## **MASTER PLAN REPORT**

# DESIGN STUDY OF A MULTIUSE TRAIL PLAINVILLE, CONNECTICUT

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MMI #2888-04

## Prepared for:

Town of Plainville

#### With Assistance From:

Plainville Planning Department Plainville Greenway Alliance Central Connecticut Regional Planning Agency

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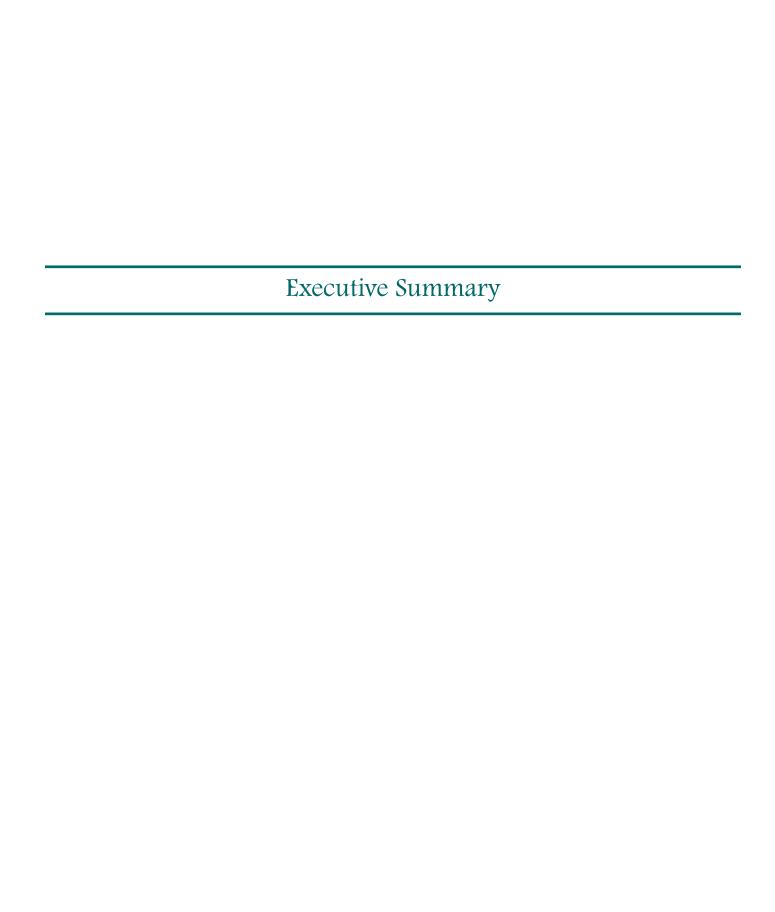
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PLAINVILLE GREENWAY MASTER PLAN

#### Introduction

The objective of the Plainville MultiUse Trail Design Study was to create a Master Plan for a multiuse bicycle/pedestrian trail through the town of Plainville. As a part of the proposed East Coast Greenway, the Plainville Multiuse Trail is one of the few major gaps in the Connecticut portion of the Greenway.

Connecticut is very close to having one of the premier regional multiuse rail-trails in the United States, linking a series of town centers. Rails-trails are used more and more as alternative transportation for commutation and point-to-point trips. This intermodal transportation pattern provides safe alternatives for bicyclists and pedestrians seeking alternative travel ways to the busy on-road routes in central Connecticut.

From New Haven to Plainville, planned use of an inactive rail corridor is the predominant site for the placement of the Farmington Canal Greenway in both the constructed and planned future trail sections. However, in Plainville, an active railroad runs for approximately two miles from the Southington town line north to both an active rail line running east and west and an active rail yard. This Master Plan study explored the use of both the active rail and inactive rail sections in Plainville for a multiuse trail. The Master Plan envisions a trail system that includes both independent multiuse trail sections as well as onstreet components winding through the downtown, along major roads and through neighborhoods, with identifiable options made available for the trail participants along the way.

#### Site Investigation and Data Collection

A comprehensive effort was performed to understand the existing conditions for numerous potential trail routes. For the purpose of this multiuse trail study, the town was organized into three distinct areas: the southern, center and northern sections. The southern section includes from Town Line Road north to Broad Street. The center section includes Broad Street to West and East Main Street (State Route 372), and the northern section includes land from Route 372 to the Farmington town line located north of Northwest Drive.

Environmental reviews of the southern, center, and northern sections were performed and the Connecticut DEP confirmed there are no potential species of special concern in the area of the potential trail routes. The selection of the Master Plan route in the southern section was influenced by the need to avoid impacts on existing streams, wetlands, and floodplain corridors. The center section, which includes the downtown area, has no significant environmental concerns since this route is projected to be primarily an on street



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trail. The northern section includes trail routing along wetlands adjacent to Robert Street Extension and the Pequabuck River and its associated wetlands.

#### **Field Investigations**

The southern section includes the active rail line, determined to be infeasible as a trail route until some possible future date when the railroad right-of-way may be completely dedicated to the Greenway.

South Washington Street (Route 177), from Town Line Road to Prior Avenue, presented difficult trail issues primarily associated with the speed and volume of vehicular traffic along the highway. However, a multiuse trail is considered possible on the west side of Route 177 for a short distance of 0.2 miles, from Town Line Road north to a piece of private property. From there, a future trail could potentially traverse private land to Norton Park subject to the availability of needed rights-of-way.

Another route considered for the southern trail section was investigated along Robert Jackson Way, a wide public street intersecting with Town Line Road. Robert Jackson Way is the selected Master Plan trail route and ends in a cul-de-sac available to be extended to the north and east as part of planned commercial expansion.

Utilizing Norton Park in the southern section of the trail is a focus of the Master Plan. A multiuse trail is feasible through the park. Improvements for Norton Park may be coordinated with trail expansion through the site. An existing boardwalk trail connection from Norton Park to Hemingway Street can be upgraded to link the trail to the residential street. Approximately 1,500 feet in length, Hemingway Street leads directly to Broad Street and the continuance of the trail route through the center section.

Investigation of the center section included walking and field review of numerous potential trail routes including Broad Street, East Main Street, Route 10, and side streets connecting the major streets. Roadways were analyzed during field reconnaissance and measured with respect to road width, lane lines, existing utilities, sidewalks, amenity zones, and rights-of-way. During the study, the community felt strongly that the trail should bring users to the downtown to increase pedestrian activity.

The northern section of trail analysis includes Robert Street Extension, the inactive Pan Am rail corridor, the Pequabuck River rail crossing, lands north of the Route 72 overpasses of Cronk Road and Route 10, and the



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crossing of Northwest Drive north to the Farmington town line. The character of the inactive rail corridor includes a flat, straight, relatively wide elevated rail bed that can easily accommodate the construction of a multiuse trail.

Based on the analysis made in this phase of study, the concept of a Master Plan which combines a multiuse trail with a shared, signed roadway and pedestrian sidewalks or bike lanes is the most feasible design approach. A key component to the success of the proposed trail Master Plan route is planned utilization of the inactive rail property to the north of the rail yard. Two design workshops were held to review the findings of the Site Investigation phase of the study.

#### Master Plan

A series of five alternative facility routes suitable for bike and pedestrian use were developed for review. Alternative routes were selected to minimize, to the extent feasible, adverse environmental impacts and required acquisition of easements. The alternative routes were presented to the public at a Design Charrete. Based on input received from the Design Charette and public planning sessions, and a thorough consideration of alternative trail options, the project Steering Committee provided direction regarding the final route selection, the type of treatments, and style of the facility. The proposed Master Plan route is comprised of sections of both on-road and multiuse trails where bicyclists share the road lanes with vehicular traffic and pedestrian utilize sidewalks. In that sense, when complete, the Plainville section of the East Coast Greenway/Farmington Canal Heritage Trail will be a trail hybrid.

The preferred trail route from the Southington town line through the southern section utilizes Robert Jackson Way and leads over private land to Norton Park. The multiuse trail will continue along the west perimeter of Norton Park leading to Hemingway Street and up to Broad Street.

The center section consists of on-road shared, signed trail facilities and sidewalks with the trail route leading users from Broad Street to Pierce Street to West Main Street, through downtown Plainville on East Main Street to Route 10. In addition, two secondary routes are proposed: the first bypassing downtown and heading directly to Route 10 from Broad Street and the other from East Main Street to Norton Place and Cronk Road, thus bypassing Route 10.

The northern section of the Master Plan route is comprised of both on-road facilities with sidewalks and



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a multiuse trail. The design and construction of this section is dependent upon the town's acquisition of access rights to the inactive railroad portion of the Pan Am Rail property. The northern section extends from the intersection of East Main Street north on Route 10 to Robert Street Extension. Following Robert Street Extension the trail intersects with Cronk Road and will proceed north as a multiuse trail to the Water Pollution Control Facility. From that point, the trail is proposed to follow within the inactive railroad right-of-way to Northwest Drive. Past Northwest Drive, coordination with the Town of Farmington will be required to determine the connection point to the Farmington Canal Heritage Trail at the town line.

#### **Design Elements**

The proposed trail consists of both an off-road, multiuse facility and a shared, signed, on-road option ("sharrows") with pedestrian sidewalks. The multiuse trail will consist of a 10-foot wide bituminous concrete paved trail with a two-foot wide soft trail that consists of stone screenings or stone dust. Access to parking is critical to the trail's success. Existing parking facilities are located at Norton Park and Town Hall. Proposed parking facilities noted on the Master Plan are located at the intersection of Town Line Road and Robert Jackson Way, Pierce Street and Broad Street, and at Northwest Drive and Johnson Avenue. Proposed parking facilities will include way-finding stations and directional signage pointing trail users in the appropriate direction. Way-finding stations along the trail may include amenities such as an information kiosk, benches, bike racks, seating or accent walls, landscaping, trash receptacles, lighting, and decorative pavement treatments. Other site amenities along the trail include gateways, landscaping, boardwalks/ bridges, railings, ornamental fencing, memorials, and decorative signage. At various locations of the trail, informational signage will be installed to describe various historical aspects of the Linear Rails-to-Trails Park, the railroad, and/or the canal that previously existed.

## **Project Phasing**

The length of the Master Plan route is approximately 4.5 miles from the Southington line to the Farmington town line, of which 2.8 miles is proposed as a signed, shared roadway system (sharrows) and 1.7 miles as a multiuse trail facility. Building this trail as one project will be impractical from a financial and public support point of view, and the implementation of the trail is suited to a phased approach. The Steering Committee feels that prioritizing the Northern Section as Phase 1 and the Southern section as Phase 2 the trail project will prove to be successful to the general public and cycling community and gain the public support needed to construct the on-road Center Section as Phase 3.



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The Conceptual Opinion of Probable Construction Costs for the preferred master plan route is \$6,000,000 in 2009 costs. Alternative route sections include another \$2,900,000 in 2009 costs. Conceptual costs include survey, design, bidding, regulatory permitting, construction, contingencies and full time construction administration. Phasing of the project will impact costs of construction and inflation factors will be required once specific time frames for construction are determined. As the design process develops, the construction costs will be modified and revised to reflect implementation costs for the detailed designs.



The Farmington Canal Heritage Trail (FCRTTA-www. farmingtoncanal.org; FVTC-www.fvgreenway.org) is a planned continuous multiuse trail that is envisioned to run from the Long Island Sound in New Haven, Connecticut to Northhampton, Massachusetts. The trail through Connecticut generally follows the route of the historic Farmington Canal and is included as part of the East Coast Greenway, a proposed multiuse trail planned to connect Maine to Florida (www.greenway.org). The objective of the Plainville Design Study was to create a Master Plan for a multiuse bicycle/pedestrian trail through the town of Plainville incorporating desirable elements of the preferred trail route developed in the April 2009 "Southington – Plainville Farmington Canal Greenway Study" prepared by the Central Connecticut Regional Planning Agency (CCRPA).



The Farmington Canal Company was chartered in 1822 by a New Haven led group seeking to take advantage of opportunities to compete with the Port of Hartford in a period of profound economic growth for the Northeastern United States. The first commercial canal boat was launched in 1828, and finally the canal was complete from New Haven to Northampton, Massachusetts a distance of 84 miles. The short lived venture was unprofitable and was replaced by the new technology of the railroad. The Canal ceased operation in 1848, and the New Haven and Northampton Railroad came into being in 1846. New Haven to Plainville was completed in 1847 making Plainville an important junction before the railroad veered off the track of the Canal and around Farmington.

The rail lines themselves fell into disrepair and the bulk of passenger and rail service ceased by the late 1980s. The Connecticut Department of Transportation (DOT), in a far-thinking policy called rail-banking, bought up most of the point-to-point rail corridor that was subsequently abandoned. In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) was passed in Washington and provided states with the ability to use federal funds to finance the conversion of these corridors into multiuse "rail-trails." The Farmington Valley Trails Council (FVTC) and the Farmington Canal Rail-to-Trail Association (FCRTTA) were founded in this period with the goal of providing advocacy to all of the towns on the Canal route





in Connecticut. Plainville became a full member of the FVTC in 2009. Those early years included initial studies for what became the Farmington Canal Heritage Trail (FCHT), which was designated a Community Millennium Trail by the federal government in recognition of its special role in the communities it serves. The FCHT is the Connecticut north-south spine of the East Coast Greenway which stretches from Key West, Florida to Calais, Maine. It is a hugely successful

East Coast

Greenway.

linear park and multiuse trail system that has 21.4 continuous paved miles of trail from Red Oak Hill Road in Farmington to the Massachusetts border, and approximately 28 paved miles from New Haven to Southington, with the largest gap consisting of the length of Plainville in conjunction with shorter connecting sections in the southern portion of Farmington and northern portion of Southington.

Connecticut is very close to having one of the premier regional multiuse rail-trails in the United States, linking a series of town centers. In addition, the DOT has taken on an interest in addressing bicycling and walking as integral parts of our state's transportation system. Bicycling and walking need not be looked at merely as recreational activities, but as integral parts of a well balanced transportation system. In locations in our region where trails have been built, commuting by bicycling has increased ten-fold. The state has adopted a forward thinking responsible growth program with bicycling and walking being extremely important elements in such a program. The Connecticut Department of Environmental Protection (DEP) has

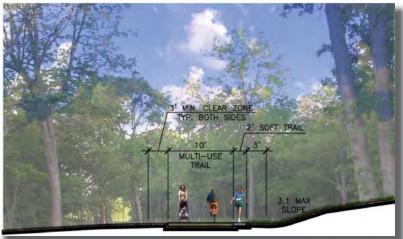
created a "No Child Left Inside" Program. There is also a federal "Safe Routes to School Program" which advocates for the development of multiuse trails and connecting spurs to schools. By recent statute, every new transportation project (including repaving) is now an opportunity to improve pedestrian and bicycle safety and those concerns must be addressed in the project planning stage.



Multiuse trails are most obviously a huge draw as a recreational community amenity that for many area towns has become a calling card. However, there are also large, proven economic returns through increases in real property values along the corridor and increased expenditures by residents. There is a corresponding rise in tourism dollars spent in the community and the expansion of commercial uses, such as restaurants, equipment rentals, and other related businesses. Finally, rails-trails are used more and more as alternative transportation for commutation and point-to-point trips. This intermodal transportation pattern is key to providing safe alternatives for bicyclists and pedestrians who are increasingly frustrated with the busy onroad routes in central Connecticut.

In this report, input from the towns of Plainville and Southington, the Plainville Greenway Alliance (PGA), the CCRPA, the DEP, the Capitol Region Council of Governments (CROCOG) and the public was received. This report provides background information on trails in Connecticut, the Farmington Canal Heritage Trail, and the East Coast Greenway, and the identification of a preferred route through Plainville.

Central to the concerns of the study were issues revolving around the use of land within the right-of-way of the active rail line owned and operated by Pan Am Railroad. From New Haven to Plainville, planned use of an inactive rail corridor is the predominant site for the placement of the Farmington Canal Greenway in both the constructed and planned future trail sections. Utilizing the April 2009 CCRPA study as a beginning point, this study, funded through a State of Connecticut Office of Policy and Management (OPM) Contingency Needs Grant, advances the trail planning process and refines the route selection and design based on a comprehensive review of existing conditions, the railroad corridor, the Plainville road network,



Multiuse Trail

and continued public involvement during the route selection.

The desired design concept for the Farmington Canal Greenway is a multiuse trail that is independent and separate from on-street systems. This can usually be accomplished by converting inactive rail lines into a multiuse trail as has been done along most of the FCHT, both north and south of town. However, in Plainville, an active rail line runs for approximately two

miles from the Southington town line north to both an active rail line running east and west and an active rail yard. Because of this unique condition, coupled with constraints inherent to the roads, neighborhoods and development within Plainville, analyzing potential routes became a complicated and intensive process. This Master Plan study explored the use of both the active rail and inactive rail sections in Plainville for a multiuse trail. For numerous reasons documented herein, the Master Plan does not utilize the active rail corridor. Use of the inactive rail section is a part of the Master Plan. In addition, the Master Plan envisions a trail system that includes both independent multiuse trail sections as well as on-street components winding through the downtown, along major roads and through neighborhoods, with identifiable options made available for the trail participants along the way. Way-finding stations with signage and site amenities, logical parking areas, trail access points, linkages to interesting sites, upgraded sidewalks, interesting landscaping, attractive road crossings, coordinated rail line crossings, and additional site amenities are strategically located to assist the trail users.



Plainville Organized Into Three Sections

For the purpose of this multiuse trail study, the town was organized into three distinct areas: the southern, center, and northern sections. The southern section includes land from Town Line Road north to Broad Street. The center section includes land from Broad Street to West and East Main Street (State Route 372), and the northern section includes land from Route 372 to the Farmington town line located north of



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Northwest Drive. Environmental components as well as key opportunities and constraints impacting routing selection were identified in each section. There were hopes, on the part of many of the participants in the trail Master Plan study, that the selected trail route would include planning for a trail adjacent to the active Pan Am Railroad line within the railroad right-of-way. During the planning process, the Town of Plainville received verbal communication from Pan Am regarding the active and inactive sections of rail, and the Master Plan does incorporate use of the rail corridor that Pan Am is considering for abandonment. It is anticipated at some future date that Plainville will enter into negotiations with Pan Am regarding use rights for the design and construction of the trail in a portion of the northern section. Working in close concert with town of Plainville planning staff, the PGA, and the Plainville community, the Master Plan identifies the route most suitable for the location of the trail with the objective of minimizing or eliminating the use of private easements and adverse environmental impacts, while providing for the enjoyment of the natural environment and a safe, positive experience for its users.



