanes Divided, Miles 2.6	SHA project planning complete	\$ 7,391,000
<b>Major Highways</b>			
M-83	Muncaster Mill Road Relocated (MD 115)	SHA project planning complete; alignment modified	4,079,000
M-42	Shady Grove Road Extension-Muncaster Road	--	8,366,000
M-60	Olney-Laytonsville Road (MD 108)	--	5,542,000
M-21	Laytonsville Road (MD 124)	--	4,506,000
M-6	Frederick Road (MD 355)	Completed	
M-23	Gude Drive	Add 2 Lanes FY 88-89 and bridge FY 88-89	989,000 1,783,000
<b>Arterial Streets</b>			
A-42	Bowie Mill Road	--	See Note 5
A-250	Avery Road	--	See Note 5
A-95	Fieldcrest Road	Completed	
A-262	Crabbs Branch Way Extended	Completed	
A-268	Airpark Road Extended	Construction scheduled for FY 88-89	4,492,000

TABLE 6 (Cont'd.)

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ROADS**

	Facility Type, Name and Location	Project Description	CIP Status	Estimated Project Cost (1984 Dollars)
<u>Primary Residential Streets</u>				
P-1	Dorsey Road	From Warfield Road (P-4) to Olney-Laytonsville Road (MD 108) M-60, R/W 70', Paving Width 24 Feet, Miles 0.8		See Note 5
P-2	New	From Dorsey Road (P-1) to Fieldcrest Road (A-95), R/W 70', Paving Width 24 Feet, Miles 0.7	--	732,000
P-3	New	From Laytonsville Road (MD 124) M-21 to Road End (6,864 feet), R/W 70', Paving Width 24 Feet, Miles 1.3	--	1,360,000
P-4	Warfield Road	From Laytonsville Road (MD-124) M-21 to Olney-Laytonsville Road (MD 108) M-60, R/W 70', Paving Width 24 Feet, Miles 1.0	--	See Note 5
P-5	New	From Bowie Mill Road to Olney-Laytonsville Road (MD 108) M-60, R/W 70', Paving Width 24 Feet, Miles 1.5	--	1,568,000
P-6	Muncaster Mill Road (MD 115) - Old Mill Run	From Laytonsville Road (MD 124) M-21 to Avery Road (A-250), R/W 70', Paving Width 24 Feet, Miles 2.8 including relocation between a point west of P-10 and A-250	--	See Note 5 602,000
P-7	Redland Road	From Plan Boundary 0.2 miles Northeast of Crabbs Branch Way to Muncaster Mill Road (P-6), R/W 70', Paving Width 24 Feet, Miles 1.9	--	See Note 5
P-8	Needwood Road	From Redland Road (P-7) to Muncaster Mill Road (P-6), R/W 70', Paving Width 24 Feet, Miles 2.2	--	See Note 5
P-9	Muncaster Mill Road (MD 115)	From Plan Boundary to Avery Road (A-250), R/W 70', Paving Width 24 Feet, Miles 0.8	--	See Note 5
P-10	Cherry Valley Drive Extended	From Muncaster Mill Road (P-6) to Plan Boundary (North Branch of Rock Creek), R/W 70', Paving Width 24 Feet, Miles 1.0	--	1,045,000
P-12	Derwood Road-Indianola Drive	From Frederick Road (MD 355) M-6 to Road End (5,280 feet), R/W 70', Paving Width 24 Feet, Miles 1.0	Completed	
P-13	New	From Crabbs Branch Way Extended (A-262) to Indianola Drive Extended (P-12), R/W 70', Paving Width 24 Feet Miles 0.2	--	209,000

TABLE 6 (Cont'd.)  
 COST FOR PROJECTS RECOMMENDED IN THE  
 UPPER ROCK CREEK MASTER PLAN AMENDMENT  
ROADS

Facility Type, Name and Location	Project Description	CIP Status	Estimated Project Cost (1984 Dollars)
<u>Industrial Streets</u>			
I-1 Southlawn Lane	From Homers Lane to Avery Road (A-250), R/W 70', Paving Width 24 to 50 Feet, Miles 1.7	--	2,154,000
I-3 Westmore Road	From Frederick Road (MD 355) M-6 to Westmore Avenue (I-4), R/W 80', Paving Width 50 Feet, Miles 0.2	--	252,000
I-4 Westmore Avenue	From Westmore Road (I-3) to N. Homers Lane, R/W 80', Paving Width 50 Feet, Miles 0.4	--	506,000
I-5 New	From Southlawn Lane (I-1) to end, R/W 80', paving 50', Miles 0.285		360,000
TOTAL			<u>3,600,000</u> \$46,193,000

