

North Gettysburg Area Trail System Feasibility Study

Adams County, Pennsylvania

September 2000

NORTH GETTYSBURG AREA TRAIL SYSTEM FEASIBILITY STUDY

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Consultant:



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A. Introduction

1. Context

a. Regional Setting

The proposed North Gettysburg Area Trail System, located in Adams County, is envisioned to connect the Borough of Gettysburg to portions of Cumberland and Straban Townships via a network of pedestrian and bicycle trails.

This proposed trail system will be the first multi-purpose trail system in Adams County. It is intended to connect existing and future residential neighborhoods to schools, places of employment and other destinations in the projects area. The intention of this trail system is to give area residents alternatives to automobile transportation. While it is acknowledged that visitors to the area may use the trail, it is designed to meet the needs of local residents.

A significant portion of the study area encompasses National Park Service lands—The Gettysburg National Military Park. Jones Battalion, Barlow Knoll, the Eternal Light Peace Memorial, and the Oak Ridge Observation Tower fall within the area under study. NPS roads within this area include Howard Avenue, Buford Avenue, Doubleday Avenue, and the northern section of Reynolds Avenue. Several historic 1863 lanes also traverse this region.

Gettysburg College is located in the southwestern corner of this study area. The college maintains campus trails currently in use, with additional trails planned as part of a recent campus landscape master plan.

Other portions of the study area are primarily residential neighborhoods with limited industrial, commercial and institutional uses. Residential developments include Gettysburg View, Roselawn Estates, Twin Oaks, and Hunters Crossing. Other residential neighborhoods are located on Long View Drive, Meadow Lane, Ridgewood Drive, Apple Avenue, Maple Avenue, Cedar Avenue, and those located within the Borough of Gettysburg.

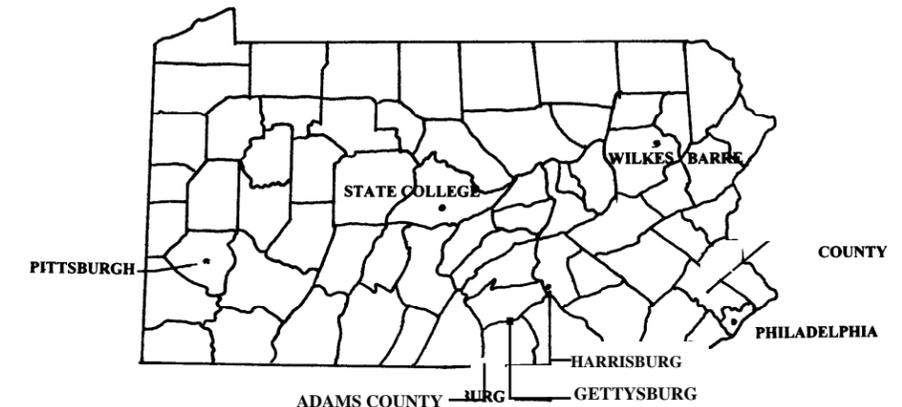
Institutions within the study boundary include Gettysburg High School, Eisenhower Elementary School, James Gettys Elementary School, Harrisburg Area Community College, County Prison, Green Acres County Nursing Home, Lutheran community along Old Harrisburg Pike, and County Agriculture Center.

Commercial use within the boundary includes restaurants, shopping locations, bank, and car dealership. Considerable commercial development is located along Route 30, York Road, south of Shealer Road.

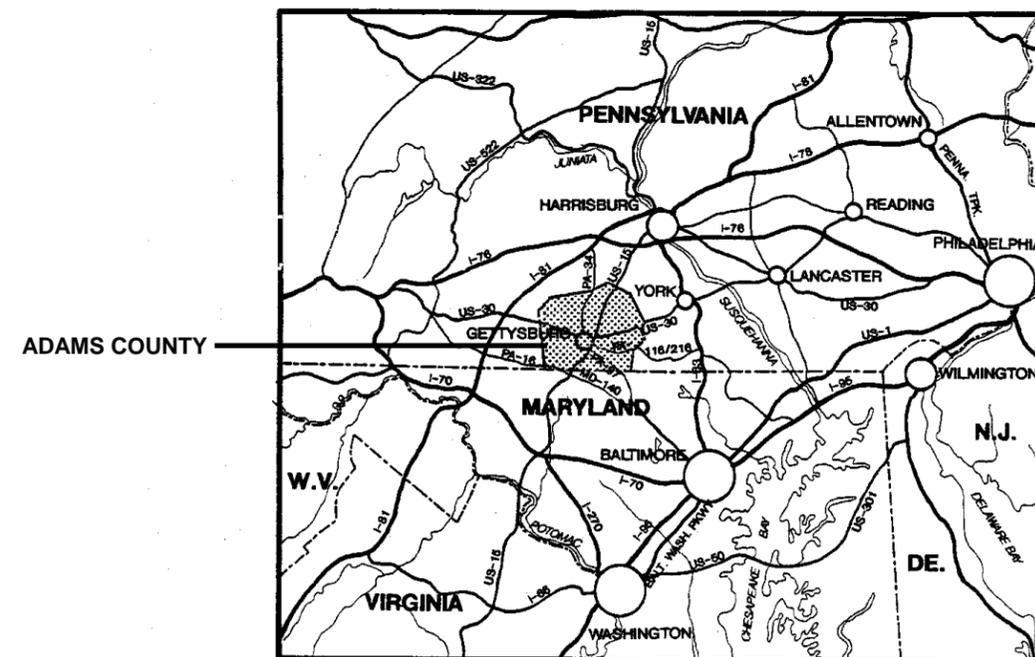
Two active railroad lines pass through the area. The CSX line runs east-west along the southern boundary of the study area, and a scenic and freight line spurs off just west of Gettysburg College, running north. This scenic line originates in the Borough of Gettysburg

at a station located along Baltimore Street. It cuts through the study area, creating a north-south physical barrier through the western sections of the study area.

U. S. Routes 15 (Blue Gray Highway) and Pennsylvania State Route 116 (Hanover Street and Fairfield Road) pass by the study area, while U. S. Route 30 (York Road and Chambersburg Road) and State Routes 34 (Biglerville Road and Carlisle Street) and 15 (Old Harrisburg Pike) pass through. Mummasburg Road, Carlisle Street/Biglerville Road, Table Rock Road, Old Harrisburg Pike, and Hunterstown Road lie in a radial pattern out from Gettysburg.

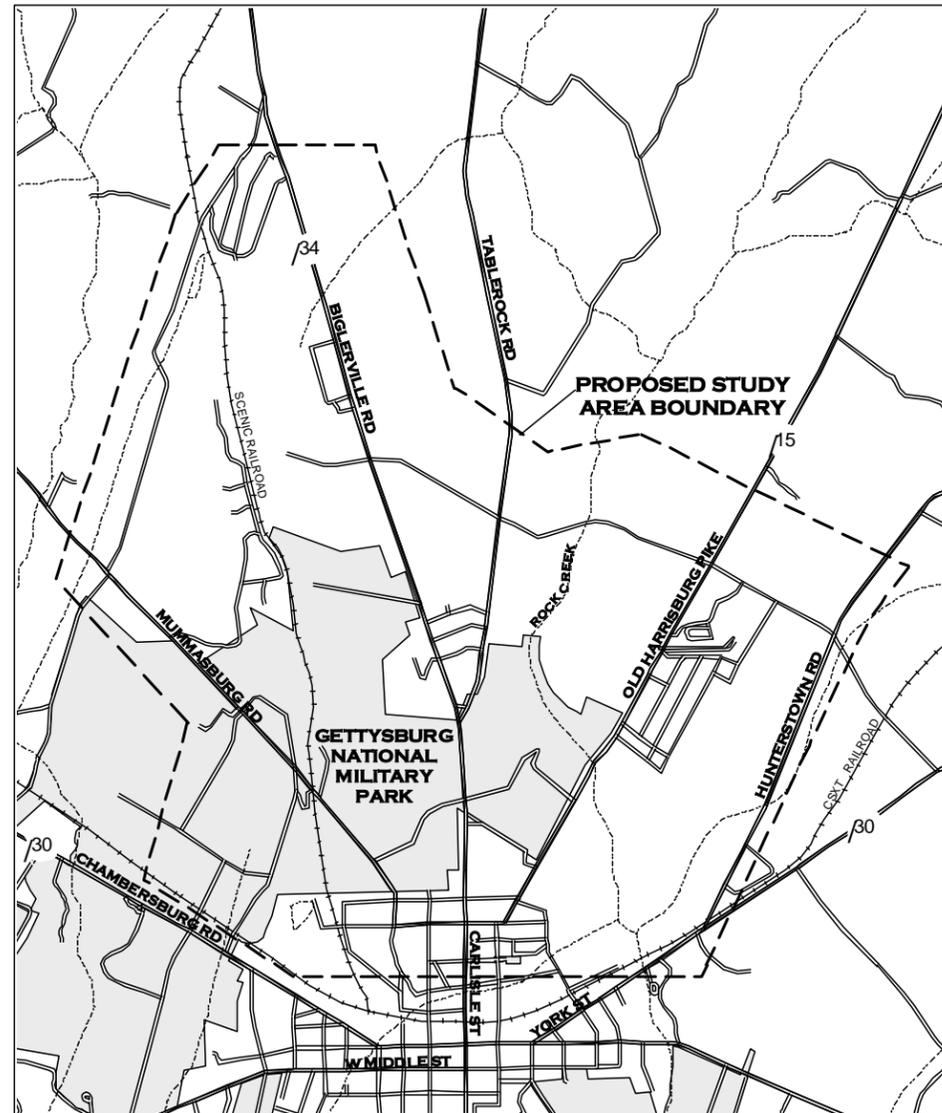


Location Map - Pennsylvania



Regional Context Map

A. Introduction



Study Area

b. Brief Regional History

The area's first residents were Native Americans from the Archaic and Late Archaic periods, as well as Early, Middle, and Late Woodland periods. Beginning in the late seventeenth century, European settlers flocked to Pennsylvania, in response to William Penn's settlement and offer of freedom, tolerance, and prosperity.

Gettysburg was settled in the eighteenth century by about 150 families, including Samuel Gettys. Forty years later, his son, James, purchased 116 acres, which were divided into the original 210 lots of Gettysburg. Gettysburg became a small rural center, located along a significant agricultural transportation corridor between larger Pennsylvania and Maryland cities. The town experienced steady growth and, with the construction of more roads and roadway improvements, became the hub of Adams County and the county seat in 1800.

Many religious institutions were established here during the first half of the nineteenth century including the Lutheran Theological Seminary, and also Pennsylvania College, later to become Gettysburg College. By 1845, the town developed a significant African-American population as a stop on the Underground Railroad. The Western Maryland Railroad was extended into town in 1858, and by the early 1860's, Gettysburg's population had grown to 2400.

On June 30, 1863, Gettysburg's history was changed forever as it became the site of the Civil War's most important battle. Union and Confederate Armies met on this day just to the west of Gettysburg along Chambersburg Road. The battle between the northern and southern armies continued over the next three days. On July 1, the armies engaged in battle north and west of the town. Confederate troops forced a Union retreat directly through the streets of town. For the next two days, the Confederate army used town buildings as the battle wore on to the south of Gettysburg. By the conclusion of the battle, 53,000 soldiers would be killed, wounded, or captured in the Union army's defeat of the Confederates.

On November 19, 1863, President Abraham Lincoln delivered the now famous Gettysburg Address at the dedication of the National Cemetery. His speech attracted over 15,000 visitors.

In 1895, Gettysburg National Military Park was established to preserve the battlefield site. President Franklin Delano Roosevelt dedicated the Eternal Light Peace Memorial during the 75th anniversary of the Battle in 1938. The military continued its interest in Gettysburg, using the battlefield to train troops during World War I, when camp Colt was established south of town. Major Dwight Eisenhower commanded the camp. In 1950, General and Mamie Eisenhower purchased a farm adjacent the battlefield. The home became a retreat

A. Introduction

during his presidency and home in retirement. It was deeded to the National Park Service in 1967 and is preserved as the Eisenhower National Historic Site.

Despite the pressures of changing economies and millions of visitors, Gettysburg has retained much of its historic character and many of its historic sites.

c. The Gettysburg Historic Pathway Plan

The Gettysburg Historic Pathway Task Force, comprised of members of various local groups, developed this plan in 1989. It outlines an important corridor centered on the Borough of Gettysburg, following Carlisle Street, Baltimore Street, and Steinwehr Avenue. Its' purpose is to guide community efforts toward economic revitalization of Gettysburg, while honoring and preserving the historic town's past. *"The premise of this report is that Gettysburg must reassert its historical role as interpreter of the battlefield which carries its name, and of which its streets and buildings were so important a part."*

The report identifies the historic pathway corridor, breaks it down into individual sections, and suggests specific improvements for each. Bringing visitors into the town is of primary goal of the report. It asserts that the historic significance and character of Gettysburg, the need to interpret that history to the million annual visitors, and the effect of those visitors on the economy and management of the Borough. Currently, only a small percentage of battlefield visitors utilize the resources of the town, and a very limited number stay longer than one day. The plan intends to attract visitors into the town and encourage them to stay longer than one day.

The North Gettysburg Area Trail Feasibility Study suggests a direct connection between the Historic Pathway Corridor and the proposed trail system, which, in turn, will ultimately link to the National Military Park.

d. Management Plan of Gettysburg National Military Park, December 1999

The Park's General Management Plan (GMP) establishes the management philosophy and identifies means to address issues and achieve management objectives within the Gettysburg National Military Park. The plan is prepared and periodically updated for the National Park System in order to help NPS decide what resource conditions and visitor experiences a park should provide, and why. The GMP sets direction for resource protection and visitor use in consultation with the public. It defines the basic philosophy of park management and provides broad guidance to park managers.

The plan acknowledges the fact that visitors want to get off the avenues and lanes to experience the battle from the perspective of its participants. This, combined with the increased number of visitors in the park, results in trampled grounds, significant erosion, and, in some cases, damage to commemorative monuments. *"On a battlefield where the resource is literally the ground that was contested, well-meaning and curious visitors are eroding the very surface of the park; the public is literally loving the battlefield to death. ...The GMP will consider appropriate ways to limit resource damage and provide the kind of access to fields people want."* (page 15)

While the plan supports the idea of providing direct pedestrian access to battlefields (page 15), it also supports the repair and rehabilitation of historic features that have been deteriorated or changed. This includes rehabilitation of historic lanes for use by horses, pedestrians, and emergency vehicles, providing that their original surface texture and width are retained (page 59). The plan specifies certain criteria for providing acceptable paths and trails on the NPS lands (page 93). Mention is also made of possible intermittent closure of certain park avenues at some times of the year to allow pedestrian use (page 95). These would occur as temporary closures, perhaps for only several hours a day, during peak usage periods. These avenues would *not* be closed indefinitely or for lengthy periods of time.

e. Adams County Comprehensive Plan

The County's most current Comprehensive Plan is dated 1990. It makes specific reference to the need for a non-vehicular pedestrian transportation system and recreation system with trails for non-motorized vehicular use.

One of the plan's circulation goals is to *"achieve a safe, efficient, mostly congestion-free circulation system that will best serve business, agriculture-related, institutional, and personal trips."* Another important goal of the plan is to *"consider the long-range potential for reducing reliance on the automobile."* It suggests that physical improvements to new roads and roads undergoing upgrades should accommodate bicyclists.

The plan states the following. *"The provision for safe and convenient movement of pedestrians and bicyclists is an important element of the plan. It is recommended that within boroughs and villages, sidewalks or other forms of all-weather pedestrian paths be provided in locations where pedestrian travel may reasonably be expected to occur or where it is to be encouraged. Between growth areas, on selected highways and rural roads, shoulders should be installed wide enough to provide for pedestrians and bicycles. Bicycle and pedestrian paths should be considered integral with major new residential developments and as part of the interconnected county-wide open space system."*

A. Introduction

Another provision of the plan is to provide an adequate supply and mix of parks, playgrounds, and other recreational facilities, both passive and active, to serve the County's population. The proposed trail system will help to satisfy this provision. While not the primary goal of this trail system, it will be useful for recreational purposes. A system of permanent linear open space corridors is envisioned by the plan, offering long-term opportunities to meet recreational needs, and providing opportunities for non-motorized transportation.

The plan state: *"The continuous, interconnected, permanent open space network is intended, then, to serve several purposes: ...to provide a framework for a trail system, eventually to stretch throughout the county, for walking, hiking, and cycling; ...to permit pedestrian and bicycle access to a variety of destinations, including adjacent and nearby communities, other residential developments, schools, special natural features, shopping, and specific sites for recreational facilities;..."*

f. Adams County Vision for Parks, Recreation and Open Space

At the direction of the County Commissioners, the Adams County Office of Planning and Development prepared the Parks, Recreation and Open Space plan as a blueprint for public involvement in planning future parks, recreation opportunities, and open space preservation. The plan has been accepted as an official amendment to the Adams County Comprehensive Plan.

A random citizens survey conducted as part of the planning process identified the need for walking and hiking trails, cited most often as generally needed. The plan asserts that *"greenways can provide outstanding passive recreation opportunities, since they may serve as a location for pedestrian and bicycle transportation facilities..."*

The Vision Plan recommends the incorporation of trail links, scenic corridors, and urban greenways into the Adams County greenway system. According to the Plan, *"trail links are important to connect other types of greenways into a cohesive system."* Greenways as "recreation corridors" for hiking, walking, and bicycling can also become part of a larger system used by residents *"for travel to and from work, (school), shopping centers, and places of worship."*

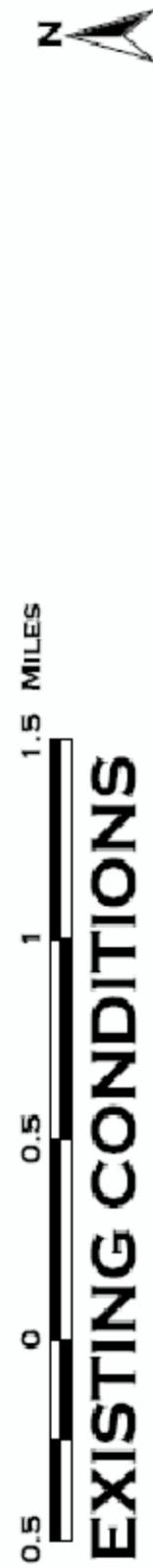
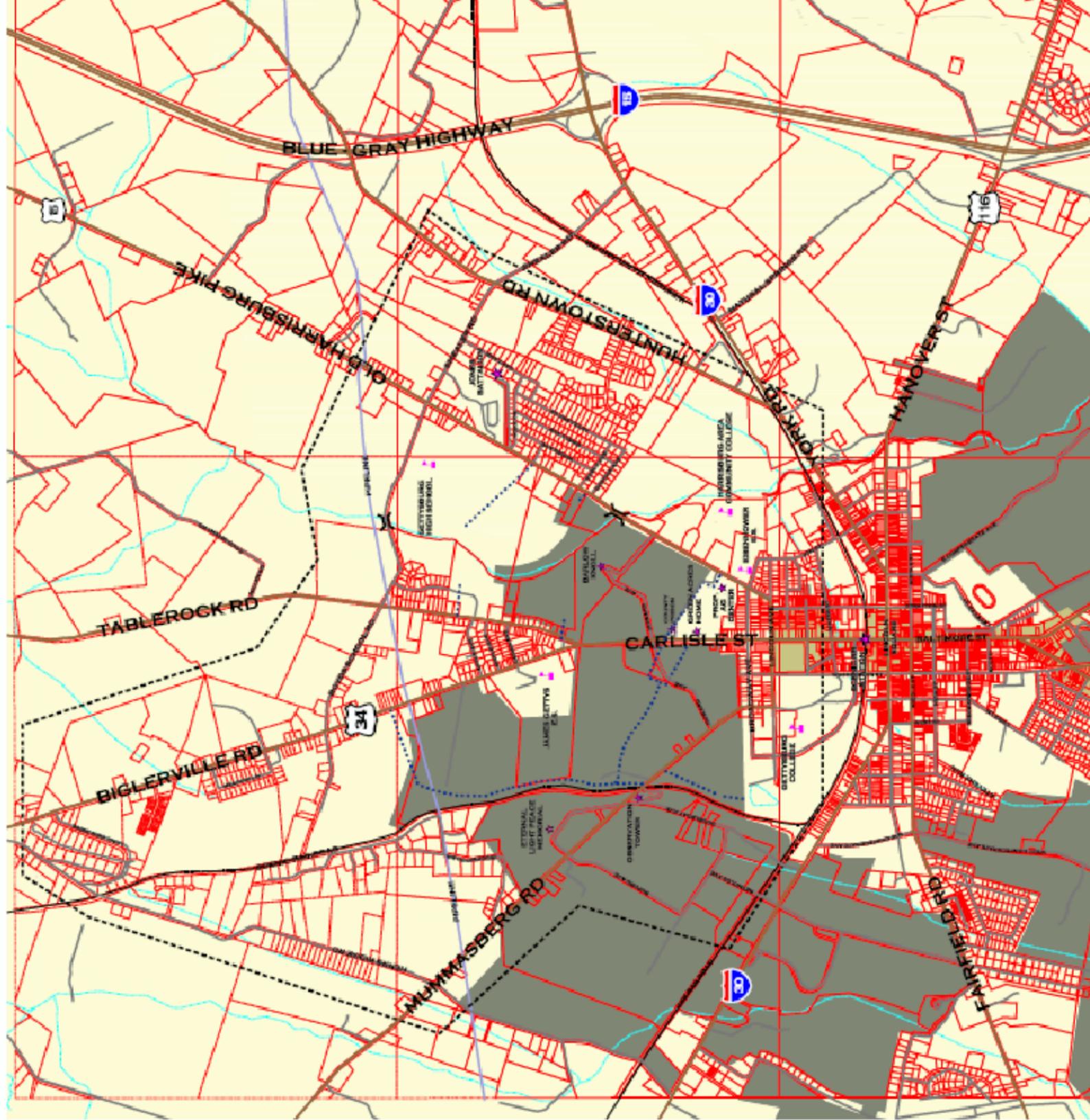
The plan states that Adams County Office of Planning and Development *"should study the concept of a loop trail around Gettysburg by providing trail links between Marsh Creek and Rock Creek both north and south of the Borough. Trail links should be used to create a North Gettysburg Area Trail System linking the Borough, the new Gettysburg High School, Gettysburg College, and surrounding neighborhoods."*

Urban Greenways, such as those proposed as part of this Feasibility Study, offer a different environment than rural greenways. *"The concentration of activity centers in urban areas offers opportunities to develop self-contained networks of connections between neighborhoods, schools, shopping areas, employment centers, and community centers which are relatively close together. Pathways, rail-to-trail projects, stream banks, sidewalks, and other urban land components are often used to complete links within a network of urban greenways. Gettysburg—the largest urban area in the County—...demonstrate[s] strong potential for urban greenways."*

A. Introduction

b. Existing Conditions

NORTH GETTYSBURG AREA TRAIL FEASIBILITY STUDY



EXISTING CONDITIONS

LEGEND

- FEASIBILITY STUDY BOUNDARY
- N.P.S. 1863 LAMP RELIEF
- ELECTRICAL TRANSMISSION LINE
- RAILROAD
- ROADS
- STATE ROAD
- STREAMS
- GETTYSBURG HISTORIC PATHWAY CORRIDOR
- N.P.S. BOUNDARY

DRAFT: SEPTEMBER 22, 1999

PREPARED FOR:
ADAMS COUNTY PLANNING COMMISSION

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B. Study Goals

1. Purpose

This study was initiated by Adams County to assess the feasibility of establishing the North Gettysburg Area Trail, a non-motorized, pedestrian/bicycle trail system. In 1995, the Adams County Office of Planning and Development prepared a cursory evaluation of potential pedestrian and bicycle connections near the new Gettysburg High School in Straban Township. This analysis illustrated the potential to create a primary loop trail that would connect Gettysburg with the high school site, and continue west over Rock Creek into Cumberland Township. Additionally, the cursory evaluation determined that there is substantial potential to create several secondary or connecting trails and pedestrian/bicycle linkages between the neighborhoods in Cumberland and Straban Townships, and also with the primary high school loop.

With the initial, cursory evaluation complete, Adams County is now proposing, through this study, a feasibility analysis to determine the potential for the development of a regional pedestrian/bicycle trail system to provide pedestrian/bicycle linkages between the Borough of Gettysburg and the new Gettysburg High School north of the Borough; as well as linkages between the residential neighborhoods in Straban and Cumberland Townships, the high school site, the Borough, and the Gettysburg College campus.

Adams County is preparing this study on behalf of the Gettysburg Area School District, the National Park Service, Gettysburg Borough, and Straban and Cumberland Townships. Gettysburg College has also indicated a strong interest in this project.

With the development of the new Gettysburg High School at the intersection of Old Harrisburg Road and Boyds School Road, the need to create safe pedestrian and bicycle connections between Gettysburg Borough and the High School quickly became evident. Enhancing public safety and convenience for students, staff, and visitors to the new school facility is of paramount importance, and was the initial driving force for this project. However, a well-conceived and designed system of pedestrian and bicycle linkages within the study area will serve a myriad of additional purposes. These include, but are not necessarily limited to, the following:

- Enhanced Pedestrian / Bicycle Linkages between neighborhoods, the Gettysburg High School, activity centers, and employment, commercial, and institutional uses within and immediately adjacent to the study area.
- Enhanced Recreational Opportunities for residents of the study area.
- Encourage Greenway Conservation efforts along Rock Creek, its tributaries, and other non-creek related open space within the study area.
- Reduced reliance on the automobile for short distance, neighborhood-oriented trips.
- Implement goals of the Statewide Bicycle and Pedestrian Master Plan, including the modification of the existing system to encourage bicycling and walking, and the design and development of new and improved facilities for bicyclists and pedestrians.

Studies have proven the need for and benefits from trail development. A 1996 report titled the *National Bicycling and Walking Study*, prepared by the Rails-to-Trails Conservancy in Washington

D.C., estimates that 131 million Americans regularly bicycle, walk, skate, or jog for exercise, sport, or recreation. Walking is the most popular recreational activity in the United States, with more than 100 million people of all ages walking for recreation from two to three times a week. In past years, more bicycles have been sold in the United States than automobiles, but bicycle owners say that there are few places near their homes where they can ride safely. In the past decade, public calls have been made in federal, state, and local legislatures indicating a growing need for more local recreational facilities. In 1987, President Reagan's Commission on the American Outdoors (PCAO) recommended that a national system of greenways—a network of natural and man-made corridors connecting communities, parks, and recreation areas—be established.

The purpose of this feasibility study is to inventory and analyze the existing conditions within the study area, develop mapping of the study area, and to suggest feasible trail alignments. Additionally, this study recommends acquisition options, construction guidelines, illustrative design details to convey solutions to critical design issues, and suggests management options and necessary maintenance. This study also estimates costs associated with development and maintenance of the trail.

The development study was funded in part by a grant from the Pennsylvania Department of Conservation and Natural Resources. The project is being administered for the County by the Office of Planning and Development.

2. Location and Limits

The trail study area is located in the heart of Adams County, immediately north of Gettysburg Borough.

The Adams County Office of Planning and Development was instrumental in defining a study area in which a regional trail system could be developed. The study area is bounded by Gettysburg Borough to the south, Herr's Ridge Road to the west, the Western Maryland Railroad right-of-way to the east, and the properties forming the northern edge of Long View Drive, Boyd's School, and Shealer Roads to the north.

3. Goals

The County envisions the North Gettysburg Area Trail to function primarily as an alternative transportation route, allowing safe pedestrian and bicycle connections between the

B. Study Goals

neighborhoods, schools, and businesses in the study area. Particular attention is paid to providing these connections to the new Gettysburg High School. Additionally, this trail shall provide recreational opportunities for local citizens. Finally, it is envisioned to promote environmental awareness through greenway conservation efforts, particularly along Rock Creek.

C. Inventory and Analysis

1. Methodology

a. Public Meetings

An important part of the trail study process is public comment and input. To accomplish this, several public meetings were held. The study was presented to the public, and ideas and comments were recorded by placing each comment or suggestion on a piece of paper on the wall. All suggestions made at the meetings were posted. The first meeting focused on presenting a project overview, analysis of the study area, and development of programming for the trail. The purpose of the second meeting was to present preliminary trail options to the public for comments. The draft plan was presented to the public at the last public meeting, again, to gain public comments and feedback.

b. Advisory Committee

An advisory committee was established to periodically review progress and provide recommendations. Members of the committee include representatives of the Borough of Gettysburg, Cumberland and Straban Townships, the Gettysburg Area School District, Gettysburg College, the Gettysburg National Military Park, the Gettysburg Recreation Board, and Gettysburg Recreation Department. A listing of advisory committee members is contained on the acknowledgements page at the beginning of this report.

c. Reconnaissance

In order to gain a thorough understanding of the study area, the consultant and representatives from the County performed field reconnaissance.

The project area was surveyed by foot and car. Notes, photographs, and slides were compiled to aid in the study. This critical part of the project scope not only helped to clear up questions, but also aided in gaining a comprehensive understanding of the site and development of possible route alternatives.

The consultant surveyed trail route alternatives with representatives from the County and developed an extensive inventory, which can be found in the form of a matrix later in this report in section D *Trail Alignments*. The final recommended routes can also be found later in this report in section D.

Trail ownership was researched using the Trail Assessment database and tax parcel mapping in addition to the County's GIS system.

d. Route Types

Five potential types of trail routes have been suggested to create the trail.

- **On-road Routes:** These routes follow roadway alignments. Each type may travel along state, county, or local roads. Three types of on-road routes may occur. *On-Road Bike Lanes* are the most formalized type of on-road trail. These are paved (often as road shoulders), with signs and a formal designation. The second type of on-road bike trail is *Signed Shared Roadways*. These routes allow bicycles to use the entire travel lane of the road. Motorists are alerted of expected bicycle activity by PennDOT's "Share The Road" or the preferred "Bikes on Road" signs. The third type, *Shared Roadway*, is the least formalized and occurs where cyclists share the road with motor vehicles. These are street and highway routes without any type of bikeway designation. Most bicycle travel in the United States occurs on shared roadways; they are simply the roads as constructed.
- **Off-road Routes:** These routes follow greenways, or designated off-road routes. They are not part of a roadway, but, instead, function as separate corridors.
- **Gettysburg College Trail Routes:** These routes share existing college trails and trails proposed as part of the recent Gettysburg College Landscape Master Plan.
- **National Park Service On-road Routes:** These routes are proposed to follow existing NPS avenues. Since these avenues are NPS operated and occur on historically significant ground, it will be necessary to work closely with NPS to institute these sections. Preliminary discussions with officials have found NPS receptive to the idea interested in the project.
- **National Park Service 1863 Historic Lane Routes:** Similar to NPS *on-road* routes, the *historic lane* routes utilize now-obliterated, historic lanes present in 1863 and during the battle. The General Management Plan of the Gettysburg National Military Park supports the reinstitution of these lanes as part of its efforts to restore the fabric of the historic Gettysburg Landscape. This trail study suggests utilizing some of these lanes. As with the NPS *on-road* routes, these will require working closely with the National Park Service. Preliminary discussions with officials have found NPS receptive to this idea.

2. Potential Demand

a. Existing and Proposed Trail Use Generators

The number of potential trail system users within the study area is high. A large number of existing residential areas, as well as commercial, business, and institutional centers, are already located within or immediately adjacent to the project study area. The neighborhoods and activity centers are typically isolated, and are not connected by pedestrian linkages.

C. Inventory and Analysis

People traveling between them usually use private automobiles. These “traffic generators” include, but are not limited to, the following:

- Existing Residential Neighborhoods in Cumberland Township, Straban Township, and Gettysburg Borough including, but not limited to, Twin Oaks, Ridgewood, Longview, Meadow Lane, Apple Avenue, Maple Avenue, Cedar Avenue, Pin Oak Lane, and Herr’s Ridge Road.
- Residential Neighborhoods currently under development include, but not limited to, Hunters Crossing, Roselawn, and Gettysburg View. When complete, these developments will include approximately 170 dwelling units.
- Public School Facilities, including the new Gettysburg High School, the James Gettys Elementary School, the Eisenhower Elementary School, and the Administrative Complex for the Gettysburg Area School District.
- College Facilities, including the Gettysburg College Campus, and the Gettysburg Campus of the Harrisburg Area Community College (located in the North Gettysburg Shopping Center).
- Retirement Communities, including the Green Acres Nursing Home (operated by Adams County), the Gettysburg Lutheran Retirement Village, and the senior center complex on North Stratton Street in Gettysburg Borough.
- The Adams County Prison (However, it is noted that Adams County is proposing the development of a new County Prison outside the study area. The disposition of the current Adams County Prison is unclear at this time.)
- The Adams County Agricultural Services Building.
- Commercial Uses within and immediately adjacent the study area, including, but not limited to, the North Gettysburg Shopping Center, a UPS distribution center, a gas station, an automobile service center, a veterinary office, Walmart, the Peebles-Festival Plaza, and numerous additional commercial uses along the U.S. Route 30 Corridor.
- Gettysburg National Military Park points of interest including the Eternal Light Peace Memorial, Oak Ridge Observation Tower, Barlow’s Knoll, and Jones Battalion.

Growth and development within the Gettysburg area of Adams County will ultimately create additional demands for non-motorized forms of transportation between activity centers, business and employment locations, recreational locations, and neighborhoods. Pending development within the Adams Commerce Center will increase demand for residential development within the Gettysburg area, some of which will most likely locate within the study area. The provision of safe pedestrian and bicycle transportation facilities, and the creation of new “bike-ped” linkages, will help alleviate future automobile traffic congestion within an already strained transportation network. As commercial enterprises along the Route 30 Corridor continue to develop, and housing continues to be built along the Hunterstown Road, Old Harrisburg Road, Table Rock Road, and Route 34 (Biglerville Road) corridors, pedestrian and bicycle linkages between these area will help reduce the reliance on the automobile to access these facilities. Of course, the development of pedestrian and bicycle trail facilities will also help to provide for the recreation needs of existing and future residents of the study area. The Adams County Parks, Recreation, and Open Space Plan demonstrate a current deficit of pedestrian and bicycle amenities within the Gettysburg region.

b. Demographics

The following information provides a cross section of the County’s residents. They will be the primary trail users.

Based on the Adams County Planning Commission Water Supply Plan population estimates, the County had a 1997 population of 90,111. These figures account for a county 16.3% growth rate since 1990. Of those, 7,124 reside in Gettysburg Borough, 6,030 in Cumberland Township, and 4,891 live in Straban Township. The population of Gettysburg Borough increased by 1.4%, Cumberland increased by 11% and Straban Township increased by 7.1%.

According to 1990 census information projections, Adams County is expected to grow at a steady rate. Population projections for the County are as follows. Growth is expected to rise from 78,274 in 1990 to 91,056 in 2000, to 104,001 in 2010. The population is expected to become more of an aging one. The 0-4 age group is expected to decline slightly, as is the 15-24 and 25-44 age groups. The 5-14 age group is expected to achieve a small gain, with the greatest increase expected for the 45-64 age group—receiving almost twice as much gain as any other. The 65 and over age group is expected to undergo very little or no measurable change.

c. Random Sample Citizens Survey

A random sample survey of area residents was performed to help assess the need for the trail, potential users, and other issues. The consultant aided the County with the preparation of the survey, while the County administered it. The following results have been drawn from the survey. (A copy of the actual survey can be found in the appendix to this report.)

Number of Surveys Sent: 340
Number of Responses Received: 95 (28% response)

Municipality of Residence:	Municipality of Work:
Gettysburg: 33	Gettysburg: 27
Cumberland: 23	Cumberland: 6
Straban: 17	Straban: 3
	Other: 9

Summary of Recreational Activities of Respondents by Age Group:

	Age Group				
	0-9	10-19	20-39	40-59	>60
Walking	5	7	25	61	43
Jogging	0	4	14	14	2
Roller-Blading	2	6	7	2	0
Street-Biking	9	9	17	23	4
Off-Road Biking	2	3	12	12	3

C. Inventory and Analysis

This data indicates that many respondents participate in two or more activities.

Summary of Frequency of Use of Road Rights-of-Way for Rec. Activities by Age Group:

	Age Group				
	0-9	10-19	20-39	40-59	>60
Daily	9	10	3	24	22
Weekly	5	7	3	35	2
Monthly	0	2	1	2	1
Not At All	0	0	0	0	5
Other	0	0	1	1	3

Respondents indicated a high level of activity on both a daily and weekly basis.

Use of Non-Motorized Modes of Transportation to Commute to Work or School:

Yes: 27 No: 61

Frequency of Non-Motorized Commuters by Age Group:

	Age Group				
	0-9	10-19	20-39	40-59	>60
Daily	2	1	2	3	1
Weekly	0	3	5	5	0
Monthly	0	0	0	3	0
Not At All	0	0	0	0	0
Other	0	0	0	2	2

Data indicates that nearly one-third of respondents use non-motorized means to commute to and from work or school on at least a weekly basis.

Household Use of Potential North Gettysburg Trail System:

Yes: 69
 No: 23
 Maybe: 2
 No Response: 1

Data indicates a high level of interest with 73% of respondents indicating that they would use the trail system.

Frequency of Use of the potential Trail System by “Yes” Respondents Above:

Very Seldom: 4
 Occasionally: 10
 Often: 26
 Very Often: 29

Data indicates that 42% of respondents who would use the trail system would use it often.

Frequency of Respondents’ Use of National Park Service Land for Recreational Purposes:

0-5 Times/Year 26
 6-10 Times/Year 6
 11-20 Times/Year 8
 21-30 Times/Year 3
 >30 Times/Year 32

Data indicates that 43% of respondents utilize existing trails on NPS lands over 30 times annually.

NOTE: Not all responses add up due to errors in completing the surveys by individual respondents, and due to unanswered questions by some respondents.

3. Providing Access Throughout the Study Area

a. Potential Land Use Implications

Existing land use in the project area is a mix of public and private lands that contain historic, institutional, commercial, residential, light industrial and open space uses.

The largest single land use and landowner is Gettysburg National Military Park that comprises approximately one-fifth of the study area. The special nature of these federal lands creates a unique historic and tourist attraction in the area.

There are five educational institutions in the project area. These are Gettysburg College, Harrisburg Rea Community College, Gettysburg Area High School, James Gettys Elementary School and Eisenhower Elementary School. Singly and collectively, these educational institutions generate hundreds if not thousands of trips to and from these schools daily. A mix of commercial uses and some limited light industrial uses are also contained in the project area. These are located along major collector roads such as Old Harrisburg Pike and Biglerville Road as well as in the Borough of Gettysburg.

Much of the land use in the project area is “undeveloped” farmland or open land, however, recent area development trends point to development of these lands in the not-to-distant future.

C. Inventory and Analysis

Single-family residential use is by far one of the largest uses in the study area, and it is one use that is most likely to continue to grow. This future residential development will most likely occur in the Biglerville Road, Old Harrisburg Road and Hunterstown Road corridors.

Substantial growth of employment center and commercial uses will likely to develop in the route 30 corridor, which is located just to the east of the study area boundary. This development will create additional demand for residential growth in the core study area.

Existing land use patterns and probable growth in the study area have implications for the establishment of a trail system in the study area.

The adoption of the trail plan by Adams County will help to encourage the incorporation of trail facilities into development plans by the private sector. Once established, these trails could have a significant mitigating impact on increased traffic that is an inevitable affect of growth. However, trail development and planning must stay ahead of development activity to ensure the inclusion of trail corridors in development plans.

The trail plan will also be important to state, county and local roadway planners in order that they accommodate on road trails into roadway improvements.

Establishment of this trail system will also have a positive effect on development activity of both residential and commercial uses, since trails is an added quality of life amenity that attracts both businesses and residents.

b. Infrastructure

The proposed trail will take advantage of existing and probable future infrastructure. Initially, the trail will use existing infrastructure, including roads and bridges. In time, as road improvements are undertaken, this study recommends that they dovetail with the trail system through careful coordination with the state and local authorities. For example, shoulder improvements should be included to move share-the-road bikeways to shoulder lanes. Additionally, any bridge improvement project should take into account shoulders for bike lanes and walkways for pedestrians, such as are included on the Old Harrisburg Pike Rock Creek Bridge improvement project recently constructed by PennDOT. Through active local participation, the plans for this bridge include shoulder bike lanes and a pedestrian walk. The walk is separated from traffic by a concrete barrier, on the high school (west) side of the bridge. This bridge, is completely trail-user friendly.

c. Possible Integration into NPS Lands

As mentioned briefly above under *Route Types*, it is suggested that the proposed trail use several National Park Service avenues and 1863 historic lanes in the Gettysburg National Military Park.

According to the Park's General Management Plan (GMP), "*People want more ways to see and experience the park. ...[W]ell-meaning and curious visitors are eroding the very surface of the park; the public is literally loving the battlefield to death.... The GMP will...provide the kind of access to fields people want.*" (page15) This trail study suggests providing this access with pedestrian/bike trails along park avenues and pedestrian-only trails along historic 1863 lanes. This will not only allow a closer, more personal experience of the battlefields and monuments in the study area (and remaining parkland through future connections), but will also encourage local citizens and those walking in the area to visit/revisit the historic sites.

The integration of these avenues and lanes into the trail system helps tie the battlefield and Military Park to its surrounding context. This integration provides a direct connection of the battlefield and town of Gettysburg, including the Gettysburg Historic Pathway running through town.

See 4.b *Trail Development on National Park Service Lands* below for further discussion on this topic.

d. Possible Regional Connections

This study considers future growth, and has provided for this growth by promoting collector trail routes throughout the study area and possible future regional connections.

This study suggests five specific local connections possible in the future.