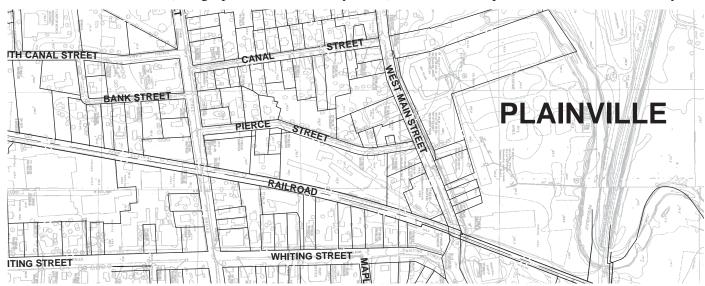


A comprehensive effort was made to understand the existing conditions for numerous potential trail routes. On-site observations, discussions with members of the PGA, town officials, local residents, and detailed photographic site inventories were techniques utilized during this study phase. The major components to the site investigation and data collection phase of the study are discussed in sequence and included the following:

- 1. Assemblage of available mapping and preparation of base maps
- 2. Environmental reviews
- 3. Field investigation and analysis
- 4. Discussion and research regarding the Pan Am rail right-of-way
- 5. Preparation of site analysis maps
- 6. Public meetings

# 3.1 Mapping

Mapping made available by the town Planning Department included assessor's maps of the town, topographic maps for the town, and selected individual site plans for developments in the area of the trail. Valuation maps of the railroad right-of-way were obtained from Pan Am, and CT DOT right-of-way maps were obtained for Routes 10 and 372. These maps were merged into a composite map for the study. In addition, town wide GIS (Geographic Information Systems) color aerial maps were obtained and heavily



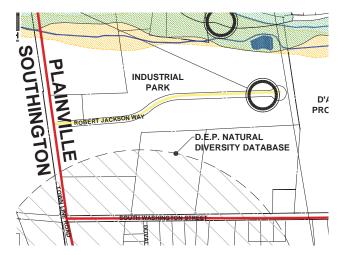
Assessor's Mapping Overlaid Town Topography Maps



utilized for preparation of the existing condition maps, site analysis maps, alternatives route maps and for presentation at public meetings. CT DOT right-of-way maps for Routes 72 and 177 were not available for use in the study.

#### 3.2 Environmental Reviews

Connecticut Department of Environmental Protection GIS data depicting environmental aspects of Plainville such as wetland soils, floodplains, flood zones, water bodies, and watercourses were transposed over the property line maps. DEP Natural Diversity Database maps were reviewed and areas containing species of special concern were identified in close proximity to the proposed trail route. A request was made by the town for the DEP to review these identified areas of concern. In response to this request, a letter from the DEP (attached to this report) indicates there are no concerns relative to this issue for the Master Plan trail route.



Natural Diversity Database Area

#### 3.2.1 Environmental Review - Southern Section



Norton Park - Restored Canal Area

The selected trail route includes some potential impacts on areas containing wetland soils. In the southern section, these areas include a stream corridor on the west side of Norton Park as well as the remnant section of the actual Farmington Canal located along the northern boundary of the park. Both areas can be successfully integrated in a proper environmentally sensitive fashion into the trail Master Plan. However, the selection of the Master Plan route in the southern section was influenced by the need to avoid the stream, wetlands, and floodplain corridor of a potential route in the vicinity of the former



Farmington Canal along an unnamed stream from Town Line Road to Norton Park. Consideration of this section of potential trail routing would include a series of problematic regulatory approval issues, high costs for boardwalks and special construction elements, and potential private property acquisitions or easements for usage rights. In addition, the active railroad right-of-way in the southern section does include some potentially significant wetland and watercourse impacts associated with design of a trail next to the active rail. This was one of a series of factors that guided the final route selection.

#### 3.2.2 Environmental Review - Center And Northern Section

Field observation and review of mapping for the center section revealed the selected trail route to be an on-street design and only minor wetland areas will be encountered along Cronk Road in this trail section. However, the northern trail section includes the Pequabuck River and associated wetlands as the river crosses the existing rail line north of the Water Pollution Control Facility at the end of Cronk Road. The existing railroad bridge over the Pequabuck River is an important feature and provides a structured crossing of the river as the trail proceeds north towards the Farmington town line. This existing bridge will require improvements for use in the trail. In addition, the northern section contains wetlands in the



Existing Railroad Trestle

vicinity of Robert Street Extension that may have potential impacts for trail construction. The presence of the Pequabuck River and its associated wetlands and floodplain west of the Pan Am rail right-of-way in the center and northern sections heavily influenced the alternative and Master Plan trail routes. Design for a trail through the Pequabuck River wetlands west of the rail corridor is not recommended due to the associated environmental permitting requirements, impacts, and costs. The trail is envisioned to incorporate the limited wetland areas in close proximity to the selected trail route for educational and passive recreation purposes. In addition to the wetland issues identified during review of maps and field investigations, the presence of an Aquifer Protection Area is identified through most of Plainville. This should not pose a significant concern for the viability of this trail. Where the trail passes within the 100-year floodplain of the Pequabuck River, a DEP Flood Management Certificate will be required with a potential for a DEP 401 Water Quality Certification and Army Corp. of Engineers 404 Permit.

## 3.3 Field Investigation and Analysis

#### 3.3.1 Southern Section

Field investigation and analysis of the southern section included identification of opportunities and constraints for several designated routes and include the railroad right-of-way route, the Washington Street (Route 177) route, the Robert Jackson Way route to Norton Park, and the stream/wetland route from Town Line Road to Norton Park. All potential trail routes proposed during this phase of the study are described and illustrated in Appendix A.

The railroad right-of-way running north/south approximately 1.2 miles from Town Line Road to Broad Street is narrow in width, ranging from 34 feet wide to 50 feet wide. Generally speaking, the rails are slightly elevated within the right-of-way, particularly in areas adjacent to wetlands. Several cross culverts traverse beneath the rails to carry watercourses. Two currently active railroad spurs on the west side of the tracks provide access to Forestville Lumber and JW Green Company Inc. Their sweeping runs preclude convenient and easy access for potential trail use over the rails on the west side of the R.O.W. The limited right-of-way width and the associated slopes on much of the easterly right-of-way present additional design

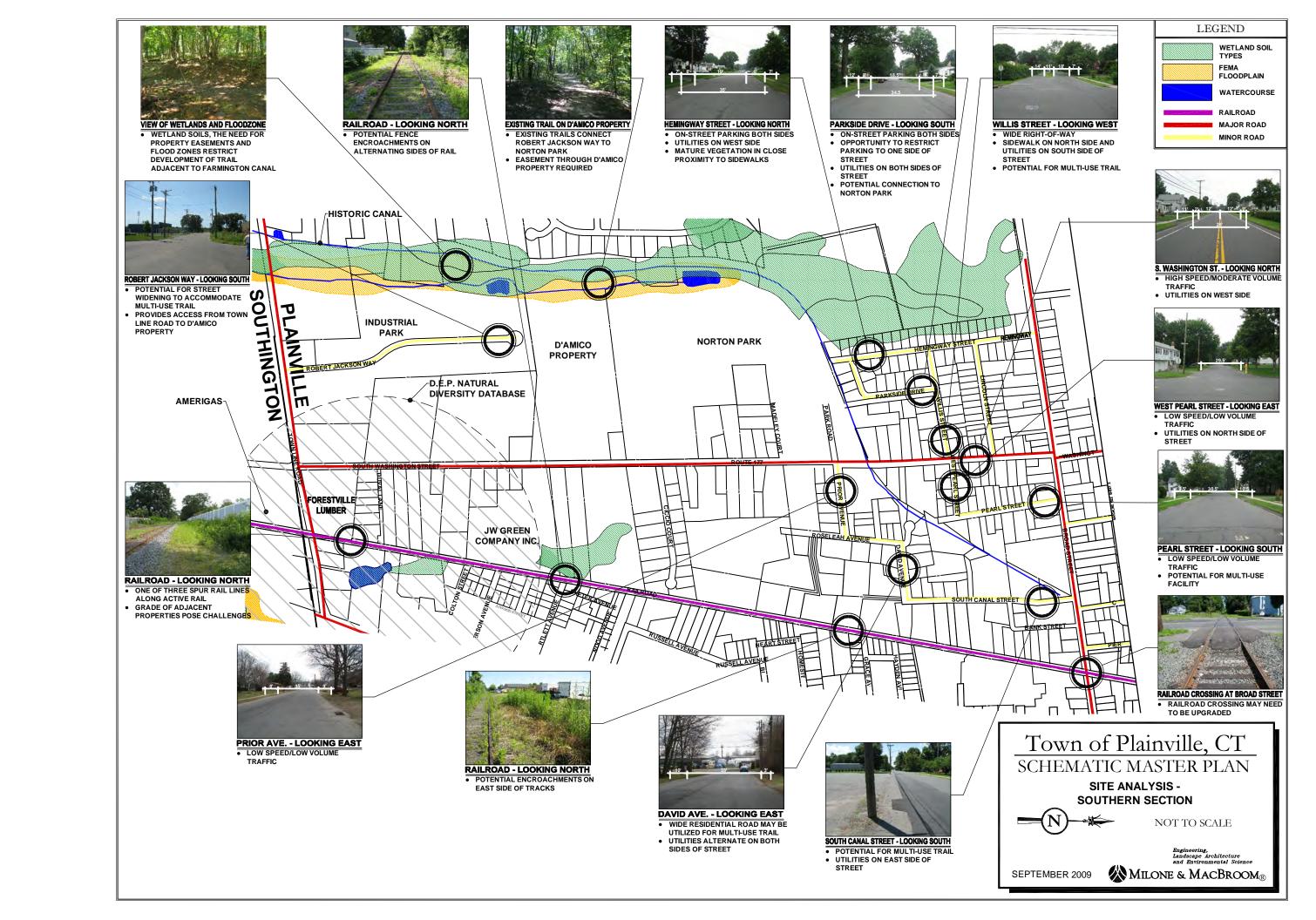


Active Rail Looking North



Active Rail Looking South at Rail Spur

constraints in planning a trail next to the active rail on that side. Another significant issue associated with the railroad right-of-way is the close proximity of residential properties abutting the right-of-way. Various types of structures (fences, sheds, amenities, etc.) have been constructed by abutting residential property



owners and appear to occasionally encroach within the Pan Am right-of-way. Trail design and construction on the east side of the active rail would require major coordination efforts devoted to identification, relocation or removal, and construction up against these numerous elements.

Coupled with issues associated with limited space adjacent to the active rail, active rail spurs to existing customers, wetlands, grades and elevations, and the private property encroachments, timely communications with Pan Am officials were limited based on Pan Am's concerns relative to their interest in permitting the use of the active rail for trail planning purposes. Therefore, utilizing the active rail is considered a long range option when Pan Am is amenable to seriously reviewing the trail's feasibility; most likely under a scenario where the rail company decides to stop using additional sections of the rail line in Plainville. Information regarding current rail usage is summarized by Town Planner Mark Devoe in an attached memo (see Appendix D).

Field investigation of existing conditions for the second route considered in this section, South Washington Street (Route 177) from Town Line Road to Prior Avenue, presented another series of issues primarily associated with the speed and volume of vehicular traffic along the highway within a relatively narrow right-of-way. This section of trail, approximately 0.8 miles in length to the intersection with Prior Avenue, could be considered for either bike lanes or a signed, shared bike use for its length. Potential vehicular/bicyclist conflicts would continue if this route was selected as the defined trail. The opportunity to construct an off-road multiuse trail for the full length of South Washington Street is limited by the narrow right-of-way and the presence of several significant commercial and residential properties. Construction of both bike lanes

and continuous sidewalks may be limited by the width of the available right-of-way. From the intersection of the Route 177 with Prior Avenue, the trail would run to Roseleah Avenue, David Avenue, and South Canal Street winding through wide residential neighborhood streets to Broad Street, a distance of approximately 0.5 miles. This section of trail has the potential for construction of a multiuse trail on one side of the road network by narrowing the road widths. In addition, sidewalks and bike lanes or shared, signed roadways are feasible. Neighborhood concerns about impacts of a multiuse trail would need to be addressed in the detailed planning of



Prior Avenue - Looking South

the trail (See Section 4.4).

A section of multiuse trail is considered possible on the west side of Route 177 to the D'Amico property, approximately 1,000 feet north of Town Line Road. Easements or acquisition of some land for a multiuse trail may be required from either of two property owners along the road up to the D'Amico property. These commercial properties contain landscaped drainage swales and curb cuts along the highway that may be impacted by a multiuse trail.

As discussed in the analysis of the environmental sections, the trail route from Town Line Road to Norton Park through a stream/wetland corridor was not considered feasible. However, a portion of the trail through property of D'Amico south of and adjacent to Norton Park is a part of this wetland corridor and was reviewed for its feasibility in trail planning. Impacts on environmental features for this trail section are considered feasible should access rights be acquired from the property owner. This trail section would also be accessed from Robert Jackson Way, a wide public street intersecting with Town Line Road. Robert Jackson Way is the selected Master Plan trail route and ends in a cul-de-sac available to be extended to the

north and east as part of planned commercial expansion. Coordination with private property owners along Robert Street Extension and Robert Jackson Way will be required where sidewalks and/or a multiuse trail are proposed. Additionally, the town will have to coordinate an easement or right-of-way thru the D'Amico property to connect the trail from Norton Park to Robert Jackson Way or Route 177.

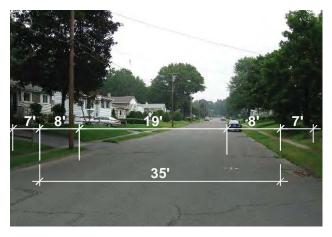
Utilizing Norton Park for the trail is a major focus of the Master Plan. A multiuse trail is feasible through the park and coordination with the Plainville Parks and Recreation Department on Master Plan improvements



Robert Jackson Way - Looking South

can be coordinated with trail expansion through the site. A designated section of the Farmington Canal may serve as a way-finding station for the trail. Abundant existing public parking at Norton Park is available for the trail users. An existing boardwalk trail connection to Hemingway Street can be improved to provide proper linkage to that quiet residential street. Approximately 1,500 feet in length, Hemingway Street leads directly to Broad Street and the continuance of the trail route through the center section. Hemingway Street

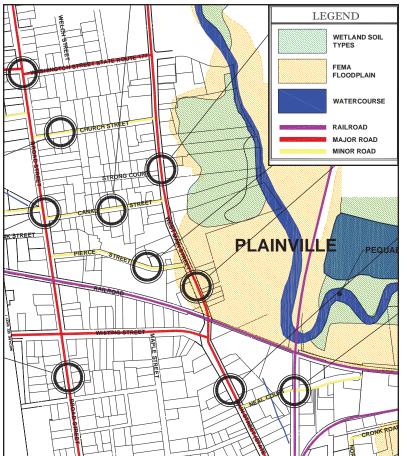
has numerous small residential home lots and driveway curb cuts, utilities, and sidewalks along with a wide street section that is suitable for either multiuse trail planning or a combination of bike lanes and sidewalks or a shared, signed use of the street.



Hemingway Street - Looking North

#### 3.3.2 Center Section

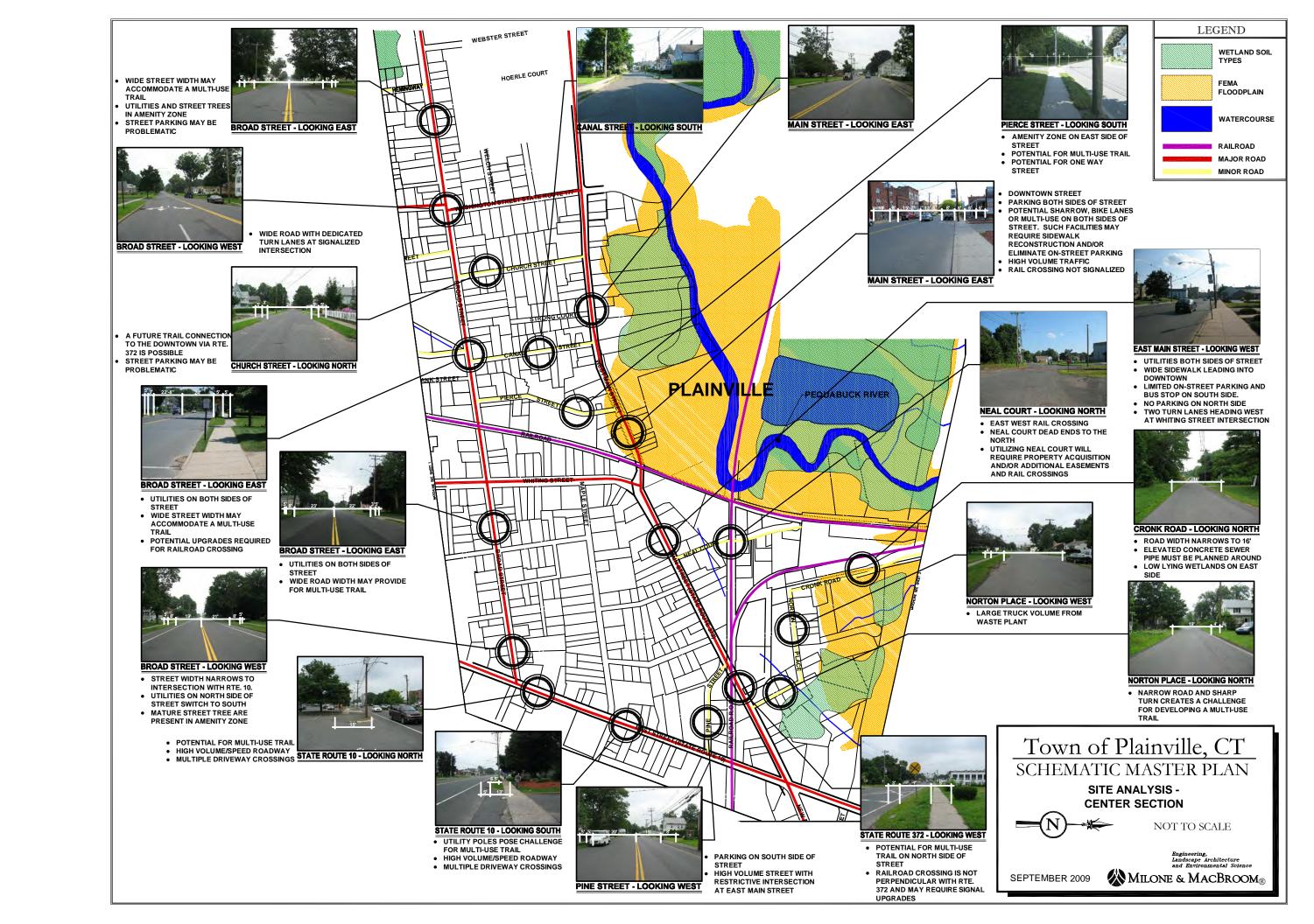
Understanding the Plainville road network was critical in defining potential trail routes, identifying on-street safety-



Plainville Road Network - Center Section

related issues and in final route selection. Roadways were analyzed during field reconnaissance and measured with respect to road width, lane lines, existing utilities, sidewalks, amenity zones, and rights-of-way and were then classified as being major or minor roads with respect to this Master Plan study. Cross sections were developed to better understand the conditions recorded in the field and are depicted on the Site Analysis Plans. At-grade street crossings of rail lines pose certain challenges in the design of bikeways and are located on Broad Street, West Main Street, East Main Street, and Route 10 and are also shown on the Site Analysis Plans. All of the major center section streets (Broad Street, East Main Street, and Route 10) are wide with existing sidewalks in various conditions, numerous driveways, curb cuts, and road intersections. They include significant above grade and





below grade utility structures that the trail must take into consideration, and the trail through the center section must have adequate signage and identification for the trail user to feel properly oriented as they traverse the area.

