



REGIONAL PLANNING BULLETIN

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SHERMAN CENTER PEDESTRIAN PLAN

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**HOUSATONIC VALLEY
COUNCIL OF ELECTED OFFICIALS**

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Sherman: A Rural Town



Introduction

Sherman: A Rural Town

Sherman is a rural town located in Northern Fairfield County, Connecticut. In 1981, the Housatonic Valley Council of Elected Officials (HVCEO) placed the Town in a “remote area” regional planning category, then reendorsed this policy in the 1997 update of its regional plan. This designation led to recommendations that sought to prevent sprawl development and to maintain the semi rural remote use of the roadways. The 2001 Sherman Master Plan complemented this policy by stating “Town roadways shall be only as large as is necessary to handle normal traffic burdens and to ensure superior access at all times for emergency vehicles. Subject to these considerations, town roadways should retain as much as possible the character of scenic rural lane, rather than modern interurban highway.” The plan went on to recommend “a Plan for pedestrian walkways within the Town Center, such that those using the Center, including school children, can move between the major locations of the Center other than by walking on heavily traveled state highways and town roads.” This advisory pedestrian plan is intended by HVCEO to promote safe pedestrian access and to reduce both auto use and parking need, thereby reinforcing the rural character of Sherman Center.



The Statistics

Sherman is a small town with a population of 4,000 in 1,461 households. Located in the northwest corner of Connecticut and Fairfield County, Sherman consists of 22 square miles with a very low population/square mile ratio of 182 (the County’s ratio is 1353/square mile).

Sherman’s Population breakdowns as follows:

- 94% White
- 3.1% Poverty Rate (compared to 7% for Fairfield County)
- 42% College Educated
- Majority between age 25-49 with median age 44

Sherman’s Top Business Sectors are:

- Service Industry
- Construction
- Trade

The Five Top Employers are:

- Sherman School
- Sherman Post Office
- Bonnie Manning Catering
- American Pie Company
- Town of Sherman

The unemployment rate is 2.9% compared to 4.4% in the County. Most people commute to work outside Sherman but the majority of in-town workers live in Sherman.

The Sherman housing market is strong with the median price per unit \$477,500. 82% of the units are owner occupied (compared to 66% in the County). 99.6% are single family residences. Most of the units have been built since the 1950's.

Sherman's Assets are:

- Candlewood Lake
- A large area of open space
- A low crime rate
- Attractive topography and natural landscapes

The Site

The focus of this pedestrian plan is the Sherman Town Center which is located at the intersection of Route 37/39. The limits are:

- The Route 37/39 intersection at the Post Office
- The traffic light at Holiday Point Road
- The Sherman Green Marketplace
- Veterans Field
- The Town Park/Beach area
- The nexus is the Route 37/39 intersection and Sherman School

The Major Elements of Sherman Town Center are:

- Post Office/American Pie Shopping Center
- Colonial Field
- Holy Trinity Church
- Sherman Library
- Sherman Historical Society
- Sherman Senior Center
- Sherman School/Veterans Field
- Sherman Town Offices
- Sherman Playhouse
- Sherman Fire Department
- Sherman Green Marketplace
- Sherman Commons



The goal of this report is to provide a contiguous pedestrian access to all the Sherman Town Center elements through new connections to existing paths and trails, thereby minimizing vehicular use.

The Past

Sherman was originally settled in 1736 due to the agricultural opportunities of the narrow, fertile valley soils that drained southward into the Sawmill Brook and into what is now a bay of Candlewood Lake called Allen's Cove. Two other streams, Greenwood and Tollgate, converge at the Town Center with the Sawmill. The Center is part of the central valley that extends north to Gaylordsville, comprised of rich soils and fertile farmland. Settlement concentrated in this central valley with the Town Center developing at the banks of the Sawmill Brook. Although small industries developed in the Center, they were mainly in support of the main industry, agriculture.



Sherman, named for Roger Sherman, signer of all four colonial documents including the Declaration of Independence, was incorporated in 1802. Population remained steady for most of the 18th century, reaching a peak of almost 1,000 in 1850. But by 1920, the population dropped to 350 as residents left for more prosperous towns and fertile soils.

Sherman was transformed in the 1920's:

- Route 37, connecting to New Fairfield, was completed and Route 39 was soon to follow
- The Playhouse moved to the Town Center in 1924
- Electricity was brought to Town in 1927
- Candlewood Lake was constructed in 1929

Due to Candlewood Lake, people began to visit and discover the natural beauty of Sherman. By the end of the 1930s, the population increased, the Sherman School opened in the Center and, in 1937, Sherman became the first town to adopt zoning.

From the 1930's to present, other major events shaped the Sherman Town Center:

- Veteran's Field was dedicated in 1947
- Population increased three fold since the end of World War II as weekend and summer residents retired to Sherman
- Sherman Players incorporated in 1949
- Naromi Land Trust was established in 1968
- 1973 wetlands protection laws reduced the development potential of Sherman
- Mallory Town Hall and a small commercial village were established in the Town Center in 1977
- Tennis courts were added to Veteran's Field
- Sherman School was expanded
- Post Office moved south to Route 37/39 intersection
- Historical Society and Museum was restored
- 2001 Master Plan of Development calling for the development of plan for pedestrian walkways within the Town Center

- Candlewood Lake Authority sponsors a watershed study of the Saw Mill Brook in 2004
- Rizzo's garage is renovated at the intersection of Route 37/39

Future plans will further impact the Town Center:

- Renovation of Route 37 East to its intersection with Route 7 in New Milford
- Expansion of Sherman Library
- Expansion of the Sherman Firehouse
- Replacement of the Old Greenwoods Brook Bridge
- Sherman Town Center Pedestrian Plan

Sherman's Pedestrian Future

Sherman is considered one of the fastest growing towns in the State. The 2001 Sherman Master Plan of Development and the Sherman Zoning Regulations serve as a guide for land use activities in Sherman Center. The 2001 Town Plan recognized the need for a subplan to coordinate pedestrian elements in the Center. The process of developing this Plan has initiated the dialogue of what form pedestrian access could be in the Sherman Town Center. The Plan provides a framework for the evolution of this unified pedestrian access.

Although this Plan focuses on desirable pedestrian connections, during the planning process concerns raised by the public as to traffic quantity and speed made a compelling reason to include traffic calming techniques. Connections to open spaces and trails are also included. Overall, the Plan itself seeks to minimize automobile use and parking needs to protect the Center's rural character.



Opportunities and Challenges



Site Assessment

Existing Conditions

The Sherman Town Center is a lovely rural hamlet located at the intersection of State Road 37 and State Road 39. The Town Center is defined by the southern intersection of these two state roads, the intersection of Route 37 and Holiday Point Road, the intersection of Route 39 and the Sherman Green Marketplace, and Saw Mill Road near Veteran's Field. There are two focal points to the Town Center:

- The Historic Center with identifying light post
- The Sherman Playhouse

The existing roads of the Town Center have relatively low daily traffic volumes. The main road is the combined section of Route 37/39 which is the highest volume segment in the Town. It is considered a rural collector road with two, 12 foot lanes and 3 foot shoulders. Route 39 and Route 37 split at the Sherman School intersection. Saw Mill Road is a side road that connects the Center to Candlewood Lake. Old Greenwood Road is a residential road.

The main features of the Town Center are:

- Playhouse
- Sherman Green Marketplace with Mallory Town Hall
- Sherman School
- Historic Center including Sherman Historical Society, Sherman Senior Center and Sherman Library
- Post Office and American Pie Company

The Town Center is part of the Candlewood Lake watershed with three major brooks:

- Saw Mill Brook
- Greenwood Brook
- Toll Gate Brook

Four bridges provide access across these brooks:

- The southern bridge is a standard issue Department of Transportation bridge
- Old Greenwood Road Bridge is in disrepair and is scheduled to be replaced
- Route 37/39 bridge over the Saw Mill Brook was replaced in 2000, utilizing upgraded aesthetic



elements such as stone facing and two, 12 foot lanes and two, 3 foot wide shoulders. No pedestrian access was provided on this new bridge.

- The recently renovated Saw Mill Road Bridge with interesting stone facing



The existing pedestrian paths in Town consist of:

- An asphalt path connecting the Sherman School with the Sherman Library
- Bluestone path in front of the Sherman Library
- Crosswalks at Sherman Commons, Sherman School and Saw Mill Road
- An asphalt ramp connecting the lower parking area and the Mallory Town Hall
- Walking trail at Veteran's Field
- Colonial Park nature trails
- Naromi trails
- Informal trail connecting Sherman School to the Sherman Green Marketplace



The topography of the Town Center ranges from relatively flat to steep. The knoll area where the Playhouse and Town Green are located overlooks the rest of the Town creating a physical separation of the municipal center from the balance of the Town. The school area also has challenging topography which separates the front of the School from Veteran's Field. Minor areas of challenging topography are impediments to traditional walkways from connecting town elements such as the knob located north of the Saw Mill Brook Bridge on Route 37/39.

But the topography also provides opportunities for dramatic views in the Town Center. The most notable are:

- View of the Playhouse from the historic center
- View of the Historic Center from the Playhouse
- View of Candlewood Lake from Veteran's Field



The existing vegetation is of a rural character with mature street vegetation. Large forested areas border the Town Center and the Naromi and Colonial Park Nature trails are located in these areas. A community garden at Colonial Field provides opportunity for deer protected gardening. Residential homes have some ornamental gardens. Wetland areas have a combination of native and invasive wetland species.

The Town Center was formed around three major water courses:

- The Saw Mill Brook
- The Greenwood Brook
- The Tollgate Brook

The brooks have little riparian buffer material and a deep channeled morphology. Unfortunately, the historical significance of these brooks to the health of the Town Center has diminished and they have become minor visual elements in the Town Center. That is, of course, until Hurricane Floyd caused the Saw Mill Brook to flood its banks and damage the bridge.



The other major water body in the Town Center is Allen's Cove, a bay of Candlewood Lake. A major issue with the cove is the sediment deposited by the Saw Mill Brook resulting in loss of volume, area and habitat. The Candlewood Lake Authority sponsored a study entitled "Sawmill Brook Watershed Study", dated October 2004, which recommended stabilization and mitigation of sediment sources throughout the watershed including areas within the Town Center specifically at:

- The Greenwood Brook intersection with the Saw Mill Brook
- The Saw Mill Brook buffer areas
- The outlet of the Saw Mill Brook into Allen's Cove



The existing structures in the Town Center provide much of its charm:

- The Post Office/American Pie Company shopping center utilize historic details to create a compatible element at the southern gateway to the Town Center but its site configuration limits its effectiveness as a traditional downtown element.
- The private homes that line Route 37/39 are charming with historic character but the proximity of some of these homes to the road presents a challenge to any pedestrian pathway that would connect the Historic Center to the Post Office.
- The Historic Center is a cluster of charming historic buildings that house the Historical Society, Senior



Center and Library.

- The Holy Trinity Church is set back from the road and is of a more modern design.
- The Playhouse structure is a 150 year old former Greek Revival Church.
- The recently renovated Sherman School fits in well with the rural character of the Town.
- Recently renovated Rizzo's garage has upgraded the view of the Route 37/39 Center.
- The Sherman Commons uses some historical detailing to provide a compatible element in the Town, but like the Post Office, its configuration is not compatible with a traditional downtown setting.
- The Town Green is surrounded by structures of a more modern design but the configuration does provide a more traditional New England town character with the Green.
- The Mallory Town Hall utilizes some traditional detailing and blends in well with the area.
- New plans are being considered for the Library and the Firehouse . The preliminary drawings appear to be compatible with the character of the Town.

Traditional Connecticut fieldstone walls, although fragmented, provide some definition to the Sherman Town Center streetscape. Most notable is a fragment of wall near Colonial Field, a new stone wall with fence in front of the private homes north of the historic center, a rustic wall at the cemetery, and a new stone wall in front of Rizzo's garage at the Route 37/39 intersection. When Connecticut DOT was planning to replace the bridge over the Saw Mill Brook, the Town asked for a more aesthetic detail and they chose fieldstone facing.

The signs in Sherman add to its rural character. The simple Sherman sign on the light post located in the intersection of Saw Mill Road and Route 37/39 is one of its identifying symbols. Other signs include



building and shopping center identification signs, Connecticut DOT signs, and a Welcome to Sherman sign in front of the Sherman School. Most of the signs are of an interesting historic character and no sign is neon or backlight. The DOT signs are the most distracting to the Town Center character.

There is no decorative street lighting in the Town Center. The one stop light in the Center is at the intersection of Holiday Point Road and Route 37. The other traffic devices are limited to stop signs. Traffic quantity is a minor issue at commuter and school A.M. and P.M. peak hours. The real issue with traffic is speed. Despite posted speed limits, most drivers exceed the speed limit. Most accidents in the Center occur at the intersection of Route 37/39 South due to the sharp angle of the intersection and the location of the Post Office driveway. A recent accident involving a pedestrian at the Historic Center crosswalk has emphasized the need for traffic calming techniques to be implemented in the Town Center.



