

September 13, 2002

MEMORANDUM

TO:

Montgomery County Planning Board

VIA:

Donald K. Cochran, Director of Parks

Michael F. Riley, Acting Chief, Park Development Division

Douglas Alexander, Design and Project Management Supervisor

FROM:

Patricia McManus, Landscape Architect Am

SUBJECT: Facility Plan for Cherry Avenue Pedestrian Access to Sligo Creek Hiker-

Biker Trail

RECOMMENDATION

Staff recommends approval of the facility plan and Option 4e.

PROJECT DESCRIPTION

The City of Takoma Park and the community requested a trail connection in 1999 from Cherry Avenue to the Sligo Creek hiker-biker trail to serve approximately twenty-five homes on Cherry Avenue and Colby Avenue. This connection is consistent with recommendations in the Approved and Adopted Takoma Park Master Plan, dated December 2000, which specifically cites this trail connection (on page 89) as an example of a neighborhood route that should be connected. Attachment A is a vicinity plan of the area. Residents currently reach the trail by three possible routes. They walk 330 feet west on a narrow, unprotected road shoulder along the north side of Sligo Creek Parkway to reach an existing trail connection at Aspen Avenue. An alternative route to reach Aspen Avenue and the existing trail connection is to climb a small hill at Cherry Avenue and cut through the parking lot of an apartment complex. The third route is to walk down a very steep path at the end of Colby Avenue to reach Hayward Avenue, where one must cross Sligo Creek Parkway and walk north on the road shoulder to reach another trail connection at Heather Avenue.

The Commission included \$11,000 in the FY 2000 budget to study the feasibility of this trail connection. Staff conducted the feasibility study and developed five options for a safe trail connection, which were presented to the community on March 20, 2001 and

were discussed in a City Council work session on April 2, 2001. One of the proposed options was to develop a sidewalk connection from Colby Avenue to Aspen Avenue through an existing public right-of-way. Prior to conducting the feasibility study, the Commission included \$30,000 in the FY 2002 budget for construction of a sidewalk through the right-of-way, based on the assumption that this would be a viable option. Attachment B shows existing pedestrian routes to the Sligo Creek trail, as well as the option through the public right-of-way.

FACILITY PLAN STUDY

The City of Takoma Park funded and conducted this facility planning study to expedite the process for design and construction of the trail. The City's consultants, Lardner/Klein Landscape Architects, P.C., prepared the attached facility plan (Attachment C) with the involvement of the neighborhood, the City of Takoma Park staff and City Council, and Commission staff. As the City of Takoma Park proceeded to develop options during facility planning, the trail option through the right-of-way was not favored by the community and was ultimately eliminated because of the negative impact that would be created for two residences on Aspen Avenue due to the close proximity of the trail.

The final facility plan includes four options for access to the Sligo Creek hiker-biker trail. The options and cost estimates are described below. The preliminary cost estimates were based on conceptual drawings and did not include all of the project costs, such as administrative costs, contingencies, permitting and construction management costs, but they demonstrate the magnitude of cost difference between the four options. Revised estimates, which include all project costs, were prepared for Options 2 and 4, based on more detailed design drawings.

Option	Description	Preliminary Estimate	Revised Estimate
Option 1	High pedestrian bridge extending over Sligo Creek Parkway and Sligo Creek from hillside of apartment complex near Cherry Avenue	\$475,000	Not revised
Option 2	Low pedestrian bridge over Sligo Creek, new crosswalks at Cherry Avenue, realignment of Sligo Creek Parkway to the south, and traffic calming measures on parkway	\$250,000	\$404,260
Option 3	240-foot boardwalk on the north side of Sligo Creek Parkway to connect to the trail at Aspen Avenue and traffic calming measures on parkway	\$318,000	Not revised
Option 4	330-foot sidewalk and 150-foot retaining wall on the south side of Sligo Creek Parkway to connect Cherry Avenue to Aspen Avenue and traffic calming measures on parkway	\$132,000	\$293,300

The City Council of Takoma Park formally accepted the facility plan and endorsed Options 2 and 4, as stated in the City's letter of February 8, 2002 (Attachment F.) The neighborhood prefers design Option 2. Commission staff reviewed the four options during the Plan Review Committee meeting on March 12, 2002. Staff preferred Option 4, because it was the lowest cost option with the least environmental impact. Environmental impacts of Option 4 are limited to some tree removal and tree root disturbance to construct the walkway and retaining wall, as well as an increase in Option 4 does not create floodplain obstructions or major impervious surface. changes to Sligo Creek Parkway that would be required with some of the other options. The options were presented to the Interagency Wetlands Coordinating Committee on March 18, 2002. The Committee indicated that the low bridge and boardwalk options (Options 2 and 3) would create obstructions in the Sligo Creek floodplain and that Option 2 was unlikely to be approved, especially given the close proximity of two other existing pedestrian bridges at Aspen Avenue and Heather Avenue. The Committee recommended Option 4 with the use of special structures on storm water outfall pipes to improve water quality.

The design for Option 4 was refined to respond to staff comments from the Plan Review Committee, comments from the Interagency Wetlands Coordinating Committee, and traffic safety recommendations that are currently being implemented as part of the Sligo Creek Parkway Speed Management Plan. The recommended revised option, which is Option 4e, includes the following elements:

Recommended Revised Option 4e

- Five foot clear width asphalt walkway, which narrows to four foot width in front
 of the retaining wall, and is designed to comply with requirements of the
 Americans with Disabilities Act
- Four foot maximum height stone faced retaining wall, consistent in appearance with existing stone walls and bridges throughout the Sligo Creek Parkway corridor
- Curb along road edge to minimize width of walkway and intrusion into the adjacent wooded slope
- Two-sided guardrail for pedestrian safety (exact design will be determined during the detailed design phase of the project)
- Three speed tables on Sligo Creek Parkway with associated signs, spaced approximately 500-700 feet apart in the vicinity of this project (exact locations will be determined by transportation planning staff during the detailed design phase of the project)
- Landscaping of trees, shrubs and groundcovers to repair and enhance areas disturbed by construction
- Drainage and utility improvements, including storm water attenuators at outfall areas for treatment of storm water quality

The construction of this project will require acquisition of easements from two neighboring property owners. The City of Takoma Park agreed to contact the property owners and acquire the easements for this project, as stated in their letter of August 1, 2002 (Attachment H.) City staff has stated that both property owners have been contacted and are agreeable to negotiating easements for the project.

PROJECT FUNDING AND SCHEDULE

The proposed cost for Option 4e, including design, permitting, construction, and construction management costs is \$293,300. Staff will continue to hold \$30,000 for this project from the FY 2002 PDF for Trails: Hard Surface Design and Construction. Staff intends to request full funding for this project in the FY 2005–2010 trails program, with a tentative recommendation for funding in FY 2007-2008, which is the earliest opportunity available following existing trail project commitments. Attachment I is an outline of prioritized major trails project commitments with an estimated timeline for funding. The attachment also includes a list of trail connector projects that have not vet been prioritized. These projects will be included in the Trail Connector Analysis. which will be presented to the Planning Board this winter for inclusion in the FY 2005-2010 Capital Improvements Program. A recommendation for the Cherry Avenue trail connection will be included in this analysis, and the Planning Board will have an opportunity to review the priority of the project at that time. Staff recommends that this project be given consideration in the schedule, because of the effort and cooperation that has been put forth by the City of Takoma Park to expedite the project. Attachments D and F are letters from the City Manager of Takoma Park requesting funding for the project at the earliest possible time. Attachments E and G are responses to these letters from the Montgomery County Planning Board Chairman.

The City of Takoma Park is aware that this project will need to compete for funding with other County trail projects. The City may seek grant funding for design and construction of the project. If a grant for this project were successful, it would be the intention of Commission staff to request escalation of the project priority in the trails program or request a separate PDF for matching funds for the project.

CONCLUSION

Staff recommends approval of the facility plan and Option 4e. The project is recommended for inclusion in the FY 2005-2010 Capital Improvements Program. A recommendation for the priority of the project will be included in the Trail Connector Analysis, which will be presented to the Planning Board this winter for consideration. A tentative recommendation is proposed for design and construction in the FY 2007-2008 Capital Improvements Program.

ATTACHMENTS

Attachment A: Vicinity Plan

Attachment B: Existing Access Routes Attachment C: Facility Plan Report

Attachment D: Letter from Richard M. Finn, April 26, 2001

Attachment E: Letter of response from William H. Hussmann, May 14, 2001

Attachment F: Letter from Richard M. Finn, February 8, 2002

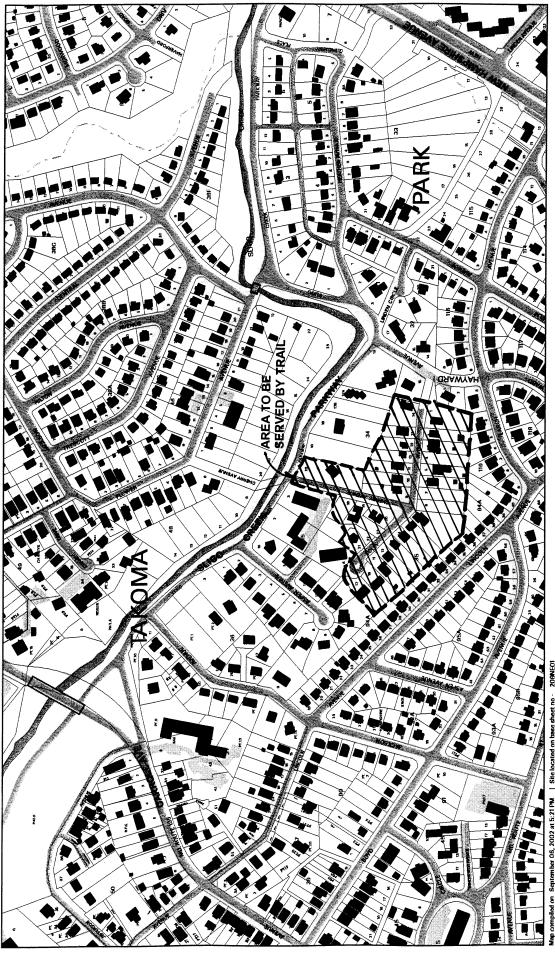
Attachment G: Letter of response from Arthur Holmes, Jr., March 4, 2002 Attachment H: Letter of understanding from Richard M. Finn, August 1, 2002

Attachment I: Hard Surface Trails Program

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VICINITY MAP FOR

CHERRY AVENUE ACCESS TO SLIGO CREEK TRAIL



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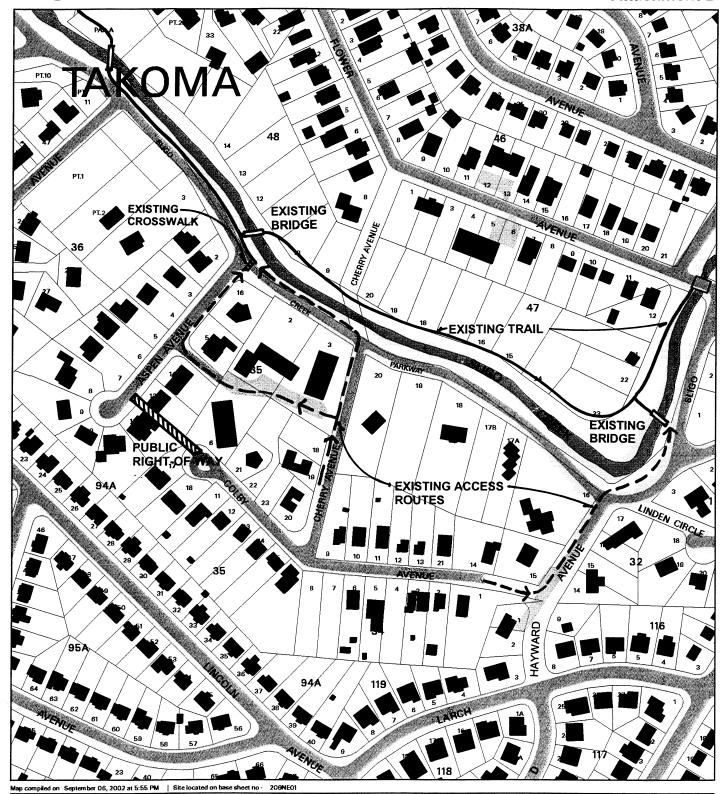
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FACILITY PLAN



CHERRY AVENUE PEDESTRIAN ACCESS TO SLIGO CREEK HIKER-BIKER TRAIL

prepared for:
The City of Takoma Park
and
The Maryland National Capital Park and Planning Commission

prepared by: Lardner/Klein Landscape Architects, P.C. in association with Daniel Consultants, Inc.