Coordination with the Connecticut Department of Transportation will be required for any planned trail impacts associated with State Routes 10, 372, 72, and 177 as well as state property from Northwest Drive to the Farmington town line. Assessor's mapping indicates the inactive railroad right-of-way from Northwest Drive to the town line is owned by the State of Connecticut. Signalized intersections that will require special design considerations are the intersections of Broad Street with Route 177, Whiting Street and Route 10, the intersection of Route 10 with Maple Avenue, Pine Street, railroad crossing and East Main Street, and the intersections of Route 372 with Whiting Street and Pine Street. Sites



Broad Street - Looking South

were analyzed for their potential as parking areas, opportunities for trail way-finding stations, points of access, and links to important community resources (See Section 4.4).

Investigation of the center section included walking and field review of numerous potential trail routes

including Broad Street, East Main Street, Route 10, and side streets connecting the major streets. Broad Street, from Hemingway Street to Route 10 (Farmington Avenue), a distance of approximately 0.7 miles, is a densely developed, well maintained pleasant residential neighborhood with numerous driveway curb cuts and road intersections. Several historic properties, churches, commercial buildings, single-family residences and apartment buildings line the wide street. Broad Street could be redesigned to support a multiuse trail, bike lanes and sidewalks, or a shared, signed biking roadway. Traffic counts performed by the CCRPA indicate



Route 10- Looking North

that Broad Street is a relatively busy street with moderate vehicular speeds. Adjacent to the westerly side of active rail crossing on the north side of Broad Street, a relatively large parcel of privately owned land (property of the Our Lady of Mercy Church) has potential for a trail gateway and parking; should coordination with the property owner be achievable.

At the intersection with Broad Street, Route 10 proceeds north to Robert Street Extension for a distance of



West Main Street - Looking East

and is heavily used by vehicles passing through the major intersections of Whiting Street and Route 10. Plainville Municipal Center, the Town Library, commercial establishments, important institutions and businesses are accessed directly off Route 372. During the study, the community felt strongly that the trail should bring users to the downtown to increase pedestrian activity. Bicycle proponents for the trail commented on the severely angled, signalized, active rail crossing on East Main Street. They expressed a need to provide an improved condition for bicycles that cross the tracks. Potential linkages to West Main Street and East Main Street were investigated

0.7 miles. The character of Route 10 from Broad Street to East Main Street is an intensely developed commercial corridor with high traffic volumes. This section of Route 10 from East Main Street to Broad Street can benefit greatly from streetscape improvements. North of East Main Street, the visual qualities of Route 10 benefit from a less developed commercial character with improved existing landscape features. A major signalized intersection at East Main Street and a significant railroad crossing south of the intersection require some improvements for trail planning purposes.

Route 372 traverses the heart of downtown Plainville



Active Rail Yard - Looking North

including Church Street, Canal Street, and Pierce Street from Broad Street to West Main Street. These short streets, 0.2 miles in length, support primarily medium density, single-family residential properties. Pierce Street, at West Main, includes an interesting collection of historic commercial buildings and has an attractive opportunity for a way-finding station for the trail. Additionally, Pierce Street has the most feasible character for a multiuse trail that would be designed along the east side of the street. Conversion of two-way streets to one-way is considered possible to support the trail in connecting Broad Street to West Main Street. Doing so would require community support and town approval.

The Pan Am rail line from Broad Street to West Main Street and West Main Street north to the rail yard was reviewed. Similar issues to those at the southern section were identified along this short, 0.2 mile length of active rail. As previously noted, Pan Am Southern is currently opposed to support sharing their right-of-way for the purposes of planning a trail system adjacent to the active rail. If, in the future, Pan Am is amenable to providing access, other limitations arise from the narrow width of the rail right-of-way when considering the proper placement of a trail adjacent to an active rail. Incorporating a safe pedestrian and bicycle crossing system is required for the trail at West Main Street. Upgrading this intersection by adding warning signs and crossing bars has been contemplated in the past, but never implemented. Coordination with Pan Am would also be required. North of West Main Street, the north/south line crosses an active east/west rail line before proceeding into the large, triangular rail yard space. The rail yard is considered infeasible for trail use while it remains an active facility.

From West and East Main Streets, existing conditions along several routes were reviewed including a link

to Neil Court past the Police Department as well as utilizing Norton Place to Cronk Road as a link to the northern section. Neil Court is a short dead-end street with access to the rail yard and includes an existing crossing of the east/west rail line. However, there are no public accessways from Neil Court to the north, and all trail linkages would require access over private property and/or the rail yard. Norton Place is a street with varying widths. From its intersection with East Main Street, Norton Place is very narrow and can only accommodate the construction of a sidewalk on one side of the street and cannot support a multiuse trail. A portion of Norton

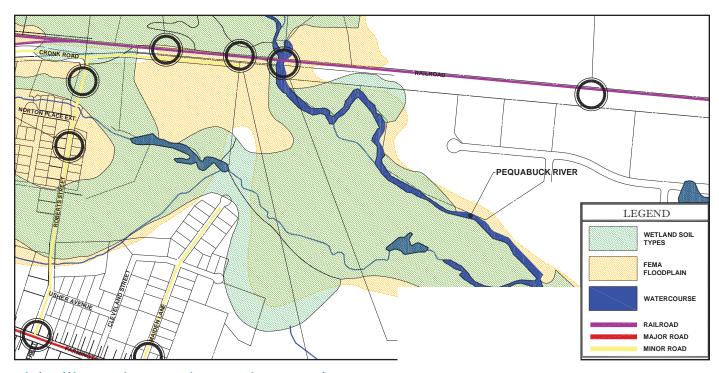


Norton Place - Looking North

Place has an existing concrete sidewalk on the south side, in front of a grouping of apartment buildings. However, the street is narrow with heavy truck traffic and some space limitations due to the development of homes and businesses close to the road right-of-way. Cronk Road connects to Norton Place as a narrow street along the east side of the rail yard with a major exposed, elevated sanitary sewer main and pump station on its westerly side. This utility creates a significant site obstruction to trail and/or sidewalk construction. Trail construction is also limited by wetlands located to the east of this section. Cronk Road significantly widens as it approaches the Route 372 overpass north the pump station.

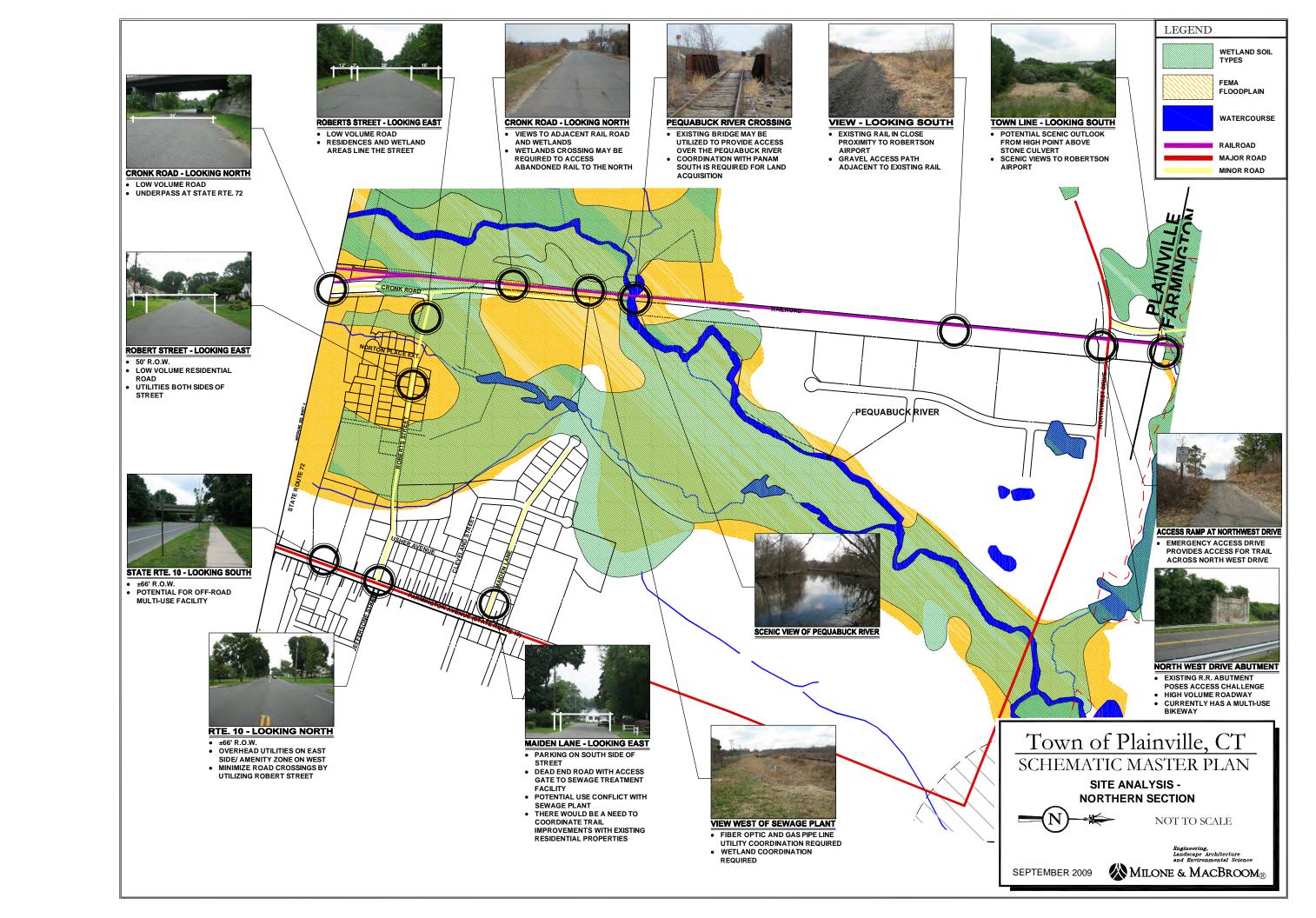
#### 3.3.3 Northern Section

The northern section of trail analysis includes the inactive Pan Am rail corridor, the Pequabuck River rail crossing, lands north of the Route 72 overpasses of Cronk Road and Route 10, and the crossing of Northwest Drive north to the Farmington town line. Existing conditions were studied along several



Plainville Road Network - Northern Section

potential trail routes beginning with Robert Street Extension at Route 10 to Cronk Road, from Cronk Road to the Plainville Wastewater Treatment Plant, to the rail corridor, and north to the town line. Robert Street Extension, .5 miles in length, is a lightly developed, quiet residential street with significant wetland systems



along the lower elevations of the road. Robert Street Extension varies in width and has the potential to accommodate sidewalks. A widening of the culvert crossing will be required should a sidewalk or multiuse trail system be proposed. However, a multiuse trail is more difficult to construct on Robert Street Extension due to the close proximity of several residences to the street. The intersection of Cronk Road and Robert Street Extension is a feasible location for a way-finding space to identify optional routes for trail users. North of the Route 72 overpass, Cronk Road is a wide street with limited development leading to and from the treatment plant. This road can accommodate a multiuse trail with the required reduction in road width. North of its intersection with Roberts Street Extension, Cronk Road abuts the eastern side of the rail corridor to the treatment plant. From the treatment plant and Cronk Road, a small wetland must be traversed to access the rail bed. The character of the inactive rail corridor includes a flat, straight, relatively wide elevated rail bed that can easily accommodate the construction of a multiuse trail. The bridge over the Pequabuck River may be adapted to trail use and the existing abutments and rail beams appear in good condition. Scour analysis of the abutments may be required for the trail design. The rail bed is adjacent to and fenced off along the entire length of the Robertson Airport runway, a distance of 0.7 miles. The length of the trail from the intersection of Cronk Road and Robert Street Extension north to the town line







Pequabuck River

is 1.1 miles. The visual character of this northern route is attractive with links to interesting site features, a quiet residential neighborhood, wetland systems, and pleasant views of the river and wetlands. Access to the treatment plant property is fenced and gated at Maiden Lane, a small residential street connecting to Farmington Avenue. Use of Maiden Lane through the treatment plant is not considered as desirable as the Cronk Road to Robert Street Extension Route due to the character of Maiden Lane and the residences that closely line the street.



Robert Street Extension - Looking East

Investigation of Cronk Road reveals a continuation of a wide street suitable for a multiuse trail from the intersection with Robert Street Extension to a point south of the Route 72 overpass. From this point south to Norton Place, Cronk Road may only be utilized as a shared, signed roadway with sidewalks. Space is limited for the construction of sidewalks and is not adequate for a multiuse trail.

In the exploration of alternatives, all of the data gathered in the field investigation and data collection phase was reviewed and discussed. Based on the analysis made in

this phase of study, the concept of a Master Plan which combines a multiuse trail with bike lanes or shared, signed roadway and pedestrian sidewalks is the most feasible design approach.

# 3.4 Railroad Right-of-Way

The town expressed interest in utilizing, to the extent possible, the existing railroad right-of-way for the multiuse trail. A major portion of the rail is currently an active corridor, from north of the downtown rail yard south to the Southington town line. Pan Am declined any interest in negotiations with the town for utilizing the any portion of the active rail as a shared use or "trail with active rail." Utilizing the active rail



may be considered a long-range option subject to agreements being made with Pan Am. Field investigations revealed a series of constraints in utilizing the active rail for a multiuse trail including:

- Grading existing railroad elevation with respect to surrounding grades
- Presence of wetlands and intermittent watercourses
- Private owner encroachments





Route 10 Railroad Crossing

- Active rail users such as Forestville Lumber, JW Green Company Inc. in Plainville, and Amerigas in Southington with associated rail spurs to these users
- Varying railroad right-of-way widths that are very narrow in certain locations
- Underground utilities including AT&T fiber optic cable and Algonquin natural gas lines

A key component to the success of the proposed trail Master Plan route is planned utilization of the inactive rail property to the north of the rail yard. Currently, negotiations for acquisition of access rights or outright

acquisition of the property by the town are viewed as positive. Acquiring this piece of land will enable the construction of a significant length of multiuse trail with opportunities for scenic views of Robertson Airport, the Pequabuck River, and associated uplands.

## 3.5 Site Analysis Plans and Public Meetings

Information and data from base map preparation, the reviews of existing conditions, discussions with the PGA and town officials, and observations from on-site field investigation was assimilated into the Existing Conditions Plans and the Alternative Route Concept Plans. A series of public meetings were held during the planning process. Project work was initiated on June 1, 2009, and an informational presentation was made to the Town of Plainville Planning and Zoning Commission on June 23, 2009. The community was introduced to the study effort and informed of the schedule and process



for development of the Master Plan. On July 14, 2009, a public planning session was held at the regular meeting of the PGA. At this meeting, the Pan Am railroad right-of-way existing conditions and a site analysis of the southern portion of the various trail options were presented for review and comment. PGA members present were enthusiastic and involved regarding the Master Plan study and issues revolving around the trail opportunities. At this meeting, the Steering Committee received input on the railroad right-of-way issues and conditions. A second public planning session was held on August 11, 2009 to review existing conditions and analysis of the center and northern sections of the trail routes under consideration. In addition to input on the trail considerations, coordination with the Town of Plainville Parks and Recreation Department was determined to be an important element of the entire Master Plan. Integration of the Master Plan for the trail with the Norton Park Master Plan was determined to be an important consideration. As an outgrowth of the design study and meetings held through August 2009, the concept of a trail through the town composed of both on-road and off-road sections took shape.