Photo Tour



LOOKING ACROSS GREEN TOWARDS IGA



FIRE DEPARTMENT AND SCHOOL



ELEVATED WALKWAY



AERIAL PHOTO



LOOKING AT SCHOOL FROM FIRE DEPARTMENT



VIEW OF PLAYHOUSE FROM ROUTE 37



SIDEWALK IN FRONT OF CEMETARY



TRAILHEADS AT COLONIAL FIELD



CANDLEWOOD LAKE FROM BALL FIELDS



LIBRARY PARKING



TOWN BEACH

Site Assessment

OPPORTUNITIES

1. POTENTIAL AREA FOR GATEWAY
2. POTENTIAL AREA FOR PEDESTRIAN WALKWAY
3. EXISTING TRAILS CONNECT TOWN CENTER TO CANDLEWOOD LAKE
4. EXISTING NAROMI TRAIL
5. STRONG HISTORIC CENTER WITH EXISTING PEDESTRIAN WALKWAYS AND CROSSWALKS
6. VISUAL RESOURCE AND POTENTIAL PEDESTRIAN CONNECTION FROM HISTORIC CENTER TO TOWN HALL/PLAYHOUSE/TOWN GREEN
7. EXISTING CROSSWALK AND EXISTING PEDESTRIAN TRAIL FROM SCHOOL/INTERSECTION TO TOWN GREEN
8. EXISTING SIDEWALK FROM SCHOOL TO LIBRARY
9. TOWN GREEN
10. FUTURE FIRE HOUSE EXPANSION
11. EXISTING CROSSWALK
12. STATE RECONSTRUCTION OF ROUTE 37 TO HOLIDAY POINT ROAD
13. TOWN OPEN SPACE
14. SCHOOL
15. MEMORIAL FIELD WITH RECREATIONAL FACILITIES
16. FUTURE LIBRARY EXPANSION
17. CONNECTION FROM HISTORIC CENTER TO CANDLEWOOD LAKE
18. CHURCH EVACUATION AREA FOR SCHOOL
19. VIEWS OF LAKE
20. CANDLEWOOD LAKE


























EDUCATIONAL OPPORTUNITIES

21. COMMUNITY GARDEN
22. WETLAND PROVIDES BIOLOGICAL AND NATURAL SCIENCE LEARNING OPPORTUNITIES
23. CONVERGENCE OF BROOKS PROVIDES NATURAL SCIENCE AND HISTORIC LEARNING OPPORTUNITIES
24. EXISTING ELEMENTS PROVIDE HISTORIC EDUCATION OPPORTUNITIES
25. CANDLEWOOD LAKE PROVIDES BIOLOGICAL, HISTORIC AND GEOLOGICAL LEARNING OPPORTUNITIES
26. OPEN FIELD PROVIDES BIOLOGICAL AND NATURAL SCIENCE LEARNING OPPORTUNITIES

STORMWATER MANAGEMENT OPPORTUNITIES

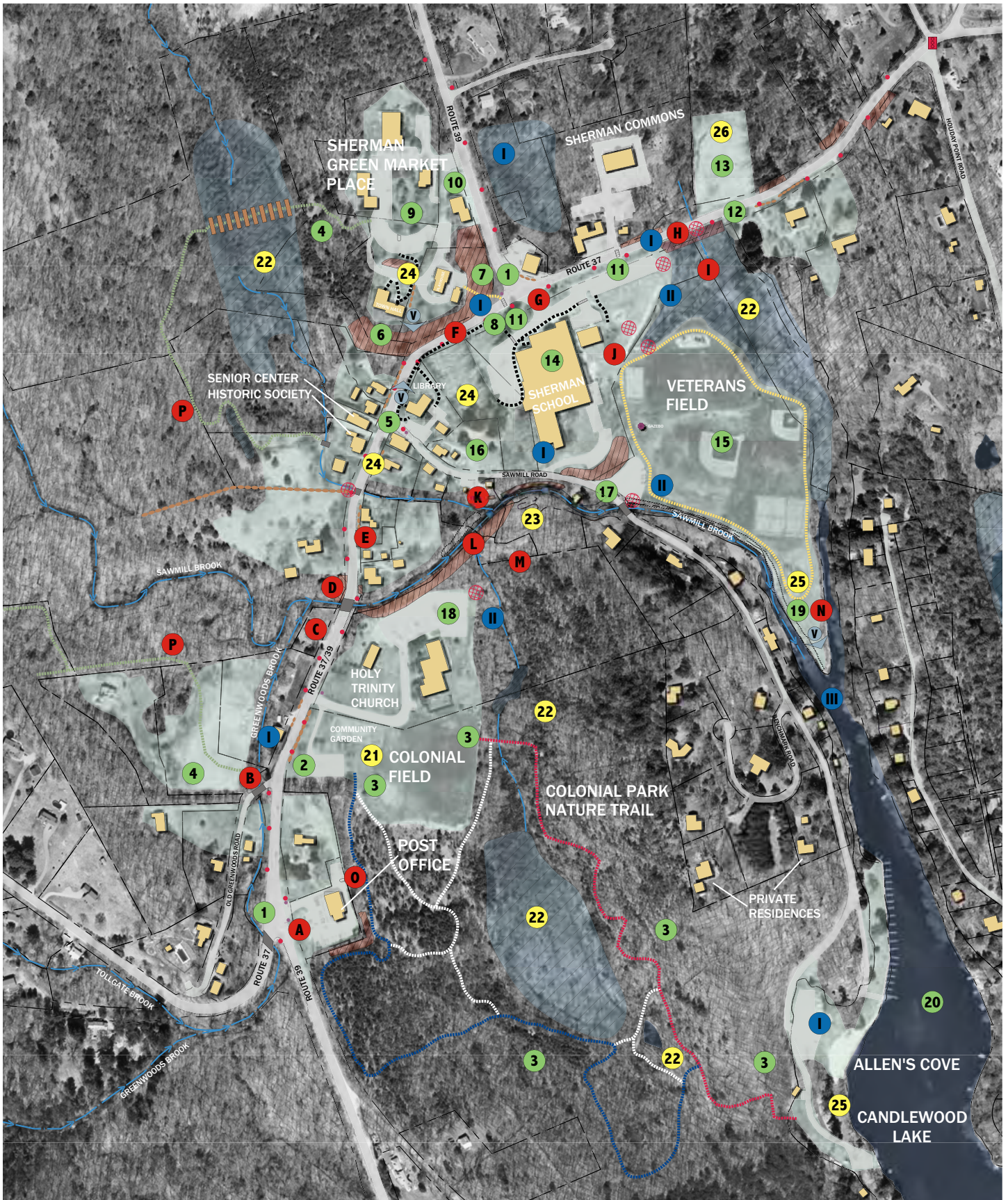
- I. STORMWATER RUNOFF FROM ALL ROADS FLOWS INTO SAWMILL BROOK WHICH IN TURN FLOWS INTO CANDLEWOOD LAKE(ALLEN'S COVE)
- II. STORMWATER RUNOFF FROM PARKING LOT FLOWS DIRECTLY INTO WETLANDS
- III. SEDIMENT ISSUES IN ALLEN'S COVE

LEGEND

	PROPERTY LINES		EXISTING GAZEBO		SIGNIFICANT VIEWS
	EXISTING RED TRAIL		TRAFFIC LIGHT		
	EXISTING WHITE TRAIL		STORMWATER RUNOFF AREAS		OPPORTUNITIES
	EXISTING BLUE TRAIL		STEEP SLOPE		EDUCATIONAL OPPORTUNITIES
	EXISTING NAROMI		EXISTING BRIDGE		STORMWATER MANAGEMENT OPPORTUNITIES
	EXISTING PEDESTRIAN PATHWAY		EXISTING WETLANDS		CHALLENGES
	EXISTING SIDEWALK		EXISTING CROSSWALK		
	EXISTING GUIDE RAIL		EXISTING BOARDWALK		
	FLOW OF STREAM				
	EXISTING STONEWALL				
	EXISTING UTILITY POLE				
	EXISTING STOP SIGN				

CHALLENGES

- A. CONFUSING INTERSECTION
- B. BRIDGE IN DISREPAIR
- C. BRIDGE TOO NARROW FOR PEDESTRIAN WALKWAY
- D. TOPOGRAPHY PRESENTS OBSTACLE FOR PEDESTRIAN WALKWAY
- E. CLOSE PROXIMITY OF RESIDENCES TO ROAD PRESENTS OBSTACLE FOR PEDESTRIAN WALKWAY
- F. TRAFFIC SPEED
- G. CONFUSING INTERSECTION
- H. VARIOUS TOPOGRAPHIC ISSUES FROM SHERMAN COMMONS TO HOLIDAY POINT ROAD
- I. WETLANDS
- J. STEEP SLOPE SEPARATES SCHOOL FROM PLAYGROUND AREA
- K. STEEP SLOPES ALONG RIVER BANK
- L. NO EXISTING BROOK CROSSING
- M. PRIVATE PROPERTY BETWEEN SCHOOL AND CHURCH
- N. SEDIMENT, EROSION AND WATERSHED ISSUES
- O. POST OFFICE NOT CENTRALLY LOCATED
- P. DISCONNECTED NAROMI TRAILS





Safety First



Public Input

A successful plan will incorporate the ideas and desires of the community. A town center is the heart of the community. Any design that impacts the town center must reflect the current needs and vision of that community. On February 11, 2006 the first of two community meetings was held at Mallory Town Hall to develop a program for the Sherman Town Center Pedestrian Plan. A diverse group of residents attended and provided a wide range of ideas.

The workshop was divided into two parts. The first part was designed to ascertain the desires of the attendees. There are four areas of concern for any successful plan:

- Design – the physical elements of the plan
- Economic - the economic impact of the plan
- Administrative – how will the plan be implemented, maintained and sustained
- Communication – how will the plan become integrated into the community

The attendees were asked to write at least five desires they had for the Pedestrian Plan. Using an interactive technique, each attendee was given the opportunity to articulate their desires and decide which area of concern they belonged in. This created four lists of ideas that then became the foundation for the second part of the workshop.

The attendees were divided into three groups. They were to take the lists of ideas and an aerial photo of the Town Center and as a group develop action statements to be included in the plan and develop proposed pedestrian routes for the plan. Each group presented their results and discussion ensued. The results were compelling.

The three major themes that emerged were:

- **Safety** – The current configuration of the Town Center provides little opportunity for pedestrian access and is considered unsafe. Any pedestrian plan should consider the safety of the pedestrian as a major priority. Safety concerns were:
 - Traffic speed
 - Crosswalk areas
 - Path surface
 - Major user group is school children
- **Rural Character** – All the attendees agreed that the beauty of Sherman is its rural small town character. They agreed that if anything was done to expand the pedestrian system (and some did not want anything done at all) it should be very subtle, utilizing the existing trails and walks as much as possible. The surface should be rural, natural and safe and in most areas soft. The paths should connect the major elements but not with traditional downtown streetscape elements.
- **Cost and maintenance** – The attendees expressed concerns on how the pathways will be paid for and who will be responsible for maintenance. The consensus was that the Town had few resources for either and therefore the plan should reflect inexpensive methods for installation and recommendations for maintenance.

Each group then elected a spokesperson who presented their proposed routing plan. The groups were designated by color. The groups were formed by a random process to ensure that each group had a diverse opinion base. The following is a summary of their presentation:

- Red Group
 - **Connect** Sherman Commons to Post Office via new crosswalk, new path in front of School,

improved path from School to Library, new path from Library across Saw Mill Road, new pedestrian bridge across Saw Mill Brook, new path across Holy Trinity Church Property and Colonial Field, connecting into the rear of the Post Office with a new path leading to the front of the Post Office.

- **Connect** Sherman Commons to Sherman Green Marketplace via a path through private property and a new mid block crosswalk at the Sherman Green Marketplace driveway.
- Improve **connection** from School to the IGA.
- **Connect** the School to Veteran's Field.
- Green Group
 - **Connect** Sherman Commons to School.
 - Install Roundabout as a **traffic calming technique** at both intersections of Route 37 and Route 39. Provide a chicane in the combined area of Route 37/39 as another traffic calming technique.
 - **Connect** Library to Veteran's field.
 - **Connect** Library to Church through new paths right behind the Old Store and private property (the easements for this might be problematic, but group felt the closer to the paths were to the intersection with Route 37/39 the more use they would get).
 - **Connect** this path to the Post Office through the Church property and Colonial Field.
 - Change the **traffic patterns** of the Sherman Green Marketplace to one way with 45 degree parking at bank.
 - Specify **larger signage** for better readability.
- Blue Group
 - **Connect** School to IGA utilizing new path behind the Firehouse, down the slope to the intersection.
 - **Connect** School to Colonial Field utilizing existing path to Library, crosswalk across Saw Mill Road, pedestrian bridge over Saw Mill Brook, path along Saw Mill Brook to Route 37/39, path along Route 37/39 to Church, Colonial Field and in the future to Post Office.
 - **Connect** School to Holiday Point Road (maybe that could be included in the DOT project).
 - **Promote a healthy lifestyle** while protecting the rural character.
 - **Use the existing trails and pathways** with minimal connections.

The next community meeting was held on October 21, 2006 to review the conceptual pedestrian plan. The major discussions were:

- Add future connections from the Historical Center to the Post Office along Route 37/39. This was hotly debated as most of the community did not want a traditional streetscape but a few people felt that this connection could add to the charm of the Town.
- Add future connections to town owned property on Route 39. The distance from the Town Center seemed to be a major impediment to this idea but all agreed that a bicycle trail might be a better approach. That is not a focus of this plan but could be a part of an open space/trail plan for the Town.

The final community presentation was held on January 25, 2006. The semi final plans were presented and provided for posting in the Town Hall. Electronic copies were also posted on the Town website. The comments ranged from total support to no support. The major event of this review period was the unveiling of the plans for the Sherman Library.

The limitations of this or any method of community input is that only interested parties express their opinions. But, this method also provides the opportunity for any citizen to be heard. The workshop structure specifically encourages individuals to express their opinions without interruption. The community input period provides several methods for opinions and suggestions to be expressed. **The result is a plan born out of consensus.**



Connecting People and Sherman



Pedestrian Plan

The Sherman Center Pedestrian Plan – Connecting People and Sherman

The Sherman Center Pedestrian Plan reflects the opportunities and challenges of the physical character of Sherman Town Center and the desires and program elements developed by the community. The Plan is not one dimensional in its design but was developed to provide a multi use system that enhances the quality of life for the residents of the Town of Sherman.