- Rock Creek Greenway connection to the north via Rock Creek
- Rock Creek Greenway connection to the south via Rock Creek
- Connection to Commercial District along York Road to the east via Shealer Road
- Connection to the Gettysburg Historic Pathway Corridor to the south via Carlisle Street
- Connection to the remaining Gettysburg National Military Park to the south via Reynolds Avenue

Additionally, a broad analysis of potential, large-scale countywide regional connections has been included and can be found on the map on the following page. In summary, a number of greenways traverse the County, which have the potential to become trail corridors. Active and abandoned railroad rights-of-way also have the potential to be included in a regional trail system. The Appalachian Trail passes just outside the northern and western edge of the

C. Inventory and Analysis

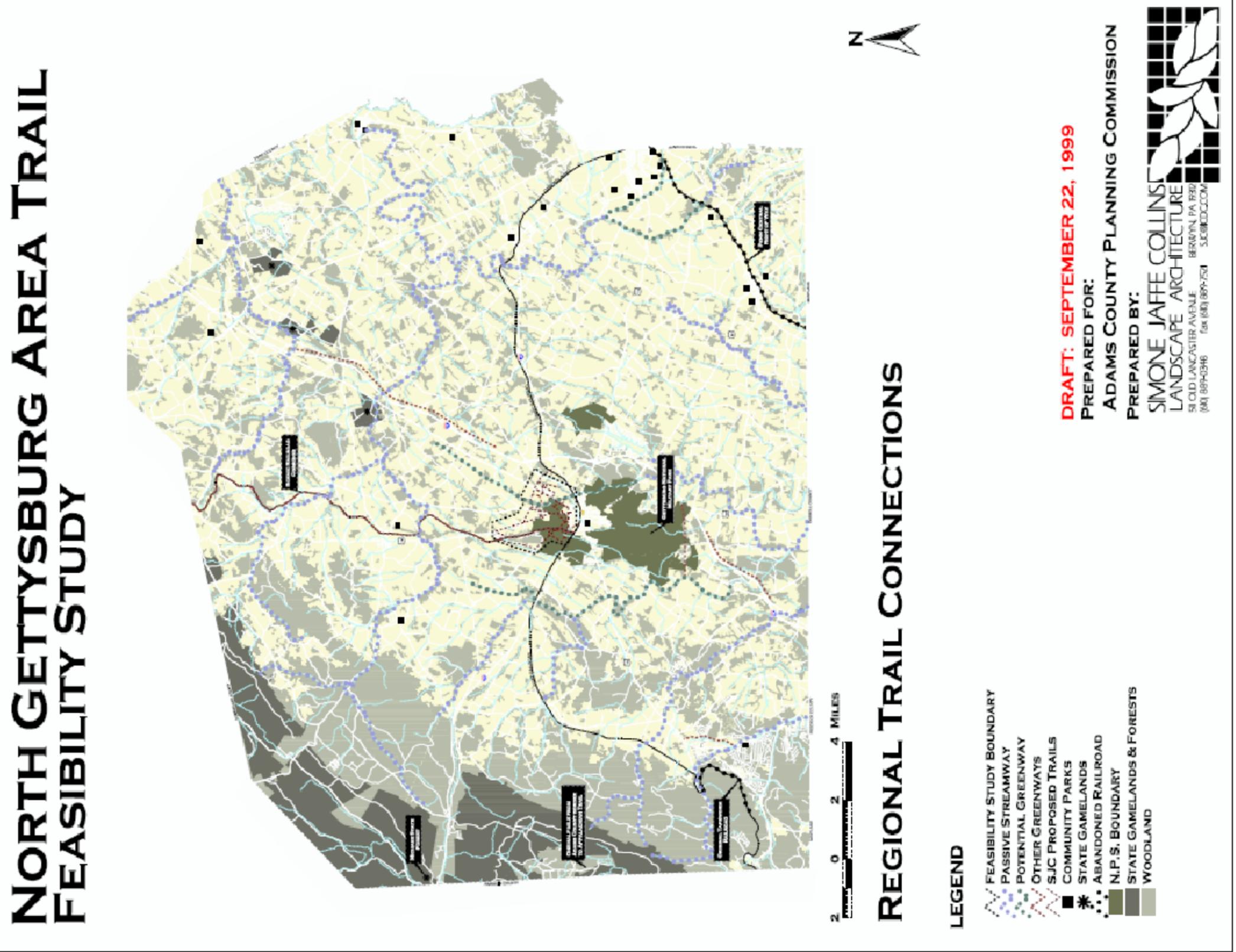
County. State game land, state forest, and community parks provide regional destinations and connections.

It is noted that the consultant has spoken with John Marino, owner of The Gettysburg Railroad Company and scenic railroad line. He has expressed an interest in sharing the company's active rail corridor running north-south through the study area to provide a trail connection between the Appalachian Trail, to the north of the County, and the Gettysburg National Military Park. The rail line is situated on fill, and the usable area on top is quite narrow and is presently wide enough for the active line only. In order to create a shared "trail with rail" significant amounts of fill would have to be added to the rail R.O.W. to create enough area for a trail.

The scenic trail corridor is paralleled for a distance by an historic 1863 lane on Military Park land. Once this historic lane is encountered from the north, the connection could be provided to the Military Park and to the entire proposed North Gettysburg area Trail system beyond assuming NPS approval. Providing the connection between the proposed North Gettysburg Area Trail System and the Appalachian Trail to the north along the railroad corridor will require careful consideration. This connection is out of the scope of this project, but is herein acknowledged. A feasibility analysis of this potential future regional link should be performed.

C. Inventory and Analysis

e. Regional Connections Map



C. Inventory and Analysis

4. Inventory and Assessment of Trail Corridors

a. Evaluation of Potential Trail Impacts

1) Natural Features

Watercourses and topography are the two greatest natural features affecting the proposed trail system. Watercourses provide obstacles to the trail, particularly off-road segments along greenways. To cross these, bridges are required. These may be prefabricated, or designed of timber or another material. Topography provides a second obstacle. The study area does not experience great topographical changes. However, in several locations, topography plays a role in hindering sight distances. Two such locations are at the intersection of Doubleday Avenue and Mummasberg Road and along Boyds School Road just west of the entrance to the Gettysburg High School. At these locations, any means of increasing the safety of both drivers and trail users should be undertaken. If possible, regrading of the road alignments may help to solve the problem. Minimally, signage, and possible flashing warning lights, must warn both drivers and trail users of the potential conflict.

2) Wildlife

The proposed trail should have little impact on local wildlife. The only impacts will occur along off-road routes primarily through greenways. Even in these locations, no significant impact can be expected, as these routes will be relatively benign. The trail is ideally ten feet wide (recommended minimum width – Trails for the Twenty First Century) although an eight foot wide, off-road multi-purpose trail is acceptable. Multi-use trails are usually either asphalt or compacted gravel surface. Either surface can be acceptable. Each surface type has implications for cost, use, and maintenance. A cleared shoulder of minimum five-foot width is included along each side of the trail. Pedestrians and bicyclists should not disrupt local wildlife, and strict construction limits should minimize disruption by construction activities. The remaining trail routes occur in conjunction with existing roadways and Military Park circulation routes; therefore, no additional impact will be incurred.

3) Structures & Barriers

Various structures and barriers should be considered in conjunction with the proposed trail system. These include bridges, drainage ways, utility poles, mailboxes, the scenic railroad line, and streams.

The Old Harrisburg Road Bridge crossing Rock Creek has recently been replaced with a new structure that will accommodate trail users quite comfortably. It includes shoulder bike

lanes and a pedestrian sidewalk. Other bridges in the study area shall be considered candidate for upgrade, particularly the Boyds School Road Bridge near the Gettysburg High School. This bridge should be widened to include bike lanes and pedestrian crossing.

Utility poles, mailboxes, signs and other roadside features may prove to be problematic in some locations, particularly as road improvements are undertaken to include shoulder bike lanes. The majority of these are minor and should not be considered as obstacles to road improvements, as they may be simply shifted back from the road. Utility poles possess a greater challenge, since a greater expense is associated with their relocation. However, these features should not interfere with the implementation of the trail system. Utility poles should not be in the way of many road-widening operations.

The scenic railroad presents a different challenge. Since it receives minimal rail traffic, it has potential for a hared trail with rail in the short term, and, if rail service does not continue, a trail by itself. Since much of the rail line exists in a fill condition and is narrow in segments, costs to add fill to accommodate the trail with rail will be substantial.

Streams occurring throughout the study area also present physical barriers to a potential trail system, particularly for off-road sections. However, trails running parallel to these streams and natural greenway provide opportunities for off-road trails. Off road trail alignments often can be most easily accommodated along existing hedgerows (which are often located along property lines). Providing a means to overcome these barriers (a bridge, for example) can create new opportunities for cyclists and pedestrians using the trail.

4) Infrastructure & Utilities

Several natural gas pipelines cross the study area. These are operated by Columbia Gas Transmission Corporation and Sun Pipeline Company. Columbia's pipelines follow easements. Some of these cross residential properties. Most importantly, Columbia does not allow shared use (such as trails) to occur along their pipelines. Trails may, however cross them at or as close to ninety degrees as possible, but not less than forty-five degrees. Sun Pipeline, however, does allow such shared use along its easements. Some of these also pass through residential areas. Both pipelines pass through the military park. Off-road trail segments are often best located along property lines, hedgerows, intermittent streams, drainage swales or other linear site features where the trail can be integrated with the legal and physical constraints of the property(ies)

Easements within the study area held by both Columbia and Sun offer little use to this proposed trail system. Columbia's pipeline easements may not be considered due to the company's guidelines and disallowance of shared use. The Sun pipeline is of little use because a large portion of it passes through the military park, other portions pass through

C. Inventory and Analysis

residential properties, and it is transected by the rail line, making it impassable. Neither of these are viable options.

No other substantial utility easements or rights-of-way have been uncovered within the study area.

Area roads are able to accommodate a trail system. Road rights-of-way are wide enough to include roadside shoulder lanes. Currently, the majority of on-road routes do not have shoulder improvements. These routes may begin as “share the road” routes. Ultimately, future road improvements should accommodate the trail system with the inclusion of paved shoulders. Future bridge, road crossings or improvements should also accommodate the trail system, such as those included with the new PennDOT Old Harrisburg Pike bridge crossing Rock Creek. This bridge includes shoulder bike lanes and a pedestrian walk separated from traffic by a physical barrier.

5) Intersections & Access

Several problematic intersections have been identified within the study area. Participants in the public meetings have mentioned that the intersection of Old Harrisburg Pike and Boyds School and Shealer Roads can be difficult to use. It is particularly difficult for drivers and cyclists waiting to turn left from Shealer Road because of obstructed views and fast moving traffic on Old Harrisburg Pike. Fortunately a traffic signal is planned for this intersection.

Additionally, two other locations suffer from poor sight distances. They are at the intersection of Doubleday Avenue and Mummasberg Road and along Boyds School Road just west of the entrance to the Gettysburg High School. These intersections, too, should be studied by state and local agencies for possible safety improvements.

b. Trail Development on National Park Service Lands

The Gettysburg National Military Park General Management Plan (GMP) supports the idea of providing pedestrian access to the battlefields. It acknowledges the fact that visitors desire pedestrian access in order to have the opportunity to walk on the site to experience it firsthand.

The GMP suggests that visitor access be provided to interpretive and historic sites while limiting resource impacts. In order to do this, the park will provide paths and trails only when they meet certain criteria. *“Paths and trails must provide educational opportunities or access to historic sites that fit the park’s mission and purpose. Gettysburg National Military Park will not provide facilities developed and intended purely for recreational use or for exercise functions. For example, the park would not provide jogging trails with exercise stations,*

mountain bike trails and other similar facilities that do not have an interpretive or visitor use function directly related to the park’s mission and purpose. ...The parks’ system of commemorative avenues and historic lanes would be the primary means of visitor access to sites” (page 93) The North Gettysburg Area Trail System Feasibility study recommends using these avenues and lanes only.

The Gettysburg National Military Park follows the preservation treatments outlined in the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Rehabilitation is one of four preservation treatments established in the Secretary’s Standards. The following is found under the heading *Rehabilitation* in the GMP. “Finally Rehabilitation permits alterations and additions for new use; an example might be providing a sub-base for a historic lane while retaining its original surface texture and width, thereby allowing it to carry horses, pedestrians and emergency vehicles while maintaining its historic appearance.” (page 59) The GMP does not allow “hard surfaced” paths or trails made of asphalt.

This trail study respects the information found in the General Management Plan and asserts that all trails proposed on NPS lands follow these guidelines. Proposed trails shall not be “hard surfaced.” They shall follow park avenues and historic lane routes predominantly. The trails proposed as part of this study through Military Park lands are intended to provide linkages within the community to and through the Gettysburg National Military Park. Interpretive information should be included along these proposed trail routes to heighten the user's experience. This should be coordinated by NPS. While several proposed NPS alignments provide a direct route from one point to another within the overall proposed trail system, the experience of the historic land, while not necessarily the reason for choosing the route, becomes an important byproduct offering educational opportunities to trail users.

The local Gettysburg Walking Club currently uses several proposed NPS avenue routes for weekly walks. The survey for this study indicated that over 52% of the respondents used the national park trails for recreational use. It is also anticipated that the development of a multi-use trail system in the North Gettysburg area will reduce the dependency on the NPS interpretive trail system, reducing NPS trail use that is not consistent with the policies of the General Management Plan. The proposed trail routes attempt to acknowledge such uses.

D. Trail Alignments

1. Preferred Corridors

a. Trail Overview Description

The proposed North Gettysburg Area Trail totals approximately 22.7 linear miles.

Five distinct route types exist.

- **On-road Routes:** These routes follow roadway alignments. Two types of formalized on-road routes are proposed. *On-Road Bike Lanes* are the most formalized type of on-road trail suggested. These are paved as road shoulders, with signs and a formal designation. The majority of proposed on-road routes are this type. The second type of on-road bike trail is *Signed Shared Roadways*. These routes allow bicycles to use the entire travel lane of the road. Motorists are alerted of expected bicycle activity by PennDOT's "Share The Road" or "Bikes on Road" signs. Proposed routes through residential neighborhoods with low vehicular traffic volumes typify this type of trail. The remaining roads in, and beyond, the study area with neither of the above two designations are non-signed *Shared Roadways*. These are least formalized and occur where cyclists share the road with motor vehicles. These are street and highway routes without any type of bikeway designation. They are simply the roads as constructed. Most bicycle travel in the US falls within this category. (The above on-road bike route designations are from AASHTO.)
- **Off-road Routes:** These routes follow greenways, or designated off-road routes. They are not part of a roadway, but, instead, function as separate corridors. The majority of proposed off-road routes are located within stream corridors; trails are permitted in these floodplain corridors. Others serve to tie local schools to the proposed trail system. Some off-road routes are sidewalks for pedestrians
- **Gettysburg College Trail Routes:** These routes share existing college trails and trails proposed as part of the recent Gettysburg College Landscape Master Plan. Connections to this resource will be provided by the proposed Gettysburg trail system.
- **National Park Service On-road Routes:** These routes are proposed to follow existing NPS avenues. Since these avenues are NPS operated and occur on historically significant ground, it will be necessary to work closely with NPS to institute these sections. Preliminary discussions with officials have found NPS receptive to the idea and interested in the project. These routes will follow paved avenues already in place and will require no further expansion.
- **National Park Service 1863 Historic Lane Routes:** Similar to NPS *on-road* routes, the *historic lane* routes utilize now-obliterated, historic lanes present in 1863 and during the battle. The General Management Plan of the Gettysburg National Military Park supports the reinstatement of these lanes as part of its efforts to restore the fabric of the historic Gettysburg Landscape. This trail study suggests utilizing these lanes located

within the study area. It is suggested that the National Park Service reinstitute these lanes for pedestrian-only use, as supported by the General Management Plan. As with the NPS *on-road* routes, these will require working closely with the National Park Service. Preliminary discussions with officials have found NPS receptive to this idea.

The following is the approximate mileage breakdown by route type:

On-road routes:	11.5 miles
Off-road routes:	10.3 miles
Gettysburg College trail routes:	0.4 miles
NPS on-road routes:	3.2 miles
NPS 1863 historic lane routes:	2.1 miles

Maps included on the following pages outline the trail system. The first map, the *Trail Overview Plan*, provides an overall understanding of the proposed trail broken down into its various route types: on-road, off-road, Gettysburg College trail, NPS on-road (avenues), and NPS 1863 historic lane.

Following the overview plan is the *Trail Alignments Plan*. This is an enlargement of the overview plan, which shows the proposed trail system on two pages, with the northern portion of the proposed trail system on one page and the southern portion of the system on the facing page. The proposed trail alignments have been broken down into various segments and points. Each segment and point is labeled according to its route type as follows:

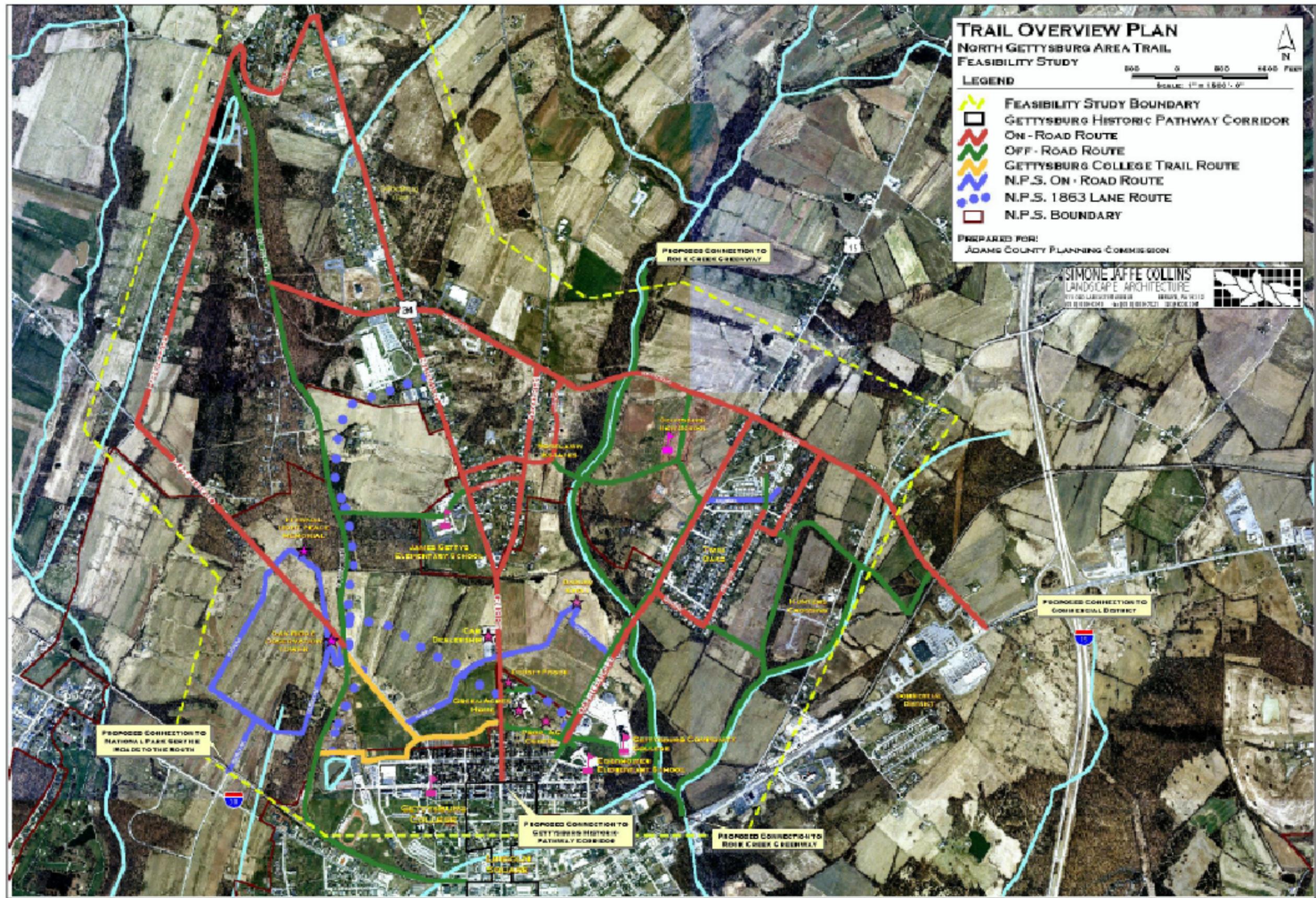
RS	on-road segment
RP	on-road point
OS	off-road segment
OP	off-road point
CS	Gettysburg C ollege segment
CP	Gettysburg C ollege point
NS	Gettysburg National Military Park (NPS) avenue segment
NP	Gettysburg National Military Park (NPS) avenue point
NLS	Gettysburg National Military Park (NPS) 1863 historic lane segment
NLP	Gettysburg National Military Park (NPS) 1863 historic lane point

The *Trail Matrix* follows the alignments plan and outlines the improvements required to implement the proposed trail system point-by-point and segment-by-segment. The matrix is broken down by route type (such as on-road route, off-road route, etc.) and further by point and segment. All on-road segments are listed first, followed by all on-road points, followed by all off-road segments, and so on.

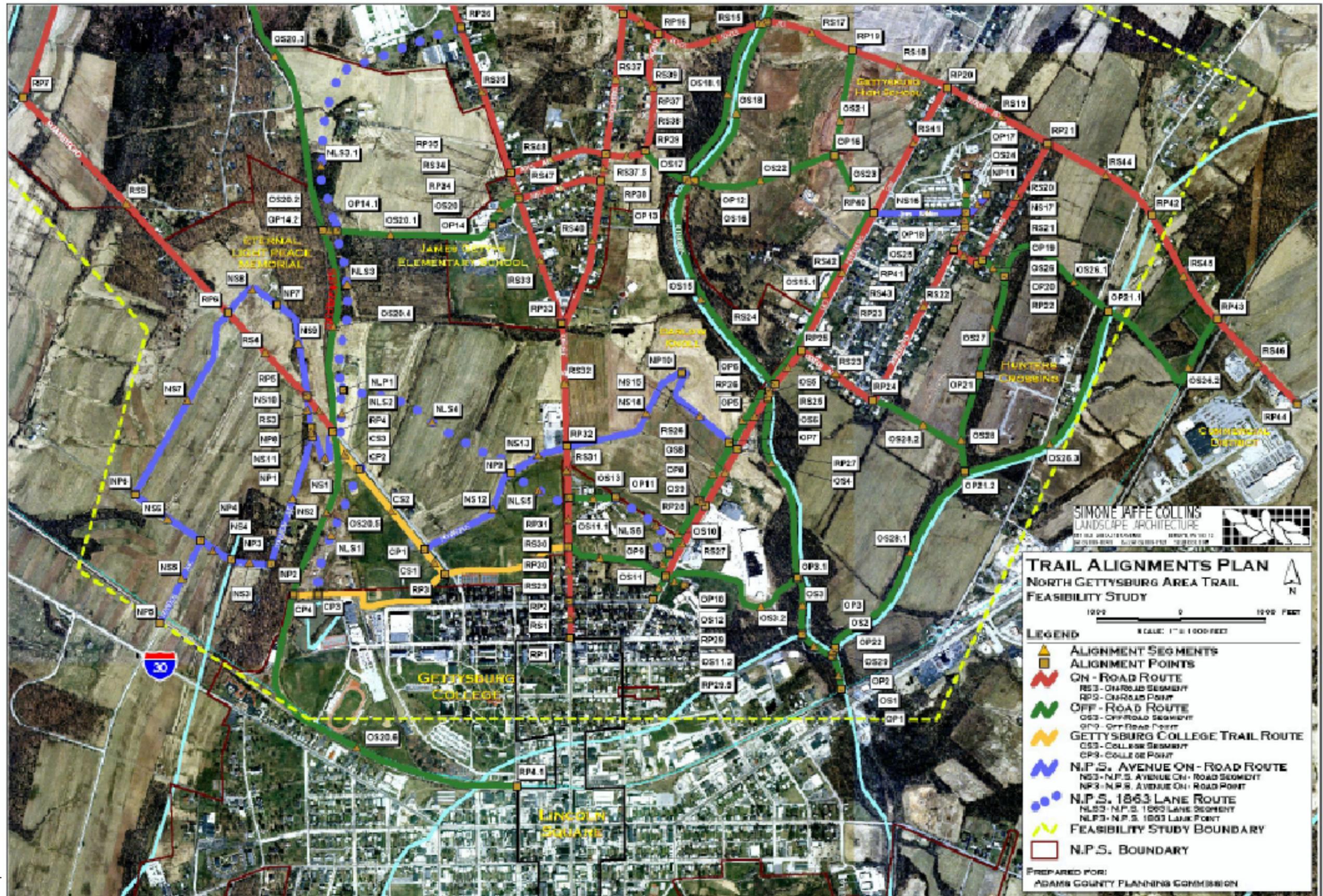
D. Trail Alignments

Trail priorities and the *Trail Priorities Plan* are presented last. These suggest an ordering of routes for implementation by overall importance to the network.

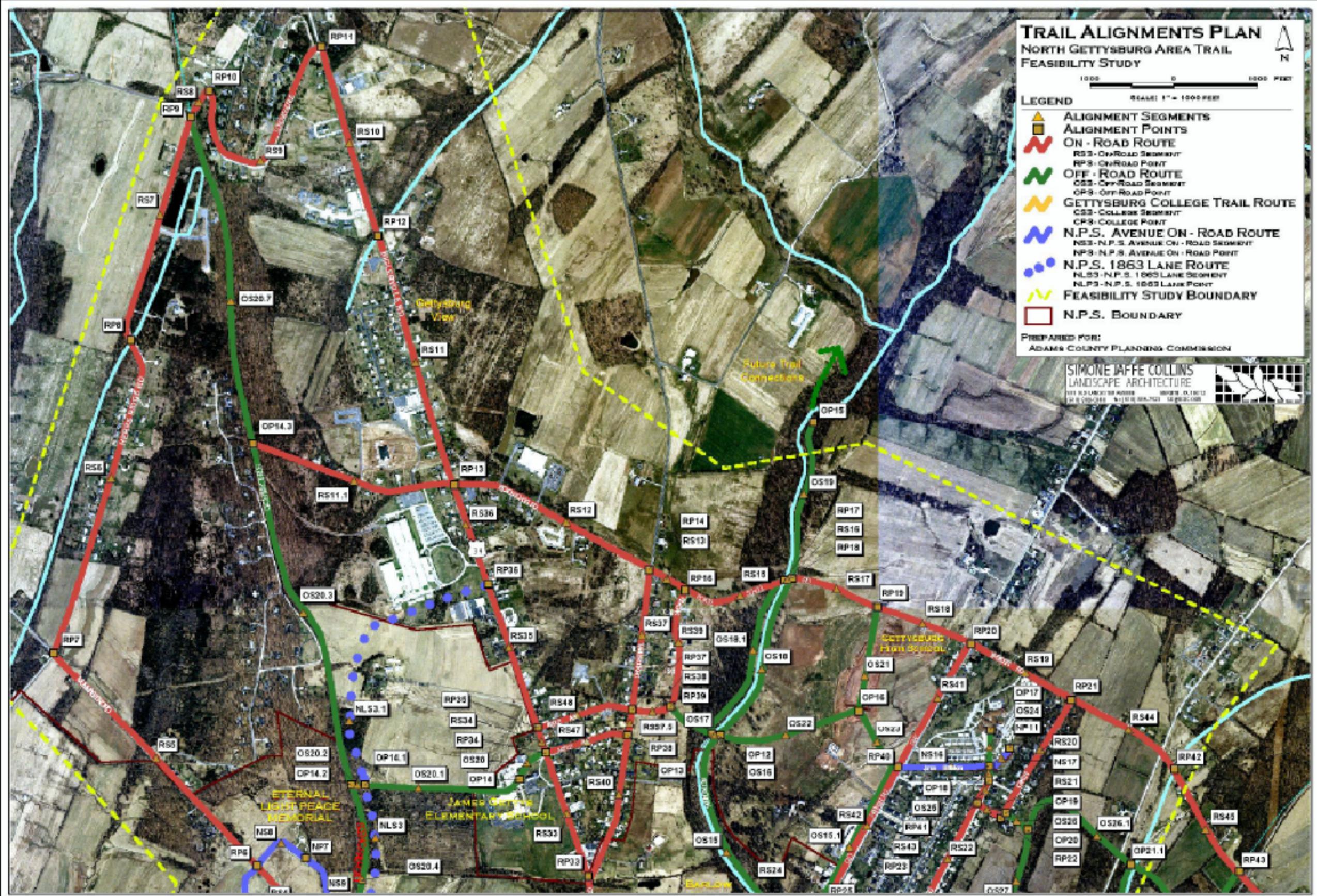
D. Trail Alignments



D. Trail Alignments



D. Trail Alignments



D. Trail Alignments

d. Trail Matrix

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
R82	RP2	RP3	On-Road	Broadway Ave.-Intersection with Carlisle St. and	First						
R81	RP1	RP2	On-Road	North on Carlisle St. from Gettysburg Borough to Broadway Ave.	Third	425	n/a	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS - Public Road Segments						1,450	5'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
R83	RP4	RP5	On-Road	Mummasberg Rd. from Intersection with College Trail to Intersection with N.P.A. trail	Third	425	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
R84	RP5	RP6	On-Road	Mummasberg Rd. from Intersection with Doubleday Ave. to Intersection with Buford Ave.	Third	1,430	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
R86	RP6	RP7	On-Road	Mummasberg Rd. from Intersection with Buford Ave. to Intersection with Hens Ridge Road	Third	3,515	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
R88	RP7	RP8	On-Road	Hens Ridge Rd. from Intersection with Mummasberg Rd. to bridge crossing stream	Third	3,880	n/a	asphalt	n/a	Cumberland Township	no
R87	RP8	RP9	On-Road	Hens Ridge Rd. from Bridge to Intersection with Railroad crossing	Third	2,600	4'	asphalt	n/a	Cumberland Township	no
R88	RP9	RP10	On-Road	Hens Ridge Rd. from Intersection with Railroad crossing to Long View Drive	Third	475	4'	asphalt	n/a	Cumberland Township	no
R88	RP10	RP11	On-Road	Long View Drive from Intersection with Hens Ridge Rd. to Intersection with Biglerville Rd.	Third	2,910	n/a	asphalt	n/a	Cumberland Township	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RS - Public Road Segments						
RS1	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS2	Include five-foot wide bike lanes between parking stalls and motor vehicle travel lane. Current Road width is adequate to accommodate bike lane and on-street parking on both sides, and two travel lanes. Line pavement for bike lanes: 6"-wide white line between motor vehicle travel lane and bike lane and 4"-wide white line between the outside edge of the bike lane and parking stalls.	line painting complete	1,450	LF	\$ 1.20	\$ 1,740.00
		bike symbol and arrow stencil painting	6	EA	\$ 48.00	\$ 288.00
		arrow only stencil painting	6	EA	\$ 8.00	\$ 48.00
RS3	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	425	LF	\$ 1.20	\$ 510.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS4	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,430	LF	\$ 1.20	\$ 1,716.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS5	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	4	EA	\$ 8.00	\$ 32.00
RS6	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS7	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder).	asphalt-surfaced bike lanes	2,310	SY	\$ 18.00	\$ 41,580.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
	Include trail ID and directional arrow signs along this lengthy stretch of trail.	signage	2	EA	\$ 200.00	\$ 400.00
RS8	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder).	asphalt-surfaced bike lanes	425	SY	\$ 18.00	\$ 7,650.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	1	EA	\$ 8.00	\$ 8.00
RS9	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
RS10	RP11	RP12	On-Road	Biglerville Rd. South from intersection with Long View Drive to bridge crossing stream	Third	2,330	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS11	RP12	RP13	On-Road	Biglerville Rd. from bridge to intersection with Boyd School Rd.	Third	3,000	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS12	RP13	RP14	On-Road	Boyd School Rd. from intersection with Biglerville Rd. to intersection with Tablerock Rd. Ex. Cartway - 24'	Second	2,500	4'	asphalt	n/a	Cumberland Township	no
RS13	RP14	RP16	On-Road	Boyd School Rd. from intersection with Tablerock Rd. to intersection with Pin Oak Drive Ex. Cartway - 24'	Second	530	4'	asphalt	n/a	Cumberland Township	no
RS14 (deleted)	-	-	-	-	-	-	-	-	-	-	-
RS15	RP16	RP17	On-Road	Boyd School Rd. from intersection with Pin Oak Dr. to bridge crossing Rock Creek Ex. Cartway - 24'	Second	1,100	4'	asphalt	n/a	Cumberland Township	no
RS16	RP17	RP18	On-Road	Boyd School Rd. from Rock Creek bridge to intersection with Rock Creek Greenway off-road trail	Second	150	4'	asphalt	n/a	Straban Township	no
RS17	RP18	RP19	On-Road	Boyd School Rd. from intersection with greenway trail to intersection of high school off-road trail Ex. Cartway - 24'	Second	1,115	4'	asphalt	n/a	Straban Township	no
RS18	RP19	RP20	On-Road	Boyd School Rd. from intersection with high school trail to intersection with Old Harrisburg Pk. and Shealer Rd. Ex. Cartway - 24'	Second	1,090	4'	asphalt	n/a	Straban Township	no
RS19	RP20	RP21	On-Road	Shealer Rd. from intersection with Old Harrisburg Pk. and Boyd School Road Rd. to intersection with Oak Ln.	Second	1,400	4'	asphalt	n/a	Straban Township	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RS10	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	2,330	LF	\$ 1.20	\$ 2,796.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	1	EA	\$ 8.00	\$ 8.00
	Include trail ID and directional arrow signs along this lengthy stretch of trail.	signage	2	EA	\$ 200.00	\$ 400.00
RS11	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,000	LF	\$ 1.20	\$ 3,600.00
		bike symbol and arrow stencil painting	6	EA	\$ 48.00	\$ 288.00
		arrow only stencil painting	1	EA	\$ 8.00	\$ 8.00
	Include trail ID and directional arrow signs along this lengthy stretch of trail.	signage	2	EA	\$ 200.00	\$ 400.00
RS12	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder). Add 4' asphalt. (2 - 10' wide vehicle lanes, 2 - 4' bicycle lanes).	asphalt-surfaced bike lanes	1,112	SY	\$ 18.00	\$ 20,016.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
	Include trail ID and directional arrow signs along this lengthy stretch of trail.	signage	2	EA	\$ 200.00	\$ 400.00
RS13	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder). Add 4' asphalt. (2 - 10' wide vehicle lanes, 2 - 4' bicycle lanes).	asphalt-surfaced bike lanes	236	SY	\$ 18.00	\$ 4,248.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS14 (deleted)	-	-	-	-	-	-
RS15	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder). Add 4' asphalt. (2 - 10' wide vehicle lanes, 2 - 4' bicycle lanes).	asphalt-surfaced bike lanes	490	SY	\$ 18.00	\$ 8,820.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
RS16	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder). Add 4' asphalt. (2 - 10' wide vehicle lanes, 2 - 4' bicycle lanes).	asphalt-surfaced bike lanes	70	SY	\$ 18.00	\$ 1,260.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
RS17	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder). Add 4' asphalt. (2 - 10' wide vehicle lanes, 2 - 4' bicycle lanes).	asphalt-surfaced bike lanes	990	SY	\$ 18.00	\$ 17,820.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
RS18	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder). Add 4' asphalt. (2 - 10' wide vehicle lanes, 2 - 4' bicycle lanes).	asphalt-surfaced bike lanes	490	SY	\$ 18.00	\$ 8,820.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	1	EA	\$ 8.00	\$ 8.00
RS19	Include four-foot wide bike lanes (min.) on roadway shoulders (one on each shoulder).	asphalt-surfaced bike lanes	1,245	SY	\$ 18.00	\$ 22,410.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	3,515	LF	\$ 1.20	\$ 4,218.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
RS20	RP21	RP22	On-Road	Oak Lane from intersection with Shealer Rd. to intersection with off road segment through private	Second	1,515	n/a	asphalt	n/a	Straban Township	no
RS21	RP22	RP23	On-Road	Oak Lane from intersection with off road segment through residence to intersection with Artillery Rd.	Second	410	n/a	asphalt	n/a	Straban Township	no
RS22	RP23	RP24	On-Road	Artillery Rd. from intersection with Oak Lane to intersection with Gordon Ave.	Third	1,975	n/a	asphalt	n/a	Straban Township	no
RS23	RP24	RP25	On-Road	Gordon Ave. from intersection with Artillery Dr. to intersection with Old Harrisburg Pk.	Third	1,070	n/a	asphalt	n/a	Straban Township	no
RS24	RP25	RP26	On-Road	Old Harrisburg Pk. from intersection with Gordon Avenue to Bridge crossing Rock Creek	First	650	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS25	RP26	RP27	On-Road	Old Harrisburg Pk. from intersection with Rock Creek Bridge to intersection with Howard Ave.	First	650	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS26	RP27	RP28	On-Road	Old Harrisburg Pk. from Howard Ave. to intersection with Off-road trail connection	First	820	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS27	RP28	RP29	On-Road	Old Harrisburg Pk. from off road trail connection, to intersection with second off road trail connection	First	700	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS28 (deleted)											
RS29	RP2	RP30	On-Road	Carlisle St. from intersection with Broadway Ave. to intersection with Gettysburg College Trail	Third	680	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RS20	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS21	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS22	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS23	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS24	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	650	LF	\$ 1.20	\$ 780.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	1	EA	\$ 8.00	\$ 8.00
	Drainage improvements along road will likely be necessary to direct water away from road and adjoining properties.	swale (both sides of road)	1,300	LF	\$ 1.50	\$ 1,950.00
RS25	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	650	LF	\$ 1.20	\$ 780.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
	Drainage improvements along road will likely be necessary to direct water away from road and adjoining properties.	swale (both sides of road)	1,300	LF	\$ 1.50	\$ 1,950.00
RS26	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	820	LF	\$ 1.20	\$ 984.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
	Drainage improvements along road will likely be necessary to direct water away from road and adjoining properties.	swale (both sides of road)	1,640	LF	\$ 1.50	\$ 2,460.00
RS27	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	700	LF	\$ 1.20	\$ 840.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
	Drainage improvements along road will likely be necessary to direct water away from road and adjoining properties.	swale (both sides of road)	1,400	LF	\$ 1.50	\$ 2,100.00
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge					
RS29	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	680	LF	\$ 1.20	\$ 816.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
RS30	RP30	RP31	On-Road	Carlisle St. from int. with Gettysburg College Trail to intersection with off-road trail & NPS Lane	Third	530	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS31	RP31	RP32	On-Road	Carlisle St. from intersection with off-road trail & NPS Lane to intersection with Howard Ave.	Third	660	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS32	RP32	RP33	On-Road	Carlisle St. from intersection with Howard Ave. to intersection with Biglerville and Tablerock Rds.	Third	1,500	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS33	RP33	RP34	On-Road	Biglerville Rd. from Intersection with Tablerock Rd. to intersection with Maple Ave.	Third	1,570	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS34	RP34	RP35	On-Road	Biglerville Rd. from intersection with Maple Ave. to intersection with Apple Avenue	Third	300	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS35	RP35	RP36	On-Road	Biglerville Rd. from intersection with Apple Ave. to intersection with Historic Lane	Third	1,940	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS36	RP36	RP13	On-Road	Biglerville Rd. from intersection with Historic Lane to intersection with Boyd School Rd.	Third	1,220	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS37	RP14	RP37	On-Road	Tablerock Rd. from intersection with Boyds School Rd. crossing to intersection with Maple Ave.	Third	1,790	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS37.5	RP37	RP38	On-Road	Tablerock Rd. from intersection with Apple Ave to intersection with Maple Ave.	Third	300	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RS30	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	530	LF	\$ 1.20	\$ 636.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS31	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	660	LF	\$ 1.20	\$ 792.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS32	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,500	LF	\$ 1.20	\$ 1,800.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS33	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,570	LF	\$ 1.20	\$ 1,884.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS34	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	300	LF	\$ 1.20	\$ 360.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS35	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,940	LF	\$ 1.20	\$ 2,328.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
	Include trail ID and directional arrow signs along this lengthy stretch of trail.	signage	2	EA	\$ 200.00	\$ 400.00
RS36	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,220	LF	\$ 1.20	\$ 1,464.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS37	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,790	LF	\$ 1.20	\$ 2,148.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS37.5	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	300	LF	\$ 1.20	\$ 360.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
RS38	RP37	RP39	On-Road	Pin Oak Drive from intersection with Tablerock Rd. to intersection with off road trail	Third	550	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS39	RP39	RP16	On-Road	Pin Oak Dr. from intersection with Boyd School Rd. to intersection with Maple Ave.	Third	1,790	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS40	RP38	RP33	On-Road	Tablerock Rd. from Maple Ave./Pin Oak Drive intersection to intersection with Carlisle Ave.	Third	1,650	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS41	RP20	RP40	On-Road	Old Harrisburg Pk. from inter. w/ Shealer Rd./Boyd School Rd. to inter. w/ off-road trail and Jones Batal.	Third	1,700	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS42	RP40	RP25	On-Road	Old Harrisburg Pk. from Off-road intersection to intersection with Gordon Ave.	First	1,750	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS43	RP23	RP41	On-Road	Artillery Rd. from intersection of Oak Lane to intersection with off-road trail leading to the Lutheran Community and Jones Battalion Dr.	Second	300	n/a	asphalt	n/a	Straban Township	no
RS44	RP21	RP42	On-Road	Shealer Rd. from intersection with Oak Ln. to bridge at stream	Second	1,480	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS45	RP42	RP43	On-Road	Shealer Rd. from bridge to rail crossing.	Second	1,330	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS46	RP43	RP44	On-Road	Shealer Rd. from rail crossing to intersection with York Rd.	Second	1,250	4'	asphalt	n/a	Pennsylvania Dept. of Transportation	no
RS47	RP34	RP38	On-Road	Maple Ave. from intersection with Biglerville Rd. to Tablerock Rd.	Third	850	n/a	asphalt	n/a	Cumberland Township	no
RS48	RP35	RP37	On-Road	Apple Avenue from intersection with Biglerville Rd. to intersection with Tablerock Rd.	Third	850	n/a	asphalt	n/a	Cumberland Township	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RS38	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS39	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS40	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,650	LF	\$ 1.20	\$ 1,980.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS41	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,700	LF	\$ 1.20	\$ 2,040.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS42	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,750	LF	\$ 1.20	\$ 2,100.00
		bike symbol and arrow stencil painting	4	EA	\$ 48.00	\$ 192.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
	Drainage improvements along road will likely be necessary to direct water away from road and adjoining properties.	swale (both sides of road)	3,500	LF	\$ 1.50	\$ 5,250.00
RS43	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS44	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,480	LF	\$ 1.20	\$ 1,776.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	2	EA	\$ 8.00	\$ 16.00
RS45	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,330	LF	\$ 1.20	\$ 1,596.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
	Include trail ID and directional arrow signs along this lengthy stretch of trail.	signage	2	EA	\$ 200.00	\$ 400.00
RS46	Include four-foot wide bike lanes (min.) on roadway shoulders (each direction) as part of PennDOT's Betterment Program.	asphalt-surfaced bike lanes	n/a	n/a	n/a	n/a
	Line pavement for bike lane: 6"-wide white line between cartway and bike lane; 4"-wide white line at outside edge	line painting - both shoulders	1,250	LF	\$ 1.20	\$ 1,500.00
		bike symbol and arrow stencil painting	2	EA	\$ 48.00	\$ 96.00
		arrow only stencil painting	1	EA	\$ 8.00	\$ 8.00
RS47	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00
RS48	Signed Shared Roadway - BIKES ON ROADWAY	signage	2	EA	\$ 200.00	\$ 400.00