PLANNING BOARD DRAFT: September 2002

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FACILITY PLAN

CHERRY AVENUE-SLIGO CREEK HIKER/BIKER TRAIL PEDESTRIAN ACCESS

prepared for:
The City of Takoma Park
and
The Maryland National Capital Park and Planning Commission

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PLANNING BOARD DRAFT: September 2002

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Note: Appendices are available for review by contacting Ivy Thompson at the City of Takoma Park (301-270-5900 x270)

Executive Summary

When the Sligo Creek Hiker/Biker Trail was constructed, an access was not provided at Cherry Avenue. Many residents use the very narrow road shoulder between Sligo Creek Parkway and Sligo Creek from Cherry Avenue to the existing bridge at Aspen. They can also reach Aspen road by going through private land on an apartment complex's parking lot. There are more than 6000 vehicles per day travelling along the Parkway, often at speeds far exceeding the posted 25 mph speed limit.

Prior to unification with Montgomery County (1997), money was allocated for access to the Trail and included into the budget of the Prince George's section of M-NCPPC for upcoming years. Following the unification, the money previously allocated for development of the access was not transferred to Montgomery County's M-NCPPC budget.

Recently, several public hearings were held by the City Council and M-NCPPC to discuss the issue. On March 20, 2001, M-NCPPC and City Staff conducted a public meeting to discuss options for safe access. Five options were presented including a bridge at Cherry Avenue and various options for a safe pathway connecting to the existing bridge at Aspen.

The City of Takoma Park agreed to fund the cost of a more detailed Facility Plan to speed up the process for providing safe access to the Sligo Creek Hiker/Biker Trail from Cherry and Colby Avenues. The plan was developed by consultants with the continued involvement of the neighborhood, the City of Takoma Park staff and City Council, and with M-NCPPC staff.

The City of Takoma Park recommended two options for providing safe and permanent access to the Sligo Creek Hiker/Biker Trail:

- installation of a pedestrian bridge at the base of Cherry Avenue (the "low bridge" option preferred by the neighborhood);
- construction of a foot path on the south side of and adjacent to Sligo Creek Parkway.

Both options require traffic calming measures to slow the operating speeds of vehicles to the posted speed of 25 miles per hour.

M-NCPPC staff recommended the south side footpath with the addition of a guardrail and barrier curb between the foot path and travel lane. The recommendations are consistent with the Takoma Park Master Plan that calls for a system of sidewalks and paths to connect neighborhoods to important community destinations, specifically referencing the Colby and Cherry Avenue connection to Sligo Creek Trail as an example (p. 89).



Lardner/Klein Landscape Architects, P.C. and Daniel Consultants, Inc.

The purpose of the project is to study the feasibility of installing a bridge connector at Cherry Avenue or a surface crossing with associated traffic calming measures on the Sligo Creek Parkway to provide access to the Sligo Creek Hiker Biker Trail.

Figure 1 Looking north from Cherry
Avenue towards Sligo Creek
Parkway. The Sligo Creek
Hiker/Biker trail is north of
the road and the creek. There
is no place to walk west
along Sligo Creek Parkway to
get to bridge at Aspen Avenue
connecting to the Trail.

Facility Planning Process

A Facility Plan is the next step in M-NCPPC's facility design process. The creation of a Facility Plan for the Cherry-Sligo Pedestrian Access project included the following steps:

- 1. Inventory and evaluate existing conditions
- 2. Define who will be using the facility
- 3. Identify and evaluate Alternatives (with neighborhood, City Council and M-NCPPC staff)
- 4. Select and refine a Preferred Alternative (with neighborhood, City Council and M-NCPPC staff)
- 5. Prepare the Facility Plan and review it with M-NCPPC
- 6. Prepare preliminary design drawings (30% plans) and a revised statement of probable cost

An informal meeting was held with neighborhood residents to review the preliminary atternatives. This was followed by a work session with Takoma Park's City Council, and review by M-NCPPC staff and the County's Interagency Wetland Coordinating Committee to formulate a recommendation for the Facility Plan for review and action by the Planning Board.

Key Issues

The area to be served by the Cherry-Sligo pedestrian connection project includes the residences along Colby Avenue and Cherry Avenue. The primary issues that need to be addressed include:

- The cost, environmental impact, and feasibility of constructing a pedestrian bridge at the base of Cherry Avenue, especially the feasibility of shifting the alignment of Sligo Creek Parkway southward to make room for a landing.
- The cost, environmental impact, and feasibility of constructing a pedestrian trail linking Cherry Avenue with the existing crossing at Aspen Avenue between Sligo Creek and Sligo Creek Parkway (or alternatively a pathway on the south side of the Parkway).
- The safety and potential effectiveness of installing traffic calming measures (speed tables or raised intersections every 200-300 feet) along Sligo Creek Parkway to slow drivers to less than 25 mph- making it safer to cross the street at the existing crossing.

Figure 2 -Looking west from Cherry Avenue intersection with Sligo towards the existing

In addition to pedestrian and vehicular safety, a number of other key issues must be evaluated to compare the alternatives:



Lardner/Klein Landscape Architects, P.C. and Daniel Consultants, Inc.

- Preservation of existing trees and streamside habitat.
- The impact of any required fill sections within the floodplain of Sligo Creek Parkway.
- Costs associated with relocating overhead utility lines and underground sanitary, gas, water and storm sewer lines.
- Considerations of the neighbors and users of the Sligo Creek Trail.

Existing Conditions

The existing conditions found along the study area constrain each of the options and potentially increase the cost of construction:

- Any fill within the floodplain must be minimized to avoid further constricting the flood flows along Sligo Creek. Sligo Creek Parkway is within the floodplain.
- The streambank area between Sligo Creek Parkway and Sligo Creek is considered wetland which provides important habitat and shades the stream.
- The adjacent slopes to the south of Sligo Creek Parkway are extensively wooded and are considered a stream buffer area. Tree removal should be minimized.

Figure 3 -Aerial photograph showing extent of tree cover along Sligo Creek and Sligo Creek Parkway in the vicinity of the project area.

Natural Resource Inventory (Step 1)

Step 1 of the Natural Resources Inventory (NRI) was prepared for the project based on the "Environmental Guidelines (1997): Guidelines for Environmental Management of Development in Montgomery County."

DATA COLLECTION

Geographic information system (GIS) data was obtained from M-NCPPC, the Maryland Department of Natural Resources, and the Natural Resources Conservation Service to produce a National Resource Inventory map (Figure 1) at 1:2400 scale (1"=200'). Current GIS data availability for the City of Takoma Park varies since the study area used to be located primarily in Prince George's County, but is now in Montgomery County.

- SOILS: Digital soils data was obtained from the Soils Survey Geographic Data Base (SSURGO) of the Natural Resources Conservation Service (NRCS). SSURGO data is available for selected counties and areas throughout the United States and its territories. SSURGO data is not yet available for that portion of Takoma Park formerly part of Prince George's County. The Prince George's County Soil Survey was examined to verify that soil conditions were similar for the former Prince George's County section of the study area.
- FLOODPLAIN: The 100-Year-Floodplain for Sligo Creek falling south of the former county line has been mapped on the NRI. This floodplain

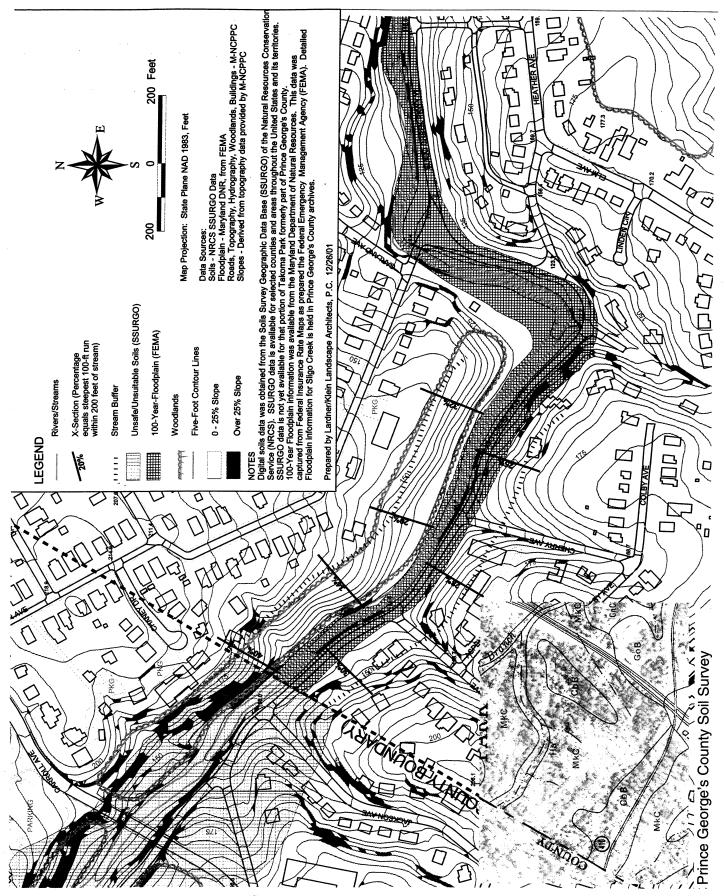


Figure 4 - Natural Resource'Inventory Map (Step 1)

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information is based on FEMA data distributed by the Maryland Department of Natural Resources. Detailed floodplain information is held in Prince George's County archives. The DNR notes that the FEMA data has been designed to support planning activities, some Community Rating System (CRS) activities, insurance marketing. and mortgage portfolio review. It does not provide base flood elevation information and has limited application for engineering analysis, particularly for site design. Floodplain mapping and



HEC-2 output file for the study area formerly located in Prince George's County was obtained from Prince George's County from the Anacostia River Watershed Study (1993)

A. STREAMS AND 100 YEAR FLOODPLAINS

All streams are shown with aqua color lines on the NRI map (Figure 4). Locations of streams were provided by M-NCPPC. Sligo Creek is a Perennial stream classified along its entirety as "USE I: Water Contact Recreation and Protection of Aquatic Life."

The 100-year floodplain is shown on the NRI map (Figure 4) with blue cross-hatching. In the vicinity of Cherry and Aspen Avenues, the creek's 100-year floodplain includes Sligo Creek Parkway and the lower portion of the hillside.

B. STREAM BUFFERS

Recommended buffer widths for the classification category (USE I) of Sligo Creek were determined by taking representative 200-foot cross sections and measuring the steepest 100' run for slope. The recommended minimum stream buffer for Sligo Creek is shown in a thick dashed line. Most of the cross sections measured a 100' slope run of over 25%, so the majority of the stream buffer is 150-feet wide (see Topography, below).

C. TOPOGRAPHY

M-NCPPC provided five-foot contour intervals for the project area, displayed as brown lines on the map. To calculate slope, the contour lines were converted to a triangulated surface (TIN) in the GIS. Steep slopes (slopes equal or greater than 25%, as defined in the "Guidelines") have been highlighted in red.

D. WETLANDS

Field observations confirmed that areas within the immediate stream environment (the shoreline of the stream and immediately adjacent streambank) possess the characteristics of regulated wetlands. Digital data

Figure 5 Typical streambank conditions between the Parkway and the Creek. A low bridge could be placed between trees with minimal disturbance to the vegetation and streambank.

