

Rock Creek Hiker-Biker Trail Bridge

Public Meeting Comments

May 1, 2003

The first Public Meeting for the Rock Creek Hiker-Biker Trail Bridge Facility Planning Study was held at Wheaton Woods Elementary School on Thursday, May 1, 2003. Approximately 15 citizens attended this meeting. Most of those in attendance live near the Rock Creek Trail or access the Trail in the vicinity of the Study Area. Some of the attendees are bicyclists who use the Rock Creek Hiker-Biker Trail as their primary bike route to work and others use it for recreation. No elected officials attended. Following a short presentation given by the Study Team, a question and answer session concluded the meeting. The following displays were available for public comment:

- Alternative 1 – No-Build
- Alternative 2 – M-NCPPC preferred Alignment
- Alternative 3 – SHA suggested Alignment (winding path through park)
- Alternative 4 – Direct Trail Connection (minimization of impacts)

The following specific comments and responses were recorded at the meeting and categorized by subject in the following table:

TOPIC	COMMENTS	RESPONSE
General	Are the proposed alignments marked in the field? Could a public walk-through be organized?	M-NCPPC and DPWT will look into the possibility of a public field review
General	Neighborhood transit (bus) users would benefit from improved access to the Trail and the proposed crossing – to cross Veirs Mill Road more safely.	All alternatives provide a safer crossing of Veirs Mill Road and access to the bus stop.
General	Bicycle commuters would benefit from shorter, more direct trails. The Park already has miles of winding path and additional meandering is not desired.	Will be a consideration during the decision making process.
General	Could a high fence block the view of the bridge from the residences?	No, the required height of the fence would be at least 20-feet in places, which is an undesirable condition. Fences may also detract from the aesthetics of the bridge.
No-Build	How can the intersection be improved for pedestrians with the soon-to-be constructed widening?	As part of SHA's project, signals will be programmed to provide adequate pedestrian Crossing time. Pedestrian refuge will be provided in the widened median. Improved sidewalks will be provided along the north edge of MD 586.

Rock Creek Hiker-Biker Trail Bridge
Public Meeting Comments
May 1, 2003

General	Has wildlife habitat and road crossing been accounted for?	Yes. As part of the study, impacts to wildlife and habitat will be accounted for and documented. Currently, the Veirs Mill Road structure over Rock Creek provides for wildlife crossings.
Design Criteria	Commuter bicyclist would like to see larger curve radius to provide smoother travel at greater speeds.	The Design Team will consider this.
Impacts	How will impacts to environmental features be mitigated?	Mitigation practices will be performed for all impacts to the environment as set by Federal, State and Local Environmental Agencies.
Bridge	What type of bridge will be constructed?	No decisions have been made about the design of the bridge at this point. It will be constructed to provide a "Gateway to Rockville" with certain features designed by an artist.
Bridge	Could the bridge be skewed across MD 586?	That option was investigated and was found not to be desirable due to the length and depth of structure it would require.
Timeline	How long before the project is complete?	Application for funding will happen by Sept. 2003. Construction will start two years after funding approval.

June 23, 2003

MEMORANDUM

TO: File

FROM: Robert T Galla, Jr., P.E.

REFERENCE: Rock Creek Hiker-Biker Trail Bridge Study
Meeting with Aspen Hill Civic Association
Meeting Summary

A meeting between the Rock Creek Hiker-Biker Trail Bridge Study Team and the Aspen Hill Civic Association (AHCA) was held on Wednesday, June 18, 2003 at 10:00 a.m. in the offices of the Maryland-National Capital Park and Planning Commission (M-NCPPC) in Silver Spring, Maryland. The purpose of the meeting was to review Alternative No. 5 with the AHCA. The Team developed Alternative No. 5 to address earlier comments from the AHCA. The following were in attendance:

Thomas Hardmon	AHCA	301-871-6216
David Polinsky	AHCA	301-466-4874
Carol Petzold	AHCA	301-871-7413
Dilip Pandya	M-NCPPC	301-495-2469
Tricia McManus	M-NCPPC	301-495-3580
Rob Galla	URS Corporation	410-785-7220

Mr. Galla began the meeting by describing Alternative No. 5. The AHCA representatives offered the following comments:

- Consider sidewalk on Baltic instead of ramps in park.
- Who owns property on park side of Baltic? (Later confirmed to be M-NCPPC.)
- Add stairs from bridge at south side of Veirs Mill Road crossing.
- Put bus stop on south side of Veirs Mill Road next to bridge. Request State to put in sidewalk to connect to new bus stop as a change order on CRS project.
- Request that SHA accommodate pedestrians at traffic signal at Aspen Hill Road intersection by providing: more time for people to cross; island in middle; and on demand pedestrian.
- Community concerned that trail is located in isolated area.
- Lighting on bridge will not resolve security concerns.
- Snow removal/maintenance? M-NCPPC does not remove snow from trails.
- Provide AHCA copies (JPEG/PDF) of alternatives.

MEMORANDUM

June 23, 2003

Page 2

- Post public meeting notes at Glenmont Metro, WMATA bus stops in park.

The AHCA wanted to look at locating the bridge closer to the community. The group discussed moving the crossing to the Aspen Hill Road intersection. It was agreed that a crossing in this location would require substantial property acquisition on the north side of Veirs Mill Road in order to provide an accessible route to the structure and would leave the bike trail within the community. The AHCA understood the undesirable impacts at crossing at the intersection.

A copy of Alternative No. 5 display was left with the AHCA and an electronic version will be provided so it can be posted on their website.

The meeting ended at 11:00 a.m.

RTG:slm

MEMORANDUM

TO: Dilip Pandya

FROM: Romaine Kesecker, RLA, ASLA

DATE: July 8, 2003

REFERENCE: Rock Creek Hiker-Biker Trail Bridge Study
July 2, 2003 Public Meeting
Meeting Minutes / Action Items

The second Public Meeting for the Rock Creek Trail Bridge Project was held at Parkland Middle School on Wednesday, July 2, 2003 at 7:30 PM. Approximately 10 citizens attended this meeting along with a number of County and M-NCPPC staff. Most of those in attendance reside near the Rock Creek Trail, or access the Trail in the vicinity of the Study Area. Some of the attendees were bicycling commuters who use the Rock Creek Hiker-Biker Trail as their primary bike route to work, and others use it for recreation. House Delegates Carol Petzold, Hank Heller (of District 19, Ways and Means Committee) and a representative of Council member Marilyn Praisner's office also attended. Following a project introduction by Dilip Pandya, a presentation of the project, its latest alignment and other items was given by Romaine Kesecker via PowerPoint, with a question and answer session concluding the meeting. The following materials were available for public review and comment:

- Alternative 5 Display
- 30% Construction Plans

The following specific comments and responses were recorded at the meeting and categorized by subject in the following table:

TOPIC	COMMENTS	RESPONSE	ACTION ITEMS
1. Bridge over Veirs Mill Road	How close is the bridge to the nearest property and residence at 5114 Adrian Street? Is the bridge is too close? Can it be moved farther away?	The bridge as proposed is approximately 85' from the property line and 130' from the adjacent residence. The bridge needs to be reasonably close to the intersection to be worth using by pedestrians and bicyclists, and especially for the transit stops. It has been located away from the adjacent property to the extent possible to minimize	<i>M-NCPPC should establish a meeting with the homeowner in the field as soon as possible to review the new alignment and obtain any additional concerns. The homeowner at 5114 Adrian Street is, Fidel Granados at 301-946-2570, cell is 301-252-</i>

		environmental impacts and to service the neighborhood pedestrians and transit users.	2946.
2. Bridge	Will the bridge be visible from the adjacent property? The bedrooms of two young girls face the bridge site, and trail users should not be able to look into the house. The adjacent homeowner does not want screening of landscape plant material and is concerned that it may attract homeless to set up camp between the landscape screening and the bridge.	The Design team can work with the adjacent homeowner regarding additional landscape screening possibilities for the view of the bridge from the house.	<i>After further discussion of the homeowner's concerns, the design team should look at alternative means (possibly structural) to screen views to the house from the bridge.</i>
3. Bridge	Will the bridge be designed to support snow removal trucks? The park needs to be able to plow the bridge after snowfall.	The bridge will be designed for H-10 loading which will accommodate light maintenance vehicles, such as pickup trucks. M-NCPPC does not perform snow removal on their trails from a maintenance standpoint. However, for transit users there may be a need for snow plowing. Snow would have to be removed from the bridge, as snow can not be pushed/blown through the barrier fence to the road below.	<i>M-NCPPC, the Park Manager, Montgomery County, and related transit authorities to discuss how snow plowing will be handled, and who will perform the work.</i>
4. Bridge	Please coordinate with police so that they can provide input on their needs. Police need to be able to drive on path through park. Can a police vehicle cross the bridge?	The bridge will have 12' wide inside clearance. A police cruiser would be able to cross the bridge. Placement of bollards at the bridge entrances is not a standard practice by the M-NCPPC, and they are a safety issue with bicyclists.	<i>M-NCPPC to discuss issues with park police to determine need for a police cruiser to cross via the bridge.</i>

5. Stair Tower	<p>Please describe the stair tower, and how far is the stair tower and the connecting sidewalk from Veirs Mill Road? Is too far away? Can it be moved closer? The stair tower should be no further than 20' from the roadway. Many trail users will be using the trail late at night and will not feel safe using the sidewalk/stair tower if it is so far from the road. The sidewalk should be along the road. The ingress/egress to the stair tower should be oriented to the roadway.</p>	<p>The stair tower would consist of about 45 to 50 steps with landings at about every 12 steps. It would consist of an open design for security concerns in order to allow for the clearest visibility to the structure.</p> <p>The path to the stair tower from the transit stop would vary from about 10' to 40' from the future edge of widened Veirs Mill Road (location of stop subject to change). The sidewalk as it is shown was set to avoid a proposed SWM ditch which will run along the widened shoulder, and to avoid existing trees. The sidewalk and tower can be moved closer to the roadway, but the ditch may be impacted. Also, moving the stair tower closer will increase the number of steps required. Too many steps may deter pedestrians from using the stair tower. The design team will look into options for setting the sidewalk and stair tower closer to the road. It was shown as well that there may be an alternative to the stair tower by connecting a path from the transit stop to the southern terminus of the bridge. The stair tower will also be subject to available construction funding for the overall project.</p>	<p><i>M-NCPPC to determine if stair tower is to be included in application for funding. Preliminary cost estimates for the stair tower are at \$40,000 however the cost may be substantially higher for all requirements, including lighting and long-term, maintenance of this structure.</i></p>
6. General	<p>Will the various sidewalks and stairs be lighted?</p>	<p>Yes. The sidewalks and stairs will be appropriately lighted with pedestrian poles or other suitable fixtures. The bridge lighting may be flush-mount type fixtures in the parapet (assisting to reduce glare considerations for motorists).</p>	
7. General	<p>Homeless individuals have been noted living</p>	<p>This will be a park police / park manager item to resolve.</p>	<p><i>M-NCPPC to investigate.</i></p>

	within the forested areas of the northern section of the bridge area. Will they be a problem living under the bridge?		
8. Bus Stop	Can a more formalized bus stop with either a concrete pad or shelter be provided?	The final design will investigate this with the transit agency.	<i>M-NCPPC and DPWT to consider determining if rider ship numbers exist for the transit stops.</i>

Additional topics discussed at the meeting include:

- Overall, there was general consensus the project would benefit the community, and that the crossing would provide an excellent means of pedestrians and transit users crossing Veirs Mill Road more safely.
- It was also noted that SHA widening work included reprogramming signal to provide adequate timing for pedestrians and provision of pedestrian refuge in the center median.
- M-NCPPC also anticipates adding a public artist to the Team in the near future. The artist will work with the Team for incorporation of artistic treatment into the project.
- The Maryland State Highway Administration (SHA) and the SHA's District Office are critical Team members in the project and will be involved in every aspect of the bridge crossing.
- Drainage off the bridge will likely be pick-up with scuppers and directed to appropriate stormwater management practices. No drainage discharge will occur over the roadway.

The attendance sign-in sheet has been scanned and is available from Dilip Pandya or URS.

Please contact me if there are any question or comments regarding the above.

cc: Peter Noursi, M-NCPPC
Tricia McManus, M-NCPPC
Marian Elsasser, M-NCPPC
Rodney Brown, P.E., DPWT
Hai-yan Zhang, DPWT
Bob Simpson, DPWT
Robert T. Galla, Jr., P.E., URS
B.C. Mehta, P.E., URS
Chris Growchowski, URS

26517 Aiken Drive
Clarksburg, Md. 20871
August 23, 2003

Derick Berlage
Chair, MC Planning Board
8787 Georgia Ave.
Silver Spring, Md. 20910

RECEIVED
AUG 26 2003

OFFICE OF THE CHAIRMAN
THE MARYLAND NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

Dear Mr. Berlage:

I am a member of the Montgomery County Bicycle Action Group (MCBAG). MCBAG supports the proposed bridge over Viers Mill Road connecting Rock Creek trail to Aspen Hill Road. The traffic signals do not allow a safe crossing for bicyclists or pedestrians. The Rock Creek trail is the only north south bike route in Montgomery County connecting Gaithersburg to DC. It is important to improve the safety of this trail.

Thanks,


Lynhe Rosenbusch

Pandya, Dilip

From: Dwight Ufford [dwightuf@erols.com]
Sent: Sunday, June 29, 2003 3:55 PM
To: Pandya, Dilip
Subject: veirs mill bridge

Currently bikers cross veirs mill and then again Aspen Hill rd. to get to the park trail. This creates an additional hazard against those vehicles that turn from Veirs mill onto aspen hill, and also those turning right onto Adrian. It would seem to make sense to provide a pedestrian overpass that would be west of Aspen Hill Rd. and avoid Aspen

Hill road altogether.



MONTGOMERY COUNTY COUNCIL

ROCKVILLE, MARYLAND

OFFICE OF THE COUNCIL PRESIDENT

August 14, 2003

Derick P. Berlage, Chairman
Maryland-National Capital Park and Planning
Commission
8787 Georgia Avenue
Silver Spring, Maryland 20910

Dear Mr. Berlage:

The County Council supports the Maryland-National Capital Park and Planning Commission's application for \$2.65 million in Federal Highway Administration Enhancement Program funds to construct a bridge for the Rock Creek Hiker-Biker Trail over Veirs Mill Road (MD 586) at Aspen Hill Road.

The Council has already appropriated \$330,000 for the initial planning work for this bridge, which would carry the heavy volume of Rock Creek Trail users safely over the heavy and fast-moving traffic on MD 586. This State highway carries an average daily traffic volume of nearly 35,000 vehicles per day. The speed limit on this section of MD 586 is 45 mph. The speed of traffic often exceeds the limit on this straight, flat segment of the highway.

Sincerely,

Michael L. Subin
Council President

MLS:go
004596



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Office of the Chairman, Montgomery County Planning Board

Bette

February 15, 2002

The Honorable Steven A. Silverman, President
Montgomery County Council
100 Maryland Avenue
Rockville, Maryland 20850

Dear Mr. Silverman:

The Planning Board proposes to amend its FY03-08 CIP submission to incorporate a new project (\$333,000) in the Facility Planning: Non-Local PDF 958776 in FY03 and FY04, specifically, facility planning for a hiker-biker bridge over Veirs Mill Road to connect portions of the Rock Creek Trail.