The Concepts

- **Safety** – This concept was the most important element discussed at the workshop and subsequent conversations with Sherman residents. The pedestrian pathways and trails provide a safe access throughout the Town Center specifically providing access from the Sherman School to its evacuation area of Holy Trinity Church. Traffic calming techniques are utilized where practical in order to reduce the speed of the traffic as it passes through the Center. The materials utilized for the pathways and trails are durable.
- **Connections** – Currently, Sherman Town Center is comprised of clusters of activity with minimal pedestrian connections. This diminishes its rural character as most rural towns have a strong pedestrian core. Currently the only practical and safe way to experience the entire Town Center is with a vehicle. This adds to the traffic conflicts that already exist in the Town and will continue to grow as the Town grows. This plan will create connections so that residents can walk all or a part of the Town Center. This will connect the people with the Town and also with their fellow residents.
- **Rural Character** - This concept directed the plan towards a subtle design with no perceptible impact on the current rural character of the Town. The plan provides connection to the major elements of the Town without creating a traditional downtown streetscape. Where practical, the pathways are constructed utilizing soft treatments and where pathways must be accessible the surface will be hard yet subtle.
- **Resource Protection** – This concept was integrated into the plan after research of the water resources in the Town and discussions with the Candlewood Lake Authority. The degradation of Allen’s Cove due to sediment deposited from the Saw Mill Watershed has provided not only challenges to the plan but also opportunities. This plan incorporates some of the recommendations of the Saw Mill Brook Watershed Study but tempers them with a “softer” and more environmentally sensitive bioengineering approach in order to provide opportunities for education, biodiversity and aesthetics.
- **Education** – The opportunities available in the Town Center provided the foundation for the concept that the pathways and trails are educational tools. Linking visual, historic, and natural resources, the trails can become a part of a curriculum, a part of a walking tour which introduces the beauty and history of Sherman to a visitor, and an outdoor laboratory for experimentation and research. Sherman can work with Candlewood Lake Authority, Western Connecticut State University, Sherman School, Sherman Library and Sherman Historical Society to further develop curriculum, signage, grant opportunities, etc. in order to create an interactive trail system.
- **Recreation** - Sherman’s renaissance in the 1920’s has been attributed to the creation of Candlewood Lake



and the influx of summer residents who decided to make Sherman their home. Recreation became an important part of Sherman's character. The pathways and trails that already exist in the Town Center can be enhanced by this plan to create a broader recreational element that will connect the Town Center to Candlewood Lake and other open space properties.

The Proposals



- **Gateway** – The introduction to the Town Center from the south is the intersection of Route 37 and Route 39. There is an area of open land adjacent to that intersection which the plan recommends a gateway design of a stone wall/sign/ planting as an introduction to Sherman. This element would also act a traffic calming technique as it provides the driver with the information that they are entering the Town Center. Adding a path and stone wall element from the Post Office to the Holy Trinity Church further clarifies that this is a town center.
 - **Funding** - This traffic calming technique could be funded through transportation enhancement grants.
 - **Challenges** – This would require permits from the Connecticut Department of Transportation. This area would require maintenance.
- **Stone walls** – There are fragments of stone walls throughout the Town Center. The only streetscape element proposed in this plan is stone walls set in a farm wall fashion using Connecticut fieldstone. By connecting the fragment stone walls, this element will provide a visual definition to the Sherman Town Center.
 - **Funding** - Sherman could work with local stone masons, develop grant applications, and request installation as properties are enhanced.
 - **Challenges** – This would require permits from the Connecticut Department of Transportation and easements from private property owners.
- **Pathways** – There are limited pathways in the Town Center that connect The Sherman School to the Library. This plan proposes to expand those pathways to provide safe pedestrian travel from the School to other popular destinations such as the IGA. These pathways will be subtle in design and could be comprised of several types of material such as porous pavement, stamped concrete, oil and stone or soil hardener. The intent of these pathways is to provide an accessible connection to these destinations. The pathways will be connected to trails systems.
 - **Funding** – These pathways can be funded via grants, or incorporated into plans as properties are enhanced in the Town Center. If the Town feels these pathways are essential, specifically the evacuation route for the School, they could be funded as a capital improvement project.



- **Challenges** – These pathways could require Connecticut Department of Transportation permits and/or easements from private property owners. But like all pathways, the greatest challenge is who is responsible for maintenance, specifically snow removal. Sherman could develop a three season ordinance for the pathways that would close the pathways during the winter months and therefore travel would be at “your own risk.” The evacuation route for the School should be clearly defined and would need to be maintained year round. Plans in progress for the Sherman Library and the Sherman Fire Department should take into consideration the recommendations of the plan, but, the pedestrian plan should be adjusted as these plans become more definite.
- **Signs** – The plan calls for three different levels of signs in the Town Center: traffic signs, identification signs and informational signs. The traffic signs on state roads are confined to the designs that are standards of the Connecticut State Department of Transportation. These include speed limit signs, road designation signs, and directional signs. The identification signs will be signs specific to Sherman such as the “Welcome to Sherman” sign, the shopping area signs, and the Sherman Library sign. These signs can become another identifying element to the Town. The last group is informational signs that provide historical or educational information about the Town Center. These signs will develop a message and enhance the users experience on the trails. The signs would be a part of the educational and recreational experience of the Town Center.

 - **Funding** – Traffic signage on state roads is the responsibility of the State. In rare cases the State will allow different posts but generally that would then make the signs the responsibility of the municipality. Town road traffic signs are the responsibility of the Town. Identification signs can be funded by donations, grants or private property owners. The informational signs could be funded by grants or private donations.
 - **Challenges** – Traffic signage can become unsightly and often placed in areas that diminish the aesthetics. Identification signs can often create a disorganized town if there are not some restrictions and methods of recommendation. Vandalism is another challenge to signs especially if they are located in a remote location.
- **Crosswalks** – There is only one signalized intersection in Sherman and it is located at Holiday Point Road. Therefore, all the existing crosswalks in Sherman are not signalized. These crosswalks can be unsafe, exemplified by a recent accident involving a pedestrian in the existing crosswalk located at the Historic Center. This plan recommends that a system to warn motorists of a pedestrian in the crosswalk be developed with the DOT. One method is a pedestrian warning light, another is a pedestrian crossing light which will stop traffic if a pedestrian is in the crosswalk, and another is signage that warns motorists of a crosswalk. For the pedestrian plan to be successful, non signalized and mid block crosswalks have to be an integral part of the plan. The plan also recommends an additional crosswalk at the intersection of Greenwood's Road and Route 37/39 to

connect the Colonial Park trails to the Naromi trails.

- **Funding** – Crosswalks are usually funded by the State on State roads, or the Town on municipal roads. Occasionally, the State will allow the municipality to install a crosswalk on a State road at the municipality's expense. Maintenance on that crosswalk would be the municipality's responsibility.
 - **Challenges** – The safety of these crosswalks is the largest challenge and should be part of traffic calming and safety plan. This plan recommends that the Town work with DOT to develop a plan that would keep the crosswalks without diminishing the rural character of the Town.
- **Trails and Trailheads** – Sherman Town Center already has an extensive network of trails. This plan recommends some connections that will enhance that system. Trails would connect the School to the Church and then to the Colonial Park Nature trails. In turn those trails would connect to the Naromi trails. There are two Naromi trails that are not connected. This plan recommends that a connection be found to connect to the Sherman Green Marketplace. Trail heads should be information hubs. They should provide information regarding the trails, the Town and the opportunities along the trail. As discussed above, signage along the trails should provide information regarding a specific highlighted area. These signs should also be utilized along the pathways to highlight important elements of the Town. This will create a loop system of trails and pathways for connection, education and recreation.
 - **Funding** – Trails can be funded by grants, private donations or in kind services. Trail creation is also a great community or scout project. These types of projects can create a great tool for community involvement in the plan.
 - **Challenges** – Easements and or property acquisition will need to be obtained in order to complete the loop.
- **Pedestrian Bridges, Boardwalks, and overlooks** – As mentioned, Sherman is the location of three major brooks: The Saw Mill, the Greenwood and the Tollgate. In order for this plan to provide the connections discussed, pedestrians need to cross water. This plan recommends a pedestrian bridge at the Saw Mill Brook as part of the evacuation trail from the School to the Church. The Old Greenwood Bridge is in need of repair and the plan recommends a pedestrian component be included in the bridge. There are a few minor streams that require a simple pedestrian bridge for crossing. In the future, if the Town decides it would like to create a connection from Colonial Field to the Historic Center, a pedestrian bridge would need to be built adjacent to the vehicular bridge on Route 37/39 (please note that this plan did not initially recommend this connection due to the many challenges facing this pathway but incorporated it as a future element at the request of the community). There is an existing boardwalk in dire need of repair along the Naromi trail near the Sherman Green Marketplace. This plan recommends its repair and the addition of a boardwalk in the Colonial Park Nature Trails. Boardwalks provide the opportunity to cross and interact with a wetland. This in turn creates educational and recreational opportunities. This plan recommends that the boardwalks be designed with overlooks which would include signs, benches, and possibly scopes for viewing wildlife. Additional overlooks could be located a trail spurs to access and provide gathering points for educational and recreational use.
 - **Funding** – These elements tend to be structural elements and therefore would require the design of an engineer and the installation by a licensed contractor. The bridges could be a part of a grant, an addition to a capitol improvement project, or a private donation.



The pedestrian bridge that is crucial to the evacuation route of the School could be funded by the Town. The boardwalks and overlooks are smaller projects and could be community or scout projects.

- **Challenges** – These elements will require permits from the wetlands commission, DOT and DEP. Depending on their scale they will require design by engineers and building permits and inspections. Maintenance is crucial in order to ensure their safety. Easements from private property owners or open space will need to be obtained.
- **Stream Bank Restoration and Riparian Buffers** – The Candlewood Lake Authority has already determined that without stream bank restoration and riparian buffers along the three brooks that converge in the downtown, the health of Allen’s Cove will continue to diminish. Their plan was a more hardscape approach to the solution and this pedestrian plan recommends a bioengineering approach which is a diverse toolbox of methods. The use of bioengineering approaches will encourage a more diverse habitat and provide opportunities for an outdoor classroom and outdoor laboratory. This will also provide a softer, more rural character along the stream banks. This plan recommends the Town become partners with the Candlewood Lake Authority to amend their study “Sawmill Brook Watershed Study”, dated October, 2004, to include these methods and implement the recommendations. The pedestrian plan then will have the added dimension of helping to protect Sherman’s greatest resource, Candlewood Lake.
 - **Funding** – This important aspect of the plan can provide more opportunities for funding through watershed enhancement grants, trail grants, education grants. These projects also lend themselves to community and/or scout projects.
 - **Challenges** – These elements will require permits from the Wetlands Commission and DEP. Easements and/or property acquisition from private property owners will be required. Monitoring and maintenance is crucial for the long term success of these elements and the Town will need to develop a plan for this in partnership with the Candlewood Lake Authority.
- **Roundabout** – This traffic calming technique is recommended for the future reconfiguration of the intersection of Route 37 and Route 39 at the Sherman School. This controversial element will provide a safer intersection, slower traffic in the Town Center and a safer pedestrian crossing. The immediate issue is that the State will be reconstructing Route 37 North from the intersection and the design phase is already complete. To incorporate this into the design at this time would mean putting a much needed project on hold. The decision was to incorporate this element into the future plans for the Town of Sherman. Please see appendix for report and plan of the roundabout.
 - **Funding** – The roundabout is a traffic calming technique that would require both a DOT permit and DOT installation. There may be opportunities for grants through traffic enhancement funds. The Town will need to work very closely with DOT to ensure the roundabout is designed in character with Sherman.
 - **Challenges** – Although these elements have a track record of improving traffic conditions, there is a learning curve for most motorists to negotiate them and some resistance from DOT in



installing them.

- **Planting** – Certain areas need to be highlighted by plantings. The Sherman Garden Club Beautification Committee has in the past adopted areas in order to plant trees and flowers. This plan recommends certain areas be planted to enhance the visual and pedestrian experience of the Town Center. Plants should be native, colorful, deer resistant and easy to maintain. (See appendix for recommended list).
 - **Funding** – Memorial Gardens, Garden Club projects, scout projects, community gardens, grants and private donations would all be reasonable funding methods for areas of planting.
 - **Challenges** – Maintenance is the biggest challenge for any planted area. If it is not maintained, the character of the Town Center will be diminished. Any plantings located within the State right of ways will require the Town to sign maintenance and liability waiver with the State. These areas then become the sole responsibility of the Town.
- **Gazebo, Benches, Other Amenities, and Lighting** – The Sherman Green Marketplace is an area built around a green. Part of that Green is on Town property. This could be an opportunity to create a structure that could provide town information in a central location, including a map of the entire Sherman Center Pedestrian Plan. This could also be a stage for small concerts on the Green and town events that need proximity to the Town Hall. The trails in this area would all converge at the gazebo. The existing gazebo in Veteran’s Field would still remain the location for major town events, specifically the end of the Memorial Day Parade. In certain locations, benches would be appropriate to allow the pedestrian to revel in a view, to rest along the way, to visit with a friend. The benches will be subtle, wooden benches that blend into the rural character of the Town. Other amenities are not specifically shown on the plan but could be added if the need presents itself such as trash receptacles, bicycle racks, and pedestrian lighting. This plan does not specifically recommend any street lighting but as the pedestrian plan develops it may become apparent that certain areas should be lit for safety. This plan recommends that the pathways be monitored for use and lights be added if needed. Therefore, conduit sleeves should be provided to allow for the addition of lighting on a need basis only. Any lighting added to the pedestrian plan should follow the “night sky” guidelines as required by the DOT.
 - **Funding** – Private funding or donation with a memorial plaque.
 - **Challenges** – Vandalism is always a challenge for any structure but there is little evidence in the Town of vandalism so this would be a minor limitation. Monitoring and maintenance would be required. Lighting costs would include the electricity which would have to be metered and paid for, usually by the municipality.