Subtotal \$ 237,824.00

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
RP - Public Road Points									
RP1	On-Road	Connection to Gettysburg Historic Pathway Corridor and downtown Gettysburg Borough	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP2	On-Road	Intersection Broadway Ave. and Carlisle St.	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP3	On-Road	Intersection with Gettysburg College Trail	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP4	On-Road	Intersection Gettysburg College Trail, Mummasberg Rd., and N.P.S. Trail	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
			Second						
			Second						
			Second						
			Second						
			Fourth						
RP5	On-Road	Intersection Mummasberg Rd. and Doubleday Ave.	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP6	On-Road	Intersection Buford Ave. and Mummasberg Rd.	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP7	On-Road	Intersection Mummasberg Rd. and Herra Ridge Rd.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP8	On-Road	Watercourse crossing on Herra Ridge Rd.	Third	-	-	-	n/a	Cumberland Township	no
RP9	On-Road	Intersection Herra Ridge Rd. and Railroad grade crossing	Third	-	-	-	n/a	Cumberland Township and Railroad Company	no
RP10	On-Road	Intersection Herra Ridge Rd. and Long View Dr.	Third	-	-	-	n/a	Cumberland Township	no
RP11	On-Road	Intersection Longview Dr. and Biglerville Rd.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP12	On-Road	Bridge-Biglerville Rd.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP13	On-Road	Intersection Biglerville Rd. and Boyds School Rd.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation & Cumberland Township	no
RP14	On-Road	Intersection Boyds School Rd. and Tablerock Rd.	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation & Cumberland Township	no
RP15 (deleted)	-	-	-	-	-	-	-	-	-
RP16	On-Road	Intersection Boyds School Rd. Pin Oak Dr.	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP17	On-Road	Bridge-Boyds School Rd.	Second	-	-	-	n/a	Cumberland / Straban Townships	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RP - Public Road Points						
RP1	Include a trail information sign to orient users to trail and list regulations, etc.					
	Include a trail information sign to orient users to trail and list regulations, etc.	trail information signage	1	EA	\$ 5,000.00	\$ 5,000.00
RP2	Include trail ID, destination, and arrow signs directing users to the Observation Tower, the Eternal Light Peace Memorial, Barlow Knoll, the Gettysburg Historic Pathway & Downtown, Gettysburg College, and Rock Creek Greenway.	signage	1	EA	\$ 300.00	\$ 300.00
RP3	Include trail ID signs at college trail entrance on each side of road and notice to pedestrians to use sidewalks to town. Also include trail destination and arrow signs directing users to Gettysburg College along college trail.	signage	2	EA	\$ 200.00	\$ 400.00
	Painted crosswalk across Mummasberg Rd.	painting crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian/bike crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include plantings at trail ID signs: 3 flowering trees and 12 shrubs.	plantings	1	LS	\$ 1,800.00	\$ 1,800.00
RP4	Include trail ID, destination, and arrow signs directing users to the Observation Tower, the Eternal Light Peace Memorial, Barlow Knoll, and the Gettysburg Historic Pathway & Downtown.	signage	1	EA	\$ 200.00	\$ 200.00
	Include railroad crossing warning signs at tracks.	signage	2	EA	\$ 200.00	\$ 400.00
	Include warning signs alerting motorists of pedestrian/bike crossing on Mummasberg Rd.	signage	2	EA	\$ 200.00	\$ 400.00
	Painted crosswalk across Mummasberg Rd.	painting crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road college trail.	bollards	1	Sets	\$ 1,400.00	\$ 1,400.00
	Include PEDESTRIAN ONLY - NO BIKES signs at entrance to historic lane route.	signage	2	EA	\$ 200.00	\$ 400.00
RP5	Since this intersection is problematic due to sight distances, warning signage should be included to alert motorists of pedestrian/bike crossing and caution trail users. Include trail ID, destination, and directional arrow signs directing users to the Eternal Light Peace Memorial.	signage	2	EA	\$ 300.00	\$ 600.00
RP6	Include trail ID, destination, and arrow signs directing users to the Eternal Light Peace Memorial.	signage	2	EA	\$ 200.00	\$ 400.00
RP7	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP8	Possible bridge/watercourse crossing expansion for trail crossing.	to be determined				\$ -
RP9	Include railroad crossing warning signs at tracks. Possible crossing upgrade for trail, including width and surface material.	signage	2	EA	\$ 200.00	\$ 400.00
RP10	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP11	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP12	Possible bridge/watercourse crossing expansion for trail crossing.	to be determined				\$ -
RP13	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP14	Include trail ID and directional arrow signs.	signage	4	EA	\$ 200.00	\$ 800.00
RP15 (deleted)	-	-	-	-	-	-
RP16	Include trail ID and directional arrow signs.	signage	4	EA	\$ 200.00	\$ 800.00
RP17	Expand bridge to include 6-foot wide bike lanes on each side. Alternately, include separate bridges, or hang bike lane expansions from each side of existing bridge. Best solution to be determined at time of implementation.	bridge improvements to include bike lanes	1	LS	\$ 120,000.00	\$ 120,000.00

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
RP18	On-Road	Intersection Boyds School Rd. and off-road trail crossing	Second	-	-	-	n/a	Straban Township	no
RP19	On-Road	Intersection Boyds School Rd. and off-road trail crossing	Second	-	-	-	n/a	Straban Township	no
RP20	On-Road	Intersection Boyds School Rd. , Shealer Rd., and Old Harrisburg Pk.	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation & Straban Township	no
RP21	On-Road	Intersection Boyds School Rd. and Oak Ln.	Second	-	-	-	n/a	Straban Township	no
RP22	On-Road	Intersection Oak Ln. and ? Rd.	Second	-	-	-	n/a	Straban Township	no
RP23	On-Road	Intersection ? Rd. and Artillery Rd.	Second	-	-	-	n/a	Straban Township	no
RP24	On-Road	Intersection Artillery Rd. and Gordon Ave.	Third	-	-	-	n/a	Straban Township	no
RP25	On-Road	Intersection Gordon Ave. and old Harrisburg Pk.	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP26	On-Road	Bridge-Old Harrisburg Pk and intersection off road trail	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP27	On-Road	Intersection Howard Ave. and Old Harrisburg Pk.	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP28	On-Road	Intersection off-road trail and Old Harrisburg Pk.	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP29	On-Road	Intersection off-road trail and Old Harrisburg Pk.	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP29.5	On-Road	Intersection Broadway Ave. and Old Harrisburg Pk.	First	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP30	On-Road	Intersection Gettysburg College Trail and Carlisle St.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP31	On-Road	Intersection Carlisle St. and off road trail/NPS historic lane	Fourth	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP32	On-Road	Intersection Carlisle St. and Howard Ave.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation and U.S.A.	no
RP33	On-Road	Intersection Carlisle St., Tablerock Rd., and Biglerville Rd.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no

LEGEND: **CS**--college segment **CP**--college point **NLS**--military park historic lane segment **NLP**--military park historic lane point **NS**--military park avenue segment **NP**--military park avenue point **OS**--off-road segment **OP**--off-road point **RS**--on-road segment **RP**--on-road point

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RP18	Painted crosswalk across Old Harrisburg Pike	painted crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include trail ID, destination, and arrow signs directing users to Rock Creek Greenway from Boyds School Road	signage	2	EA	\$ 200.00	\$ 400.00
RP19	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP20	Include trail ID and directional arrow signs.	signage	4	EA	\$ 200.00	\$ 800.00
RP21	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP22	none	n/a	n/a	n/a	n/a	n/a
RP23	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP24	Include trail ID and directional arrow signs.	signage	2	EA	\$ 200.00	\$ 400.00
RP25	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP26	None are necessary. PennDOT has already performed improvements to this bridge to make it trail-user friendly, including 6-foot wide bike lane on each side and a 5-foot wide pedestrian walk along the northwestern side.	n/a	n/a	n/a	n/a	n/a
RP27	Include double-sided trail ID, destination, and arrow signs directing users to Barlow Knoll.	signage	1	EA	\$ 200.00	\$ 200.00
RP28	Painted crosswalk across Old Harrisburg Pike	painted crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	2	Sets	\$ 1,400.00	\$ 2,800.00
	Include a trail information sign to orient users to trail and list regulations, etc. near the road and trail intersection	trail information signage	1	EA	\$ 5,000.00	\$ 5,000.00
	Include plantings at information sign: 1 shade tree, 3 flowering trees and 12 shrubs.	plantings	1	LS	\$ 2,200.00	\$ 2,200.00
RP29	Include sign to direct pedestrians to use sidewalks to town.	signage	1	EA	\$ 200.00	\$ 200.00
	Painted crosswalk across Old Harrisburg Pike	painted crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	2	Sets	\$ 1,400.00	\$ 2,800.00
RP29.5	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP30	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
RP31	Include trail ID and PEDESTRIAN ONLY - NO BIKES signs at trail entrance on each side of road.	signage	2	EA	\$ 200.00	\$ 400.00
	Painted crosswalk across Carlisle St.	painted crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
RP32	Include trail ID, destination, and arrow signs directing users to Barlow Knoll.	signage	1	EA	\$ 200.00	\$ 200.00
RP33	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
RP34	On-Road	Intersection Biglerville Rd. and Maple Ave.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP35	On-Road	Intersection Biglerville Rd. and Apple Ave.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP36	On-Road	Intersection Biglerville Rd. and Lane Route.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP37	On-Road	Intersection Tablerock Rd., Apple Ave., and Pin Oak Drive	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation and Cumberland Township	no
RP38	On-Road	Intersection of Tablerock Rd. and Maple Ave.	Third	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP39	On-Road	Intersection Pin Oak Dr. and off-road trail to Rock Creek Greenway and high school	Third	-	-	-	n/a	Cumberland Township	no
RP40	On-Road	Intersection Old Harrisburg Pk., Jones Battalion, and High School off road trail	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation	no
RP41	On-Road	Intersection Artillery Rd. and off road trail	Second	-	-	-	n/a	Straban Township	no
RP42	On-Road	Bridge along Shealer Rd.	Second	-	-	-	n/a	Straban Township	no
RP43	On-Road	Rail Road Crossing along Shealer Rd.	Second	-	-	-	n/a	Straban Township	no
RP44	On-Road	Intersection of Shealer Rd. and York Rd.	Second	-	-	-	n/a	Pennsylvania Dept. of Transportation and Straban Township	no

LEGEND: **CS**--college segment **CP**--college point **NLS**--military park historic lane segment **NLP**--military park historic lane point **NS**--military park avenue segment **NP**--military park avenue point **OS**--off-road segment **OP**--off-road point **RS**--on-road segment **RP**--on-road point

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
RP34	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
	Painted crosswalk across Bigglerville Road	painted crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	1	Sets	\$ 1,400.00	
RP35	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP36	Include trail ID and PEDESTRIAN ONLY - NO BIKES signs.	signage	1	EA	\$ 200.00	\$ 200.00
RP37	Include trail ID and directional arrow signs.	signage	4	EA	\$ 200.00	\$ 800.00
RP38	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP39	Include trail ID and directional arrow signs.	signage	3	EA	\$ 200.00	\$ 600.00
RP40	Include trail ID and directional arrow signs.	signage	4	EA	\$ 200.00	\$ 800.00
RP41	Include trail ID and directional arrow signs.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	1	Sets	\$ 1,400.00	\$ 1,400.00
RP42	Possible bridge/watercourse crossing expansion for trail crossing.	to be determined				\$ -
RP43	Include railroad crossing warning signs at tracks. Possible crossing upgrade for trail, including width and surface material.	signage	2	EA	\$ 200.00	\$ 400.00
RP44	Include trail ID and directional arrow signs. Include END sign facing east-bound bicyclists at the side parking lot entry to the Wal-Mart shopping center complex.	signage	2	EA	\$ 200.00	\$ 400.00
	Include a trail information sign to orient users to trail and list regulations, etc. near Wal-Mart parking lot entrance	trail information signage	1	EA	\$ 5,000.00	\$ 5,000.00
	Include plantings at information sign: 3 evergreen trees and 12 shrubs.	plantings	1	LS	\$ 1,800.00	\$ 1,800.00
Subtotal						\$ 165,315.00
TOTAL						\$ 403,139.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
OS - Off-Road Segments											
OS1	OP1	OP2	Off-Road	Rock Creek Greenway Connection to intersection of off-road trails	Second	600	10	asphalt	38,G12-0110--	Erian Investment Co. Inc.	yes
OS2	OP2	OP3	Off-Road	From intersection of trails northwest to stream crossing	Second	400	10	asphalt	38,G12-0110--	Erian Investment Co. Inc.	yes
OS3	OP3	OP4	Off-Road	From stream crossing north to off-road trail intersection	Second	1,400	10	asphalt	38,G12-0110-- 09,F12-0178--	Erian Investment Co. Inc. Times News & Publishing Co.	yes
OS4	OP3.1	OP5	Off-Road	From trail intersection north to intersection with Old Harrisburg Pk.	Second	1,780	10	asphalt	09,F12-0178-- 38,F12-0160-- 38,F12-0162--	Times News & Publishing Co. Wibur Knox Anthony Guiffreda	yes
OS5	OP5	OP6	Off-Road	Off-road trail using Old Harrisburg Pike bridge for bike and ped. crossing of Rock Creek	Second	n/a	n/a	n/a	n/a	Pennsylvania Department of Transportation	no
OS6	OP6	OP7	Off-Road	Off-road trail parallel to Old Harrisburg Pike.	First	800	10	Asphalt	-	-	-
OS7 (deleted)	-	-	-	-	-	-	-	-	-	-	-
OS8	OP5	OP8	Off-Road	From intersection with Old Harrisburg Pike at the Rock Creek Bridge to off-road trail intersection	First	1,560	5	concrete	n/a	Pennsylvania Department of Transportation	no
OS9	OP8	RP28	Off-Road	From int. of sidewalk along Old Harrisburg Pike to int. with Old Harrisburg Pk. & off-road trail	First	5	5	concrete	n/a	Pennsylvania Department of Transportation	no
OS10	OP8	OP9	Off-Road	From intersection of off-road trail connector to int. with NPS historic lane trail at county ag. site	First	750	5	concrete	n/a	Pennsylvania Department of Transportation	no
OS11	OP9	RP29	Off-Road	From intersection with NPS historic lane trail at county ag. site to Old Harrisburg Pk. intersection	First	480	5	concrete	n/a	Pennsylvania Department of Transportation	no
OS11.1	RP29	RP30	Off-Road	On Agricultural Center site	Second	1,150	10	Asphalt		County	no
OS11.2	RP29	RP29.5	Off-Road	Sidewalk	Second	250	5	concrete	n/a	Pennsylvania Department of Transportation	no
Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
OS - Off-Road Segments						
OS1	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	600	LF	\$ 8.00	\$ 4,800.00
		asphalt-surfaced trail	600	LF	\$ 20.00	\$ 12,000.00
		swale	600	LF	\$ 1.50	\$ 900.00
		culvert & stone dissipator	2	EA	\$ 500.00	\$ 1,000.00
OS2	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	400	LF	\$ 8.00	\$ 3,200.00
		asphalt-surfaced trail	400	LF	\$ 20.00	\$ 8,000.00
		swale	400	LF	\$ 1.50	\$ 600.00
		culvert & stone dissipator	1	EA	\$ 500.00	\$ 500.00
OS3	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	1,400	LF	\$ 8.00	\$ 11,200.00
		asphalt-surfaced trail	1,400	LF	\$ 20.00	\$ 28,000.00
		swale	1,400	LF	\$ 1.50	\$ 2,100.00
		culvert & stone dissipator	4	EA	\$ 500.00	\$ 2,000.00
	Include trail ID signage.	signage	2	EA	\$ 200.00	\$ 400.00
	Include one grouping of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	2	Sets	\$ 3,050.00	\$ 6,100.00
OS4	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	1,780	LF	\$ 8.00	\$ 14,240.00
		asphalt-surfaced trail	1,780	LF	\$ 20.00	\$ 35,600.00
		swale	1,780	LF	\$ 1.50	\$ 2,670.00
		culvert & stone dissipator	5	EA	\$ 500.00	\$ 2,500.00
	Include trail ID signage.	signage	2	EA	\$ 200.00	\$ 400.00
	Include one grouping of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	1	Sets	\$ 3,050.00	\$ 3,050.00
	Include groupings of 2 picnic tables at one location	picnic table	1	EA	\$ 1,200.00	\$ 1,200.00
OS5	None are necessary. PennDOT has already performed improvements to this bridge to make it trail-user friendly, including 6-foot wide bike lane on each side and a 5-foot wide pedestrian walk along the northwestern side.	n/a	n/a	n/a	n/a	n/a
OS6	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	asphalt-surfaced trail	890	SY	\$ 18.00	\$ 16,020.00
OS7 (deleted)	-	-	-	-	-	-
OS8	Include pedestrian walk in Old Harrisburg Pike ROW (along northwestern side of road) , separated by a 5 to 6' wide grass median. This will connect pedestrian sidewalk facilities in the Borough of Gettysburg with the Rock Creek Greenway trail and the High School via the greenway trail.	concrete sidewalk	7,800	SF	\$ 4.50	\$ 35,100.00
OS9	Provide connector between prop. sidewalk along Old Harrisburg Pike and off-road trail crossing (on Old Harrisburg Pike) leading back to the Rock Creek Greenway Trail.	concrete sidewalk	25	SF	\$ 4.50	\$ 112.50
OS10	Include pedestrian walk in Old Harrisburg Pike ROW (along northwestern side of road) , separated by a 5 to 6' wide grass median. This will connect pedestrian sidewalk facilities in the Borough of Gettysburg with the Rock Creek Greenway trail and the High School via the greenway trail.	concrete sidewalk	3,750	SF	\$ 4.50	\$ 16,875.00
OS11	Include pedestrian walk in Old Harrisburg Pike ROW (along northwestern side of road) , separated by a 5 to 6' wide grass median. This will connect pedestrian sidewalk facilities in the Borough of Gettysburg with the Rock Creek Greenway trail and the High School via the greenway trail. Tie proposed walk into existing sidewalks in the Broadway neighborhood.	concrete sidewalk	2,400	SF	\$ 4.50	\$ 10,800.00
	Asphalt surface trail on Agricultural Center property	asphalt-surfaced trail	1,277	SY	\$ 18.00	\$ 22,986.00
	Provide concrete sidewalk	concrete sidewalk	1,250	SF	\$ 4.50	\$ 5,625.00
Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost

OS12	RP29	OP3.1	Off-Road	Extension from Old Harrisburg Pk. Through Eisenhower Elementary School to Creek Trail	Third	1,700	10	asphalt	09,F12-0195--	Gettysburg Area School District	yes
OS13	RP31	OP11	Off-Road	From intersection with Carlisle St. to N.P.S. historic lane through county site	Fourth	60	4'	aggregate	09,F12-0159--	County of Adams	no
OS14 (deleted)											
OS15	OP6	OP12	Off-Road	Intersection with Old Harrisburg Pk. North along Rock Creek greenway to intersection at N.P.S. boundary	Second	2,570	10	asphalt	38,F12-0162-- 38,F12-0148-- 38,F12-0064--	Anthony Guiffreda Kenneth Faust Gettysburg Area School District	yes
OS15.1	OP6	RP40	Off-Road	From Old Harrisburg Pk. at Rock Creek north to off-road trail intersection		2,030	10	asphalt			
OS16	OP12	OP13	Off-Road	From intersection w/ Rock Creek greenway trail to creek crossing (Roselawn Estate connection)	Second	120	10	asphalt	38,F12-0064--	Gettysburg Area School District	yes
OS17	OP13	RP39	Off-Road	From creek crossing west to Pin Oak Dr. (Roselawn Estate connection)	Second	425	10	asphalt	09,F12-0063A-	Robert Wagner	yes
OS18	OP12	RP18	Off-Road	Intersection of off-road trail At Roselawn Estate connection to Boyds School Rd.	Second	2,250	10	asphalt	38,F12-0064--	Gettysburg Area School District	yes
OS18.1	OP12	RP18	Off-Road	Intersection of off-road trail At Roselawn Estate connection to Boyds School Rd.	Fourth	2,250	10	asphalt			
OS19	RP18	OP15	Off-Road	From Boyds School Rd. to future Rock Creek Greenway regional connection	Second	1,990	10	asphalt	38,F12-0064-- 09,F11-0081--	Gettysburg Area School District Donald Miller	yes
OS20	RP34	OP14	Off-Road	From intersection of Maple Ave. & Biglerville Rd. through school site to Gettys Elementary School	Third	400	10	asphalt	09,F12-0115--	Gettysburg Area School District	yes
OS20.1	OP14.1	OP14	Off-Road	From intersection with N.P.S. Lane Route to James Gettys Elementary School	Fourth	1,980	10	asphalt			
Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
OS20.2	OP14.2	OP14.1	Off-Road	From N.P.S. Lane Route to connection with off-road trail.	Fourth	220	10	asphalt			

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

OS12	Provide pedestrian and bicycle multi-use trail through school grounds to link it with the trail system at creek. Tie into Old Harrisburg Pike intersection/crossing. Avoid conflicts with parking lot and peds. through school and adjacent site.	asphalt-surfaced trail	1,890	SY	\$ 18.00	\$ 34,020.00
OS13	pedestrian-only trail; snake through county-owned site	aggregate-surfaced trail	27	SY	\$ 7.50	\$ 202.50
OS15	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	2,570	LF	\$ 8.00	\$ 20,560.00
		asphalt-surfaced trail	2,570	LF	\$ 20.00	\$ 51,400.00
		swale	2,570	LF	\$ 1.50	\$ 3,855.00
		culvert & stone dissipator	8	EA	\$ 500.00	\$ 4,000.00
	Include trail ID signage.	signage	2	EA	\$ 200.00	\$ 400.00
	Include groupings of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	2	Sets	\$ 3,050.00	\$ 6,100.00
	Include grouping of 2 picnic tables at one location	picnic table	1	EA	\$ 1,200.00	\$ 1,200.00
	Include interpretive signage about Rock Creek Greenway's natural processes, flora, fauna, etc. Locate at a bench	interpretive signage	1	EA	\$ 5,000.00	\$ 5,000.00
OS15.1	Provide asphalt-surfaced multi-use trail to allow connection to historic property.	asphalt-surfaced trail	2,030	LF	\$ 20.00	\$ 40,600.00
OS16	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	120	LF	\$ 8.00	\$ 960.00
		asphalt-surfaced trail	120	LF	\$ 20.00	\$ 2,400.00
OS17	Provide pedestrian and bicycle multi-use trail through open space area to link the Pin Oak Drive neighborhood with the Rock Creek Greenway and High School.	trail preparation	425	LF	\$ 8.00	\$ 3,400.00
		asphalt-surfaced trail	425	LF	\$ 20.00	\$ 8,500.00
OS18	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	2,250	LF	\$ 8.00	\$ 18,000.00
		asphalt-surfaced trail	2,250	LF	\$ 20.00	\$ 45,000.00
		swale	2,250	LF	\$ 1.50	\$ 3,375.00
		culvert & stone dissipator	7	EA	\$ 500.00	\$ 3,500.00
OS18	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	2,250	LF	\$ 8.00	\$ 18,000.00
		asphalt-surfaced trail	2,250	LF	\$ 20.00	\$ 45,000.00
		swale	2,250	LF	\$ 1.50	\$ 3,375.00
		culvert & stone dissipator	7	EA	\$ 500.00	\$ 3,500.00
	Include trail ID signage.	signage	2	EA	\$ 200.00	\$ 400.00
	Include groupings of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	2	Sets	\$ 3,050.00	\$ 6,100.00
	Include grouping of 2 picnic tables at one location	picnic table	1	EA	\$ 1,200.00	\$ 1,200.00
OS19	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	1,990	LF	\$ 8.00	\$ 15,920.00
		asphalt-surfaced trail	1,990	LF	\$ 20.00	\$ 39,800.00
		swale	1,990	LF	\$ 1.50	\$ 2,985.00
		culvert & stone dissipator	6	EA	\$ 500.00	\$ 3,000.00
	Include trail ID signage.	signage	2	EA	\$ 200.00	\$ 400.00
OS20	Provide pedestrian and bicycle multi-use trail through school grounds to link it with the trail system. Tie into Maple Avenue intersection/crossing. Avoid conflicts with parking lot and peds. through school site.	asphalt-surfaced trail	400	LF	\$ 20.00	\$ 8,000.00
OS20.1	Provide pedestrian and bicycle multiuse trail from school grounds to link with trail system at N.P.S. Lane Route intersection	asphalt-surfaced trail	1,980	LF	\$ 20.00	\$ 39,600.00
Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
OS20.2	Provide connection to scenic railroad off-road trail from intersection with N.P.S. Lane Route.	asphalt-surfaced trail	220	LF	\$ 20.00	\$ 4,400.00

OS20.3	OP14.2	RP9	Off-Road	From Eternal Light Peace Memorial to intersection with Herra Ridge Rd.	Fourth	8,360	10	asphalt			
OS20.4	OP14.2	RP4	Off-Road	From intersection along Scenic Railroad to Mummasberg Rd.	Fourth	2,030	10	asphalt			
OS20.5	RP4	CP4	Off-Road	From intersection with Mummasberg Rd and College Trail south around college to Lincoln Square	Fourth	6,400	10	asphalt			
OS21	RP19	OP16	Off-Road	From Boyd School Rd. through Gettysburg High School site to the High School	Second	1,500	10	asphalt	38,F12-0064--	Gettysburg Area School District	yes
				Adjust Alignment - By School							
OS22	OP12	OP16	Off-Road	From Gettysburg High School through High School site to off-road trail intersection along stream	Second	2,000	10	asphalt	38,F12-0064--	Gettysburg Area School District	yes
				Adjust Alignment - By School							
OS23	OP16	RP40	Off-Road	From Gettysburg High School through High School site to Old Harrisburg Pk.	Second	1,000	10	asphalt	38,F12-0064--	Gettysburg Area School District	yes
				Adjust Alignment - By School							
OS24	OP17	OP18	Off-Road	Connection to Lutheran community from intersection with Jones Battalion Drive	Third	390	10	asphalt	38,G12-0043--	Lutheran Social Services, South Reg.	yes
OS25	OP18	RP41	Off-Road	Connection to Artillery Rd. from intersection with Jones Battalion Drive	Second	240	10	asphalt	38,002-0011--	Douglas Small	yes
OS26	RP19	OP20	Off-Road	Through private property on Oak Ln. from intersection on Oak Lane to Hunters Crossing connection	Second	390	10	asphalt	38,002-0027--	Bruce Hartman	yes
OS27	OP20	OP21	Off-Road	From edge of private property, through Hunters Crossing woodland, to intersection w/ Hunters Crossing road	Second	1,175	10	asphalt	38,G12-0061B- 38,002-0027--	LL Lawrence Builders Bruce Hartman	yes
OS28	OP21	OP22	Off-Road	Hunters Crossing South to stream crossing	Second	3,688	10	asphalt	38,G12-0061B- 38,G12-0130--	LL Lawrence Builders Gerald Black	yes

LEGEND: **CS**--college segment **CP**--college point **NLS**--military park historic lane segment **NLP**--military park historic lane point **NS**--military park avenue segment **NP**--military park avenue point **OS**--off-road segment **OP**--off-road point **RS**--on-road segment **RP**--on-road point

OS20.3	Long off-road section connecting Eternal Light Peace Memorial to Herrs Ridge Rd.	asphalt-surfaced trail	8,360	LF	\$ 20.00	\$ 167,200.00
OS20.4	Eternal Light Peace Memorial Connection to Mummasberg Rd. intersection	asphalt-surfaced trail	2,030	LF	\$ 20.00	\$ 40,600.00
OS20.5	From intersection of Mummasberg Rd., College Dr., and off-road trail to Lincoln Square	asphalt-surfaced trail	6,400	LF	\$ 20.00	\$ 128,000.00
OS21	Provide pedestrian and bicycle multi-use trail through school grounds to link it with the trail system. Tie into Boyds School Road next to vehicular entrance. Avoid conflicts with parking lot and peds. through school site.	asphalt-surfaced trail	1,500	LF	\$ 20.00	\$ 30,000.00
	Install shade trees along trail.	shade trees	5	EA	\$ 400.00	\$ 2,000.00
OS22	Provide pedestrian and bicycle multi-use trail through school grounds to link it with the trail system. Tie into Rock Creek Greenway trail. Avoid conflicts with parking lot and peds. through school site.	asphalt-surfaced trail	2,000	LF	\$ 20.00	\$ 40,000.00
	Install shade and flowering trees along trail, include some at bench location.	shade trees	12	EA	\$ 400.00	\$ 4,800.00
	Include groupings of 2 benches, 1 trash receptacle, and 1 bicycle tie-up	site amenities	1	Sets	\$ 3,050.00	\$ 3,050.00
OS23	Provide pedestrian and bicycle multi-use trail through school grounds to link it with the trail system. Tie into Old Harrisburg Pike directly across from entrance to Jones Battalion Ave. Avoid conflicts with parking lot and peds. through school site.	asphalt-surfaced trail	1,000	LF	\$ 20.00	\$ 20,000.00
	Install shade trees along trail.	shade trees	7	EA	\$ 400.00	\$ 2,800.00
OS24	Provide asphalt-surfaced trail connection between Lutheran Community and Jones Battalion Ave.	asphalt-surfaced trail	390	LF	\$ 20.00	\$ 7,800.00
	Include plantings of shade and flowering trees in conjunction with benches.	tree planting	6	EA	\$ 400.00	\$ 2,400.00
	Include one grouping of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	1	Sets	\$ 3,050.00	\$ 3,050.00
OS25	Provide asphalt-surfaced multi-use trail and buffer planting for privacy. (This segment passes through private property.)	asphalt-surfaced trail	240	LF	\$ 20.00	\$ 4,800.00
		Buffer Planting	240	LF	\$ 40.00	\$ 9,600.00
OS26	Provide asphalt-surfaced multi-use trail and buffer planting for privacy. (This segment passes through private property.)	asphalt-surfaced trail	390	LF	\$ 20.00	\$ 7,800.00
		Buffer Planting	390	LF	\$ 40.00	\$ 15,600.00
OS27	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	1,175	LF	\$ 8.00	\$ 9,400.00
		asphalt-surfaced trail	1,175	LF	\$ 20.00	\$ 23,500.00
		swale	1,175	LF	\$ 1.50	\$ 1,762.50
		culvert & stone dissipator	4	EA	\$ 500.00	\$ 2,000.00
	Include trail ID signage.	signage	2	EA	\$ 200.00	\$ 400.00
	Include one grouping of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	1	Sets	\$ 3,050.00	\$ 3,050.00
OS28	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts. (A portion of this segment passes through private property along the creek.)	trail preparation	3,688	LF	\$ 8.00	\$ 29,504.00
		asphalt-surfaced trail	3,688	LF	\$ 20.00	\$ 73,760.00
		swale	3,688	LF	\$ 1.50	\$ 5,532.00
		culvert & stone dissipator	10	EA	\$ 500.00	\$ 5,000.00
	Plant an increased buffer area along segments through private property, between residence and trail.	buffer planting	1,000	LF	\$ 40.00	\$ 40,000.00
	Include trail ID signage.	signage	4	EA	\$ 200.00	\$ 800.00
	Include groupings of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	2	Sets	\$ 3,050.00	\$ 6,100.00
	Include groupings of 2 picnic tables at one location	picnic table	2	EA	\$ 1,200.00	\$ 2,400.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
OS28.1	OP21.2	OP22	Off-Road	Rock Creek crossing North to Intersection	Second	2,600	10	asphalt			
OS29	OP22	OP2	Off-Road	Stream crossing to intersection with off-road trail	Second	140	10	asphalt	38,G12-0110--	Erian Investment Co. Inc.	yes

LEGEND: **CS**--college segment **CP**--college point **NLS**--military park historic lane segment **NLP**--military park historic lane point **NS**--military park avenue segment **NP**--military park avenue point **OS**--off-road segment **OP**--off-road point **RS**--on-road segment **RP**--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost		
OS28.1	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts. (A portion of this segment passes through private property along the creek.)	trail preparation	3,688	LF	\$ 8.00	\$ 29,504.00		
		asphalt-surfaced trail	3,688	LF	\$ 20.00	\$ 73,760.00		
		swale	3,688	LF	\$ 1.50	\$ 5,532.00		
		culvert & stone dissipator	10	EA	\$ 500.00	\$ 5,000.00		
		Plant an increased buffer area along segments through private property, between residence and trail.	buffer planting	1,000	LF	\$ 40.00	\$ 40,000.00	
		Include trail ID signage.	signage	4	EA	\$ 200.00	\$ 800.00	
		Include groupings of 2 benches, 1 trash receptacle, and 1 bicycle tie-up along segment.	site amenities	2	Sets	\$ 3,050.00	\$ 6,100.00	
		Include groupings of 2 picnic tables at one location	picnic table	2	EA	\$ 1,200.00	\$ 2,400.00	
		OS29	Provide asphalt-surfaced multi-use trail and necessary drainage improvements to collect surface runoff in swale and direct under the trail via culverts.	trail preparation	140	LF	\$ 8.00	\$ 1,120.00
				asphalt-surfaced trail	140	LF	\$ 20.00	\$ 2,800.00
Subtotal					\$	1,549,055.50		

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
OP - Off-Road Points									
OP1	Off-Road	Future Regional Connection to Rock Creek Greenway to the south	Fourth	-	-	-	38,G12-0110--	Erian Investment Co. Inc.	yes
OP2	Off-Road	Intersection of off-road trails	Second	-	-	-	38,G12-0110--	Erian Investment Co. Inc.	yes
OP3	Off-Road	Stream crossing	Second	-	-	-	38,G12-0110--	Erian Investment Co. Inc.	yes
OP4	Off-Road	Intersection of off-road trails behind Harrisburg Area Community College and shopping center	Second	-	-	-	09,F12-0178--	Times News & Publishing Co.	yes
OP5	Off-Road	Rock Creek Greenway trail intersecting Old Harrisburg Pike to use road bridge to cross creek		-	-	-	n/a	Pennsylvania Department of Transportation	no
OP6	Off-Road	Rock Creek Greenway trail crossing Rock Creek	Second	-	-	-	n/a	Pennsylvania Department of Transportation	no
OP7 (deleted)	-	-	-	-	-	-	-	-	-
OP8	Off-Road	Intersection of off-road trail and proposed sidewalk along Old Harrisburg Pike	Second	-	-	-	n/a	Pennsylvania Department of Transportation	no
OP9	Off-Road	Intersection prop. sidewalk along Old Harrisburg Pike with Historic Lane Route through prop. county ag. center	Second	-	-	-	n/a	Pennsylvania Department of Transportation	no
OP10	Off-Road	Eisenhower Elementary School	Third	-	-	-	09,F12-0195	Gettysburg Area School District	yes
OP11	Off-Road	Intersection Historic Lane Route and off-road route through County nursing home/prison site	Fourth	-	-	-	09,F12-0159--	County of Adams	no
OP12	Off-Road	Intersection of off-road trails between high school and Pin Oak Drive	Second	-	-	-	38,F12-0064--	Gettysburg Area School District	yes
OP13	Off-Road	Stream crossing	Second	-	-	-	38,F12-0064--	Gettysburg Area School District	yes
OP14	Off-Road	James Gettys Elementary School	Third	-	-	-	09,F12-0115--	Gettysburg Area School District	yes
OP15	Off-Road	Proposed future regional connection to Rock Creek Greenway to the north	Second	-	-	-	09,F11-0081--	Donald Miller	yes
OP16	Off-Road	Gettysburg High School	Second	-	-	-	38,F12-0064--	Gettysburg Area School District	yes
OP17	Off-Road	Lutheran Community	Third	-	-	-	38,G12-0043--	Lutheran Social Services, South Reg.	yes
OP18	Off-Road	Intersection Jones Battalion Ave.	Second	-	-	-	38,G12-0042--	US Dept. of the Interior (NPS)	no

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
OP - Off-Road Points						
OP1	none	n/a	n/a	n/a	n/a	n/a
OP2	none	n/a	n/a	n/a	n/a	n/a
OP3	provide bridge across creek	proposed timber bridge	1	EA	\$ 40,000.00	\$ 40,000.00
OP4	Include interpretive signage about Rock Creek Greenway's natural processes, flora, fauna, etc.	interpretive signage	1	EA	\$ 5,000.00	\$ 5,000.00
OP5	Painted crosswalk across Old Harrisburg Pike	painting crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	2	Sets	\$ 1,400.00	\$ 2,800.00
	Include double-sided trail ID, destination, and arrow signs directing users to Rock Creek Greenway trail and high school.	signage	2	EA	\$ 200.00	\$ 400.00
OP6	Painted crosswalk across Old Harrisburg Pike	painting crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	2	Sets	\$ 1,400.00	\$ 2,800.00
	Include double-sided trail ID, destination, and arrow signs directing users to Rock Creek Greenway trail and high school.	signage	2	EA	\$ 200.00	\$ 400.00
OP7 (deleted)	-	-	-	-	-	-
OP8	None	n/a	n/a	n/a	n/a	n/a
OP9	Include trail ID and PEDESTRIAN ONLY - NO BIKES signs.	signage	1	EA	\$ 200.00	\$ 200.00
OP10	Tie trail into the elementary school.	n/a	n/a	n/a	n/a	n/a
OP11	none	n/a	n/a	n/a	n/a	n/a
OP12	Include double-sided trail ID, destination, and arrow signs directing users to Rock Creek Greenway trail and high school.	signage	2	EA	\$ 200.00	\$ 400.00
	Include a trail information sign to orient users to trail and list regulations, etc.	trail information signage	1	EA	\$ 5,000.00	\$ 5,000.00
	Include plantings at information sign: 3 flowering trees and 12 shrubs.	plantings	1	LS	\$ 1,800.00	\$ 1,800.00
OP13	provide bridge across creek	proposed timber bridge	1	EA	\$ 40,000.00	\$ 40,000.00
OP14	Tie trail into the elementary school.	n/a	n/a	n/a	n/a	n/a
OP15	provide bridge across creek (permit cost extra)	proposed timber bridge	1	EA	\$ 40,000.00	\$ 40,000.00
OP16	Tie trail into the high school.	n/a	n/a	n/a	n/a	n/a
OP17	Tie trail into the Lutheran Community.	n/a	n/a	n/a	n/a	n/a
OP18	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	2	Sets	\$ 1,400.00	\$ 2,800.00
	Include trail ID signage at entrance to off-road trail segments intersecting road.	signage	2	EA	\$ 200.00	\$ 400.00

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
OP19	Off-Road	Intersection of Oak Lane and route through private property	Second	-	-	-	38-002-0027--	Bruce Hartman	yes
OP20	Off-Road	Intersection of route through private property and Hunters Crossing	Second	-	-	-	38-002-0027--	Bruce Hartman	yes
OP21	Off-Road	Road Intersection - Hunters Crossing	Second	-	-	-	38,G12-0061B-	LL Lawrence Builders	yes
OP22	Off-Road	Stream crossing	Second	-	-	-	38,G12-0110--	Erian Investment Co. Inc.	yes

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
NS - National Park Service Avenues -- On-Road Segments											
NS1	RP4	NP1	N.P.S. On-Road	Intersection of College trail Mummasberg Rd. and N.P.S. trail to intersection with Doubleday Ave.	Second	475	n/a	asphalt	n/a	USA	No
NS2	NP1	NP2	N.P.S. On-Road	Doubleday Ave. from intersection with NPS Ave. to turn in Rd. along Doubleday Ave	Second	1,650	n/a	asphalt	n/a	USA	No
NS3	NP2	NP3	N.P.S. On-Road	Doubleday Ave. from turn in road to Bridge	Second	560	n/a	asphalt	n/a	USA	No
NS4	NP3	NP4	N.P.S. On-Road	Doubleday Ave. from bridge to intersection with Reynolds Ave.	Second	475	n/a	asphalt	n/a	USA	No
NS5	NP4	NP5	N.P.S. On-Road	Reynolds Ave. from intersection with Doubleday Ave. to railroad crossing and proposed future N.P.S. connection	Second	1,125	n/a	asphalt	n/a	USA	No
NS6	NP4	NP6	N.P.S. On-Road	NPS Ave. from intersection with Reynolds to intersection with 'Buford Ave.	Second	940	n/a	asphalt	n/a	USA	No
NS7	NP6	RP6	N.P.S. On-Road	Buford Ave. from intersection with NPS Ave. to intersection with Mummasberg Rd.	Second	2,400	n/a	asphalt	n/a	USA	No
NS8	RP6	NP7	N.P.S. On-Road	NPS Ave. from intersection with Mummasberg Rd. to 'Eternal Peace Light Memorial	Second	850	n/a	asphalt	n/a	USA	No
NS9	NP7	RP5	N.P.S. On-Road	NPS Ave. from intersection Eternal Peace Light Memorial to intersection with Mummasberg Rd.	Second	1,400	n/a	asphalt	n/a	USA	No
NS10	RP5	NP8	N.P.S. On-Road	Doubleday Ave. from intersection with Mummasberg Rd. to Observation Tower	Second	220	n/a	asphalt	n/a	USA	No
NS11	NP8	NP1	N.P.S. On-Road	Doubleday Ave. from Observation Tower to intersection w/ NPS Avenue leading to Mummasberg Rd.	Second	100	n/a	asphalt	n/a	USA	No
NS12	CP1	NP9	N.P.S. On-Road	Howard Ave. from intersection with Mummasberg Rd. and off-road College Trail to Historic Lane intersection	Second	1,380	n/a	asphalt	n/a	USA	No
NS13	NP9	RP32	N.P.S. On-Road	Howard Ave. from intersection with Historic Lane to intersection with Carlisle St.	Second	780	n/a	asphalt	n/a	USA	No
NS14	RP32	NP10	N.P.S. On-Road	Howard Ave. from intersection with Carlisle St. to Barlow Knoll	Second	1,770	n/a	asphalt	n/a	USA	No

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
OP19	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	1	Sets	\$ 1,400.00	\$ 1,400.00
	Include double-sided trail ID sign	signage	1	EA	\$ 200.00	\$ 200.00
OP20	none	n/a	n/a	n/a	n/a	n/a
OP21	Painted crosswalk across road	painting crosswalk/trail crossing	1	EA	\$ 145.00	\$ 145.00
	Include warning signs alerting motorists of pedestrian crossing.	signage	2	EA	\$ 200.00	\$ 400.00
	Include bollards, 2 permanent and 1 removable, to control vehicular access to off-road trail.	bollards	2	Sets	\$ 1,400.00	\$ 2,800.00
OP22	provide bridge across creek	proposed timber bridge	1	EA	\$ 40,000.00	\$ 40,000.00
					Subtotal	\$ 188,035.00
					TOTAL	\$ 1,737,090.50