(National Wetlands Inventory) was not available for this area, and therefore are not shown on the NRI map. These areas will be avoided to the extent practicable in each of the alternatives.

E. FOREST AND TREES

Natural forest and tree cover areas have been provided by M-NCPPC and are indicated by green outlines. The upland area north of Sligo Creek between the horseshoe bend and Carroll Avenue is also forested, as indicated on the air photo (Figure 3, page 3). Mature trees (8" or greater dbh) were surveyed in the field and are shown on each of the alternative drawings.

Alternatives are designed to minimize the amount of tree cover and mature trees to be removed to the maximum extent practicable.

F. UNSAFE AND UNSUITABLE LAND (SOILS)

Digital soil information was unavailable for the vicinity of Aspen and Cherry Avenues (see note on page 3). However, a review of the hard copy of the Prince George's County Soil Survey indicate that a wide band of unsafe and unsuitable soil lies on either side of Sligo Creek. This band varies from approximately 100 to 300+ feet on either side of the creek.

Soils along the floodplain in the study area are identified as Hatboro silt loam (Ha) soil type and are described in the Prince George's County Soil Survey as:

"poorly drained silt loam on flood plains; consists of recent alluvium weathered from crystalline rock; 6 to 20 feet or more to bedrock; 0 to 1 foot to seasonally high water table; subject to flooding."

Soils associated with the adjacent slopes to both the north and the south of the floodplain are identified as Manor Urban Land Complex, 8-15% slopes. These soils are characterized as:

"Well-drained to somewhat excessively drained soils that are loam throughout; thick saprolite substratum; 0 to 10' or more to bedrock; 5 feet or more to water table."

For planning purposes, the entire band of streambank and adjacent hill slopes should be considered as constrained by either the floodplain and high water table, or by the adjoining steep slopes. Alternatives should be designed to minimize the amount of disturbance to existing vegetated areas and to utilize areas adjacent to the road that have already been disturbed.

G. DANGER REACH/DAM BREAK ANALYSIS

This analysis is not applicable for this NRI since no dam is proposed on site, and the project site is more than one mile downstream of a dam.

H. THREATENED AND ENDANGERED SPECIES AND SPECIES IN NEED OF CONSERVATION

A review of available data indicates that no DNR sensitive species project review areas or DNR wetlands of special state concern are located in the study area.

Design Users

The primary purpose of the connection is to provide safe pedestrian access to the Sligo Creek Hiker/Biker Trail for residents living along Colby and Cherry Avenues. Currently residents have to walk along the shoulder without pathway, curb, or guardrail protection from moving vehicles traveling at far greater speeds than the posted speed limit. The most recent traffic data indicates that the average daily traffic count (ADT) is greater than 6,000 vehicles.



In order to minimize the impact on

the environment associated with the many constraints, it is assumed that the proposed access will be designed for pedestrians, not bicycles, and will meet Americans with Disabilities Act (ADA) standards. The pathway should be signed to direct bicyclists to dismount. If a bridge is constructed, however, it will be built to the same width as the existing Sligo Creek Trail bridges as the cost difference is minimal.

Figure 6 Existing Bridge just west of
Aspen. The bridge is 10'
wide.

Alternatives Considered

The following alternatives have been identified and evaluated based on initial direction provided by the City of Takoma Park:

- High Bridge Option at Cherry Avenue- avoiding all environmental constraints
- 2. Low Bridge Option at Cherry Avenue with a shift in the Sligo Creek Parkway alignment
- 3. Creekside Path crosswalk at Cherry Avenue, connecting to the existing bridge at Aspen by the path
- 4. Hillside Path pathway on south side of Sligo Creek Parkway, connecting to the existing bridge at Aspen

The original proposal for a low pedestrian bridge (Alternative 2) over Sligo Creek only, proposed by residents and initially examined by M-NCPPC staff as an option, assumed that the road would have to be moved over 5' to create enough room for a landing. Since the hillside also serves as a stream buffer, a high bridge alternative (Alternative 1) was examined that would not require extensive regrading of the hillside to move the road over, and therefore, to minimize the impact to the hillside and existing trees.

Prior to initiating the facility planning process, residents preferred a soft path between Sligo Creek and the Parkway (Alternative 3), if the low bridge proved infeasible. A fourth alternative (the Hillside path) was developed when it became apparent that there was not enough space to construct a soft path between the Creek and Parkway, and it would require the construction of a boardwalk.

Alternate 1:

High Bridge Over Sligo Creek Parkway, Sligo Creek and the Bike Trail

This bridge option would minimize grading to the maximum extent possible and bring the bridge completely out of the floodplain. The prefabricated bridge would be approximately 145-150 feet long and would have 15' clearance over Sligo Creek Parkway. A concrete deck and an 8' high safety fence are recommended by the manufacturer.

The bridge would have a 2% camber to reduce ramp requirements. The approach from the south side would be accomplished using a boardwalk connecting to Cherry Avenue approximately 100 feet south

EXTENSION RAMP BRIDGE LANDING BOARDWALK, 7' WIDE EASEMENT REQUIRED

of the intersection. An easement would be required from the owner of the Apartment building.

The approach from the North would be accomplished with a series of ADA accessible ramps within the existing Cherry Avenue right-of-way. A 5-foot wide asphalt pathway would connect down to the Sligo Creek Trail. Access from Flower Avenue to the Sligo Creek Trail could also be improved through the Cherry Avenue right-of-way.

This option completely separates the pedestrian and vehicular traffic, and therefore, would not require any modifications to the road. However, overhead utility lines would have to be either relocated or raised to provide enough clearance (minimum 10') for pedestrians underneath the electrical lines.

Figure 7 - Plan showing alignment of high bridge option (Alternate 1)

Alt 1: High Bridge Option

Alternate 2:

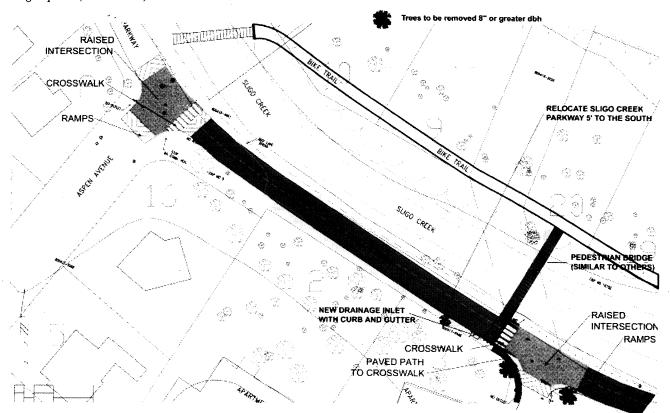
Low Bridge over Sligo Creek with Pedestrian Crossing at Cherry

The Low Bridge is the neighborhood preferred option prior to the development of the Facility Plan. The Low Bridge would be similar to the other pedestrian bridges over Sligo Creek (approximately 70 feet long and 10 feet wide— see Figure 6).

There is not enough room between Sligo Creek Parkway and Sligo Creek to provide adequate setback behind the guardrail to keep a vehicle from crashing into the bridge itself. In addition there is a need to create a 5' landing at each end of the bridge. Therefore, this option requires that Sligo Creek Parkway be realigned. The realignment would have to start east of Cherry Avenue and continue to just east of Aspen (a total distance of 320'). A utility pole may have to be relocated (or a jersey barrier placed in front to protect it). One manhole would have to be reset. A jersey barrier would be required for approximately 80 feet east of Cherry and 120 feet west of Cherry to keep from encroaching in the adjacent property owners. This is particularly crucial east of Cherry where a conservation easement has been recorded by property owners to limit disturbance. Alternatively a slope easement could be obtained to meet grade using a 2:1 cut and revegetating the cut with plants suitable for erosion control.

Pedestrian sight distances are limited by the dip and rise just east of Cherry Avenue (a distance of 140'). A car travelling at 25 mph would arrive at the crosswalk in 3.8 seconds. A car traveling 35 mph would arrive in 2.7 seconds. A person would need to walk 4 miles per hour to safely cross the street when a car travels 25 mph, and 5.5 miles per hour when a car travels 35 mph. Traffic calming measures that slow traffic approaching Cherry Avenue to the posted 25 mph speed limit would have obvious benefits. See page 14 for a description of recommended traffic calming measures.

Figure 8 - Plan showing alignment of low bridge option (Alternate 2)



Alt. 2: Low Bridge Option and Realignment of Sligo Creek Parkway

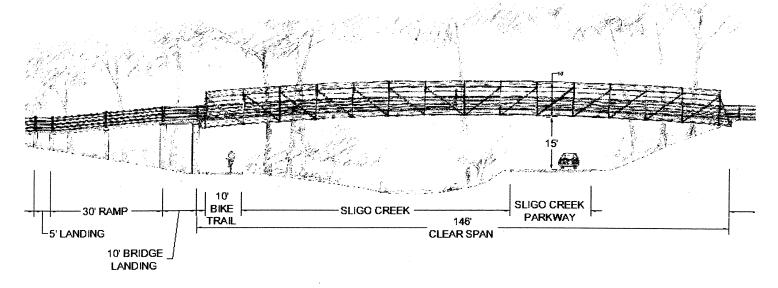


Figure 9 -Section showing scale and appearance of high bridge option (Alternate 1)

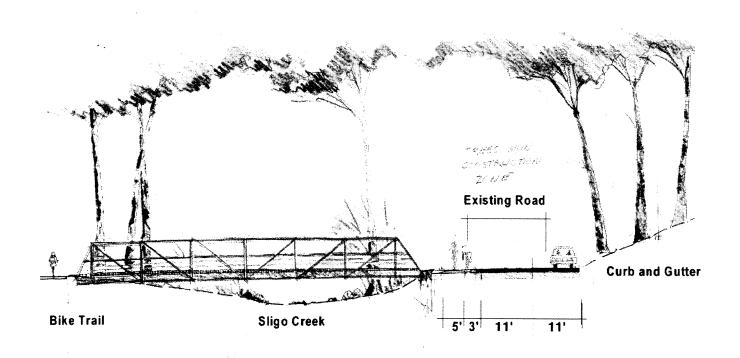


Figure 10 -Section showing scale and appearance of low bridge option (Alternate 2)

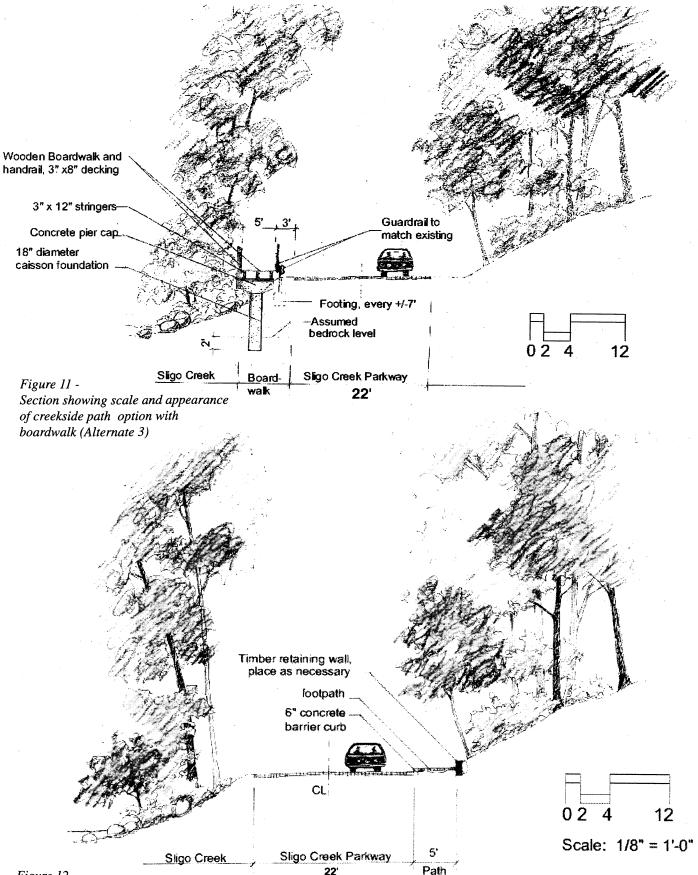


Figure 12 - 22 Path Section showing scale and appearance of hillside path option crossing at Aspen (Alternate 3)



Figure 13 - showing existing conditions.