The County Council is familiar with the history of this project:

- (1) On February 13, 2001, the County Council adopted Resolution 14-773 pertaining to the improvement of Veirs Mill Road/Aspen Hill Road intersection. Listed among the County Council's recommendations is "accommodation of a potential Rock Creek Hiker-Biker Trail bridge over Veirs Mill Road. The Council will seek State funding for this pedestrian/bicycle bridge."
- (2) On February 16, 2001, County Council President, Blair G. Ewing, wrote to Parker F. Williams, Administrator, State Highway Administration (SHA), that the County Council

"is committed to seeking State funding to construct a bridge over MD 586 for the Rock Creek Trail, which would allow pedestrians and bikers to avoid the thousands of vehicles that pass through this intersection daily. We think it appropriate that the State fund this bridge under the Access 2000 program, and we hope it can be done on a schedule commensurate with the construction of the intersection improvements, that is during 2003."
- (3) On March 21, 2001, John D. Porcari, Secretary, Maryland Department of Transportation, wrote to County Council President, Blair G. Ewing, that
"We are recommending that Montgomery County apply for the improvement as an Enhancement Project through the Executive Committee review process. . . It is

our intention to continue to coordinate with M-NCPPC and Montgomery County staff to develop a strategy to address the hiker-biker connection at Veirs Mill Road. We will also continue to investigate all funding sources available for this improvement."

- (4) On January 8, 2002, Neil Pedersen (SHA) and Department staff discussed the project. Mr. Pedersen urged the Commission to submit an application for TEA funds in November 2003.

It is likely that the federal Transportation Enhancement Act will be reauthorized in Fall 2003 making more funds available for projects such as the hiker-biker bridge over Veirs Mill Road. To be eligible for those funds, projects must be in public ownership, design must be 35 percent complete, i.e. facility planning must be complete, and design and construction must be able to begin soon after award of the grant. Grants are fifty percent of the cost for remaining design and construction.

The Planning Board proposes to facility plan the hiker-biker bridge over Veirs Mill Road to connect portions of the Rock Creek Trail so that the project will be eligible for Transportation Enhancement Act funds by Fall 2003. We will be eligible to apply for TEA funds for this project if we can begin facility planning in FY03. The need for the project is described in part by Attachment 1, a letter from the Aspen Hill Civic Association to the County Council dated November 24, 2000.

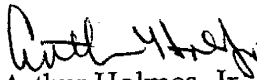
The PDF proposes to fund facility planning with County Current Receipts in FY03 and FY04 so that facility planning can be completed in FY04 and an application filed for TEA funds in November 2002 (FY04). The Planning Board seeks these funds in addition to the level-of-effort funding already proposed in the FY03-08 program. FY02 facility planning projects in progress and expected to carry-over into FY03 are the Rock Creek Maintenance Yard renovation, Woodlawn Park Police Special Operations Program of Requirements, and Black Hills Regional Park hard surface trail renovation. The new FY03 appropriation funds further work on the Woodlawn Park Police Special Operations facility plan, a facility plan for a skateboard park at South Germantown Recreational Park, and a facility plan for a dog park at a site to be determined. New FY04 appropriation funds facility plans for the Magruder Branch Hard Surface Trail extension Capital Crescent Trail connector to Rock Creek Trail, and Wheaton hard surface trail extension to Randolph Road. Our original appropriation request for FY03 was \$135,000 and for FY04, \$145,000. The sum of these two requests (\$280,000) would not be sufficient to meet the \$333,000 needed for the hiker-biker bridge over Veirs Mill Road to connect portions of the Rock Creek Trail. The Commission cannot absorb this project in our current level-of-effort expenditure schedule because it would require elimination of part of our current FY02 program and all of the FY03 and FY04 programs proposed by the Planning Board prior to consideration of the hiker-biker bridge over Veirs Mill Road.

The Maryland State Highway Administration proposes to acquire 3.3 acres from Rock Creek Regional Park as part of its intersection improvement at Veirs Mill Road and Aspen Hill Roads. The acquisition is likely to occur in Fall 2002 (FY03). The estimated

cost of the acquisition is \$333,000. The acquisition may involve four parcels—some owned by Montgomery County and some by the Commission. It is possible that some or all of the proceeds from the sale of the property to the State could be earmarked for a portion of the local share of the project costs. Staff will pursue the viability of this option as the SHA project progresses.

Please note that this request is shown in the Facility Planning: Non-Local PDF. The text of this PDF has been changed slightly from our original November 1, 2001 submission. The Planning Board's acceptance of the County Executive's reduction to the Trails: Hard Surface Design and Construction PDF involved shifting two projects—Magruder Branch Trail and the Capital Crescent Trail connector to Rock Creek Trail -- back into the facility planning PDF so that facility plans could be finalized.

Yours truly,


Arthur Holmes, Jr.
Chairman

Attachments

N:\CIP\03-08 CIP\Transmittal.ltr\VM-RC H-B Overpass.FP-NLamendment.MCC.doc



ASPEN HILL CIVIC ASSOCIATION

November 24, 2000

30 NOV 28 A 9:13

034820

Montgomery County Council
Mr. Michael L. Subin, Council President
100 Maryland Avenue
Rockville, MD 20850

RE: Resolution regarding SHA Intersection Improvements,
MD 586 (Veirs Mill Road) and Aspen Hill Road

Dear Council President Subin:

As President of the Aspen Hill Civic Association, I would like to express the concerns of our Association regarding the intersection improvements at Aspen Hill Road and Veirs Mill Road (MD 586). The boundaries of the Aspen Hill Civic Association include all of Aspen Hill Road and is bounded by Veirs Mill Road (MD 586) from Turkey Branch Parkway to the Rock Creek Stream. The Board of Directors and our members are well aware of the accidents, backups, and all around headaches that result from the amount of traffic driving through this intersection. I am sure you are aware that Aspen Hill Road is a major cross county route.

The Maryland State High Administration and Montgomery County Department of Park and Planning have been extremely generous in making themselves available to the Aspen Hill Civic Association to explain the two options for improvement of this intersection. The Aspen Hill Civic Association is very concerned because there is a large volume of bus, auto, bike, and pedestrian traffic in a very complicated intersection in limited space. Part of the Rock Creek Hiker Biker trail comes out of Aspen Hill Community Park, on to Baltic Avenue and Adrian Street, across Aspen Hill Road and then across Veirs Mill Road. This trail is highly utilized. Many families with small children use this trail in the evenings and on the weekends. Many employees from the Parklawn Drive area use this trail during workdays. This trail is used for marathons during workdays and weekends. The large volume and speed of traffic on Aspen Hill Road and Veirs Mill Road is a constant all day long, and of course, reaches a peak at rush hour. Careful attention must be made in making this intersection safe for all pedestrians, hikers, and bikers.

At the Montgomery County Planning Board Public Hearing held Thursday, November 16, 2000, Chairman Hussmann expressed his concern for pedestrian safety at this intersection. It was suggested that the State procure funds for a pedestrian bridge to be built over Veirs Mill Road taking the Rock Creek Hiker Biker trail away from this extremely busy intersection. The Aspen Hill Civic Association highly encourages this proposal.

- 2 -

Montgomery County Council
Mr. Michael L. Subin, Council President
100 Maryland Avenue
Rockville, MD 20850

RE: Resolution regarding SHA Intersection Improvements,
MD 586 (Veirs Mill Road) and Aspen Hill Road

It is fortunate that some of our neighbors and friends have not lost their lives at this intersection. However, it is extremely tragic that three people have lost their lives along Veirs Mill Road since 1998. It is very possible that these three deaths are the result of trying to cross this extremely busy road. Last winter a vehicle hit a bicyclist exiting the bike path on to Veirs Mill Road.

I would also like to add that the residents along Aspen Hill Road are currently experiencing problems exiting from their driveways on to Aspen Hill Road. Another problem local residents currently encounter is "cut through" traffic. Residents on Arbutus Avenue and Adrian Street have not found a way to prohibit "cut through" traffic. Therefore, they are considering requesting traffic calming devices be installed to at least slow down "cut through" traffic.

The Aspen Hill Civic Association and I respectively thank you for your time and attention to our concerns. We look forward to a safe and mutually agreeable resolution to the problems at this intersection.

Sincerely,



Mr. Donald A. Becker
President
13115 Dauphine Street
Silver Spring, MD 20906

cc: Council Member Isiah Leggett
Chairman, Transportation and Environment Committee

**ROCK CREEK HIKER-BIKER
TRAIL BRIDGE**

**FACILITY PLAN
TECHNICAL REPORT**

Prepared by

**URS CORPORATION
HUNT VALLEY, MARYLAND**

September 4, 2003

TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	1
Need	4
Alternative Plans Considered.....	5
Alternative 1 - No Build	6
Alternative 2 - Slightly Meandering Trail (Original Preferred)	6
Alternative 3 - Winding Park Trail	7
Alternative 4 - Direct Path Connection.....	7
Alternative 5 - Revised Preferred Alternative.....	7
Impacts and Issues Summary	8
Preferred Facility Plan.....	8
Current Status.....	10
Next Steps	15
Project Funding and Cost.....	16
Cost Estimate	16
Schedule	16
Figures	
30% Preliminary Cost Estimate	
30% Submittal Plans	
Meeting Summaries and Correspondence	

FACILITY PLAN TECHNICAL REPORT

ROCK CREEK HIKER-BIKER TRAIL BRIDGE

INTRODUCTION

The Maryland-National Capital Park and Planning Commission's (M-NCPPC) 18-mile **Rock Creek Hiker-Biker Trail** is one of the most popular trails in the Washington metropolitan area. A section of the trail near the Aspen Hill Road/Veirs Mill Road intersection is discontinuous, relying on local streets within the Aspen Hill community to access the present trail termini. Further, this route requires trail users to cross Aspen Hill Road at an unsignalized crosswalk and cross Veirs Mill Road at a signalized crosswalk. Trail users encounter high levels of vehicle traffic when using both crosswalks, which are also used by transit users accessing and transferring between adjacent WMATA and County Ride-On bus stops.

The M-NCPPC proposes an improved connection for the Rock Creek Hiker-Biker Trail across the Veirs Mill Road (MD 586)/Aspen Hill Road intersection, including sidewalk connections to the adjacent community and bus stops (see **Figure 1**). This 1,670 linear foot section will provide, when built, a safer, high quality continuous connection between separated segments of the popular Rock Creek Hiker-Biker Trail to better serve bicyclists, pedestrians and transit users in the Aspen Hill region of Montgomery County.

M-NCPPC retained the services of the Montgomery County Department of Public Works and Transportation (DPWT) to conduct a Facility Planning Study. The Facility Planning Study by DPWT was conducted in accordance with the following:

- M-NCPPC's April 1994 Approved and Adopted Aspen Hill Master Plan

- M-NCPPC's December 1993 Approved and Adopted General Plan Refinement of the Goals and Objectives for Montgomery County (General Plan)
- M-NCPPC's June 1978 Approved and Adopted Master Plan of Bikeways

The Aspen Hill Master Plan calls for a bikeway network of commuter and recreational routes interrelated with a system of neighborhood routes that connect communities to many public facilities, shopping centers and employment sites. The Rock Creek Hiker-Biker Trail is an important element of the network of high quality trails in the County. An improved connection of Rock Creek Hiker-Biker Trail in this location will in part serve to complete the bikeway network. Improving the Rock Creek Hiker-Biker Trail with other existing and proposed bikeways in the Aspen Hill Planning Area would provide a comprehensive network of bikeways for bicyclists, encourage more individuals to choose multi-modal transportation options, reduce the congestion in the area during the peak commuting hours, and would promote the health and welfare of residents within the Aspen Hill communities (**Figure 2** shows the existing and proposed trails in the vicinity of the Study Area).

The trail is very popular, as evidenced by the trail usage data shown in **Table 1**, which provides a summary of Trail User Counts performed during the year 2000. While the data was collected at the intersection of the Rock Creek Hiker-Biker Trail and Dewey Road, which is located just outside of this project's limits, it does provide an example of the types and volumes of trail users. The average number of users per hour is 35. This average was calculated from data representing the 707 total trail users recorded for the duration of 20 separate hour-long observations.

**TABLE 1: ROCK CREEK HIKER-BIKER
TRAIL USAGE DEMOGRAPHICS AND VOLUMES***

AGE GROUP							
ACTIVITY (# of users)		0-14	15-24	25-44	45-59	60+	Total
	Bicyclists (312)	11%	10%	16%	7%	1%	45%
	Walkers (312)	10%	10%	14%	7%	3%	44%
	Joggers (50)	0%	1%	5%	0%	0%	6%
	Inline Skaters (1)	<1%	0%	0%	0%	0%	<1%
	Other (10)	1%	0%	0%	0%	0%	1%
	Infants/Strollers (22)	3%	0%	0%	0%	0%	3%
	Total (707)	26%	21%	35%	14%	4%	100%

*Data Represents Totals of 20 Separate Hour-Long Observations

The Rock Creek Hiker-Biker Trail is discontinuous near the Aspen Hill Road/Veirs Mill Road intersection. Presently, the north side of the trail terminates at the circular parking area at the Aspen Hill Local Park (see **Figure 3**). Users of the trail wishing to continue south across Veirs Mill Road must follow the parking lot driveway to Baltic Avenue, and then take Baltic Avenue to Adrian Street to Aspen Hill Road. Pedestrians and bikers then must cross to the south side of Aspen Hill Road to reach the crosswalk at the Veirs Mill Road/Aspen Hill Road intersection (see **Figure 4**). The hiker-biker trail then re-emerges, and continues within Rock Creek Regional Park south of the signalized Aspen Hill Road/Veirs Mill Road intersection. Northbound trail users at this point must reverse the route described above to rejoin the trail at the parking lot in the Aspen Hill Local Park. The dashed orange line shown on **Figure 1** represents the existing path trail users must take through the neighborhood.

The existing hiker-biker trail is a multi-use facility serving mostly recreational bicyclists and pedestrians daily throughout the year, with larger numbers of users during the warmer months. Pedestrians use the trail throughout the day for recreational walking and as a means of travel to community destinations. Although the Rock Creek Hiker-Biker Trail is used primarily by recreational bicyclists and pedestrians, there is the potential for commuter bicyclists

to travel from Upper Rock Creek and the Aspen Hill neighborhoods to Bethesda, North Bethesda and Kensington, and perhaps beyond to Washington, D.C.

NEED

A continuous connection of the Rock Creek Hiker-Biker Trail, between the Veirs Mill/Aspen Hill Road intersection and the parking area of the Aspen Hill Local Park, is needed to add continuity to the trail and provide a safer crossing of Veirs Mill Road. Users currently face an at-grade crossing at the intersection of Veirs Mill Road and Aspen Hill Road.

To address intersection capacity, the intersection of Aspen Hill Road and Veirs Mill Road (MD 586) is the subject of a Congestion Relief Study improvement being implemented by the SHA. Travel demand forecasts for SHA's study indicate that the intersection is currently experiencing a failing level of service (LOS F) in the a.m. peak and LOS E in the p.m. peak period and is forecasted to deteriorate further. In addition, the intersection of Adrian Street and Aspen Hill Road also experiences high traffic volumes during the morning and evening peak periods. SHA's programmed improvements at Veirs Mill Road and Aspen Hill Road will improve the traffic operations, but pedestrians and bicyclists using the Rock Creek Hiker-Biker Trail will still need to mix with high volumes of motor vehicle traffic as they cross Veirs Mill Road at grade. Removing the majority of bicycle and pedestrian traffic from the Veirs Mill Road/Aspen Hill Road intersection will improve the operations and safety of the intersection for motorists, bicyclists, and pedestrians.

The existing high levels of traffic present a potential conflict between users of the hiker-biker trail and vehicles traveling across Veirs Mill Road. Pedestrian crossing signals have been implemented for the purposes of crossing Veirs Mill Road and Aspen Hill Road. However, the at-grade crossings and general inconvenience pedestrian and bikers face at these congested intersections may be a barrier to the continued use of the trail from the transition points. In addition, those same pedestrians and cyclists present an element of danger and inconvenience to

the motorists. By forcing pedestrians and bicyclists to cross at grade at an already congested intersection, additional conflicts may be generated by motorists waiting for crossing pedestrians and cyclists. The increased width resulting from the roadway expansion proposed under the CRS improvement will increase the amount of time it takes for pedestrians and bicyclists to cross the roadway.