On August 27, 2009, the alternative trail route options were presented to the public during a Design Charette held at the Plainville Public Library. At this public meeting, interested citizens and stakeholders were presented with a series of graphic plans and trail options to review, study, and comment on through verbal and written comments and suggestions. This meeting was well attended by over 70 members of the community and PGA. The charette was organized into four graphic presentation stations: southern section,



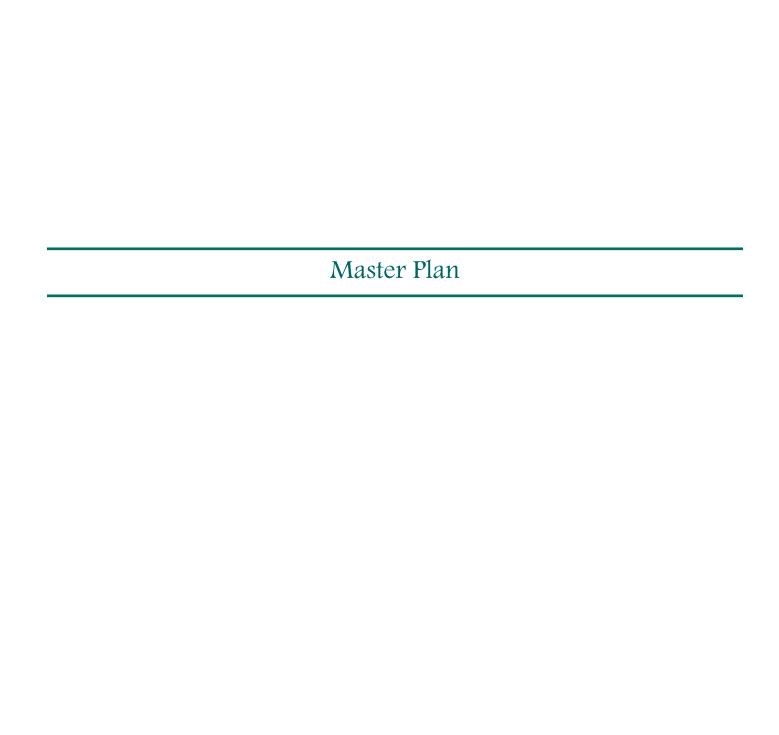
# Site Investigation & Data Collection

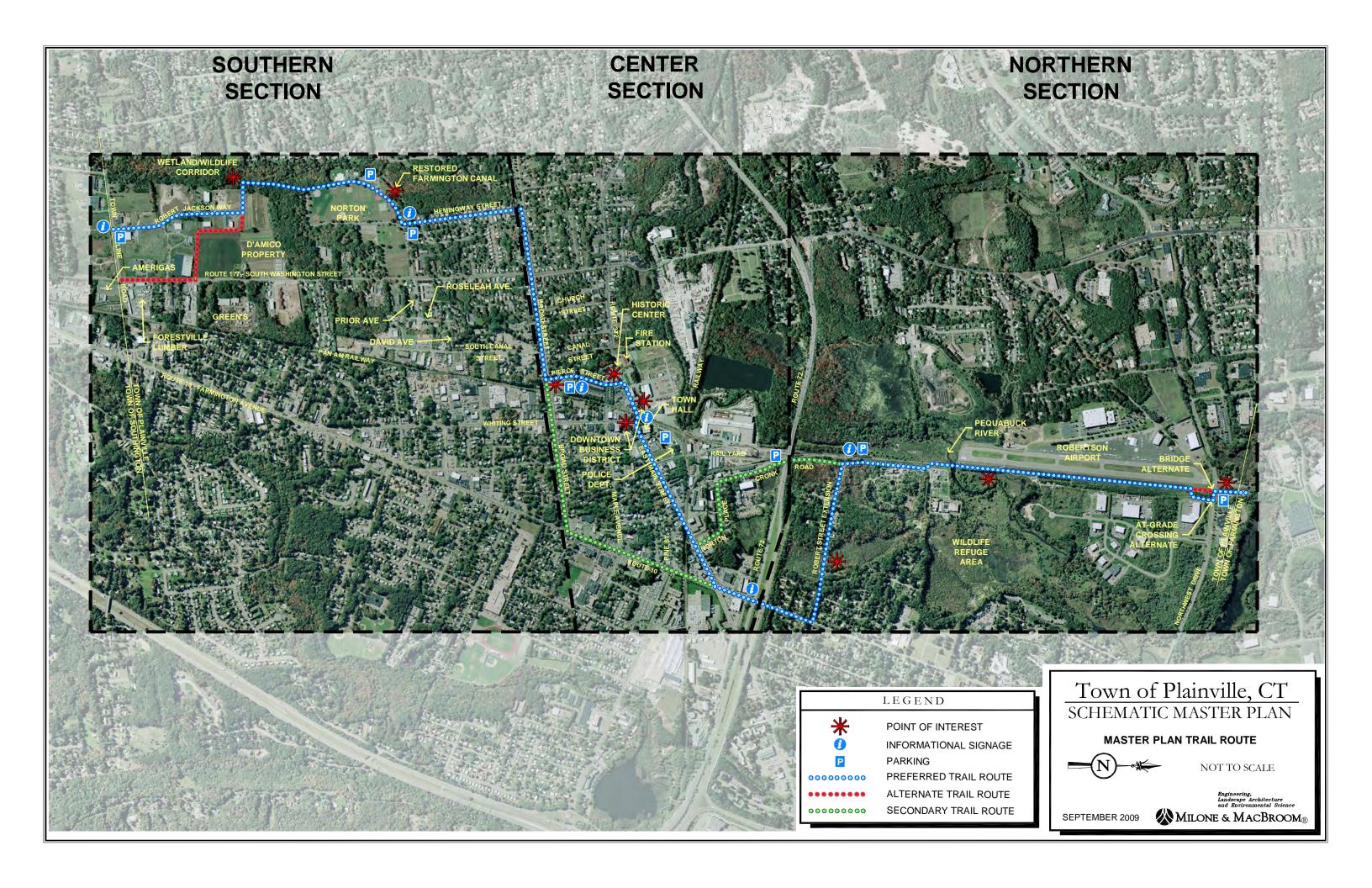
PLAINVILLE CREENWAY MASTER PLAN

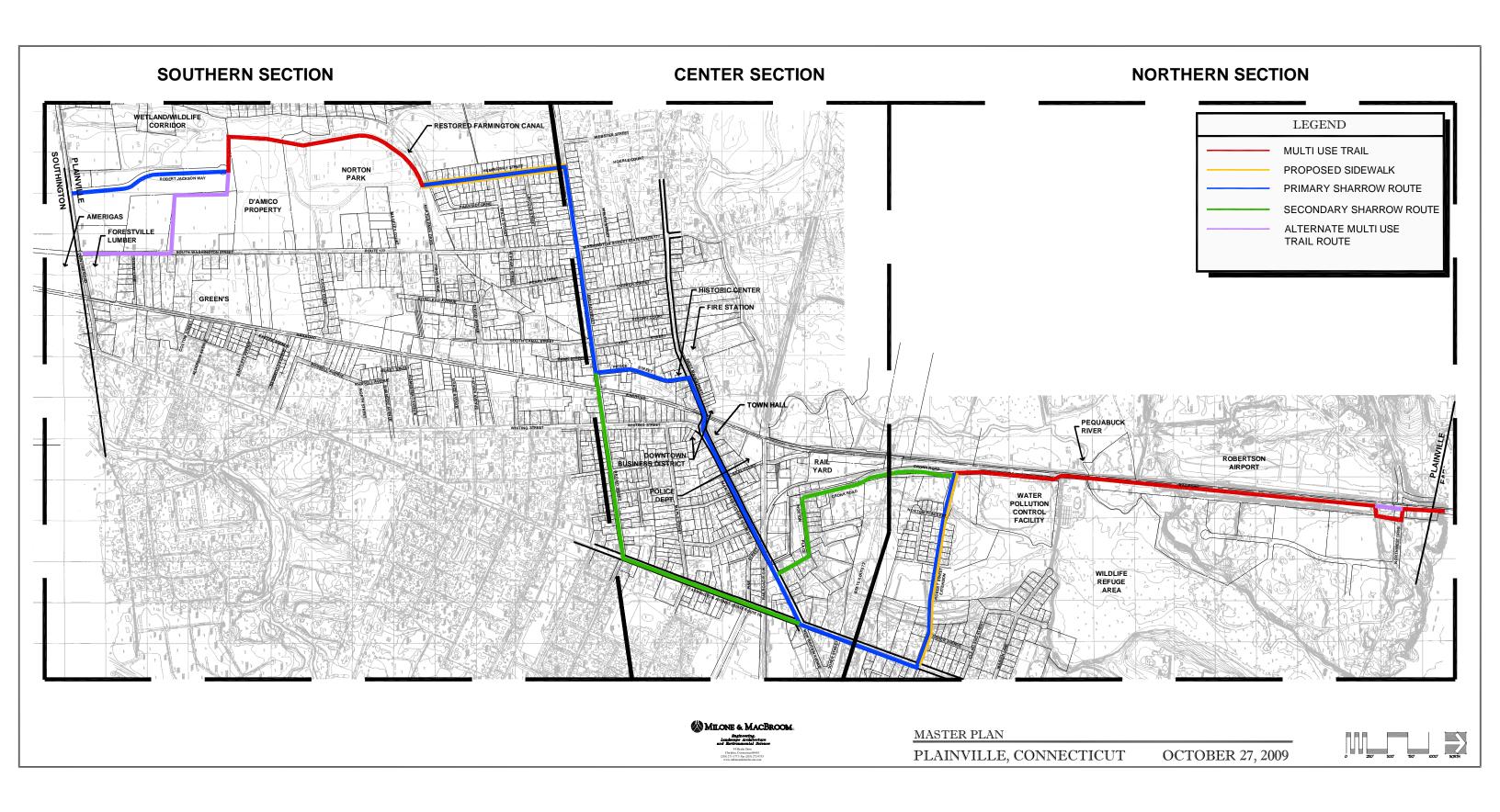
center section, northern section, and an overall Master Plan accompanied by typical design treatments showing options for trail gateways, intersection treatments, lighting, landscaping, boardwalks/bridges,

railings/fences, parking areas, benches/bike racks, kiosks, memorials, and signage. In addition, a survey questionnaire on preferred routes was made available for participants to submit written comments. The data from the questionnaires are included in Appendix B. Upon completion of the Design Charette, the trail Steering Committee, and design team met to review all of the compiled information, including comments received from the public and to decide on the most appropriate Master Plan route for the trail through the town. The planning and direction of the Master Plan design reflects input received from the community and Steering Committee.



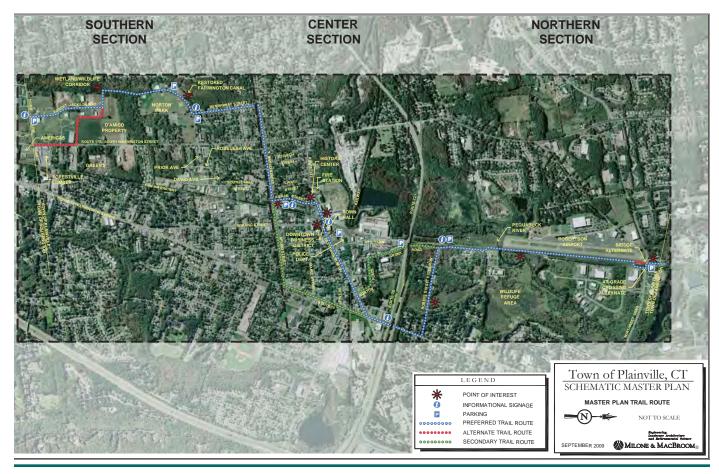






Based on input received from the Design Charette and public planning sessions, and a thorough consideration of alternative trail options described in Appendix A, the Steering Committee provided direction regarding the final route selection, the type of treatments and style of the facility. The proposed Master Plan route is comprised of sections of both on-road and multiuse trails where bicyclists share the road lanes with vehicular traffic and pedestrian utilize sidewalks. When complete, the Plainville section of the East Coast Greenway/Farmington Canal Heritage Trail will be a trail hybrid, allowing trail users to follow a defined route in a variety of manners and with enhanced recreational opportunities for local citizens as well. The creation of interesting, well developed on-road, bicycle and pedestrian-friendly sections will provide excellent opportunities for Plainville in continuing their development of a complete network of pedestrian-oriented travelways in town that will improve the town character as a more bicycle-friendly environment and incorporate the Farmington Canal Heritage Trail as a centerpiece for the community.

For the purposes of review and discussion, the Master Plan is organized into three areas: the southern, center, and northern sections.



#### 4.1 Southern Section

#### Southington Town Line to Broad Street

The Master Plan route requires coordination between the towns of Plainville and Southington to determine the exact location for connecting to the Farmington Canal Trail to the south. The preferred trail route through the southern section utilizes Robert Jackson Way and leads over private land to Norton Park. A second option to connect Town Line Road to private property requires acquisition of usage rights over private property. Both the preferred route and the second option are feasible subject to acquisition of access rights over the property of D'Amico and/or others. The town has had preliminary discussions with the developer of the D'Amico property, and they have indicated an interest in working with the town regarding the trail. While the timeframe is still uncertain, the town will continue to coordinate these development plans.

• Preferred Route – The Master Plan route begins at the intersection of Robert Jackson Way and Town Line Road. Proposed parking facilities and a way-finding station are proposed along the northern side of Town Line Road although the precise locations will require coordination with adjacent property owners. Trail users will head north for 0.4 miles to the end of Robert



Master Plan - Southern Section



Jackson Way as an on-road route with a new sidewalk proposed on the east side. At the end of Robert Jackson Way, a multiuse trail turns west through land of D'Amico for approximately 400 LF to town-owned land.



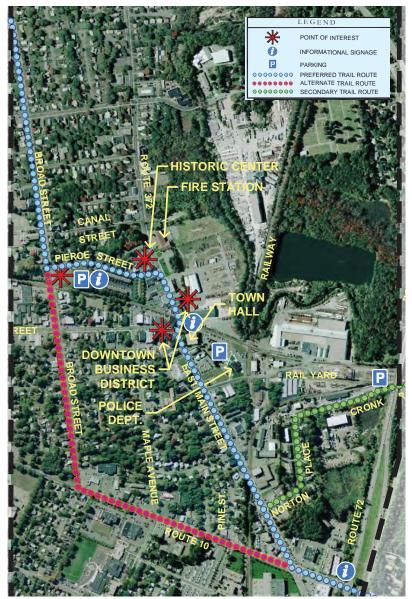
Existing Woodland Trails at Norton Park

• Option #2 – The trail route begins at the intersection of Town Line Road and South Washington Street (Route 177) and heads north as a multiuse facility for 0.2 miles. From Route 177, the trail will require acquisition of a right-of-way over land of D'Amico and others as it heads west away from Route 177. The trail would travel along the south and east perimeters of the D'Amico property for 0.4 miles bypassing Robert Jackson Way and connecting to Norton Park. This option is dependent upon the ability to design an off-road trail along the stretch of Washington Street to Town Line Road as well as acquisition of access rights over the D'Amico property.

From the town-owned land, the Master Plan trail route heads north for ±100 LF to Norton Park utilizing the location of existing woodland trails where it then connects with an existing paved trail. The multiuse trail will continue along the west perimeter of Norton Park, bypassing the public pool, and connect to a parking lot located at the west entrance on Norton Park Drive. The trail crosses Norton Park Drive and continues along the historic Farmington Canal bypassing an existing canal monument and gazebo, past a proposed way-finding station, until it reaches a pedestrian crossing of the canal at the south end of Hemingway Street. Access to Hemingway Street from Norton Park will require improvements to an existing canal crossing. It is recommended that coordination with Plainville Park and Recreation Department continue when determining the final location of the proposed trail route through Norton Park and that the final route is coordinated with the Norton Park Master Plan.

Upon leaving Norton Park, the trail heads north for 0.3 miles on Hemingway Street to the intersection with Broad Street as a shared, signed on-road facility where cyclists will share the road lanes and pedestrians will utilize sidewalks. It is recommended that sidewalks be replaced on both sides of Hemingway Street.





Master Plan - Center Section

#### 4.2 Center Section

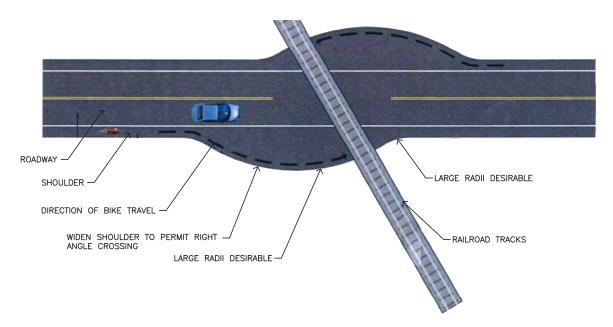
#### **Broad Street to Route 72**

The center section consists of on-road shared, signed trail facilities with the trail route leading users from Broad Street to Pierce Street to West Main Street, through downtown Plainville on East Main Street to Route 10. In addition, two secondary routes are proposed: the first bypassing downtown and heading directly to Route 10 from Broad Street, and the other from East Main Street to Norton Place and Cronk Road, bypassing Route 10. Feedback from several public workshops indicated that some members of the community were not comfortable using the primary route, while others felt it is unsafe given the high vehicle traffic. The center section of trail was of special concern to the Steering Committee, and it was agreed that a multiuse trail was neither a desirable nor a practical greenway facility. It was decided that a shared, signed roadway ("sharrows") with directional and way-finding signage would be most appropriate due to both safety concerns and physical constraints associated with

constructing the wider multiuse trail (i.e., overhead utilities, driveway conflicts, etc.). The center section requires design improvements at street intersections and will require coordination with the CT DOT as well with Pan Am where rail crossings are encountered. It is the goal of the Steering Committee and the Town of Plainville to make this on-road stretch of trail one of the most "bicycle friendly" roads in the state and a highlight for those cycling the trail. Such an effort will involve all levels of town staff (roads, traffic, police,

and education), the town council, state representatives, the public, as well as stakeholders along the trail north and south of Plainville, in order to be successful.