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
NS - National Park Service Avenues -- On-Road Segments						
NS1	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS2	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS3	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS4	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS5	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment provides a link to the park and battle fields to the south & is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS6	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS7	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS8	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS9	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS10	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS11	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary. (This segment is currently used by the Gettysburg Walking Club.)	n/a	n/a	n/a	n/a	n/a
NS12	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary.	n/a	n/a	n/a	n/a	n/a
NS13	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary.	n/a	n/a	n/a	n/a	n/a
NS14	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary.	n/a	n/a	n/a	n/a	n/a

Point	Point Type	Location/Description			Priority				Tax Parcel ID	Ownership	Acquisition Required?
NS15	NP10	OP7	N.P.S. On-Road	Howard Ave. from Barlow Knoll to intersection with off-road trail	Second	1,090	n/a	asphalt	n/a	USA	No
NS16	RP40	OP18	N.P.S. On-Road	Jones Battalion Ave. from intersection with Old Harrisburg Pike to intersection with off-road cross-trails	Second	1,020	n/a	asphalt	n/a	USA	No
NS17	OP18	NP11	N.P.S. On-Road	Jones Battalion Ave. from intersection with off-road cross-trails to termination of Ave.	Second	375	n/a	asphalt	n/a	USA	No

Point	Point Type	Location/Description			Priority				Tax Parcel ID	Ownership	Acquisition Required?
NP - National Park Service Avenues -- On-Road Point											
NP1	On-road	Intersection NPS Avenue and Doubleday Ave.			Second	-	-	-	n/a	USA	No
NP2	On-road	Intersection Doubleday Ave. and NPS Ave.			Second	-	-	-	n/a	USA	No
NP3	On-road	Stream crossing			Second	-	-	-	n/a	USA	No
NP4	On-road	Intersection of Reynold Ave and NPS Ave.			Second	-	-	-	n/a	USA	No
NP5	On-road	Future Connection to National Park Lands to the south			Second	-	-	-	n/a	USA	No
NP6	On-road	Intersection Mummasberg Rd. and Buford Ave.			Second	-	-	-	n/a	USA	No
NP7	On-road	Eternal Peace Light Memorial			Second	-	-	-	n/a	USA	No
NP8	On-road	Observation Tower			Second	-	-	-	n/a	USA	No
NP9	On-road	Intersection Howard Ave. And Historic Lane Route			Fourth	-	-	-	n/a	USA	No
NP10	On-road	Barlow Knoll			Second	-	-	-	n/a	USA	No
NP11	On-road	Jones Battalion			Second	-	-	-	n/a	USA	No

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
NS15	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary.	n/a	n/a	n/a	n/a	n/a
NS16	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary.	n/a	n/a	n/a	n/a	n/a
NS17	This will be a shared roadway; bikes will share this segment with motor vehicles. No improvement is necessary.	n/a	n/a	n/a	n/a	n/a
					Subtotal	\$ -

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
NP - National Park Service Avenues -- On-Road Point						
NP1	Include trail ID, destination, and arrow signs directing users to the Observation Tower, the Eternal Light Peace Memorial, Barlow Knoll, and the Gettysburg Historic Pathway & Downtown.	signage	1	EA	\$ 400.00	\$ 400.00
NP2	none	n/a	n/a	n/a	n/a	n/a
NP3	none	n/a	n/a	n/a	n/a	n/a
NP4	Include trail ID, destination, and arrow signs directing users to the Observation Tower, the Eternal Light Peace Memorial, Barlow Knoll, and the Gettysburg Historic Pathway & Downtown.	signage	1	EA	\$ 400.00	\$ 400.00
NP5	none	n/a	n/a	n/a	n/a	n/a
	Include a trail information sign to orient users to trail and list regulations, etc.	trail information signage	1	EA	\$ 5,000.00	\$ 5,000.00
NP6	none	n/a	n/a	n/a	n/a	n/a
NP7	none	n/a	n/a	n/a	n/a	n/a
NP8	none	n/a	n/a	n/a	n/a	n/a
NP9	Include trail ID and PEDESTRIAN ONLY - NO BIKES signs at trail entrance on each side of road.	signage	2	EA	\$ 200.00	\$ 400.00
	Include warning signs alerting motorists of pedestrian crossing on Howard Ave.	signage	2	EA	\$ 200.00	\$ 400.00
NP10	none	n/a	n/a	n/a	n/a	n/a
NP11	none	n/a	n/a	n/a	n/a	n/a
					Subtotal	\$ 6,600.00
					TOTAL	\$ 6,600.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
NLS - National Park Service 1863 Lane Route Segments											
NLS1	CP2	CP3	N.P.S. Lane Route	Connection between college jogging trail and trail along Mummasberg Rd.	Fourth	1,450	4'	aggregate	n/a	USA	No
NLS2	RP4	NLP1	N.P.S. Lane Route	Intersection of trails at Mummasberg Rd. to intersection of Historic Lanes	Fourth	425	4'	aggregate	n/a	USA	No
NLS3	NLP1	RP36	N.P.S. Lane Route	Historic Lane intersection to Biglerville Rd.	Fourth	5,375	4'	aggregate	n/a	USA	No
NLS4	NLP1	NP9	N.P.S. Lane Route	intersection of Historic Lanes to intersection with Howard Ave.	Fourth	2,310	4'	aggregate	n/a	USA	No
NLS5	NP9	RP31	N.P.S. Lane Route	intersection with Howard Ave. to intersection with Carlisle St.	Fourth	680	4'	aggregate	n/a	USA	No
NLS6	OP11	OP9	N.P.S. Lane Route	Intersection with off-road trail through county aged home to intersection with Old Harrisburg Pk.	Fourth	880	4'	aggregate	n/a	USA	No

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
NLP - National Park Service 1863 Lane Route Point									
NLP1	Off-Road	Intersection of two Historic Lane Routes	Fourth	-	-	-	n/a	USA	No

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
NLS - National Park Service 1863 Lane Route Segments						
NLS1	Pedestrian-only route; recommended to be implemented and operated by NPS	aggregate-surfaced trail	n/a	n/a	n/a	n/a
	Include interpretive signage about GNMP historic lanes.	interpretive signage	1	EA	\$ 5,000.00	\$ 5,000.00
NLS2	Pedestrian-only route; recommended to be implemented and operated by NPS	aggregate-surfaced trail	n/a	n/a	n/a	n/a
NLS3	Pedestrian-only route; recommended to be implemented and operated by NPS	aggregate-surfaced trail	n/a	n/a	n/a	n/a
	Include interpretive signage about GNMP historic lanes.	interpretive signage	1	EA	\$ 5,000.00	\$ 5,000.00
NLS4	Pedestrian-only route; recommended to be implemented and operated by NPS	aggregate-surfaced trail	n/a	n/a	n/a	n/a
	Include interpretive signage about GNMP historic lanes.	interpretive signage	1	EA	\$ 5,000.00	\$ 5,000.00
NLS5	Pedestrian-only route; recommended to be implemented and operated by NPS	aggregate-surfaced trail	n/a	n/a	n/a	n/a
NLS6	Pedestrian-only route; recommended to be implemented and operated by NPS	aggregate-surfaced trail	n/a	n/a	n/a	n/a
	Include interpretive signage about GNMP historic lanes.	interpretive signage	1	EA	\$ 5,000.00	\$ 5,000.00
					Subtotal	\$ 20,000.00

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
NLP - National Park Service 1863 Lane Route Point						
NLP1	Include double-sided trail ID, destination, and arrow signs directing users to Barlow Knoll.	signage	2	EA	\$ 200.00	\$ 400.00
					Subtotal	\$ 400.00
					TOTAL	\$ 20,400.00

Segment	Point (Begin)	Point (End)	Segment Type	Trail Location/Description	Priority	Length (LF)	Width (minimum)	Proposed Surface Material	Tax Parcel ID	Ownership	Acquisition Required?
CS - College (Gettysburg) Trail Route Segments											
CS1	RP3	CP1	College Trail	College Trail intersection to intersection with Howard Ave.	Second	390	10	Aggregate		Gettysburg College	No
CS2	CP1	CP2	College Trail	Howard Ave. intersection to intersection with Historic Lane	Second	1,140	10	Aggregate		Gettysburg College	No
CS3	CP2	RP4	College Trail	Historic Lane Intersection to intersection of Mummasberg Rd. and N.P.S. trail	Second	665	10	Aggregate		Gettysburg College	No

Point	Point Type	Location/Description	Priority				Tax Parcel ID	Ownership	Acquisition Required?
NLP - National Park Service 1863 Lane Route Point									
CP1	On-Road	Intersection Gettysburg College Trail and Howard Ave.	Second	-	-	-		Gettysburg College	No
CP2	On-Road	Intersection Gettysburg College Trails and NPS Lane Route	Fourth	-	-	-		Gettysburg College	No
CP3	Off-Road	Intersection NPS Lane Route and Gettysburg College Trail	Fourth	-	-	-		Gettysburg College	No
CP4	Off-Road	Intersection of College Trail and off-road trail	Fourth	-	-	-		Gettysburg College	No

LEGEND: CS--college segment CP--college point NLS--military park historic lane segment NLP--military park historic lane point NS--military park avenue segment NP--military park avenue point OS--off-road segment OP--off-road point RS--on-road segment RP--on-road point

Segment	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
CS - College (Gettysburg) Trail Route Segments						
CS1	Work an agreement with the college for shared use of this segment as part of the N. Gettysburg Area Trail System; to remain under the ownership of the college. Recommend upgrading surface material and trail width. (bike & ped. use)	aggregate	n/a	n/a	n/a	n/a
	Install shade trees along trail.	shade trees	3	EA	\$ 400.00	\$ 1,200.00
CS2	Work an agreement with the college for shared use of this segment as part of the N. Gettysburg Area Trail System; to remain under the ownership of the college. Recommend upgrading surface material and trail width. (bike & ped. use)	aggregate	n/a	n/a	n/a	n/a
	Install shade trees along trail.	shade trees	8	EA	\$ 400.00	\$ 3,200.00
	Include groupings of 2 benches, 1 trash receptacle, and 1 bicycle tie-up near each trail intersection	site amenities	2	Sets	\$ 3,050.00	\$ 6,100.00
CS3	Work an agreement with the college for shared use of this segment as part of the N. Gettysburg Area Trail System; to remain under the ownership of the college. Recommend upgrading surface material and trail width. (bike & ped. use)	aggregate	n/a	n/a	n/a	n/a
	Install shade trees along trail.	shade trees	3	E	\$ 400.00	\$ 1,200.00
					Subtotal	\$ 10,500.00

Point	Notes / Recommendations	Improvements	Quantity	Unit	Unit Cost	Total Cost
CP1	Construct short segment of trail to connect college segment to intersection of Mummasberg Rd. and Howard Avenue.	asphalt-surfaced trail	n/a	n/a	n/a	n/a
	Include double-sided trail ID, destination, and arrow signs directing users to Barlow Knoll.	signage	2	EA	\$ 200.00	\$ 400.00
CP2	Construct short segment of trail to connect college segment to intersection of Mummasberg Rd. and Howard Avenue.	asphalt-surfaced trail	n/a	n/a	n/a	n/a
CP3		none necessary	n/a	n/a	n/a	n/a
CP4			n/a	n/a	n/a	n/a
					TOTAL	\$ 400.00

GRAND TOTAL	\$	2,167,629.50
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D. Trail Alignments

D. Trail Alignments

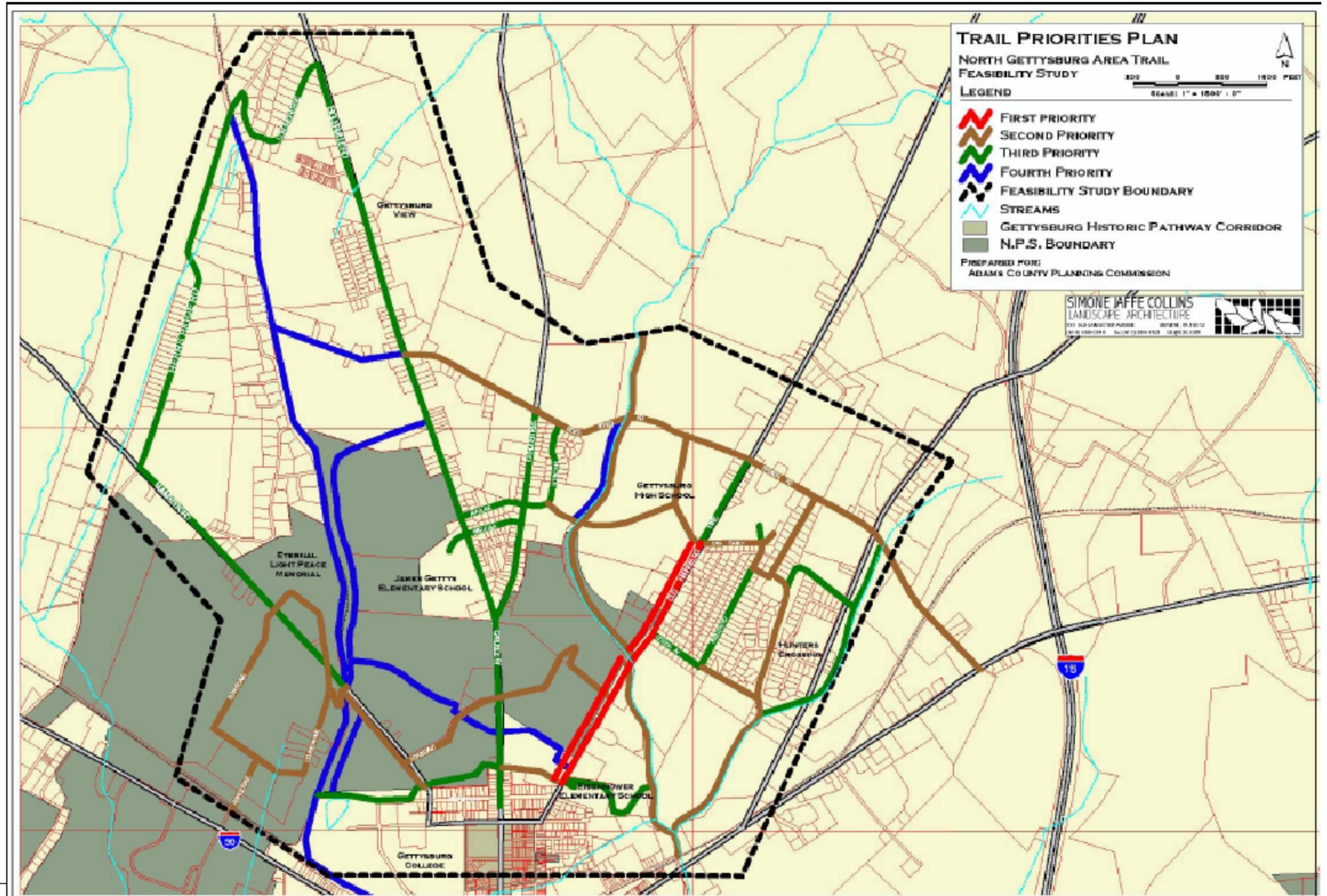
Trail Priorities

a. Priorities Description

- **First** These trail alignments are the highest priority. They include all segments necessary to provide the initial pedestrian and bicycle connection between the Borough of Gettysburg and the Gettysburg High School.
- **Second** The next highest priority is a system that begins to provide recreational opportunities for local citizens. These include routes within the study area that are currently used by the Gettysburg Walking Club. Also included, are National Park Service avenues to provide a connection between this important resource and the local community. Second priority alignments also begin to connect the Gettysburg High School to nearby residential neighborhoods. Last, a connection to the commercial district along York Road is included as a second priority, since this route is currently used—by students in particular—to access this important resource from the study area.
- **Third** Third priority alignments are those which provide connections between residential neighborhoods within the study area. These segments also provide connections between these residential neighborhoods and higher priority segments of the trail system.
- **Fourth** National Park Service historic 1863 lanes conclude the trail priorities. They provide useful pedestrian connections, historic interpretation, and increased access to the battlefield grounds. The Gettysburg National Military Park's General Management Plan mentions the importance of reinstating these lanes as part of the historic fabric of the park. These lanes should be included as pedestrian-only routes, with bicycles being prohibited. Also included is the shared trail on the scenic railroad, due to the significant cost to construct this trail.

D. Trail Alignments

b. Priorities Map



E. Legal Feasibility

1. Local Landowners' Support

Currently, a number of local landowners support the trail, including Adams County, Pennsylvania Department of Transportation, National Park Service, Gettysburg Area School District, Gettysburg College, and numerous citizens in attendance at public outreach meetings.

2. Investigations for National Park Service Lands

Before trail development is possible on NPS lands, consultations will be required with National Park Service staff and the Pennsylvania Historic and Museums Commission to coordinate efforts. This coordination has already begun as part of this study. The NPS has been involved in the planning efforts of this proposed trail system.

Specific investigations, such as archaeological and environmental assessments, may be needed before trail development over NPS lands may be permitted. These investigations should occur as sections of trail are to be implemented. This study anticipates limited, if any, problems with the implementation of trails over NPS lands due to such assessments. Proposed routes follow already existing park avenues and historic lanes, therefore requiring little if any alterations or improvements. Historic lane routes are a low priority for implementation, intended to work in concert with NPS efforts to re-institute these lanes. The inclusion of these lane routes in this study are intended to encourage the NPS to re-institute these particular lanes as walking routes, an idea in which NPS is interested.

Archeological and environmental assessments were conducted earlier and as a part of the General Management Plan. An *Overview and Assessment* of the archeological resources of the park was completed in 1996. Archeological resources include those associated with both temporary and permanent prehistoric and historic settlements and with the temporary military uses of the land. Prehistoric activity and settlements throughout the park were indicated on a preliminary survey. These were concentrated in areas where later white settlements occur. Almost all indications of prehistoric and early white historic settlements have been buried by subsequent activities. Temporary military use has also left archeological remains throughout the area. These are primarily through the activities associated with the Gettysburg Battle of 1863.

3. Acquisition

For on-road sections of the trail, ownership issues are moot since these occur in rights-of-way owned by the state, townships, or borough. Assuming that the respective government entity is agreeable to the proposed on-road routes, acquisition is an issue for the remaining off-road alignments only.

Several potential means of acquisition for the remaining alignments include purchase, lease, and easement. Depending on the wishes of the landowner, any one of these options could be acceptable. For segments through publicly owned sites, an easement may be the simplest solution, since the land is already publicly held. For segments through private property, either outright purchase or easement are means of gaining public access. A lease option, although less desirable, should also be considered if the previous two options are not successful. If a landowner is not willing to accept any offer, the segment should not become abandoned or be considered lost. Instead, follow-up negotiations should be pursued periodically as the owner's support may change. This is especially true once a parcel of land is transferred to a new owner.

Trail segments were selected, to the greatest extent possible, to create an efficient trail system providing the greatest degree of non-vehicular connectivity in the study area.

It is anticipated that developers of lands where trails are proposed will accommodate trail plans within development plans and enter into negotiations with the appropriate entity to formalize the trail. One option for trail land set-asides is the donation of trail lands to the Land Conservancy of Adams County, which may give tax advantages to the property owner.

Proposed trail route alignments on National Park Service lands present a unique situation. These routes will remain under NPS ownership and control since this is already public land intended for public use. The proposed trail alignments through this land are intended to utilize existing park resources (or capitalize on future resources through the re-institution of historic lanes) to unite the military park with the community and increase public access to this facility.

The Gettysburg College segment along Mummasberg Road is another a unique situation. This segment is currently in place and in use. This study recommends including this section of trail as part of the North Gettysburg Area Trail System since this segment relocates an on-road route to an off-road route. In this circumstance, an easement or other creative means of shared use may be in order. Gettysburg College may possibly allow shared use of the trail segment.

E. Legal Feasibility

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F. Financial Feasibility

1. Summary of Estimated Right of Way Acquisition Costs

Land costs in Adams County vary depending on the location, development potential of the parcel, existence of sensitive environmental features, adjoining land uses, and a host of other tangible and intangible variables.

A listing of recent land sales compiled by the Director of the Adams County Tax Appraising Department gives a sampling of recent land sales within or near the project area.

Parcel location	Municipality	Size(acres)	Cost (\$)	Cost/Acre (\$)	Date
Table Rock Road	Cumberland Town.	0.59	10,000	16,949	6.4.99
11 White Oak Trail	Cumberland Town.	1.00	40,000	40,000	6.28.99
74 Tiffany Lane	Cumberland Town.	1.02	100,000	98,039	4.8.99
1421 Fairfield Road	Cumberland Town.	1.94	48,000	24,742	3.10.98
204 Hospital Road	Cumberland Town.	2.00	59,900	29,950	7.16.98
290 Knight Road	Cumberland Town.	2.00	41,000	20,500	9.1.98
575 Knight Road	Cumberland Town.	2.01	40,000	19,901	6.30.98
1933 Biglerville Road	Cumberland Town.	2.10	44,000	20,952	3.16.98
280 Ridgewood Drive	Cumberland Town.	2.33	49,000	21,030	9.18.98
Off Biglerville Road	Cumberland Town.	14.60	70,000	4,795	3.23.99
Sentz Road	Cumberland Town.	22.01	44,028	2,000	5.19.99
180 Swetland Road	Cumberland Town.	27.00	80,000	2,963	3.26.99
Off Chambersburg Rd.	Cumberland Town.	37.35	95,000	2,544	7.2.98
Baltimore Pike	Cumberland Town.	45.73	2,750,000	60,136	1.11.99
725 New Chester Road	Straban Township	1.49	29,000	19,463	3.5.99
21 Charmed Circle	Straban Township	1.53	30,000	19,608	7.15.98
250 Hunterstown-Hamp	Straban Township	4.27	35,000	8,197	4.30.98
475 Smith Road	Straban Township	5.59	40,500	7,245	2.3.99

Shrivers Corner Road	Straban Township	7.00	35,000	5,000	2.18.99
New Chester Road	Straban Township	7.80	52,900	6,782	7.7.99
Hunterstown-Hampton	Straban Township	37.24	54,777	1,471	1.16.98
Old Harrisburg Road	Straban Township	52.74	110,754	2,100	4.19.99

Indicated Fair Market Value Per Acre	
1 Acre	\$25,000 to \$30,000
2 Acres	\$20,000
5 Acres	\$7,500
15 Acres	\$3,000
20 Acres plus	\$2,500

F. Financial Feasibility

The sales listed above are for whole properties. No recent land transactions have occurred that include only a portion of a property, an easement, or a right-of-way. Since the portion of land required for a trail alignment is relatively small, being a narrow and linear corridor, it may be expected that the costs for acquisition from private landowners would be slightly higher (per acre) than those listed in the table. This is particularly true for small parcels, such as a few hundred linear feet. A private landowner is likely to feel that the fair market equivalent for their small piece of land is not adequate to offset the value they believe the land holds to them. However, a highly inflated price—as compared to fair market value and other circumstances, such as parcel size—should not be considered. A limited number of acquisitions are required for the proposed trail system; therefore, these costs should be quite minimal overall.

The needs of the land seller are an important determinant in land costs, as is his/her support or lack of support for the proposed trail. Each parcel considered for acquisition *must* be considered and negotiated one parcel at a time. The inclusion of specific potential costs, which may or may not be accurate, is dangerous and may easily become detrimental, as it would likely influence the County's negotiations with landowners.

Easements and leases should also be considered as an alternative to purchase and as a means to minimize development costs.

2. Summary of Estimated Development Costs

NOTE: Costs are approximated in 1999 dollars.

3. Typical Improvement Costs NOTE: Costs are in 1999 dollars.

Improvement	Unit	Unit Cost
<i>Trail Construction, complete (*asterisk indicates shared use, off-road, trail):</i>		
*Asphalt-surfaced (10' wide, 6" ag't. sub-base, 6" asphalt surface) \$18 SY	LF	\$20.00
*Aggregate-surfaced (10' wide, 6" sub-base, 2" surface course) \$7.50 SY	LF	\$8.50
Concrete walk (4" thick)	SF	\$4.50
Road shoulder widening for bike lane (6" aggregate sub-base, 6" asphalt)	SY	\$18.00
<i>Pavement Markings (on-road bike lanes):</i>		
Line Painting (4"-wide, white reflective paint)	LF	\$0.25
Line Painting (6"-wide, white reflective paint)	LF	\$0.35
Crosswalk/Trail Crossing (zebra pattern w/ 12"-wide lines, 10' walk width)	EA	\$145.00
Bike Symbol (6'-0" high)	EA	\$40.00
Arrow (6'-0" high)	EA	\$8.00
<i>Composite: Bike Symbol and Arrow</i>	EA	\$48.00
<i>Composite: Bike Lane Painting-one side of road (6" and 4"-wide line)</i>	LF	\$0.60
<i>Composite: Bike Lane Painting-both sides of road (6" and 4"-wide line)</i>	LF	\$1.20

*Total Anticipated Trail Implementation Cost (not including land acquisitions): approx. \$1,582,205

Proposed Route Type	Anticipated Implementation Costs		
	Improvements Only	plus 12% design	plus 12% design & 10% contingency
On-Road Routes	\$403,139	\$451,515	\$491,829
Off-Road Routes	\$1,737,090	\$1,945,541	\$2,119,250
* ¹ NPS Avenue On-Road Routes	\$6,600	\$7,392	\$8,052
* ¹ NPS 1863 Historic Lane Routes	\$20,400	\$22,848	\$24,888
* ² Gettysburg College Trail	\$10,500	\$11,760	\$12,810
Total	\$2,177,729	\$2,439,056	2,656,829

NOTES: *¹ Costs reflect signage only. *² Costs reflect signage, plantings, and site amenities only.

Proposed Route Priority	Anticipated Implementation Costs		
	Improvements Only	plus 12% design	plus 12% design & 10% contingency
First	\$114,539	\$128,284	\$139,738
Second	\$1,405,702	\$1,574,386	\$1,714,957
Third	\$166,165	\$186,104	\$202,721
Fourth	\$459,722	\$514,889	\$560,861

<i>Traffic Control Devices:</i>		
Bollard (permanent)	EA	\$400
Bollard (removable/breakaway, wooden)	EA	\$600
<i>Composite: Bollards (2 permanent & 1 removable/breakaway, wooden)</i>	EA	\$1,400
<i>Bridges (shared use, off-road, trail):</i>		
Timber (14' width & 25' length, with conc. abutments)	EA	\$40,000
Aluminum (prefabricated, 14' width & 25' length, with conc. abutments)	EA	\$30,000
<i>Site Amenities:</i>		
Bench (6-foot, recycled plastic lumber on colored-concrete pad)	EA	\$1,000
Trash Receptacle (recycled plastic lumber on colored-concrete pad)	EA	\$550
Picnic Table (recycled plastic lumber on compacted stone pad)	EA	\$1,200
Bike Rack (recycled plastic lumber and steel, on an asphalt pad)	EA	\$1,500
<i>Drainage Improvements:</i>		
Swale (12" depth, 4' width)	LF	\$1.50
12" dia. culvert beneath trail (15 LF) & stone dissipater	EA	\$500
<i>Off-road Trail Preparation: light clearing—grubbing, shrub and small tree removal—and light grading (assumed corridor width is 20 feet)</i>	LF	\$8.00

F. Financial Feasibility

Improvement	Unit	Unit Cost
<i>Signage:</i>		
Directional/Warning	EA	\$200
Informational	EA	\$5,000
Interpretive	EA	\$5,000
<i>Vegetation:</i>		
Buffer Planting (3 deciduous trees, 3 flowering trees, 10 evergreen trees, and 12 shrubs per 120 LF; 25'-wide)	LF	\$40.00
Shade, Flowering, or Evergreen Tree	EA	\$400.00
Shrubs	EA	\$50.00

4. Summary of Maintenance and Management Costs

Maintenance of Off-Road Trail Segments

Based on National Park Service estimates, annual off-road trail maintenance costs can typically run from \$500 per mile for low use trails to \$5,000 per mile for high use trails. Experience on other trails has shown that with the aid of volunteers, these figures can be brought down significantly. Due to the relatively low off-road trail mileage, operational costs should be low. According to NPS standards, yearly costs for off-road trail segments should be anticipated somewhere between approximately \$2,500 to \$25,000 (with an average of these figures being reasonably expectable.) Greenway trails will require the greatest maintenance, and therefore associated costs will be highest for these sections of trail. Other off-road segments occur in more “urbanized” areas, requiring less maintenance of the surface and trail shoulders.

Maintenance of On-Road Trail Segments

On-road trail maintenance tasks are predominantly performed as part of routine road maintenance. The increased amount of pavement markings, such as bike lane lining and stenciling, will incur additional costs as repainting is required. Roads with bike lanes in both directions may incur an additional \$2,500 to \$5,000 cost per mile each time *complete* relining and restenciling of pavement markings is required. This translates to an annual cost range of approximately \$5,000 to \$25,000 since markings only need to be redone every 2 to 5 years—depending on various circumstances effecting wear. Signed shared roadways will incur minimal maintenance costs associated with trail use, as the majority of maintenance will be performed as part of routine road maintenance. Maintenance costs associated with these routes will be attributed mainly to replacement of signage and, possibly, an increased level of maintenance to provide a smoother surface for bicyclists.

Management Costs

Minimal management costs should be anticipated for the operation of the proposed trail system. A county worker should inspect the trail once or twice a year to determine any necessary course of maintenance or other actions required. This information should then be compiled in the form of a trail inspection report and forwarded to trail owners, who would then be responsible for maintenance/corrective action. The inspection process should take no longer than a few days, including writing the report. Any additional management costs should be minimal. Management costs for each municipal owner could be absorbed into existing operations since the proposed trail system will become part of existing public transportation and recreation facilities. This assumes each jurisdiction is willing to assume these costs and responsibilities.

G. Implementation Strategy

1. Trail Integration

The proposed North Gettysburg Area Trail is intended to provide alternative, non-motorized connections within the northern area of Gettysburg Borough and neighboring Cumberland and Straban Townships. By providing bicycle and pedestrian routes, residents will be given the opportunity to walk or cycle to local destinations. The system will also provide recreational opportunities and direct access to the Gettysburg National Military Park.

The proposed trail will help to unite the various neighborhoods and destinations in and around the study area. Integration of the trail into the community setting will occur through the implementation of the system. A seamless transition between various route types will be accomplished through the use of clear signage and pavement markings. It will be necessary to provide a comprehensive and clear signage system.

2. Linkages to Area Community Facilities

The proposed trail system will provide linkages to area community facilities from residential neighborhoods. The Borough of Gettysburg and its many facilities will be made available to trail users through a direct connection to the town via Carlisle Street. On the edge of town, Gettysburg College will be linked directly to the proposed trail network via the college's existing and proposed trail system. Area schools, including Gettysburg High School, Harrisburg Area Community College, James Gettys Elementary School, and Eisenhower Elementary School, will tie directly to the trail. In fact, the connection between the Borough of Gettysburg and Gettysburg High School is the top priority of this study. Other local facilities will be accessible from the proposed trail system, including the resources of the Gettysburg National Military Park which will be made more easily available to local pedestrians and cyclists.

3. Access from Outside the Study Area

Access from outside the study area will initially occur on a non-formalized basis as a "shared" on-road trail. Most bicycle travel in the United States occurs on shared roadways; they are simply the roads as constructed without any type of bikeway designation. Nearby residents without direct access to the trail system will follow local roads or possibly off-road routes to access the trail. The present study area boundary is required to concentrate planning efforts and provide a framework for the trail.

Once constructed and operational, trail user demand will help determine the need to expand the trail system to accommodate more users. This should be evaluated at the appropriate time by the County and local municipalities. This expansion may occur through an extension of the North Gettysburg Area Trail system, or through a larger, possibly county-wide, trail system.

4. Ownership Options

There are a number of ownership options for the North Gettysburg Area Trail. Each option may hold inherent advantages and disadvantages. For on-road sections of the trail, ownership issues are moot since the on-road trail occurs in right-of-way that is owned by the state, county, township or borough. Assuming that the respective government entity is agreeable to the proposed on-road routes, ownership is an issue for off-road segments only. These potential ownership entities include:

- County
- Municipality (township/ borough) or intra-municipal trail authority
- National Park Service
- Non-profit trail association
- Private landowners
- A combination of ownership options

County Ownership

County ownership of the off-road segments of the North Gettysburg Area Trail is perhaps the most obvious and may be the most advantageous option. The typical mission of a county park system certainly fits the goal of the Adams County Vision Plan as it addresses the development of recreational infrastructure that sustains quality of life, economic growth, and preservation of a clean and healthy environment, and also provides alternative means of transportation.

As options to a county parks and recreation department, public works or a county established authority could own and operate the trail. For example, York County established a rails-to-trail authority to manage and develop its trail system. Authorities have the ability to raise funds for trail development through bond issues. As a trail authority, the mission of such an entity would be clear and not diluted by the operations of the larger county government, perhaps enhancing the ability of this type of entity to focus on trail development and maintenance.

Municipal Ownership or Intra-Municipal Recreation Authority

The proposed trail system passes through three municipalities. While the idea of an intra-municipal authority is conceivable, the Pennsylvania experience of intra-municipal cooperation on projects like this is not good, especially within largely rural jurisdictions. Additionally, the potential local jurisdictions involved in this effort vary widely in size, structure, priorities, population, and administrative capabilities. Coordination of a multi-municipal trail ownership and maintenance would be cumbersome at best and is not recommended for consideration.

National Park Service

The National Park Service would be a logical owner for portions of the trail that share NPS-owned avenues and historic lanes through the Gettysburg National Military Park. These trail segments would remain under the ownership and operation of the NPS.

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Non-Profit Association

Non-profit associations may take the form of trail-specific groups, land trusts, trail conservancies or other entities either currently existing or formed specifically to own and/or manage the North Gettysburg Area Trail.

Private Landowners

Private landowners will most likely be a part of the eventual trail ownership scenario through the granting of easements for trail use. Easements can be purchased or donated, with the trail management entity holding the easements.

Private landowners may also lease property to the trail for a specified number of years. A twenty-five year lease is the minimum duration lease that makes a property eligible for many state funding programs. Lease can be for a longer duration to perpetuity.

A landowner who opens his land for recreation use free of charge is protected from liability the Pennsylvania Recreational Use of and Land and Water Act of 1994 and supporting case law. Additionally, a landowner may be indemnified under a greenway of trail organization's insurance program.

Combination of Ownership Options

For any trail system, a combination of ownership options may be feasible. Given the variety of land uses, existing ownership patterns, multiple municipal jurisdictions, two counties, and various types of trails that will comprise the North Gettysburg Area Trail, a variety of ownership is possible.

Ownership Recommendation

Experience has shown that County ownership of multi-jurisdictional trail systems is the best option and is recommended here for all trail segments except NPS lands and any lands that must remain in private ownership and are accessible through easements. Excellent examples of county owned and maintained trail systems in Pennsylvania can be found in York, Somerset and Montgomery Counties. While this will be a major step for Adams County, it is recommended that it is a necessary one if the county is to ensure that "green" transportation and recreation infrastructure is a part of its future.

5. Potential Funding Sources & Financing Options

PaDOT- TEA-21

The Transportation Equity Act for the 21st Century (TEA-21), a federal program that funds transportation related projects, is a direct successor to the 1991 Intermodal Surface Transportation

Efficiency Act (ISTEA). The bill allocates approximately \$217 billion over six years and includes funding for recreational trails and parks.

In Pennsylvania, the Department of Transportation (PA DOT) administers several TEA-21 bicycle and pedestrian related programs:

Surface Transportation Program (STP):

Eligible Projects: Construction of bicycle transportation facilities; construction of pedestrian walkways; bicycle safety brochures, maps, public service announcements.

Requirements: Any bicycle project must be primarily a transportation project; STP projects should encourage desirable traffic patterns; and STP projects should sensitize people to environmental and social concerns.

Mandates: 10% of STP funds are set aside for Transportation Enhancements (TE). TE projects enhance the environs of the transportation network.

Notes: STP projects are not required to demonstrate impacts on traffic or transit.

Applicable to the North Gettysburg Area Trail: Yes.

Scenic Byway Program:

Eligible Projects: Construction of bicycle and pedestrian facilities along highways.

Applicable Routes: Trails along PaDOT highways.

Applicable to the North Gettysburg Area Trail: Yes.

All programs listed above require 20% state or local match, except for Federal Lands Highways, which are 100% federally, funded.

Legislative Funding

State and federal elected officials can often include items into legislation for worthy projects in their districts. Clearly identifying reasonable needs is a key to securing this type of funding. A conversation between county officials and legislators is the way to begin this process. This type of funding should be targeted toward capital improvement projects.

USDA Forest Service

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The USDA Forest Service has funded small bridge projects through the “Timber Bridge Initiative” program, and other wood related projects through the “Rural Development” program. The grants are relatively small and best used for design, small construction, or interpretation. Grants must be matched 50-50 by nonfederal dollars or in-kind. Trail bridges in visible locations, perhaps such as the proposed bridges crossing Rock Creek, may make strong applications.

KEYstone Community Grant Program

This program was initially funded by a bond issue approved in a statewide referendum. Perennial funding is through a dedicated percentage of the statewide real estate transfer tax.

Funding from the program is dedicated toward recreation and cultural and heritage resources throughout the state. Several agencies distribute funds through competitive grants, including; the PA Fish and Boat Commission, PA Historic and Museum Commission, and the PA Department of Conservation and Natural Resources. Trail projects are eligible in upcoming rounds of funding for the Keystone Trail Program, which is expected to have at least \$1 million available for trails.

DCNR - Pennsylvania Recreational Trails Program

This program provides funds to states to make grants for trail and trail-related projects. Funding to this program is provided through to the Commonwealth through the Federal Highway Administration (FHWA) and the Intermodal Surface Transportation Act (ISTEA) of 1991 which included the Symms National Recreational Trails Act (NRTA), and the National Highway System Designation Act of 1995 (NHS Act).

The monies may be used for the development of urban trail linkages near homes and workplaces; maintenance of existing recreational trails; development of trail-side and trail-head facilities; provision of features which facilitate the access and use of trails by persons with disabilities; acquisition of easements for trails, or for trail corridors identified in a State trail plan; acquisition of fee simple title to property from a willing seller; and construction of new trails on state, county, municipal, or private lands. The North Gettysburg Area Trail would be eligible to compete for some of these funds.

PA Historic and Museum Commission (PHMC)

The competition in this program is considerable for relatively small grant awards. Application and administration for these grants are time consuming and should be considered when deciding if to apply. Perhaps the best target for PHMC KEYstone funds is for the museum function of preparing an interpretive plan for a trail.

“Growing Greener” Initiative

Late in 1999, “Growing Greener” was approved and signed into law by the Governor. This program will make nearly \$650 million available over a five year period for projects to help improve the environment through stewardship and watershed protection. The greatest applicability of this program

to the funding and implementation of the trail plan will be for trail segments along creeks, where riparian buffers can be reestablished and where there may be interpretive opportunities for trail users to learn about these sensitive lands. While cash or in-kind matches are encouraged for this program, they are not required. Excellent potential source for “matching” funds.

Private Foundations

There are various corporations and foundations, which support public works such as trail development. The competition for these funds has become brisk, but the opportunities should be researched. Funding must often be to non-profit organizations.

DCED Community Revitalization Funds

The Department of Community and Economic Development (DCED) Community Revitalization Fund is a State program that supports local initiatives that improve the stability of communities and enhance local economies. The grant program covers a wide range of eligible uses including: acquisition of land, buildings, and right-of-ways; recreation projects; programs and developments that build capacity of the local community and relevant local organizations to better serve the needs of the community, and other reasonable and necessary expenses related to community-based activities. The North Gettysburg Area Trail would be eligible for application for these funds. Active support of the area’s State Senator and state representative is critical for a successful grant application.

Schools

Local schools may also be of assistance in several ways. The student body might get involved with clubs, fundraising events, and trail cleanup days. The faculty could incorporate trail projects into various curricula with students helping to develop and possibly maintain a portion of the trail as part of a classroom assignment or after school club. This is particularly true for segments that are proposed to pass near and through school property, such as at the Gettysburg High School. The schools could also help to publicize the trail.

Adams County Juvenile Probation

This program could potentially help create and maintain the trail.

Grant Match Options

Most of the funding programs that are listed above require some level of either cash or in-kind services match. For example, TEA-21 funding requires a 20% non-federal match to the 80% federal funding. TEA-21 matches can generally be obtained through state funds. These state funds are often in the form of DCNR Keystone funds (usually requiring a 50% match for

G. Implementation Strategy

construction funds, 20% match for planning funds) or DCED community revitalization funds (requires no match). County and/or municipal funding is also a viable source for matching funds. If the County decides to create a “trail authority”, bonds can provide a source for matching funds. While these matches can be substantial, when measured against the benefits of a trail system over the life span of a trail, they become relatively minimal.

When applying for state funds, even nominal contribution commitments from local organizations and individuals can help move funding applications forward in the process. Based on the final decision of the County regarding ownership and management structure for the trail, a detailed funding strategy should be developed that specifies goals and a timetable for trail funding and implementation.

6. Trail Security

The Adams County Vision for Parks, Recreation and Open Space plan specifically states that *“experience throughout the Country indicates that well-maintained greenways (trails) have little or no loitering or vandalism.”* This is in direct accord with the Consultant’s experience and findings as published various other publications.

According to a study performed on the effect of trails on property values and public safety has found no real safety (security) concerns associated with trails; *“no public safety issues could be directly linked to the trail. ... The effect of a trail on the neighboring property is beneficial, rather than detrimental. The general opinion is that trails are an amenity to the neighborhoods around them....”*

In light of this information, no real security issues should be anticipated for this proposed trail, especially due to its setting in a highly developed area. This, of course, does not preclude the need for police monitoring and patrol. Regular presence of law enforcement officials proves to be one of the best forms of security. Trail segments along roads should be monitored as part of routine police patrolling. Off road segments, which will be somewhat more secluded, should be patrolled regularly by law enforcement officials.

The most efficient method of keeping the trail system secure is by regular use by the public. Regular use not only deters undesirable behavior, but also encourages more use by others. As individuals encounter other users and experience potential interaction, a sense of security is fostered.