Further, traffic accidents may result from motorists exceeding the posted speed limit of 45 mph and reduced reaction time when faced with slower bicyclist and pedestrian traffic. Data reported by the Maryland State Police for this intersection between January 1, 1998 and July 11, 2001 indicate that three pedestrians and two bicyclists have been involved in accidents at the Veirs Mill Road/Aspen Hill Road intersection. Of the 41 total accidents reported at this intersection, there was one fatal accident, a pedestrian collision involving an eastbound vehicle (four of the five pedestrian/bicycle accidents involved vehicles eastbound on MD 586). In addition, 24 accidents involved injuries. The most prevalent collision types were rear end collisions (17), left turn collisions (14) and pedestrian /bicycle (five). There were five accidents involving the use of alcohol (none of which were pedestrian/bicycle collisions). The types and severity of these accidents illustrate the need for a safe bicycle/pedestrian crossing near this intersection.

ALTERNATIVE PLANS CONSIDERED

The new trail alignments for all alternatives would be within existing M-NCPPC property. The property is heavily wooded with dozens of specimen trees. Specimen trees have a diameter 30 inches or greater when measured 4.5 feet above the ground. The portion of the property north of Veirs Mill Road is higher in elevation than Veirs Mill Road. South of Veirs Mill Road, the property is lower and lies within the 100-year floodplain. The presence of wetlands is minimal in the adjacent floodplain. The ruins of Veirs Mill lie to the southeast of the Veirs Mill Road crossing at Rock Creek. The ruins are not impacted by the project. They are

located outside the project areas of all of the alternates, except Alternate 3. The ruins are located within 100 feet of the alignment for Alternate 3.

The surrounding community would like the trail screened from their perspective, however, they requested that the portions of the trail connecting the community to the transit stops be highly visible to reduce crime and security concerns, especially during hours of darkness.

Three build alternatives were presented to the public on May 1, 2003 (see attached plans). A comparison of the alternatives is shown below.

Alternative 1 - No Build (see Figure 5)

- Pedestrians and bicyclists would continue to cross, at-grade, at the signalized intersection.
- Alternative does not address the project's purpose and need.
- SHA's widening improvements include upgrading the existing crossing to include pedestrian refuge in the median.
- No impacts are anticipated.

Alternative 2 - Slightly Meandering Trail - Original Preferred (see Figure 6)

- Provides park-like trail experience for users.
- Trail comes no closer than 60 feet of Aspen Hill Park neighborhood.
- Partially follows natural contours of park.
- Elevated crossing of MD 586 is 600 feet northwest of intersection.
- Introduces 1,925 feet of new trail.
- Moderate parkland and floodplain impacts.

Alternative 3 - Winding Park Trail (see Figure 7)

- Provides best park-like trail experience for users.
- Trail comes no closer than 70 feet of Aspen Hill Park neighborhood.
- Follows natural contours of park.
- Elevated crossing of MD 586 is 900 feet northwest of intersection.
- Introduces 2,700 feet of new trail.
- Highest parkland and floodplain impacts.

Alternative 4 - Direct Path Connection (see Figure 8)

- Most direct trail connection.
- Provides minimal park-like experience for user.
- Trail comes within 25 feet of Aspen Hill Park neighborhood.
- Elevated crossing of MD 586 is 400 feet northwest of intersection.
- Introduces 1,560 feet of new trail.
- Least parkland and floodplain impacts.

Alternative 5 - Revised Preferred Alternative (see Figure 1)

- Provides park-like trail experience for users.
- Trail provides adequate separation of trail and Aspen Hill Park neighborhood.
- Curved bridge crossing of MD 586 is 370 feet northwest of intersection.
- Adds about 1,670 linear feet of new trail.
- Moderate parkland and floodplain impacts.

- Provides access to community and transit stops.

Impacts and Issues Summary

Issues and Impacts	Alternative 1 No-Build	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Length of Bridge/ Curved Section	No Structure	750 feet of structure/75 feet of curved section	825 feet of structure/200 feet of curved section	700 feet of structure/200 feet of curved section	610 feet of structure/542 feet of curved section
Wetland Impacts	No Impacts	None Anticipated	None Anticipated	None Anticipated	None Anticipated
Park Experience	None	Moderate	Best	Least	Moderate
Impacts to 100- Year Floodplain	No Impacts	Elevated: 2,300 S.F.	Elevated: 7,300 S.F.	Elevated: 1,100 S.F.	Elevated: 7,800 S.F.
		Retained: 15,300 S.F.	Retained: 20,300 S.F.	Retained: 11,100 S.F.	Retained: 27,600 S.F.
Parkland Impacts	No Impacts	33,500 S.F.	53,500 S.F.	29,600 S.F.	81,900 S.F.
Forest Impacts	No Impacts	Elevated: 26,000 S.F.	Elevated: 46,000 S.F.	Elevated: 12,000 S.F.	Elevated: 7,900 S.F.
		Retained: 30,000 S.F.	Retained: 50,000 S.F.	Retained: 15,000 S.F.	Retained: 57,900 S.F.
Specimen Tree Impacts	No Impacts	3 Specimen Trees	3 Specimen Trees	3 Specimen Trees	4 Specimen Trees
Impacts to Veirs Mill Ruins	No Impacts	No Impacts	Minimal Impacts (Within 100 Feet of Ruins)	No Impacts	No Impacts
Impacts will increase for Alternatives 2 to 4 if stormwater management and community connections are included.					
Construction Costs (Millions)	None	\$4.2	\$4.8	\$4.1	\$4.7

PREFERRED FACILITY PLAN

Alternative 2 was the preferred alternative after the first public meeting held on May 1, 2003. Later, the Aspen Hill Civic Association requested that the project include enhanced connections to the community and transit stops along Veirs Mill Road and Aspen Hill Road. The enhancements were applied to the preferred alternative only. Also, as a result of incorporating the latest topographic survey rather than photogrammetry on Alternative 2, grading impacts increased significantly for the northernmost 300 feet of the trail. The revised Alternative 2 was

renamed Alternative 5. These two above mentioned revisions to Alternative 2 would have similar impacts if included under the remaining alternatives should they be developed further.

Enhancement funding is requested for a shared-use trail that will be 8 feet minimum in width. Environmental features have been identified during field walks with the Maryland Department of the Environment (MDE) and Montgomery County Department of Permitting Services (DPS), along with correspondence from the Maryland Historic Trust, Maryland Department of Natural Resources (DNR) Environmental Review, DNR Wildlife and Heritage, and the U.S. Fish and Wildlife Service (see agency coordination letters). Based on input received, environmental impacts have been minimized.

The project is designed to conform to the recommendations of the "Guide for the Development of Bicycle Facilities" as published by the American Association of State Highway and Transportation Officials (AASHTO). The applicable standards of the SHA, the requirements of the Americans with Disabilities Act, and Montgomery County requirements will also be utilized.

The project includes the following features:

- 1,060 linear feet of Class I asphalt bike trail of 8-foot width;
- 610 linear feet of bridge crossing of 12-foot width able to accommodate light maintenance vehicles (H-10 loading);
- 555 linear feet of concrete sidewalk of 8-foot width connecting to adjacent community and transit stops;
- stormwater management and water quality enhancement;
- signage appropriate to design;
- design aesthetics or treatments involving an artist who participates on the design team; and

- pedestrian lighting on new portions of trail bridge and sidewalk used to transfer between transit stops.

There are no historic structures, historical districts, or archaeological sites within the project area for the preferred alignment.

All of the right-of-way for the project is contained within the County-owned right-of-way/parkland or State right-of-way.

CURRENT STATUS

The M-NCPPC has identified the Rock Creek Hiker-Biker Trail Bridge as a priority project. M-NCPPC with the support of DPWT awarded a contract to URS Corporation to perform Phase I and II Facility Planning for the project in January 2003.

Data collection and base mapping, utilizing available GIS information provided by the County, SHA right-of-way plats, SHA CRS Construction Plans, etc. were completed to allow for preparation of alternative alignments for the proposed trail. After a preferred route was selected, topographic survey and geotechnical borings were obtained. Base maps show known right-of-way boundaries, existing roadway locations, proposed roadway improvements where known, stormwater management, and other features. The proposed Class I, or shared-use path, is shown on the 30 percent completion plans. This alignment was selected from three concepts and best represents implementation of the trail to minimize environmental impacts, especially floodplain, wetland, parkland, and specimen tree impacts, while avoiding utilities and disruption to adjacent residential areas.

The Rock Creek Hiker-Biker Trail Bridge presents the fundamental type of project that the Transportation Enhancement Program selects for funding. This trail will provide a safe and attractive path for residents, pedestrians, and bicyclists using the Rock Creek Trail in

addition to providing a safe, attractive, and lighted path for transit users accessing and transferring between transit stops.

This project has continued public support as indicated by attendance at public meetings and forums (meeting summaries attached), and the other individuals that have provided support letters. The community requested safe, attractive, and lighted areas to the trail, while adjacent homeowners requested a privacy buffer between their homes and the trail. After the first public meeting, the community leaders felt that the original design alternates could have better access to the community, so these requests were reinforced during subsequent meetings with the Aspen Hill Civic Association (meeting summary attached). Afterwards, the community connections were further enhanced for the preferred alternative and presented at the second public meeting. A third public meeting was held to introduce the artist and give her feedback.

Communication with SHA officials, including Messrs. Neil Pedersen (Administrator) and Charlie Watkins (District 3 Engineer), has been ongoing for the past year or more. They have been supportive of this overall project and encouraged M-NCPPC to apply for Enhancement funds to facilitate the construction. This is clearly a regional improvement considering the proximity to transit, schools, and recreational facilities in the vicinity. The project team also received recommendations from SHA representatives responsible for administering the Transportation Enhancement funds program (Mary Feller, Victor Barreira, and Mike Haley) at a project introduction meeting on June 18, 2003 (see attached meeting summary). The TEP funding application and cost estimate incorporates these recommendations.

Several review meetings took place with M-NCPPC staff. A Development Review Committee Meeting was held on July 28, 2003. During the meeting a request was made for a meeting with historical and archeological staff at M-NCPPC. This meeting with Michele Naru of M-NCPPC Historic Properties and Dr. Jim Sorenson of M-NCPPC Archeology was held on August 4, 2003. After reviewing the researched documents, the staff determined that the remains of Veirs Mill are located west of the preferred alignment, southeast of where Veirs Mill

Road crosses Rock Creek. It was also noted that the alignment for Alternate No. 3 would come within 100 feet of the remains.

A Plan Review Meeting was held on August 12, 2003 (see attached meeting summary). Staff was concerned about the minimal benefits of the stair tower on the south side of Veirs Mill Road; possible revisions that would reduce the large number of trees impacted; and security, cleaning and maintenance requirements. Addressing these concerns should not significantly increase the costs of the project and would be addressed during final design.

During final design, the Federal draft trail accessibility standards, which are more permissive than the current ADA standards for walkways, would need to be approved for use on the project in order to reduce the large number of trees impacted. The draft standards would be applied to only the portion of the trail not used for transit access. Using the draft standards would permit the designers to increase the slope of the trail along the parking areas approaching the northern limit of work, thereby significantly decreasing the grading requirements. Also, if the project was allowed to rely on less restrictive stormwater management requirements that considered the non-motorized users, the treatment requirements would be reduced, thereby decreasing the tree impacts to a lesser extent.

The Public Arts Trust of the Arts and Humanities Council of Montgomery County identified this project as an ideal project for incorporating public art. The Trust funded \$10,000 to include an artist on the design team during the facility planning process. The artist was selected through the Public Art Trust's process. The Public Arts Trust identified a short list of several artists with experience in bridge and highway design and construction. The artists were interviewed by a panel consisting of representatives from the Public Arts Trust, Montgomery County Department of Public Works and Transportation, and the Commission. Vicki Scuri, who has a national reputation and extensive experience in this type of design, was selected for the project.

The following outline is a status of Environmental Issues:

I. Wetlands

- A. Held field walk with agencies on May 9, 2003 (Meeting summary attached). MDE requested that it be verified that no wetlands are present at eastern limit of trail. Wetlands were not noted at eastern limit during informal JD held on June 21, 2002 for SHA's MD 586 at Aspen Hill Road project.
- B. URS verified no wetlands during field investigation held on June 10, 2003.
- C. URS sent follow up letter to MDE on June 17, 2003 (attached).
- D. Waiting for MDE response to follow up letter.
- E. After response, no additional effort expected before TEP application.

II. Historical

- A. MHT determined no properties were affected by SHA's MD 586 at Aspen Hill Road project. Since study area extended beyond Rock Creek Trail project limits, no properties are thought to be affected by Rock Creek Trail project.
- B. URS sent letter and plans to MHT on May 29, 2003, requesting that MHT concur that no properties affected by Rock Creek Trail project (attached).
- C. Received MHT's concurrence on June 20, 2003 (attached).
- D. Briefed Michele Naru of M-NCPPC Historic Properties and Dr. Jim Sorenson of M-NCPPC Archeology on August 4, 2003. Determined that the remains of Veirs Mill are located west of the preferred alignment, southeast of where Veirs Mill Road crosses Rock Creek. It was noted that the alignment for Alternate No. 3 would come within 100 feet of the remains.
- E. On August 14, 2003, agreed to request from Susan Sodenberg to include bronze marker for Veirs Mill (attached).
- F. No additional effort expected before TEP application.

III. Forest

- A. URS submitted NRI/FSD to M-NCPPC on June 19, 2003 (attached).
- B. Received M-NCPPC approval of NRI/FSD on July 25, 2003 (attached).
- C. Preliminary FCP submitted on September 3, 2003 (attached).
- D. Waiting on review comments on Preliminary FCP.

IV. Floodplain

- A. Held field walk with agencies on May 9, 2003 (Meeting summary attached).
- B. Submitted 100-year floodplain study to DPS on May 30, 2003 (attached).
- C. Received DPS study approval on July 3, 2003 (attached).
- D. No additional effort expected before TEP application.

V. SWM

- A. URS submitted SWM Concept application to DPS on June 24, 2003 (attached).
- B. DPS response received August 19, 2003 (attached).
- C. URS addressed DPS comments and submitted response on August 29, 2003. Infiltration trenches were added along sections of the trail at the request of DPS (attached).
- D. No additional effort expected before TEP application.

VI. Flora and Fauna

- A. DNR' Wildlife and Heritage Service: Letter dated February 18, 2002 determined that no Federal or State rare, threatened, or endangered plants or animals within SHA's MD 586 at Aspen Hill Road project site (attached). Since study area extended beyond Rock Creek Trail project limits, no species are thought to be affected by Rock Creek Trail project. DNR strongly encouraged

Board and County Council will need to act quickly so that the application can be completed and submitted on time.

PROJECT FUNDING AND COST

Cost Estimate

The preliminary cost estimate that depicts the construction and total costs for the Rock Creek Hiker-Biker Trail Bridge, and the funding allocation is \$5,844,124 (attached). Transportation Enhancement projects in Maryland are typically funded at 50 percent State/50 percent Local match. Based on discussions with representatives at SHA responsible with administering the Transportation Enhancement funding program, the cost of this project is significantly more than past selections. The maximum expected matching Transportation Enhancement funds would be \$2,000,000.00 for a bridge over a non-interstate roadway. The SHA representatives further noted that the applicant should be prepared to complete the project should a full match not be approved.

Schedule

The attached schedule depicts the anticipated timelines for this proposed Enhancement-funded project. The schedule is based on the assumption that an application for Transportation Enhancement funds will be submitted in November 2003 with funds being awarded in January 2004.

that it's guidelines on Forest Interior Dwelling Birds (FIDS) and other native forest plants and wildlife be followed.