Person is standing at a total of 7 feet back from the travelway

Alternate 3:

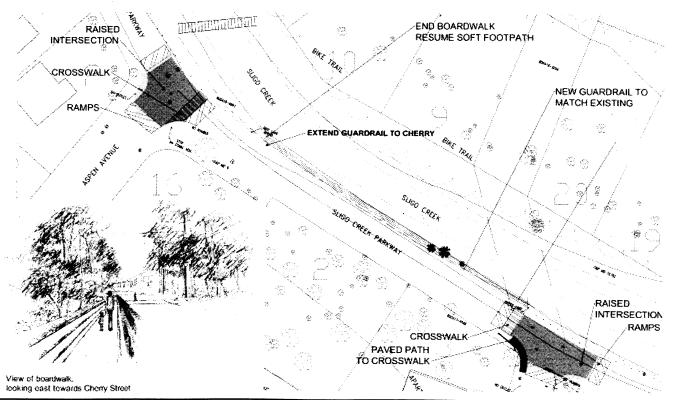
Soft Path Adjacent to Sligo Creek with Pedestrian Crossing at Cherry

A soft path between Sligo Creek and the Parkway was originally proposed as an alternate to the Low Bridge. There is not enough room at the edge of the road to construct the path. The person in the photograph is standing exactly 7 feet from the edge of the travelway. There is a 3-4 foot drop in elevation. This condition exists for approximately three-fourths of the distance between Cherry and Aspen.

Therefore, construction of the soft path would require either the road to be moved over, or a boardwalk to be con-

structed adjacent to the road. Moving the road over would require extensive regrading of the adjacent hillside to the south (similar to the Low Bridge Option). The minimum width required for a pathway adjacent to the creek would be a total of eight feet from the edge of the travelway—3' for the guardrail system, and five feet for the walk. The distance between the travelway and the streambank is less than the eight feet needed for three-fourths of the distance between Cherry and Aspen.

A boardwalk could be constructed on top of piers or caissons spaced between 15 and 18 feet apart. The deck would be supported by 3" x 12" stringers. A railing would be required adjacent to the stream side. The main issue is whether or not the boardwalk would impede the floodway. A detailed hydraulic study will be required to insure that any additional fill will not raise the 100-year floodplain elevation. A DNR waterway construction permit would be required.



Alt. 3: Creekside Path Option with Boardwalk

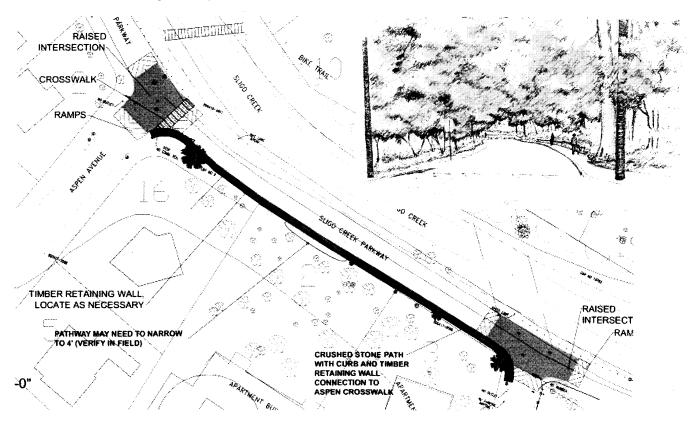
Figure 14 - Plan and perspective view

Alternate 3, whether a boardwalk or soft path (with the road realigned further to the south) would require pedestrians to cross at Cherry Ave. The sight distances at this crossing are limited by a rise in grade to the east, as discussed under Alternate 2. Taking out the rise would improve sight distances, but may, at the same time, increase vehicular speeds (since drivers can also see further). Traffic calming measures would be required to slow traffic approaching Cherry Avenue to the posted 25 mph speed limit. See recommendations for traffic calming on page 14.

Alternate 4: Path Adjacent to South Side of Parkway with Pedestrian Crossing at Aspen Another option is to construct 5-foot pathway on the south side of Sligo Creek Parkway. The pathway would require a barrier curb with gutter pan to accommodate drainage. A low timber retaining wall (or other type of low retaining wall) would be required to accommodate the pathway in some locations. Alternatively the pathway could be narrowed to 4' and a 2:1 slope used to match the adjacent hillside. A DNR waterway construction permit would still be required, since the cross-section would still be changed within the 100 year floodplain (this option would not require fill in that floodplain, however.)

Residents have requested that natural surface material be used. In order to maintain ADA accessibility, a stone-dust path could be utilized. However, the maintenance of the stone dust path would be higher than an asphalt path. One option to consider regarding the surface would be to utilize a "popcorn" asphalt mix (also referred to as a "permeable pavement"). This mix still allows for infiltration while reducing the amount of maintenance required.

Crossing at Aspen improves sight distances. However, traffic calming measures would still be required to slow traffic to the posted 25 mph speed limit. Higher speeds would require greater physical separation between the pedestrian and the vehicle (using a guardrail, or greater distance). See recommendations for traffic calming on page 14.



Alt. 4: South Side of Sligo Parkway Path Option

Figure 15 - Plan and perspective view

Traffic Calming Measures for Sligo Creek Parkway

Three of the four options require traffic calming measures to slow the speed of vehicles approaching both Cherry and Aspen Avenues. Vehicles typically travel along Sligo at speeds of 35 m.p.h. or greater. The road is posted for a 25 m.p.h. speed limit. Slowing the speed of vehicles increases the time for pedestrians to cross the road, and therefore increases pedestrian safety. Vehicles traveling greater than the posted speed also tend to stray across the yellow line.

There are three ways to slow down traffic: enforcement, changing the horizontal alignment, or changing the vertical profile. Enforcement can be accomplished through the use of a trailer mounted radar that displays vehicle speed, or through direct monitoring by enforcement officers. Changes in horizontal or vertical alignment allow for the self-enforcement of speed limits (a driver can only go as fast as the road will allow). Horizontal alignment shifts are not possible on Sligo due to limited space. However, changes in vertical alignment are possible.

Two traffic calming options were considered: raised intersections or speed tables. Raising the intersections will require some additional drainage structures and curb and gutter as well as some fill within the floodplain. Another issue is the concern that cars travelling downhill on Cherry Avenue will slide across the intersection under icy conditions. Guardrails would need to be raised an additional six inches to ensure that the guardrail would still function properly for such a sliding vehicle. There is also a concern that the existing guardrails may need to be reinforced due to the weak soils associated with the adjacent streambank. Speed tables (not speed humps) have the advantage of being simpler to install and more familiar to drivers. They will not require additional drainage or curb and gutter work. The speed table has a profile that is suitable for emergency vehicles traveling 20-25 miles per hour.

Warning signs will also be needed in advance of the traffic calming measures. Rumble strips are recommended in the vicinity of the Carroll Avenue Bridge. Raised rumble strips that adhere to new or existing pavement are the type recommended here. The markers are often reflective to define traffic lanes at night and in poor weather. The recommended locations are shown in Figure 17. Noise emanating from the rumble strips will be blocked by the bridge and adjacent hillside. There is one residence that is close enough to potentially hear the rumble strips. Should the noise prove to be a problem, they will have to be removed.

Based on recommendations from M-NCPPC's Transportation Planning Division for traffic calming measures on Sligo Creek Parkway, two to three speed tables are recommended in the vicinity of the existing crosswalk at Aspen placed 500-700' apart with appropriate signage in the vicinity of the speed tables. The locations of the speed tables and signs will be determined during the final design phase of the project.

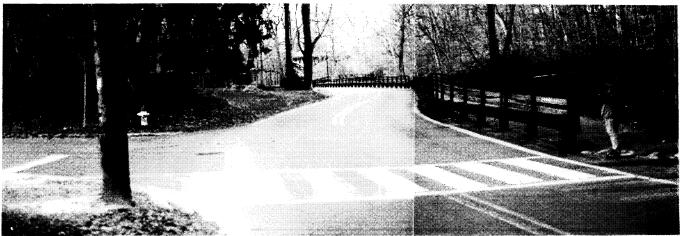


Figure 16 - View of existing crossing at Aspen. Speed tables would slow drivers traveling through the intersection.

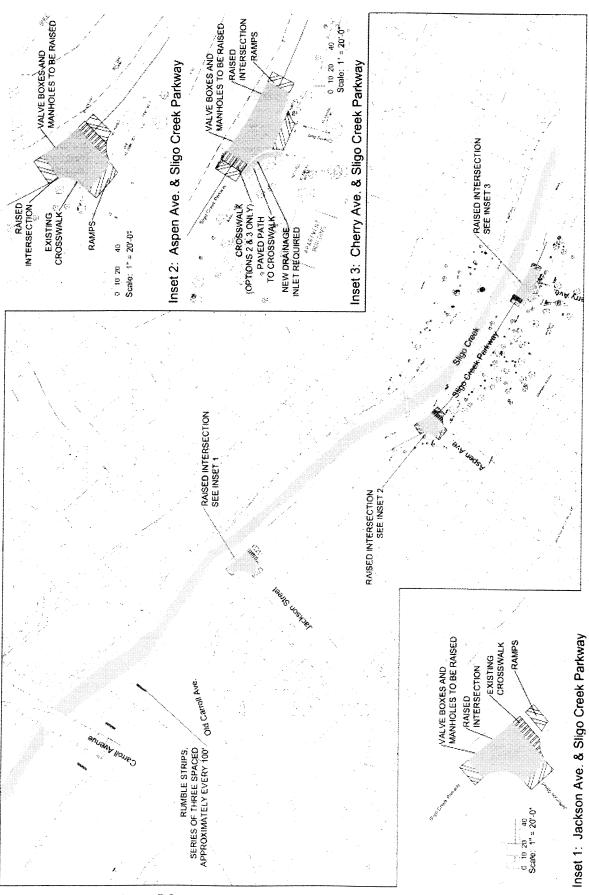


Figure 17 - Recommended traffic calming measures

Lardner/Klein Landscape Architects, P.C. and Daniel Consultants, Inc.