- NOTES: 1. When specific development plans are submitted, additional industrial, business and/or primary road right-of-way dedication will be required where necessary.
2. All Street rights-of-way (not otherwise classified) shall conform to the requirements set forth in either the zoning ordinance or Subdivision Regulations, whether the zoning lies on one or both sides of the street.
3. Right-of-way costs are not included for New Primary and Industrial Streets since necessary rights-of-way for these streets are generally dedicated through the subdivision process. Construction costs are shown although these roads are usually constructed by the developer and are not a cost to the County.
4. Cost estimate for M-23 obtained by FY 86-91 CIP.
5. Any additional land required to bring the right-of-way up to Master Plan classification will be dedicated at the time of subdivision. Usually additional right-of-way for an existing road would be purchased only if a roadway improvement project were scheduled and no improvements of that magnitude are planned for these roads except for the relocation of a portion of P-6.
6. County FY 86-91 CIP includes construction of 2 lanes of F-9/M-83 with at-grade intersections, construction scheduled to begin in FY 89.

TABLE 6 (Cont'd.)

COST FOR PROJECTS RECOMMENDED IN THE  
UPPER ROCK CREEK MASTER PLAN AMENDMENT  
BIKEWAYS

Facility Type, Name and Location	Project Description	CIP Status	Estimated Project Cost (1984 Dollars)
<u>BIKEWAYS</u>			
P-27 Shady Grove Access	Needwood Road from Rock Creek to Redland Road (Class II: 2.4 miles)	--	\$ 200,400
P-28 Shady Grove North Access	Linear open space from Redland Road at Needwood Road north to Rock Creek at Muncaster Road (Class I: 2.7 miles)	--	200,6000
P-29 Rock Creek North Loop	Rock Creek Park from Lake Needwood north to MD 108, then south to Lake Norbeck (Class I: 12.3 miles) <sup>2</sup>	--	<u>1,250,000</u>
TOTAL			<u>\$1,651,000</u> <sup>3</sup>

- 1 Where equestrian and bikeway rights-of-way coincide the facilities are separate.
- 2 Section from Needwood Lake south to existing Rock Creek Trail is under design for construction in FY 86.
- 3 Construction costs only.

TABLE 6 (Cont'd.)

COST FOR PROJECTS RECOMMENDED IN THE  
UPPER ROCK CREEK MASTER PLAN AMENDMENT  
SCHOOLS

Facility Type, Name and Location	Project Description	CIP Status	Estimated Project Cost (1984 Dollars)
Elementary School, Bowie Mill Road area	700 Students	None, Site to be acquired and facility to be constructed when needed	\$ 4,500,000
Middle School, Warfield Road area	800 Students	None, Site to be acquired and facility to be constructed when needed	\$ 7,400,000
			<u>\$11,900,000</u>

90 NOTE: Acquisition and equipment costs not included.

COST FOR PROJECTS RECOMMENDED IN THE  
UPPER ROCK CREEK MASTER PLAN AMENDMENT  
PARKS

Facility Type, Name and Location	Project Description	C/P Status	Estimated Project Cost (1984 Dollars)
<b>PARKS</b>			
<b>LOCAL USE PARKS</b>			
Proposed Development Bowie Mill Community Park, Bowie Mill Road	Active recreational facilities which may include: A recreation shelter, athletic fields, a lighted multi-use court and play equipment: 20 acres existing	Proposed development FY 90	\$ 280,000
<b>STREAM VALLEY PARKS</b>			
Rock Creek Stream Valley Park (U11-16)	Hiker-biker trails, nature trails and/or equestrian trails Pope Farm Nursery Carson Memorial Garden Existing 424 acres; 23 additional acres proposed for acquisition	Beyond 6-Year Program FY 86 FY 87 FY 85-89	- 65,000 30,000 3,000
North Branch Stream Valley Park (U2-4)	Hiker-biker trails, nature trails and/or equestrian trails Existing 824 acres; 222 additional acres proposed for acquisition	Beyond 6-Year Program FY 85-88	- 3,000
Crabbs Branch	114 existing acres; Trails linking portions of Rock Creek and Lake Needwood	Beyond 6-Year Program	85,000
<b>REGIONAL PARK</b>			
Rock Creek Regional Park	18-hole golf course, boating, picnicing, and Visitors Center 9-hole, par 3 golf course. Nature center improvements, 1770 existing acres; 11 additional acres proposed	Proposed development FY 85-90 Proposed acquisition FY 85-86	745,000 3,000
<b>SPECIAL PARKS</b>			
Gude Recreational Park	Archery ranges, softball fields, baseball fields, picnic areas, 3 football/soccer fields, amphitheatre, creative and adventure play sites, hiker-biker trail with exercise segment, and astronomy study area: 161 acres proposed	FY 88-90	1,305,000
Muncaster Recreation Park	Baseball fields, football/soccer fields, softball fields, picnic area, multi-purpose courts, tennis courts, handball courts, and a recreation shelter: 105 acres existing	FY 91 and beyond 6-Year Period	620,000
Agricultural Farm Park	Activity Center, future may include museum building and resident dormitory: 410 acres existing	FY 85-87	1,081,000
<b>TOTAL</b>			<u>\$4,126,000</u> Plus <u>\$2,032,000</u> Acquisition Costs <u>\$6,158,000</u>