- B. DNR's Environmental Review Unit: Letter dated January 18, 2002 determined that anadromous fish species are not present in Rock Creek drainage near the SHA's MD 586 at Aspen Hill Road project site (attached). Since study area extended beyond Rock Creek Trail project limits, no species are thought to be present within Rock Creek Trail project. DNR also stated that species in the tributaries to Rock Creek should be adequately protected by the Use I instream work prohibition period, sediment and erosion control methods, and other Best Management Practices typically used for protection of stream resources.
- C. The US Fish and Wildlife Service: Letter dated February 22, 2002 determined that no federally proposed or listed endangered or threatened species are known to exist within the SHA's MD 586 at Aspen Hill Road project site (attached). Since study area extended beyond Rock Creek Trail project limits, no species are thought to be present within Rock Creek Trail project.
- D. No additional effort expected before TEP application.

NEXT STEPS

The M-NCPPC is preparing an application for Transportation Enhancement grant funds to match local expenditures to design and construct the bridge. The grant application requires evidence that facility planning has been completed, including an approved preliminary Forest Conservation Plan, and that the County Council has approved design and construction funding for the project. The Maryland State Highway Administration (SHA) will set the due date for grant applications when the Congress approves funding for the renewed program. Since SHA expects to establish an October or November due date for these grant applications, the Planning

Board and County Council will need to act quickly so that the application can be completed and submitted on time.

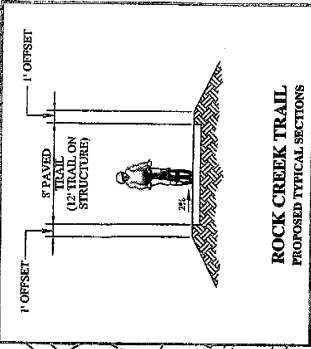
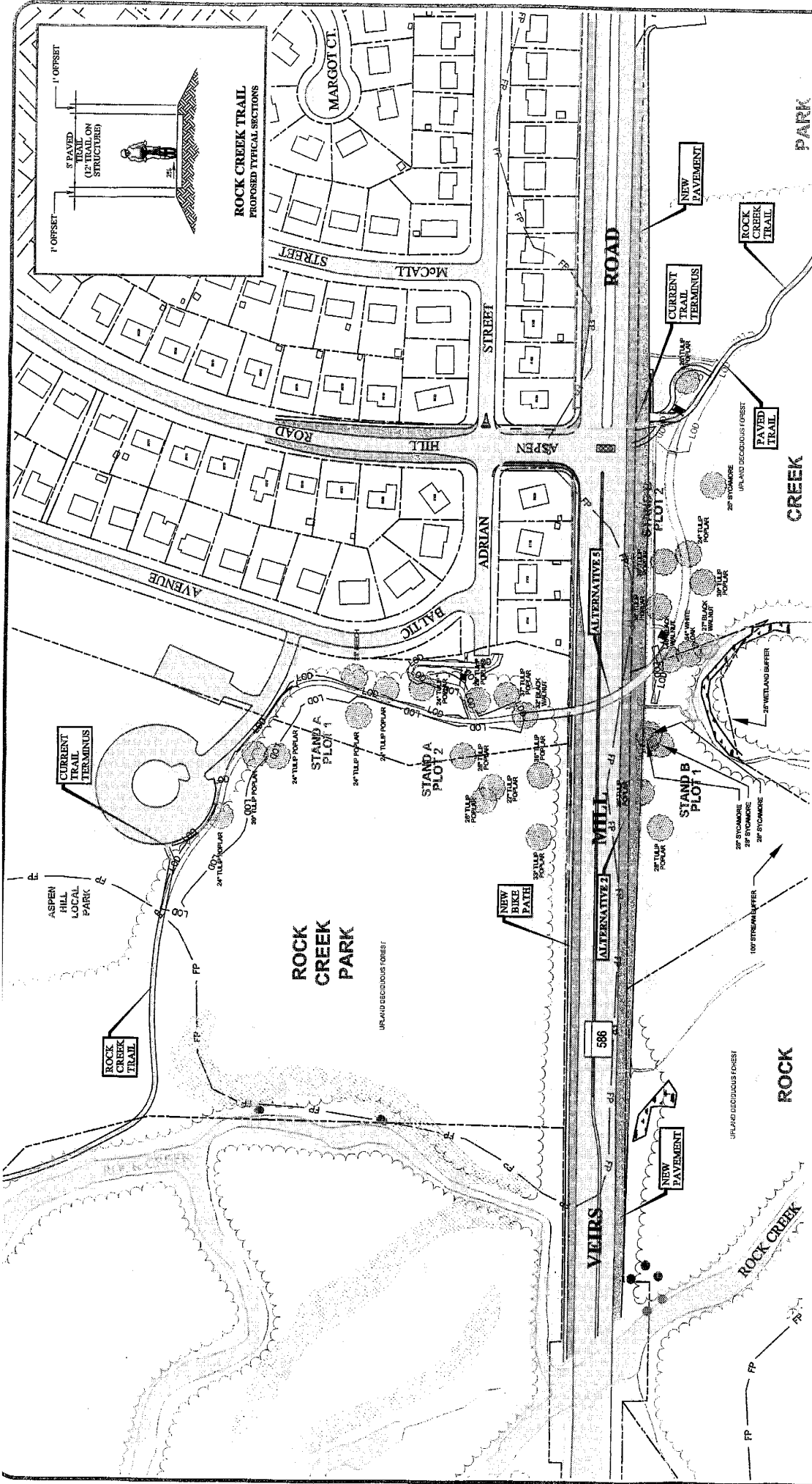
PROJECT FUNDING AND COST

Cost Estimate

The preliminary cost estimate that depicts the construction and total costs for the Rock Creek Hiker-Biker Trail Bridge, and the funding allocation is \$5,703,352 (attached). Transportation Enhancement projects in Maryland are typically funded at 50 percent State/50 percent Local match. Based on discussions with representatives at SHA responsible with administering the Transportation Enhancement funding program, the cost of this project is significantly more than past selections. The maximum expected matching Transportation Enhancement funds would be \$2,000,000.00 for a bridge over a non-interstate roadway. The SHA representatives further noted that the applicant should be prepared to complete the project should a full match not be approved.

Schedule

The attached schedule depicts the anticipated timelines for this proposed Enhancement-funded project. The schedule is based on the assumption that an application for Transportation Enhancement funds will be submitted in November 2003 with funds being awarded in January 2004.



ROCK CREEK TRAIL BRIDGE
DRAFT WORK-IN-PROGRESS

ALTERNATIVE 5

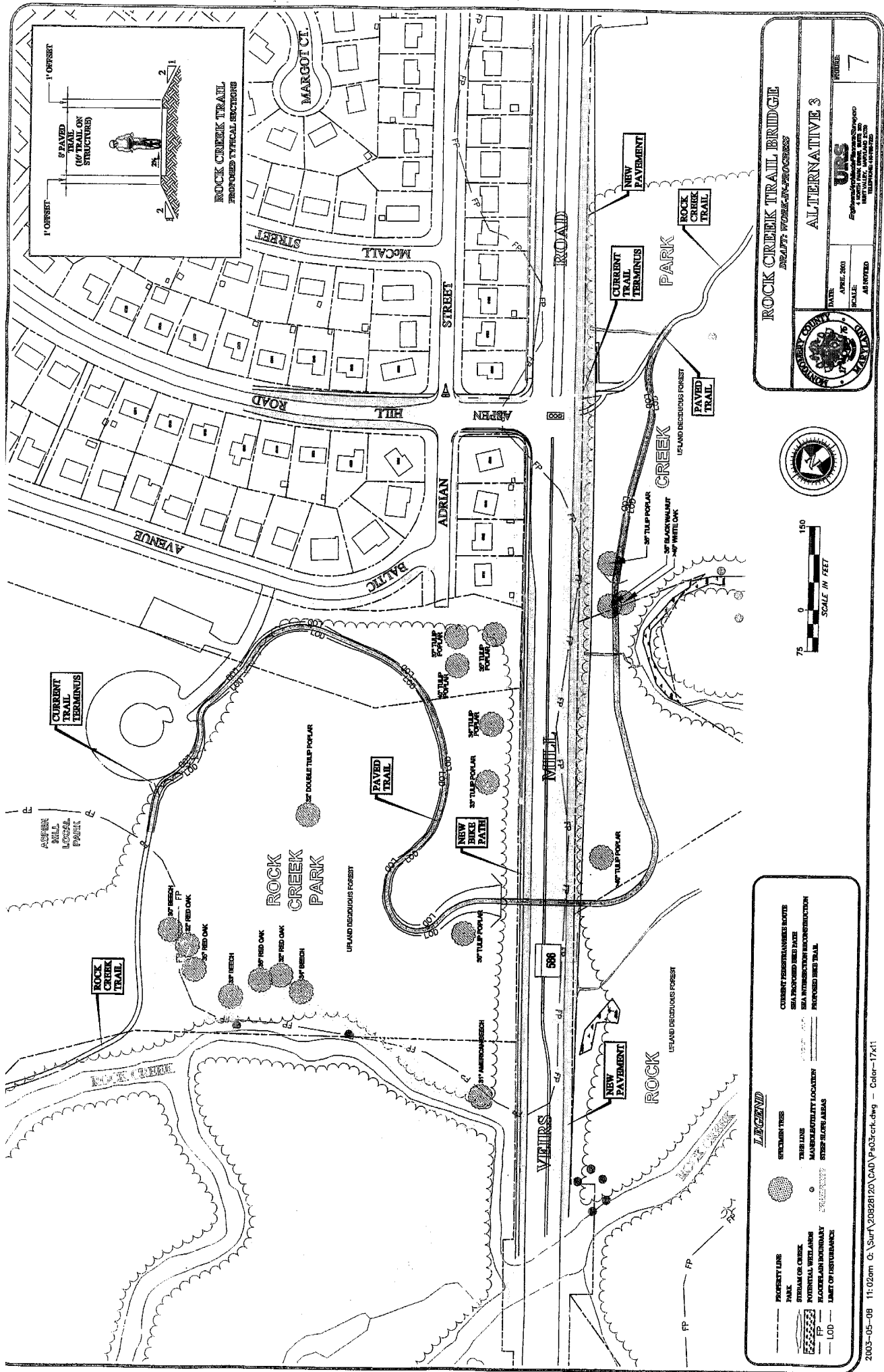
DATE: APRIL 2003
SCALE: AS NOTED
PROJECT: 1

URS
Engineering & Construction
1 NORTH PARK DRIVE, SUITE 200
DENVER, COLORADO 80202
TELEPHONE: 303.733.7220



LEGEND

- PROPERTY LINE
- PAVED TRAIL
- STREAM OR CREEK
- VERTICAL WETLANDS
- FLOODPLAIN BOUNDARY
- LIMIT OF DISTURBANCE
- SIGNIFICANT TREE
- TRAIL LINE
- MANEUVERABILITY LOCATION
- STUDY SLOPE AREAS
- CURRENT RECREATION ROUTE
- SEA FENCED LINE PATH
- SEA INTERSECTION RECONSTRUCTION
- PROPOSED BIKER TRAIL



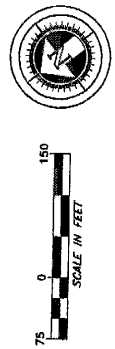
LEGEND

PROPERTY LINE
PARK
UPLAND OR CREEK
POTENTIAL SETBACK
PLACEMENT OF TRAIL
LIMIT OF DISTURBANCE

CURRENT FRESHWATER NOTE
SEA PROPOSED SETBACK
SEA INTERSECTION RECONSTRUCTION
PAVED TRAIL

SPERMATOPHYTES
TREES
MANAGEMENT LOCATION
STEP-BY-STEP AREA

FP
LOD



ROCK CREEK TRAIL BRIDGE
NEARBY WORK-PROCESS

ALTERNATIVE 3

URS
Engineering & Construction
10000 N. 10th Ave., Suite 200
Denver, CO 80231
Tel: 303.733.1000

DATE: APRIL 2003
SCALE: AS SHOWN
FIGURE: 7

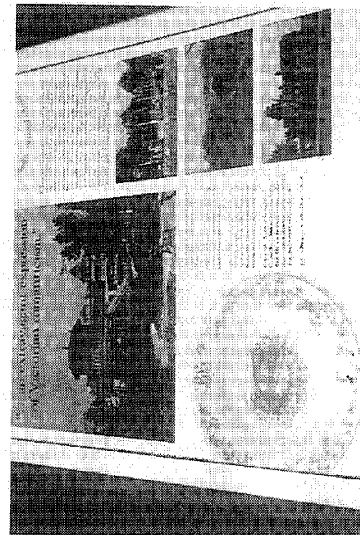
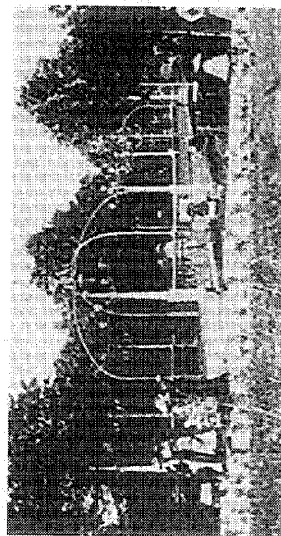
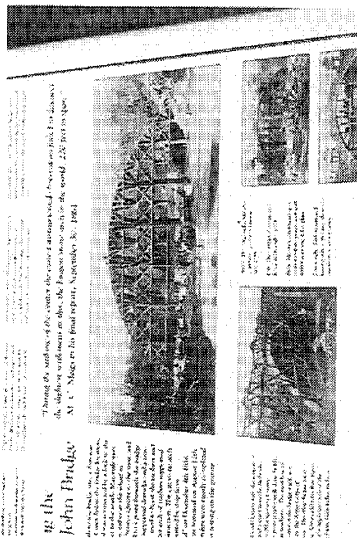
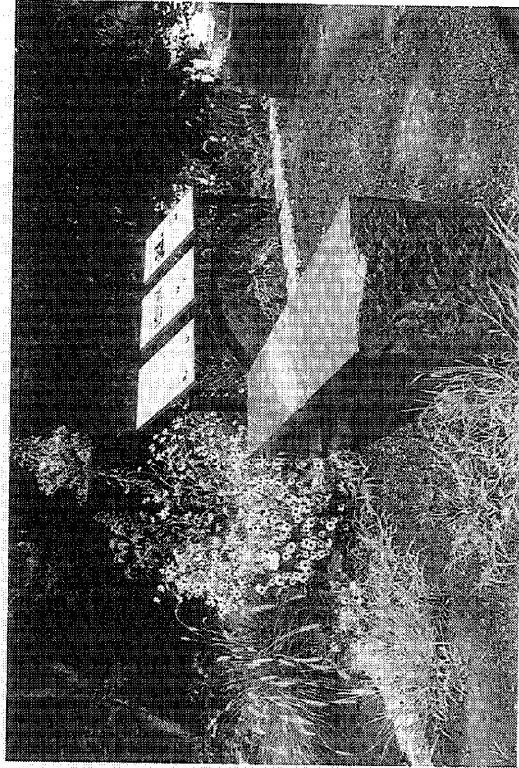
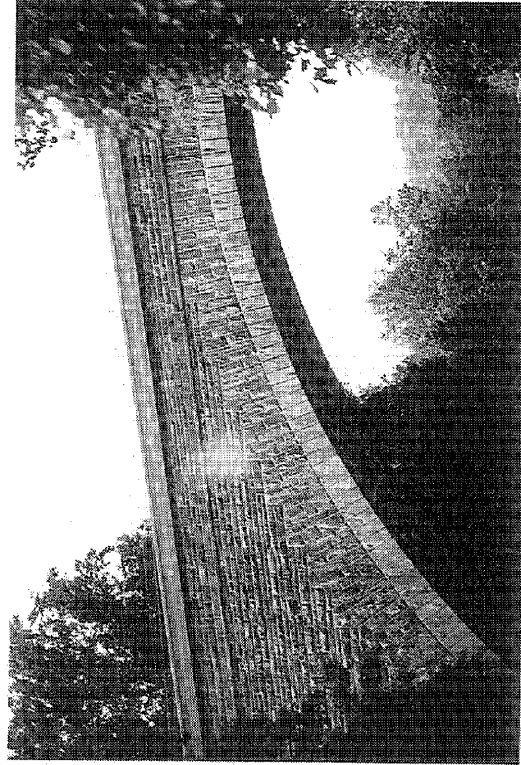
Top left, interpretive panels like those at the Cabin John Bridge make history come alive, and create an awareness for visitors and community, creating a strong sense of place and identity. This interpretive work offers an excellent model for the Rock Creek Trail Bridge.