Table 1 - Comparison of Alternatives

Option	Typical Section	Pedestrian/Vehicular Safety
High Bridge (over Parkway, creek and bike path)	THE STATE OF THE S	Vehicular and pedestrian traffic are completely separated Requires: • minimum clearance above travel lanes (15' clearance shown - if higher clearance required, then impact on trees and private property will result)
Low Bridge (neigh- borhood Preferred Option)	Curb and Gutter	Pedestrian crossing at Cherry Avenue has: • poor sight distance • high vehicular speed Requires: • realignment of Parkway • new barrier curb • 2:1 slope Traffic calming √ Raised intersections
Creek- Side Path (partial board- walk)	Existing Road	√ Flashing advance warning signs Pedestrian crossing at Cherry Avenue has: • poor sight distance • high vehicular speed Requires: • Pedestrians separated by new guardrail Traffic calming √ Raised intersections √ Flashing advance warning signs
Hillside Path (with timber retaining wall)	The content of the co	Pedestrian crossing at Aspen Avenue has: • better sight distance • high vehicular speed Traffic calming √ Raised intersections √ Flashing advance warning signs

	."			
Floodplain/Wetlands	Vegetation	Utilities/Drainage	Adjacent Land Use	Probable Cost (includes 25% contingency)
Structure is completely out of the floodplain, no fill required	One major tree to be removed adjacent Sligo Creek	Requires relocation of overhead electric utility lines	Requires permanent easement from property at corner of Cherry and Sligo	Very High \$475,000 (does not include cost
Structure is completely out of wetland areas associated with the stream bank	Construction limits approx. 30' wide will affect riparian vegetation for bridge (7500 SF) plus 25' wide hillside to accommodate ramps and path (11,250 SF)	No change to underground utilities Mitigate surface runoff at bridge abutments	Security and privacy will be reduced for pedestrians and residents adjacent to walkway Bridge is large and out- of-scale with setting	of easement required for construction; no traffic calming included)
Bridge abutments require modification of streambank (similar to existing bridges)	Three major trees to be removed from the realignment of Sligo Creek Parkway	Road realignment reset 1 manhole relocate 1 hydrant relocate 1 utility pole new drain inlet	Most direct route from Cherry Avenue Minor construction easement may be	High \$250,000 (includes \$45,000 cost of traffic calming
Realignment of Sligo Creek Parkway to increase floodplain cross-section	Construction limits affect approximately 10' of hillside for road realignment (approx. 3800 SF) plus 30'	Traffic calming Reset 8 manholes and valve boxes for raised intersection	required at corner of Cherry and Sligo	measures 3 raised intersections)
Raised intersections to decrease floodplain cross-section	riparian vegetation to accommodate bridge and path (2400 SF)			
Ten 18" diameter caissons placed 15-18 feet apart to support	One major tree to be removed adjacent Sligo Creek	No utility adjustments needed to accommodate path	Long distance to bridge from Cherry (365')	High \$318,000
boardwalk Caissons placed within compacted soils adjacent to roadway Handrail and caissons may trap debris during flood	Construction limits affect 8' of riparian vegetation along 280' of path (2240 SF) and 10' of hillside vegetation along 35' path (350 SF)	New guardrail required Traffic calming Reset 8 manholes and valve boxes for raised intersection	Minor construction easement may be required at corner of Cherry and Sligo	(includes \$45,000 cost of traffic calming measures 3 raised intersections)
Timber retaining wall (or 2:1 slope) required to provide adequate width for walkway	Two major trees to be removed (and potentially the beech tree)	Road realignment reset 1 manhole may require 1 utility pole to be relocated or path to be narrowed new drain inlet with curb	Long distance to bridge from Cherry (365') Small construction easement may be	Moderate \$132,000 (includes \$45,000 cost of traffic calming
Barrier curb with gutter to accommodate drainage Balanced cut and fill with no net change to floodplain cross section	Construction limits affect approximately 10' of hillside vegetation along 345' of pathway (3450 SF)	Traffic calming Reset 8 manholes and valve boxes for raised intersection	required at corner of Cherry and Sligo and temporary construction easement along hillside between Cherry and Aspen	measures 3 raised intersections)

Evaluation of Alternatives

Table 1 compares the pros and cons of each alternative. The following summarizes the consultants' evaluations:

The **High Bridge Option** is the only way to avoid impacts to the floodplain, associated wetlands, and trees within the stream buffer area. It is also the only option that completely separates pedestrian and vehicular traffic. No traffic calming would be needed. However, the high cost makes it infeasible to construct. An easement would also be required from two properties on the south side of Sligo Creek Parkway. The high bridge option would require more detailed engineering study to demonstrate the potential impact of the bridge on the floodway or floodplain.

The **Low Bridge Option** provides more direct access to the Sligo Creek Trail from Cherry Avenue. However, the crossing at Cherry has limited sight distances due to the dip in the road to the east. The crossing would be safer if traffic calming measures were installed. The low bridge also requires that the alignment of Sligo Creek Parkway be adjusted to allow for a landing between the bridge and the road. This option would remove the highest number of trees. Detailed engineering study would be required to demonstrate the impact of the bridge on the floodway an floodplain. A permit for the required encroachment on the floodway would be very difficult to obtain.

The Creekside Path Option provides a trail located between the road and the creek, linking the trail crossing of Sligo at Cherry to the existing bridge at Aspen. A guardrail similar to the existing guardrail at Aspen would separate the road from the trail. However, there is not enough room at the top of the streambank to construct the trail. Figure 13 illustrates the challenges of locating a trail at that location. Over two thirds of the route would require a boardwalk cantilevered over the streambank. This option would have an effect on the floodplain and adjacent streamside vegetation. Traffic calming measures would be required to slow vehicular speeds. As with the low bridge option, detailed engineering study would be required to demonstrate that the impact of the boardwalk on the floodway. A permit for the required encroachment on the floodway would be very difficult to obtain.

The **Hillside Path Option** provides a trail along the south side of Sligo Creek Parkway from Cherry Avenue to Aspen. A low timber retaining wall would be required in some places. The trail would cross at the existing Aspen Ave. crosswalk. Two major trees would need to be removed. The Beech tree at Aspen and Sligo may need to be removed (pending a review by the City Arborist). The Hillside Path is the least costly. Pedestrian safety is maintained through the traffic calming measures. A barrier curb would be constructed to separate the pathway from the street (similar to other urban streets where a pathway is built next to the street where cars are traveling 25 m.p.h.)

Based on the factors of floodplain, wetland, impact on vegetation, pedestrian and vehicular safety, required adjustments to utilities, adjacent land use, and cost, the Hillside Path option appears to have the least environmental impact and the least cost, while still enhancing pedestrian safety. The neighborhood is in favor of the most direct route, the Low Bridge Option. Both of these options require traffic calming measures.

Takoma Park City Council and M-NCPPC Review

On January 28, 2002, the City Council endorsed City staff recommendations to support the neighborhood preference for the low bridge option and that both the low bridge option (Option 2) and the path along the south side of Sligo Creek (Option 4) be considered as viable and safe connections to the Sligo Creek Hiker/Biker Trail.

In March 2002 the project was discussed at the monthly Plan Review meeting by M-NCPPC staff. M-NCPPC staff recommended that the Facility plan be presented to the M-NCPPC Planning Board with the following changes:

- 1. Traffic calming measures will be addressed for the entire length of Sligo Creek Parkway as part of the ongoing speed control study of Sligo Creek Parkway. Since the Plan Review meeting, the Sligo Creek Parkway traffic control study was expedited and recommendations from M-NCPPC's Transportation Planning Division are being implemented. It was recommended that two or three speed tables be constructed approximately 500-700 feet apart along with appropriate signage in the vicinity of the crosswalk. Final locations for the speed tables and signs will be determined during the final engineering phase of the project.
- 2. Staff recommends a two-sided guardrail between Sligo Creek Parkway and the proposed foot path. Standard MSHA detail 605.26-01 should be used that allows the guardrail to be placed at the immediate face of a barrier curb, reducing the width required for the guardrail.
- 3. The width of the foot path should be 5'-0" clear between the back side of the guardrail and the proposed retaining wall. Narrowing the walk to minimize the clearing and grading requirements can be accomplished as long as there is adequate passing spaces (60 inches by 60 inches) located at reasonable intervals not exceeding 200'. M-NCPPC staff recommends that the foot path be surfaced with asphalt, rather than stone dust to be consistent with the materials used throughout the park and to reduce maintenance requirements.
- 4. Materials for the retaining wall should be stone or stone-faced to remain in character with existing walls along the entire length of Sligo Creek Parkway.

Interagency Wetland Coordinating Committee Review

In March 2002, M-NCPPC and Lardner/Klein staff presented the project to M-NCPPC's Interagency Wetland Coordinating Committee. Committee members confirmed that the bridge and boardwalk options (1, 2 and 3) would require detailed engineering study of the potential impact of the bridges on the floodway and floodplain and indicated that a permit for any encroachment in the floodway would be very difficult to approve. At the same time they indicated that raised intersections or speed tables of 6" or less would not be an issue with committee members, especially since the retaining wall and associated cut section would increase the cross-sectional area within the floodplain to compensate for the raised intersections.

Stormwater Management Concept

The overall amount of disturbed area for the project will be less than 5,000 SF and therefore is exempt from the provisions of COMAR 26.17.02.05. However, the path along the south side of the Parkway will require curb and gutter and the reconstruction of the existing drainage structure at the southwest corner of Cherry and Sligo Creek Parkway (an open ditch that is dangerous to both vehicles and pedestrians). The outfall will need to be redesigned to handle the small increase in stormwater runoff that would be collected. Wetland Committee members suggested the use of attenuators at the outfall similar to others already in use within the park.

Preferred Alternative

Following the meeting, M-NCPPC and Lardner/Klein staff identified ways to further reduce the impact of adding the guardrail and stone-faced barrier wall. Figure 19 illustrates the preferred alternative resulting from the refinements made after the Plan Review meeting. The following additional changes were made:

- A 10' permanent right-of-way will be required to ensure that the retaining wall will be on public land.
 The City of Takoma Park will be responsible for obtaining the right-of-way.
- Additional tree and shrub planting has been included to repair and enhance areas disturbed by construction. Additional shrub and ground covers have also been budgeted for planting behind the wall.
- ADA-accessible curb ramps are required at Aspen and Cherry Avenues. A special curb ramp will be needed to fit within the narrower sidewalk.
- Three speed tables and related signs are included in the plan with the exact locations to be determined in the design phase of the project.

Implementation/Next Steps

The City continues to request that Park and Planning staff work creatively with them to implement the facility plan recommendations. Safe pedestrian access to the Sligo Creek Hiker/Biker Trail is an important public safety issue for all residents. It is included in the Takoma Park Master Plan. The City has contributed to the solution by funding the facility plan and by working with neighbors on a temporary solution. A permanent and safe solution is needed as soon as possible.

M-NCPPC and Montgomery County DPW are moving forward with a plan to improve pedestrian and bicycle safety along the entire length of Sligo Creek Parkway. Traffic calming measures will be implemented as part of this overall process.

The next step in the process is for the Maryland-National Capital Park and Planning Board to accept the facility plan and give consideration to funding the construction of the neighborhood access and traffic calming measures in the upcoming Capital Improvement Program budget.

Statement of Probable Cost

A statement of probable cost has been prepared for the preferred option (Option 4). Since the cost for the preferred alternative was significantly higher and approaching the original statement of probable cost for the Low Bridge Option, an additional cost analysis was prepared. In summary, the Hillside Path continues to be the least cost option. Table 2 compares the cost elements for each Option. The cost of the pedestrian bridge and road realignment associated with Option 2 is greater than the cost of the retaining wall and asphalt path associated with Option 4.

The significant increase in cost over the preliminary analysis is associated with the larger contingency, design and administrative cost requested by M-NCPPC staff, as well as refined costs for maintenance of traffic, landscape, utilities, the guardrail and theretaining wall. Detailed statements of probable cost are included in Appendix A.

Due to the significant increase in cost and the importance of this project to the safety of those in the Cherry-Colby neighborhood, an analysis was made of potential cost savings for the preferred option. Cost savings of at least \$17,500 dollars can be achieved by a combination of value engineering techniques including changing some of the drainage details and changing from a stone-faced wall to concrete with form liner similar to the Baltimore Washington Parkway.

It should also be noted that these costs do not include the permanent right-of-way acquisition costs.

Category	Low Bridge Option OPTION 2	Hillside Path OPTION 4 (Preferred)
Preliminary	\$40,650	\$32,250
Grading	\$8,500	\$6,140
Drainage	\$15,695	\$15,895
Structures	\$75,000	\$50,754
Pavement	\$21,300	\$9,740
Shoulder	\$7,000	\$23,600
Landscape	\$37,950	\$18,800
Utility	\$45,000	\$25,000
Construction Contingency (15% subtotal)	\$37,664	\$27,326
Total Construction	\$288,759	\$209,505
Design and Adniminstrative Costs (40% of Total Construction)	\$115,504	\$83,802
Total	\$404,263	\$293,307

Table 2 - Comparison of Costs for Low Bridge and Hillside Path (Revised Cost Statements)

Funding

The City of Takoma Park requests that funding be put in place to construct the requested pedestrian access and traffic calming measures as part of M-NCPPC's CIP budget as soon as possible.