During public meetings for this project, there was minimal concern voiced regarding security issues

H. Trail Management and Maintenance Plan

1. Management Plan

Since the trail crosses lands with varying forms of public and private ownership, it is anticipated that a variety of partners could be involved in trail management and maintenance. The Gettysburg Area School District, Adams County, Gettysburg Borough, Straban and Cumberland Townships, and the National Park Service may each play a role in trail management and maintenance.

One agency should organize and coordinate the efforts of the various partners. One of the three municipalities could take this lead or this could be a county function, which is recommended as the best option.

2. Maintenance Plan

Annual trail maintenance costs as estimated by the National Park Service for off-road trails can typically run from \$500 per mile for low use trails to \$5,000 per mile for high use trails. Experience on other trails has shown that with the aid of volunteers, these figures can be brought down significantly.

Volunteers can help perform many of the routine and very necessary maintenance tasks along the proposed trail. The utilization of volunteer labor is an important component in managing the trail. General trail clean-up and trash pick-up and removal along the trail is one of the important volunteer tasks that can have immediate positive results.

It is imperative that a smooth surface, free of debris and surface defects, is provided on all bikeways. Glass, sand, litter, and fallen leaves often accumulate on bike lanes, roadway shoulders, and shared use paths; therefore, regular sweeping is desirable. Pavement edges should be uniform, and transition to the adjacent grade smoothly. As little as a 0.25" lip between the trail surface and adjacent finished grade may cause deflection of a bicycle tire. Signs and pavement markings should be inspected regularly and kept in good condition.

Typical off-road trail maintenance tasks include clearing fallen trees, removing dangerous trees or limbs, maintaining adequate shoulder clearances along trail, cleaning drainage structures, repairing erosion and damaged trail surfaces, removing invasive plant species, trash pick-up and removal, undertaking periodic inspections, and other associated tasks. Attention should be given to maintaining the full paved width and not allowing the edges to ravel. Trees, shrubs, and other vegetation should not be allowed to encroach upon the clear shoulder areas, and should not interrupt clear sight distances. Trash receptacles should be located for convenience and emptied regularly. Seeded and sodded areas should be mowed regularly.

Typical on-road trail maintenance tasks, predominantly performed as part of routine road maintenance, include repair of potholes and cracks, removal of debris, and repainting of pavement markings. Routine maintenance of roadways will usually provide good riding conditions. On

roadside shoulders used by bicyclists, it is particularly important to provide a high standard of maintenance, since even small amounts of debris and pavement surface degradation will effect the cyclist's ability to safely navigate the route. Roadways with bicycle traffic, particularly bike lanes, may require a more frequent and higher level of maintenance than other highways.

3. Maintenance Task Schedule

The following is an outline of the trail maintenance tasks that should be performed annually to maintain the trails in safe condition. The majority of these tasks are related to off-road segments, particularly "greenway trail" sections; these will require the most attention. Some tasks such as trash pick-up, drainage structure cleaning, plantings and other maintenance tasks can be completed by volunteers. This work should be coordinated with an appropriate staff of the trail management agency. Larger equipment and materials-intensive tasks are best performed by professional maintenance personnel.

On-road segments are generally maintained as part of the road and have limited "trail-only" maintenance associated with them. Many bicycle facility improvements outlined here can be implemented during routine maintenance activities. Consideration can also be given to adjusting lane widths and providing wider outside curb lanes for bicyclists during restriping operations. The addition of edge lines can better delineate a shoulder, especially at night. When bicycle shoulders are resurfaced, a smooth surface suitable for bicycle riding should be considered. The main requirement for on-road segments is providing routes clear of debris and free from surface defects. This can best be obtained as part of routine road maintenance. It is preferable, though, to provide repairs to even small surface defects, such as potholes and crumbling, as soon as possible where they occur within the area used by bikes since they will become hazards. Additionally, routine maintenance of on-road routes should include sweeping of the shoulders to remove accumulating debris, which may also provide a hazard for cyclists.

December, January and February

Trails maintenance work in the winter months can continue dependent on weather conditions.

Typical winter trail work may include:

- Trash pick-up and removal.
- Removal of dangerous trees or tree limbs.
- Sever free hanging vines on trees in off-road trail ROW.
- Bridge/structure inspections (every other year) - staggered schedule.
- Minor repairs to trails (erosion repair, etc.)
- Inspect and repair/replace signs as needed.
- Minor repairs to structures, fences, and bridge railings.
- Keep drainage ways clear and clean out culverts as required.
- Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.

March

H. Trail Management and Maintenance Plan

Trash pick-up and removal.
Trail-wide inspection for winter damage. Schedule repair work over the next two to three months.
Obtain bare-root and other tree and shrub plant materials for spring revegetation projects.
Install spring plantings (continue into April).
Distribute / post information about major trail improvement projects for the spring (Capital improvements.)
Remove downed trees as required.
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.

April

Trash pick-up and removal.
Complete tree and shrub plantings.
Complete herbaceous and ground cover plantings, if necessary.
Begin major trail improvement project(s).
Prepare and seed areas to prevent erosion.
Remove downed trees as required.
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.
Sweep routes to remove debris.
Perform repairs to on-road route pavement surface caused by winter damage.

May

Trash pick-up and removal.
Complete spring plantings.
First spraying of invasive species.
Continue trail repair.
Remove downed trees as required.
Mow and trim (first time).
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.
Reline and repaint bike lane pavement stencil markings as required.

June

Trash pick-up and removal.
Continue trail repair.
Plan for fall planting.
Removed downed trees as required.
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.
Sweep routes to remove debris.

July

Trash pick-up and removal.
Continue trail repair.
Undertake second spraying of invasive species.
Remove downed trees as required.
Mow and trim (second time).
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.

August

Trash pick-up and removal.
Continue trail repair.
Distribute/post information about major trail repair and expansion projects for the Fall (Capital improvements).
Remove downed trees as required.
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.
Sweep routes to remove debris.

September

Trash pick-up and removal.
Continue trail repair.
Undertake third spraying of invasive species.
Remove downed trees as required.
Mow and trim (Third time).
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.

October

Trash pick-up and removal.
Continue trail repair.
Plan for spring planting.
Remove downed trees as required.
Keep drainage ways clear and clean out culverts as required.

H. Trail Management and Maintenance Plan

Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.
Sweep routes to remove debris.
Reline and repaint bike lane pavement stencil markings as required.

November

Trash pick-up and removal.
Continue trail repair.
Remove downed trees as required.
Keep drainage ways clear and clean out culverts as required.
Keep off-road trail bridge deck surfaces clear and fencing/railing free of vegetation.

Do not defer maintenance. Deferring maintenance for short-term savings is a faulty strategy with a poor chance of long-term success. Most funding agencies do not provide operational funding. If the trail quality deteriorates and does not provide a high quality recreation experience, it will lose popular support. Maintenance costs will only increase over time and must be planned for by the trail management entity and its partners.

Maintenance costs can be further minimized by establishing a high level of quality during design. For example, an off-road trail segment might be paved with a three-inch thick asphalt surface. However, some municipalities have opted to build new trails with a six-inch thick pavement, since maintenance on a surface of this thickness will not be required for many years.

H. Trail Management and Maintenance Plan

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I. Trail Design Standards

1. Trail Design Standards

The physical design of the trail will largely depend on site-specific conditions. As a result, a general summary of trail design standards is described. Further refinement and development will be required before trail construction.

Please refer to the next section, *2. Trail Construction Details*, for typical details.

TYPES OF BICYCLE FACILITIES

Shared Roadway (No Bikeway Designation)

Most bicycle travel in the United States occurs on shared roadways; they are simply the roads as constructed. These are street and highway routes without any type of bikeway designation. In some cases, signing and striping for bicycle use may be unnecessary because an existing street system may be fully adequate for efficient bicycle use. Especially acceptable are streets with low traffic volume—such as residential neighborhoods—and urban streets with low motor vehicle speeds. In other cases, some streets and highways may be less suitable for bicycle travel, and it would be inappropriate to encourage bicycle travel by designating the routes as bikeways. Shared roadways function well on local streets, minor collectors, and on low-volume rural roads and highways.

Signed Shared Roadway

Signed shared roadways are designated by bike route signs, and serve to provide continuity to other bicycle routes and designate preferred routes through high demand corridors. These routes are similar to shared roadway routes, with the exception that they are designated by signage. Signing of shared roadways indicates to bicyclists that an advantage exists to using that particular route compared with others, that responsible agencies have taken actions to assure that these routes are suitable as shared routes, and that they will be maintained for bicycle use. Signing also advises drivers of the presence of cyclists.

Bike Lane

Bike lanes, defined by pavement markings and signage, are the most formalized on-road type of bicycle travel ways. The purpose is to improve conditions for cyclists on streets. Bike lanes help to delineate the right of way assigned to motorists and cyclists. Bike lanes help to provide a comfortable route for cyclists where existing space is inadequate for comfortable cycling on existing streets. This may be accomplished by reducing the width of vehicle lanes or prohibiting parking in order to delineate bike lanes. In addition to striping, other measures to be taken to provide effective bicycle facilities include the use of bicycle-safe drainage grates, and the provision of smooth pavement surfaces and traffic signals responsive to bicyclists. Additionally, maintenance becomes important particularly on bike lanes, since cyclists are unable to use safely a lane with potholes, accumulated debris, and broken glass.

Shared Use Path

Shared use paths occur off road and are generally used to serve corridors not served by streets and highways or where wide utility rights-of-way or railroad rights-of-way exist. Shared use paths should offer opportunities not provided by the road system. They can provide recreational opportunity, and in some cases serve as a direct commuter route with minimized cross flow by vehicles and pedestrians. The most common applications are along rivers, utility rights-of-way, former or active railroad rights-of-way, within college campuses, or within and between parks. Shared use paths also help to tie residential developments together and close gaps in bicycle travel caused by construction of cul-de-sacs, railroads, freeways, or to circumvent natural barriers (rivers, mountains, etc.). Shared use paths should be designed with the bicyclist's requirements in mind, but other users, such as walkers, joggers, people in wheelchairs, people pushing baby carriages, skate boarders, in-line skaters, and others, should be accommodated.

TRAIL SURFACE

Three primary types of trail surface are compacted earth, compacted stone, and asphalt. Trail topography, use, and surrounding environment will determine the best-suited surface. Since all trail surfaces require maintenance, the level of maintenance and use should be considered before determining the type of surface.

Compacted Earthen Surface

A compacted earthen surface can be best described as a mowed path, often worn to exposed soil from use. This is an inexpensive surface, acceptable in low use areas. The trail surface is usually suitable for most trail users when dry. In wet areas or during periods of rainfall, the surface is less usable. A well-drained surface will reduce maintenance issues. Mud can be a nuisance to trail users, particularly walkers and bicyclists. Ruts and erosion from tires often result in wet areas. Users often try to avoid these areas by going around them, resulting in an undesired widening of the trail. Areas that collect water or are muddy should be filled to adequately drain. The trail needs to be free from protruding rocks, roots and other obstacles in order to prevent tripping hazards. The trail should be mowed at least twice a year to control vegetative growth from congesting the trail. A 10' wide clear path should be maintained where possible. In some cases, the addition of shredded mulch is used to control vegetative growth. Wood chips require greater maintenance and often wash easily, creating a tripping hazard, and are not recommended.

A compacted earthen surface is not recommended for use in the North Gettysburg Area Trail System.

Compacted Stone Surface

A stone surface can vary from a fine stone dust or cinders to a medium gravel (modified with fine aggregate) surface. Walkers, joggers, and bicyclists often prefer this material for several reasons. The stone surface is permeable and drains well, even during or after a rain making the trail more usable. The surface is hard enough to ride on yet soft enough to absorb the impact of joggers.

I. Trail Design Standards

Stone provides for improved drainage compared to an earthen surface, reducing puddles and mud. A six-inch (6") minimum depth stone base should be installed under a two-inch (2") stone dust surface. Native stone should be used where possible to blend with the landscape. A geotextile fabric is often placed between the stone base and earth to prevent mixing of the materials and improve structural integrity of the trail.

One disadvantage of using the fabric is its tendency to become exposed when the surface is not maintained properly. This is unsightly and becomes a tripping hazard. The existing subbase, stone base and stone surface should all be compacted in layers. Providing for adequate drainage is important when utilizing this surface. Surface grades should not exceed three percent (3%); otherwise, surface erosion will occur.

In areas that are subject to frequent or even occasional flooding or drainage problems, or in areas of steep terrain, unpaved surfaces will often erode and are not recommended.

A compacted stone surface is suitable for use on some segments of the North Gettysburg Area Trail System.

Asphalt

Although asphalt does require a greater construction cost, the yearly maintenance required and associated costs are less than other surfaces. This is a particularly useful surface in high use areas or on sections of trail with drainage/erosion problems. A six inch (6") compacted stone base should be placed on a graded and compacted subbase. A three-inch (3") asphalt surface will accommodate most trail uses. A thicker asphalt surface (to 6") will minimize future maintenance. Should heavy equipment or frequent service vehicular use occur, the thickness of asphalt should be increased accordingly. Asphalt provides the opportunity for striping the trail to divide trail traffic flow in heavy use areas. The surface should be cleaned or swept at least twice a year to remove leaves and other debris. The fall and late spring are usually the best times to sweep.

An asphalt surface is recommended for use on some segments of the North Gettysburg Area Trail System.

TRAIL WIDTHS AND CLEARANCES

The trail should be wide enough to accommodate the level of use.

For off-road shared use trails, a minimum of ten (10') is recommended, allowing bicycles and joggers/pedestrians to pass one another easily as well as provide for service and emergency vehicles. In addition to the trail, a five-foot (5') wide shoulder free of obstacles should be kept maintained on either side. Within this shoulder and directly adjacent both sides of the trail, a minimum 2-foot wide graded transition area with a 1:6 maximum slope should occur. Trees and large shrubs adjacent the trail should be trimmed to provide a minimum of 8' (10' preferable) clearance above the trail.

A shared roadway, where there is no bike lane and bikes share the road with vehicular traffic, should have travel lanes of 14 feet wide to comfortably accommodate both users. On steep grades, an increased width to 15 feet is preferred. In no circumstance should the width exceed 16 feet, which encourages the undesirable operation of two motor vehicles in one lane.

On-road bike lanes must be 4 feet wide minimally if there is no curb or gutter. If a curb or gutter is present, the minimum acceptable bike lane width is 5 feet. Where a bike lane occurs in conjunction with on-street parking, it must be placed between the vehicle travel lane and parking stalls, and the width should be 5 feet if there is a line designating the outer edge of the parking stalls. If no line is included between the parking stalls and bike lane, the minimum acceptable width should be 11 feet without a curb face and 12 feet if adjacent to a curb. A bike lane should be delineated from the motor vehicle travel lanes with a 6-inch solid white line. Some areas use an 8-inch line for added distinction. Where a bike lane occurs alongside a parking lane, a 4-inch solid white line can be used to separate the bike lane and parking lane to encouraging parking closer to the curb and discourage motorists from using the bike lane as a through travel lane.

DRAINAGE

Regardless of the surface of the trail, proper drainage will greatly influence trail maintenance and durability. Divert runoff from the surrounding area away from the trail. Shoulder bike lanes should be provided with adequate drainage to prevent ponding, washouts, debris accumulation, and other potentially hazardous situations for bicyclists. A swale on the uphill side of an off-road trail will help to collect the runoff and channel the flow to culverts under the trail. The trail surface should be cross-sloped two percent (2%) towards a swale for an off-road trail, and away from the road for an on-road shoulder bike lane. Culverts should be placed periodically under off-road trails to disburse the outflow. Trails should not have more than five percent (5%) slope. Surfaces with greater gradients should be carefully designed to minimize erosion. Where possible, the swale should tie into existing drainage systems.

Surface drainage grates occurring along bike lanes should be bicycle-safe, and grates and covers should be located in such a manner as to minimize severe and or frequent maneuvering by bicyclists. Conflicts with grates may result in serious damage to the bicycle wheel and frame and/or injury to the bicyclist. Drainage grates should have 4" center-to-center maximum spacing between grate members, creating a tight system of grating that can not swallow up a bicycle wheel.

OBSTACLES

On-road route obstacles include cross-traffic, parked cars, drainage grates, mailboxes, poor pavement condition, and debris. Proper maintenance, signage, and vehicular control will help to alleviate these potential conflicts. Off-road route obstacles include fallen trees/branches, accumulation of leaf litter and other debris. Typically, fallen branches, trees, and rocks require immediate removal from trail segments. If obstacles are left unattended, trail users are forced to

I. Trail Design Standards

create rough trails around the object, often disturbing the neighboring landscape and creating a new problem.

BRIDGES

Off Road Trail Segments

Bridges are always a challenge in trail design. The added costs for installation are offset by the interest they bring to the trail. These structures often become gathering places and points of interest and reference.

A structural engineer should be consulted when either renovating an existing structure or designing a new one. When adapting an existing structure, care should be taken to preserve its integrity. If the structure is new, care should be taken to minimize its impact on the landscape and be in character with the surrounding heritage. In all cases, the structure should be built to accommodate use levels and all user types.

On new structures, the minimum clear width should be the same as the approach paved shared use path, plus the minimum 2-foot wide clear areas. This additional room helps to provide additional maneuvering space to avoid conflicts with other pedestrians or cyclists who may be stopped on the bridge, and provides additional room for maintenance and emergency vehicles. The decking surface should be non-slip. If decking is used, place on a diagonal. A minimum forty-two inch (42") high railing, fence, or barrier should be placed on either side of the bridge. Spacing between horizontal rails should be no more than fifteen inches (15") for fencing. At either end of the structure, approach railings should be installed. Often a removable bollard or pass-thru barrier is placed at each end of the bridge to control vehicular access onto a non-vehicular bridge.

On Road Trail Segments

Bridges shared with motor vehicular traffic (on-road routes) should include 5'-wide minimum shoulder bike lanes separate from the motor vehicle travel lanes. One lane must be provided on each side of the bridge for each direction of travel. Ideally, these bridges should also have separate pedestrian walks to accommodate safe pedestrian passage.

Alternatively, a separate crossing could be developed on each side of an existing bridge not wide enough to accommodate bike lanes. This would eliminate the need for complete bridge reconstruction. Possible retrofitting, or completely separate structures could be constructed along each side of an existing bridge. Because of the large number of variables involved in retrofitting bicycle facilities onto existing bridges, compromises in desirable design criteria are often inevitable. Therefore, the appropriate solution is best determined by the designer at the time of implementation after thoroughly considering all variables.

RAILROAD CROSSINGS

Trails intersecting railroad-highway grade crossings can occur as a separate path next to the road or as a widened road shoulder. They should occur as close to 90 degrees to the rails as possible.

The greater the angle of deviation from a right angle, the greater the potential for a bicycle's front tire to be trapped in the flangeway, causing loss of steering control. If the crossing is at an angle of less than approximately 45 degrees, an additional paved shoulder of sufficient width should be provided to swing out to create an improved approach angle—preferably perpendicular, but not less than 60 degrees—permitting the bicyclist to cross the track at a safer angle. Where this is not possible, and where train speeds are low, commercially available compressive flangeway fillers may improve bicyclist operation. The roadway approach must also be at the same elevation as the rails to create a safe transition.

The crossing material and flangeway depth and width should also be considered. Rubber or concrete crossing materials are longer lasting than wood or asphalt, require less maintenance, and provide a smoother surface for bicyclists. Concrete crossings are considered the best for bicycle access; it performs best under wet conditions and, when laid with precision, provides a super smooth ride. Rubber crossings tend to become somewhat slippery when wet, but are still more desirable than wood or asphalt. Asphalt is acceptable if well maintained. Wood is the least acceptable material.

The combination of smoothness, angle, and flange opening create conditions that affect cycling. By improving smoothness and flange opening, the angle becomes less critical.

Warning signs and pavement markings must be provided at crossings in accordance with the PaDOT Manual of Uniform Traffic Control Devices.

SIGNAGE

An important aspect to trail development is signage. Signs are intended to aid and instruct trail users about the trail. Three main types of signs are described in this development plan: directional, informational, and interpretive.

Directional

A variety of signs are included under this term, primarily to provide for safety and orientation.

Traffic control signs geared toward trail users, such as *stop*, *yield*, and *road crossing ahead* signs, should be clearly placed within trail users' view. Warning signs provide a signal to the trail user of what is ahead, in order to reduce conflict. Regulatory as well as warning signs on off-road trails should be placed two feet (2') from the trail edge and signs should be four to five feet (4-5') tall. Please refer to the Federal Highway Administration's Manual on Uniform Traffic Control Devices for recommended standards for sign size, color and shape.

Since excessive signage clutters roadways and becomes disregarded by motorists, regulatory and warning signage along on-road routes should be considered carefully. Signage used along roadways should serve a specific purpose, including *trail crossing roadway*, *bikes on roadway*, and trail identification and destination signs. Signs in this group are intended to either warn motorists of trail use or guide trail users along the system. Please refer to the Federal Highway

I. Trail Design Standards

Administration's Manual on Uniform Traffic Control Devices for recommended standards for sign size, color and shape.

Identification of the trail route is important in orienting trail users. There is nothing worse than being unsure about the trail routes while using the system. Clear and concise signs and arrows should be placed to designate the trail route. This is especially important for the North Gettysburg Area Trail because it traverses a variety of routes. It is important to include directional arrows at intersections to clarify whether the route continues through the intersection or makes a turn in direction. Destination signs are also important to direct users to particular areas or sites, such as downtown Gettysburg, sites within the National Military Park, and Rock Creek Greenway Trail. Directional arrows and destination placards should be mounted to the same post with the bicycle route sign. Trail identification and directional signs should be located for maximum visibility of trail users. Trail identification signs should be uniform in color, size, and logo along the entire trail for continuity. Directional signs for Signed Shared Roadway segments should be placed every ¼ mile, at every turn or change in direction, and at signalized and major intersections. For all other segments, signs should be placed at critical junctures to provide a clear understanding of the trail routes for users.

Informational

Informational signs provide facts about the trail to users. A map to orient trail users should be simple, graphic, and clear. Rules and general regulations on trail use and etiquette should be simple and bold. Other information about features or points of interest can be pointed out on the plan. Name, address, and telephone number for a contact person or agency should be noted. This is a great location to gather support for the trail. Potential volunteers are most likely those who use the trail. Information signs should be located at all major points of access along the route. A place for notices to be placed can advertise trail maintenance events and tours. Lid covered boxes housing pamphlets and trail maps can also be helpful.

Interpretive

Trail users often want to know more about historic aspects and natural or man made features along the trail. Develop interpretive signs to be both graphic in presentation and descriptive in narrative using durable materials. Signs should be geared to interest a wide range of user ages and interests. Clear graphics can involve most ages. Signs should be placed to accommodate small groups safely off the trail. Depending on the feature, a bench, trash receptacle, and plantings may be added.

REST STOPS

Due to the nature of the proposed trail, rest stops will not be required along the majority of trail segments. Several rest stops may be useful along greenway trails. Rest stops provide places for users to pause and take a break. Minimally, a rest stop should consist of a durable bench, trash receptacle, bike rack, and shade. Rest stops should be placed and oriented to take advantage of views and should be located off to the side of the trail.

BIKE LANE PAVEMENT MARKINGS

A bike lane should be painted with standard pavement symbols to inform bicyclists and motorists of the presence of the bike lane. One of two bicycle symbol or the words BIKE LANE and a directional arrow should be used. These should be located on the far side of an intersection, and additional markings may be placed on long, uninterrupted sections of roadway. A rule of thumb for appropriate spacing is multiply designated travel speed by 40. For example, in a 35 MPH speed zone, stencils may be placed approximately every 1400 feet. A supplementary arrow stencil may be placed at the end of a block to warn cyclists not to enter a bike lane on the wrong side of the road. A solid white line (6" minimum width) should be used to distinguish a bike lane from motor vehicle travel lanes. This line should be included between the bike travel lane and the motor vehicle travel lane; the inclusion of a second line on the outside edge of the bike lane is preferred to help guide the bicyclist, particularly at night time. This fog line should be 4" wide. All pavement markings must be white and reflective.

Please be aware that the diamond Preferential Lane Symbol previously used to mark bike lanes and on signs to show preferential use by different classes of vehicles should no longer be used for bikeways. These have become confused with the use of the diamond for High Occupant Vehicle (HOV) lanes, and to some, the symbol is confused as a two-way arrow.

OBSTRUCTION MARKING

Vertical barriers and obstructions, such as abutments, piers, and other features causing bikeway constriction, should be clearly marked to gain the attention of approaching bicyclists. Drainage grates should also be marked. Only bicycle-safe grates should be used. Signs, reflectors, diagonal pavement markings, or other treatments may be appropriate to alert bicyclists of potential obstructions.

I. Trail Design Standards

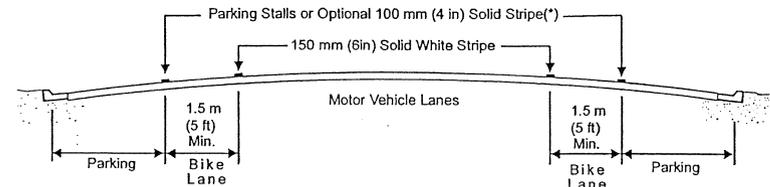
2. Trail Construction Details

There are a variety of construction details—some typical, some unique to the particular site, which can be used to successfully construct and operate a trail system. Several excellent trail construction detail reference guides are available—most notably the Guide for the Development of Bicycle Facilities by the American Association of State Highway and Transportation Officials (AASHTO), the Trails Management Handbook by the National Park Service, The US Forest Service's Standard Specifications for the Construction of Trails, the Forest Service's Trails Management Handbook, and Trails for the Twenty-First Century by the Rails to Trails Conservancy.

Several of the most important construction details from these and other sources are reproduced here as a guide and reference for the designers of trail improvements, as well as for those who must maintain the trails. They are by no means intended as a complete inventory of trail details. Details must be tailored to the particular requirements of each location.

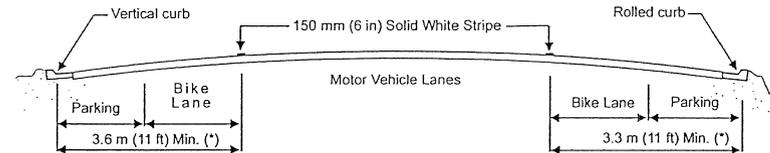
a. Typical Trail Cross Sections

1) Bike Lanes



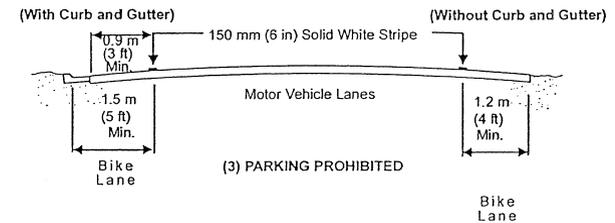
* The optional solid white stripe may be advisable where stalls are unnecessary (because parking is light) but there is concern that motorists may misconstrue the bike lane to be a traffic lane.

(1) ON-STREET PARKING

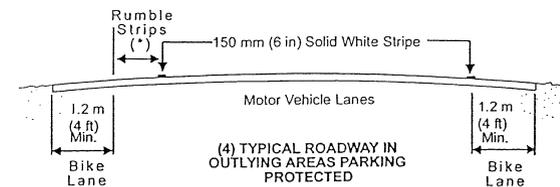


*3.9 m (13 ft) is recommended where there is substantial parking or turnover of parked cars is high (e.g. commercial areas).

(2) PARKING PERMITTED WITHOUT PARKING STRIPE OR STALL



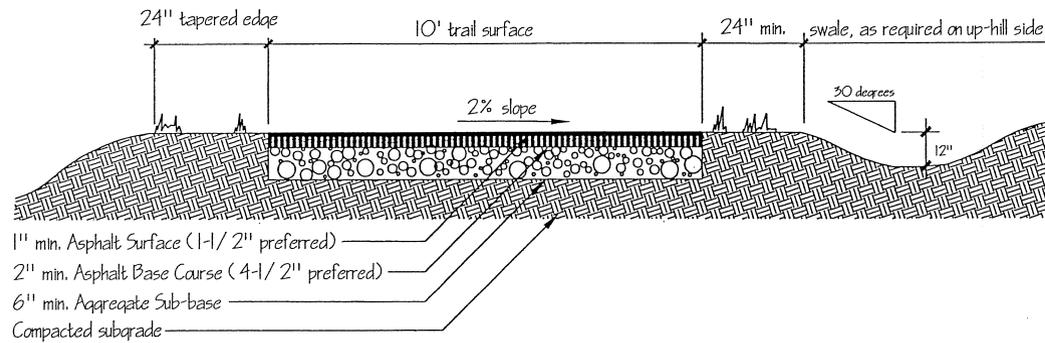
(3) PARKING PROHIBITED



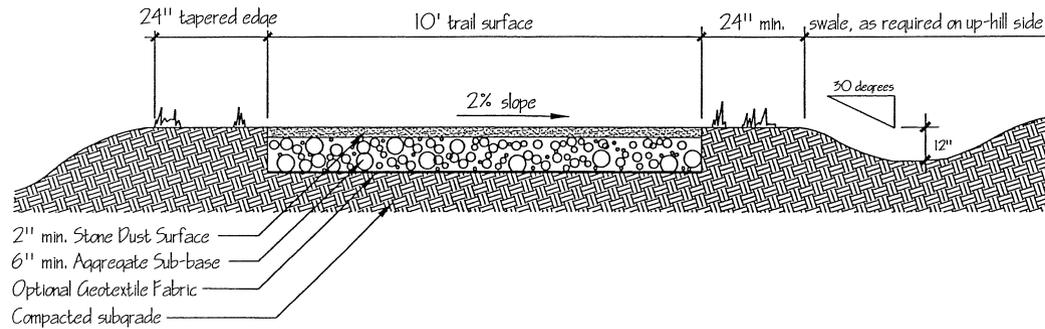
*If rumble strips exist there should be 1.2 m (4ft) minimum from the rumble strips to the outside edge of the shoulder.

I. Trail Design Standards

2) Off Road Shared Use Trail



○ ASPHALT-SURFACED TRAIL DETAIL SECTION
Not to scale

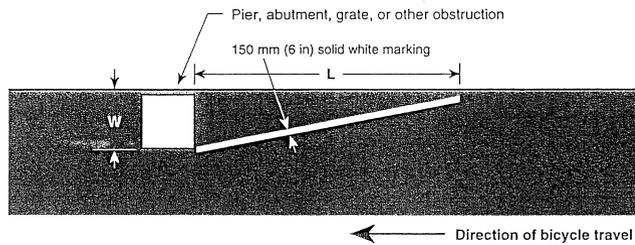


○ AGGREGATE-SURFACED TRAIL DETAIL SECTION
Not to scale

I. Trail Design Standards

b. Typical Bike Lane Pavement Markings

1) Obstruction Markings



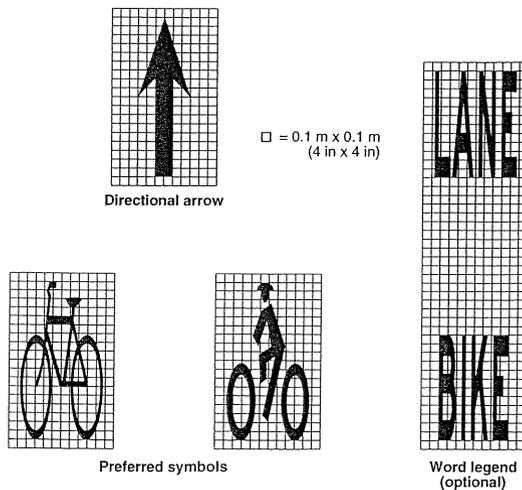
For Metric Units:

$$L = 0.62 WV, \text{ where } V \text{ is bicycle approach speed (km/h)}$$

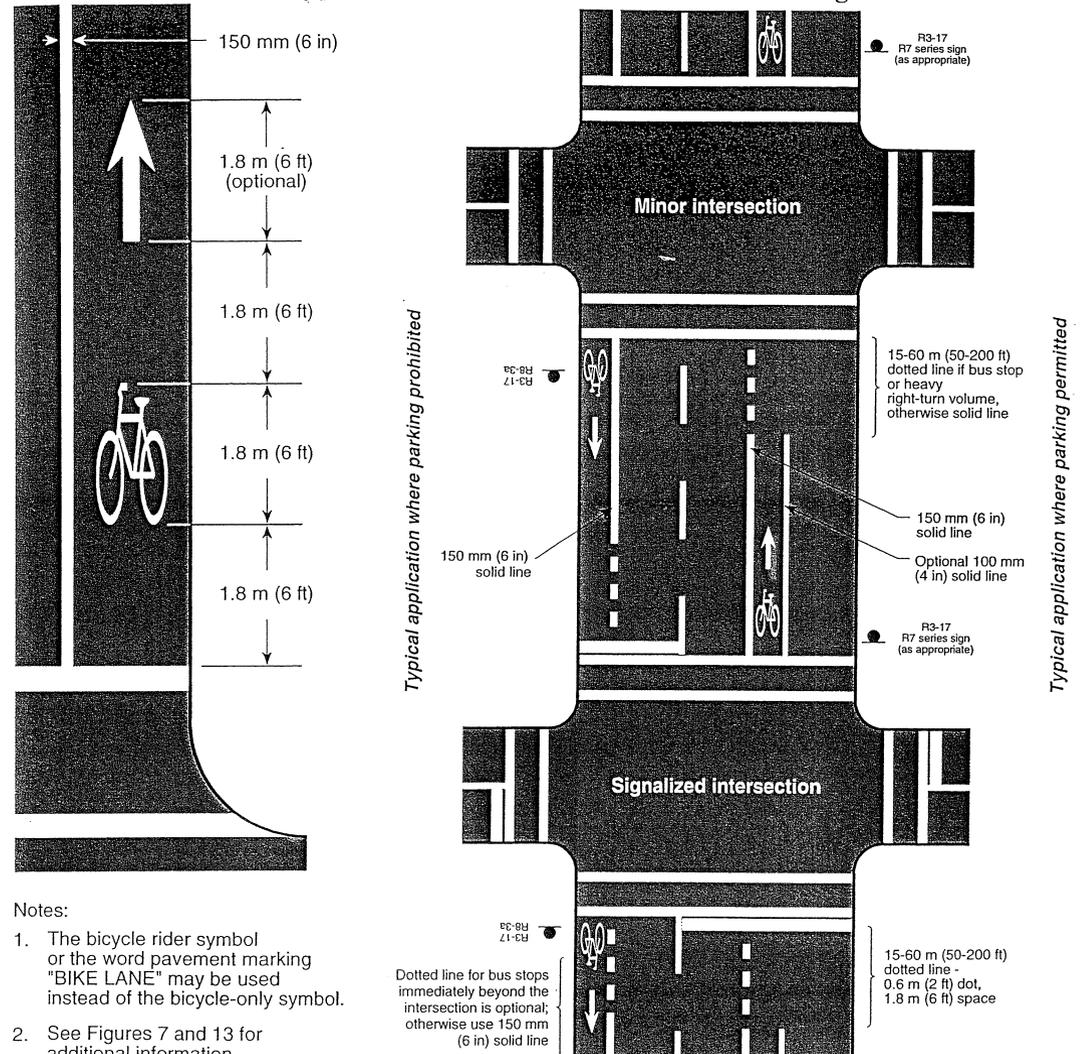
For English Units:

$$L = WV, \text{ where } V \text{ is bicycle approach speed (mph)}$$

2) Bike Lane Symbol Guidelines

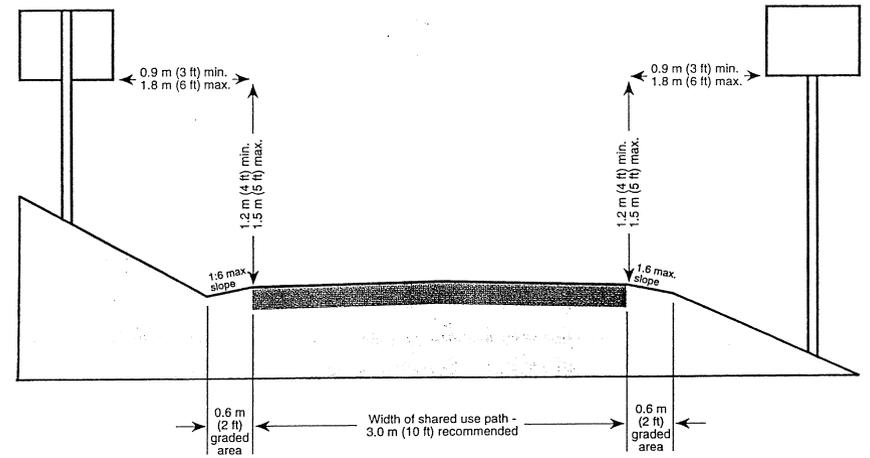
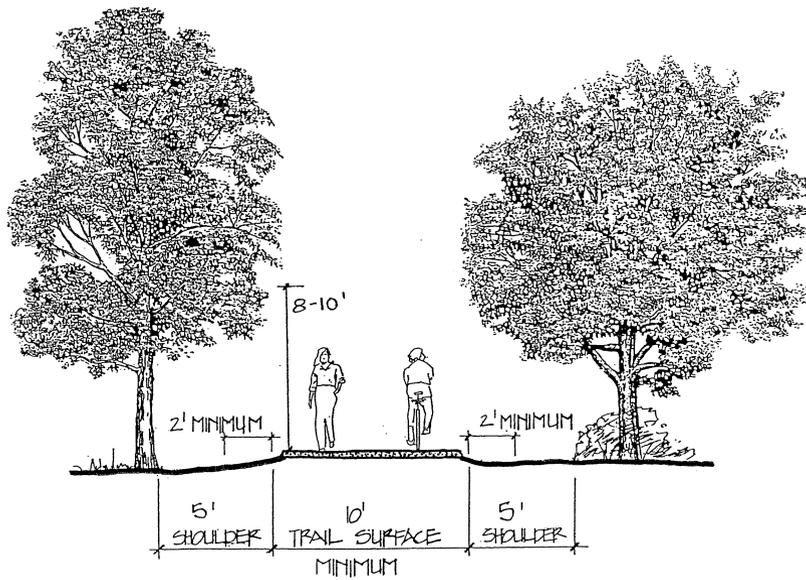


3) Typical Bike Lane Pavement Markings



I. Trail Design Standards

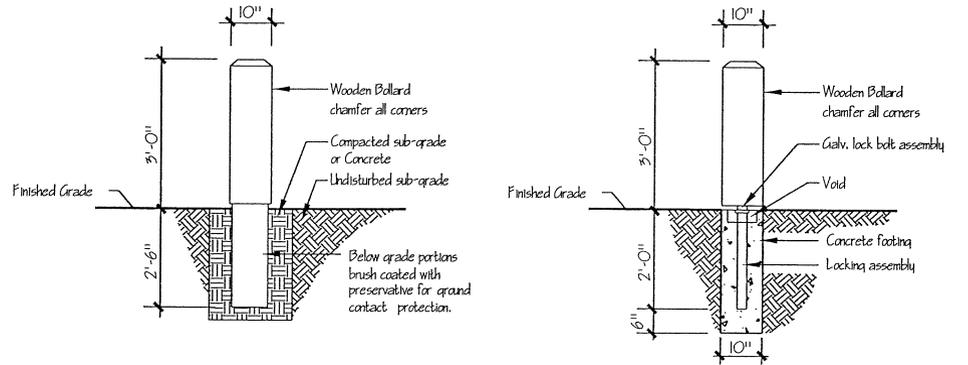
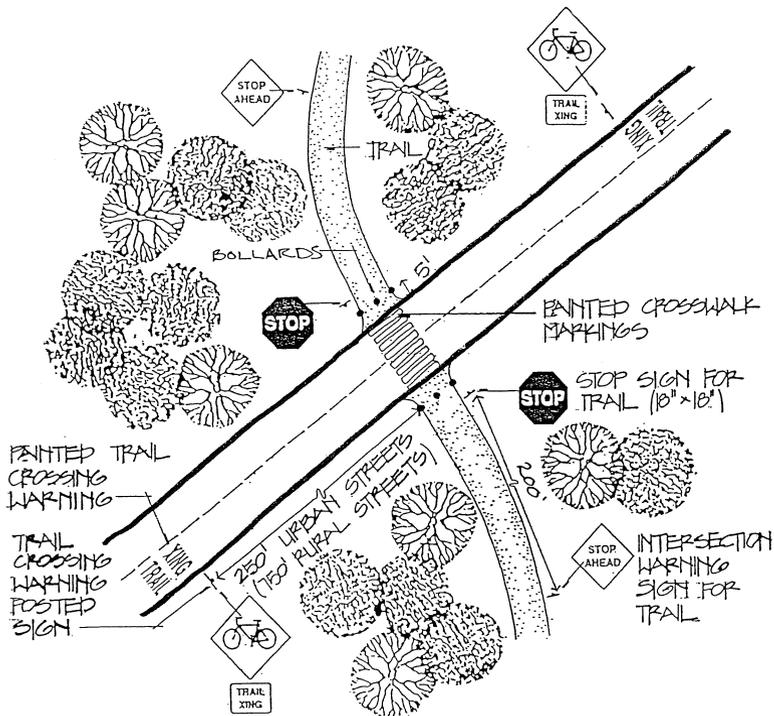
c. Typical Widths and Clearances



Cross Section of Two-Way Shared Use Path on Separated Right-of-Way

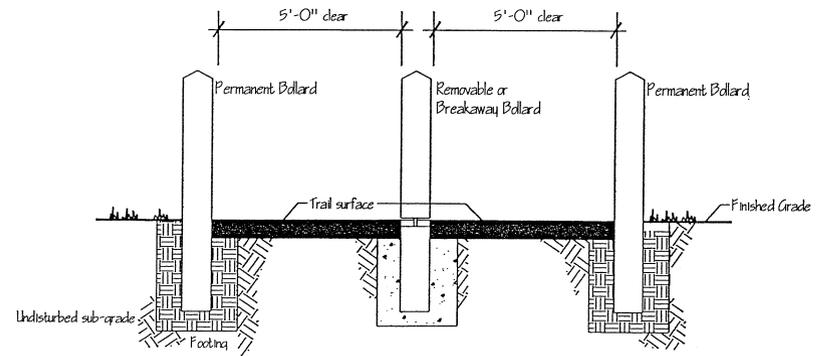
I. Trail Design Standards

d. Typical Road Crossing / Vehicular Control



STANDARD BOLLARD DETAIL (WOOD)

REMOVABLE BOLLARD DETAIL (WOOD)