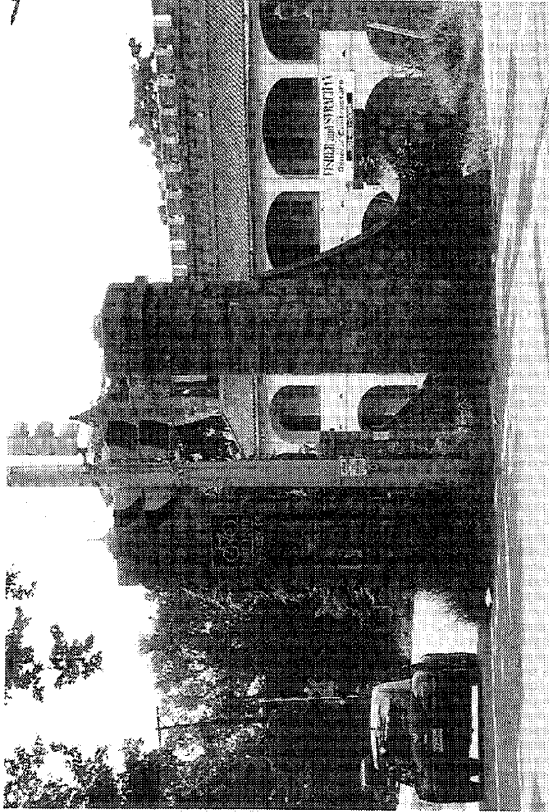
Top right, the Washington Aqueduct is the Cabin John Bridge. An engineering masterpiece, this bridge has supplied the drinking water to the City of Washington, since 1863.

Middle left, an historic photograph of the iron foot bridge that once connected the Cabin John Hotel, "an extravagant expression of Victorian romanticism, to the trolley terminus across Cabin John Creek. This elegant Victorian design offers inspiration for the Rock Creek Trail Bridge.

Bottom left, memorabilia. "Guests arriving at Bobinger Brother's Cabin John Hotel entered the grounds by way of an ornate foot bridge crossing Cabin John Creek and ascending along manicured paths... The place was extravagant in every way, even by the standards of its era. Gazebos and summer cottages were scattered along wooded paths. Forty acres of lawns overlooked the river & creek valleys."

Below right, the arch and materials of the bridge are incorporated into the interpretive display, creating an informative, multidimensional experience for the viewer.



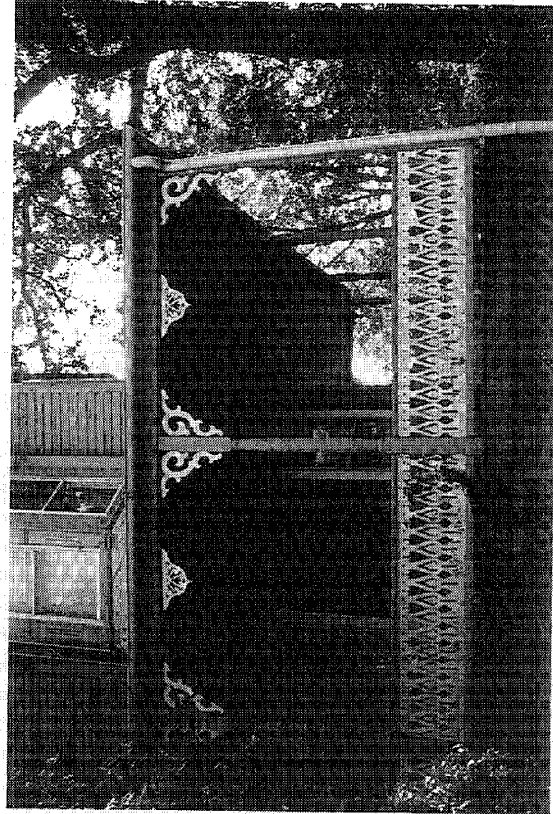
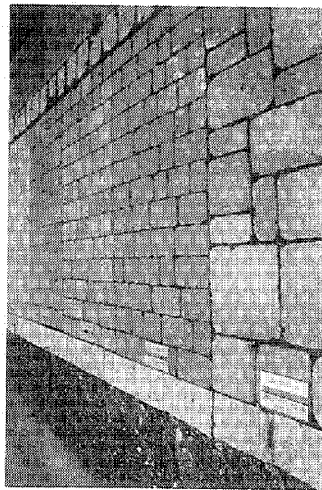
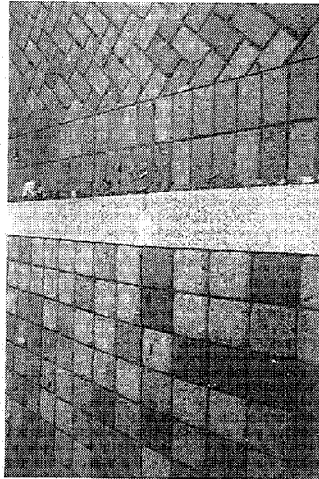


Top left, paving detail. Attention to details make cities more livable. This excellent paving detail is from downtown Rockville.

Top right, a remnant ruin graces this busy intersection, recalling another time period in Rockville's history, and creating a memorable image.

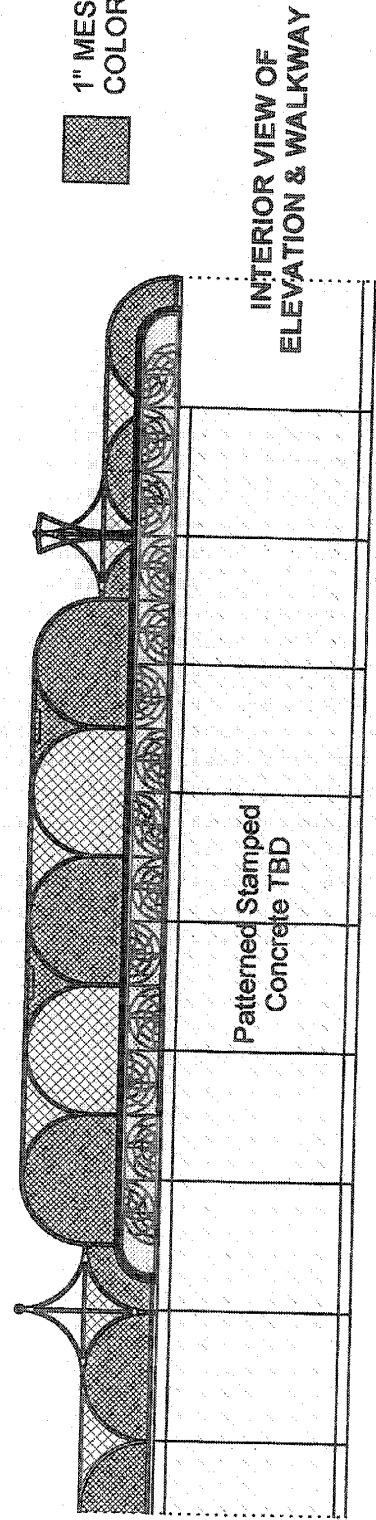
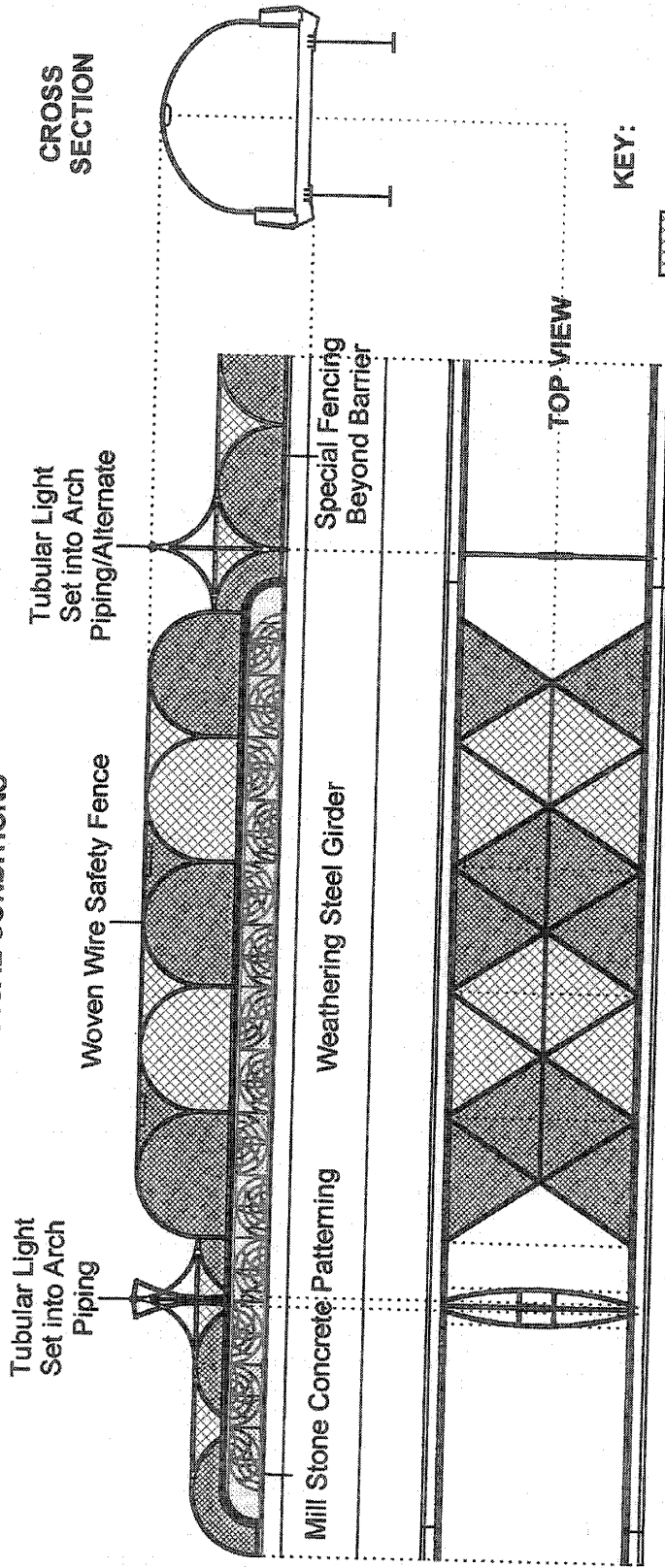
Below left, a variety of possible paving materials. Concrete brick pavers offer great variety, and could possibly be used on the bridge walkway.

Below right, a Victorian house in downtown Rockville, displays a touch of fanciful Victorian romanticism in its railings and architectural details.

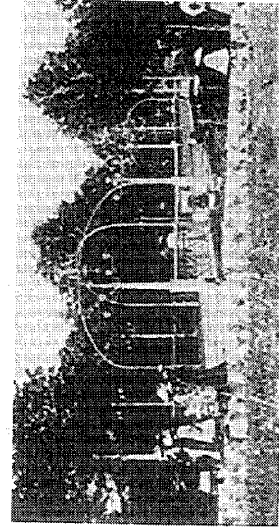
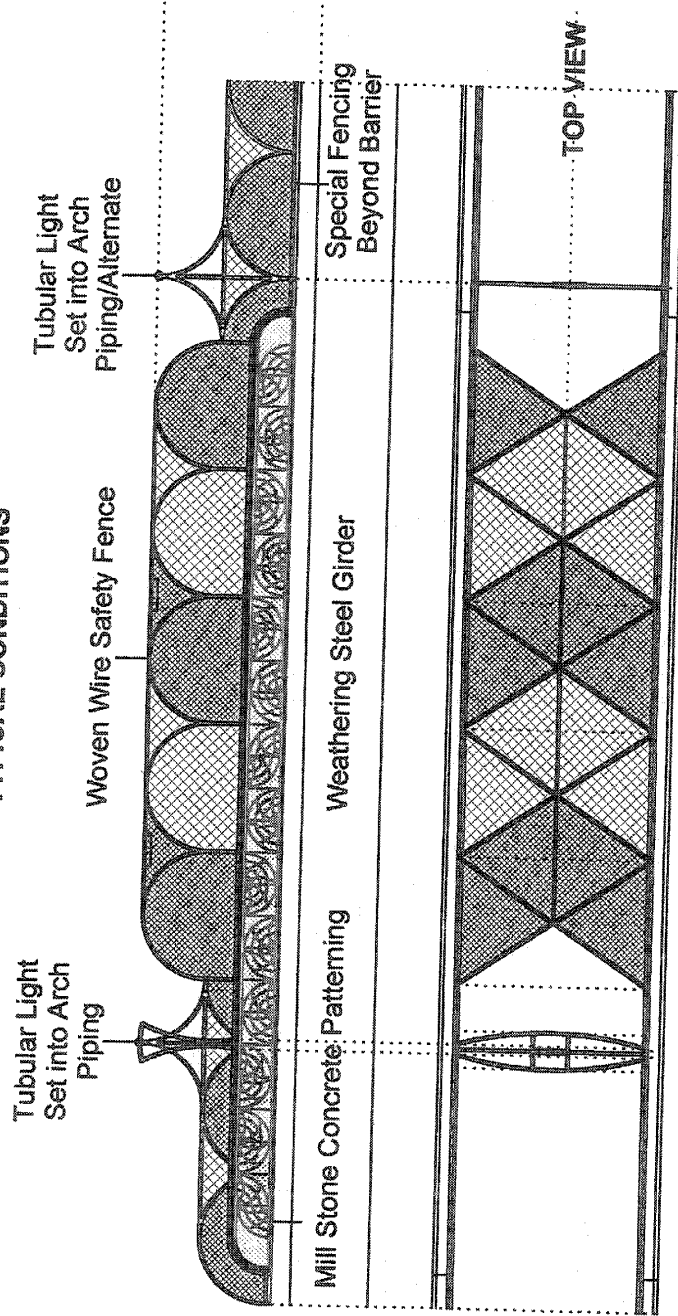


Below, Victorian inspired fence patterning and cage designs for Rock Creek Trail Bridge, with mill stone patterning for concrete barrier walls, exterior and interior; 2" relief for pattern.

EXTERIOR VIEW TYPICAL CONDITIONS



EXTERIOR VIEW TYPICAL CONDITIONS



Top, fence patterning typical details for Rock Creek Trail Bridge. Fencing is fabricated in pre-galvanized woven wire cloth, of two mesh sizes, 1" and 2" weave, to provide contrast and pattern opportunity, suggesting an overhead awning or tree canopy.

Overhead lighting is mounted into tubular members to provide a safe, cost-effective lighting solution, providing a consistent rhythmic element and enhancing the bridge's graceful curves. The overhead arches, and windows-to-the-woods, recall the Victorian romanticism of garden trellis structures, gazebos, and the overhead structure of the Cabin John Hotel Ornate Iron Bridge.

Veirs Mill flourished during the Victorian era. It seems most appropriate to contrast the Rock Creek Trail Bridge design with inspiration derived from Victorian romanticism and muscular iconography from the mills. Mill wheels, mill stones, and various related hardware, such as saw blades and gears can provide pattern opportunities, landscape ornaments and sculptural opportunities at bridge entries.

Also, ornamental grasses may be planted to suggest a mill pond, at one or more bridge entries.

Below, a historic photograph of Cabin John Hotel Iron Bridge is inspiration for Rock Creek Trail Bridge. Classic designs are timeless, and provide fertile ground for imaginative updates.