From Hemingway Street, the primary trail route heads east on Broad Street and continues for 0.5 miles to a proposed way-finding station and parking facility conceptually located on the property adjacent to the Broad Street Pan Am rail crossing. Coordination with the owner and the Plainville Planning Department will be required as this piece of property has significant developmental value. The Master Plan route heads north on Pierce Street for 0.2 miles and leads trail users past the Plainville Historical Society (potential way-finding station) on the west and the Plainville Fire Station at the intersection of Pierce Street and West Main Street (Route 372). The trail turns east and heads directly through downtown Plainville passing through an active at-grade railroad crossing (requiring upgrades), proceeding through the signalized Whiting Street intersection where recent streetscape improvements have been completed; however, some upgrades may still be necessary to achieve "bike friendly" status. A way-finding station is proposed at the green in front of the Town Hall, and trail users may utilize existing parking at the Town Hall. From Whiting Street, the trail continues east toward Route 10 and passes through the Pine Street intersection and encounters another

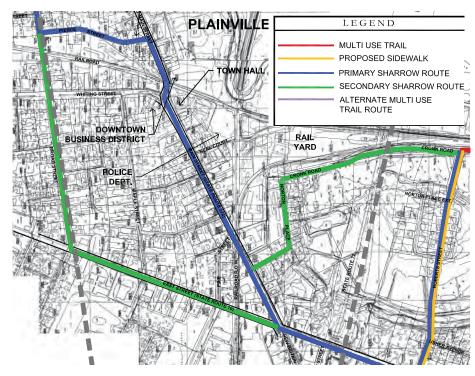


Widened Road Shoulder to Permit Right Angle Crossing

active at-grade railroad crossing before reaching Route 10. The rail crossing immediately east of Pine Street requires special design treatment due to the angle of the crossing. Property easements may be required to

accommodate such a treatment and shall be coordinated with property owners by the Town of Plainville. At the East Main Street/Route 10 intersection, the trail heads north for 0.1 miles to a way-finding station located just south of the Route 72 overpass and passes by a former crossing of the Farmington Canal. Select areas of sidewalk along Route 372 may need replacement and are to be coordinated with the Town of Plainville.

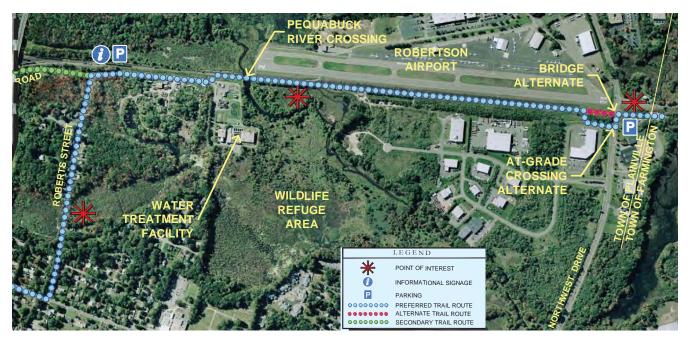
The secondary route that bypasses downtown continues east on Broad Street for 0.4 miles from Pierce Street to Route 10. Improvements to Pan Am's Broad Street railroad crossing are to be coordinated with the railroad, as are the required improvements to the signalized intersection at Whiting Street and Route 10 to be coordinated with CT DOT. From Broad Street, the secondary route will head north on Route 10 to the intersection with Robert Street Extension for approximately 0.4 miles and pass through signalized intersections at Maple Street, Pine Street,



Schematic Trail Diagram - Center Section

East Main Street, and the signalized railroad crossing 0.1 miles south of East Main Street. It is assumed that pedestrians will utilize existing sidewalks along Broad Street and Route 10. Route 10 streetscape improvements along the trail coordinated with the trail route are considered highly desirable.

A proposed secondary route available from East Main Street turns north onto Norton Place and connects to Cronk Road, again as a shared, signed roadway. This route allows trail users to connect to the northern section without having to travel along Route 10. New sidewalks are proposed along the north/south portions of Norton Place tying into sidewalks along the frontage of Norton Place Apartments and continuing along Cronk Road to the Route 72 overpass.



Master Plan - Northern Section

#### 4.3 Northern Section

#### Route 72 to Farmington Town Line

The northern section of the Master Plan route is comprised of both on-road facilities and a multiuse trail. The design and construction of the northern section is dependent upon the town's acquisition of access rights to the Pan Am Rail property from a point south of the Pequabuck River north to Northwest Drive, a distance of approximately 0.8 miles. The town has initiated conversation with Pan Am regarding this issue. It is anticipated negotiations by the town with Pan Am will proceed, and funds will eventually be required to obtain access rights.

The primary Master Plan route continues from the Route 72 overpass at Route 10 and heads north to the Robert Street Extension intersection for 0.3 miles as a shared, signed on-road facility utilizing existing sidewalks at the intersection of Route 10 and Robert Street Extension. The trail proceeds west on Robert Street Extension for 0.5 miles to a proposed way-finding station at the intersection of Cronk Road and Robert Street Extension. A new sidewalk is proposed along the north side of Robert Street Extension, which may require a culvert extension and/or pedestrian bridge or boardwalk by wetlands and a watercourse as well as coordination with property owners. North of the intersection of Roberts Street Extension with

Cronk Road, the trail becomes a multiuse facility and continues north for 0.2 miles to the Water Pollution Control Facility. It then connects to the rail property via a proposed pedestrian footbridge/boardwalk over a wetland/watercourse and heads north for 350 feet to the existing railroad trestle. This trestle requires improvements necessary to accommodate the multiuse trail. From the trestle, the trail heads north for .7 miles through the 165-foot wide corridor to Northwest Drive. The width of this property provides a unique opportunity along the Plainville Trail to create a linear park and take advantage of scenic views of the Pequabuck River, associated wetlands, and Robertson Airport. The trail leads down an existing emergency access way providing an at-grade crossing of Northwest Drive and proposed parking and way-





Typical Wetlands Crossing

finding station located on the north side of Northwest Drive. Usage rights over land owned by the State of Connecticut are required. In addition, coordination with the Town of Farmington will be required to determine the exact connection point to the Farmington Canal Heritage Trail at the town line. A bicycle/pedestrian bridge over Northwest Drive was considered given the increasingly heavy use of this road and was proposed in the CCRPA study (Appendix G). Conceptual costs associated with bridge construction are included as an alternative to the at-grade crossing.

In this northern section of the trail Master Plan, a secondary trail is also included to connect from the Route 72 overpass at Cronk Road north to the way-finding station at the Robert Street Extension/Cronk Road intersection. This secondary route, approximately 0.2 miles in length, links to Cronk Road south to the Route 72 overpass to Norton Place and to East Main Street in a more direct fashion than the primary route. This secondary portion of on-road trail requires a new sidewalk to be constructed along Cronk Road and further study of exactly how to accomplish shared use of this narrow corridor.

#### 4.4 Typical Site Amenities

Site amenities along the trail are proposed and standards have been developed by the FVTC to provide common elements for the Farmington Canal Heritage Trail. The town of Plainville may utilize these standards as well as incorporate unique design details that provide a sense of identity and exemplify the town's character.



**FVTC Typical Pavillion** 

#### **Trail Options**

The proposed trail consists of both an off-road, multiuse facility and a shared, signed on-road option ("sharrows"). Sharrows utilize existing road lanes for bicyclists to share the road with vehicular traffic and have pavement markings set 200 feet apart with associated signage. Pedestrians utilize sidewalks on either side of the road. The multiuse trail will consist of a 10-foot wide bituminous concrete paved trail with a two-foot wide soft trail that consists of stone screenings or stone dust.



Sharrow



Multiuse Trail and Parking Facilities

**Bike Lane:** 5' wide painted lane on street exclusively for bicycle use. The bike lane is located on the right hand side of the street. Cyclists ride with the direction of traffic and are expected to cross traffic lanes to make left turns.

Sharrow Lane: A vehicle lane with sharrow symbols painted approximately 200' apart. The lane is shared between vehicle and bicycle traffic. Sharrow lanes are currently being experimented with around the country. They are not currently recognized by the Federal Highway Administration in the Manual on Uniform Traffic Control Devices (MUTCD).

**Bike Box:** A painted area reserved for bicyclists in front of the vehicle stop bar. The purpose of the bike box is to allow for cyclists to queue in front of traffic stopped at a traffic signal.

Approach Lane: A painted bicycle lane provided between two lanes of traffic instead of to the right. This allows for bicycles to enter the intersection in a position to make a left hand turn.



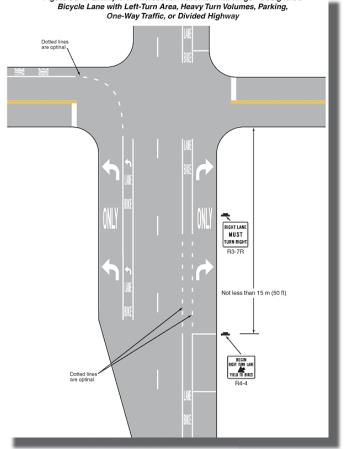
Bike Lane Exclusively for bicycle use



**Sharrow Lane** 



Bike box allowing cyclists to queue at a traffic signal

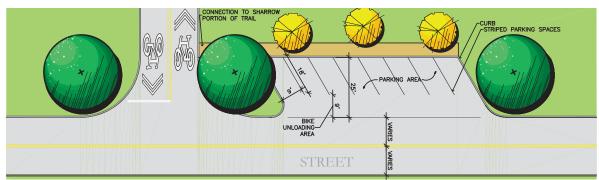


Approach Lane

**GREENWAY DEFINITIONS** 

PLAINVILLE RAILS TO TRAILS FEASIBILITY STUDY

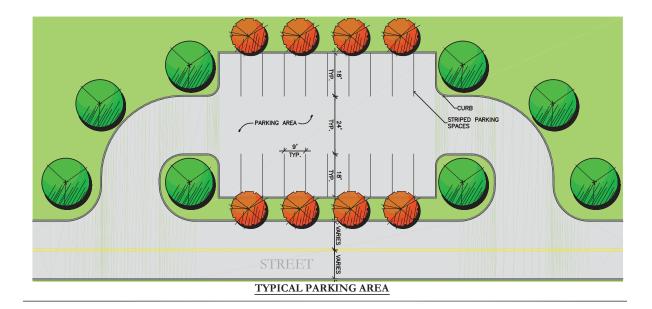




TYPICAL 60° PARKING

#### **Parking**

Access to parking is critical to the trail's success. Existing parking facilities that may be utilized for the trail are located at Norton Park and Town Hall. Proposed parking facilities noted on the Master Plan are located at the intersection of Town Line Road and Robert Jackson Way, Pierce Street and Broad Street, and at Northwest Drive and Johnson Avenue. Proposed parking facilities will include way-finding stations and directional signage pointing trail users in the appropriate direction.





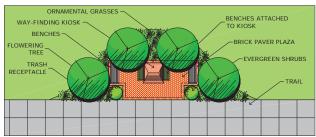




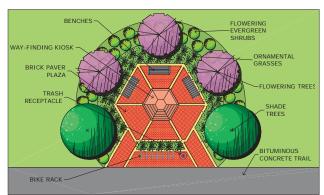
Information Kiosk Examples

#### **Way-finding Stations**

Way-finding stations along the trail may include amenities such as an information kiosk, benches, bike racks, seating or accent walls, landscaping, trash receptacles, lighting, and decorative pavement treatments. Other site amenities along the trail include gateways, landscaping, boardwalks/bridges, railings, ornamental fencing, memorials, and decorative signage. At various locations of the trail, informational signage will be installed to describe various historical aspects of the Linear Railsto-Trails Park, the railroad, and/or the canal that previously existed.



WAY-FINDING STATION ALONG ON ROAD ROUTE WITH SIDEWALKS

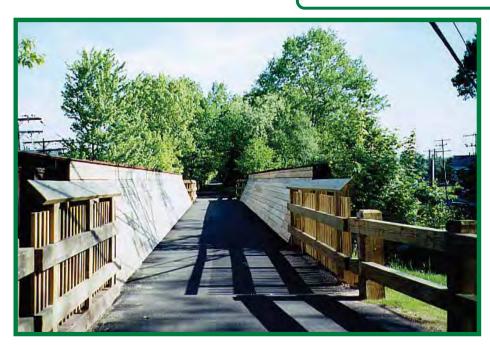


WAY-FINDING STATION ALONG MULTIUSE TRAIL

# Design Treatment Options



## Boardwalks / Bridges

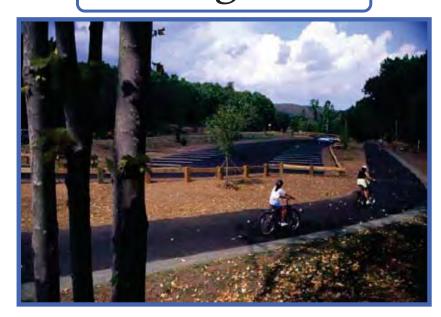




Railings / Fencing



Parking Areas



Benches / Bike Racks





# Design Treatment Options



## Gateways



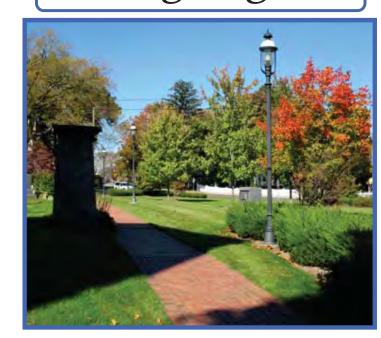


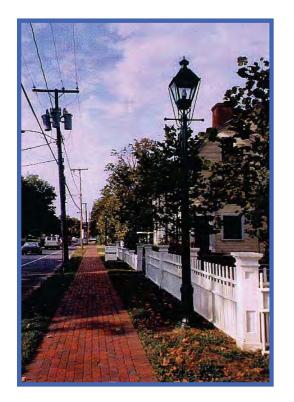


### **Intersection Treatments**



## Lighting







# Design Treatment Options



## Kiosks







### Memorials



Signage









#### 4.5 Regulatory Permits

#### **Local Permits**

Local permits are anticipated to include the Inland Wetlands and Watercourses Commission. Planning and Zoning Commission approvals for various proposed improvements may be required to supplement the required CGS 8-24 referral and approval. Plans will be reviewed by local authorities to determine any additional required permits.

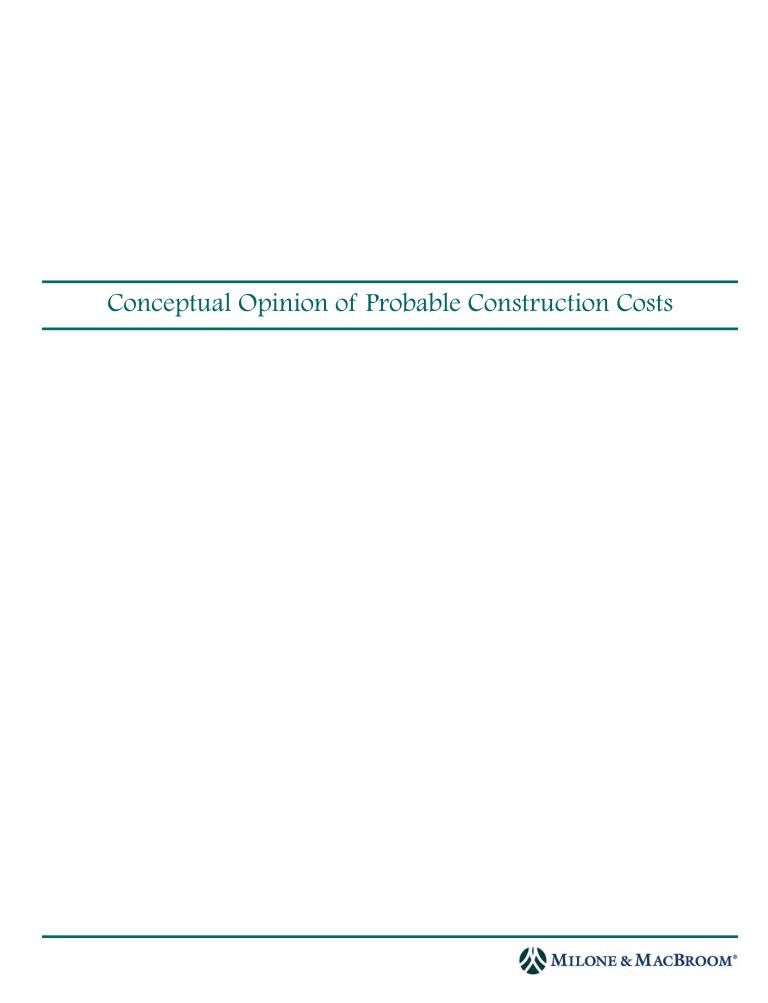
#### **Nonlocal Permits**

A floodplain management certificate from the Connecticut DEP is anticipated for this project based on the Master Plan. A DEP General Stormwater Permit must be submitted prior to the start of construction. U.S. Army Corps of Engineers and CT DEP 401 Water Quality Certificate needs are uncertain at this time and may be required based on detailed design.

#### 4.6 Project Phasing

The length of the Master Plan route is approximately 4.5 miles from the Southington line to the Farmington town line, of which 2.8 miles is proposed as a signed, shared roadway system (sharrows) and 1.7 miles as a multiuse trail facility. Building this trail as one project will be impractical from a financial and public support point of view, and the implementation of the trail is suited to a phased approach. The Steering Committee feels that by prioritizing the Northern Section as Phase 1 and the Southern Section as Phase 2 the trail project will prove to be successful to the general public and cycling community and gain the public support needed to construct the on-road Central Section as Phase 3.





#### Conceptual Opinion of Probable Construction Costs

PLAINVILLE CREENWAY MASTER PLAN

Conceptual budgetary estimates of probable construction costs have been prepared and a summary is shown below. Appendix E provides detail on the conceptual costs for each section and the alternative routes. The conceptual cost projections will be revised and modified during the design phases of each section and serve as order of magnitude estimates suitable for planning purposes only. These costs do not include land acquisition or easement costs.

The Conceptual Opinion of Probable Construction Costs for the preferred master plan route is approximately \$6,000,000 in 2009 costs. Alternative route sections include another approximate \$2,900,000 in 2009 costs. Conceptual costs include survey, design, bidding, regulatory permitting, construction, contingencies and full time construction administration. Phasing of the project will impact costs of construction and inflation factors will be required once specific time frames for construction are determined. As the design process develops the construction costs will be modified and revised to reflect implementation costs for the detailed designs.