The Sherman Center Pedestrian

PROPOSALS

1. GATEWAY
2. NEW PEDESTRIAN PATHWAY FROM POST OFFICE TO HOLY TRINITY CHURCH
3. EXTEND STONEWALL ALONG NEW PEDESTRIAN PATHWAY AS AN IDENTITY ELEMENT FOR SHERMAN
4. TRAIL WITH STREAM BANK RESTORATION ALONG SAWMILL BROOK
5. ACCESS SPUR FROM NEW TRAIL TO CHURCH AS PART OF EVACUATION ROUTE
6. PEDESTRIAN BRIDGES WITH EDUCATIONAL INFORMATION REGARDING BROOKS
7. CROSSWALK AND TRAILHEAD AT REAL ESTATE OFFICE
8. PEDESTRIAN PATHWAY CONNECTING SCHOOL TO LIBRARY*
9. CLOSE DRIVE FROM LIBRARY AND ENHANCE CORNER*
10. BEAUTIFY AND ENHANCE EXISTING WALKS*
11. MAINTAIN SPUR WALK AT REAR OF LIBRARY
12. IMPROVE PEDESTRIANS CONNECTIONS FROM SCHOOL TO SHERMAN GREEN AND SHERMAN COMMONS
13. PROPOSED STRUCTURE AT TOWN GREEN FOR COMMUNITY GATHERINGS AND COMMUNITY INFORMATION
14. PLACE RAILING AT TOWN HALL WALKWAY
15. IMPROVE NAROMI TRAILHEAD
16. IMPROVE NAROMI BOARDWALK AND ADD EDUCATIONAL INFORMATION
17. IMPROVE PEDESTRIAN BRIDGE
18. IMPROVE TRAILHEAD AT HISTORICAL SOCIETY
19. PROVIDE PEDESTRIAN CONNECTION FROM EXISTING CROSSWALK TO TRAILHEAD
20. PROVIDE PEDESTRIAN CONNECTION FROM UPPER PLAY AREA OF SHERMAN SCHOOL TO MEMORIAL FIELD
21. ENHANCE MEMORIAL FIELD WALKWAY WITH NATIVE PLANTINGS AND STORMWATER MANAGEMENT STRUCTURES
22. PROVIDE EDUCATIONAL INFORMATION ABOUT CANDLEWOOD LAKE
23. TRAIL CONNECTING PEDESTRIAN BRIDGES TO RED TRAIL HEAD. IMPROVE RED TRAIL HEAD
24. EDUCATIONAL SPUR TO WETLANDS WITH VIEWING PLATFORM
25. TRAIL AT COLONIAL FIELD CONNECTING RED TRAIL HEAD TO BLUE TRAIL HEAD
26. IMPROVE BLUE TRAIL HEAD
27. TRAIL CONNECTING BLUE TRAIL TO NAROMI TRAIL WITH NEW MID-BLOCK CROSSWALK
28. NEW NAROMI TRAILHEAD INCORPORATED INTO IMPROVED BRIDGE AT OLD GREENWOODS ROAD
29. ACCESS SPUR FROM BLUE TRAIL TO POST OFFICE/AMERICAN PIE

* ADJUST AS NECESSARY TO INCORPORATE NEW LIBRARY PLANS

FUTURE PROPOSALS

- A. STREAM BANK RESTORATION AND A MID-BLOCK CROSSWALK, PEDESTRIAN BRIDGE AND PEDESTRIAN PATHWAY CONNECTING HOLY TRINITY CHURCH TO HISTORIC CENTER
- B. PEDESTRIAN PATHWAY CONNECTING SCHOOL TO TOWN OPEN SPACE AND HOLIDAY POINT ROAD
- C. CONNECT NAROMI TRAILS
- D. ADDITIONAL TRAILS AT COLONIAL PARK
- E. ROUNDABOUT AT INTERSECTION OF ROUTE 37 AND ROUTE 39*
- F. PEDESTRIAN PATHWAY CONNECTING HISTORIC CENTER TO PLAYHOUSE AND IGA

*SEE APPENDIX

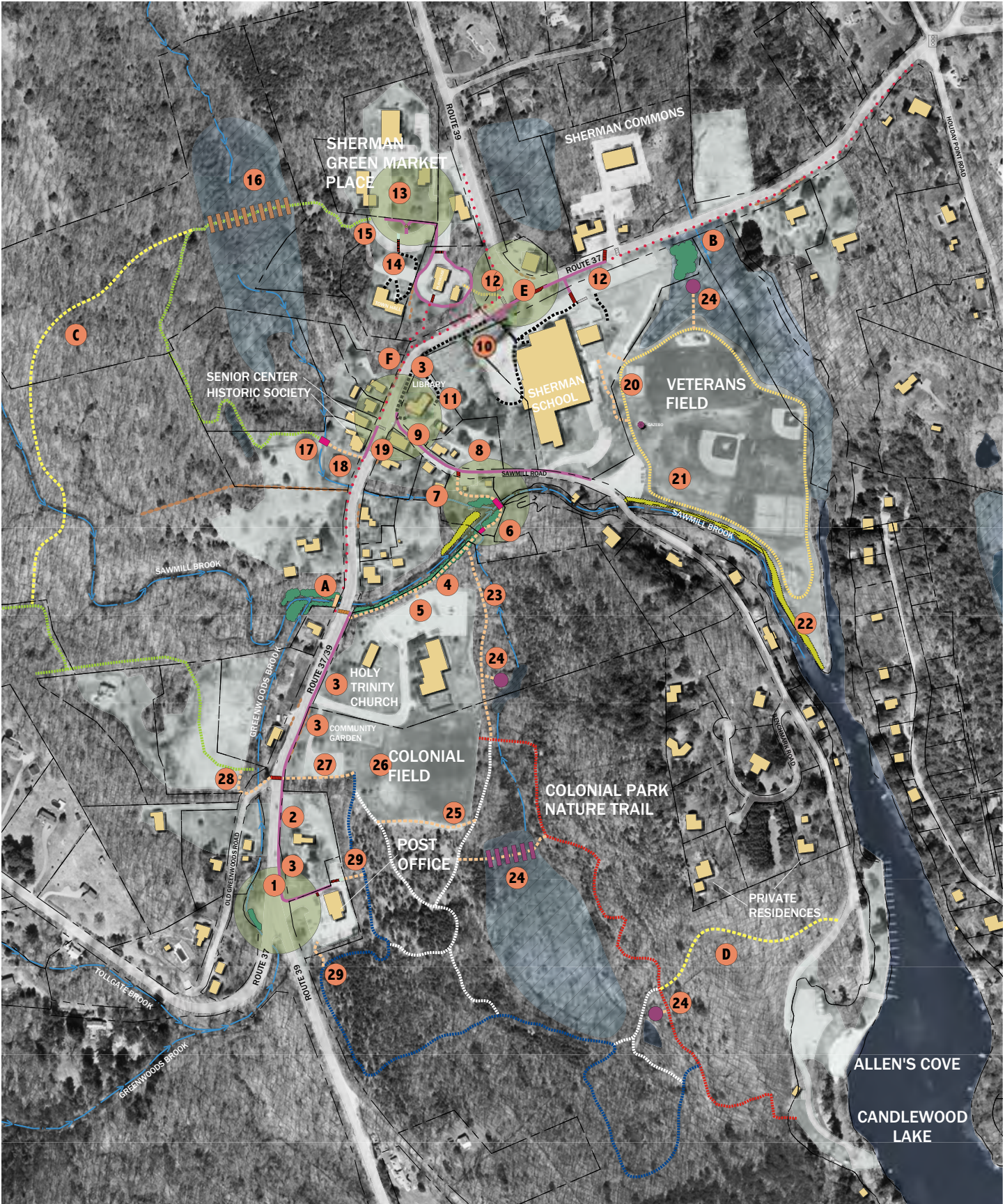
LEGEND

EXISTING

	PROPERTY LINES
	EXISTING RED TRAIL
	EXISTING WHITE TRAIL
	EXISTING BLUE TRAIL
	EXISTING NAROMI
	EXISTING PEDESTRIAN PATHWAY
	EXISTING SIDEWALK
	FLOW OF STREAM
	EXISTING STONEWALL
	EXISTING GAZEBO
	EXISTING WETLANDS
	EXISTING BOARDWALK
	EXISTING CROSSWALK

PROPOSED

	PROPOSALS		PROPOSED VIEWING PLATFORM
	FUTURE PROPOSALS		PROPOSED FUTURE CROSSWALK
	PROPOSED PEDESTRIAN PATHWAY		PROPOSED FUTURE PEDESTRIAN PATHWAY
	PROPOSED TRAIL		PROPOSED FUTURE TRAIL
	PROPOSED CROSSWALK		PROPOSED FUTURE PEDESTRIAN BRIDGE
	PROPOSED BOARDWALK		DETAIL AREAS
	PROPOSED GAZEBO		
	PROPOSED PEDESTRIAN BRIDGE		
	PROPOSED STREAM BANK RESTORATION		
	PROPOSED RIPARIAN BUFFER AND STREAM BANK RESTORATION		



The Details

The Gateway at Route 37 and Route 39 intersection WELCOME (and please slow down)



Plan Not to Scale

The Gateway will welcome the visitor to the Town while providing the cues that the motorist should slow down. Stone walls, colorful native plants, a “Welcome to Sherman” sign, and pedestrian pathways will create the initial impression of the Town. The sign could be developed as part of a town wide contest. The following photo simulations are to provide a vision. The actual configuration will need to be developed with the Town of Sherman and DOT.





Before



Proposed After

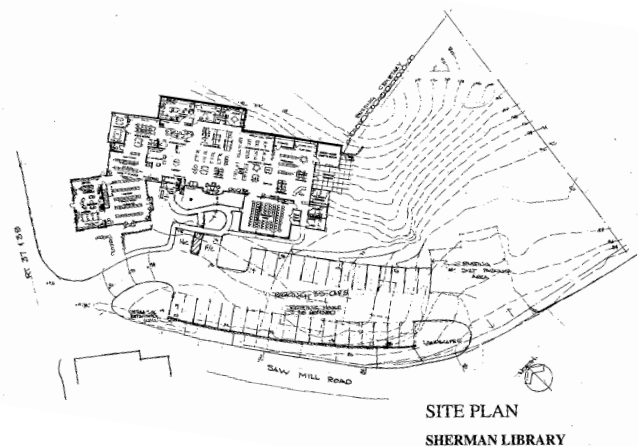
The Historic Center



Plan Not To Scale

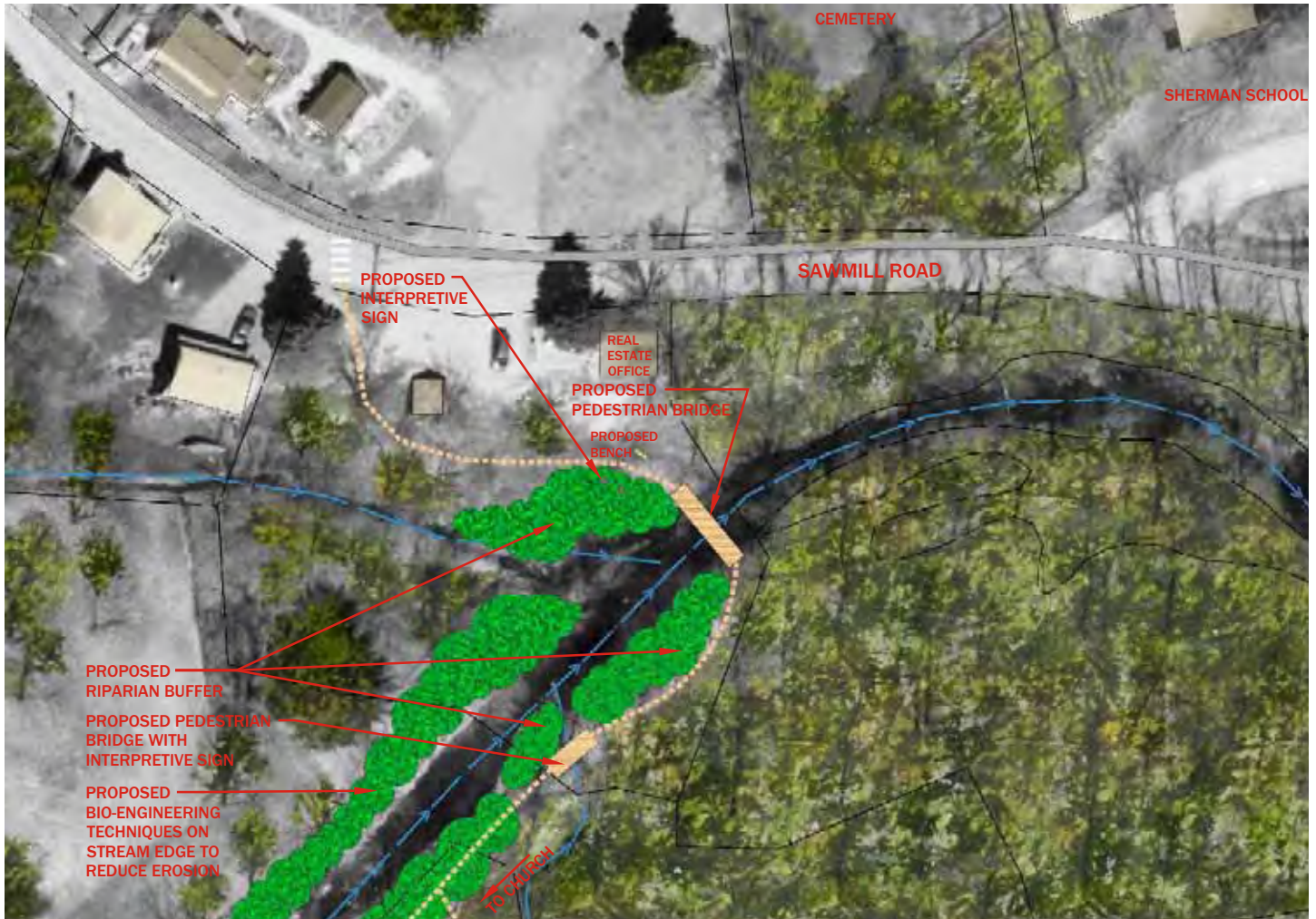
The Historic Center is the visual center of Sherman Town Center. Pedestrian access is essential because the parking for the Senior Center and the Historical Society is at the Library. Enhancing this charming area with some connections will enable access to all the elements.