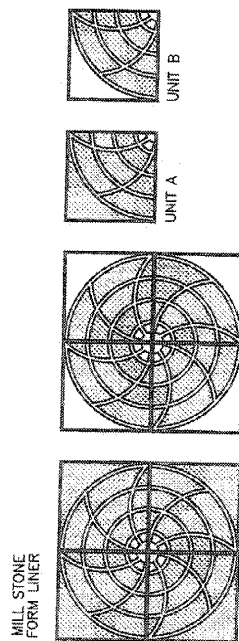
BRIDGE ELEVATION NOTES:

single arch light armature
triple arch light armature
cage lighting
pier lighting

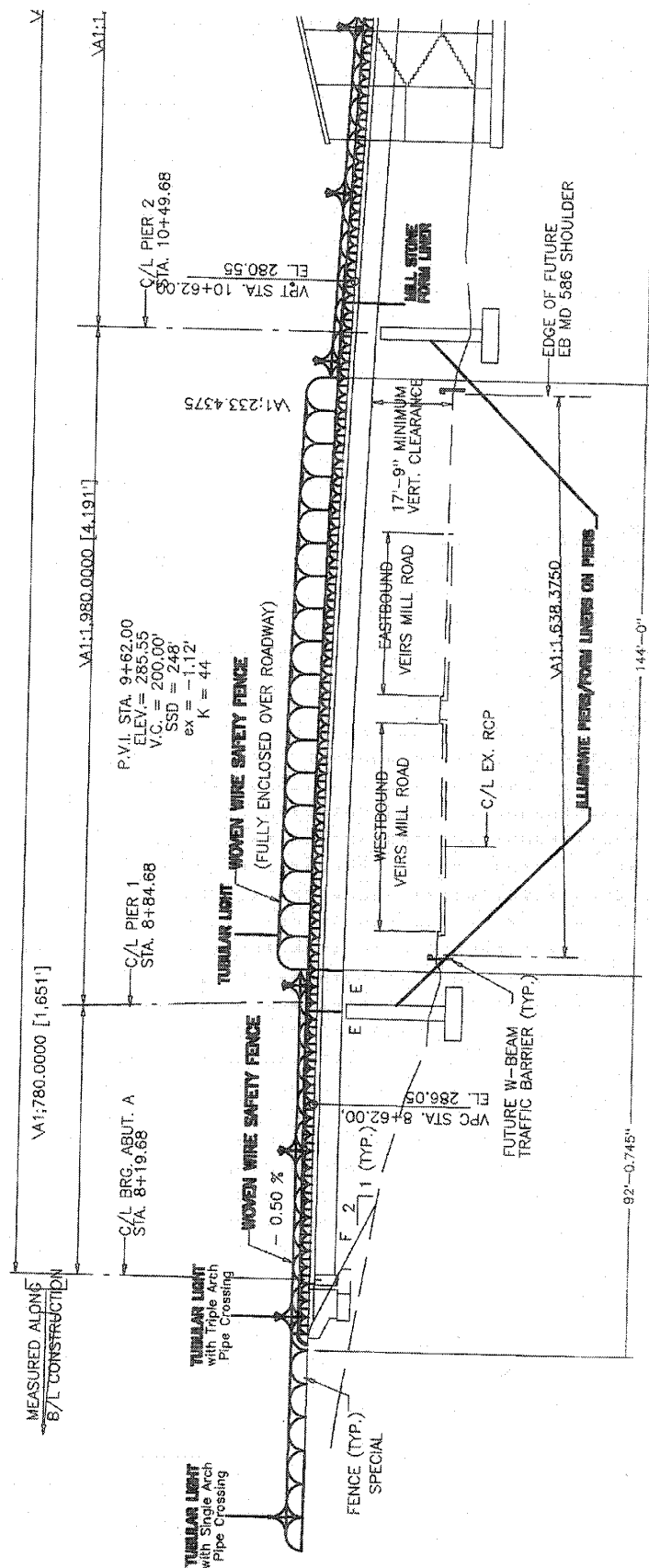
cage fencing
barrier fencing
trail fencing

Concrete Patterning Family
mill stone pattern for concrete barrier
stamped concrete for bridge walkway

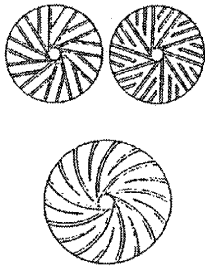
Gateway Landscape at entry



Unit Size: 2' x 2'; Full Pattern = 4' x 4'
Allow 3" for Relief (include edge bevel)
Note: Liner is used on both sides of barrier



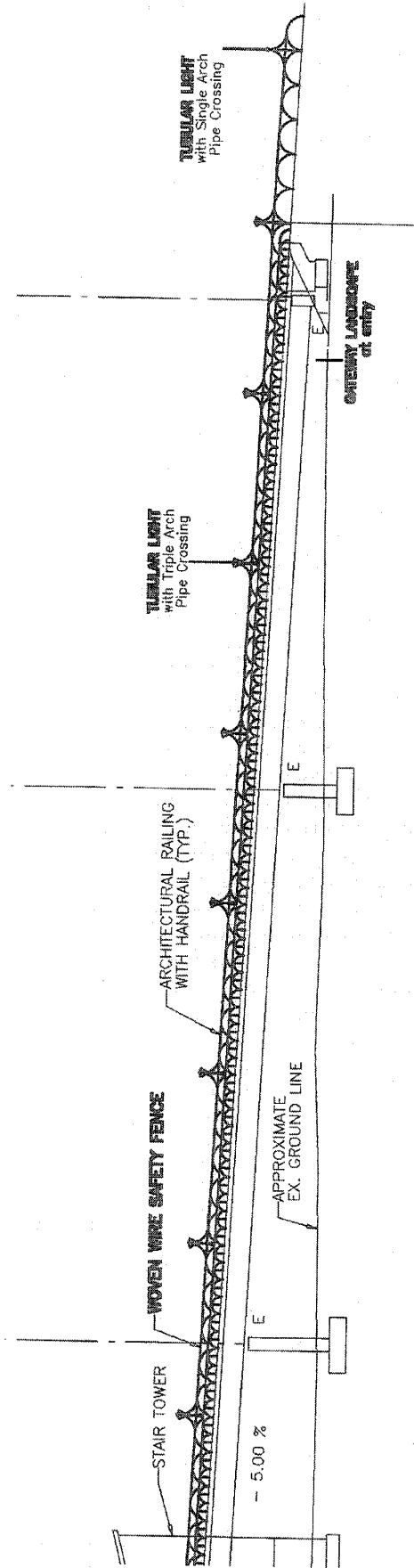
The mills operated by the mill wheel turning a shaft which turned other cogged wheels in the mill. The arrangement was ingenious. By going from larger to smaller gears, for instance, a millstone could be turned over a hundred times every minute while the water wheel turned only seven.⁸ A pair of millstones was needed to grind the grain, which was dribbled into a hole in the center of the top stone. The top stone, the runner, was turned by the force of the mill wheel and the bottom runner, the bedstone, was stationary. The faces of both millstones were furrowed to cut the grain and channel the ground meal or flour to the edge of the stones, the furrows cut in a variety of ways.⁹

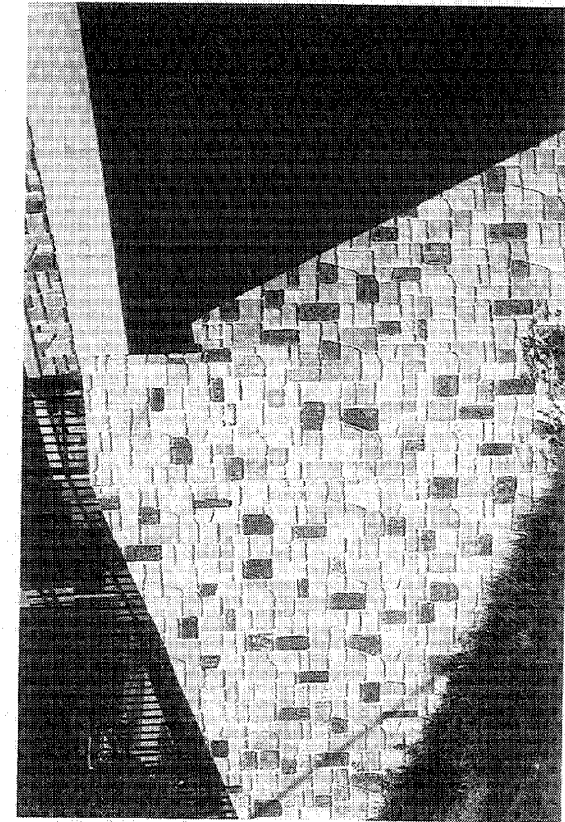


At first the mill stones were quarried locally, "country stones," which were fine for grinding rye flour, buckwheat and cornmeal. However, Cullin stones, German millstones from Cologne, and French burrs, made of quartz quarried in the Paris Basin and renowned for wheat-flour production, were imported quite early.¹⁰ A mill owner in 1795 proudly advertised that his mill had "burrs."

Top, excerpt about mill wheels from *The Montgomery County Story, Early Water Mills in Montgomery County* by Eleanor M.V. Cook

Bottom, partial bridge elevation: Victorian inspired fence patterning with light arches and cage designs for Rock Creek Trail Bridge, with mill stone patterning for concrete barrier wall, both sides.

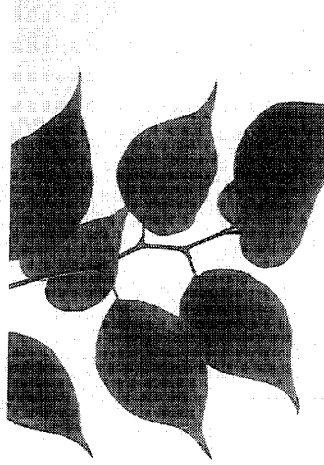




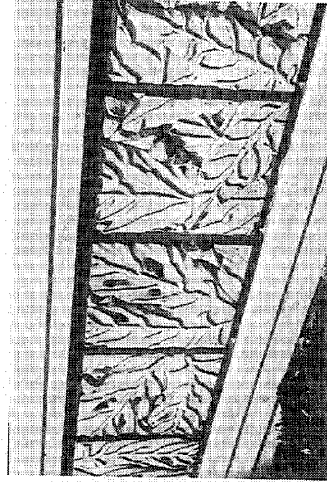
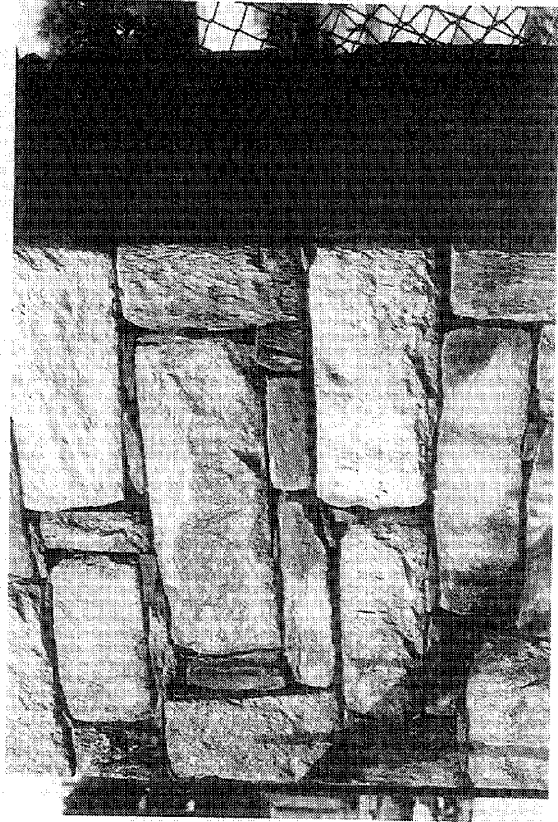
Top left, patterned concrete abutment and wing walls, depicting natural stone.

Below left, rock column made from local rock from a nearby quarry.

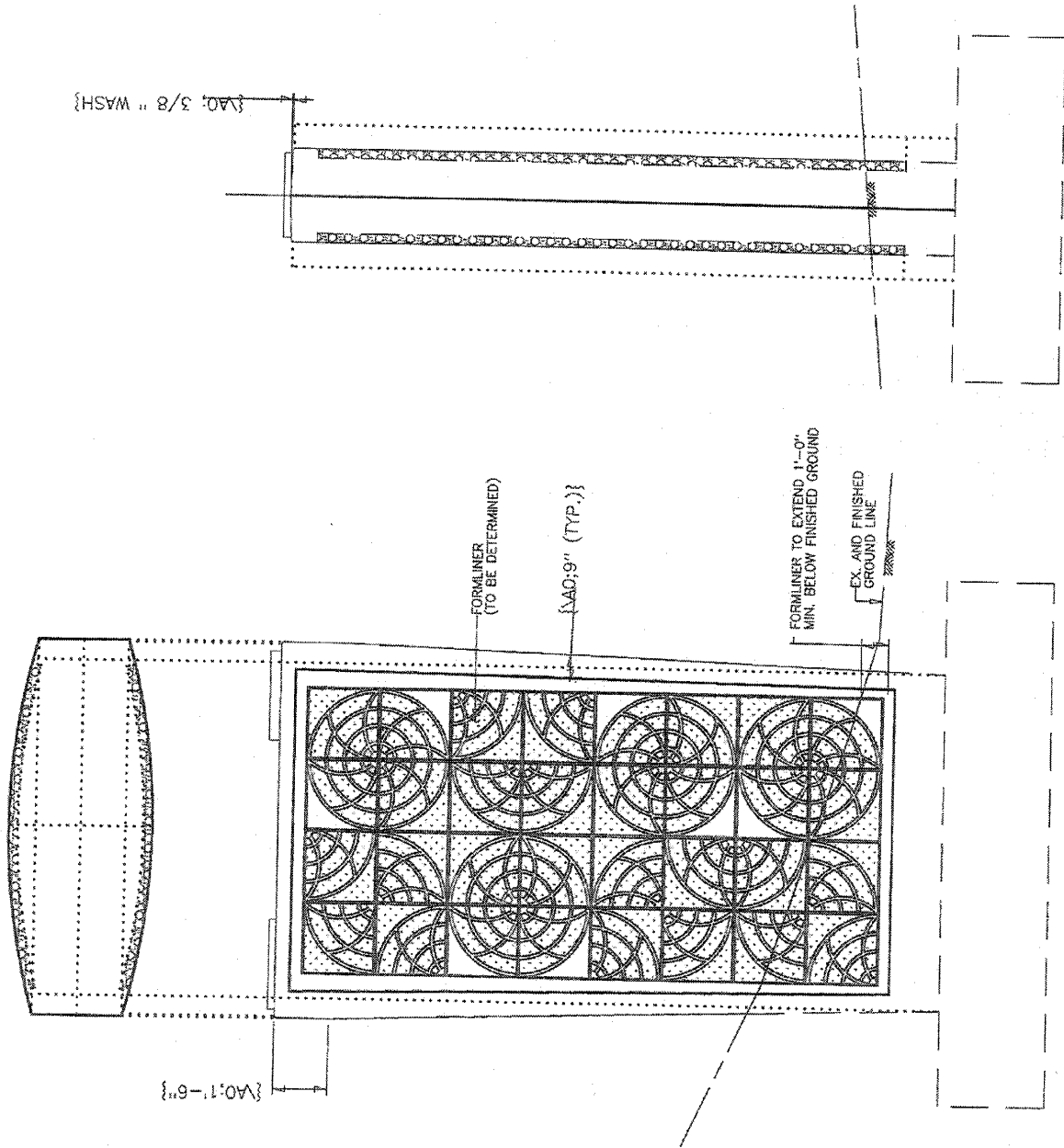
Top right, leaf patterns can provide inspiration for design motifs.