#### **MASTER PLAN ROUTE**

N	ORTHERN SECTION	ON		CENTER SECTION	N	SOUTHER	N SECTION
4,800 LF	1,200 LF	2,500 LF	1,500 LF	3,300 LF	5,500 LF	3,000 LF	2,000 LF
TOWN LINE TO CRONK ROAD	CRONK ROAD (TO ROBERTS STREET EXT)	ROBERTS STREET EXTENSION	ROUTE 10 (ROBERTS STREET EXT TO EAST MAIN)	WEST MAIN STREET	PIERCE/BROAD /HEMINGWAY STREET	NORTON PARK TO ROBERT JACKSON WAY	JACKSON WAY/
\$ 1,693,000	\$ 340,000	\$ 597,000	\$ 500,000	\$ 1,072,000	\$ 582,000	\$ 584,000	\$ 688,000
	\$2,630,000			\$2,154,000		\$1,27	2,000

PROJECT TOTAL (ROUNDED) = \$ 6,000,000

#### **ALTERNATIVE PLAN ROUTES**

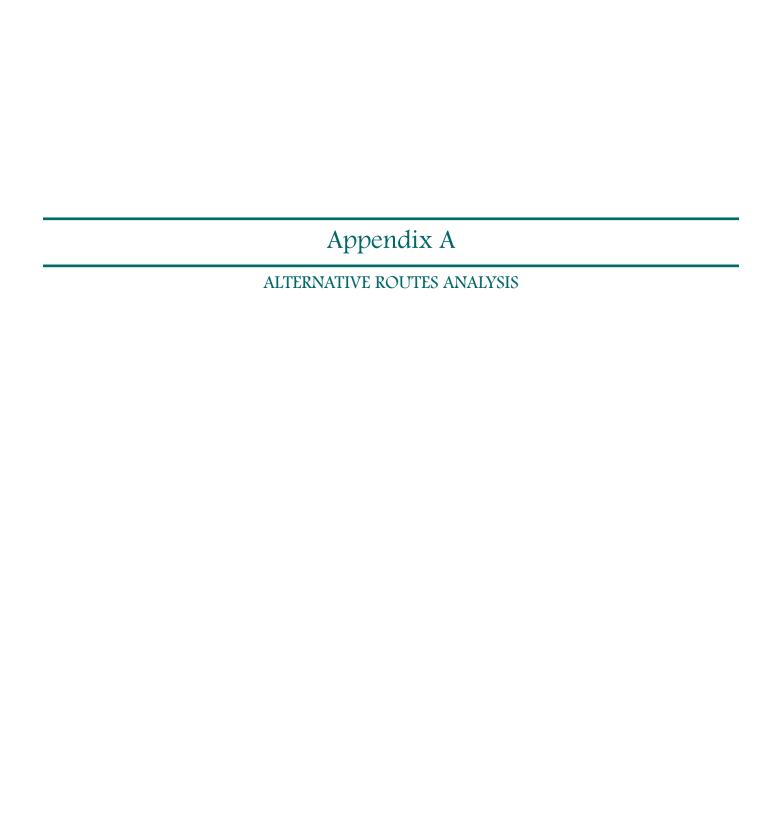
3,000 LF	4,500 LF	2,600 LF	300 LF
TERNATIVE 1 - CRONK ROAD TO NORTON PLACE	ALTERNATIVE 2 - ROUTE 10 TO BROAD/PIERCE STREET	ALTERNATIVE 3 - NORTON PARK TO ROUTE 177	ALTERNATIVE 4 -BRIDGE OVER NORTHWEST DRIVE
\$ 568,000	\$ 995,000	\$ 667,000	\$ 639,000

ALTERNATIVES (ROUNDED) = \$ 2,900,000

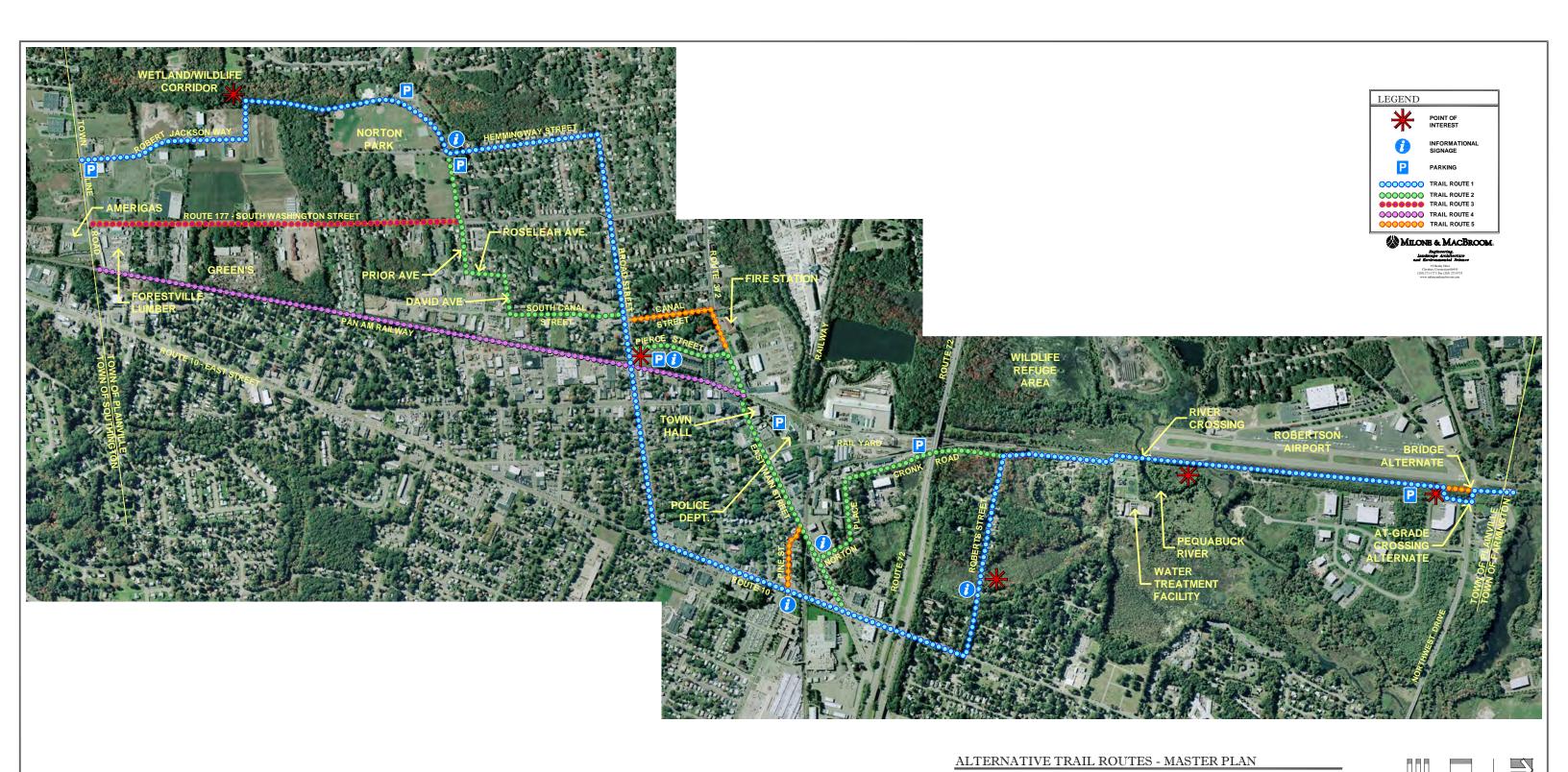
#### Note

Conceptual cost shown are preliminary in nature and suitable for planning purposes only.
 Detailed design will impact the determination of actual costs.





MILONE & MACBROOM®



PLAINVILLE, CONNECTICUT

AUGUST 28, 2009

Based on a thorough understanding of all related site issues, the designs prepared by the Southington-Plainville Greenway Committee (SPGC) and a preferred alternative prepared by the Plainville Greenway Alliance (PGA), a series of five alternative facility routes suitable for bike and pedestrian use were developed. Alternative routes were selected to minimize, to the extent feasible, adverse environmental impacts and required acquisition of easements. It should be noted that each trail terminus in Plainville will need to be coordinated with Southington to the south and Farmington to the north to determine the exact methods for making a trail connection to the respective town. Each trail route presented its own unique opportunities and constraints as discussed below. The alternative routes were presented to the public at the August 2009 design charette.



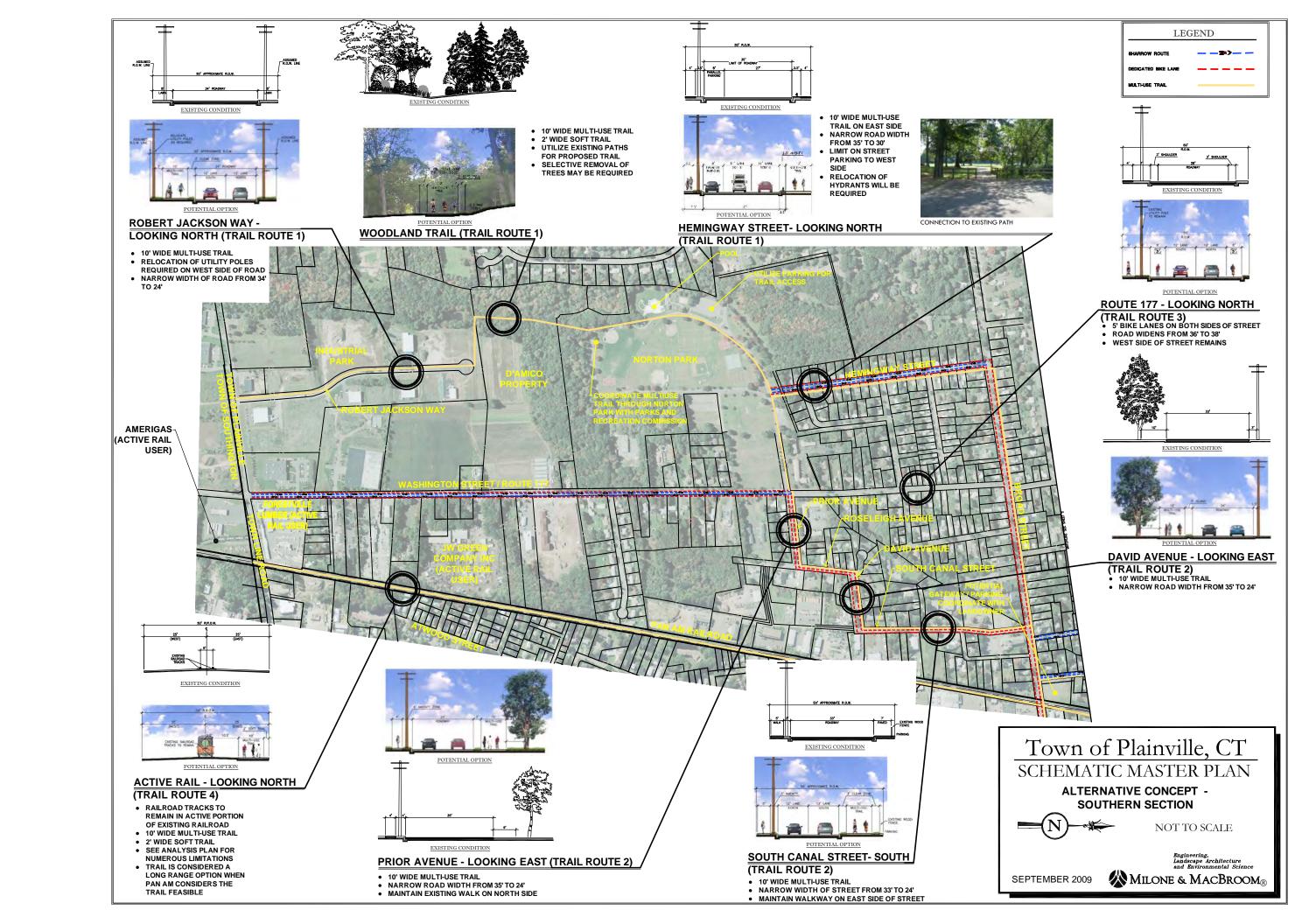
Alternative Trail Routes ~ Master Plan

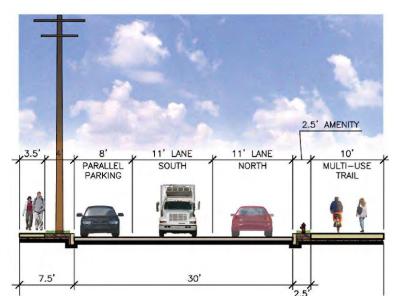
#### A.1 Trail Route 1

#### A.1.1 Southern Section

Beginning at Town Line Road as a multiuse trail, Trail Route 1 heads north to the end of the cul-de-sac on Robert Jackson Way. This requires reconstruction of portions of Robert Jackson Way to accommodate the







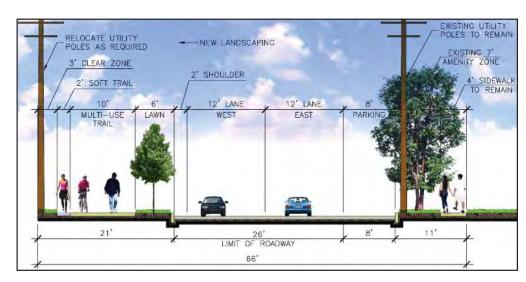
Hemingway Street - Proposed Section

trail. The multiuse trail will then head west for 400 LF through private property (D'Amico) until it connects up with town-owned land. The multiuse trail then heads north towards Norton Park utilizing the location of existing woodland trails where it will connect to Norton Park and a paved trail currently utilized for pedestrians only. The multiuse trail will then continue through Norton Park along the western perimeter, bypassing the public pool, leading to a restored and demarcated section of the Farmington Canal until it intersects with an unpaved parking lot in Norton Park at the southern end of Hemingway Street. To access Hemingway Street from Norton Park,

improvements to a culvert crossing the canal will be required. From this intersection, Trail Route 1 turns north along Hemingway Street as a multiuse trail; a signed, shared on-street route; or bike lanes until it intersects with Broad Street.

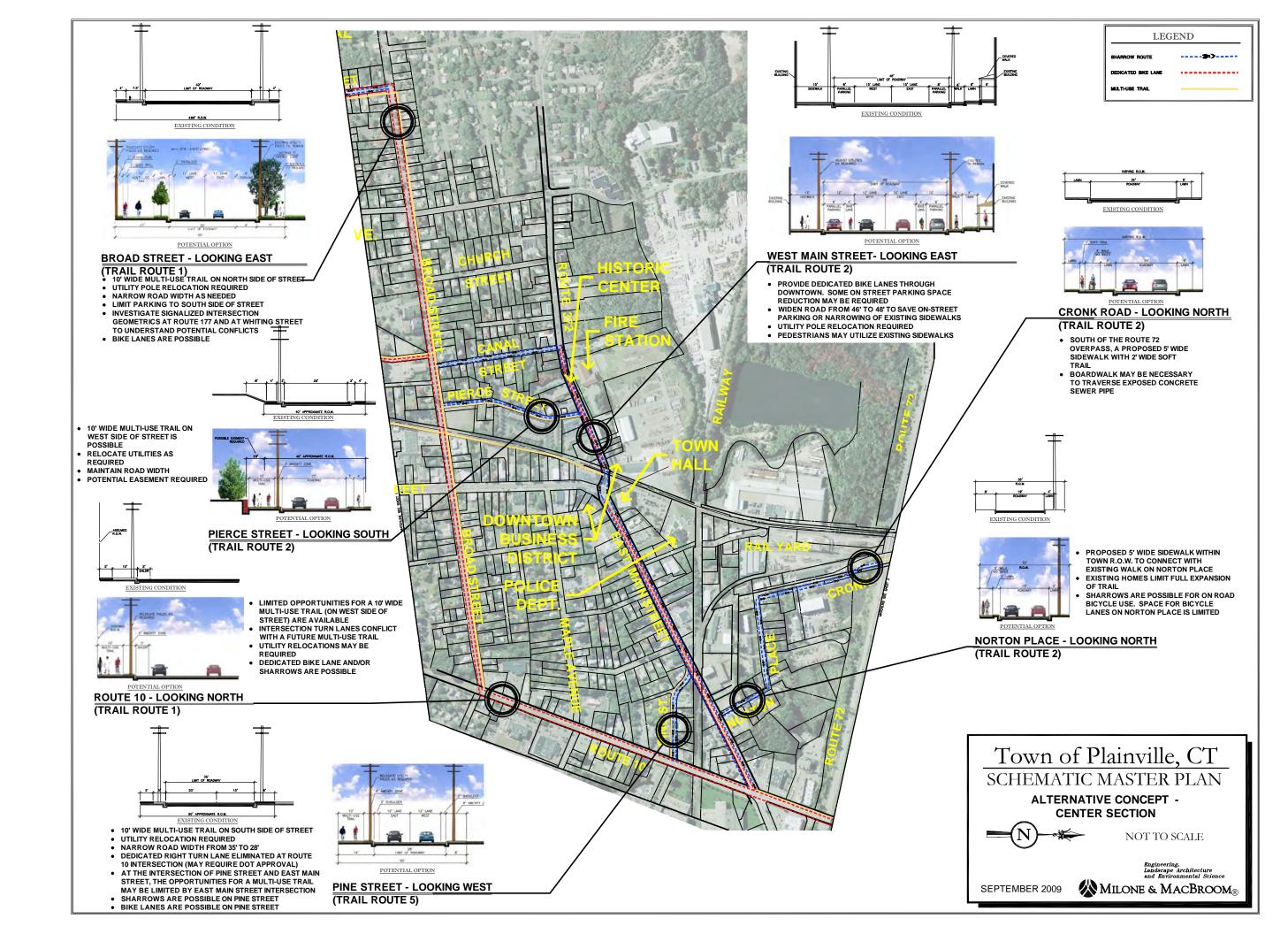
#### A.1.2 Center Section

Trail Route 1 heads east along Broad Street for 0.9 miles to Route 10 as a multiuse trail, sharrows, or bike lanes. Challenges posed along Broad Street include numerous residential driveways, signalized intersections at Route 177 and Whiting Street, and a railroad



Broad Street - Proposed Section





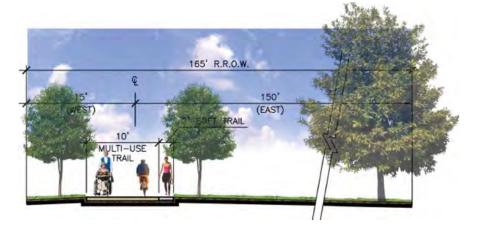


crossing between Pierce Street and Whiting Street. In addition, significant utility relocation and roadway narrowing will be required to construct a multiuse trail along Broad Street. Informational and way-finding signage will be designed to direct people to the downtown business district. The trail turns north on Route 10 from Broad Street north to the intersection of Route 372 (East Main Street) approximately 0.5 miles with dedicated bike lanes. Route 10 is very challenging in this center section having four signalized intersections at Broad Street, Maple Avenue, Pine Street, and Route 372; an additional signalized railroad intersection between Pine Street and Route 372; multiple business driveways; high volumes of traffic; and road widths maximized for vehicular travel at the intersection of Route 372 having dedicated turn lanes. From the north side of the intersection of Route 372, the trail has a multiuse trail option along the west side of Route 10 to the overpass at Route 72 where the Farmington Canal once crossed.