The Library expansion plans were provided after the Pedestrian Plan was presented to the Town. However, we would like to recommend that the Library consider closing the driveway at the intersection for safe egress from the parking area to avoid conflicts with turning movements between Routes 37 & 39 and Saw Mill Road. All recommended pathways should be incorporated into the plan and adjusted according to the final layout of the building. Incorporating a low stone wall at the walkway from Saw Mill Road to the cemetery



Proposed Library Plan

Evacuation / Education Trail

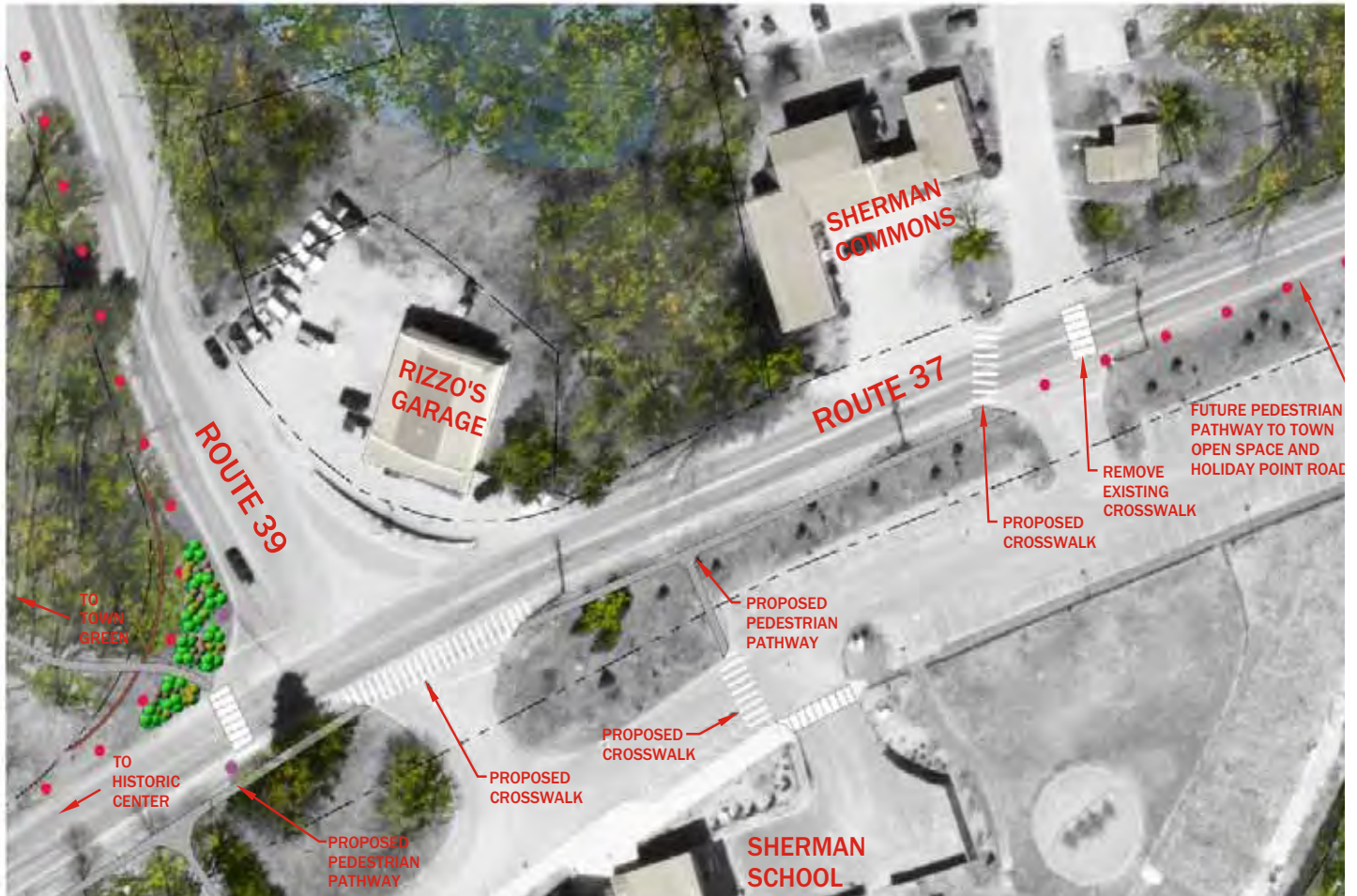


Plan
Not To Scale



The Evacuation / Education Trail has to traverse the Saw Mill Brook. A Pedestrian Bridge similar to this example could span the brook. A porous paving trail system and riparian plantings can provide a safe evacuation route from the School to the Church plus educational opportunities and trails for family recreation. Overlooks with educational signs, similar to example, can provide information about the resources of the Town. The trail provides a safe evacuation route, connection to southern town elements, education about the natural and historic resources of the Town, and a beautiful, peaceful place to spend an afternoon.

The Intersection of Route 37 and Route 39



Plan Not To Scale

This intersection is the center of the Town Center and the location of the Sherman School. The school children are the largest pedestrian group and connecting them to the main features of the Town, specifically the IGA, the Commons and the Library, was the community's greatest concern. Using a porous pavement treatment on the pathways creates a subtle connection without adding impervious surface to the Town Center. A stone wall element opposite Rizzo's garage emphasizes the corner. A rain garden, similar to example shown, mitigates the drainage that is now in a paved ditch while providing low maintenance colorful plantings to the intersection. Traffic calming is recommended for this intersection and a roundabout design has been developed and is available in the appendix.



The Sherman Green



Plan Not To Scale

The Green is a precious resource for the Town and should be preserved. The recently released plans for the Firehouse impact the Green and this plan recommends re-examining that decision. This plan recommends that a small structure in the Green become an important hub for the Sherman Pedestrian Pathways and Trails. This structure, similar to the example, could also serve as a small stage for events that occur on the Green. It could also provide a daily refuge for the town pedestrian. Connecting trails to the Playhouse and the intersection will provide safe access for the school children. A connecting trail to the Naromi trail head will provide access to the entire loop of trails and paths. A new railing at the existing pathway will create an accessible connection from the Green to the Mallory Town Hall.



One Step at a Time



Conclusion

Conclusion: One step at a time

The Sherman Center Pedestrian Plan is a vision and a guide. Its goal is to provide a means to connect the people of Sherman to the place called Sherman. The experience of walking a place provides intimate, lasting memories. Sherman's pedestrian challenge is its configuration. But, if the pedestrian pathways and trails are designed not only to connect, but to educate, to provide recreation and to protect the town's natural resources, the need for a pedestrian plan becomes compelling.

The recommendations of this plan were carefully designed to be appropriate for a small rural hamlet. Accordingly, their scale would be inappropriate for a larger "downtown" area. The community was explicit in its desire to keep the rural character of the Town intact. But rural character should not mean access only by car. It does mean access to the town's beauty and fellow residents. It does mean learning about the town, experiencing every aspect of the town, sharing that experience with guests and visitors and doing all this while improving the health and quality of life of the residents. The plan is subtle and designed to be an evolution but the results will be transforming. This can only happen on foot, one step at a time. This can only happen when people slow down and listen. This is the foundation of the Sherman Center Pedestrian Plan.



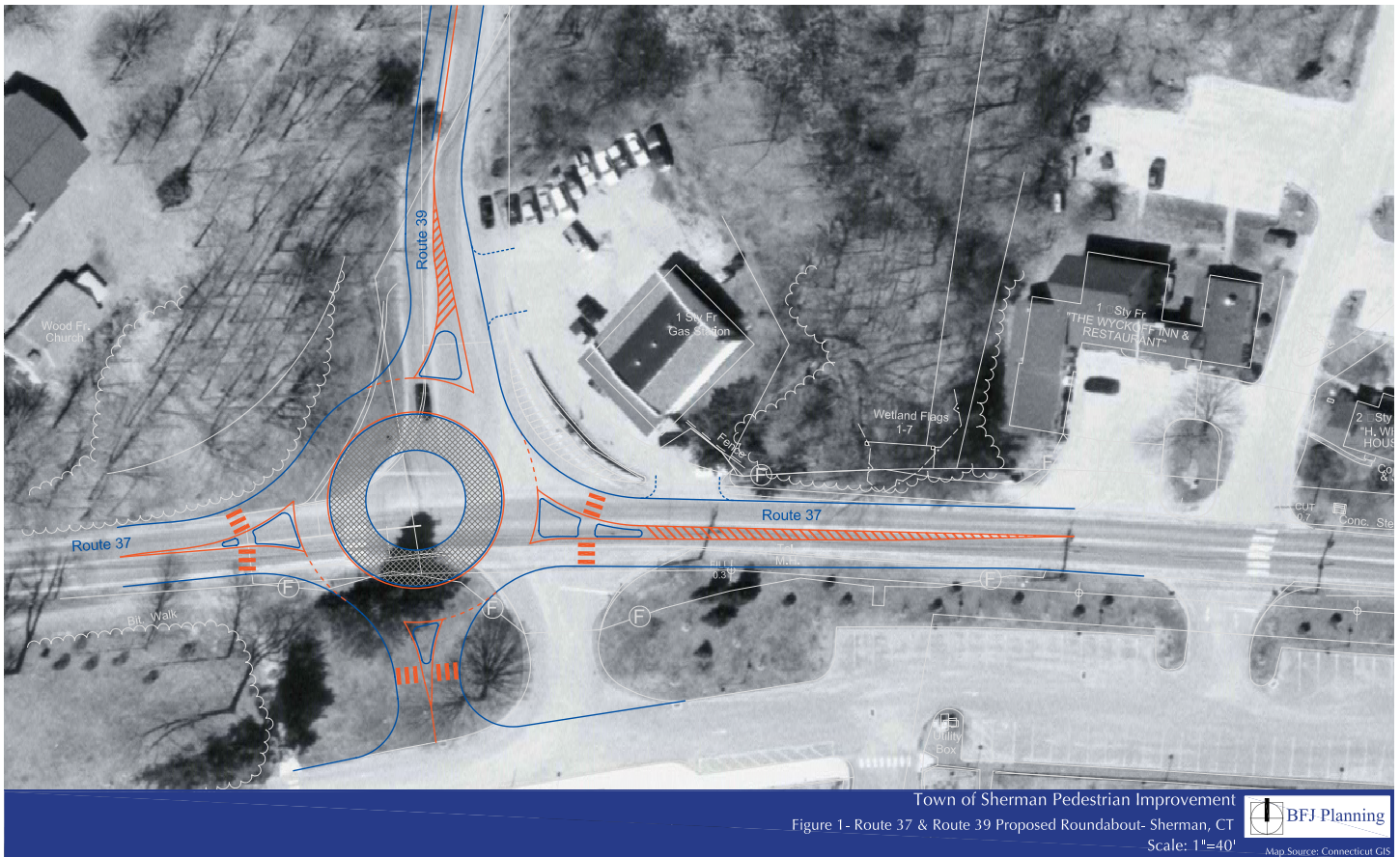
Reports and Resources



Appendix

Roundabout Study

Prepared by Buckhurst Fish & Jacquemart Inc.
115 Fifth Avenue New York, NY 10003



Plan
Not to Scale

The purpose of this study is to compare traffic flow conditions and safety at the intersection of Route 37 and Route 39 in the existing condition (operating as a two-way stop intersection) and as a single lane roundabout.

Existing Conditions:

A traffic count was performed at the Route 37 & Route 39 intersection on Thursday April 5, 2006 between 7:00 AM and 9:00 AM and on Friday March 31, 2006 between 4:00 PM to 5:30 PM. Detailed data sheets and diagrams are attached. Table 1 shows Levels of Service (LOS) and delays for the different movements in the existing condition.

Table 1 - Level of Service & Delay in Existing Conditions

Approach	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
Eastbound LTR	1.9	A	4.5	A
westbound LTR	1.7	A	0.4	A
northbound LTR	27.5	D	93.0	F
southbound LTR	54.4	F	116.1	F
<i>Overall</i>	<i>17.5</i>	<i>A</i>	<i>45.1</i>	<i>C</i>

Proposed Roundabout:

The intersection of Route 37 & Route 39 is being considered to become a roundabout because of the visual, traffic flow and safety advantages of the roundabout vis-à-vis other types of intersections. Single-lane roundabouts are also very safe for pedestrians even though pedestrians would not get a "walk/don't walk" signal. One of the main characteristics of the "modern" roundabouts is that they are designed to slow down cars, unlike the old circles or rotaries that act more like a racetrack. Table 2 shows the crash reductions that have been achieved by different roundabouts in the United States. As can be seen, roundabouts tend to decrease total accidents by about half and injury accidents by almost three quarters.

Table 2- Safety Impacts of Modern Roundabouts (Source: NYSDOT Study October 2008)

Type of Roundabout	Converted from	# of Conversions	Percent Reduction of all Crashes	Percent Reduction of Injury Crashes
Single Lane, Urban	Stop Controlled	12	69%	80%
Single Lane, Rural	Stop Controlled	9	65%	68%
Multi-lane, Urban	Stop Controlled	7	8%	73%
Urban	Signalized	5	37%	75%
All		33	47%	72%

Figure 1 shows the proposed roundabout at the intersection of Route 37 & Route 39. To optimize the roundabout design, maintain reasonable entry angles and preserve the service station in the northeast quadrant we shifted the school driveway to the west. We maintained sufficient space between the roundabout and the stonewall in front of the service station so that a walkway could be added. The cross-hatched area around the landscaped central island is the truck apron that is normally built with pavers and allows large trucks and buses to make left turns or even U-turns. Pedestrian crossings have been provided on either side of the school driveway. As per US and international standards the crossings are about one car length back from the outer circle, across the splitter island, thus allowing pedestrians to cross in two phases one lane at a time. The pedestrian crossings would be supplemented with pedestrian yield signs.

Table 2 compares the levels of service and delays of the existing intersection and the proposed roundabout assuming a 20% increase over today's peak hour volumes. It can be seen that delays would be significantly reduced with the proposed roundabout.

Table 2- Level of Service & Delay in Future Conditions

Approach	Future Conditions with out Roundabout				Future Condition with Roundabout			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
eastbound LTR	2.1	A	5.1	A	5.4	A	8.4	A
westbound LTR	1.9	A	0.4	A	4.2	A	4.8	A
northbound LTR	60.1	F	249.8	F	7.2	A	4.8	A
southbound LTR	207.0	F	371.8	F	8.4	A	6.0	A
<i>Overall</i>	<i>61.4</i>	<i>F</i>	<i>140.2</i>	<i>F</i>	<i>5.5</i>	<i>A</i>	<i>6.8</i>	<i>A</i>

Conclusion:

A modern roundabout would be a great improvement for this intersection from the point of view of aesthetics, traffic safety, traffic delays and pedestrian circulation. As shown in Figure 1, the school driveway would have to be shifted further west and one large evergreen would have to be removed, as well as a utility pole. The approaches from the east and from the west would have an advance warning sign "Roundabout Ahead".