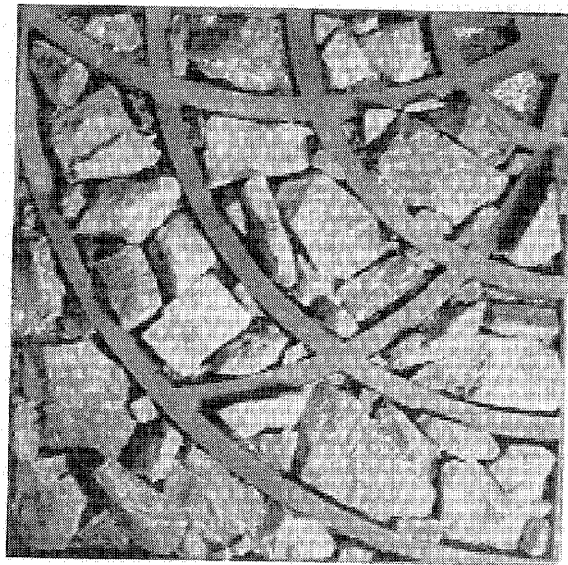


Below right, concrete relief with leaf and rock patterns.

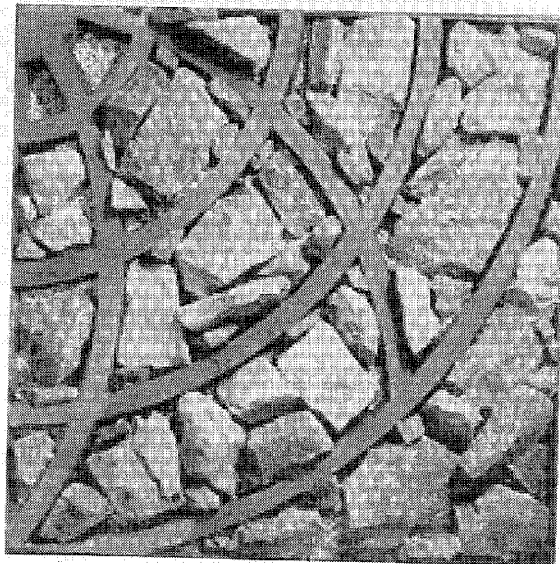


Left, pier elevation and plan with mill stone patterning. Add curve to grace shape, taper to ground.

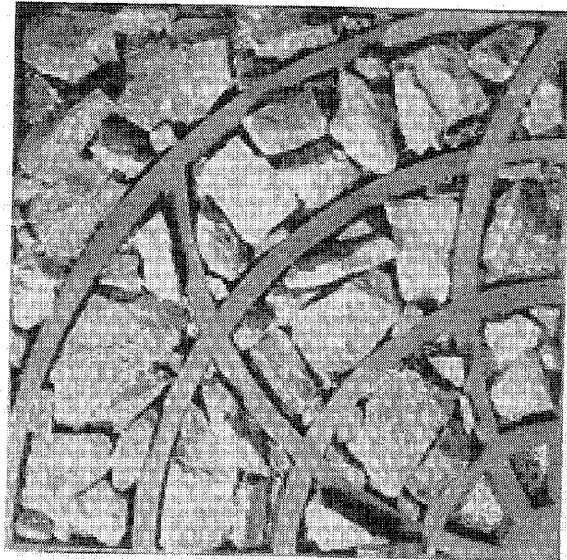




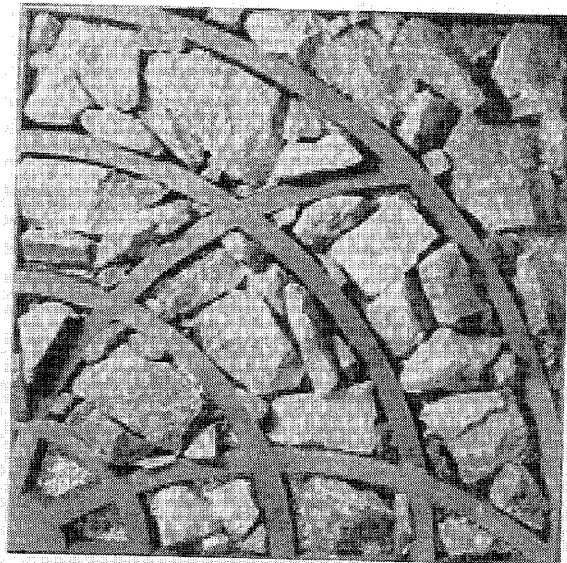
Top left, mill stone quadrant pattern, no rotation, 2'x2' to be fabricated with textures from locally quarried rocks.



Top right, mill stone quadrant pattern, rotated 90 degrees clockwise.



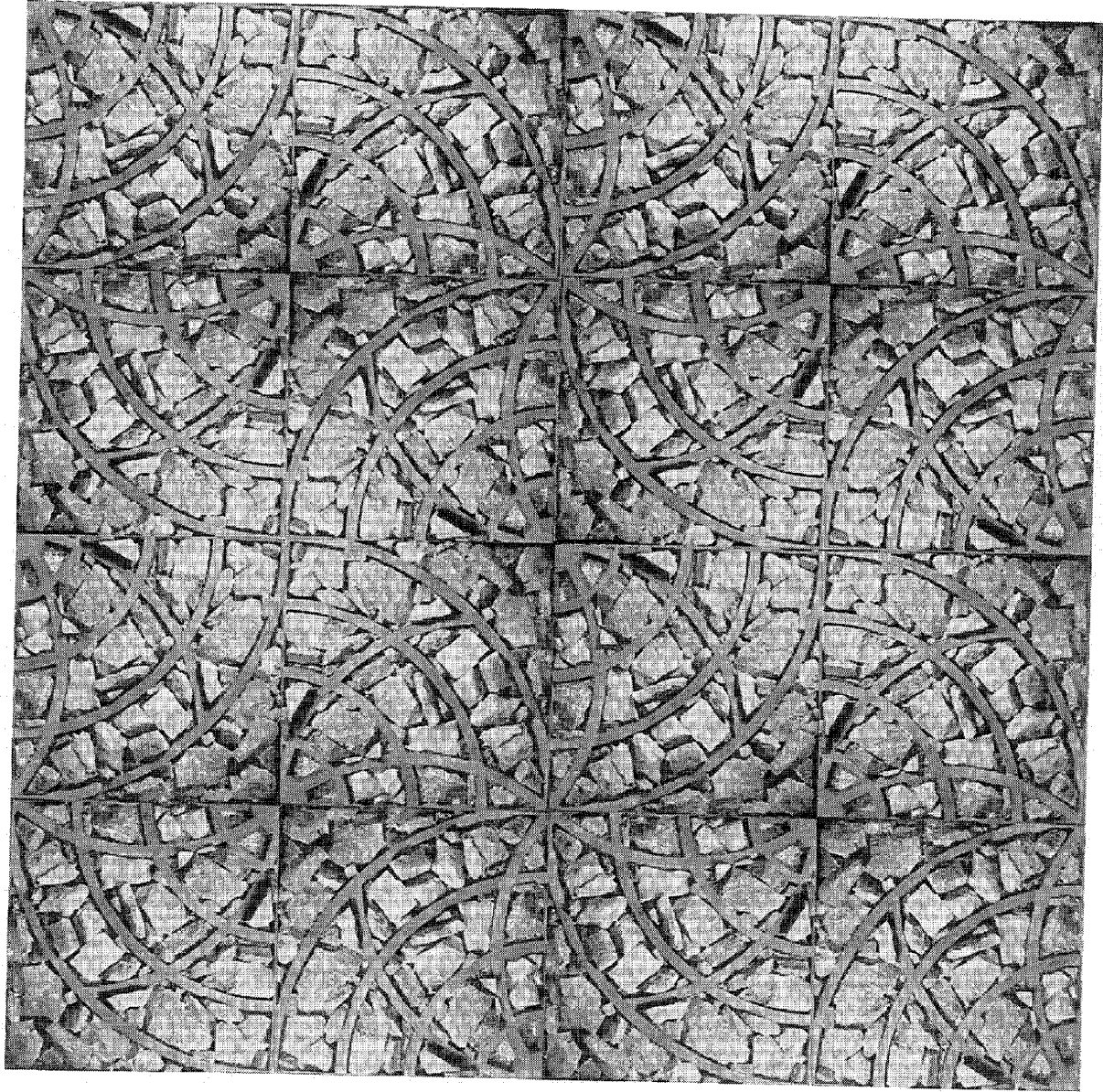
Below right, mill stone quadrant pattern, rotated 180 degrees clockwise.



Below left, mill stone quadrant pattern, rotated 270 degrees clockwise.

These quadrants may be combined in numerous ways to create a variety of patterned fabrics. The images demonstrate "the look" of the mill stone pattern when filled with rock textures. The pattern may be filled in a variety of ways.

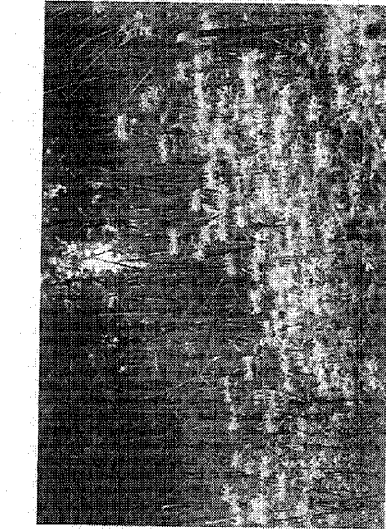
These pattern elements may be translated to concrete by using elastomeric form liners, an industry standard that is frequently used in the construction process.



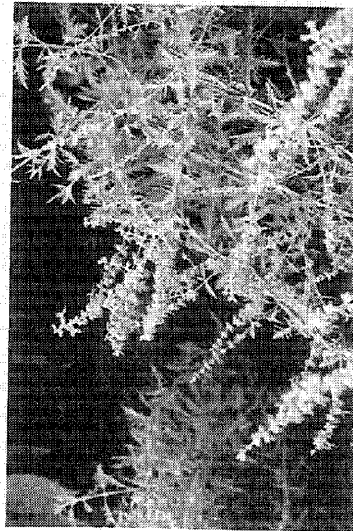
Left, example pattern layout.



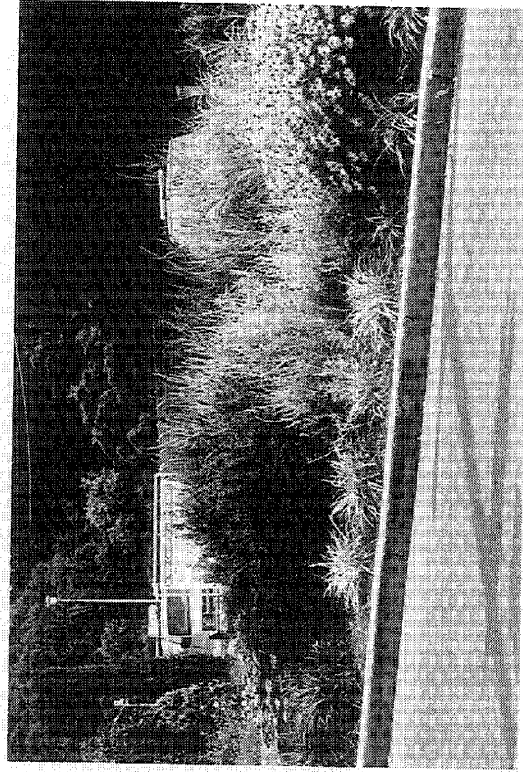
Top left, sweeping strokes of ornamental grasses and perennial flowers attract butterflies and create a stunning display of color and texture in Needwood Mansion Park.



Top right, the forest canopy along Rock Creek Trail is lush with organic form. While many trees will be saved along the alignment, there is a need to replant the site.

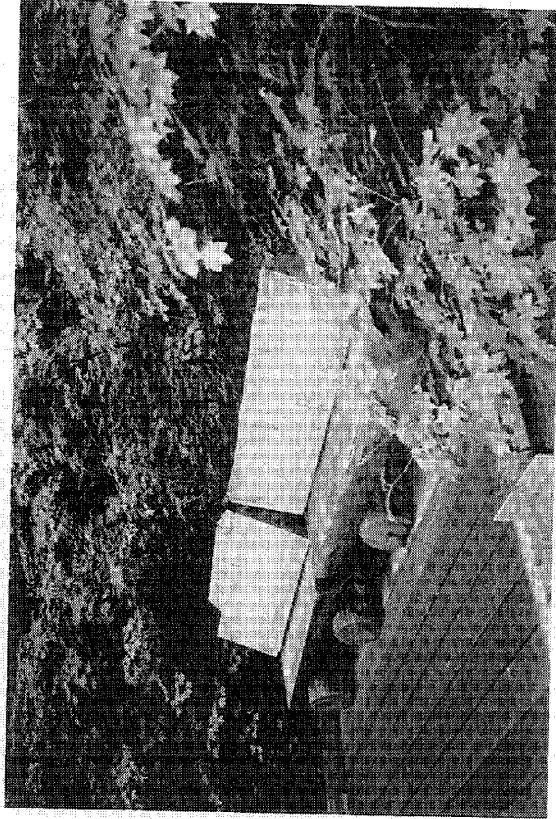
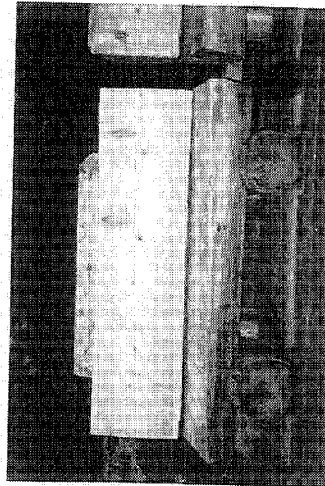
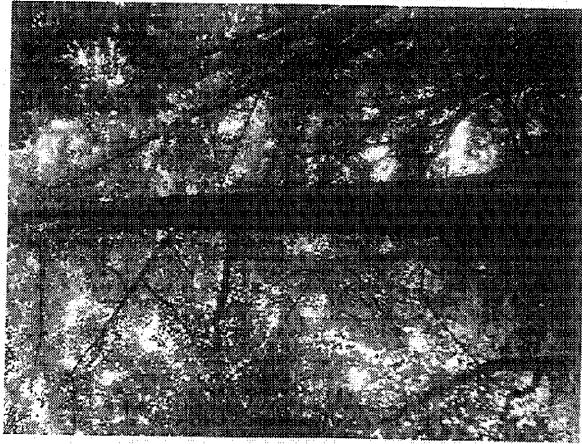


Terracing (recalling the Veirs Mill grounds) and contrasting the woods with mass installations of native plants, perennials, shrubs and ornamental grasses, in sweeping geometries, that relate to the sweeping curves of the bridge, could offer an interesting counterpoint to the naturalized landscape, providing seasonal color, fragrance and habitat.



Below left, many plants are drought tolerant and attract butterflies.

Below right, a median that illustrates an innovative plant palette of perennial flowers, shrubs native and ornamental grasses. Feature plant installations like this could be employed at the bridge entries. Also, ornamental grasses could be installed en masse to suggest a mill pond. A commemorative water wheel could be fabricated to celebrate Veirs Mill. The Veirs Mill overshoot wheel was 9' in diameter. This could provide an interesting focal point for an interpretive display about the mill.



Top left, a tree along the alignment of the Rock Creek Trail Bridge. A possible use for the trees that must be removed from the alignment, is to recycle them into benches for Rock Creek Trail Bridge and Trail. Additionally, these benches could be identified, each with a pictorial label, illustrating the leaf pattern, seed, and name of the particular tree type. The benches could be similar to those created for Mount Rainier's *Walk of the Patriots*. Perhaps these benches could be fabricated by the Parks Department carpenters for the project.

Top right, a rock dome seat, in Mount Rainier National Forest. Special features such as this dome seat, could be incorporated at a neighborhood entry to the Rock Creek Trail Bridge, adding a place to reflect and rest.

Below left, wood benches from Mount Rainier National Forest, *Walk of the Patriots*.