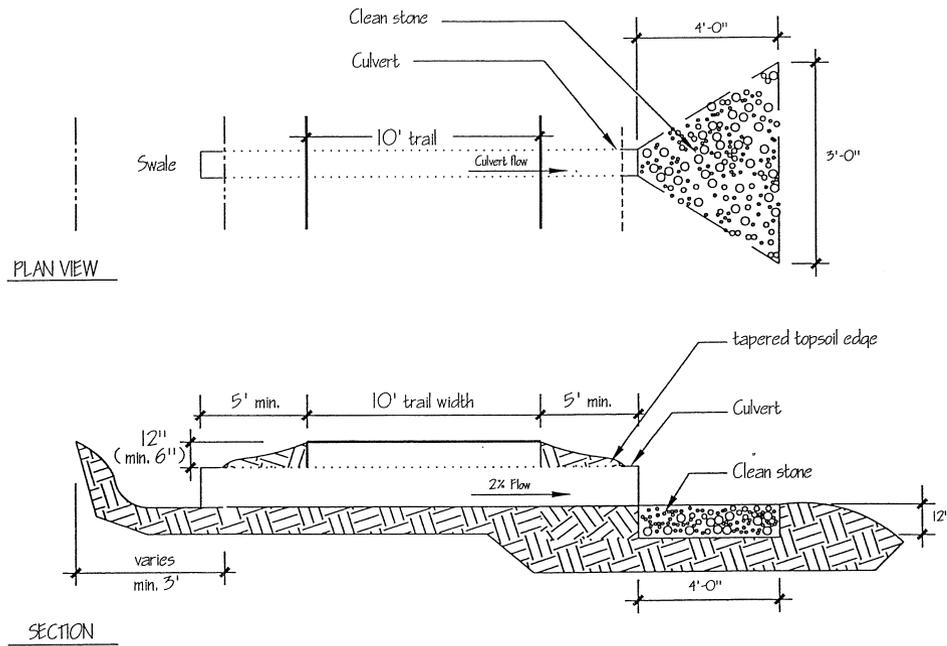


VEHICULAR CONTROL - BOLLARD ARRANGEMENT

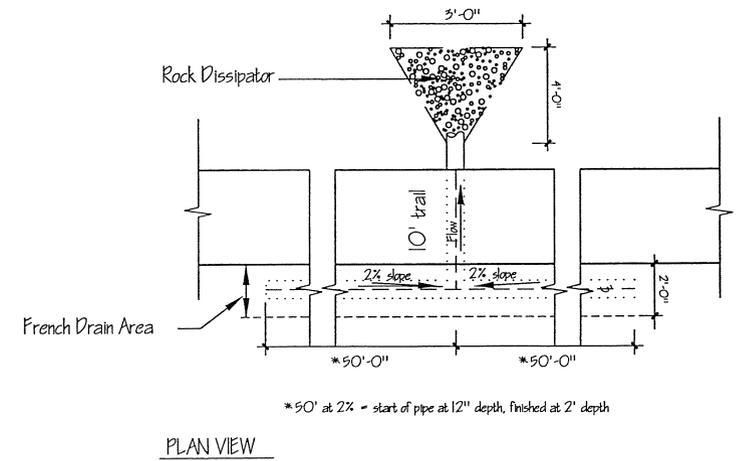
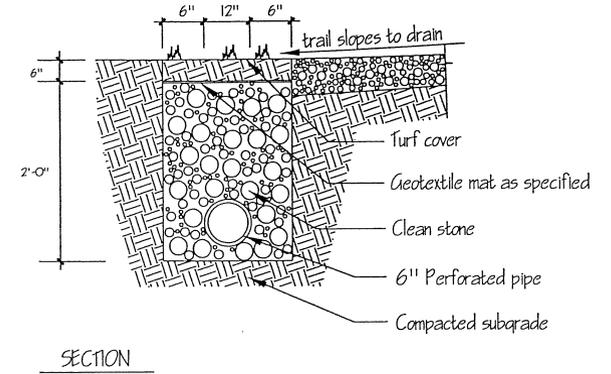
not to scale

I. Trail Design Standards

e. Typical Drainage Details

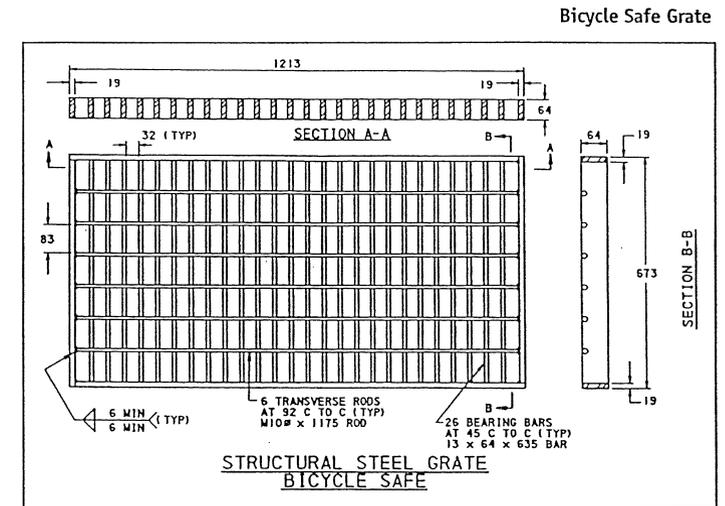
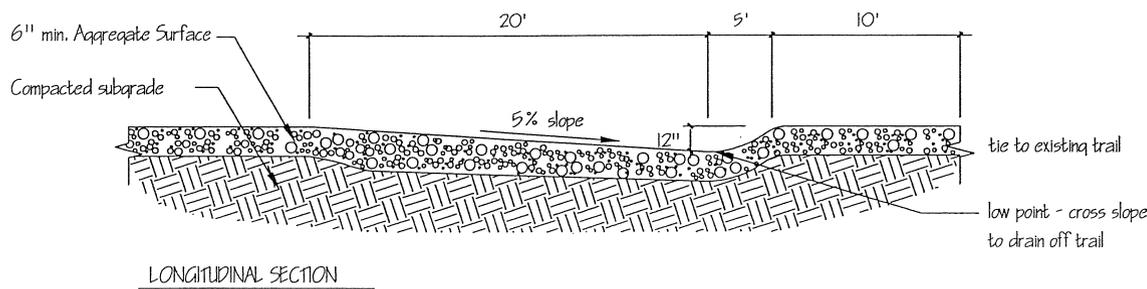
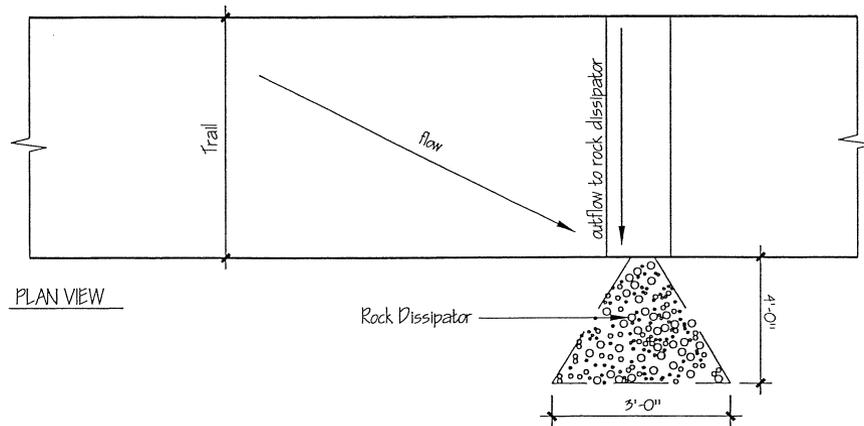


○ SWALE, CULVERT & ROCK DISSIPATER DETAIL
Not to scale



○ FRENCH DRAIN DETAIL
Not to scale

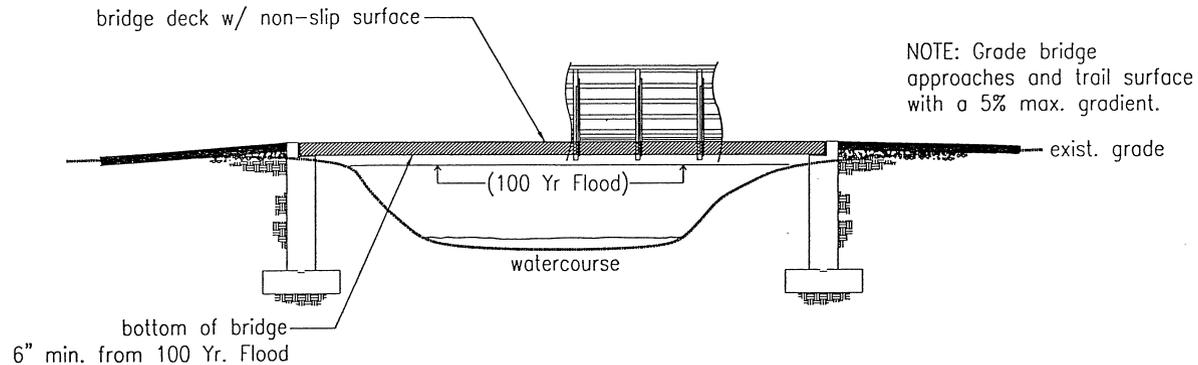
I. Trail Design Standards



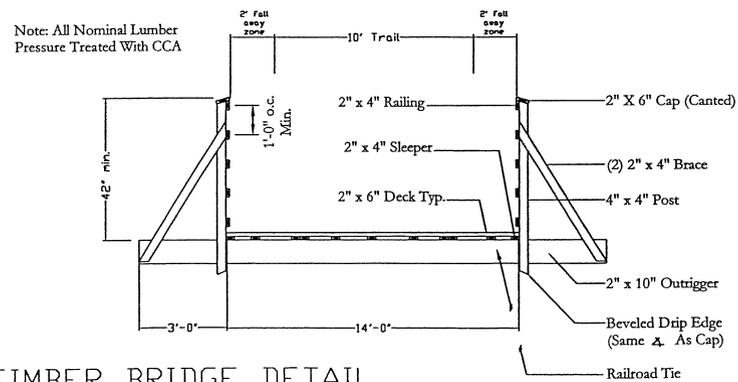
Source: PennDOT Standards for Roadway Construction, 1995

I. Trail Design Standards

f. Typical Stream Crossing Details



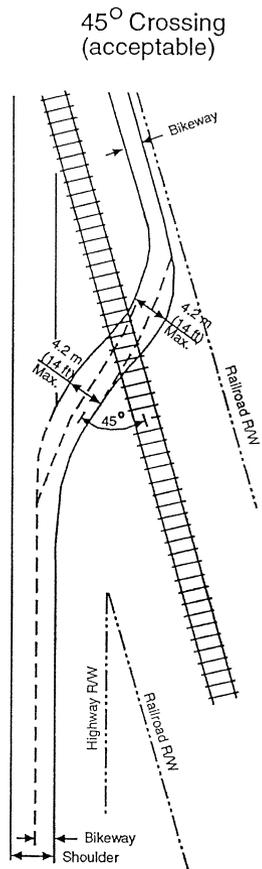
○ TYPICAL STREAM CROSSING DETAIL SECTION-ELEVATION
Not to scale



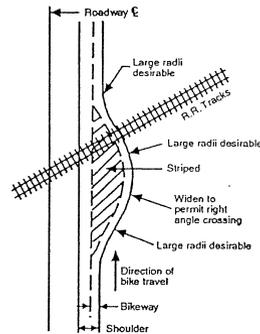
○ TYPICAL TIMBER BRIDGE DETAIL SECTION
Not to scale

I. Trail Design Standards

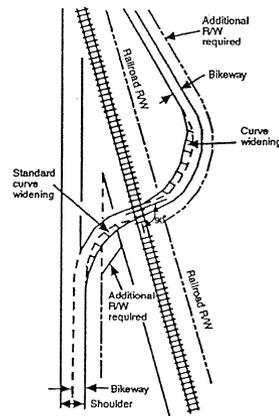
g. Typical Railroad Crossings



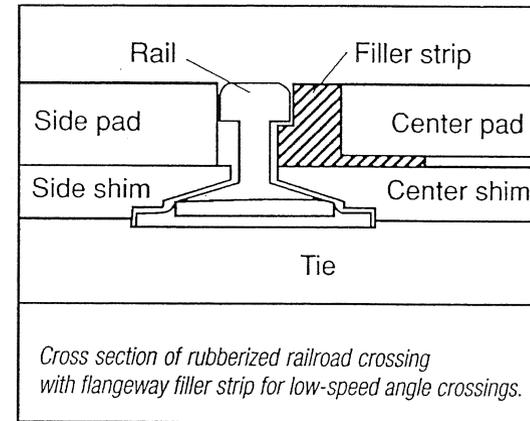
Widened Shoulder



90° Crossing (most desirable)



NOTE:
Additional width to 4.2 m (14 ft) to be provided at railroad crossing to allow cyclists to choose their own crossing routes.

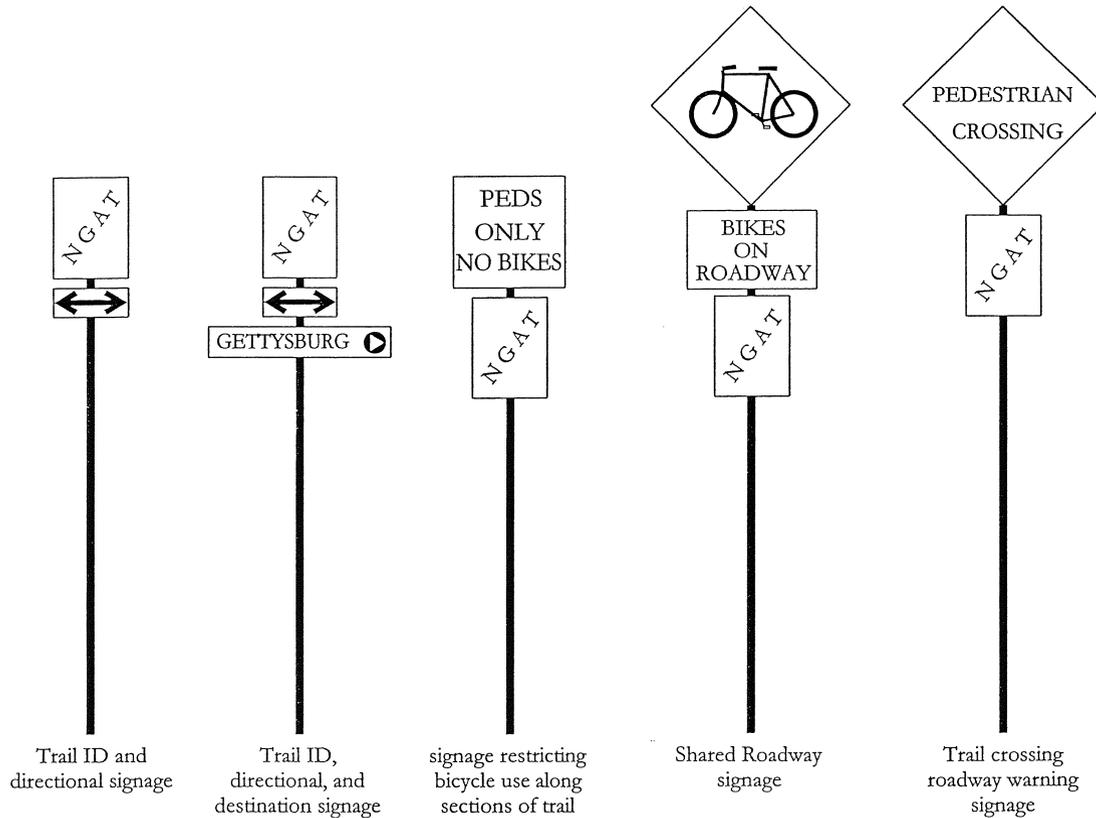


Rubberized Flangeway Filler Strip

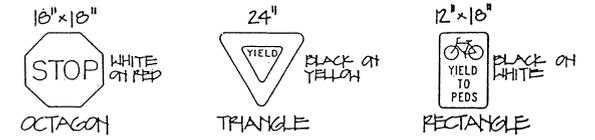
Source: *North Carolina Bicycle Facilities Planning and Design Guidelines*, 1994

I. Trail Design Standards

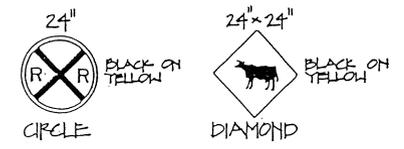
h. Typical Trail Signage



SCHMATIC SIGNAGE FOR TRAIL SYSTEM

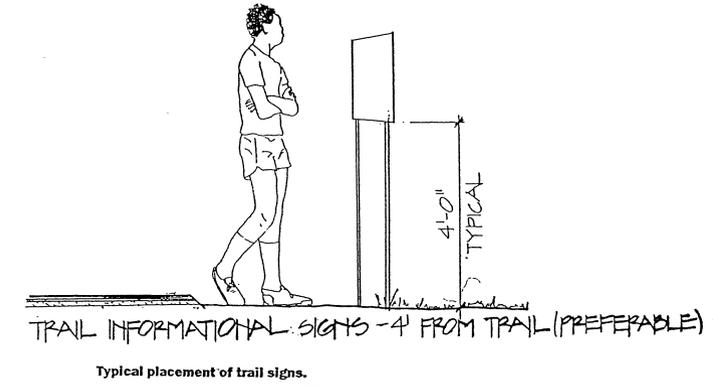
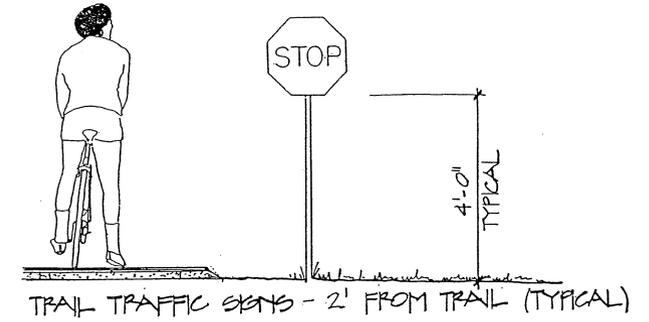


REGULATORY TRAIL SIGNS (TYPICAL)



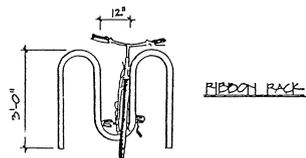
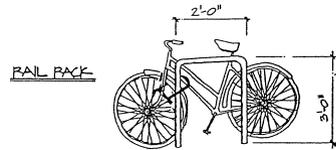
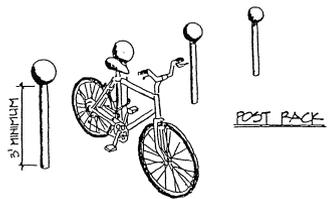
WARNING TRAIL SIGNS (TYPICAL)

Standard trail signs.

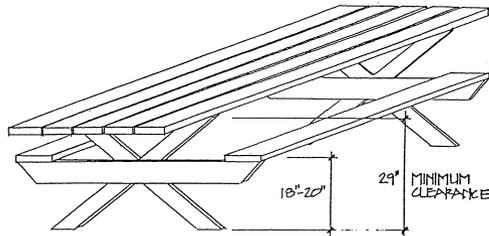
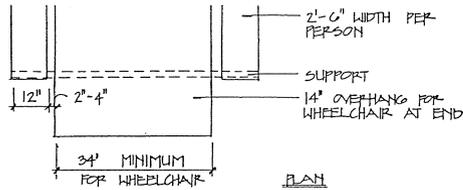


I. Trail Design Standards

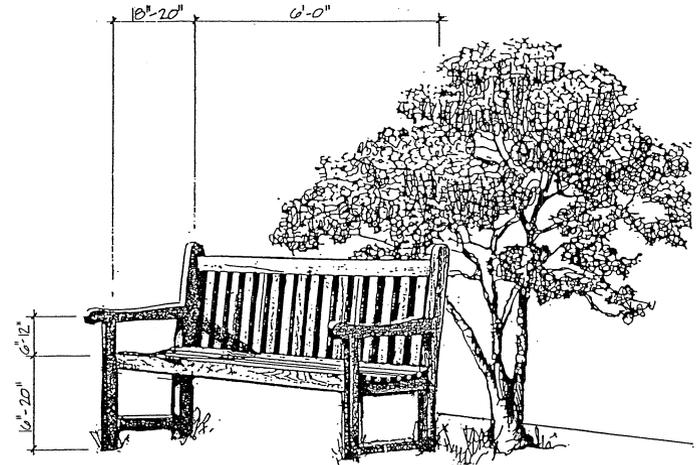
i. Typical Site Amenities



Styles of bicycle racks.

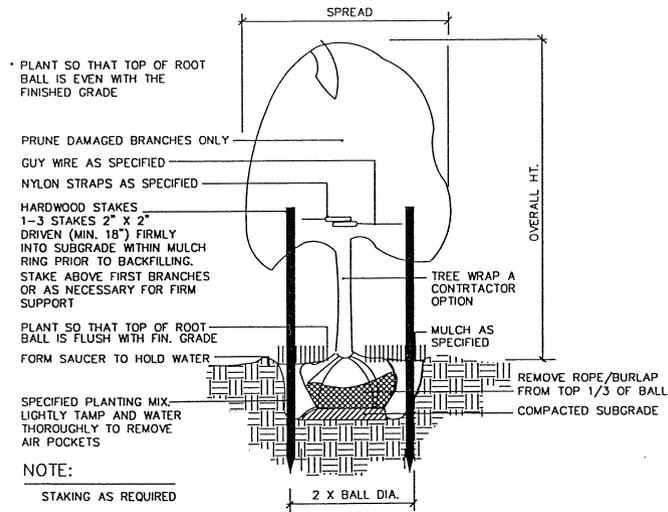


Typical dimensions of a picnic table.



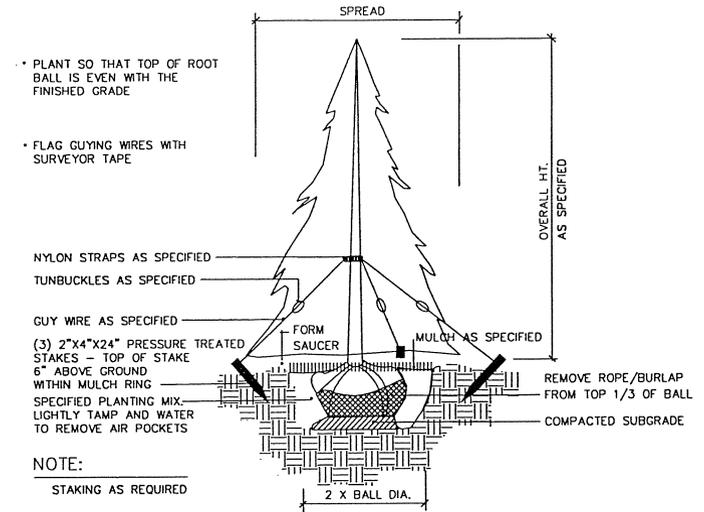
I. Trail Design Standards

j. Typical Landscape Restoration and Planting



TREE PLANTING DETAIL

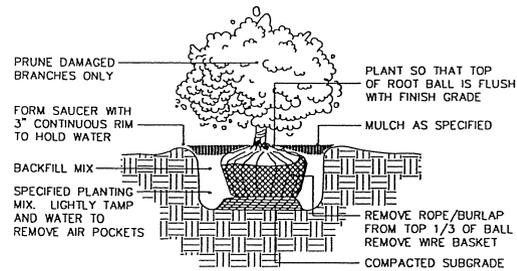
SCALE: NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL

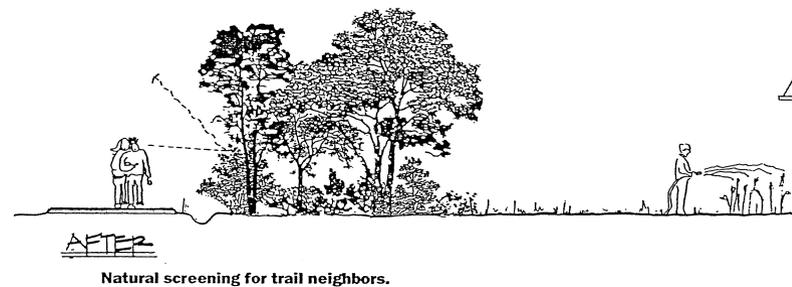
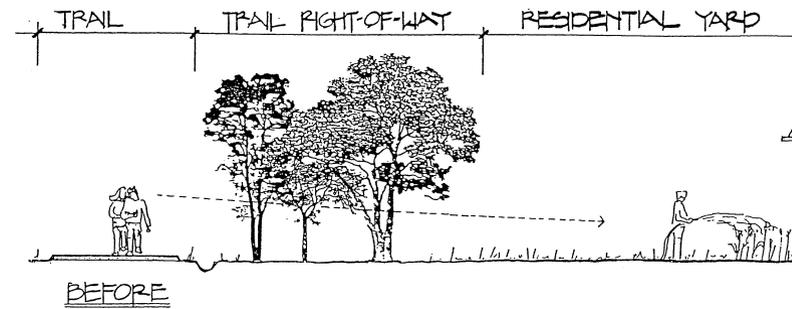
SCALE: NOT TO SCALE

I. Trail Design Standards



SHRUB PLANTING DETAIL

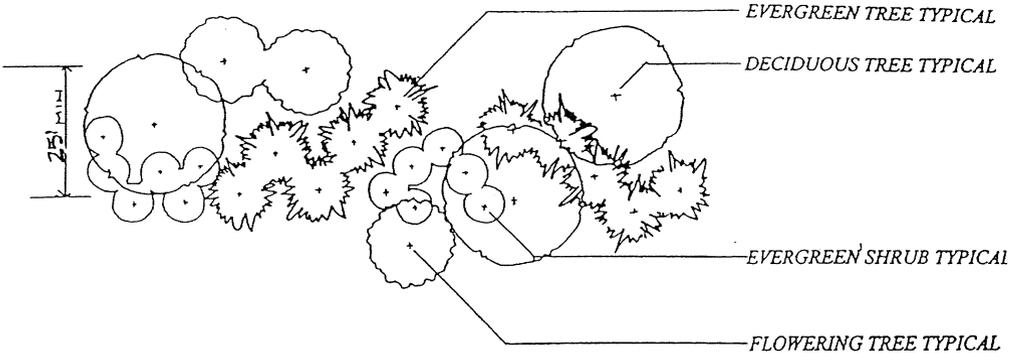
SCALE: NOT TO SCALE



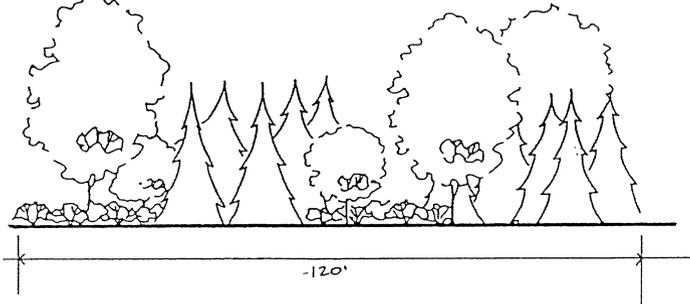
I. Trail Design Standards

Typical Buffer Planting

PLAN



ELEVATION



I. Trail Design Standards

k. Typical Vegetation Clearances

Clearing Limits

Do not cut trees over _____ in. diameter if they are over _____ feet from the centerline (both sides).

Saw branches

Vertical Clearing Limit

Clearing Limit Uphill Clearing Limit Downhill

Trailway

Trailbed

Clearing Limits (Ft.)

Station	Uphill	Downhill	Height

All trees _____ in. or less in diameter shall be cut if they are within _____ feet of centerline (both sides).

Stump Height Requirements* (Inches)

Stump Position	Side Slope	Uphill		Downhill	
Stumps left in place between the trailway and clearing limits	Side slope less than 10%				
	Side slope over 10%				
Stumps outside the clearing limits	Side slope less than 10%				
	Side slope over 10%				

Trail Name _____

Trail Number _____

*All heights measured from uphill side of stumps.

Clearing Limits

Brush extending into the clearing limits that is over 12 inches in height and 1/2 inch in diameter shall be cut flush with the main stem at a branch fork or at ground level if a fork main stem is nonexistent.

Clearing Limit Uphill Clearing Limit Downhill

Trailway

Trailbed

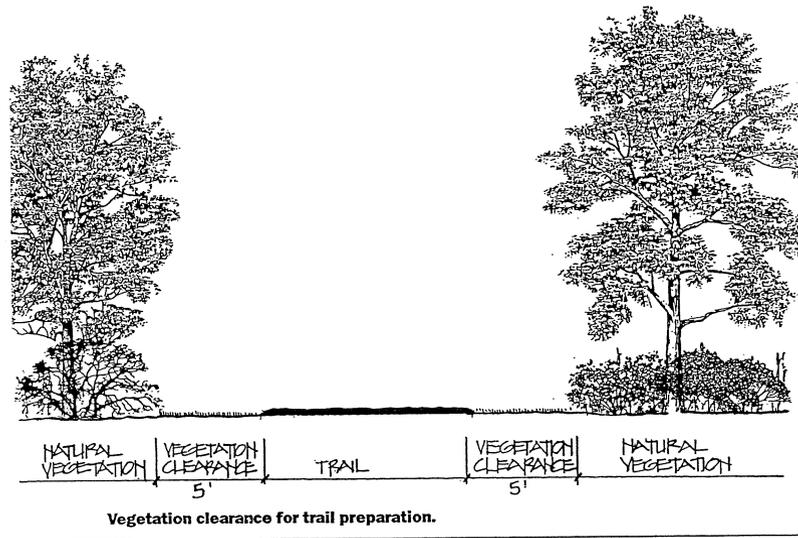
Cut

Cut All Logs

Uphill Downhill

Cut

I. Trail Design Standards



J. Appendix

1. Chronology of Meetings and List of Issues (Cards)

Chronology of Meetings:

April 14, 1999	Advisory Committee Meeting #1 – Kick-off. Begin work, confirm project and meeting schedule, and collect all available base information. Review goals and concepts and receive additional ideas.
May 12,	Advisory Committee Meeting #2 – Analysis. Discuss reconnaissance prepared by the Consultant, initial alignment ideas, and overall project goals.
June 9,	Committee Meeting #3, Public Meeting #1 – Programming. Public Outreach Meeting by the Consultant and County to meet with residents in the project area to review project goals and concepts, and receive ideas and suggestions for additional goals and concepts.
July 14,	Committee Meeting #4, Public Meeting #2 – Preliminary Design. Present preliminary trail routes and obtain feedback and comments from residents in attendance.
September 22	Committee Meeting #5, Public Meeting #3 – Presentation of Draft Plan.
September 22 to December 1	Plan open to public comment and review.
TBA	Advisory Committee Meeting #6 – Receive Comments and determine course of action to prepare final plan.
TBA	Public Meeting #4 – Present Final Plan to Public.
TBA	Present Final Plan to County Commissioners

J. Appendix

List of Issues:

Developed with Advisory Committee, April 15, 1999

Italicized items developed at Community Meeting, June 9, 1999

GOALS

- Provide Pedestrian and Bicycle Linkages
- Provide Recreational Opportunities
- Promote Greenway Conservation Efforts along Rock Creek
- Promote Environmental Awareness

SCHEDULE

- April 14: Advisory Committee Meeting #1 – Kick-off
- May 12: Advisory Committee Meeting #2 – Analysis
- June 9: Committee Meeting #3, Public Meeting #1 – Programming
- July 14: Committee Meeting #4, Public Meeting #2 – Preliminary Design
- Week of September 13: Committee Meeting #5, Public Meeting #3 – Draft Plan
- 60 day review period
- Week of November 15: Advisory Committee Meeting #6 – Receive Comments
- Week of December 6: Public Meeting #4 – Final Plan
- Present Final Plan to County Commissioners

PLAYERS

- Adams County
- Gettysburg Borough
- Cumberland Township
- Straban Township
- National Park Service
- Gettysburg Area School District
- PennDOT
- Gettysburg College
- Pennsylvania Historic and Museum Commission
- Residents
- Abutting Property Owners
- Advisory Committee
- Simone Jaffe Collins, Inc.
- *Gettysburg Walking Club*
- YWCA

FACTS

- 1995 Adams County evaluation of potential pedestrian and bicycle connections
- "Resource Overlay" MAPS (GIS)
- Rock Creek Floodplain
- Gettysburg National Historic Park
- Gettysburg College
- Gettysburg High School site
- Gettysburg College Master Plan
- Chamber of Commerce Meets 2nd Wednesday of each month
- Cumberland Township Recreation Plan

CONCEPTS

- Creation of a Loop Trail

- Gettysburg Borough to High School Site a High Priority
- Link Cumberland and Straban Townships to the "Main Loop"
- High School Site to Table Rock Road Neighborhoods a priority
- Provide Direct Neighborhood Access
- Minimize Security Concerns
- Integrate Trail with National Park Service Lands
- Utilize Existing and Proposed Transportation Infrastructure
- Citizen Survey
- Determine Demand for the Trail
- Future Connections
- "Legal Feasibility" ?
- Determine Alternatives
- Determine Priorities
- Maintenance Responsibility
- Cost Estimates
- Lower Speed Limits
- Hunters Crossing and Twin Oaks Developments Disconnected
- Funding Strategies
- Don't Include Broadway
- Prison and Ag. Center Inclusion
- Demographics
- Connect to Rural Roads
- Roller Blading?
- Widen Roads?
- Equestrian Farm and Trails
- Horse Use Permitted on some NPS Trails in Gettysburg Park
- Avoid Heavily Wooded Areas?
- Student Safety on Trails
- All Students Provided Bus Service
- Pedestrian Safety Crossing Bridges and Along Roads
- Interim Safety Measures
- Utilize Existing NPS Road ROWs in Gettysburg Park
- Trails as Close to NPS Roads as Possible
- County Bond Issue to Pay for Trail
- New Agricultural Services Center Building Planned
- Security/Safety Along Old Harrisburg Road
- *Initiate Trail in a Timely Fashion*
- *Use Separation*
- *Consider Stevens Run Trail*
- *Trail for all Ages*
- *Include Sidewalks where possible*
- *Consider Parking Areas, Rail Roads, Trail Maintenance*
- *Official Action is Preferred*
- *Property Owners' Permission to be Required*
- *Enhance Gettysburg (Tourist Destination)*
- *Do Not Market As a Tourist Attraction*
- *Consider Local Future Linkages*
- *Prime Focus: Serve the Community*
- *Keep Plan Reasonable/Manageable*
- *Design Alternatives Important*
- *Jump Start the High School Link*
- *Include Funding Strategies*

2. References/Bibliography

- a. Adams County Comprehensive Plan, Adams County, Pennsylvania; Norman Day Associates, in association with Orth-Rodgers & Assoc., Coughlin, Keene & Assoc., John Milner Associates, and R. E. Wright Associates; 1990.
- b. Adams County Vision for Parks, Recreation and Open Space; Park and Recreation Advisors, Urban Research and Development Corporation, in association with Natural Lands Trust, and Toole Recreation Planning; December 1997.
- c. Gettysburg Historic Pathway Plan; prepared by: Gettysburg Historic Pathway Task Force, and Division of Park and Resource Planning, Mid-Atlantic Regional Office, National Park Service; 1989.
- d. Draft General Management Plan and Environmental Impact Statement; Gettysburg National Military Park; August 1998.
- e. Landscape Master Plan Report; Gettysburg College, Gettysburg Pennsylvania; prepared by: Carol R. Johnson Associates Inc., Landscape Architects Environmental Planners, and A. William Graham, Jr., Arboricultural Consultant and Educator, Morris Arboretum of the University of Pennsylvania; June 1997.
- f. The Effect of Greenways on Property Values and Public Safety; A joint study by The Conservation Fund and Colorado State Parks State Trails Program; March 1995.
- g. Guide for the Development of Bicycle Facilities; American Association of State Highway and Transportation Officials (AASHTO); prepared by the AASHTO Task Force on Geometric Design; 1999.
- h. Bicycle Guidelines, Statewide Bicycle & Pedestrian Master Plan, Bicycling & Walking in Pennsylvania A contract for the 21st Century, prepared for: Commonwealth of Pennsylvania Department of Transportation, submitted by The RBA Group and others, April 1996.
- i. Trails Management Handbook; the National Park Service.
- j. Standard Specifications for the Construction of Trails; the US Forest Service.
- k. Trails Management Handbook; the U S Forest Service.
- l. Trails for the Twenty-First Century; the Rails to Trails Conservancy.

J. Appendix

3. Random Sample Citizens Survey

June 28, 1999

Dear Resident:

Adams County is conducting a feasibility analysis to determine the potential for the development of a community-serving, non-motorized, pedestrian and bicycle trail system. If implemented, the system will provide pedestrian/bicycle linkages between the Borough of Gettysburg, the Gettysburg Area High School, residential neighborhoods in Straban and Cumberland Townships, and the Gettysburg College campus.

Your participation in this planning process is critical. Enclosed you will find a Citizen Survey, which we hope will allow us to measure citizen interest and potential use of a neighborhood trail system, should such a system be implemented. Your household has been chosen, using random selection techniques, to receive the survey. We are requesting that you complete the enclosed survey, fold and close the survey with the mailing address showing, and drop the packet in the mail. Please note that providing your name and address on the survey form is optional. We urge you to return your completed survey to us by July 14, 1999.

We look forward to receiving your completed survey form. If you have any questions regarding the survey form, respondent confidentiality, or any other issue regarding the North Gettysburg Area Trail Feasibility Study, please do not hesitate to contact either myself or Richard Schmoyer, Director of Planning and Development, at 337-9824.

Thank you for your participation in this important project.

Sincerely,

Robert Thaeler, Senior Community Planner

Encl. Citizen Survey
rdt c:\projects\rec_proj\trail\misc\survey2.doc

North Gettysburg Area Trail Feasibility Study Citizen Survey

1. Name (optional) _____
Address (optional) _____ Zip Code _____
Number of persons in household _____ Ages: _____
2. Please indicate the municipality in which you live: _____ work: _____
3. In which of the following recreational activities does your household most frequently engage?
Please indicate which ages in your household engage in an activity by indicating those ages next to the activity. You may show more than one age next to each.
____ walking ____ jogging/running ____ roller-blading ____ street-biking ____ off-road biking
4. How often do you or members of your household engage in the above activities on roadways?
Please indicate which ages next to the frequency. You may show more than one age next to each.
____ daily ____ weekly ____ monthly ____ not at all ____ other (please explain)
5. Do you or members of your household ever commute to work or school by non-motorized means (e.g. walking, bicycling, etc.)? ____ Y ____ N
If yes, how often? Please indicate how often members of your household commute by non-motorized means, i.e. walk or bike, by indicating those ages next to the frequency. You may show more than one age next to each.
____ daily ____ weekly ____ monthly ____ not at all ____ other (please explain)
6. Would you or members of your household use a pedestrian / bicycle trail system connecting Gettysburg Borough, the site of the new Gettysburg High School, and adjoining neighborhoods in Straban and Cumberland Townships? ____ Yes ____ No
If yes, approximately how often would you use the trail?
____ Very Seldom ____ Occasionally ____ Often ____ Very Often
7. How many annual visits does your household make to areas within the Gettysburg National Military Park, including but not limited to Park avenues and equestrian trails, for recreational purposes? _____
8. Are there any specific connections within Straban and Cumberland Townships and Gettysburg Borough you would like to see included in a neighborhood trail system in the North Gettysburg area? Please list them below. (continue on the reverse as needed)

9. Additional Comments (continue on the reverse as needed):

Thank you for participating in this survey. Your involvement in this project is important and greatly appreciated.

4. Correspondences and Record of Information

Adams County Office of Planning and Development
 Adams County Courthouse
 111-117 Baltimore Street Gettysburg PA 17325
 Phone: (717) 337-9824 Toll Free: 1-888-337-9824
 FAX: (717) 334-2091
 E-mail Address: acopd@evn.net
 Director: Richard H. Schroyer, AICP

MEMORANDUM

Date: July 14, 1999
 To: Steering Committee
 North Gettysburg Area Trail Feasibility Study
 From: Richard H. Schroyer, AICP
 Director of Planning and Development
 Robert Thaler, RST
 Senior Community Planner
 Subject: Citizen Survey - Initial Findings
 North Gettysburg Area Trail Feasibility Study

A critical component of the citizen participation portion of the North Gettysburg Area Trail Feasibility Study is the completion of a random sample citizen survey within the project area. Over the past several weeks, the staffs of the Office of Planning and Development Simone, Jaffe, Collins have prepared and conducted the required random sample citizen survey. Approximately 350 households were selected from the project area to receive the survey form. ACOPD staff used the County's "per capita" tax records to select the households to which a survey form would be sent. We achieved a decent response rate of about 21%, which, in terms of real numbers, equals 74 completed surveys. A copy of the survey form is provided as an attachment to this memo.

ACOPD and Simone, Jaffe, Collins are still reviewing the completed survey forms to obtain detailed analysis. However, we are providing the Steering Committee with the following cursory analysis of the information:

1. Respondents were asked to provide information regarding the type of recreation activities their household pursues (Question 3) and the ages of the household member that participates in each activity. A large number of respondents indicated that walking is a significant activity in their household. The responses indicated that 40 persons over 60 years of age walk, that 43 persons

between 40 and 59 years old walk, and that 21 persons between 20 and 39 walk. The 20-39 and 40-59 age groups also show relatively large numbers of persons participating in jogging and bicycling activities.

2. Respondents were asked to provide information regarding how often their chosen recreation activity results in use of existing roadways (Question 4). Large numbers of respondents in the 20-39, 40-59, and over 60 age groups indicated that their recreation activities place them on the public roads on either a daily or weekly basis.

3. Respondents were asked to indicate whether members of their household use non-motorized forms of transportation to commute to work or school. 15 respondents indicated in the affirmative, while 53 indicated that they did not use non-motorized forms of transportation for commuting purposes.

4. Respondents were asked to indicate whether members of their household would use a trail facility in the North Gettysburg Area (Question 5). Of the 74 surveys received, 51 respondents (68.9%) indicated that they would use such a trail facility, while 21 (28.4%) indicated that they would not. Of those households who indicated that they would use a trail facility developed in the North Gettysburg Area, 26 respondents (51%) indicated that they would use the system "Very Often," while 18 respondents (35.3%) indicated they would use the system "Often." 7 respondents (13.7%) indicated that they would use the system only "Occasionally" or "Very Seldom."

5. Respondents were asked to indicate the number of visits per year members of their household make to the Gettysburg National Military Park (GNMP) for recreational purposes. Of the 56 responses to this question, 21 respondents (37.5%) indicated that their household uses GNMP facilities between 0 and 5 times per year for recreational purposes. On the other hand, 24 respondents (42.9%) indicated that they visit the GNMP more than 30 times per year for recreational purposes. The balance of the respondents indicated that their household visited the GNMP between 6 and 30 times per year for recreational purposes.