- NOTE:**
- Budget constraints may necessitate deferral of construction of proposed parks.
  - The Revenue Authority operates the 175-acre Laytonsville Golf Course on Dorsey Road, near Laytonsville.
  - Individual acquisition costs included in total cost estimate for all stream valley and regional parks.

TABLE 6 (Cont'd.)

COST FOR PROJECTS RECOMMENDED IN THE  
UPPER ROCK CREEK MASTER PLAN AMENDMENT  
WATER AND SEWER DISTRIBUTION SYSTEMS

Facility Type, Name and Location	Project Description	CIP Status	Estimated Project Cost (1984 Dollars)
<b>WATER AND SEWER DISTRIBUTION SYSTEMS</b>			
Airpark Water Pressure Zone Storage, 1400' south of Warfield Road on MD 124 (Project #W-56.00)	Elevated 2 mg storage facility. Approximately 8000 feet of 16-inch water main is required from tank site to existing water system at Route 124 and Airpark.	WSSC CIP FY 86-91 project completion expected in FY 86	\$4,250,000
<b>TOTAL</b>			<u>\$4,250,000</u>

NOTE:

- The policy recognizes the possibility of expanding community water service to RE-1 zoned areas above Muncaster Mill Road. It is difficult to estimate the cost to expand the water service system to implement the community water policy recommended in this Amendment. However, all the proposed water service category upgrades are in areas currently served by the WSSC; therefore, it is concluded that no major water system improvements will be necessitated to implement Master Plan recommendations.
- Areas recommended for community sewer service will either have sewer service immediately available or service can be provided without difficulty and without the need for any major facilities.
- The public cost of servicing the Fulks, Schefferies, Episcopal Church, Board of Education, and Benedek properties will be minimal, since no extensions of program size water and sewer lines are necessary. Extensions to serve these properties will be paid through WSSC assessment charges as well as by the developers.
- There is no major water or sewer system improvement cost associated with the land use changes proposed in the Upper Rock Creek Master Plan Amendment.
- Cost estimates to provide the mitigation techniques recommended for the Airpark Road Extended construction are noted on the next page. Without detailed design plans, accurate BMP cost estimates cannot be made. The following BMP scenarios provide rough cost estimates to be used for illustrative purposes only.

GRAND TOTAL

\$70,152,000

EROSION AND SEDIMENT CONTROL COST ESTIMATES  
AIRPARK ROAD EXTENDED

Scenario	BMP	Estimated Number Required	Estimated Cost Per Unit*	Estimated Total Cost (1984 Dollars)
A. Standard Construction Subtotal	Standard stone outlet sediment trap	10	\$ 2,000	\$20,000 \$20,000
B. BMP Minimum Subtotal	Rip-rap outlet "Super" trap (2 x storage capacity of standard sediment trap) Standard stone sediment trap	4 4	\$ 6,000 \$ 2,000	\$24,000 \$ 8,000 \$32,000
C. BMP Minimum Subtotal	Sediment Basin "Super" trap Standard sediment trap	2 2 4	\$ 15,000 \$ 6,000 \$ 2,000	\$30,000 \$12,000 \$ 8,000 \$50,000
STORMWATER MANAGEMENT/WATER QUALITY				
A. Standard Construction	None	--	--	--
B. BMP Minimum Subtotal	Stone filled** infiltration trenches (2-2 control) Grass Swale	2 (1/10 ac) 19,200 L.F.	\$ 37,336 --	\$74,672 -- \$74,672
C. BMP Maximum Subtotal	Stone filled infiltration trenches (2-2 control) Extended detention dry ponds Grass Swale Vacuum sweeping	2 2 19,200 L.F. 9,600 L.F. once per month	\$ 37,336 \$ 12,000*** ? ?	\$ 74,672 \$24,000 ? \$98,672

\* Based on cost range noted in 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control.

\*\* Source: Maryland Water Resources Administration.

\*\*\* L.F. = Linear Feet.

\*\*\*\* Approximately the same as curb and gutter.