#### A.1.3 Northern Section

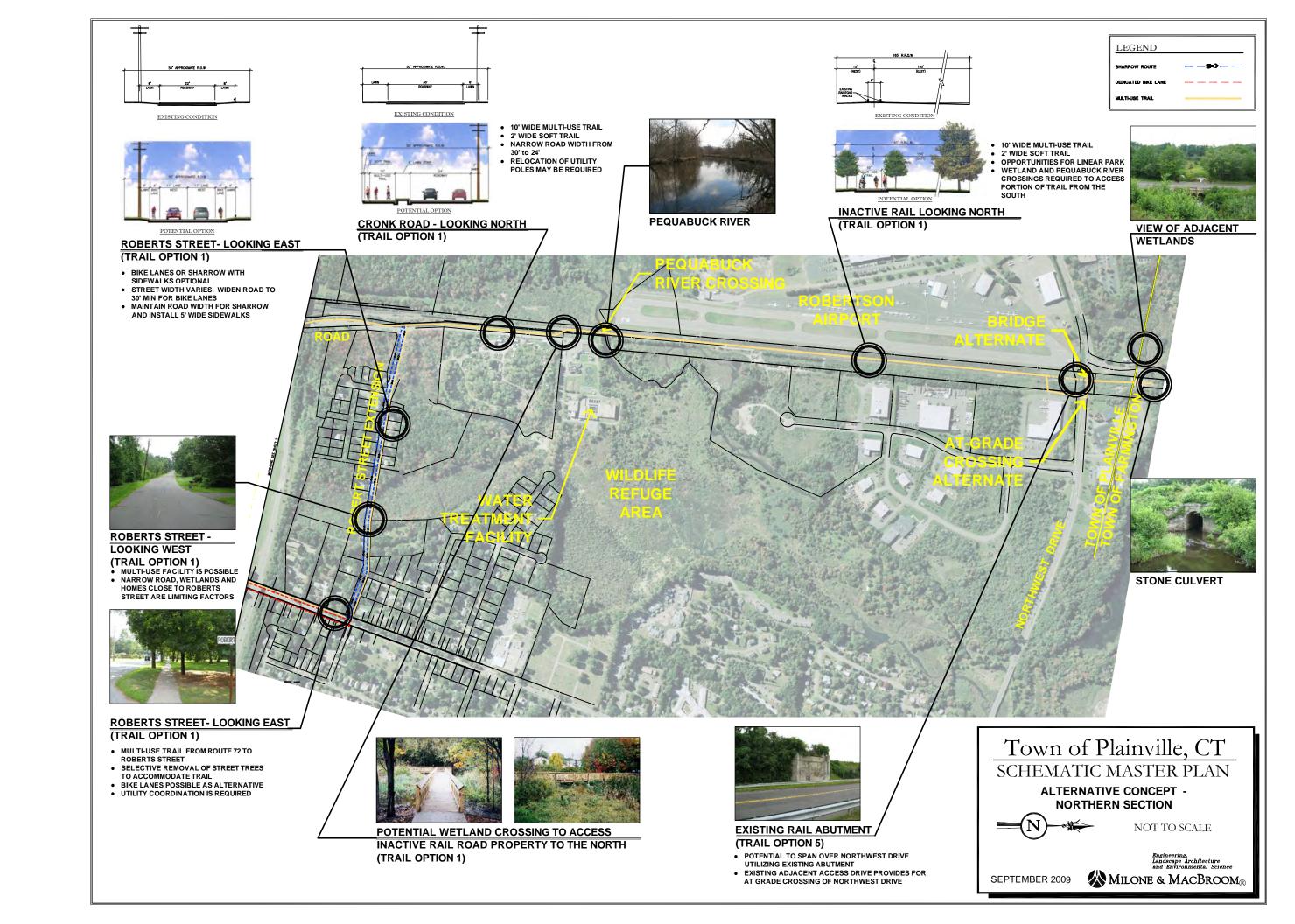
From the Route 372 overpass north to the Robert Street Extension intersection, the trail will continue as a multiuse facility, dedicated bike lanes, or sharrows before taking a left onto Robert Street Extension. Trail Route 1 continues for 0.5 miles west on Robert Street Extension to Cronk Road as a multiuse trail along the north side of Robert Street Extension or sharrows. A narrow road width, homes located close to the

street, and a watercourse crossing are challenges toward constructing a multiuse trail. From Robert Street Extension, the trail will head north on the west side of Cronk Road as a multiuse trail and will require a wetland crossing to access the inactive railroad property to the north. Once on the inactive rail property, the current railroad trestle will provide a means of crossing the Pequabuck River and head north for 0.8 miles to Northwest Drive.



In-Active Rail Property - Proposed Section

The trestle will require improvements to accommodate a multiuse trail. The 165-foot wide property of the inactive rail provides great opportunity, a park-like setting with scenic views of the Pequabuck River with associated uplands and Robertson Airport. The inactive rail ends at an existing abutment at Northwest



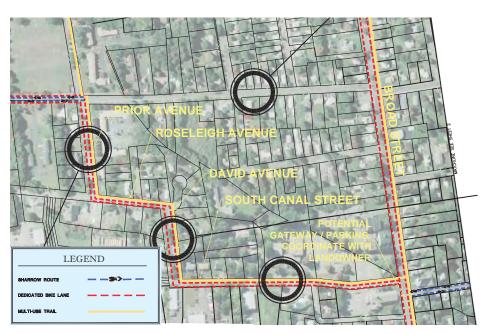
Drive and will require a pedestrian bridge over Northwest Drive to continue north toward Farmington or the trail can utilize an emergency access to the east of the rail that brings pedestrians to an at-grade crossing of Northwest Drive. The trail then proceeds to the Farmington town line, 400 LF north of Northwest Drive. Coordination between the Town of Farmington and the Town of Plainville will be required to determine the

exact location for linking the two trails together.

#### A.2 Trail Route 2

#### A.2.1 Southern Section

Trail Route 2 follows the same course of Trail Route 1 from Town Line Road to the Hemingway Street intersection where it bypasses Hemingway Street and heads east as a multiuse facility along Norton Place to the intersection of Route 177. The trail crosses Route 177 onto Prior Avenue and jogs

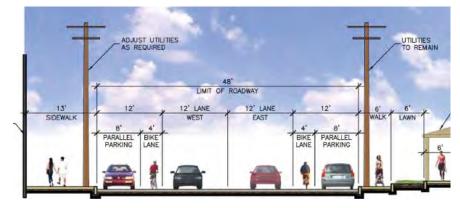


Southern Section ~ Trail Route 2

through a series of residential streets, Roseleah Avenue, David Avenue, and South Canal Street, until it reaches Broad Street. The residential streets appear to have room for a full multiuse trail or bike lanes with minor utility relocation.

#### A.2.2 Center Section

Trail Route 2 heads east on Broad Street for a short distance (450 feet) and turns left onto Pierce Street where it continues north towards the downtown business district as a multiuse trail or a signed, shared route. Property, currently a large

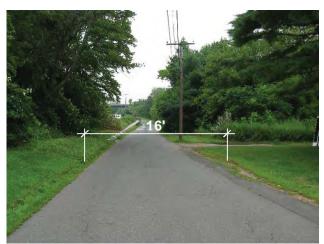


West Main Street ~ Proposed Section



open field, on the southeast corner of Pierce Street has potential for an intermediate way-finding station and parking for trail users. From Pierce Street, the trail would head east onto West Main Street, directly through downtown Plainville encountering several intersections including a nonsignalized railroad intersection, two signalized intersections of Whiting Street and Pine Street, and another nonsignalized railroad crossing on East Main Street before a signalized intersection of Route 10.

Alternatively, after the railroad crossing on East Main Street, the trail may turn left onto Norton Place as a signed, shared route and continue to the Route 372 overpass at Cronk Road. Norton Place has varying road widths and a 90-degree turn, making it difficult to provide for a full multiuse facility. An elevated, exposed sanitary sewer pipe that runs parallel along the narrowest part of Cronk Road by the rail yard also makes it difficult to provide a multiuse trail. The original PGA idea of a boardwalk atop the sewer line to increase the safety of trail users along that stretch of Cronk Road and the concept of a bridge over the rail yard throat was considered infeasible due to property acquisition issues and bridge design requirements and costs.



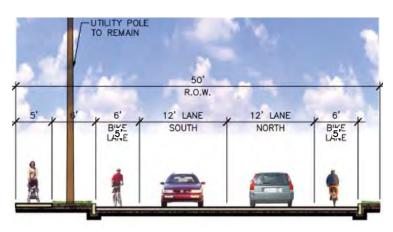


Norton Place - Varying Widths

#### A.2.3 Northern Section

From the Route 372 overpass north to the Robert Street Extension intersection, the trail will continue as a multiuse facility until it connects with the multiuse trail. The trail will then continue in the same manner as Trail Route 1 to Northwest Drive.

#### A.3 Trail Route 3



DOTENTIAL OPTION

Route 177 - Proposed Section

#### A.3.1 Southern Section

Trail Route 3 begins at the intersection of Town Line Road and Route 177 and heads north for 0.8 miles to the intersection of Norton Park, Prior Avenue, and Route 177. This portion of trail would require road widening to accommodate bike lanes but could be utilized as a signed, shared route. It should be noted that during the public design charette, residents of Plainville expressed concern of safety along Route 177 due to high vehicular travel speeds and traffic volumes.

#### A.3.2. Center and Northern Sections

Trail Route 3 will follow Trail Route 2 to the center and northern sections from the intersection of Route 177 and Prior Avenue or following Trail Route 1 along Broad Street.

#### A.4 Trail Route 4

#### A.4.1 Southern and Center Sections

Trail Route 4 considers the use of the existing railroad right-of-way. This option is considered a long range option subject to Pan Am's interest in assisting in developing a multiuse facility within their right-of-way.

#### A.5 Trail Route 5 (Minor Route Alternatives)

#### A.5.1 Center Sections

Trail Route 5 connects Broad Street to West Main Street via Canal Street as a signed, shared route.



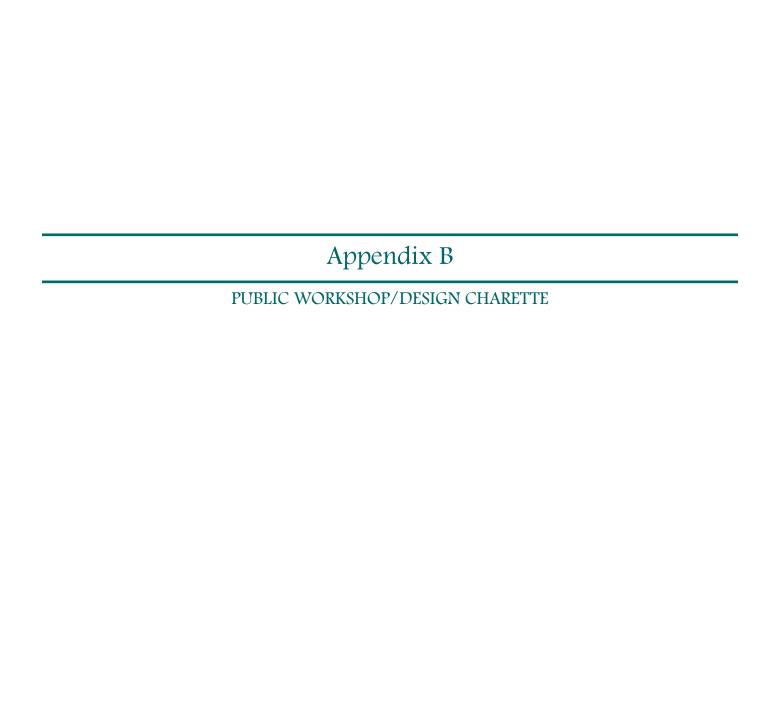
#### **Alternatives Analysis**

PLAINVILLE GREENWAY MASTER PLAN

#### A.5.2. Northern Section

The alternative design for this section of trail incorporates construction of a bridge over Northwest Drive. The existing abutment on the south side of Northwest Drive is to remain and a new abutment constructed on the north side of the street. Significant fill is required to provide a transition in grade from the new bridge to the existing grade of the land on the north side of Northwest Drive. Parking for trail users would be considered south of Northwest Drive alongside the trail via access off the existing emergency access drive to the rail corridor. Verification of construction impacts and sightlines is required to determine if the emergency access route can be safely utilized for everyday access to trail parking.





### PLAINVILLE MULTI USE TRAIL DESIGN STUDY

### RATING AND COMMENT SHEET - DESIGN CHARETTE

August 27, 2007

SOUTHERN SECTION - PREFERRED RO	DUTE
TRAIL ROUTE 1 St choice	
TRAIL ROUTE 2 Ist charge	2 - 20
TRAIL ROUTE 3 Znd choice	Henry way st Broad Street
TRAIL ROUTE 4	Herry and
TRAIL ROUTE 5	Broad Street
OTHER (explain below)	
COMMENTS would like the access to the	in lock
TRAIL ROUTE 1 SHOWN SECTION - PREFERRED R  TRAIL ROUTE 1 SHOW COST H  TRAIL ROUTE 3  TRAIL ROUTE 4  TRAIL ROUTE 5  THER (explain below)  COMMENTS	

### PLAINVILLE MULTI USE TRAIL DESIGN STUDY

### RATING AND COMMENT SHEET - DESIGN CHARETTE

August 27, 2007

	N – PREFERRED ROUTE
TRAIL ROUTE 1	et 2018 - Rt 10
TRAIL ROUTE 2	- 100 7 PCT 16
TRAIL ROUTE 5	_
OTHER (explain below) _	
COMMENTSNOCK	would tile to see a bridge our west Drive - however it is a big cost
ADDITIONAL OVERALL	COMMENTS:

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
Return to Mail 1 Frond - Rt. 10 - Roberts - Paul
DOWNTOWN SECTION – PREFERRED ROUTE
DOWNTOWN SECTION I REFERRED ROOTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS I Second the idea of one /wk road closured - Brown st. Hermomery to Pt 18 on & Sundays 12-6
Me world Day to Laker Day.

## RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION - PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS Provide Section (a Robertson Argant
Dor Not refer to trail as "Bike hard"- Many weers not bicyclists and one feasiful of bikes travelly to fast.

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS travels through Norton Park & Broad Street Which is a wide street Someone mentioned Rt 177 - cars speed on this road and also mentioned that while visiting another country-discovered that when a vehicle was speeding-it would trip a traffic light which Changes to a DOWNTOWN SECTION - PREFERRED ROUTE red light - which this speeding vehicle stop
TRAIL ROUTE 1 at this light. (this would protect the bicyclist to slow the traffic speed)
IRAIL ROUTE 3
TRAIL ROUTE 4
FRAIL ROUTE 5
OTHER (explain below)
COMMENTS Broad street indestreet a trees-scenic route I'm concerned about this route on Route to due to the vehicle traffic congestion at times of day

## RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SEC	CTION – PREFERRED ROUTE
TRAIL ROUTE 1	
TRAIL ROUTE 2	
TRAIL ROUTE 5	
OTHER (explain belo	w)
the wild R. Farmington trail vide.	the travel the Roberts Street passing efrequence on my left asing toward Torum line. It is a smooth staight
To defray a work on t	his trail in sections.