One potential source of funding is the National Recreational Trails program administered by the Maryland State Highway Administration (MSHA). This program funds the development of community-based, motorized and non-motorized recreational trail projects. This program "matches federal funds with local funds or in-kind contributions to implement trail projects". Federal funds are available for up to 50% of the project cost, matched by at least 50% funding from the project sponsor. Matching funds must be committed and documented in the local jurisdiction's budget. Activities eligible for funding within this program include trail linkages. Preference will be given to projects which:

- have broad-based community support
- provide linkages to or complete existing trails
- · provide improvements to a trail in order to benefit or mitigate impacts to the natural environment
- will be accomplished with youth conservation or service groups to perform construction and maintenance

Projects must meet Federal ADA requirements as well as state and federal environmental regulatory requirements (NEPA, MEPA, Section 106, Section 4(f)). SHA will provide assistance to the project sponsor to acquire these approvals.

Prior property acquisition may be counted as an in-kind contribution if it occurred within two years of the proposal submission. There is a good chance that the funds used to pay for the Facility Plan could be considered for the local match. A clarification would be needed from the MSHA. Emphasis should be placed on the trail linkage of this project. Since some of the options run close to the road, the project may be construed as a pathway project that should be funded from the local capital improvement

program. However, utilizing a natural material, such as stone-dust, and making it clear that the purpose of the project is to link the neighborhood to the trail, will emphasize the recreational trail aspect of the project. The traffic calming aspects must also be tied directly to the trail linkage.

Applications are due November 30, for 2003 awards. MSHA encourages local groups to submit applications early so that they can be reworked to better meet the program goals. The program has a very high funding rate once eligibility for the program has been determined.

In order to pursue this funding the M-NCPPC Montgomery County Planning Board needs to endorse the Facility Plan and agree to participate in the final design should the grant be awarded. To implement this plan the following steps are recommended:

- 1. Review and approval of Facility Plan by M-NCPPC (September 2002)
- 2. Obtain local commitments from M-NCPPC and City of Takoma Park for use as match when applying for grants). (Fall 2002)
- 3. Work with MSHA Recreational Trails coordinator to ensure that application meets grant criteria (Summer 2002) and make final application by November 30, 2002.
- 4. Prepare final engineering plans (2003-4, if grant awarded)
- 5. Commence construction on receipt of award (2003-4).

FACILITY PLAN Appendix A: Statement of Probable Cost

CHERRY AVENUE-SLIGO CREEK HIKER/BIKER TRAIL PEDESTRIAN ACCESS

prepared for:
The City of Takoma Park
and
The Maryland National Capital Park and Planning Commission

prepared by: Lardner/Klein Landscape Architects, P.C. in association with Daniel Consultants, Inc.

PLANNING BOARD DRAFT: September 2002

Number Category 1 - Preliminary 1001 Cit 1002 En 1003 ME 1004 Te 1005 Co 1006 Co Co 1006 Co Co Co Co Co Co Co C	AUGUST 8.2002					
Number Category 1 - Preliminary 1001 Cir 1002 En 1003 Mit 1005 Dr 1006 Cr 10						
Category 1 - Preliminary 1001 Cld 1002 En 1003 Mt 1004 Te 1005 Dr	Description	Unit	Ousmith	Orico	1000	Cost-Saving
1001 1002 1003 MA 1004 1005 1006 CA			THE PARTY OF THE P	3	1802	Alternate
1002 1003 1004 1005	Clearing & Grubbing	S	-	\$3,000,00	\$3,000,00	
1003 1004 1005	Engineers Office No. 2	rs	-	\$8,000.00	\$8,000,00	
1004	Maint. Of Traffic	Day	8	\$1,200.00	00 009 6\$	
	Temp. Traffic Signs Type III Retroflective Sheeting	S	81	\$10.00	\$810.00	
	Drums for Maint, Of Traffic	EA	14	\$60.00	\$840.00	
	Construction Stakeout	<u></u>		\$5,000,00	00.00	
1007 Mc	Mobilization	3 2		\$5,000.00	\$5,000.00	
Subtotal				00.000	\$32.250.00	
Category 2 - Grading		-				
1	Class 1 Excavation	2	030	40.00		
2002 Re	Remove Existing Paved Ditch	5 8	750	\$18.00	\$4,500.00	
	Saw Cuts	5 -	0- 66	\$20.00	\$200.00	
-	000 11	L	360	\$4.00	\$1,440.00	
					40,140.00	
Category 3 - Drainage	11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1					
	Stabilized Const. Entr.	NOT	40	\$25.00	\$1,000.00	
	Renab. Stab. Constr. Entr.	NOT	10	\$20.00	\$200.00	
	Inlet Protection	EA	5	\$100.00	\$500.00	
	Erosion and Sediment Control Cleanout Excavation	ბ	12	\$10.00	\$120.00	
	Sandbag Dike	ч	300	\$20.00	\$6,000.00	-\$6,000.00
	Earth Dike Alternate	Щ	300	\$4.00		\$1,200,00
	Geotextile F for Slope Silt Fence	L	350	\$3.50	\$1,225.00	
	Class I Riprap	λS	35	\$10.00	\$350.00	
3009 Cr	Curb Opening Inlet	6 8	2	\$3.000.00	\$6.000.00	And the second s
3010 Att	Attenuator	69		\$500.00	\$500.00	
Subtotal					\$15.895.00	(4.800.00)
						(20.000)
structure						
	Reinforced Concrete Retaining Wall (4' high steel reinforced w/ drainage tied into storm drain)	5	102	\$267.00	\$27,234.00	
	Reinforced Concrete Retaining Wall (2' high steel reinforced w/ drainage tied into storm drain)	4	48	\$150.00	\$7,200.00	
4003 Str	Stone Facing No Coping	R	510	\$32.00	\$16,320.00	-\$16,320.00
ð	Option A Architectural Treatment (form liner, stain with coping)	R	510	\$20.00		\$10,200.00
Subtotal					\$50,754.00 \$	(6,120.00)
Category 5 - Pavement						
5001 Ho	Hot Mix Asphalt for Wedge and Level	<i>></i>	200	\$10.00	00 000	The state of the s
	Crosswalk Waterborne Traffic Paint - Longitudal with striping	, w	240	\$1.00	\$240.00	
	Speed Tables with 2 warning signs per Speed Table	ΔΠ	6	00 CO CO	\$7 E00 00	

CHERRY - SLIC	CHERRY - SLIGO PEDESTRIAN ACCESS FACILITY: HILL SIDE PATH OPTION 4 (Preferred)	-	***************************************			
	AUGUST 8,2002					
Number	Description	Unit	Onantity	Price	***************************************	Cost-Saving
Subtotal					\$9 740 00	CHARTISTS
			-			
Category 6 - Shoulder						
6001	Type A Curb and Gutter	5	350	\$20.00	\$7,000,00	
< 6002	Hot Mix Asphalt Sidewalk	TON	35	00 08\$	\$2,000.00	
6003	Curbcut Ramps	E	2	\$200.00	6400.00	
6004	Two Sided Guardrail	ш	340	\$40.00	612 400 00	
6005	Guardrail End Sections	EA	000	\$500.00	61,400.00	
Subtotal					622 600 00	
A CALL SERVICE AND A CALL SERVIC					450,000,00	
Category 7 - Landscape	ede					
7001	Place Topsoil 4" Depth	SF	1725	\$1.00	\$1 725 00	
7002	Minor Trees and Shrubs - slope stabilization	R	1725	\$7.00	\$12.075.00	
7003	Major Trees	EA	10	\$500.00	\$5,000,00	
Subtotal					\$18,800.00	
Catalan Control						
category 8 - Utility						
2002	Keset Manhole	EA	-	1000	\$1,000.00	
8002	Relocate Utility Pole	EA	2	12000	\$24,000.00	
Subtotal					\$25,000.00	
Citchdia						
80000					\$182,179.00 \$	(10,920.00)
	Construction Contingency - 15% of construction cost subtotal				\$27,326.85 \$	(1,638.00)
TOTAL	TOTAL PROBABLE CONSTRUCTION COST	444			\$209,505.85 \$	(12,558.00)
	Design, Engineering & Permitting (includes procurement) - 25% of total project cost		,			(3,139.50)
	Project Manager, Construction Manager, Construction Inspector - 15% of total project cost			-	\$31,425.88 \$	(1,883.70)
TOTAL	RECOMMENDED BUDGET				\$293,308.19 \$	(17,581.20)

CHERRY - SLI	CHERRY - SLIGO PEDESTRIAN ACCESS FACILITY: LOW BRIDGE OPTION 2				
	AUGUST 8,2002				
Number	Description	Unit	Quantity	Price	Cost
Category 1 - Preliminary	inary		·		
1001	Clearing & Grubbing	S	-	\$3,000,00	62 000 00
1002	Engineers Office No. 2	<u></u>		00.000,00	90,000.00
1003	Maint. Of Traffic	Si C	- 4	60,000.00	\$8,000.00
× 1004	Temp. Traffic Signs Type III Retroflective Sheeting	ν γ υ	2 6	91,200.00	\$18,000.00
1005	Drums for Maint. Of Traffic	5 1	0 7	\$10.00	\$810.00
1006	Construction Stakeout	5 0	4 7	\$60.00	\$840.00
1007	Mobilization	3 2		\$5,000.00	\$5,000.00
Subtotal		3		\$5,000.00	\$5,000.00
					\$40,650.00
Category 2 - Grading	7				
2001	Class 1 Excavation	ઠ	300	\$18.00	\$5 400 00
2002	Remove existing Pavement	ర	55	\$20.00	\$1 100 00
2003	Remove Existing Paved Ditch	5	5	00.024	90000
2004	Saw Cuts		O VEO	940.00	\$200.00
Subtotal		3	000	00.4¢	\$1,800.00
Office of the second se					98,500.00
Catagory 3 - Draina					
2001	Stabilized Conc. Entr.	TON	40	\$25.00	\$1,000.00
3002	Rehab, Stab, Constr. Entr.	TON	10	\$20.00	\$200.00
3003	Inlet protection	ā	4	\$100.00	\$400.00
3004	Erosion and Sediment Control Cleanout Excavation	₽	12	\$10.00	\$120.00
3005	Sandbag Dike	F	300	\$20.00	\$6,000,00
3006	Geotextile F for Slope Silt Fence	5	350	\$3.50	64 225 00
3007	Class I Riprap	S	25	\$10.00	\$250.00
3008	Curb Opening Inlet	EA	2	\$3.000.00	\$6,000,00
3009	Attenuator	EA		\$500.00	\$500.00
Subtotal					\$15,695.00
Category 4 - Structures	ITES				
4001	Pedestrain Bridge	ST		\$75,000,00	\$75,000,00
0.16464					
Subtotal					\$75,000.00
Category 5 - Pavement	ant				
5001	Hot Mix Asphalt for Wedge and Level	30	COC	0000	
		5	700	\$10.00	\$2,000.00