PEAK HOUR TRAFFIC VOLUMES

Intersection: Route 39 & Route 37

Day/Date of Count: Thursday/ April 5, 2006

Municipality/State: Saratoga, NY

Project: Sherman Roundabout

Morning Traffic Counts

		Route 39 & Route 37																15 minute Totals	
		Route 39 & Route 37 Eastbound				Route 37 Westbound				Sherman School Dr. Northbound				Route 37 Southbound					
		left	thru	right	TV	left	thru	right	TV	left	thru	right	TV	left	thru	right	TV		
7:00	7:15	5	22	4	31	1	12	2	15	1	2	0	3	8	1	20	32	81	Hourly Totals 852 900 974 909 736
7:15	7:30	10	31	6	47	1	63	11	75	2	0	0	2	12	2	30	47	171	
7:30	7:45	14	36	6	56	4	60	9	73	0	1	0	1	17	6	30	53	192	
7:45	8:00	7	31	31	69	4	66	19	99	0	1	0	1	12	17	30	59	218	
8:00	8:15	12	19	32	63	15	59	23	97	1	6	1	8	8	26	30	69	237	
8:15	8:30	15	20	24	59	17	69	15	101	4	7	2	13	12	21	31	64	237	974
8:30	8:45	12	24	1	37	4	24	6	34	4	3	2	9	16	2	19	37	117	909
8:45	9:00	29	26	5	60	3	27	6	36	0	0	0	0	14	6	29	49	145	736
		104	200	109	421	49	380	91	520	12	20	3	17	99	63	228	470	1388	874 hourly pk. traffic vol
Peak Hour (7:30 - 8:00)		48	105	53	248	40	254	88	380	5	15	3	23	48	72	128	245		
Peak Hour Factor		0.80	0.75	0.73	0.89	0.59	0.62	0.72	0.89	0.31	0.54	0.39	0.44	0.72	0.54	0.94	0.89		

Day/Date of Count: Friday/ March 31, 2006

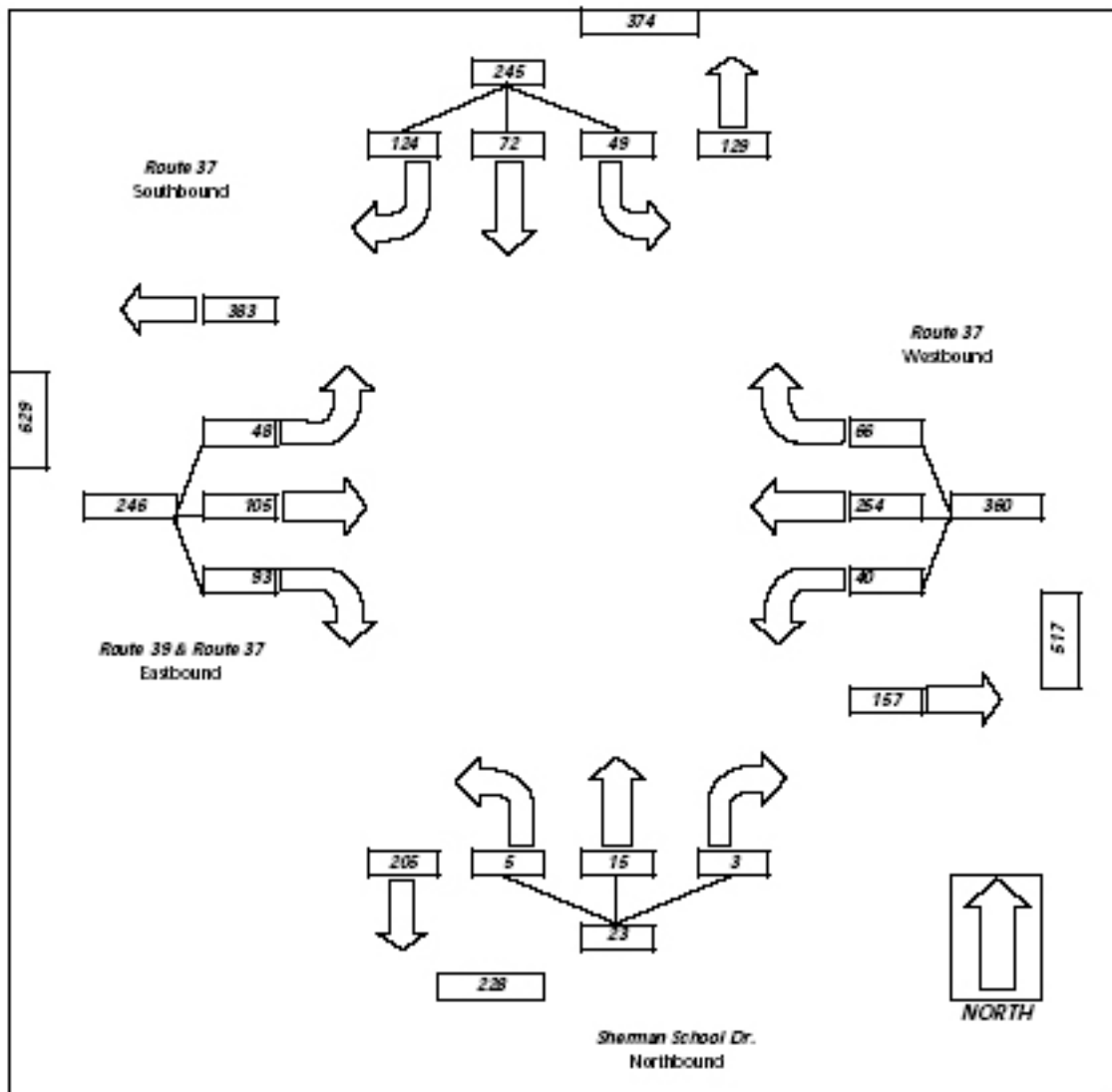
Afternoon Traffic Counts

		Route 39 & Route 37																15 minute Totals		
		Route 39 & Route 37 Eastbound				Route 37 Westbound				Sherman School Dr. Northbound				Route 37 Southbound						
		left	thru	right	TV	left	thru	right	TV	left	thru	right	TV	left	thru	right	TV			
16:15	16:30	45	56	2	103	1	55	13	69	1	1	1	3	21	1	25	47	221	Hourly Totals	
16:30	16:45	54	73	4	131	0	43	18	61	0	0	0	0	25	0	24	49	241		
16:45	17:00	47	53	0	100	2	55	20	77	0	0	0	0	14	4	57	115	292		
17:00	17:15	46	56	5	107	0	35	23	58	0	0	0	0	9	2	46	57	222		976
17:15	17:30	48	75	4	127	3	42	13	58	1	0	0	1	19	4	48	71	257		1012
17:30	17:45				0				0				0				0	0	771	
17:45	18:00				0				0				0				0	0	479	
18:00	18:15				0				0				0				0	0	257	
		240	312	15	567	6	230	87	323	2	1	1	4	99	11	240	339	1293		
Peak Hour (4:15 - 5:15)		185	257	13	455	5	175	74	254	1	0	0	1	87	10	218	292			
Peak Hour Factor		0.80	0.88	0.85	0.89	0.42	0.60	0.80	0.82	0.25	#DIV/0!	#DIV/0!	0.25	0.87	0.63	0.88	0.83		1092 hourly pk. traffic vol	

PEAK HOUR TRAFFIC VOLUMES
Route 39 & Route 37
AM Peak Hour

Peak Hour: (7:30 - 8:30)
Day/Date: Thursday/ April 5, 2006
Notes:

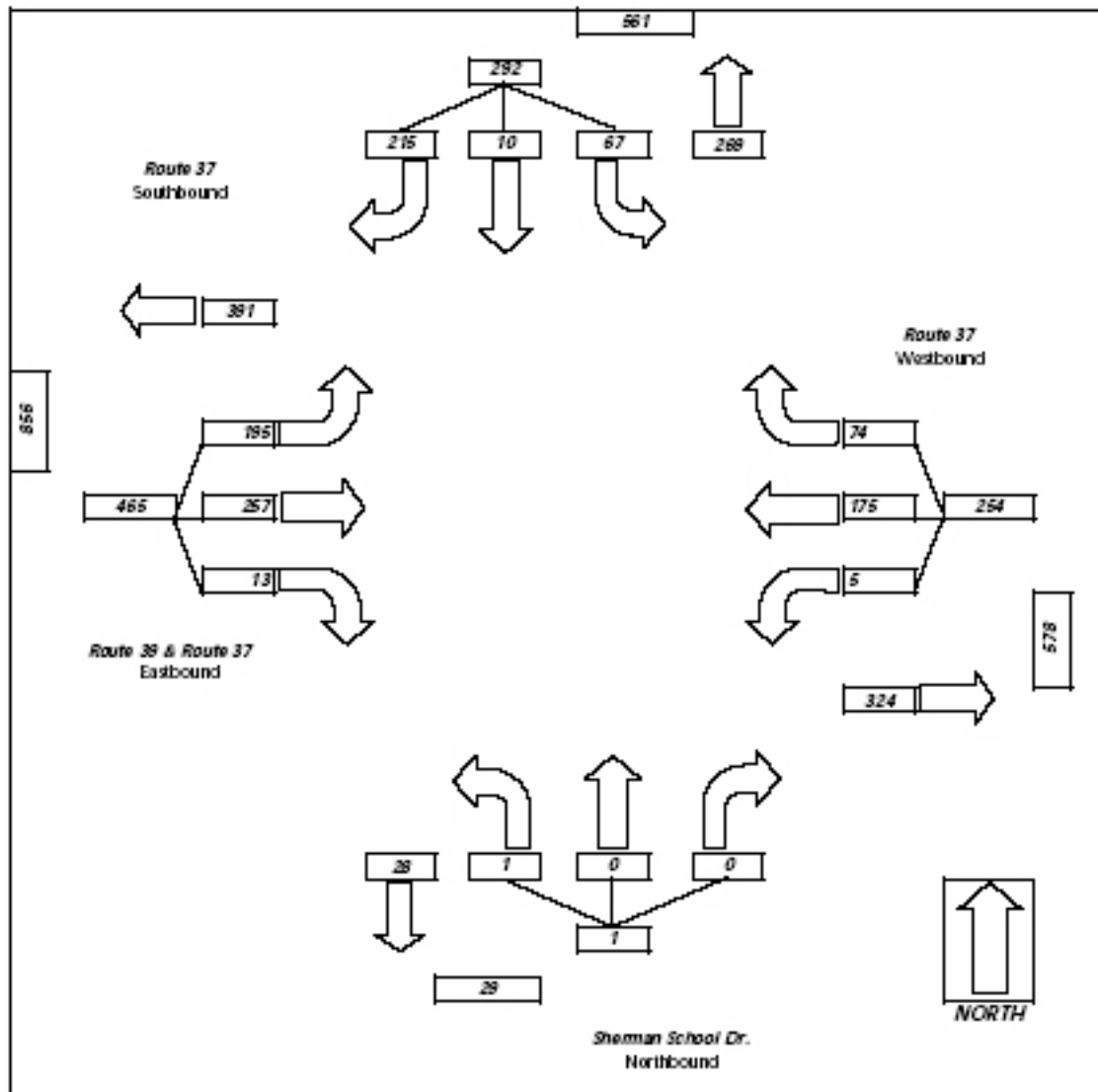
Project: Sherman Roundabout
Municipality/State: Somers, NY



PEAK HOUR TRAFFIC VOLUMES
Route 39 & Route 37
PM Peak Hour

















Peak Hour: (4:15 - 5:15)
 Day/Date: Friday/ March 31, 2006
 Notes:

Project: Sherman Roundabout
 Municipality/State: Somers, NY



HCM Unsignalized Intersection Capacity Analysis 2: Route 37 & Route 39

5/12/2006

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations												
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	185	257	13	5	175	74	1	0	0	67	10	215
Peak Hour Factor	0.90	0.86	0.65	0.42	0.80	0.80	0.25	0.92	0.92	0.67	0.63	0.55
Hourly flow rate (vph)	217	299	20	12	219	92	4	0	0	100	16	391
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	311			319			1430	1077	308	1031	1041	285
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	311			319			1430	1077	308	1031	1041	285
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	83			99			91	100	100	45	92	49
cM capacity (veh/h)	1249			1241			45	179	731	182	188	774
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	536	323	4	507								
Volume Left	217	12	4	100								
Volume Right	20	92	0	391								
cSH	1249	1241	45	445								
Volume to Capacity	0.17	0.01	0.09	1.14								
Queue Length 95th (ft)	16	1	7	455								
Control Delay (s)	4.5	0.4	93.0	116.1								
Lane LOS	A	A	F	F								
Approach Delay (s)	4.5	0.4	93.0	116.1								
Approach LOS			F	F								
Intersection Summary												
Average Delay				45.1								
Intersection Capacity Utilization				65.1%	ICU Level of Service				C			
Analysis Period (min)				15								

Sherman Roundabout
PM

Existing Conditions
Buckhurst Fish & Jacquemart Inc.