Conclusion: At this point, ACOPD and Simone, Jaffe, Collins are still evaluating the "finer points" of the responses to the random sample citizen survey. We will be able to provide further information to the Steering Committee in the coming weeks. However, one may conclude from a cursory review of the surveys that citizens may likely support the development of a North Gettysburg Area trail system, and that multi-modal level of use of such a system may be significant.

cc: Peter Simone, SJC
 encl. Survey Form
 c:\projects\trc\study\comm\citizen\survey-rev-01.doc

NORTH GETTYSBURG AREA TRAIL FEASIBILITY STUDY

Committee Meeting No. 3, Preliminary Trail Alignments
 July 14, 1999 4 PM - Gettysburg High School

NAME	ADDRESS / ORGANIZATION	PHONE NO.
Steve & Trudy Gifford	400 OLD HAGERSTOWN RD - GETTYSBURG	337-9629
Beet Herbold	Gettysburg NMP - 97 Towns rd - Gettysburg	334-3777 ext 11
Bob Needy	33 E. Lincoln Ave. Gettysburg (Harris)	334-0762
DAN WILSON	305 OAK LANE, GARDEN - EAGLE VIEW	334-5064
Eric & Terma	1728 Oak Ave. Gettysburg PA	334-2437
Robert J. Jaffe	167 Garden Ave. Gettysburg	337-6128
Royce Cooper	210 W. Broadway - Gettysburg	337-1074
Almaez Sicks	550 Meigs Ridge Road Gettysburg PA 17325	334-1830
TED Sicks	550 Meigs Ridge Road Gettysburg Pa 17325	334-1830
Lashon Folio	Fox 45 Meigs 2005 S. Queen St. York, PA 17365	1-800-680-1754
John Kulp	449 Epsell Dr. 17325	337-2816
Marcy Schwabe	35 South Steeles Chase (Name as above)	357-2464
John F. Miller	280 S. Howard Ave. Gettysburg - Walking Club	334-3354
John W. Kulp	449 Epsell Drive Gettysburg PA 17325	334-1161
John & Ann Wood	308 Pine St. Gettysburg PA 17325	334-9271
John & Ann Wood	43 S. Broadway Gettysburg PA	334-6663
John & Ann Wood	65 WATERWALKER ST. GETTYSBURG PA	334-2552
Bob Wagner	229 Teal Oak Rd Gettysburg PA	
John & Ann Wood	FIN 945	

SIMONE, JAFFE, COLLINS • LANDSCAPE ARCHITECTURE
 311 OLD LANCASTER AVENUE • HERRYPEN, PENNSYLVANIA 17311 R10 R10 R10

J. Appendix

PRESS RELEASE - FOR IMMEDIATE RELEASE

June 1, 1999
 Adams County Office of Planning & Development will hold its first public meeting on the North Gettysburg Trail Feasibility Study at 2PM on Wednesday, June 9, 1999 at the (Gettysburg Area High School). The purpose of this public meeting is to discuss concepts and ideas with area residents on potential pedestrian and bicycle connections throughout the North Gettysburg area.

Simone Jaffe Collins, Landscape Architects, of Berwyn, PA, was recently retained by the Adams County Office of Planning and Development to determine the potential of a regional pedestrian/bicycle trail system. Pedestrian/bicycle linkages between the Borough of Gettysburg and the Gettysburg Area High School will be a priority. Linkages between the residential neighborhoods in Straban and Cumberland Townships, the high school site, the borough and Gettysburg College will also be planned. The purpose of this study is to determine the feasibility of creating safe, non-motorized trails within the study area; provide local residents with increased recreational opportunities; and serve as a catalyst for future greenway conservation efforts along Rock Creek.

Public involvement is critical to the success of the project. At the meeting on June 9, 1999, an overview of the study will be presented and citizen ideas will be solicited. Township and borough residents are urged to attend and participate.

June 9 is the first in a series of four public meetings. Public meetings will be held on July 14, 1999, and during the weeks of September 13, 1999 and December 6, 1999. Exact times and locations will be publicized once finalized. A draft plan will be presented at the September meeting, followed by a sixty-day review period, allowing time for public comment. Revisions to the draft plan will then be incorporated into the final December recommendations.

This Feasibility Study is the first step in the establishment of a countywide trail system. Community interaction and feedback is important to the success of the project. The public is urged to attend all community meetings.

R:\98077-n.gettysburg\press-release.doc 05/28/99

North Gettysburg Trail meeting set

The Adams County Office of Planning and Development will hold its first public meeting on the North Gettysburg Trail Feasibility Study at 2:00 p.m. on Wednesday in the Library Conference Room of the Gettysburg Area High School. The purpose of this meeting is to discuss concepts and ideas with area residents on potential pedestrian and bicycle connections throughout the North Gettysburg area. Simone Jaffe Collins, landscape architect of Berwyn, Pa., was recently retained by Adams County to determine the potential for a community pedestrian/bicycle trail system.

Due to safety concerns, pedestrian/bicycle linkages between the Borough of Gettysburg and the Gettysburg Area High School must be a priority in this endeavor. However, potential linkages between the residential neighborhoods in Straban and Cumberland Townships, the high school site and the borough and Gettysburg College will also be planned. The purpose of this study is to determine the feasibility of creating safe, non-motorized trails within the study area; provide local residents with increased recreational opportunities, and serve as a catalyst for future greenway conservation efforts along Rock Creek.

Public involvement is critical to the success of the project. At the meeting, an overview of the study will be presented and citizen ideas will be solicited. Township and borough residents are urged to attend and participate. Wednesday's meeting is the first in a series of four public meetings. The next meeting will be held on July 14. Subsequent meetings will be scheduled during the weeks of September 13 and December 6, 1999. Exact times and locations will be publicized once finalized.

A draft plan will be presented at the September meeting, followed by a sixty-day review period, allowing time for public comment. Revisions to the draft plan will then be incorporated into the final December recommendations.

The Feasibility Study represents an initial step towards addressing the goals and objectives stated in the recently completed Adams County Parks, Recreation and Open Space Plan. Community interaction and feedback are important to the success of the project. The public is urged to attend all community meetings. The Library Conference Room may be accessed from the main entrance of the High School. Signs will be displayed directing attendees to the conference room.

NOTICE
PUBLIC MEETING

to receive comment concerning the
 North Gettysburg Area Trail Feasibility Study

hosted by
 Adams County Office of Planning and Development

Wednesday, June 9, 1999
 7:00 PM
 Library Conference Room
 Gettysburg High School
 Old Harrisburg Road, Gettysburg, PA

A Feasibility Study is being prepared to determine the potential for creating trail system that would connect Gettysburg Borough, the new Gettysburg High School, and surrounding residential neighborhoods in Straban and Cumberland Townships.

The public is urged to attend this meeting to provide opinions and ideas regarding this project.

SIGN IN SHEET
PUBLIC MEETING
NORTH GETTYSBURG AREA TRAIL FEASIBILITY STUDY

Wednesday, June 9, 1999
 Library Conference Room, Gettysburg High School, Gettysburg
 7:00 PM

Would you like to be notified by mail of future Public meetings regarding this project (Y/N)?

Name	Address	
Andrea Grunp	59 East High Street Gettysburg	Y
Peggy Thomas	172 East 2nd Gettysburg	Yes
Steve Jaffe	3175 Old Mtg. Rd. Gettysburg	Yes
BOB ELLER	50 N. HARRISBURG RD. GETTYSBURG	YES
Steve White	150 N. Stratton St, Gettysburg	Y
Dan "	" "	"
Mike Malavick	2 W. Broadway Gettysburg	Yes
Ryan Wray	137 N. Broadway "	Yes
Don Borock	43 E. Broadway Gettysburg	Yes
Jean Miller	170 CONFEDERATE DR. Gettysburg	Yes
DAVID CROMMER	161 GORDON AVE. GETTYSBURG	YES
Walter Hilde	25 4th Ave. Gettysburg	Yes
Virginia McLaughlin	14 Linden St. Gettysburg	Yes
John Powell	201 E. 2nd Ave. Gettysburg	Yes
John K. Hilde	169 2nd Ave. One Gettysburg	Yes
D. J. Shaffer	89 E. Broadway Gettysburg	Yes
Tom Mudd	308 Pine St. Gettysburg	Yes
Nathy Sefton	271 Table Rock Rd. Gettysburg	Yes
Janet Kautz	65 W. 1st Ave. Gettysburg	Yes
John McKenna	977 ANEVILLE RD. GETTYSBURG	YES
Harold Morris	61 E. Broadway Gettysburg	Yes
Kim Beaman	98 E. Broadway Gettysburg	Yes
John J. Miller	280 S. HARRISBURG RD. GETTYSBURG	Yes
Kathy Ery	330 Ridgewood Dr. Gettysburg	Y
Ken Zeisloff	" " " " " "	No
MARX SHAM	SJC	
PETE SIMONE	SJC	

J. Appendix



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

April 15, 1999

Mr. Robert Thaeler,
Senior Community Planner
Adams County Office of Planning & Development
Adams County Courthouse
111-117 Baltimore Street
Gettysburg, PA 17325

RE: North Gettysburg Trail Feasibility Study
SJC #98077

Dear Robert:

The following is a memorandum of the following three events held on Wednesday, April 14, 1999 regarding the development of a feasibility study for the North Gettysburg Trail:

1. 10:00 AM Meeting with Rob Thaeler and Dick Schmoyer, at the Adams County Planning Department
2. Project area introduction with Dick Schmoyer
3. Advisory Committee Meeting at 6:00 PM at the Gettysburg High School

Peter Simone, Bill Collins, Mark Smith and Tom Johnston attended from Simone Jaffe Collins (SJC). An attendance list for the advisory committee meeting is enclosed.

1. A list of information discussed at the 10:00 AM meeting and promised this office has already been forwarded to your attention. We await receipt of this information to continue with our analysis efforts.
2. A map of overlays containing various trail-pertinent information used at the pre-bid meeting was loaned to SJC. This map includes potential trail alignments. SJC was told that there are written descriptions of items numbered on this map and was promised this written information.
3. SJC has suggested that a preservationist from the local community be added to the advisory committee.
4. A freight train passes along rail tracks to the south and west edges of the project site approximately twice a day. A seasonal rail excursion begins at the station in Gettysburg, just north of Gettysburg College, and travels briefly along the same

111-117 BALTIMORE STREET, GETTYSBURG, PA 17325
511 OLD LANCASTER AVENUE, BERWYN, PENNSYLVANIA 19312
(610) 889 0348 FAX (610) 889 7521 EMAIL: SJC@CDC.COM

tracks used by the freight trains in Gettysburg, then turns along a spur line to the east of the freight line.

5. The County owns the Adams County Nursing Home land.
6. Rock Creek has a history of significant flooding.
7. PennDOT is currently working on plans to widen the Old Harrisburg Road Bridge across Rock Creek. At the County's request, SJC has contacted PennDOT to review the plans in light of the future North Gettysburg Trail. The width and shoulder treatment of this bridge will become an important factor in pedestrian use and potentially as part of a trail. At a minimum, bike lanes on both sides of the bridge and a sidewalk on one side (west) of the bridge should be a part of the new bridge.
8. The new Rose Lawn housing development is cut off from the neighboring Twin Oaks development and the High School Site. The trail should develop a safe pedestrian connection between these three sites.
9. A narrow National Park Service road runs alongside the Adams County Nursing Home facility back to a small memorial site. This could potentially be utilized as a potential link to connect the housing developments above this site to the High School site.
10. Several new housing developments in the project area have been approved and are currently or will soon be under construction.
11. The Boyds School Road Bridge is narrow and does not include shoulders. Students walking to the High School, among others, use this bridge. This bridge is not currently safe for pedestrian use and is especially dangerous in the winter following snowstorms.
12. A proposal is currently on the table for the development of a sewer treatment facility located off Table Rock Road. The development of such a facility would have a major impact on further development in the project area and beyond. Currently development on a great portion of this land is impossible, restricted by wet hydrologic conditions that will not allow septic systems.
13. Biglersville Road is sometimes very busy.
14. A few large industrial/corporate facilities are located in the project area. Consideration should be given to tie these sites to the trail, providing employees alternative means of commute and exercise/recreation during the workday.
15. Issues discussed at the afternoon advisory committee meeting are included on the enclosed list of cards.
16. The advisory committee discussed the scheduled times for future meetings. Attendees have included time preferences on the enclosed attendance list. The

County needs to evaluate these requests and decide whether or not it wants to change any future meeting times. Please advise SJC of any changes.

17. The County Comp Plan indicates the 1990 County population is approximately 78,000, while the projection for the year 2000 is approximately 88,000.

Please notify this office of any errors or omissions.

Respectfully Submitted,
SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

Mark T. Smith

Encl.: Steering Committee Meeting attendance list
List of Cards (April 15, 1999)

J. Appendix

NAME	ASSOCIATION	PHONE #	PICTURE #
John Stokas	S.J.C.		414171
Bill Collins	SIMONE JAFFE COLLINS	610 889 0348	
Sue Giuffreda	Straban Township	337-9629	
TONY GIUFFREDA	STRABAN TOWNSHIP	337-9629	
John McKenna	NPS	374-1124, 3440	
Bob Wagner	Rosebawn	717-337-1554	
Joy Boden	Gettysburg School District Rel Board Bathfield Grove NPS	337-3264	
Bob Nardran	Honover Cyclists Bicycle Club	334-0742 (H) 337-6586 (C)	
Cindy Wright	GETTYSBURG COLLEGE	337-6322	
Patt Symmes	GASD Sch Board Straban road.	334-5475	
BARRY SEASE	Cumberland Twp.	334-3996	
DAN WILSON	LOCAL RESIDENT	334-5064	
Andrea C. Crouse	Borough of Gettysburg Recreation Department	334-2028	
Peggy Gustafson	Borough of Gettysburg	334-2352	
Harry Stokes	Commissioners	337-920	
Rob Thaler	County Planning	337-9224	
SNOW CORREY	County Planning	337-9824	
MARIE SMITH	SJC	610-889-0348	
Peter Simons	SJC	610-889-0348	



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

North Gettysburg Trail Feasibility Study List of Cards - April 15, 1999

GOALS

- Provide Pedestrian and Bicycle Linkages
- Provide Recreational Opportunities
- Promote Greenway Conservation Efforts along Rock Creek
- Promote Environmental Awareness

SCHEDULE

- April 14: Advisory Committee Meeting #1 - Kick-off
- May 12: Advisory Committee Meeting #2 - Analysis
- June 9: Committee Meeting #3, Public Meeting #1 - Programming
- July 14: Committee Meeting #4, Public Meeting #2 - Preliminary Design
- Week of September 13: Committee Meeting #5, Public Meeting #3 - Draft Plan
- 60 day review period
- Week of November 15: Advisory Committee Meeting #6 - Receive Comments
- Week of December 6: Public Meeting #4 - Final Plan
- Present Final Plan to County Commissioners

PLAYERS

- Adams County
- Gettysburg Borough
- Cumberland Township
- Straban Township
- National Park Service
- Gettysburg Area School District
- PennDOT
- Gettysburg College
- Pennsylvania Historic and Museum Commission
- Residents
- Abutting Property Owners
- Advisory Committee
- Simone Jaffe Collins, Inc.

FACTS

- 1995 Adams County evaluation of potential pedestrian and bicycle connections
- "Resource Overlay" MAPS (GIS)
- Rock Creek Floodplain
- Gettysburg National Historic Park
- Gettysburg College
- Gettysburg High School site

SIMONE JAFFE COLLINS 555855SERVERV5JCCDC198077
N GETTYSBURG PA 17530

511 OLD LANCASTER AVENUE BERWYN, PENNSYLVANIA 19312
(610) 889 0348 FAX (610) 889 7521 EMAIL SJCCDC@COC

- Gettysburg College Master Plan
- Chamber of Commerce Meets 2nd Wednesday of each month
- Cumberland Township Recreation Plan

CONCEPTS

- Creation of a Loop Trail
- Gettysburg Borough to High School Site a High Priority
- Link Cumberland and Straban Townships to the "Main Loop"
- High School Site to Table Rock Road Neighborhoods a priority
- Provide Direct Neighborhood Access
- Minimize Security Concerns
- Integrate Trail with National Park Service Lands
- Utilize Existing and Proposed Transportation Infrastructure
- Citizen Survey
- Determine Demand for the Trail
- Future Connections
- "Legal Feasibility" ?
- Determine Alternatives
- Determine Priorities
- Maintenance Responsibility
- Cost Estimates
- Lower Speed Limits
- Hunters Crossing and Twin Oaks Developments Disconnected
- Funding Strategies
- Don't Include Broadway
- Prison and Ag. Center Inclusion
- Demographics
- Connect to Rural Roads
- Roller Blading?
- Widen Roads?
- Equestrian Farm and Trails
- Horse Use Permitted on some NPS Trails in Gettysburg Park
- Avoid Heavily Wooded Areas?
- Student Safety on Trails
- All Students Provided Bus Service
- Pedestrian Safety Crossing Bridges and Along Roads
- Interim Safety Measures
- Utilize Existing NPS Road ROWs in Gettysburg Park
- Trails as Close to NPS Roads as Possible
- County Bond Issue to Pay for Trail
- New Ag. Services Center Building Planned
- Security/Safety Along Old Harrisburg Road

J. Appendix



United States Department of the Interior
NATIONAL PARK SERVICE

GETTYSBURG NATIONAL MILITARY PARK
GETTYSBURG, PENNSYLVANIA 17325

EISENHOWER NATIONAL HISTORIC SITE
GETTYSBURG, PENNSYLVANIA 17325

IN REPLY REFER TO:

A38
X-L3027

August 27, 1999

Mr. Richard Schmoey
Adams County
Office of Planning & Development
111 Baltimore Street
Gettysburg, Pennsylvania 17325

Dear Dick,

Gettysburg National Military Park (GNMP) staff have attended each meeting on the proposed pedestrian trail in Adams County and have helped develop the trail to its current proposed configuration. Although the current proposal is still in its preliminary stages, it is felt that NPS participation can be most useful to the process at this point by drafting a proposal for the trail as it passes through the park and links with other portions of the trail. Therefore, this letter serves to forward to your office the GNMP's proposed pedestrian trail (enclosure 1) as it passes through the park. The following assumptions are part of this proposal: (1) the portion of trail that is on park roads will be on existing pavement, (2) portions of the trail involving PennDot or railroad lands is on their right-of-way, and (3) the only newly developed area within the park would be the trail along the North side of Rock Creek.

Since all development occurring within GNMP must conform to Federal Environmental and Preservation Laws, this plan has been drafted to have a minimal impact on cultural and natural resources within the park. It is our feeling that use of this proposed plan will improve the likelihood of success for the entire trail, make it less controversial, and speedup its implementation, especially in the crucial area around Old Harrisburg Road.

RECEIVED AUG 30 1999

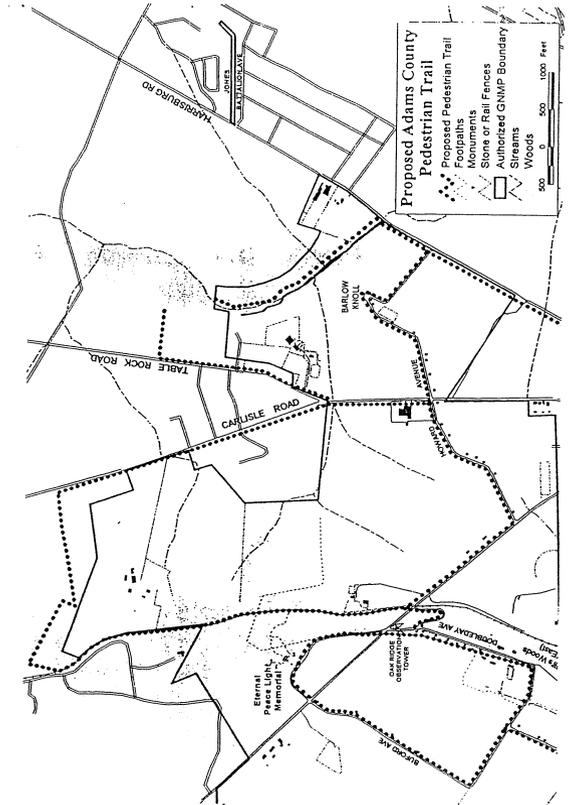
Thank you for including park staff in the development of this trail. We look forward to completing the project with you and the other partners. If you have any questions, please contact John McKenna at 717-334-1124, ext. 400.

Sincerely,


John P. McKenna
Assistant Superintendent

cc: Mr. Peter Simone, Simone Jaffe Collins, 511 Old Lancaster Avenue, Berwyn, Pennsylvania 19312

2



J. Appendix



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

September 1, 1999

John P. McKenna
Assistant Superintendent
Gettysburg National Military Park
97 Taneytown Road
Gettysburg, PA 17325

Re: North Gettysburg Area Trail Feasibility Study
SJC # 98077

Dear John:

We are in receipt of your letter addressed to Richard Schmoyer dated August 27, 1999. We appreciate the input from the Gettysburg National Military Park (GNMP) staff and have the following reply.

The portion of trails that are on park roads will be on existing pavement, as stated in your letter. Portions on PennDOT roads will follow fall within the road right-of-way.

The proposed trail alignments outlined on the map (enclosure 1 of your letter) agree with the alignments we are proposing with the following exceptions. Please refer to the enclosed maps for reference.

*to 1/2 mi from
edge of road*

1. The portion of trail following alongside the north-south rail road line is meant to follow the historic 1963 lane route through NPS lands, not the railroad right-of-way. There is not adequate width available on the rail road right-of-way to allow shared use with the trail—the raised alignment on fill precludes shared use due to the narrow usable width on top and steep side-slopes. We are proposing this alignment along the historic lane as a pedestrian-only route.
2. Using the same rationale, we are suggesting a segment along other historic lanes running east-west from Old Harrisburg Pike through the county site, crossing Carlisle Street and Howard Avenue, and concluding at the historic lane route detailed above. This would be pedestrian only.
3. We are also suggesting a segment along a short historic lane running south from Mummasberg Road to tie into the Gettysburg College trail. This would be pedestrian only.
4. We are proposing a short section of trail along the Jones Battalion Avenue. Additionally, we would like to access this avenue from both the neighboring Lutheran community and Hoke Drive by providing a trail cross-connection linking into the avenue. This will provide a connection between the Twin Oaks and Hunters Crossing housing developments and the high school via Jones Battalion Avenue.
5. A proposed off-road trail is proposed along the west side of Old Harrisburg Pike from the proposed County Ag. Center to the junction with the trail running along the north side of Rock Creek. This route is proposed to be approximately 40-

*to 1/2 mi from
edge of road*

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feet off the edge of cartway running through parkland. This is an important route to help provide an off-road connection between the Borough of Gettysburg and the high school for school students.

We sincerely hope the GNMP staff finds the above acceptable. We understand that the Draft Management Plan supports reinstating the historic lanes for pedestrian use. We foresee these segments remaining under the park's ownership and operation as part of the park. As you will see in the enclosed highlighted sections of the draft report, providing this access to the public is important not only for providing safer pedestrian connections within the study area, but also to encourage visitation/revision of this historic ground either intentionally or as a by-product.

We have enclosed portions of the draft narrative, which pertain to the GNMP, and request that you review and comment as necessary.

As you may know, the draft plan will be presented to the public on Wednesday, September 22nd. We will need to have the draft plan wrapped up by the previous Wednesday (September 15) in order to allow sufficient time for the printing of the reports. Therefore, time is limited. We look forward to hearing your reply soon.

Thank you in advance for your continued input and assistance.

Sincerely,
SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

Mark T. Smith
Encl.: Trail Overview Map
Trail Priorities Map
Pages A-3, C-3, C-6, E-1, and D-7 from draft report

Cc: Richard Schmoyer, ACOPD w/o enclosures



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

July 2, 1999

Russell Jones
Sun Pipe Line Company
1801 Market Street
Philadelphia, PA 19103-1699

Re: North Gettysburg Area Trail Feasibility Study
SJC # 98077

Dear Russell:

Adams County has retained our firm to determine the feasibility of developing a trail system in the communities immediately north of Gettysburg borough. During our analysis, we consider all possible linkages. I believe Sun Pipe Line has an alignment which transects our study area.

As per our telephone conversation on July 29th, I am writing to request a copy of general recommendations and specifications for proposed trails and walking paths within a Sun Pipe Line right of way. I am also requesting an accurate map showing the pipe line alignment between Old Harrisburg Road running east to Hunterstown Road. We want to identify the properties, which the right of way transects. Again, I would like to thank you for the information you have provided so far. I am enclosing a map highlighting the Sun Pipe Line alignment that lies within the study boundary.

Please contact me with any questions.

Thank you in advance for your assistance.

Sincerely,
Simone Jaffe Collins
Landscape Architecture

Thomas J. Johnston

SIMONE JAFFE COLLINS 115831PVER131C00118077
511 OLD LANCASTER AVENUE BERWYN, PENNSYLVANIA 19312
(610) 889 0348 FAX (610) 889 7521 EMAIL SJCA@CDC.COM

J. Appendix



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

August 4, 1999

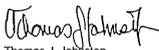
Attn: Jeanne
Columbia Gas Transmission Corporation
4741 Biesecker Road
Thomasville, PA 17364

Re: North Gettysburg Area Trail Feasibility Study
SJC # 98077

Dear Jeanne:

As per our telephone conversation on August 4, 1999, I understand that Columbia Gas Transmission Corporation (CGTC) will not approve any shared use of their pipeline right of way for walking trails or bike paths. CGTC permits trails that cross pipelines at or as near 90° as practical, but not less than 45°. I have received the minimum guidelines for construction activities and will reference it as necessary. Again, I would like to thank you for the information you have provided. If I have misinterpreted any of the above information, please contact me at your earliest convenience.

Sincerely,
Simone Jaffe Collins
Landscape Architecture


Thomas J. Johnston

SIMONE JAFFE COLLINS # 198077-001519010111-0001COLUMBIA.GAS
511 OLD LANCASTER AVENUE BERWYN, PENNSYLVANIA 19312
16101889 0348 FAX 16101889 7521 EMAIL=SJC@JCDC.COM

04: 99 (WED) 08:34

THOMASVILLE PA

TEL: 717 292 3176

P. 002

98077
8-4-99

Phone Conversation Columbia Gas Transmission Corp.
Spoke with Genie

1000psi high-pressure line carrying natural gas.

Size of pipe varies. Columbia Gas has numerous alignments throughout the county.

Columbia Gas Supplies (CGS) natural gas to the East Coast and New York. CGS does not own the gas, they transport it only.

The pipeline which transects North Gettysburg runs to Waynesberg, PA then picks up again in Ohio.

Genie will be faxing a copy of general guidelines.

Columbia Gas Transmission does not permit trails or bike paths to be constructed along the easement.

If a trail or bike path must cross the alignment, it is preferred that it crosses at a 90-degree angle.

Genie is unaware of depth, said that it varies along alignment.

Fax attached.

Genie.
Phone - 717-292-5602
cell - 717-870-7161

COLUMBIA GAS TRANSMISSION CORPORATION MINIMUM GUIDELINES FOR CONSTRUCTION ACTIVITIES ON PIPELINE RIGHTS OF WAY AND IN THE VICINITY OF GAS FACILITIES

GENERAL

These Guidelines are intended to preserve the integrity of Columbia's facilities and to insure the safety of the general public. Columbia wants to cooperate as much as possible in the utilization of property in the vicinity of its facilities. However, Columbia cannot allow its facilities and attendant property rights to be compromised. In an effort to minimize conflicts and delays, property owners or developers should involve Columbia in the design phase of their project and receive prior approval of their plans before obtaining zoning permits, etc., and committing to construction schedules.

CONSTRUCTION

No construction or excavation activities of any kind, including blasting, are to be done on Columbia's easement area before Columbia personnel have researched the actual location of all affected facilities and the levels of the easements. Columbia personnel must be present during any approved construction or excavation activities.

1.) Blasting

Columbia must be notified at least two working days prior to commencement of any construction in the vicinity of Columbia's facilities. This notification can be made directly to the appropriate local Columbia office, however, the one call system should be used in all cases. When requested, Columbia will, at no charge, locate and mark all affected facilities.

2.) Excavation in Vicinity of Pipelines

a.) No excavation with powered machinery shall be made on the pipeline right of way without prior notification to Columbia's local operations office.
b.) Excavations that are done above, below or within three feet of either side of the pipeline shall be hand dug.

3.) Crossing Pipelines With Heavy Equipment

During construction, to adequately protect Columbia's pipelines from damage which could be caused by the crossing of heavy equipment, mats, old pads or barriers must be removed after construction unless otherwise directed by Columbia personnel.

4.) Blasting

Any blasting proposed within 300 feet of Columbia's facilities must have prior written consent. Consent may be requested by submitting a blasting plan for evaluation by Columbia's Engineering personnel. Any required modifications to the blasting plan will be specified in writing. If requested, the blasting contractor will monitor and record the seismic shock at the facilities.

OPERATING AREA OF STORAGE WELLS

To ensure the integrity of Columbia's natural gas storage fields, an operating area comprised of a 300 foot radius circle around each active well must be maintained clear of any constructions.

RIGHT-OF-WAY

To maintain unobstructed rights of way to permit Columbia to adequately operate its pipelines, the minimum standards listed below are to be used as guidelines; review of your plans and Columbia's property rights may reveal more specific requirements.

1.) The existing cover over pipelines, which is normally 36 inches, shall be maintained. The minimum earth cover over pipelines at all street and road crossings, including the adjacent ditch line, shall be 36 inches and 60 inches minimum cover at stream and river crossings.

2.) Above ground or below ground structures or obstructions of any type shall not be placed within the easement area of any pipeline, which is generally 25 feet each side of the pipeline. In some instances, the right of way may be less than 50 feet wide, or the right of way may not be centered on the pipeline.

3.) Pipeline easements will not be altered unilaterally with other utilities. All water valves, curb boxes, manholes, etc., must be outside the easement. Other Columbia's pipelines unless prior written consent is obtained due to sound engineering requirements. Cable or wire utilities must be in conduit the full width of Columbia's right of way. All crossings must be approved by Columbia prior to commencement of installation.

4.) Streets that cross pipelines at or as near 90° as practical, but not less than 45°. If any protective measures are required for the pipeline to accommodate the street, the design and approval for the measure will be provided by Columbia's Engineering. The cost of installing protection for Columbia's facilities will be paid for by the entity constructing the street.

5.) Paved areas, such as parking lots must be designed to leave grass medians over the full width of Columbia's easement areas.

6.) Septic tanks and leach fields should be placed so they will drain away from the pipelines where practical but in no case shall they be placed on the right of way outlined above.

7.) The right of way may be planted in lawn and small shrubs (less than 5 feet tall at maturity) or may be used for normal agricultural purposes. However, shrubs are not allowed within five (5) feet each side of the pipeline. The planting of trees shall be done where the right of way is available.

NOTE: These guidelines supersede any and all prior guidelines and/or directives pertaining to activities and placements on or near Columbia Gas Transmission facilities. Existence of or the ramifications from the implementation of prior guidelines will not dictate, direct or provide for exemption of any of the above guidelines.

EV 52756

08/04/99 08:41

TX/RX NO. 2230

P. 002



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

June 10, 1999

Mark A. Malhenzie
Consultant Liaison Engineer
Engineering District 8-0
Pennsylvania Department of Transportation
2140 Herr Street
Harrisburg, PA 17103-1699

Re: North Gettysburg Area Trail Feasibility Study
SJC # 98077

Dear Mr. Malhenzie:

Adams County has retained our firm to determine the feasibility of developing a trail in the communities immediately north of Gettysburg borough. You may recall speaking with me in April about proposed improvements to the Old Harrisburg Road Bridge over Rock Creek, as this will have an impact on the future trail system.

I will be passing through the Harrisburg area on the morning of Wednesday, June 23 and hope that you will be available to meet with me and another member of our firm, Bill Collins, briefly to discuss the trail study and potential future PennDOT involvement. We anticipate some on-road portions of trail and feel it prudent to discuss this and other relevant information, including the twelve-year plan, at this time.

Additionally, the County and community have voiced concern over the safety of school children walking from the borough of Gettysburg to the high school along Old Harrisburg Road. The provision of this safe connection is one of our ultimate trail goals. To prevent the entire trail study from delaying this important connection any longer, it was suggested that this pedestrian connection be developed now. As the first step to bringing this to fruition, I would also like to discuss this idea with you on the 23rd.

We also wonder whether you can provide us with the following information to help guide us in the trail plan: (1) right of way widths for PennDOT roads highlighted on the enclosed map, (2) the twelve-year plan, and (3) traffic counts for any roads within our study area, highlighted on the enclosed map. If you could forward this information at this time, or provide during our requested meeting, we would be greatly appreciative.

I sincerely hope you will be able to meet with us on Wednesday, June 23 at 11:00 AM. Please contact me to discuss the contents of this letter and let me know whether you would be available for a meeting. Thank you.

Sincerely,
Simone Jaffe Collins
Landscape Architecture

Peter M. Simone, RLA, ASLA
Cc: Mr. Robert Thaeler, Adams County Planning Commission

511 OLD LANCASTER AVENUE BERWYN, PENNSYLVANIA 19312
[610] 889 0348 FAX [610] 889 7521 EMAIL+SJC@ICDC.COM



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

FIELD NOTES

DATE: Mtg. 6/23 PROJECT NAME / No.: North Gettysburg Trail / 98077
RE: Meeting with PennDOT District 8-0 liaison Mark Malhenzie
 2140 Herr Street, Harrisburg, PA 17103-1699
 Voice 717 783 5080 Fax 717 783 4788
ATTENTION: SJC staff / Dick Schmoyer / Rob Thaeler (Adams Co. Planning)

Bill Collins and I met with Mark A. Malhenzie, Consultant Liaison Engineer for District 8-0 on June 23 to discuss the Gettysburg Trail study in general and the speedy implementation of the trail section from Gettysburg High School to the Borough in particular.

We discussed two existing programs under which PennDOT may be able to be of assistance in implementing this section of trail.

PennDOT's "Betterment" program is basically shoulder improvements along PennDOT ROW's. Shoulder improvements are a viable option to implement the trail along the entire length of SR 301 (Old Harrisburg Road and Lincoln Ave), depending on the advantages or disadvantages of on off-road (parallel to SR 301) on National Park Service lands.

There is certainly room for an off-road trail along the County-owned land (proposed AG Center). Shoulder improvements may again be needed at the corner of Lincoln Ave and Broadway.

Here, it would be safest to bring the trail onto Broadway, which is wide, residential and offers the safest route into town.

Brian Sanders is the Bike/Ped Coordinator for District 8-0. We should contact him regarding the overall trail.

Terry Adams and the program engineer regarding roadway improvements on the twelve-year plan in the district.

Dave Minor is the district Enhancements Director (TEA-21)

Another PennDOT program that may help with implementation with section of the trail is called the "Agility" program. This is basically an exchange of services between PennDOT's maintenance program and the local municipality, NPS or County. For example, the local municipality could mow the PennDOT ROW in exchange for PennDOT drainage improvements, etc.

PREPARED BY:

SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE
Peter Simone

511 OLD LANCASTER AVENUE BERWYN, PA 19312 [610] 889 0348
FAX [610] 889 7521 EMAIL+SJC@ICDC.COM



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

July 12, 1999

Mr. Robert Thaeler
Senior Community Planner
Adams County Office of Planning and Development
Adams County Courthouse
111-117 Baltimore Street
Gettysburg, PA 17325

Re: North Gettysburg Trail Feasibility Study
SJC # 98077

Dear Rob:

Following our meeting with PennDOT District 8-0 Liaison Mark Malhenzie and based upon our initial trail route recommendations, we are proposing the following concerning a speedy implementation of a bicycle and pedestrian route between Gettysburg High School and the Borough.

There are two priorities for the trail from the high school property to the corner of Lincoln Avenue and Broadway.

Priority #1 is the development of an "on-road" bike route, on the road shoulders, within the existing PennDOT right-of-way. This would require improvement (paving) of the shoulders as well as drainage improvements along both sides of the 5250 linear feet of roadway. A grass swale in the right-of-way, directly adjacent the carway, currently carries road run-off. An improvement on both north and southbound shoulders conforms to PennDOT's bike lanes on the new bridge over Rock Creek. When the bike route reaches the corner of Broadway, we suggest that the bike route continues on this wide street via an on-road bike lane or "share the road" signage to Carlisle Street. Pedestrian traffic could use Broadway's existing sidewalks.

Priority #2 is the construction of an off-road trail, parallel and close to the Lincoln Avenue right-of-way. This off road trail would run from Broadway (at the county property) to the Rock Creek Bridge. This off-road segment would then cross the creek (via an additional pedestrian bridge) and continue along the creek and floodplain to the high school site and beyond. This would require the cooperation of the National Park Service, assuming portions of the off-road trail would be on NPS land. While we can see no apparent downside for the National Park Service to grant an easement or otherwise allow the construction of an off-road trail on their property, NPS approval must be obtained.

SIMONE JAFFE COLLINS # 98077
N. GETTYSBURG CORRIDOR AND CENTER STREET SCHOOL TO BOROUGHS
LEGUMENT DOT

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J. Appendix

When the off-road trail reaches the county property, at the proposed AG School, we assume that there would be no obstacles for the county to approve this section of off-road trail.

The on-road route should be implemented first, as the beginning of a larger, on-road bike route (continuing north). A TEA-21 application for funding can be pursued for the off-road trail that is directed toward use by students.

The second round of TEA-21 applications will be due in October of this year. We believe that if the National Park Service can be recruited as an active partner for the trail, a TEA-21 Enhancements application would have an excellent chance of being funded. A complimentary adjunct to this application would be for the construction of a linkage to the Twin Oaks Community through the use of the NPS Jones Battalion lane (basically off-road) with a signed crossing of Old Harrisburg Pike to the school. The connection to the Jones Battalion Lane to the community would require the acquisition of a strip of private property at the north end of Artillery Drive.

There are two obstacles to a successful TEA-21 application (assuming enthusiastic support from all partners).

First, these transportation improvements must be placed on the County's Enhancements TIP (Transportation Improvements Plan). This can be easily accomplished by the County (MPO) amending the TIP to include this project. Secondly, the TEA-21 application's chance of success will be greatly enhanced if the off-road design and engineering begins immediately. Then, when the application is submitted in October, it can be stated that engineering will be completed at the time of the TEA-21 awards in Spring 2000. This will require local funding of design and engineering. The County (or grant applicant) can obtain a letter of "no-prejudice" from PennDOT so that the cost of engineering (before the grant awards are determined) can be used as a part of the required 20% match to TEA-21 funds.

Therefore, we are recommending that the following occur:

On-road bike route / shoulder improvements

1. Forward letters from Staban and Cumberland Townships, Gettysburg Borough, Adams County and NPS supporting the idea of an on-road bike route (shoulder improvements) to Brian Sanders, Bike/Ped Coordinator for District 8-0. Copy Program Engineer Terry Adams, Liaison Mark Malhenzie and the District Maintenance Director.
2. Recruit local legislator support for these improvements.
3. Follow through with meetings with District 8-0.

Off-road Trail

1. Amend TIP to include trail
2. Meet with PennDOT District Enhancements Director to review project, request for a letter of "non-prejudice" and possibly request that a PennDOT project manager be assigned to the project. (to work with design consultant to ensure that PennDOT requirements are met).

3. Obtain survey for off-road alignment (some areas may be available from PennDOT, High School and NPS)
4. Contract with trail design firm to design and engineer trail improvements.
5. Complete TEA-21 enhancements application (Due in October 1999 – we suggest beginning the application ASAP). Possibly retain consultant to prepare application.
6. Notify PennDOT Statewide Pedestrian/Bicycle Coordinator about the project (SJC will do this for Adams County)
7. Attempt to obtain Phase II Bike / Pedestrian planning assistance from current PennDOT Bike / Pedestrian Implementation project.

The early implementation of the high school to borough bike route is a great way to create interest in the overall trail system.

Please advise if you have any questions regarding our recommendations. We should discuss them before Wednesday's meeting so that we agree on what aspects of this section of trail should be discussed at the meeting.

Sincerely,

Simone Jaffe Collins
Landscape Architecture



Peter M. Simone, ASLA
Vice President



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

FAX TRANSMITTAL

DATE:	7/20/99	TIME:	9:15 AM
TO:	Rob Thaefer, Adams Co. Planning	FAX No.:	717 354 2091
RE:	N. Gettysburg Trail Study	PROJECT No.:	98077
FROM:	Pete Simone		

We are sending 1 pages including this cover sheet. If you do not receive all the pages, please call (610) 889-0348. Our FAX number is (610) 889-7521.

COMMENTS: Dear Rob:

Attached is our suggested letter to be submitted by the County Commissioners to PennDOT District 8-0 requesting a meeting to review the project.

I believe it is critical that the Commissioners sign the letter. I also believe that it is critical that you copy your State Senators and State Representatives.

You should also copy ALL of the project partners CC'd on the letter to get their OK before you send the letter.

Please call me with any questions. I have also sent you a copy of this letter via email.

COPY:

511 OLD LANCASTER AVENUE BERWYN, PA 19312 (610) 889 0348
FAX (610) 889 7521 EMAIL SJCA@ICDC.COM

J. Appendix



Office of the Adams County Commissioners

111-117 Baltimore St., Gettysburg, PA 17325 • (717) 337-9820 • FAX (717) 334-2091
Commissioners: Thomas J. Weaver, Harry C. Stokes, Thomas L. Collins
Chief Clerk: Brenda J. Constable
Solicitor: John R. White

August 18, 1999

RECEIVED AUG 23 1999

Mr. Barry Hoffman, P.E.
District Engineer
Pennsylvania Department of Transportation
District 8-0
2140 Herr Street
Harrisburg, Pennsylvania 17103-1699

Re: North Gettysburg Area Trail Feasibility Study
Old Harrisburg Road Pedestrian Concern – Public Safety Issue

Dear Mr. Hoffman,

For the past four months, Adams County, through our Office of Planning and Development, has been engaged in a comprehensive Trail Feasibility Study for the northern part of Gettysburg Borough, the western Section of Straban Township, the eastern section of Cumberland Township and portions of Gettysburg National Military Park and Gettysburg College. Working with our trail study committee, area residents, and consultants, we have identified critical safety and planning / funding issues. We would like to arrange a meeting with appropriate PennDOT staff as soon as possible to discuss the following critical issues:

1. Lack of a Safe Pedestrian and Bicycle Connection - Borough to High School

The community has voiced much concern about the present lack of a safe pedestrian or bike connection between the Borough and Gettysburg Area High School, located approximately one mile north of the Borough on Old Harrisburg Road (L.R. 3001). Establishing a safe Pedestrian / Bike connection along this route is the number one priority in the present study.