Below right, wood benches from Mount Rainier National Forest, *Walk of the Patriots*.

APPENDIX

Left, Map of Mills in Montgomery County, 1783-1800. Unfortunately, very little documentation describes Veirs Mill, specifically. We do know that mills were very important to the early prosperity of Montgomery County, and Veirs Mill was a prosperous merchant mill that operated for 89 years.

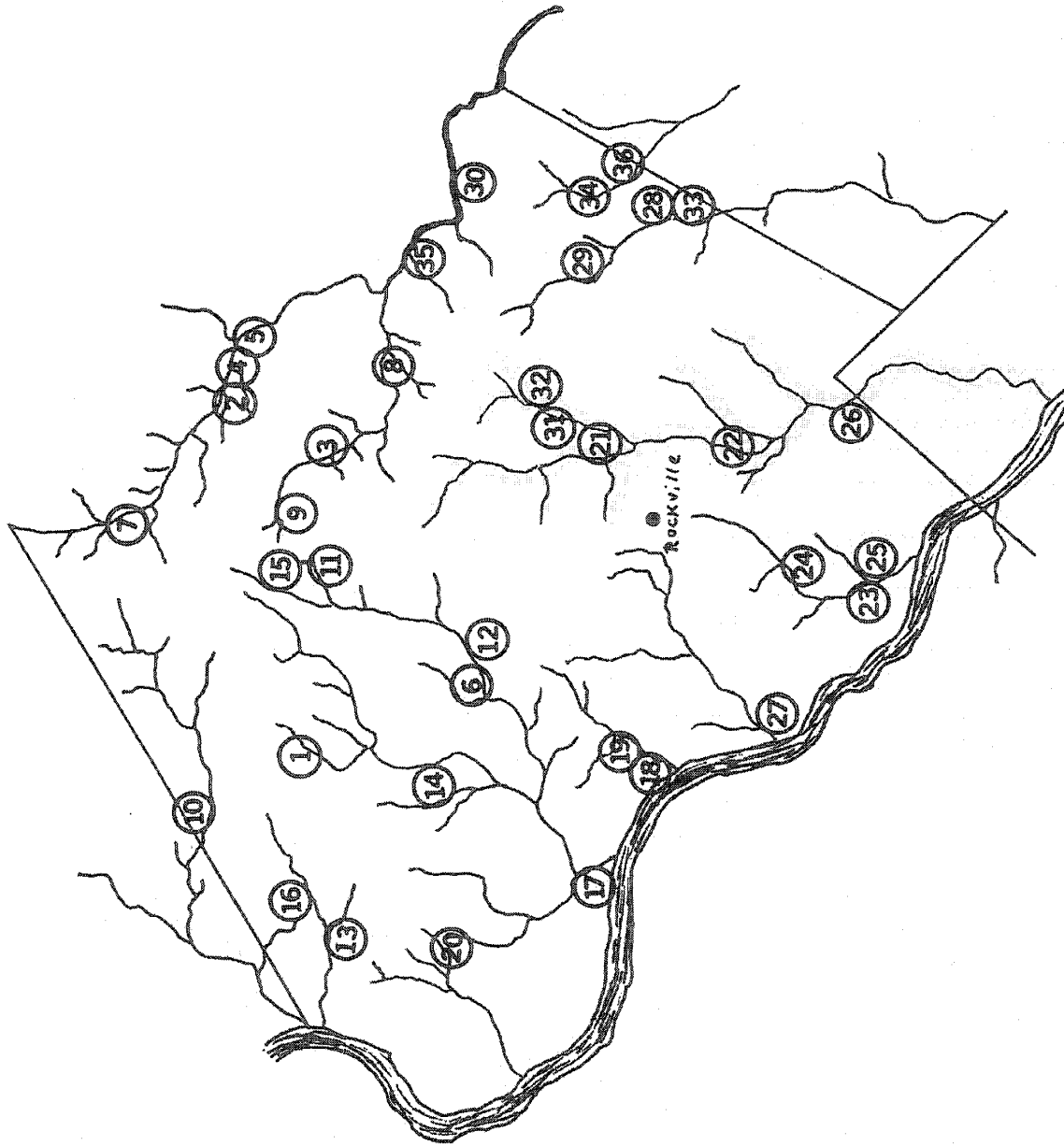
Samuel Clark Veirs purchased the property for Veirs Mill in 1838. The mill, along with the Veirs house, Meadow Hall, overlooking Rock Creek, was a landmark in its day. The property featured terraced grounds. Remnants of these terraces are still visible near the mill site.

"The Rockville Flour Milling Company, as advertised in 1880, sold flour under the brand name of Veirs Family and Bouquet. The 1880 census listed Veirs and Bro. Mill as worth \$230,000, with 14 employees and a 100 bushel per day capacity. The mill was driven by an overshot wheel nine feet broad which rated at 30 horsepower."

Rockville Newsletter, June 18, 1975

This map precedes Veirs Mill, but it does illustrate the wealth of mills in the area. Most likely, Veirs Mill is located somewhere near Mill 22: Bersheba/Dann/Newport Mills.

This map is courtesy of the Montgomery County Story: Early Water Mills in Montgomery County, by Eleanor M.V. Cook.



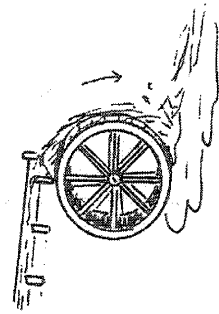
Mills in Montgomery County 1783-1800



Top, another map of Montgomery County Mills. Veirs Mill is marked in yellow.

Bottom, an illustration with text on mill wheels, excerpted from The Montgomery County Story.

As the population and agriculture increased, there was a demand for mills of greater capacity. A dam was built to provide a more reliable source of water power and to allow the use of an overshot wheel, which was far more efficient than the undershot. The paddles of an overshot wheel were formed into buckets and when the water struck the upper blades it turned the wheel not only by the force of the water but by the force of gravity as the water in the buckets fell.³ While there were other types of wheels, flutter wheels, breast wheels and turbines, it is overwhelmingly the overshot wheel that is mentioned in Montgomery County records.





Mrs. Wootton's Mill

Photo courtesy of the Columbia Historical Society

This article is another in a series of articles about Rockville's past brought to you by the Rockville Bicentennial Commission.

This article was written by Robert Braunberg, who has been involved locally in industrial archeology for a number of years. The Montgomery County Historical Society quarterly, THE MONTGOMERY COUNTY STORY, will soon carry a more extensive discussion of this topic by Mr. Braunberg. He gratefully acknowledges the assistance of Michael F. Dwyer (Maryland-National Capital Park and Planning Commission), John W. McGrain (Montgomery County, Maryland), Robert Truxer (Columbia Historical Society), and the Montgomery County Historical Society library.

The local mill was vital to American agrarian life in the 17th, 18th, and early 19th centuries. Before the revolution, there were virtually no large industrial centers in America. Even iron was made locally in small furnaces located anywhere that the raw materials could be obtained. Just as settlement patterns

followed the establishment of transportation networks, the locations of towns in early Maryland were often determined by the presence of suitable mill sites on creeks and rivers. Aside from animals, wind and water were the only prime movers available to the colonists. Milling grains were vital to the diet, and transportation was poor at best until well into the 19th century. The grains grown locally had to be milled locally.

Within a six-mile radius of the Courthouse in Rockville, there are recorded the sites of eleven grist mills. Here, on the Piedmont, water mills were the rule. On Maryland's Coastal Plain, where there are no waterfalls, wind mills were constructed.

Of the eleven mills mentioned only two were operated on the undershot principle. In undershot operations, the flow of the stream under the wheel caused it to turn. One such mill, Bowie's Mill, the mill nearest the headwaters of Rock Creek, was located where Bowie's Mill Road

crossed the creek, and was probably built by Jeffrey Magruder before 1786. The undershot wheel mill was located in the area of the mill by Lake Park and was built by Joseph Egar before 1772. Egar and his brothers originally from Poledet, Phila, constructed several mills on their Millen Farm and in the neighboring area. Egar probably built the Muncaster Mill, for example, about 1820 and gave it a 15 foot diameter overshot wheel. Most 19th century mills were powered by overshot wheels, in which the weight of water conducted through the race to the top of the wheel caused it to turn with about three times the efficiency of an undershot wheel.

The two mills closest to Rockville are good examples of the two different types of mill that were operated. Mrs. Wootton's saw and grist mill was a local or custom mill. Custom mills were small. They ground the owner's grain and, upon the payment of a toll, that of his neighbors. Typically such mills had but one run of stones and were sometimes located on streams of such trifling flow that one wonders how they could induce any sort of wheel to turn. One answer was that the miller saved water behind his dam at night to have enough to run the mill during the day. In addition to the single run of stones, such a mill would have an up-and-down saw out back and operation would be seasonable at best. Wootton's Mill may have been built as early as the 1770s - there is a somewhat cryptic reference to a mill that might be this one in a document dated 1778. Wootton's Mill is described in the (Rockville) Maryland Journal of July 31, 1844, as to be offered for auction on September 27 of that year. It is shown on Matlene and Boyd's map of 1855 as located on Wally Branch at a 100 yd wide road.

28. The accompanying photograph is from the collection of the Columbia Historical Society shows what we have come to expect as typical of such mills throughout this

area. The second class of mills is represented by the Rockville mill, which was built by a merchant mill built by Wally's son about 1800. The mill, which overlooked the creek, was a landmark in the area. Merchant millers were in the business full time and located their operations on streams that could be counted upon to turn their wheels most of the year. They did custom milling, and they also bought grain from local growers and sold flour. The Rockville Flour Milling Company, as advertised in 1880, sold flour under the brand name of Veirs Family and Bouquet. The 1880 census listed Veirs and Bro. Mill as worth \$230,000, with 14 employees and a 100 bushel per day capacity. The mill was driven by an overshot wheel nine feet broad which rated at 30 horsepower.

After the coming of the railroad in 1873, the improved transportation opportunities made the local mills less of a necessity. Some millers improved their efficiency by converting their water powers to turbines; others such as Bowie's went to steam power. Few were able to effectively meet the competition of large regional milling centers far into the 20th century.

The other mills within a six mile radius of Rockville were Glenwood on Muddy Branch at Turkey Foot Road, Belt's Old mill at the mouth of Watts Branch, Belt's Mill at Seven Locks Road at Democracy Boulevard (on Cabin John Creek), Magruder's Fully on Cabin John Creek at River Road, Wally's on Rock Creek at Avery Road, Muncaster's on Rock Creek at Muncaster Mill Road, Wootton's grist mill on Piney Branch near Glen Road, and two ancient (and to date unlocated) sites of Elias Mills on Rock Creek between Horner's and Muncaster's mills.

Rockville Newslet
June 15, 1975

Left, an article, from the Rockville Newsletter, June 18, 1975, which features a story on early Rock Creek mills, including several paragraphs about Veirs Mill.

Rock Creek Pedestrian Bridge -- No. 048703

Category **M-NCPPC**
 Agency **M-NCPPC**
 Planning Area **Aspen Hill**
 Relocation Impact **None.**

Date Last Modified
 Previous PDF Page Number
 Required Adequate Public Facility

September 5, 2003
 NONE
 NO

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY02	Remain. FY02	Total 6 Years	FY03	FY04	FY05	FY06	FY07	FY08	Beyond 6 Years
Planning, Design and Supervision	1,025	0	0	1,025	0	0	300	250	325	150	0
Land											
Site Improvements and Utilities	4,486	0	0	4,486	0	0	0	0	3,140	1,346	0
Construction	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	5,511	0	0	5,511	0	0	300	250	3,465	1,496	0

FUNDING SCHEDULE (\$000)

TEA-21	2,243	0	0	2,243	0	0	0	0	1,570	673	0
G.O. Bonds	3,268	0	0	3,268	0	0	300	250	1,895	823	0

ANNUAL OPERATING BUDGET IMPACT (\$000)

DESCRIPTION

The Rock Creek Hiker-Biker Trail extends 15 miles from Beach Drive at the District of Columbia line to Lake Needwood in Rock Creek Regional Park. The trail currently crosses Veirs Mill Road at grade at its signalized intersection with Aspen Hill Road. To the north of Veirs Mill Road, the trail is on street for approximately 0.2 miles traversing Aspen Hill Road, Adrian Street, Baltic Avenue, and finally the access drive to Aspen Hill Local Park before continuing northward as a trail.

The proposed pedestrian bridge would provide a grade separated crossing for the Rock Creek Hiker-Biker Trail over Veirs Mill Road and remove the need for the on street section described above. It would also provide the opportunity for local residents of the Aspen Hill community to cross Veirs Mill Road on the bridge to access bus transit or other destinations without crossing at grade at the busy intersection of Veirs Mill Road and Aspen Hill Road.

The project includes a 28-foot high stair tower on the south side of Veirs Mill Road to access the elevated bridge structure. It is envisioned that residents of Aspen Hill will use the stair tower to access relocated transit stops via the pedestrian bridge as opposed to the at-grade intersection of Aspen Hill Road and Veirs Mill Road.

The frequency of use of the stair tower will depend on pedestrian's choice between a more direct route involving crossing at-grade at a busy intersection vs. a grade separated crossing involving a more circuitous route and climbing stairs.

JUSTIFICATION

The 15-mile Rock Creek Hiker-Biker Trail is one of the most popular trails in the Washington metropolitan area. A section of the trail near the Aspen Hill Road/Veirs Mill Road intersection is discontinuous, relying on local streets within the Aspen Hill community to access the present trail termini. Further, this route requires trail users to cross Aspen Hill Road at an unsignalized crosswalk and cross Veirs Mill Road at a signalized crosswalk. Trail users encounter high levels of vehicle traffic when using both crosswalks, which are also used by transit users accessing and transferring between adjacent WMATA and County Ride-On bus stops.

On February 13, 2001, the County Council adopted Resolution 14-773 pertaining to the improvement of Veirs Mill Road/Aspen Hill intersection. Listed among the County Council's recommendations was "accommodation of a potential Rock Creek Hiker-Biker Trail bridge over Veirs Mill Road. The Council will seek State funding for this pedestrian/bicycle bridge."

Plans and Studies

The Planning Board approved the facility plan on September 11, 2003.
 Aspen Hill Master Plan, approved 1994.
 Countywide Plan of Trails, approved 1998.

Specific Data

Design

STATUS

The Maryland Department of Transportation (MDOT) is currently awaiting reauthorization of the six-year federal surface transportation legislation, currently known as TEA-21, that expires September 30, 2003. As early as Fall 2003, MDOT may invite submission of new project proposals for review and consideration for Transportation Enhancement Program (TEP) funding. Matching funds must be committed and documented in the local jurisdiction's budget prior to approval of TEP funding. The TEP application requires evidence that preliminary design has been completed and that the County Council has approved funding for the project.

APPROPRIATION AND
EXPENDITURE DATA

Date First Appropriation	FY03	(\$000)
Initial Cost Estimate		0
First Cost Estimate		
Current Scope	FY03	0
Last FY's Cost Estimate		0
Present Cost Estimate		5,511
Appropriation Request	FY04	0
Supplemental Approp. Req.	FY03	0
Transfer		0
Cumulative Appropriation		0
Expenditures/ Encumbrances		0
Unencumbered Balance		0
Partial Closeout Thru	FY01	0
New Partial Closeout	FY02	0
Total Partial Closeout		0

COORDINATION

Facility Planning: Non-Local Parks PDF 958776
 Trails: Hard Surface Design and Construction PDF 768673
 Montgomery County Department of Transportation
 State of Maryland Department of Transportation

MAP

Projects must be advertised for construction within 18 months of the letter notifying the sponsor that funding has been awarded or the TEP funds may be withdrawn.

OTHER

The Public Arts Trust of the Arts and Humanities Council identified this project as an ideal project for incorporation of public art. The trust funded \$10,000 to include an artist on the design team during the facility planning phase.