HCM Unsignalized Intersection Capacity Analysis2: Route 37 & Route 39

5/12/2008

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	48	105	93	40	254	66	5	15	3	49	72	124
Peak Hour Factor	0.80	0.75	0.73	0.59	0.92	0.72	0.31	0.54	0.38	0.72	0.64	0.94
Hourly flow rate (vph)	60	140	127	68	276	92	16	28	8	68	112	132
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	368				267				969	827	204	803
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	368				267				969	827	204	803
tC, single (s)	4.1				4.1				7.1	6.5	6.2	7.1
tC, 2 stage (s)												
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5
p0 queue free %	95				95				88	90	99	73
cM capacity (veh/h)	1191				1296				119	276	837	255
										270		
										719		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	327	436	52	312								
Volume Left	60	68	16	68								
Volume Right	127	92	8	132								
cSH	1191	1296	211	360								
Volume to Capacity	0.05	0.05	0.25	0.87								
Queue Length 95th (ft)	4	4	23	206								
Control Delay (s)	1.9	1.7	27.5	54.4								
Lane LOS	A	A	D	F								
Approach Delay (s)	1.9	1.7	27.5	54.4								
Approach LOS			D	F								
Intersection Summary												
Average Delay				17.5								
Intersection Capacity Utilization				47.9%	ICU Level of Service				A			
Analysis Period (min)				15								

















Sherman Roundabout
AM

Existing Conditions
Buckhurst Fish & Jacquemart Inc.

HCM Unsignalized Intersection Capacity Analysis

2: Route 37 & Route 39

5/12/2006













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	58	126	112	48	305	79	6	16	4	59	86	149
Peak Hour Factor	0.80	0.75	0.73	0.59	0.92	0.72	0.31	0.54	0.38	0.72	0.84	0.94
Hourly flow rate (vph)	72	168	153	81	332	110	19	33	11	82	134	159
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	441				321				1165	894	245	968
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	441				321				1165	894	245	968
IC, single (s)	4.1				4.1				7.1	6.5	6.2	7.1
IC, 2 stage (s)												
IF (s)	2.2				2.2				3.5	4.0	3.3	3.5
p0 queue free %	94				93				66	84	99	56
cM capacity (veh/h)	1119				1238				57	214	794	184
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	394	523	63	375								
Volume Left	72	61	19	82								
Volume Right	153	110	11	159								
cSH	1119	1238	125	282								
Volume to Capacity	0.06	0.07	0.51	1.33								
Queue Length 95th (ft)	5	5	59	478								
Control Delay (s)	2.1	1.9	60.1	207.0								
Lane LOS	A	A	F	F								
Approach Delay (s)	2.1	1.9	60.1	207.0								
Approach LOS			F	F								
Intersection Summary												
Average Delay				61.4								
Intersection Capacity Utilization				56.3%	ICU Level of Service			B				
Analysis Period (min)				15								

Sherman Roundabout
AM

Future Conditions
Buckhurst Fish & Jacquemart Inc.

HCM Unsignalized Intersection Capacity Analysis2: Route 37 & Route 39

5/12/2006

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	↕			↕			↕			↕				
Sign Control	Free			Free			Stop			Stop				
Grade	0%			0%			0%			0%				
Volume (veh/h)	234	308	18	8	210	89	1	0	0	80	12	258		
Peak Hour Factor	0.90	0.86	0.65	0.42	0.80	0.80	0.25	0.92	0.92	0.67	0.63	0.55		
Hourly flow rate (vph)	260	358	25	14	262	111	4	0	0	119	19	469		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type							None			None				
Median storage (veh)														
Upstream signal (ft)														
pX, platoon unblocked														
VC, conflicting volume	374				383				1716	1293	370	1237	1249	318
VC1, stage 1 conf vol														
VC2, stage 2 conf vol														
VCu, unblocked vol	374				383				1716	1293	370	1237	1249	318
IC, single (s)	4.1				4.1				7.1	6.5	6.2	7.1	6.5	6.2
IC, 2 stage (s)														
IF (s)	2.2				2.2				3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	78				99				78	100	100	5	86	35
cM capacity (veh/h)	1185				1176				18	126	675	126	133	722
Direction, Lane #	EB 1	WB 1	NB 1	SB 1										
Volume Total	643	388	4	608										
Volume Left	260	14	4	119										
Volume Right	25	111	0	469										
cSH	1185	1176	18	349										
Volume to Capacity	0.22	0.01	0.22	1.74										
Queue Length 95th (ft)	21	1	16	967										
Control Delay (s)	5.1	0.4	249.8	371.8										
Lane LOS	A	A	F	F										
Approach Delay (s)	5.1	0.4	249.8	371.8										
Approach LOS			F	F										
Intersection Summary														
Average Delay				140.2										
Intersection Capacity Utilization				76.2%	ICU Level of Service			D						
Analysis Period (min)				15										

Sherman Roundabout
PM

Future Conditions
Buckhurst Fish & Jacquemart Inc.

RODEL Analysis Reports

12:5:06					Sherman, CT- CL=85					17				
E	(m)	4.27	4.27	4.57	4.27	TIME PERIOD					min	90		
L'	(m)	15.48	4.64	25.98	10.85	TIME SLICE					min	15		
V	(m)	4.27	4.27	4.52	4.27	RESULTS PERIOD					min	15 75		
RAD	(m)	21.34	15.24	21.34	15.24	TIME COST					\$/hr	15.00		
PHI	(d)	26.98	30.78	22.18	20.25	FLOW PERIOD					min	15 75		
DIA	(m)	35.06	35.06	35.06	35.06	FLOW TYPE					pcu/veh	VEH		
GRAD SEP		0	0	0	0	FLOW PEAK					am/op/pm	AM		
LEG NAME		PCU	FLOWS (1st exit 2nd etc...U)			FLOF	CL	FLOW RATIO				FLOW TIME		
RT. 37/39		1.05	112	126	58	0	1.00	85	0.75	1.125	0.75	15	45	75
SCHOOL DR.		1.05	4	18	6	0	1.00	85	0.75	1.125	0.75	15	45	75
RT. 37		1.05	79	305	48	0	1.00	85	0.75	1.125	0.75	15	45	75
RT. 39		1.05	149	86	59	0	1.00	85	0.75	1.125	0.75	15	45	75
L' < 5														
FLOW		veh	331	31	483	328								
CAPACITY		veh	993	935	1151	903	AVDEL s 5.5							
AVE DELAY		mins	0.09	0.07	0.09	0.10	L O S B							
MAX DELAY		mins	0.12	0.08	0.12	0.14	VEH HRS 1.8							
AVE QUEUE		veh	1	0	1	1	COST \$ 26.9							
MAX QUEUE		veh	1	0	1	1								

12:5:06					Sherman, CT- CL=85			18		
E	(m)	4.27	4.27	4.57	4.27	TIME PERIOD			min	90
L'	(m)	15.48	4.64	25.98	10.85	TIME SLICE			min	15
V	(m)	4.27	4.27	4.52	4.27	RESULTS PERIOD			min	15 75
RAD	(m)	21.34	15.24	21.34	15.24	TIME COST			\$/hr	15.00
PHI	(d)	26.98	30.78	22.18	20.25	FLOW PERIOD			min	15 75
DIA	(m)	35.06	35.06	35.06	35.06	FLOW TYPE			pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK			am/op/pm	PM
LEG NAME	PCU	FLOWS (1st exit 2nd etc...U)				FLOF	CL	FLOW RATIO		FLOW TIME
RT. 37/39	1.05	16	308	234	0	1.00	85	0.75 1.125 0.75	15 45 75	
SCHOOL DR.	1.05	1	0	0	0	1.00	85	0.75 1.125 0.75	15 45 75	
RT. 37	1.05	89	210	6	0	1.00	85	0.75 1.125 0.75	15 45 75	
RT. 39	1.05	258	12	80	0	1.00	85	0.75 1.125 0.75	15 45 75	
L' < 5										
FLOW	veh	623	1	341	391					
CAPACITY	veh	1047	726	1060	985	AVDEL s 6.8				
AVE DELAY	mins	0.14	0.08	0.08	0.10	L O S B				
MAX DELAY	mins	0.20	0.11	0.11	0.13	VEH HRS 2.6				
AVE QUEUE	veh	2	0	0	1	COST \$ 38.7				
MAX QUEUE	veh	2	0	1	1					

Report Web and Print Resources

Advisory Commission on Intergovernmental Relations

www.opm.state.ct.us/budget/steap/steap.htm

Bioengineering for Hillslope, Streambank and Lakeshore Erosion Control

www.ianrpubs.unl.edu/epublic/pages/publicationD.jsp?publicationId=562

Connecticut Economic Resource Center, Inc. (CERC)

www.cerc.com

Connecticut Farmland Trust

www.ctfarmland.org/basic.php

Connecticut Rural Development Council

www.ruralct.org

Gross, Zimmerman, and Buchholz; Signs, Trails, and Wayside Exhibits:

Connecting People and Places; UW-SP Foundation Press, Inc.; 2006

HVCEO Connecticut Commute

www.hvceo.org/tables/TABLE_T19.php

www.hvceo.org/tables/TABLE_T20.php

HVCEO Regional Growth

www.hvceo.org/regionalplan_categories_development.php

HVCEO Regional Plan

www.hvceo.org/regionalplan_pedestriansmixedusetransit.php

HVCEO Regional Transportation Plan

www.hvceo.org/transport/tprojectssherman.php

HVCEO Sherman, Connecticut Water Supply Resources

www.hvceo.org/water/WATERSHERMANMAIN.php

HVCEO Town of Sherman, Connecticut Changing Land Use

www.hvceo.org/luchange_sherman.php

HVCEO Transportation Planning

www.hvceo.org/transport/transport_sherman_rt37.php

www.hvceo.org/transport/transport_sherman_tint.php

HVCEO Transportation Planning – Route 39

www.hvceo.org/transport/transport_sherman_rt39.php

Local Capital Improvement Program

www.opm.state.ct.us/igp/grants/LOCIP.HTM

National Geographic Map Machine

mapmachine.nationalgeographic.com

National Rural Development Partnership

www.rurdev.usda.gov/nrdp/state/state_profile/ct.html

New Milford Chamber of Commerce

www.newmilford-chamber.com/sherman.html

Sherman Playhouse

www.geocities.com/~shermanplayers/history.htm

Sherman Schools

www.shermanschool.com

U.S. Department of Agriculture, Natural Resources Conservation Service

www.ctfarmland.org/challenge_45pct_may06.jpg

Wikipedia – Rural

en.wikipedia.org/wiki/Rural

Example: Educational Trail Program



Fall School Programs

From October 2 through November 17, 2006, we are offering fall programs for children in Preschool through 5th grade. Each 90 minute program includes time on the trails exploring a theme, looking for animals and plants, and playing educational games. The themes are designed for a particular grade but can be flexible and adapted to different grade levels. The themes are:

Preschool and Kindergarten
Using our Five Senses

First Grade
Plants in the Fall

Second Grade
Animals Interactions

Third Grade
Habitats and Communities

Fourth Grade
Rocks and Minerals

Fifth Grade
Water Cycles and Watersheds

All of these programs cost \$1 per student with no cost for teachers or chaperones. Register for programs by calling the Calvin College Science Division at (616) 526-6200 after September 18.

To arrange special programs for upper elementary, middle school, or high school classes, please contact Cheryl Hoogewind at (616) 526-7601.

K-5 Educational Goals:

- Present the natural history of specific flora and fauna of the preserve in the context of their geological setting.
- Offer treatments of the composition and function of the natural communities found on the preserve and the successional processes at work in them.
- Investigate the nature of significant interactions between humans and natural communities, both now and in the past.

- Seek to expand each visitor's general awareness and appreciation of the diversity and complexity of the natural environment.
- Develop each visitor's ability to take notice of and carefully observe objects in the natural environment.



Description of K-5 Programs:

Our curriculum was designed for students in kindergarten to fourth grade to complement units studied in the classroom. Our programs are offered to area elementary schools each spring and fall.

- Kindergarten students will use every sense but taste to explore the fields and forest.
- First grade program focuses on plant life cycles in the fall and spring trees and wildflowers in the spring (program description coming soon).
- Second grade students will discover the relationships between animals through predator-prey interactions and camouflage.
- Third grade students will look at various communities and habitats and see how animals and plants depend on each other for survival.
- Fourth graders use scientific tools to identify rocks and minerals and look for signs of Michigan's glacial history and modern erosion in the Ecosystem Preserve.
- Fifth graders explore the concepts of water cycle, water pollution, and watersheds and learn how to map them. They become a drop of water that moves through a city sewer system.

GIS Sources

The Center for Land Use Education and Research (CLEAR), at the University of Connecticut. CLEAR provides information, education, and assistance to land use decision makers on how better to protect natural resources while accommodating economic growth. CLEAR conducts remote sensing research, develops landscape analysis tools and training, and delivers outreach education programs. CLEAR is made up of several programs, ranging in geographical scope and topical focus, including NEMO.

<http://www.clear.uconn.edu>

Department of Environmental Protection Store (DEP). DEP Store sells data CDs of natural resources information such as aquifer protection areas, land use/cover, drainage basin boundaries, surficial materials, and leachate and wastewater discharge sites that can be used in GIS.

<http://www.dep.state.ct.us/store/>.

Environmental and Geographic Information Center (EGIC). DEP's EGIC publicly distributes a wide array of information on the state's land, water, plant, and animal resources via paper maps and reports, open file documents, and digital GIS formats. The DEP also has a grant program to assist non-governmental organizations, including volunteer-based local commissions, with the use of GIS. EGIC, (860) 424-3540, the DEP Store, (860) 424-3540, DEP Technical Publications Office, (860) 424-3555. For EGIC grant information or Deborah Dumin, DEP/EGIC Program, (860) 424-3595.

Regional Planning Organizations (RPO). RPOs may have GIS data and maps for the towns that are included in their boundaries.

<http://www.opm.state.ct.us/igp/rpos/rpo.htm>

State Agencies

The Connecticut Rural Development Council (CRDC). CRDC is a voluntary partnership organization formed by the state and the U.S. Dept. of Agriculture in 1994. Its mission is to develop strategies to help improve employment opportunities, incomes and the well-being of rural communities in Connecticut. The public and elected officials and town leaders are invited to attend the meeting in their region. <http://www.ruralct.org/>

Department of Agriculture. This department administers the state's Farmland Preservation Program, which purchases development rights on select farms throughout Connecticut. <http://www.ct.gov/doag/site/default.asp>

Department of Environmental Protection (DEP). DEP works to conserve, improve, and protect the environment and natural resources of the state, including open space, land and water issues. <http://dep.state.ct.us>. DEP Store: (860) 424-3555. Technical Publications Office, (860) 424-3540.