CHERRY - SLIG	CHERRY - SLIGO PEDESTRIAN ACCESS FACILITY: LOW BRIDGE OPTION 2				
	AUGUST 8,2002				
Number	Description	Unit	Quantity	Price	Cost
5002	Hot Mix Asphalt Surface SF	λS	086	\$10.00	\$9.800.00
5003	Hot Mix Asphalt Base BC	λS	165	\$10.00	\$1,650,00
5004	5" Yellow Waterborne Traffic Paint	5	100	\$0.20	\$20.00
5005	5" White Waterborne Traffic Paint	5	450	\$0.20	00 06\$
5006	Crosswalks Waterborne Traffic Paint - longitudnal striping	R	240	\$1.00	\$240.00
	Speed Tables with 2 warning signs per Speed Table	EA	8	\$2.500.00	\$7.500.00
Subtotal					\$21,300.00
Category 6 - Shoulder					
6001	Type A Curb and Gutter	ч	350	\$20.00	\$7,000,00
					0000
Subtotal					\$7,000.00
Category 7 - Landscape	be				
7001	Place Topsoil 4" Depth	SF	3500	\$1.50	\$5 250 00
7002	Straw Mulching	λS	300	\$2.00	\$600 00
7003	Seeding	λS	300	\$2.00	\$600.00
7004	Minor Trees and Shrubs - slope stabilization	R	3500	\$7.00	\$24 500 00
7005	Major Trees	Ę	14	\$500.00	\$7.000.00
Subtotal					\$37,950.00
Category 8 - Utility					
8001	Reset Manhole and Valve Boxes	Ę	4	1000	\$4,000.00
8002	Relocate Fire Hydrant	EA	-	2000	\$5,000.00
8003	Relocate Utility Poles	EA	3	12000	\$36,000.00
Subtotal					\$45,000.00
Subtotal					00 100
	Construction Contingency - 15% of construction cost surbtatal				4231,093.00
TOTAL	TOTAL PROBABLE CONSTRUCTION COST				\$288.759.25
	Design, Engineering & Permitting (includes procurement) - 25% of total project cost				\$72,189.81
	Project Manager, Construction Manager, Construction Inspector - 15% of total project cost				\$43,313.89
TOTAL	RECOMMENDED BUDGET				\$404,262.95

FACILITY PLAN Appendix B: Preliminary Design Plan

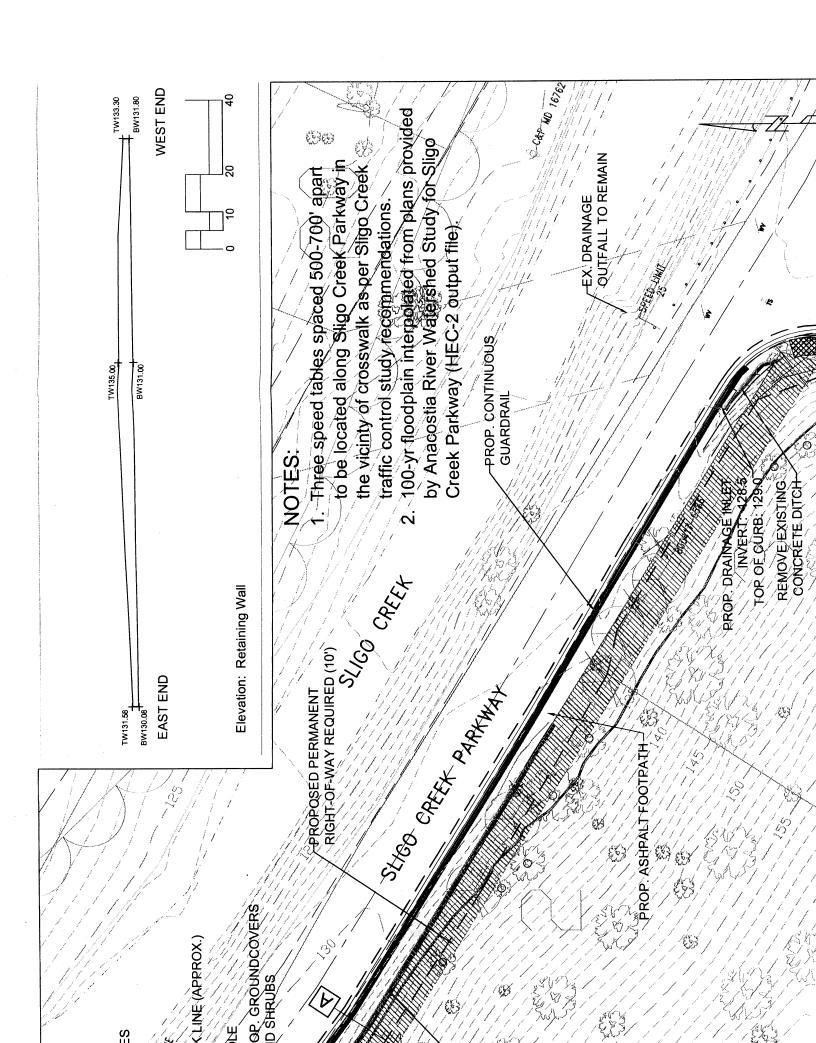
CHERRY AVENUE-SLIGO CREEK HIKER/BIKER TRAIL PEDESTRIAN ACCESS

prepared for:
The City of Takoma Park
and Planning Commission

The Maryland National Capital Park and Planning Commission

prepared by: Lardner/Klein Landscape Architects, P.C. in association with Daniel Consultants, Inc.

PLANNING BOARD DRAFT: September 2002



Richard M. Finn City Saminichrois

OFFICE OF CITY ADMINISTRATOR TELEPHONE (201) 270-1700 FAX (301) 27C-8754

William H. Hussmann, Chairman Montgomery County Planning Board M-NCPPC 8787 Georgia Avenue Silver Spring, MD 20910-3760

Dear Mr. Hussmann:



7800 MAPLE AVENUE TAKOMA FARK, MD 20512

April 26, 2001

OFFICE OF THE CHAIRMAN THE MATYLAND NATIONAL CAPITAL PAR NO PLANNIG COMISSION

As you are aware from previous testimony provided by Councilmember Carol Stewart, the City of Takoma Park strongly supports the installation of the pedestrian bridge across the creek at the intersection of Cherry and Sligo Creek. To further demonstrate our support for this option, the City Council has authorized the expenditure of city funds up to \$30,000 to pay for a project facility planning study which would examine the feasibility of this project. In addition, the Council is recommending that the study also look at the natural walkway which would be located along the creek from Aspen to Cherry as an alternative project, if the bridge is determined to be not practical. The City puts this forth in the spirit of cooperation and partnership and to demonstrate its commitment to a long term solution to this pedestrian safety issue. As you are also aware, the City has already committed to finding and implementing a short term solution which will provide time to enable us to study the pedestrian bridge option.

On behalf of the City Council, we respectfully request that the Maryland-National Park and Planning Commission include the pedestrian bridge project in the County's Capital Improvement Project plan for Fiscal Year 2003 to 2008. The City is prepared to manage the project facility plan study and to work closely with your staff to determine the feasibility of the bridge and secondarily, the natural pedestrian walkway along the creek. We also proposed that the study include investigating traffic calming alternatives in the

If you have any questions of require additional information, please do not hesitate to contact me by effected ब्रास्ट. phone at 301/270-1700 ext. 230 or by email at RickF@nakomagov.org.

Sincerely.

City Administrator

Don Downing, Planner Coordinator, Silver Spring/Takoma Park Community-Based Planning Team cc: Takoma Park City Council

Suzanne Ludlow, FCD Coordinator

ARYLAND-NATIONAL CAPITAL FARK AND PLANNING COMMISSION E7E7 Georgia Avenue • Silver Spring, Maryland 20910-3760

(301) 495-4605

Montpomery County Planning Board Office of the Chairman

May 14, 2001

Mr. Richard M. Finn City Administrator City of Takoma Park 7500 Maple Avenue Takoma Park, MD 20912

Dear Mr. Finn:

Thank you for your letter of April 26, 2001 in support of the installation of a pedestrian bridge across Sligo Creek at Cherry Avenue. We are pleased that the City of Takoma Park is funding a facility planning study and that the City is putting this forth "in the spirit of cooperation and partnership and to demonstrate its commitment to a long term solution to this pedestrian safety issue."

You ask that the Planning Board include the pedestrian bridge project in the County's Capital Improvement Program for FY03-08. The County Council has already approved \$30,000 for construction of a connector in this location in FY02 as part of our FY01-06 CIP. If your facility plan determines that a bridge is feasible, it is probable that the bridge would cost more facility plan determines that a bridge is feasible, it is probable that the bridge would cost more than the \$30,000 we have allocated for the project. In that case, our staff must review the facility plan and total project cost (design and construction cost estimates for the bridge and related connectors) in light of other competing priorities for trails, particularly those which are named in the approved Countywide Plan of Trails (attached). Your facility plan should produce a cost estimate based on completion of, at least, one-third of the design for the total project and should clearly identify construction (and costs) proposed within park property or County right-of-way, any easements or right-of-way which may be necessary to implement the project, and all required permits.

Upon receipt and review of your facility plan and construction cost estimate, our staff will make a recommendation to the Planning Board regarding the inclusion of this project in the CIP. Typically, the County Council requires that a facility plan and cost estimate precede programming for design and construction for significant projects, especially those which will have environmental implications, require multiple permits, and involve major capital costs.

Our staff expects to propose the FY03-08 CIP to the Planning Board in mid-September. Your report should be completed prior to that date so that our staff can review it with you and make a recommendation to the Board when the FY03-08 CIP is submitted for Planning Board

worksessions. According to State law, the Planning Board must submit the CIP to the County Executive and County Council on November 1 so the period for Planning Board deliberation is very short. The Planning Board may review and request supplemental appropriations or CIP amendments outside of this cycle but we try to keep these to a minimum.

Thank you for your commitment to spend the funds necessary to determine the feasibility and cost of this project. We look forward to receipt of your facility plan and further discussion of this project in the Fall.

Yours truly,

tue Vimmee

William H. Hussmann

Enclosure
N:\CIP\Public Hearings\CherryAve.Takoma. Hussmann.Finn.ltr.wpd

City of Takoma Park, Maryland

Richard M. Finn City Manager

OFFICE OF THE CITY COUNCIL TELEPHONE 270-1700



7500 MAPLE AVENUE TAKOMA PARK, MD. 20912

8 February 2002

Arthur Holmes, Jr., Chairman Montgomery County Planning Board Maryland - National Capital Park and Planning Commission 8787 Georgia Avenue Silver Spring, MD 20910-3760

Dear Mr. Holmes:

This letter shall serves as written notification that the City of Takoma Park City Council has reviewed and formally accepted the Cherry-Sligo Facility Plan prepared by Jim Klein of Lardner/Klein, Inc. The City Council has formally endorsed option two, a low bridge crossing with traffic calming measures, and option four, a hillside path with traffic calming measures as means of providing safe access to users of the Sligo Creek Hiker-Biker Trail from the Cherry and Colby Avenue Neighborhood. It is the City of Takoma Park's understanding that the review of the study by M-NCPPC staff is incomplete for the current budgeting process. We have been advised that further analysis must be conducted by M-NCPPC staff before it can be approved as part of the budget. Based on this the City formally requested that City of Takoma Park staff and M-NCPPC staff continue to work together to complete analysis for inclusion in the Fiscal Year 2004-2005 budget process.

As you are aware this action supports Council member Stewart's request at the April 19th Public Forum for inclusion in the CIP budget. In our effort to expedite a solution, the City of Takoma Park is committed to be an active partner in providing safe access to the Sligo Creek Hiker-Biker Trail for all users.

We appreciate this opportunity to work with you in resolving this safety issue in our City. We look forward to our continued partnership with M-NCPPC. If there are any questions please feel free to contact me at 301-270-1700, ext. 230.

Sinderely.

Richard M. Finn

City Manager

cc: David Alexander, Supervisor, M-NCPPC, Design and Project Management Don Cochran, Director of Parks, M-NCPPC

THE MARYLA

MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

(301) 495-4605

Montgomery County Planning Board Office of the Chairman

March 4, 2002

Mr. Richard M. Finn, City Manager City of Takoma Park, Maryland 7500 Maple Avenue Takoma Park, MD 20912

Dear Mr. Finn:

Thank you for your letter of February 8, 2002. The Montgomery County Planning Board shares your interest in providing safe access to trails in the City of Takoma Park and throughout Montgomery County.

The draft facility plan that was submitted on February 8, 2002 for pedestrian access from Cherry Avenue to the Sligo Creek hiker-biker trail has been distributed for staff review. The facility plan is on the agenda for the monthly Plan Review meeting on March 12. Staff recommendations from this meeting will be reviewed with the City of Takoma Park staff and Lardner/Klein Landscape Architects, P.C. for inclusion in the final facility plan report. The final report will then be presented to the Montgomery County Planning-Board.