Old Harrisburg Road has a fifty-foot right-of-way and one vehicular travel lane in each direction. There are limited and sometimes non-existent shoulders. Along some sections of roadway, grass drainage swales convey water away from the road. Approximately 1/8th mile south of the High School, the existing Old Harrisburg Road bridge over Rock Creek is being rebuilt by PennDOT. The new bridge will include northbound and southbound improved shoulders and a five-foot wide walkway on the western (High School) side of the bridge. We

commend District 8-0 for including Bike / Pedestrian facilities as part of the new bridge. However, without an extension of pedestrian and bicycle facilities from the replacement bridge along Old Harrisburg Road, there will be a continuing public safety concern due to the use of Old Harrisburg Road for pedestrian and bicycle trips. We anticipate that this public safety concern will only increase as more and more school children and community residents use the Old Harrisburg Road right-of-way for pedestrian and bicycle trips.

In an effort to address the safety concerns raised by our Office, Borough and Township officials, and area citizens, we request that PennDOT improve the shoulders along L.R. 3001 from the Borough to the High School to conform to the shoulder improvements presently being undertaken on the new bridge. We look forward to being able to work jointly with PennDOT staff to achieve this objective. We suggest that these improvements be undertaken through PennDOT's Betterment Program. We may also be interested in participating in PennDOT's Agility Program toward implementing these improvements.

2. TEA-21 Enhancement—Fall 1999 Funding Cycle

Adams County, in cooperation with Gettysburg Borough, Straban Township, Cumberland Township, the National Park Service and Gettysburg College, may submit a portion of the Gettysburg Trail plan for funding under the TEA-21 Enhancements Program due this Fall. The trail, and subsequent Enhancement Program application, will likely include both on-road and off-road trail segments. The Adams County Rural Transportation Study Area (ACRTSA) constitutes the TEA-21 transportation planning entity for the Adams County area. A successful Enhancement Program application would automatically add the trail plan to the Transportation Improvement Plan for ACRTSA for the Fiscal Year 2000-2001.

Adams County, working jointly with Gettysburg Borough, Straban Township, Cumberland Township, the National Park Service, Gettysburg College, and others, may also prepare engineering plans for the segments of the trail to be included in the TEA-21 Enhancements Program application. We would like the engineering costs to be counted toward the required 20% non-federal match for TEA-21 Enhancements Program funding. Our understanding is that, in order to undertake engineering and be able to count these costs against the 20% match (at our risk), we require a letter of "no-prejudice" from District 8-0. We would like to receive that determination. We would also like to review the overall project with your office so that your staff is familiar with the project and ask for your assistance in advancing it. Finally, we respectfully request a (PennDOT) project manager be assigned to our project.

As indicated above, we would appreciate the opportunity to discuss our short-term public safety issues and longer term trail development plans with appropriate PennDOT staff. We understand that the Betterment Program is

coordinated through District Maintenance and that Enhancements is through your Enhancements Coordinator. We suggest the following persons be included in the meeting.

- Terry Adams, District Program Manager
- Dave Minor, Enhancements Director
- Brian Sanders, Bike / Pedestrian Coordinator
- Ed Kazlauskas, Assistant District Engineer (head of maintenance)
- Mark Malhenzie, Consultant Liaison Engineer

We believe that a meeting in Gettysburg would be ideal so that we may visit the project area if the course of our discussions warrant. However, we understand that arranging a meeting date and location where all of the above mentioned PennDOT staff are able to attend may be difficult. Thus, we are certainly willing to meet at your offices in Harrisburg if necessary.

Thank you in advance for your attention to this critical issue. You may contact Richard Schmoeyer, Director of Planning and Development, at (717) 337-9824 to discuss meeting arrangements. Our Office of Planning and Development staff will assist you in any means possible to schedule these important discussions.

ADAMS COUNTY COMMISSIONERS

Thomas Weaver, Chairman

Harry Stokes, Vice Chairman

Thomas Collins

Cc: Hon. Sen. Terry Punt, 33rd District
Hon. Rep. Steven Mailand, 93rd District
Roy Thomas, Chairman, Board of Supervisors, Straban Township
George Weikert, Chairman, Board of Supervisors, Cumberland Township
John Eline, President, Gettysburg Borough Council
Peter Simone, Simone Jaffe Collins, Inc.
Richard Schmoeyer, Adams County, Office of Planning and Development
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J. Appendix



SIMONE JAFFE COLLINS
LANDSCAPE ARCHITECTURE

July 2, 1999

Fred Minard
Historical Roadway Information Desk
Engineering District 8-0
Pennsylvania Department of Transportation
2140 Herr Street
Harrisburg, PA 17103-1699

Re: North Gettysburg Area Trail Feasibility Study
SJC # 98077

Dear Mr. Minard:

Adams County has retained our firm to determine the feasibility of developing a trail in the communities immediately north of Gettysburg borough. Our firm has been in contact with Mark Malhenzie regarding potential PennDOT involvement.

Mr. Malhenzie provided us with your name and told us that we may obtain information from you. We are requesting that you send us the following information as soon as possible to help guide us in the trail plan: (1) right of way widths for PennDOT roads highlighted on the enclosed map and (2) traffic counts for these roads within our study area, highlighted on the enclosed map.

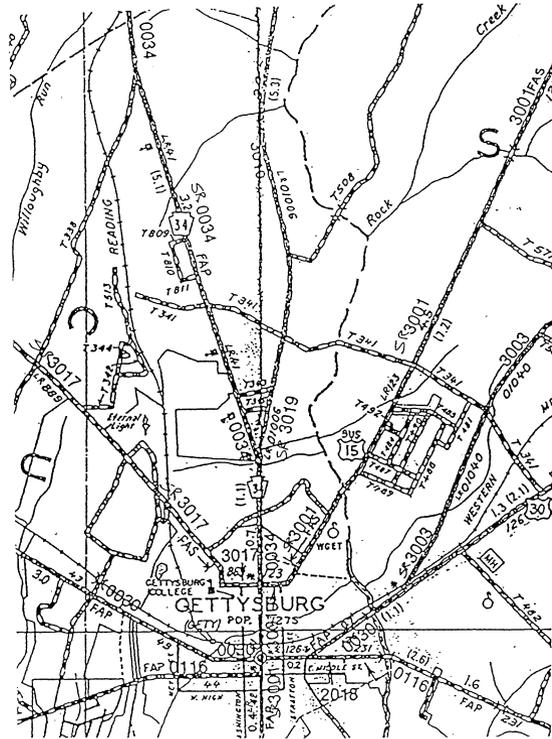
Please contact me with any questions.

Thank you in advance for your assistance.

Sincerely,
Simone Jaffe Collins
Landscape Architecture

Mark T. Smith

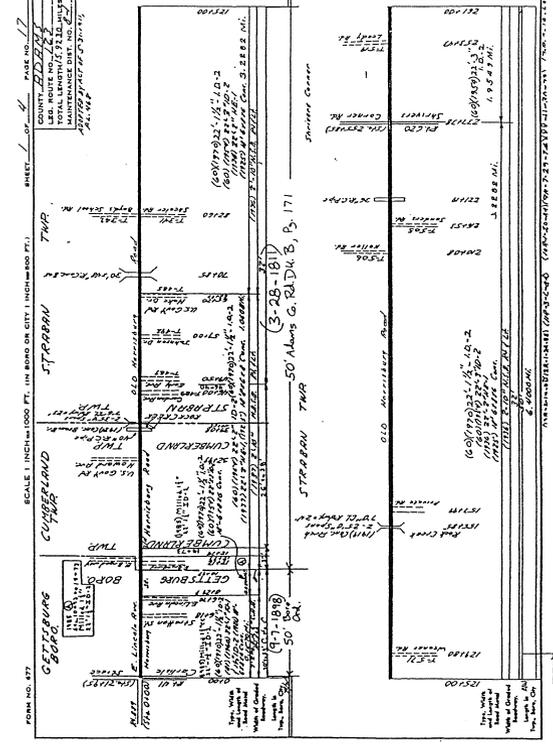
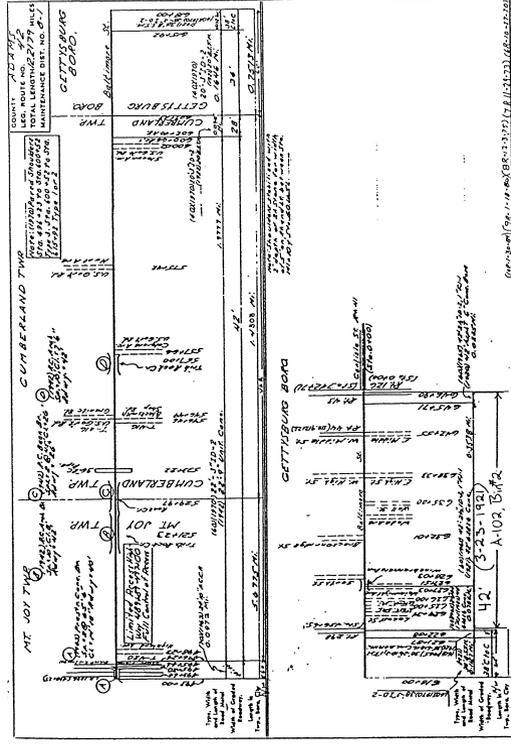
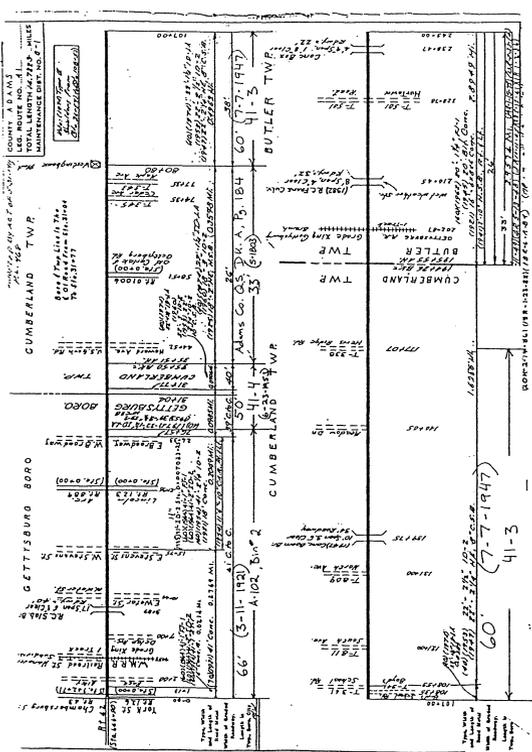
Mark T. Smith
Cc: Mr. Robert Thaeler, Adams County Planning Commission



S.R. 0034	L.R. 41	Stations: 0+00 to 177+07	Page 1
S.R. 3001	L.R. 42	Stations: 622+88 to 646+90	Page 8
S.R. 3001	L.R. 123	Stations: 0+00 to 129+80	Page 17
S.R. 3017	L.R. 889	Stations: 0+00 to 96+59	Page 50
S.R. 3019	L.R. 01006	Stations: 0+00 to 62+00	Page 79
S.R. 3003	L.R. 01040	Stations: 0+00 to 59+26	Page 124

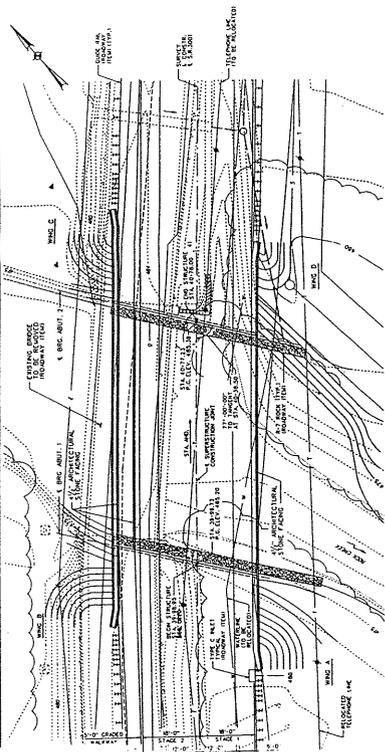
SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE
511 OLD LANCASTER AVENUE BERWYN, PENNSYLVANIA 19312
(610) 889-0348 FAX (610) 889-7521 EMAIL: SJ@CJLDC.COM

J. Appendix



J. Appendix

OLD HARLISBURG PIKE BRIDGE OVER ROCK CREEK



INDEX OF DRAWINGS	
SHEET NO.	DESCRIPTION
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2	GENERAL PLAN AND ELEVATION
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4	SECTION 009
5	SECTION 010
6	SECTION 011
7	SECTION 012
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93	SECTION 098
94	SECTION 099
95	SECTION 100

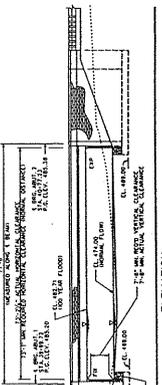
CLASSIFICATION OF MATERIALS FOR STRUCTURES	
CLASSIFICATION	DESCRIPTION
1	CONCRETE
2	STEEL
3	WOOD
4	ASPHALT
5	GRAVEL
6	SAND
7	CLAY
8	ROCK
9	SOIL
10	WATER
11	AIR
12	ICE
13	SNOW
14	VEGETATION
15	ANIMALS
16	PLANTS
17	MINERALS
18	FOSSILS
19	ARTIFACTS
20	STRUCTURES
21	UTILITIES
22	ROADS
23	RAILROADS
24	WATERWAYS
25	AIRWAYS
26	SEWERAGE
27	WASTE
28	LANDFILL
29	WATER TREATMENT
30	INDUSTRIAL
31	AGRICULTURE
32	RECREATION
33	RELIGION
34	EDUCATION
35	GOVERNMENT
36	RESIDENTIAL
37	COMMERCIAL
38	INDUSTRIAL
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41	RELIGION
42	EDUCATION
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94	INDUSTRIAL
95	AGRICULTURE
96	RECREATION
97	RELIGION
98	EDUCATION
99	GOVERNMENT
100	RESIDENTIAL

NOTES:

- 1. FOR CHECK, SEE SHEET 1, SHEET 2.
- 2. FOR FINISH, SEE SHEET 1, SHEET 2.
- 3. SEE SHEET 1, FOR FINISH, SEE SHEET 1.
- 4. SEE SHEET 1, FOR FINISH, SEE SHEET 1.

SUPPLEMENTAL DRAWINGS	
NO.	DESCRIPTION
1	GENERAL NOTES
2	GENERAL PLAN AND ELEVATION
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95	SECTION 100

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION, 1997 EDITION, AS AMENDED.



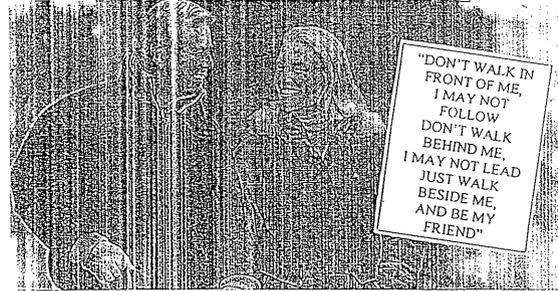
ELEVATION

DATE: 10/1/00
SCALE: 1" = 10'

S.R. 3000 PREVIOUSLY KNOWN AS L.R. 123
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
S.R. 3001 SECTION 008
S.R. 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3045, 3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3077, 3078, 3079, 3080, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3092, 3093, 3094, 3095, 3096, 3097, 3098, 3099, 3100, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3157, 3158, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 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INCOMPLETE 1 - DRAFT

... like to walk ?
 ... need to walk ?
 ... like to be with nice people ?
 ... then come and walk with us



THE GETTYSBURG WALKING CLUB

Founded in 1970

no dues ... no fees ... no locked-in attendance requirements !

WHERE THE GETTYSBURG WALKING CLUB GOES ...

MALL & MALL AREA WALKS

- (01) North Hanover Mall & surrounding area
- (72) Cumberland Mall

MISCELLANEOUS AREAS

- (23) Sun's Lake
- (24) Sun's Lake
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here's more

DOWNTOWN HISTORICAL AREA WALKS

- (23) Gettysburg & Gettysburg College
- (24) Park
- (25) New Oxford
- (26) Hanover
- (27) Alexandria

... COME AND WALK WITH US
 ON TUESDAY MORNINGS!

GETTYSBURG NATIONAL MILITARY PARK (gettsburg-walks)

- (1) Visitor's Center, Cyclorama, and National Cemetery
- (2) Linn's Round Top
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RECREATION PARKS, TRAILS AND AREAS

- (10) Laurel Lake trails
- (11) Laurel Lake trails
- (12) Poplar-Nick trails
- (13) Cunningham Falls trails
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21 JUNE 1999

MR. ROBERT THAEER
 ADAMS COUNTY OFFICE OF PLANNING & DEVELOPMENT
 ADAMS COUNTY COURTHOUSE
 GETTYSBURG, PENNSYLVANIA 17325

DEAR MR. THAEER:

MRS JOAN MILLER OF THE GETTYSBURG WALKING CLUB HAS ASKED ME TO SEND YOU A LIST OF WHERE THE CLUB WALKS ... AND A LITTLE SOMETHING ABOUT THE CLUB.

ENCLOSED IS A VERY ROUGH DRAFT OF A NEW CLUB BROCHURE WE ARE IN THE PROCESS OF PUTTING TOGETHER WHICH MAY BE OF SOME INTEREST TO YOU REGARDING YOUR PROJECT OF "GETTYSBURG AND SURROUNDING AREAS WALKING TRAILS".

MAY I SUGGEST YOU ADD A MEMBER OF THE CLUB TO YOUR ADVISORY COMMITTEE. ANY OF THE THREE MEN BELOW HAVE EXTENSIVE EXPERIENCE OVER MANY YEARS IN WALKING IN OUR AREA ... I KNOW ANY OF THEM WOULD BE A GREAT HELP TO YOUR COMMITTEE.

- ✓ MR. JOHN WALTER 717/334-6653
- ✓ MR. TED SIRKO 717/334-1830
- ✓ MR. DAN SANDERS 717/334-4625 in 865 Frank Ave. Suite 107E

MRS JACQUALIN MARQUARDT, OUR CURRENT CLUB LEADER WILL BE HAPPY TO ANSWER ANY FURTHER QUESTIONS YOU MAY HAVE OR PUT YOU IN TOUCH WITH ONE OF OUR BEST QUALIFIED MEMBERS. HER NUMBER IS 717/642-9078.

SINCERELY,
 ORIGINAL SIGNED BY
 R. L. ELLER
 ROBERT L. ELLER (A CLUB MEMBER)

CC: PETER M. SIMONE

ROBERT L. ELLER
 50 RIDGEWOOD CIRCLE
 GETTYSBURG, PENNSYLVANIA 17334-8505, U.S.A.

TELEPHONE: 717-337-4398
 FAX: 717-337-1122
 E-MAIL: r-eller@wildopen.net

J. Appendix

NORTH GETTYSBURG AREA TRAIL FEASIBILITY STUDY

STEERING COMMITTEE MAILING LIST

1. Cindy Wright
Box 400
Gettysburg College
Gettysburg PA 17325

Representing: Gettysburg College
Phone: 337-6322
FAX:
2. Dale Biesecker
Gettysburg Area School Board
Box 8 - 290 High Street
Cashtown PA 17310

Representing: Gettysburg Area School Board
Phone: 334-1674
FAX:
3. Peggy Gustafson
429 Carlisle Street
Gettysburg PA 17325

Representing: Gettysburg Borough Council
Phone: 334-2352
FAX:
4. Kim Patrono
98 E. Broadway
Gettysburg PA 17325

Representing: Gettysburg Borough
Phone: 334-8098
FAX:

STEERING COMMITTEE MAILING LIST (Cont.)

5. Tom Shealer
1370 Fairfield Road
Gettysburg PA 17325

Representing: Cumberland Township Supervisors
Phone: 334-6485
FAX: 334-3632
6. Barry Sease, Chief
Cumberland Township Police
1370 Fairfield Road
Gettysburg PA 17325

Representing: Cumberland Township Police
Phone: 334-6485
FAX: 334-3632
7. Jill Purdy
110 Friendship Lane
Gettysburg PA 17325

Representing: Gettysburg High School Students
Phone:
FAX:
8. Tom Piper
164 Early Avenue
Gettysburg PA 17325

Representing: Straban Township
Phone: 334-4967
FAX:
9. Anthony and Susan Giuffreda
900 Old Harrisburg Road
Gettysburg PA 17325

Representing: Straban Township
Phone: 337-9629
FAX:

STEERING COMMITTEE MAILING LIST (Cont.)

10. John McKenna
National Park Service
97 Taneytown Road
Gettysburg PA 17325

Representing: National Park Service
Phone: 334-1124
FAX:
11. Joy Boden
Gettysburg Recreation Board
59 East High Street
Gettysburg PA 17325

Representing: Gettysburg Recreation Board
Phone: 334-1160
FAX:
12. John Regentin
Director of Student Development
Gettysburg College Union Building
Gettysburg PA 17325

Representing: Gettysburg College
Phone: 337-6319
FAX:
13. Andrea Crouse
Gettysburg Recreation Department
59 East High Street
Gettysburg PA 17325

Representing: Gettysburg Recreation Department
Phone: 334-2028
FAX:

J. Appendix

STEERING COMMITTEE MAILING LIST (Cont.)

14. Roberta Page
Gettysburg Area High School
1130 Old Harrisburg Road
Gettysburg PA 17325

Representing: Gettysburg Area School District
Phone: 334-6254
FAX:
15. Zachery Bair
279 Longstreet Drive
Gettysburg PA 17325

Representing: Gettysburg High School Students
Phone: 334-7640
FAX:
16. Lenna Atrand
85 Plank Road
Gettysburg PA 17325

Representing: Gettysburg High School Students
Phone: 334-0390
FAX:
17. Robert Nordvall
33 Lincoln Avenue
Gettysburg PA 17325

Representing: Citizens
Phone: 334-0742
FAX:
18. Patricia Symmes
Gettysburg Area School Board
340 Good Intent Road
Gettysburg PA 17325

Representing: Gettysburg Area School Board
Phone: 334-8475
FAX:
19. Daniel and Robin Wilson
305 Oak Lane
Gettysburg, PA 17325

Representing: Citizens
Phone: 334-5064
FAX: 334-1770
e-mail: wilson@mail.widopen.net



United States Department of the Interior NATIONAL PARK SERVICE

GETTYSBURG NATIONAL MILITARY PARK
GETTYSBURG, PENNSYLVANIA 17325

EISENHOWER NATIONAL HISTORIC SITE
GETTYSBURG, PENNSYLVANIA 17325

IN REPLY REFER TO:

D30

September 10, 1999

Mr. Richard Schmoyer
Adams County Office of
Planning & Development
111 Baltimore Street
Gettysburg, Pennsylvania 17325

Dear Dick:

This letter is in response to the Simone Jaffe Collins letter dated September 1, 1999 and subsequent discussion between Mark Smith (SJC) and John McKenna on September 7, 1999 which clarified several issues relative to the proposed trail. The purpose of this letter is to indicate our understanding of how the proposed trail will traverse National Park Service (NPS) land.

After reviewing the September 1st letter, our primary concern involved the proposed trail as it runs along Old Harrisburg Road between the new Agricultural Center and the Rock Creek Bridge. There are currently two alternatives for this area: (a) a sidewalk that would run within the current road right-of-way and involves no Park Service land; and (b) a greensway trail that would run parallel to the road but on Park Service land about 20 to 40 feet from the road. Since there is no historic precedence for a trail or road in the area of alternative (b), park staff feel that this alternative would have a severe impact on our resources. During the above referenced discussion, it was agreed that alternative (b) would not be included in the proposed trail plan due to lack of historic precedent. Since park service staff are very concerned about completing the pedestrian trail to the high school as quickly as possible, and feel the sidewalk alternative provides the most expeditious and direct route, we support that alternative.

RECEIVED SEP 13 1999

2

Park Service staff are also concerned about proposed trail development on NPS land in connection with those portions of the trail that are off-road, paragraphs 1, 2 & 3 of the referenced letter. Much research and study is needed before any historic lanes are re-established in the park. In addition, implementation of any historic lanes will occur only as park staff deems a particular area of the park as a high priority for restoration of the historic landscape. Trail development within the park, including historic lanes, would occur only within this context and after much consultation with the state. Some elements of the historic landscape may not be restored as a result of insufficient funding or lack of a high priority. At this point in time, it is unknown whether some, all or none of the historic lanes in the study area of the pedestrian trail will be restored. It is important that the public is aware of this possibility.

Thanks you for including us in you planning effort. We look forward to seeing these thoughts included in the draft pedestrian trail proposal.

Sincerely,


Dr. John A. Latschar
Superintendent

cc: Simone Jaffe Collins, 511 Old Lancaster Avenue, Berwyn, Pennsylvania 19312

J. Appendix

5. Executive Summary

(Omitted this submission)

J. Appendix

MEMORANDUM

AUG - 2 2000

Date: July 31, 2000

To: Peter Simone
Simone, Jaffe, Collins

From: Richard Schmoyer
Director of Planning and Development

Robert Thaeler
Senior Community Planner

Subject: Final Changes
North Gettysburg Area Trail Feasibility Study

As a result of our meeting on July 18, 2000, we indicated that there were several items that we were to collect for you. In this regard, please see the attached information:

- 1997 Population Estimates and Projection Work from Adams County Water Supply / Wellhead Protection Plan (draft). Please note that the projection number to use are located in the final column of the second page. These represent year 2010 projections.
- Title Page and Acknowledgements Page
- "Clean" memo regarding staff's review of submitted comments.
- Revised text for sections on Pages B-1 and C-1.

Also, with regard to the trail link along the James Gettys Elementary School property, the currently proposed link does cross NPS land. Unfortunately, NPS land follows a strip running north-south along the railroad right-of-way. The distance between the Gettysburg School District property and the NPS property is approximately 160 feet. The setting is wooded. Nevertheless, we still believe that the inclusion of this link is appropriate. Even if this link crosses NPS land, it will have exceedingly little impact on existing NPS resources, particularly since a gas transmission pipeline also transverses the same property. Please insert text in the appropriate section of the Final Plan document that indicates that we are aware that the segment will cross NPS property, and that appropriate coordination must be held before this segment could be implemented.

This should address all the issues we discussed on July 18, 2000. Please let us know if there is a need to discuss any further information.

Encl. (5)
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MEMORANDUM

AUG - 2 2000

Date: July 10, 2000

To: Peter Simone
Simone, Jaffe, Collins

From: Richard Schmoyer, AICP
Director of Planning and Development

Subject: Summary of Comments
Preparation of Final Plan Document

The Adams County Office of Planning and Development has reviewed comments received during the review of the Final Draft of the North Gettysburg Area Trail Feasibility Study document. Following a staff meeting held on June 29, 2000, staff has reached a consensus regarding each of the following discussion points. The comments have been reviewed from the following perspectives:

- ♦ Ensuring and enhancing public safety.
- ♦ Promoting connectivity between activity centers in the study area.
- ♦ Minimizing community conflict.

We have addressed all of the points made in the comments provided to us during the review period. Many of the comments are valid and must be included as we prepare the Final Plan Document. Please incorporate the following into the Final Plan Document:

1. Gettysburg College recommends that a 10 foot wide stabilized aggregate trail be shown starting at CP2, and following the railroad alignment all the way to North Washington Street. The College recommends that the surface be stabilized aggregate, and recommends against using asphalt. We concur with this recommendation. Please show this link on the Final Plan Document. We further suggest that a surface similar to that used for the York County Rail-Trail would be appropriate, and that this segment could be used as an exercise trail.

2. Gettysburg College recommends that the Mummasburg Road segment be described as a 10 foot wide stabilized aggregate trail also. The College also recommends against using the trail furniture for this segment recommended in the Draft Plan. We concur with both of these recommendations, and further request that the Final Plan Document show the strategic placement of limited trail furniture. This may include the following:

- ♦ Picnic Tables and associated amenities at OP15.
- ♦ Benches and waste receptacles only at OS15, OS18, and OS28.

As a neighborhood and community oriented trail (as opposed to a long-distance linear trail), we do not feel there is a need for substantial trail furniture.

3. Gettysburg College also recommends the elimination of the "stadium and quarry" loop, and also recommends elimination of the tennis court connection. We concur with the removal of the stadium / quarry loop if a perimeter loop along the railroad track is shown. We do not concur with the elimination of the tennis court connection. Please effect these changes.

4. Rod Sheffer, a Gettysburg Borough resident, provided comments regarding safety concerns at the Old Harrisburg Road / East Broadway intersection. He recommends moving the trail connection to the east side from the west side of Old Harrisburg Road. We do not concur with this recommendation from public safety perspective. Pedestrians should not be forced to cross so many commercial driveways (Adams County National Bank, North Gettysburg Shopping Center, etc.) while trying to access the Gettysburg High School or the Agricultural Services Center. Five traffic generators, including the Harrisburg Area Community College Center (a 100% commuter-oriented campus), are located on the east side of Old Harrisburg Road. Further, the pedestrian component of the Rock Creek Bridge is to be located on the west side. Therefore, the segment must be retained on the west side. In addition, the OS-11 segment must be extended to the RP-29 point to provide the pedestrian connection to the Gettysburg Borough sidewalk system. Please effect this change.

5. Mr. Sheffer recommends eliminating OS-11.1 and, instead, providing an off-road segment from RP-30 to a point between OS-9 and OS-10. We do not concur with this recommendation, and note that this segment would not be possible because of current construction and land ownership. Please continue to show this link, but adjust it slightly to conform, as closely as possible, with the attached concept landscaping plan for the Agricultural Services Building. Please note that the segment would be located on the south side of the creek on the eastern side, then transition to the north side moving toward Biglerville Road.

6. Mr. Sheffer also recommends eliminating the entire off-road section between RP-3 and OP-3.1. We strongly disagree with this recommendation. It must be noted that the "pedestrian" system must be designed to benefit the entire community, and not to avoid modest increase in pedestrian / bicycle activity along one street. Of course, this section must be designed to address aesthetic issues, as well as transportation, recreation, and quality-of-life needs of the community.

7. Mr. Sheffer provided other recommendations which have either already been addressed in other memo, or are not directly relevant to this Plan.

8. The National Park Service recommends removing the trail segment along the scenic railroad line. We do not concur with this recommendation. Gettysburg needs to

J. Appendix

identify potential trail system components that can be used to facilitate town-to-country connections, particularly if this neighborhood system is to eventually connect to a more regional system of trail linkages. While, due to width, there may be some design challenges, a visual inspection by staff revealed that there may be sufficient room to accommodate a trail. Concern from the National Park Service should not result in the premature removal of a trail segment recommendation that may, in the future, provide significant neighborhood and regional benefits.

9. The National Park Service recommends removing OS-20.1, particularly in the context of their recommendation regarding the scenic railroad line segment. We do not concur with this recommendation. We fully understand that care must be taken to keep the trail segment off NPS land, as well as to address scenic issues. However, we also feel that it is equally important to provide off-road linkages between the Ridgewood residential area and the Gettys Elementary School.

10. The National Park Service recommends moving the Gettysburg College tennis court off-road trail from the north side to the south side of the tennis courts. As noted in Comment 3 above, this section needs to be shown, as it provides an important east-west linkage through this area. We do not have a strong recommendation regarding whether the trail should be located north or south of the tennis courts, provided there is sufficient room in either location to provide a properly designed facility. We also note that the college is in the process of constructing additional tennis courts to the north of the existing courts. We believe that the NPS concerns regarding potential infringement of the trail segment on the easement agreement are unfounded if the easement agreement will allow the construction of additional courts.

11. The National Park Service recommends that the statement regarding the Gettysburg Walking Club be removed. The NPS interprets this statement as attempting to establish NPS policy. It is not the intent of this statement to establish NPS policy. It is important to understand that the County does not establish policy for anyone. Further, the Office of Planning and Development reserves the right to make appropriate advisory recommendations, based on sound planning judgement, for all lands within Adams County, including those lands under the authority of the National Park Service or any other state or federal agency. This said, we are willing to consider "tweaking" the statement.

12. Diane Kripas, DCNR, requires that the DCNR citation be added. This, of course, must be added. We also require that an acknowledgements page be added.

13. Ms. Kripas recommends that the analysis of survey results be moved to Page C-2. The text should be revised to at least include the key points from the survey in the text.

14. Ms. Kripas recommends that further information, including general information regarding section length, general width, proposed surface, public versus private land

ownership, whether land acquisition is required, etc. Can we provide some additional summary information in this section to meet Ms. Kripas's request?

15. Ms. Kripas requires that the Plan indicate whether affected private property owners have been contacted and, if so, what issues or concerns may have been raised. Individual owners have not been notified. We feel that it is too early to negotiate with individual property owners. Instead, negotiations should occur when the Plan is finished and implementation efforts are initiated.

16. Ms. Kripas recommends that the Plan include an update regarding coordination with PennDOT. Staff is attempting to contact appropriate PennDOT officials to "re-initiate" this process.

17. Ms. Kripas recommends that the Plan include an assessment regarding the potential need for trailhead parking. We do not see this as a pressing need, primarily because the system is intended as a neighborhood-oriented system. If parking is needed, we anticipate that the Gettysburg High School parking lot would be available for use.

18. Ms. Kripas indicates that the Plan must summarize any security issues raised during the public comment period. Significant public comments regarding security were not raised.

19. Ms. Kripas requires that the Plan provide a recommendation regarding the preferred ownership and maintenance approach. This Office indicated a similar requirement in our January 11, 2000 memo. The Plan document must provide a specific recommendation on ownership and maintenance issues. We anticipate that the preferred approach will include multiple ownership, particularly when dealing with those sections already in public or semi-public ownership. We also anticipate that those public or semi-public owners will maintain their sections. In addition, a specific ownership and maintenance recommendation for those segments to be located on private property must be provided. It is not sufficient to provide a summary of ownership and maintenance alternatives.

cc. Diane Kripas, DCNR
encl. Comment Letters

rdt c:\projects\vec_proj\trail\corres\simone07.doc

J. Appendix

07/10/2000 16:05 ADAMS CO COMMISSIONERS + 161088975214171857 NO. 019 014



Gettysburg College Gettysburg, Pennsylvania
17325-1486
(717) 337-6700 Facilities Services

07/10/2000 16:05 ADAMS CO COMMISSIONERS + 161088975214171857 NO. 019 015

May 9, 2000

Mr. Rob Thaeler
Senior Community Planner
Adams County Office of Planning and Development
Adams County Courthouse
111-117 Baltimore Street
Gettysburg, PA 17325

Dear Rob:

Thank you for this opportunity to review the North Gettysburg Area Trail Feasibility Study. It is an exciting plan for the Borough and Adams County and we are glad to play a role in its implementation. I regret that I or another representative from the College is unable to attend tonight's meeting. This letter represents our comments on the draft issued September 22, 1999.

Gettysburg College shares the goals of promoting alternative transportation routes and recreational opportunities set forth in this study. The College's Landscape Master Plan, undertaken in 1996, proposed a jogging path loop through the campus and interconnecting with the routes along Carlisle that led to the high school. In addition, the plan cites the value of the use of bicycles by the students. Our review of the Trail Feasibility Plan, in conjunction with our overall plan for the campus, requires some modifications to the College's portion of the trail system as described in the plan.

We have attached a plan that indicates the trails that the College will undertake for inclusion in the Gettysburg Area Trail System. They are as follows:

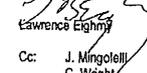
- A 10' wide stabilized aggregate-surfaced trail beginning at CP2 of the plan, located near the railroad crossing at Mummasburg Road, following the 1863 Historic Lane Route on the College's property; continuing along the railroad at the bottom of the embankment; and connecting to Constitution Avenue somewhere near its intersection with North Washington Street. (The location of this connection has not yet been determined.) The stabilized aggregate surfacing has the advantage over traditional aggregate surfaces in that a powdered plant extract is incorporated into the aggregate causing it to knit together and render the surface accessible to both wheelchairs and bicycles.
- A 10' wide stabilized aggregate-surfaced trail along Mummasburg Road beginning at the northernmost point of the College's property and continuing to the intersection with

Howard Avenue. The College will install shade trees along the route in a manner that replicates the existing pastoral landscape. While the plan calls for a grouping of two benches, trash receptacle, and bicycle tie-up at each end of this route, we do not feel that these items would be appropriate to the openness of the landscape along Mummasburg Road. Signs providing directions to Barlow Knoll or other points on the trail would be important to the success of the trail system, and the College will install the standard trail signage.

While the College welcomes the public into its campus along the trails described above, other segments of the trail system are not desired by the College in that they have the potential of generating high volumes of faster moving non-motorized traffic to portions of the campus intended primarily for pedestrian use. The elimination of these segments, the loop around the quarry and stadium and the trail through the tennis courts, does not weaken the plan. Rather, the connection of the railroad segment to Constitution Avenue provides a through route alternative to the proposed stadium/quarry loop; and the proximity of the Howard Avenue route provides a good alternate to the route through the tennis court complex.

We look forward to working with you on this venture. Please contact me with any questions.

Sincerely,


Lawrence Eighmy

Cc: J. Mingolelli
C. Wright

J. Appendix



United States Department of the Interior NATIONAL PARK SERVICE

GETTYSBURG NATIONAL MILITARY PARK
GETTYSBURG, PENNSYLVANIA 17325

EISENHOWER NATIONAL HISTORIC SITE
GETTYSBURG, PENNSYLVANIA 17325

IN REPLY REFER TO:
A38

June 2, 2000

Mr. Richard Schmoyer
Adams County Office of Planning & Development
Gettysburg, Pennsylvania 17325

Dear Mr. Schmoyer:

This letter provides our comments with respect to the draft plan of the North Gettysburg Area Trail Feasibility Study provided by your office at the public meeting on May 10th, 2000. While we are still in general agreement with the spirit of the draft plan, we noticed enough incremental changes and additions in this latest version of the draft plan to warrant a restatement of Gettysburg National Military Park's position with respect to the trail: "the park's General Management Plan (GMP) suggests that visitor access be provided to interpretive and historic sites while limiting resource impacts. In order to do this, the park will provide paths and trails only when they meet certain criteria. Paths and trails must provide educational opportunities or access to historic sites that fit the park's mission and purpose. GNMP will not provide facilities developed and intended purely for recreational use or for exercise functions. the Park's system of commemorative avenues and historic lanes would be the primary means of visitor access to sites." As in the first draft of the trail plan, this current version still states, in section C-3, "the GMP willprovide the kind of access to fields people want. This trail study suggests providing this access with pedestrian/bike trails along park avenues and pedestrian-only historic 1863 lanes." All segments of the trail must adhere to these criteria.

Examination of the draft plan provided at the May 10th meeting found several new trail segments that may not follow this requirement:

- a. Scenic railroad trail – This additional trail is a change from the first draft plan. The trail appears to run between Mummasburg Road and Her's Ridge Road. The exact location of this trail is unclear, as there is no description of this trail in section D of the plan. Simone Jaffe Collins letter of May 8th, 2000 indicates that this trail was added at the request of Adams County over the consultant's reservations about having enough usable space. Since this trail appears to run within the boundary of the NPS at several points, we would like to make it clear that the trail can not be located within the NPS boundary, unless it stays within the railroad right of way. Since Simone Jaffe Collins has reservations about having enough space within that right of way, we suggest that the trail be removed from the plan.
- b. Extension of OS-20 – At the County's request, an off-road trail section has been added between the Gettys Elementary School and the scenic railroad trail. This addition runs primarily on non-NPS owned lands, but within the NPS boundary. It does cross onto NPS owned land for a small distance before connecting to the scenic railroad trail. Since the NPS suggests removing the scenic railroad trail in (a) above, there would be no need for this trail extension. In addition, since part of the extension crosses NPS owned land, that section of the trail would not be constructed in accordance with the Park's GMP.

- c. College Trail CS-2 – This section of the trail, running parallel to Mummasburg Road, is on a section of College property on which the NPS has certain easement rights to protect the cultural landscape. Therefore, any changes to the existing walkway there must be coordinated, in detail, with NPS approval. For instance, maintaining and using the existing walking lane in that location may be acceptable, but widening that lane or adding trees and benches would be prohibited. In addition, the section of the College trail that runs between Carlisle Street and Mummasburg Road needs to be located south of the NPS easement line. Any trail that is depicted on the northern side (current plan) of the existing tennis courts would violate the easement terms. We suggest moving this section of the trail to the existing driveway immediately South of the existing tennis courts.
- d. Section D – Trail alignment and description - This section provides detailed level information about each section of the trail, i.e. segment type, location, ownership, proposed surface etc. This current version of the draft plan doesn't include many of the changes that have been incorporated in the plan, making it hard to understand details of the proposed changes. For example, trail segments OS-20.1 through OS-20.3 were added to the plan, but not included in the descriptive matrix. In addition, many of the comments provided in the County's letter of January 11, 2000 may have been incorporated into the plan without detailed information in section D. Therefore, the NPS is unable to determine whether or not a specific change in the draft plan has potential impact on park resources. As a result, the NPS must withhold its opinion on the plan in total until all of the changes have been made and the plan documentation is complete.
- e. OS-8 – Pedestrian walk in Old Harrisburg Pike ROW – Although there were no changes made to this section of the trail, we want to reiterate that any new trails in this area must be located within the existing road right of way with respect to the western side of the ROW (NPS owned lands). The NPS would not support taking of NPS lands to expand the road ROW. In addition, the trail could not be located on NPS land as that is counter to the Park's GMP.

Finally, page C-7 contains the following sentence: "The local Gettysburg Walking Club currently uses several proposed NPS avenue routes for weekly walks. The proposed trail routes attempt to formalize such uses". Inclusion of this sentence in a County planning document gives the appearance that the County sets NPS policy. This is not the case, as Gettysburg National Military Park's (GNMP) policies emanate from its enabling Federal Legislation and other NPS Federal Policies. The GNMP takes exception to including this sentence in a County planning document. We request that the sentence be removed from the feasibility study documentation.

Although the NPS has participated in the development of the North Gettysburg Area Trail Feasibility Study, we do not fully concur with the resulting plan in its current draft configuration. If you have any questions or need additional information, please contact Assistant Superintendent, John McKenna, at 717-334-1124, ext. 400.

Sincerely,

Dr. John A. Latschar
Superintendent

Cc: Simone Jaffe Collins, 511 Old Lancaster Avenue, Berwyn, and Pennsylvania 19312.

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