Department of Public Health (DPH). DPH works to ensure that public water supply systems comply with state and federal laws, reviews permits for the sale and/or change-in-use of water company-owned lands, and reviews long term water supply plans. <http://www.dph.state.ct.us>

Department of Public Utility Control (DPUC). DPUC regulates public- and investor-owned water companies that serve at least 50 customers, reviews all water supply plans for the state and makes recommendations to DPH, and oversees the sale of water company-owned lands. <http://www.state.ct.us/dpuc/>

Federal Agencies

My Watershed.Com. This site educates residents in eight states about watersheds and nonpoint source pollution, offering new ways for residents to view and improve their surroundings, thereby improving water quality within watersheds. <http://www.mywatershed.com/>

Soil and Water Conservation Districts. These districts provide technical assistance and education on agricultural and natural resource issues to towns, farmers, and individuals. There are seven conservation districts in Connecticut, located in Fairfield, Hartford, Litchfield, Middlesex, New Haven, New London, Tolland, and Windham counties.

Natural Resources Conservation Service (NRCS). NRCS has scientists and community planners available to help locales with different aspects of the open space planning process, including public involvement, natural resource assessments, and the definition of conservation goals. <http://www.ct.nrcs.usda.gov/>

Non Profit Agencies

The Trust for Public Land (TPL). A national nonprofit working exclusively to protect land for human enjoyment and well-being. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities. TPL Connecticut office is located in New Haven, (203) 777-7367. <http://www.tpl.org/connecticut/>

American Farmland Trust (AFT). AFT is only nationwide nonprofit organization dedicated exclusively to protecting agricultural resources. AFT has a Connecticut office, (202) 331-7300. <http://www.farmland.org/>

Connecticut Association of Conservation and Inland Wetlands Commission. This entity provides timely information and education to all of the municipal Conservation and Inland Wetland Commissions in Connecticut, establishes Conservation Commissions in towns where they do not exist, provides coordination and assistance in carrying out the purposes of Conservation and Inland Wetland Commissions, and educates Connecticut citizens in the preservation and management of natural resources. <http://www.caciwc.org/>

Connecticut Chapter of American Planning Association (CTAPA). The CTAPA is dedicated to advancing the practice of good planning in Connecticut by providing its members with up-to-date information about current planning issues and techniques, by building public and political awareness of the importance and benefits of good planning and by bringing the Chapter's diverse membership together from throughout the state to share experiences with colleagues. <http://www.ccapa.org/>

Connecticut Farmland Trust. This organization partners with towns and land trusts to identify threatened farms and opportunities for land protection. (860) 296-9325. <http://www.ctfarmland.org/preservation-page.htm>

Connecticut Fund for the Environment (CFEV). CFEV is the state's non-profit legal champion for the environment. Working with thousands of citizen activists, other environmental groups and elected officials, CFE uses law, science and education to improve air and water quality, control toxic contamination, minimize the adverse impacts of highways and traffic congestion, protect public water supplies and preserve the open space and wetlands so crucial to both the state's citizens and its wildlife.

The Conservation Fund. This organization forges partnerships to preserve our nation's outdoor heritage – America's legacy of wildlife habitat, working landscapes and community open-space. (703) 525-6300.

<http://www.conservationfund.org/>

Green Valley Institute. Green Valley is dedicated to improving the knowledge base from which land use and natural resource decisions are made and building local capacity to protect and manage natural resources as our region grows.

<http://www.thelastgreenvalley.org/>

Land Trust Alliance (LTA). LTA is provides resources, leadership, and training to the nation's 1,200-plus nonprofit, grassroots land trusts, helping them to protect important open spaces. (203) 638-4745. <http://www.lta.org/>

Natural Resources Council of Connecticut. This organization was founded to help educate the public concerning the need to protect the natural resources of Connecticut.

<http://www.engr.uconn.edu/envIRON/nrcc/index.htm>

The Nature Conservancy (TNC). TNC is an international organization that works to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. (860) 344-0716. <http://nature.org/>

Rails to Trails Conservancy. This organization supports local efforts to transform the dream of a trail into a tangible community asset by promoting policy at the national and state levels to create the conditions that make trail building possible. (508) 755-3300. <http://www.railtrails.org/>

River and Watershed Organizations

Connecticut River Watershed Council, Inc. (CRWC). CRWC promotes the protection, restoration and wise development and use of the natural, scenic and community resources in the 11,260-square-mile Connecticut River watershed in Connecticut, Massachusetts, New Hampshire and Vermont. (413) 529-9500. <http://www.ctriver.org/>

Housatonic Valley Association (HVA). HVA works to conserve the natural character and environmental health of communities in the Housatonic River watershed by restoring and protecting lands and waters for this and future generations. <http://www.hvathewatershedgroup.org/>

The Rivers Alliance of Connecticut. This statewide coalition of river organizations and individuals was established to protect and enhance Connecticut's rivers. The group maintains records on the many local, state, and federal organizations dedicated to preserving water quality. (860) 693-1602, <http://www.riversalliance.org/>

River Network. The mission of the River Network is to help people understand, protect and restore rivers and their watersheds. <http://www.rivernetwork.org/>

Outdoor Educational Organizations

The Center for Land Use Education and Research (CLEAR), at the University of Connecticut. CLEAR provides information, education, and assistance to land use decision makers on how better to protect natural resources while accommodating economic growth. CLEAR conducts remote sensing research, develops landscape analysis tools and training, and delivers outreach education programs. CLEAR is made up of several programs, ranging in geographical scope and topical focus, including NEMO. <http://www.clear.uconn.edu>

Land Conservation Methods

Doing Deals: A Guide To Buying Land for Conservation. Written by the Trust for Public Land and published by LTA, this book includes information on working with landowners, surveys, appraisals, working with government agencies and negotiating. (202) 638-4725. <http://www.lta.org/>

Saving American Farmland: What Works. This comprehensive guidebook examines tools and strategies that people use to protect farmland and includes case studies of successful programs in California, Maryland, and Washington. (800) 370-4879. http://www.farmland.org/merch/pub_orderform.pdf

Municipal Funding Guides

Local Parks, Local Financing, Volume I: Increasing Public Investment in Parks and Open Space. This TPL report takes a close look at the revenue-generating options granted by states to local governments, and at the variety of ways in which communities are using these tools to support parks, open space, and recreational facilities.

http://www.tpl.org/tier3_cdl.cfm?content_item_id=1048&folder_id=825.

Local Parks, Local Financing, Volume II: Paying for Urban Parks Without Raising Taxes. This TPL report examines ways in which communities can fund urban parks and recreational facilities through the use of fees, donations, and corporate donations.

http://www.tpl.org/tier3_cdl.cfm?content_item_id=1110&folder_id=826

State Funding Sources

Recreation and Natural Heritage Trust Program. The program enables outside groups, typically municipalities or nonprofit organizations, to assist the state in acquiring properties. <http://dep.state.ct.us/>

Open Space and Watershed Land Acquisition Grant Program. This program awards grants to municipalities and nonprofit land conservation organizations for up to 50 percent of the land's fair market value. <http://dep.state.ct.us/rec/opensp31.htm>

Charter Oak Open Space. This program awards matching grants to municipalities and nonprofits for acquisition of open space or conservation easements. <http://dep.state.ct.us/>

Public Act 490. Public Act 490 (Connecticut General Statutes Sections 12-107a through 107-f) allows a farm, forest, or open space land to be assessed at its use value rather than its fair market or highest and best use value for purposes of local property taxation. www.state.ct.us/doag/business/490q.htm.

Farmland Preservation Program. Through this program the Connecticut Department of Agriculture preserves farmland by acquiring development rights to agricultural properties. (860) 713-2511. www.state.ct.us/doag/business/farmpres.htm.

Federal Funding Sources

North American Wetlands Conservation Act (NAWCA). This program provides matching grants to private or public organizations or to individuals who have developed partnerships to carry out wetlands conservation projects in the United States, Canada, and Mexico.

<http://northamerican.fws.gov/NAWCA/grants.htm>

Farm and Ranchland Protection Program (FRPP). FRPP provides matching funds to help state, tribal, or local governments and non-governmental organizations purchase development rights to keep productive farm and ranchland in agricultural uses. (202) 720-9476.

<http://www.nrcs.usda.gov/programs/frpp/index.html>

Forest Legacy. The Forest Legacy Program is a partnership between participating states and the USDA Forest Service to identify and help protect environmentally important forests from conversion to nonforest uses. (603) 868-7695.

<http://www.fs.fed.us/na/durham/legacy/index.shtml>

In Connecticut, 860-424-3634.

<http://www.dep.state.ct.us/burnatr/forestry/index.html>

Transportation Efficiency Act for the 21st Century (TEA-21 Funding). Administered by the U.S. Department of Transportation, TEA-21 is a six-year transportation funding bill which includes monies for the following types of transportation enhancements projects (in addition to traditional road building): land acquisition and infrastructure development of pedestrian and bike trails, provisions of safety and educational activities for pedestrians and bicyclists, historic preservation, conversion of railway corridors to trails, scenic or historic highway programs, and water pollution mitigation.

<http://www.fhwa.dot.gov/tea21/index.htm>

Coastal and Estuarine Land Conservation Program. This NOAA program funds grants to states and local governments for the cost of land acquisition and restoration in a state's coastal zone.

<http://www.noaa.gov/coasts.html>

Clean Water State Revolving Fund (CWSRF). CWSRF programs provided an average of \$3.8 billion over the past five years to fund water quality protection projects for wastewater treatment, nonpoint source pollution control, and watershed and estuary management.

<http://www.epa.gov/owm/cwfinance/cwsrf/index.htm>

Private Funding Sources

The Foundation Center. The Foundation Center provides resources, directories, and training opportunities for grantseekers on their website.
<http://fdncenter.org/>

Connecticut Council for Philanthropy. The Council provides a list of foundations operating in the state. (860) 626-5585.
<http://www.ctphilanthropy.org>

Environmental Grantmakers Association. EGA supports member organizations in grantmaking that protects the environment and its inhabitants, and to provide means for them to connect with, encourage, and challenge one another; explore environmental issues and grantmaking; and promote, diversify, and expand environmental philanthropy.
<http://www.ega.org/>

Riparian Buffer and Rain Gardens: Recommended Plant List

Trees

Betula Nigra	River Birch
Acer Rubrum	Red Maple
Amelanchier Canadensis	Shadblow
Cercis Canadensis	Eastern Redbud
Pinus Strobus	Eastern White Pine

Shrubs

Aronia Arbutifolia	Red Chokeberry
Clethra Alnifolia	Summersweet
Clethra Alnifolia “Hummingbird”	Hummingbird Summersweet
Cornus Sericea	Red Twig Dogwood
Ilex Glabra Compacta	Compact Inkberry
Ilex Veticillata Winter Red	Winter Red Winterberry
Lindera Benzoin Spicebush	
Vaccinium Corymbosum	High Bush Blueberry
Viburnum Trilobum	American Cranberrybush

Perennials

Arisaema Triphyllum	Jack In The Pulpit
Asclepias Incarnata	Swamp Milkweed
Caltha Palustris	Marsh Marigold
Eupatorium Maculatum	Joe Pye Weed
Lobelia Cardinalis	Cardinal Flower
Mertensia Virginica	Virginia Bluebells
Polygonatum Biflorum	Solomon’s Seal
Tiarella Cordifolia	Foamflower

Emergents

Sagittaria Latifolia	Northern Arrowhead
Pontederia Cordata	Pickernelweed
Scirpus Validus	Softstem Bulrush
Iris Versicolor	Blue Flag Iris
Acorus Calamus	Sweetflag
Verbena Hastata	Blue Vervain

Community Walking Resources

WALKING INFORMATION

Pedestrian and Bicycle Information Center (PBIC)
UNC Highway Safety Research Center
730 Airport Road, Suite 300
Campus Box 3430
Chapel Hill, NC
27599-3430
Phone: (919) 962-2202
www.pedbikeinfo.org
www.walkinginfo.org

National Center for
Bicycling and
Walking
Campaign to Make
America Walkable
1506 21st Street, NW
Suite 200
Washington, DC 20036
Phone: (800) 760-NBPC
www.bikefed.org

WALK TO SCHOOL DAY WEB SITES

USA event: www.walktoschool-usa.org
International: www.iwalktoschool.org

STREET DESIGN AND TRAFFIC CALMING

Federal Highway Administration
Pedestrian and Bicycle Safety Research Program
HSR - 20
6300 Georgetown Pike
McLean, VA 22101
www.fhwa.dot.gov/environment/bikeped/index.htm

Institute of Transportation Engineers
www.ite.org

Surface Transportation Policy Project
www.transact.org

Transportation for Livable Communities
www.tlcnetwork.org

ACCESSIBLE SIDEWALKS

US Access Board
1331 F Street, NW
Suite 1000
Washington, DC 20004-1111
Phone: (800) 872-2253;
(800) 993-2822 (TTY)
www.access-board.gov



PEDESTRIAN SAFETY

National Highway Traffic Safety Administration
Traffic Safety Programs
400 Seventh Street, SW
Washington, DC 20590
Phone: (202) 662-0600
www.nhtsa.dot.gov/people/injury/pedbimot/ped

National SAFE KIDS Campaign
1301 Pennsylvania Ave. NW
Suite 1000
Washington, DC 20004
Phone: (202) 662-0600
Fax: (202) 393-2072
www.safekids.org

WALKING AND HEALTH

Centers for Disease Control and Prevention
Division of Nutrition and Physical Activity
Phone: (888) 232-4674
www.cdc.gov/nccdphp/dnpa/readysset
www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm

Prevention Magazine
33 East Minor Street
Emmaus, PA 18098
www.itsallaboutprevention.com

Shape Up America!
6707 Democracy
Boulevard
Suite 306
Bethesda, MD
20817
www.shapeup.org

WALKING COALITIONS

America Walks
P.O. Box 29103
Portland, Oregon
97210
Phone: (503) 222-1077
www.americawalks.org

Partnership for a Walkable America
National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
Phone: (603) 285-1121
www.nsc.org/walkable.htm



taken from Partnership for a Walkable America
<http://www.walkableamerica.org/>