Following Planning Board approval of the facility plan, staff will assess this project in relation to other competing priorities for trail connectors throughout the County. A prioritized list of trail connectors will be presented to the Planning Board in fall of 2003 for inclusion in the Fiscal Year 2005-2010 Capital Improvements Program. Because the CIP is reviewed on a two-year cycle, the earliest year that additional funds are likely to be allocated to this project would be FY 2005. The Planning Board may review and request supplemental appropriations or CIP amendments outside of the normal cycle, but these requests are usually kept to a minimum.

We appreciate this opportunity to work with the City of Takoma Park. The Planning Board and staff look forward to continued cooperation in this project effort.

Sincerely,

Arthur Holmes,

Chairman

Copy: Don Cochran

.... 8 **-** 2002

LANCOROS CARARAS



City of Takoma Park, Maryland

INCORPORATED APRIL 3, 1890

7500 MAPLE AVENUE TAKOMA PARK, MD 20912

TELEPHONE 301-270-5900 FAX 301-270-8794

1 August 2002

Douglas Alexander, Supervisor, Design and Project Management Maryland National Capital Park & Planning Commission 8787 Georgia Avenue Silver Spring, MD 20910-3760

Dear Mr. Alexander:

This letter serves as a Letter of Understanding between the City of Takoma Park, MD and the Maryland National Capital Park & Planning Commission (M-NCPPC) - Montgomery County regarding safe access to the Sligo Creek Hiker Biker Trail at Cherry Avenue in Takoma Park. In preparation for a formal presentation of the "Cherry Avenue Pedestrian Access to Sligo Creek Hiker-Biker Trail Facility Plan" to the M-NCPPC planning board on September 19, 2002 the City of Takoma Park commits to completing the following tasks:

- 1. The City of Takoma Park will contact property owners to inform them of the intent to seek easements on their properties for construction of this project. The City of Takoma Park will submit letters of contact and verbal or written responses from the property owners (or other preliminary evidence that they will agree to the project) to M-NCPPC no later than August 19 for inclusion in the staff report to the Planning Board. When construction documents are completed, the City of Takoma Park will negotiate both easements with the property owners and purchase them if necessary, based on actual limits of work shown on the construction documents.
- 2. M-NCPPC will present the project to the Planning Board jointly with the City of Takoma Park and will request full funding for the project in the FY05-FY10 trails program. We will make a recommendation for a specific year, which will be the earliest opportunity available following existing trail project commitments.
- 3. The City of Takoma Park may seek grant funding for design and construction of the project. M-NCPPC would not be responsible for preparing the grant, but would assist Takoma Park in its preparation.
- 4. If the grant were successful, M-NCPPC staff would go back to the Planning Board to request escalation of the project priority in the trails program or request a separate PDF for the project.

We appreciate this opportunity to work with you in resolving this safety issue in our City. We look forward to our continued partnership with M-NCPPC. If there are any questions please feel free to contact Sara Anne Daines (301.891.7224) or Ivy Thompson (301.891.7232).

City Manager

cc: Tricia McManus, M-NCPPC
Alfred Lott, Public Works Director

CAPITAL IMPROVEMENTS PROGRAM Hard Surface Trails Design and Construction MANCEPC Park Development Division

M-NCPPC Park Development Division September 13, 2002

Page 1 of 3

		T	1		1			1		
					1					
Priority	PROJECT	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10
1 Hority	FROJECT	1	1		1	1				
	HARD SURFACE TRAILS - PR	ORITIZED I	MAJOR PRO	JECTS				.		
1	Matthew Henson Trail -	Phase 1&2		I .	Phase 1&2	Phase 1&2	Phase 3		Phase 3	Phase 3
1	Phase 1 & 2 - 2 mile trail from	Facility	İ	1	Constr.	Constr.	Design		Constr.	Constr.
l	Rock Creek to Georgia Ave.	Planning			\$2.40		\$150,000		\$3 million	
	Phase 3 - 2.8 mile trail from	& Design		}	million					· ·
	Georgia Ave. to Alderton Road	\$249,000								
2	Black Hill Trail Extension -		Facility			Constr.				
	2 mile trail from Spinning		Planning					1		
	Wheel Drive to Parking Lot 2		& Design						1	
	within park		\$118,000			-	Consta			
3	Clarksburg Greenway -		Fac. Plnng \$25,000	1	2.5		Constr. \$1.26	l		
	1.85 mile trail from Stringtown		Design				million		ł i	
	Road to Dewart Road	l	\$77,000				THIIIOTT	:	1	
4	Black Hill Trail Renovation -		Facility				Design	Constr.		
*	2 mile trail from Waters Landing		Planning		l		Boolgii	Ochou.		
	to Spinning Wheel Drive		\$65,000							
5	Magruder Branch Trail -		1 7,555	Facility				Design	Constr.	
ľ	2-3 mile trail extension from	İ		Planning	Ì					
l	Sweepstakes Road to		Ì	\$80,000						
	Damascus Town Center &]					
	0.9 mile connector to high	i				i				
	school									
6	Wheaton Trail Extension -				Facility				Design	Constr.
	0.7 mile extension from	1			Planning					
ŀ	Wheaton Regional Park to				\$25,000					
	Randolf Road					F 1114 .				D
7	Rock Creek Trail connection					Facility Planning				Design
	to Gude Drive through Gude					\$40,000				
8	landfill - 1.1 mile trail Lake Frank - Trail, parking and					\$40,000		Facility		
٥	trailhead on east side of Lake							Planning		
	Frank to replace removed							\$60,000		
	parking and road							V 00,000		
	parking and road									
	HARD SURFACE TRAILS - PRI	ORITIZED C	ONNECTOR	R PROJECT	'S					
1	Bradley Avenue connection to	Design	Constr.							
	Capital Crescent Trail (2 sets	complete	\$90,000							
	of access stairs)									
1	Massachusetts Avenue	Design	Constr.							
	connection to Capital Crescent	complete	\$15,000							
	Trail (improve 80 feet of gravel									
4	trail)	Docian	Constr.							
1	Ray's Meadow Parking Lot	Design complete	\$25,000							
	connection to Rock Creek Trail (provide ADA access)	complete	φ20,000							
2	Crystal Rock Drive connection	Facility		Constr.						· · · · · · · · · · · · · · · · · · ·
	to WSSC boardwalk and trail at	Planning		\$125,000				,		
	Black Hill Regional Park (1/8	complete		,						
	mile trail with two bridges)	Design 90%						·		
3	Viers Mill Overpass connection		Facility							
-	to Rock Creek Trail		Planning							
			\$333,000							
4	Capital Crescent Trail/Trestle			Facility	Design &	Constr.	Constr.			
l	connection to Rock Creek		1	Planning	Constr.					
-	Trail and Park near Freyman		į	\$77,000	\$342,000					
	Drive (1/4 mile trail)				English		Desir- 0	Cariti		
	Rock Creek Trail connection				Facility Planning		Design & Constr.	Constr.		
	from Lake Needwood to Lake				\$25,000		Consu.			
	Frank (1/4 mile trail)				Ψ20,000					

CAPITAL IMPROVEMENTS PROGRAM Hard Surface Trails Design and Construction M-NCPPC Park Development Division September 19, 2002

Page 2 of 3

Priority	PROJECT	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10
	HARD SURFACE TRAILS - UN	PRIORITIZE	D CONNEC	TOR PROJ	ECTS	l	1	L	J	<u> </u>
	Capital Crescent Trail	Design	Constr.		Ι	1			T	
l	connection to Little Falls Trail	complete	\$5,000			ĺ				
ļ <u>.</u>	(315 feet of gravel trail)									
	Capital Crescent Trail			Design \$10,000						
!	connection to MacArthur Blvd. (1/8 mile asphalt trail near			\$10,000						
	Dalecarlia)						:			
	Paint Branch Trail connection				Facility		Design	Constr.		
	from MLK Park to Old				Planning		·			
l	Columbia Pike - \$450,000				\$35,000					
	estimated for FP/Des/Constr.				F99.	Davies 0	0			
l	Rock Creek Trail connection to Grosvenor Metro Station				Facility Planning	Design & Constr.	Constr.			
1	at Saul Road (1/2 mile trail				\$50,000	\$625,000				
	with bridge)				(estimated)					İ
	Cherry Avenue connection to		Facility				Design &	Constr.		
	Sligo Creek Trail (370 feet of		Planning				Constr.			
	trail with retaining wall)		complete				\$264,330			
	Big Pines Local Park - connect									
	hard surface path to play lot (963 feet of trail)									
	Capital Crescent Trail -									
	correct safety issue with bridge									
	and traction at the Little Falls									1
	Trail									
	Capital Crescent Trail									ı
	connection to Little Falls Mall									
	Capital Crescent Trail connection to Little Falls									
	Parkway behind Bethesda Pool									
	Capital Crescent Trail									
	connection to Kentbury Drive									
	near Sleaford Road									
	Capital Crescent Trail					·				
	connection to Brookway Drive (provide ADA & stroller access)									
	Capital Crescent Trail									
	connection to Westmoreland									
	Hills Apartments parking lot	i								
	Georgetown Branch Trail									
	connection to Meadowbrook									
	Annex parking lot									
	Long Branch Trail connection from Whitney Street to Long		l							
	Branch Local Park		[1						
	Long Branch Trail connection									
l	to existing path on Piney									
	Branch Road									
	Long Branch Trail at Domer									
	Avenue - replace existing bridge with wider bridge									
	Magruder Branch connection									
	to Tobacco Leaf Lane									
	Magruder Branch connection									
	to Clearsprings subdivision or	1								
	area near elementary school									
	Northwest Branch Trail bridge				İ					
	connection to Montgomery Knolls Elementary School									
	Paint Branch Trail connection									
	from MLK Park to Springbrook		İ							
	High School									

CAPITAL IMPROVEMENTS PROGRAM Hard Surface Trails Design and Construction M-NCPPC Park Development Division September 19, 2002

Page 3 of 3

Priority	PROJECT	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10
	HARD SURFACE TRAILS - UNF	RIORITIZE	D CONNEC	TOR PROJE	CTS (Conti	nued)				<u> </u>
	Paint Branch Trail connection from MLK Park to Wheaton Regional Park									
	Paint Branch Trail connection from MLK Park to Wheaton Library						·			
	Paint Branch Trail connection from Fairland Road to the Intercounty Connector R.O.W.									
	(0.40 mile trail) Rock Creek Trail connection from Lake Needwood trail head to Shady Grove Metro Station				-					
	via Crabbs Branch Way to Redland Road Rock Creek Trail connection from Lake Needwood trail head			·	·					
	to Gaithersburg Town Center Rock Creek Trail connection to Kensington Parkway near									
	Rock Creek Hills Local Park Rock Creek Trail connection from Mill Creek to Mid-County									
	Highway to Montgomery Village Rock Creek Trail connection from Beauvoir Boulevard to Redland Local Park									
	Rock Creek Trail connection from Lake Needwood recreation area to the						·			
	Intercounty Connector R.O.W. Rock Creek Trail - extend Bowie Mill trail in parkland south									
	Rock Creek Trail connection at Emory Grove Rock Creek Trail connection									
	at Cedar Lane play equipment Sligo Creek Trail connection to Colt Terrace									
	Sligo Creek Trail connection to Wheaton Regional Park (improve existing connection)									
	Sligo Creek Trail connection to Wheaton Regional Park (near Wheaton Reg. Library)									
	Sligo Creek Trail connection to Carroll Avenue bridge Sligo Creek Trail connection to Domer Avenue									
	Sligo Creek Trail at Bennington Drive - replace existing bridge with wider bridge								• .	
	Sligo Creek Trail connection from Washington Adventist Hospital trail and parking lot									
	Sligo Creek Trail connection to Parkside Headquarters and hilltop roads Sligo Creek Trail - pave existing								2	
1	gravel access road on east side of Parkway									