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SECTION - PREFERRED ROUTE	
TRAIL ROUTE 1	
TRAIL ROUTE 2	
TRAIL ROUTE 3	
TRAIL ROUTE 4	
TRAIL ROUTE 5	
OTHER (explain below)	
COMMENTS	
	_
	_
	-
DOWNTOWN SECTION - PREFERRED ROUTE	
TRAIL ROUTE 1	
TRAIL ROUTE 2	
TRAIL ROUTE 3	
TRAIL ROUTE 4	
ΓRAIL ROUTE 5	
TRAIL ROUTE 5  OTHER (explain below)	
TRAIL ROUTE 4  TRAIL ROUTE 5  OTHER (explain below)  COMMENTS	_
TRAIL ROUTE 5  OTHER (explain below)	

### RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION – PREFERRED ROUTE	
TRAIL ROUTE 1	
TRAIL ROUTE 2	
TRAIL ROUTE 5	
OTHER (explain below)	
COMMENTS	
	_
	_
ADDITIONAL OVERALL COMMENTS:	
ADDITIONAL OVERALL COMMENTS:	_
ADDITIONAL OVERALL COMMENTS:	

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1 1-15 the best
TRAIL ROUTE 2
TRAIL ROUTE 3 Not route 3 (Rte 177) - 400 dangerous
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
Hemingway St. then connect to Green trail Route
When south canal meets up to Broad reconnect to
DOWNTOWN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 3
ΓRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS I wouldn't use East Main St through

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS northern section continue on Trail Route 1
ADDITIONAL OVERALL COMMENTS:  Overall-very mice plan

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

	SOUTHERN SECTION – PREFERRED ROUTE
	TRAIL ROUTE 1 X 15t
	TRAIL ROUTE 2 znd
	TRAIL ROUTE 3 **
	TRAIL ROUTE 4
	TRAIL ROUTE 5
	OTHER (explain below)
	COMMENTS * Route 177 all the way over to Broad Street. Than Broad Street to Route 10
	DOWNTOWN SECTION – PREFERRED ROUTE
	TRAIL ROUTE 1 X
	TRAIL ROUTE 2 X + 2nd
	TRAIL ROUTE 3
	TRAIL ROUTE 4
	TRAIL ROUTE 5
	OTHER (explain below)
*	comments I would rather Stay on Broad Street down to Rt 10. If you then turn left on East main & hop on Norton Place 68 th (trail Route 2) to cronk Road.
	this would re-connect to betrail Route I behind the
	ts cronk Road
RT	SE Norton

## RATING AND COMMENT SHEET - DESIGN CHARETTE

'RAIL RO' 'RAIL RO'	
TRAIL ROI	
OTHER (ex	plain below)
COMMENT	S
DDITIONA	L OVERALL COMMENTS:
busa	11 not a (B)
Ju Dive	to Route 10 as a back-up if you can't get the
The clos	arer the "Route" the hother It's touch
iding a	bike if you get lost because there are too
3,	HSA 1815 ENBOGH SIGNS,
ption if	Rail Road by Airport doesn't happen
_	<b>↓</b> T .
	Vorthwest Converte Converte Co
) W	+ 1 3 1 5 00

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

August 27, 2007

## SOUTHERN SECTION - PREFERRED ROUTE TRAIL ROUTE 1 TRAIL ROUTE 2 TRAIL ROUTE 3 TRAIL ROUTE 4 TRAIL ROUTE 5 OTHER (explain below) \_\_\_\_\_ COMMENTS **DOWNTOWN SECTION – PREFERRED ROUTE** TRAIL ROUTE 1 TRAIL ROUTE 2 \_\_\_\_\_ TRAIL ROUTE 3 TRAIL ROUTE 4 TRAIL ROUTE 5 \_\_\_\_\_ OTHER (explain below) \_\_\_\_\_ COMMENTS

## RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION - PREFERRED ROUTE
TRAIL ROUTE 1X_
TRAIL ROUTE 2
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS
ADDITIONAL OVERALL COMMENTS:

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1 V then go From Hemming wenter Broad
TRAIL ROUTE 2 Then go From Hemminguage to Broad  then to Pièrce then prick of Route 2  trail ROUTE 3
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
Center of town, for for to go through the
DOWNTOWN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS
ADDITIONAL OVERALL COMMENTS:

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SECTION - PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS
DOWNTOWN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2 X
TRAIL ROUTE 3
TRAIL ROUTE 4
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION – PREFERRED ROUTE
TRAIL ROUTE 1
TRAIL ROUTE 2
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS
ADDITIONAL OVERALL COMMENTS:

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SE	CTION	PREFERRED ROUTE	
TRAIL ROUTE 1		-	
TRAIL ROUTE 2			:
TRAIL ROUTE 3			,¥
TRAIL ROUTE 4			
TRAIL ROUTE 5			
OTHER (explain bel	low)		
COMMENTS			
DOWNTOWN SETRAIL ROUTE 1 TRAIL ROUTE 2 TRAIL ROUTE 3 FRAIL ROUTE 4 FRAIL ROUTE 5		N-PREFERRED ROUTE Broad St> 17 to Norton Par	emmingwag E
OTHER (explain belo			
COMMENTS			

### RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTIO	N – PREFERRED ROUT	re .
TRAIL ROUTE 1	_	
TRAIL ROUTE 2	_	
TRAIL ROUTE 5	==	
OTHER (explain below) _		
COMMENTS		
ADDITIONAL OVERALL	COMMENTS:	
ADDITIONAL OVERALL	€OMMENTS:	
ADDITIONAL OVERALL	COMMENTS:	
ADDITIONAL OVERALL	€OMMENTS:	
ADDITIONAL OVERALL	€OMMENTS:	
ADDITIONAL OVERALL	COMMENTS:	

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERNSE	CTION – PREFERRED ROUTE
TRAIL ROUTE 1	
TRAIL ROUTE 2	
TRAIL ROUTE 3	
TRAIL ROUTE 4	
TRAIL ROUTE 5	
OTHER (explain be	elow)
COMMENTS	
TRAIL ROUTE 1 TRAIL ROUTE 2 TRAIL ROUTE 3 TRAIL ROUTE 4 TRAIL ROUTE 5 OTHER (explain bel	
TRAIL ROUTE 1 TRAIL ROUTE 2 TRAIL ROUTE 3 TRAIL ROUTE 4 TRAIL ROUTE 5 OTHER (explain bel	
TRAIL ROUTE 1 TRAIL ROUTE 2 TRAIL ROUTE 3 TRAIL ROUTE 4 TRAIL ROUTE 5 OTHER (explain bel	ow)
TRAIL ROUTE 1 TRAIL ROUTE 2 TRAIL ROUTE 3 TRAIL ROUTE 4 TRAIL ROUTE 5 OTHER (explain bel	ow)

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION - PREFER	RRED ROUT	E		
TRAIL ROUTE 1				
TRAIL ROUTE 2				
TRAIL ROUTE 5				
OTHER (explain below)				
COMMENTS				
ADDITIONAL OVERALL COMMENTS	/			
Cleanest, most direc	t and	most	likely	to
be used regularly	/.			_

Julie Sanders

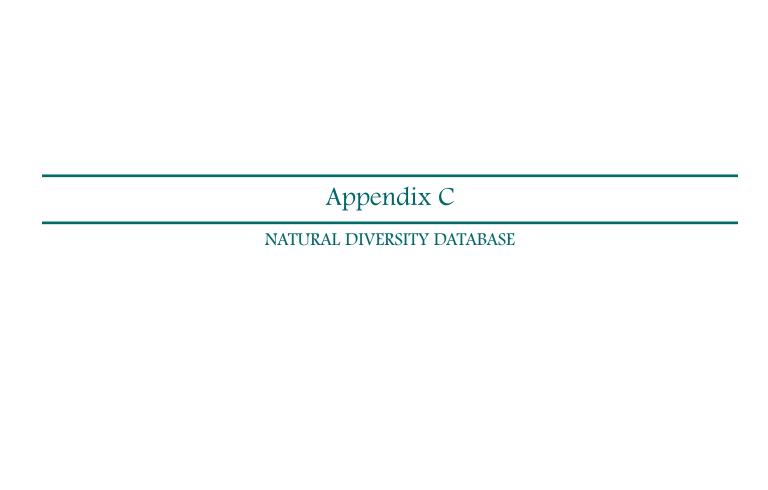
#### PLAINVILLE MULTI USE TRAIL DESIGN STUDY

#### RATING AND COMMENT SHEET - DESIGN CHARETTE

SOUTHERN SE	CCTION – PREFERRED ROUTE
TRAIL ROUTE 1	2°2Chorce
TRAIL ROUTE 2	2 <del>7313</del>
TRAIL ROUTE 3	
TRAIL ROUTE 4	1 St Choice
TRAIL ROUTE 5	
OTHER (explain b	elow)
COMMENTS	
DOWNTOWN S	ECTION – PREFERRED ROUTE
DOWNTOWN S	ECTION - PREFERRED ROUTE  2nd Charco
DOWNTOWN S TRAIL ROUTE 1 TRAIL ROUTE 2	ECTION - PREFERRED ROUTE  2nd Choice
DOWNTOWN S FRAIL ROUTE 1 FRAIL ROUTE 2 FRAIL ROUTE 3	ECTION - PREFERRED ROUTE  2nd Choice
DOWNTOWN S FRAIL ROUTE 1 FRAIL ROUTE 2 FRAIL ROUTE 3 FRAIL ROUTE 4	ECTION - PREFERRED ROUTE  2nd Choice
DOWNTOWN S FRAIL ROUTE 1 FRAIL ROUTE 2 FRAIL ROUTE 3 FRAIL ROUTE 4 FRAIL ROUTE 5 OTHER (explain be	ECTION - PREFERRED ROUTE  2nd Choice
DOWNTOWN S FRAIL ROUTE 1 FRAIL ROUTE 2 FRAIL ROUTE 3 FRAIL ROUTE 4 FRAIL ROUTE 5 DTHER (explain be	ECTION - PREFERRED ROUTE  2nd Choice  15th (hoice  low)
DOWNTOWN S FRAIL ROUTE 1 FRAIL ROUTE 2 FRAIL ROUTE 3 FRAIL ROUTE 4 FRAIL ROUTE 5 DTHER (explain be	ECTION - PREFERRED ROUTE  2nd Choice  15th (hoice  low)

# PLAINVILLE MULTI USE TRAIL DESIGN STUDY RATING AND COMMENT SHEET - DESIGN CHARETTE

NORTHERN SECTION - PREFERRED ROUTE
TRAIL ROUTE 1 X
TRAIL ROUTE 2
TRAIL ROUTE 5
OTHER (explain below)
COMMENTS
ADDITIONAL OVERALL COMMENTS:
Using the railways is always best but Staying off the Main Streets is also imported
Staying off the main Streets 15 also importunt
Staying off the main Streets is also important
Staying off the main Streets is also imported
Staying off the Main Streets is also important
Staying off the Main Streets is also importunt
Staying off the main Streets is also important



#### **Tom Sheil**

From:

Mark Devoe [devoe@plainville-ct.gov]

Sent:

Thursday, August 20, 2009 9:57 AM

To:

Tom Sheil; Ryan Chmielewski

Cc:

Bruce Donald; fosterwhite@comcast.net; james p. cassidy; John R. Bossi; Melon Wedick;

Steve & Kathy Cole; tomwarnat@yahoo.com

Subject:

**DEP Natural Diversity Database** 

Attachments: DEP NDDB Clearance - 08-11-09.pdf

Hello All,

There are no "ruby throated boobies" or other such endangered species in that nebulous circle drawn on the DEP Natural Diversity Database map in the vicinity of Forestville Lumber. If the trail does move onto the southern portion of the rail, an environmental assessment may become necessary. So long as we remain on town roads, we are in the clear.

DEP letter attached....

#### Mark

Mark DeVoe, AICP Director, Planning and Economic Development One Central Square Plainville, CT 06062 Email: devoe@plainville-ct.gov (860) 793-0221 ext 210



## STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



August 11, 2009

Mr. Mark DeVoe, AICP Town of Plainville One Central Square Plainville, CT 06062

Re: Proposed Master Plan, Multi-Use Trail, Plainville, CT

RECEIVED

AUG 2 0 2009

Town of Plainville Land Use Office

Dear Mr. DeVoe:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided and listed above. According to our information, there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species at the site in question.

Natural Diversity Data Base information includes all information regarding critical biologic resources available to us at the time of the request. This information is a compilation of data collected over the years by the Environmental and Geographic Information Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions regarding this information (424-3585). Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

Nancy Murray

Biologist/Senior Environmental Analyst NDDB

Program Coordinator

NM/ho

cc: NDDB #17079



#### Pan Am/Southern Rail Line - Rail Usage Survey - July 30, 2009

- 1. **Green's Salvage Yard**: Greens' Salvage Yard is dependent on rail service to its location on South Washington Street. They could not define average usage due to market fluctuations. They did recently purchase two of their own rail cars to ease congestion at their location. While their shipments have decreased in recent months, they can ship as many as twelve (12) cars per week during peak economic conditions. Currently, shipments are sporadic. That is due in part to a lack of cars to load.
- 2. **Forestville Lumber**: Forestville Lumber on Town line Road based their response on market conditions. With the slow economy (housing market), their usage is currently low. From 2000 to 2005, the yard manager characterized shipments as averaging 6 per week. He conceded that during certain weeks it would be possible to receive only two (2) shipments, while twelve (12) might be possible in the following week. Currently they are receiving approximately two (2) cars per week.
- 3. Amerigas: Located at the corner of Town Line Road and Birch Street in Southington, Amerigas stated that their business receives deliveries via rail at the rate of two (2) deliveries per month in off peak season. During busier times, they will receive as many as four (4) deliveries per month. A recent maximum delivery schedule during one month last winter was 52 cars or 13 deliveries. This said, based on the maximum loads allowable on the line, Amerigas stated they average approximately two deliveries per week.

All those interviewed stated that their business was reliant on rail deliveries. All characterized the saving they realize by utilizing rail service as allowing them to remain in business.

Rail Usage maximums based on the above information:

Green's Salvage:

12 deliveries per week

Forestville Lumber:

6 deliveries per week

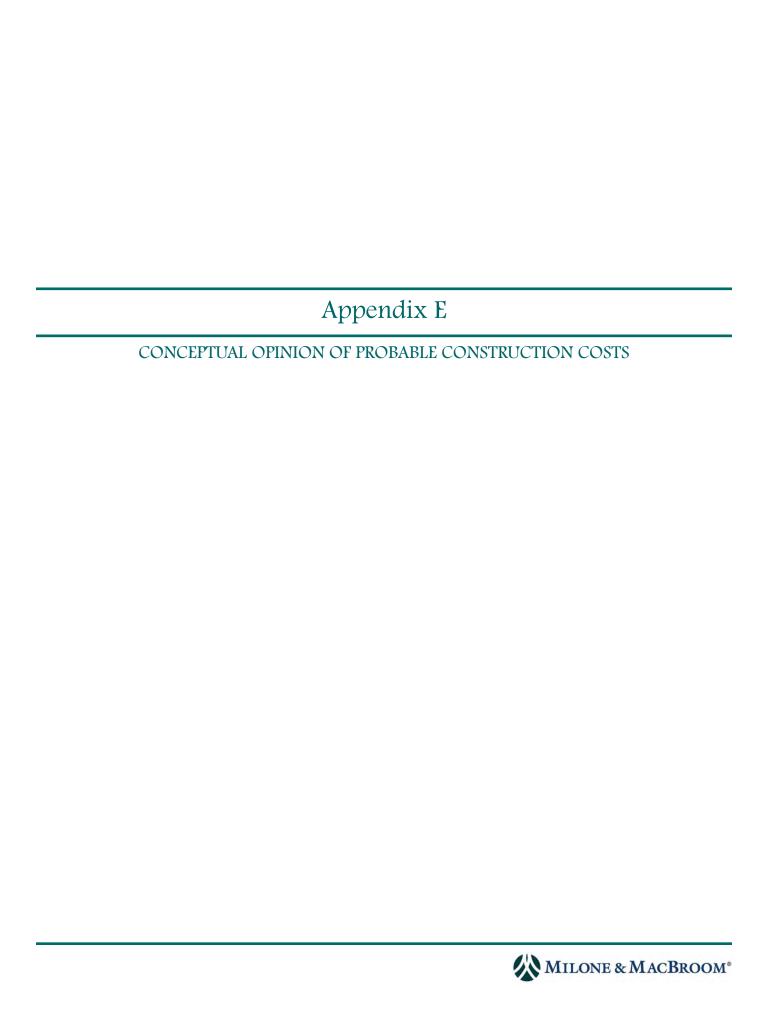
Amerigas:

1 delivery per week

Total:

22 deliveries per week

With the exception of Amerigas, none of the representatives we spoke with were able to put a realistic number on cars per delivery. It is unlikely that market forces will be optimal for all users at the same time so a more realistic "trip per week" scenario might be approximately ten (10) to fifteen (15). The current service appears to be much less, a sure factor of the present economy.



# CONCEPTUAL OPINION OF PROBABLE CONSTRUCTION COST MULTI-USE TRAIL DESIGN STUDY PLAINVILLE, CONNECTICUT NOVEMBER 25, 2009

#### MASTER PLAN ROUTE

MASTER PLAN ROUTE																				
		QUANTITY										AMOUNT IN FIGURES								
ITEM DESCRIPTION	UNIT	TOWN LINE TO CRONK ROAD	CRONK ROAD (TO ROBERTS STREET EXT)	ROBERTS STREET EXTENSION	ROUTE 10 (ROBERTS STREET EXT TO EAST MAIN)	EAST MAIN / WEST MAIN STREET	PIERCE/BROAD /HEMINGWAY STREET		ROBERT JACKSON WAY/ TOWN LINE ROAD	TOTAL	UNIT COST	TOWN LINE TO CRONK ROAD	CRONK ROAD (TO ROBERTS STREET EXT)	ROBERTS STREET EXTENSION	ROUTE 10 (ROBERTS STREET EXT TO EAST MAIN)	EAST MAIN / WEST MAIN STREET	PIERCE/BROAD/ HEMINGWAY STREET	NORTON PARK TO ROBERT JACKSON WAY	ROBERT JACKSON WAY/ TOWN LINE ROAD	TOTAL
Multi-Use Trail	LF	4,220	1,325	0	0	0	0	2130	0	7675	\$ 55	\$ 232,100	\$ 72,875	\$ -	\$ -	\$ -	\$ -	\$ 117,150	\$ -	\$ 422,125
Concrete Sidewalk	SF	0	0	10,850	3,700	14,650	0	0	9350	38550	\$ 11	\$ -	\$ -	\$ 119,350	\$ 40,700	\$ 161,150	\$ -	\$ -	\$ 102,850	\$ 424,050
Bicycle-safe CB grate	Ea.	0	0	20	12	24	40	0	14	110	\$ 1,000	\$ -	\$ -	\$ 20,000	\$ 12,000	\$ 24,000	\$ 40,000	\$ -	\$ 14,000	\$ 110,000
Pedestrian Bridge (approx. 85' long over Pequabuck River)	Ea.	1	0	0	0	0	0	0	0	1	\$ 350,000	\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 350,000
Foot bridge (Roberts Street)	Ea.	0	0	1	0	0	0	0	0	1	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000
Modular Block Retaining Wall (Roberts St.)	Ea.	0	0	1	0	0	0	0	0	1	\$ 20,000	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000
Parking Lot (approx. 20 spaces)	Ea.	1	0	0	0	0	1	0	0	2	\$ 75,000	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ 150,000
Parking Area - Town Line Rd. (north side)	Ea.	0	0	0	0	0	0	0	1	1	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000
Way-Finding Station	Ea.	0	1	0	1	1	1	1	1	6	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 480,000
Intersection/Rail Crossing Improvements	Ea.	0	0	0	1	3	1	0	0	5	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ 225,000	\$ 75,000	\$ -	\$ -	\$ 375,000
Furnishing and Placing Topsoil	SY	25,320	3,690	13,020	4,440	2,430	0	12780	11220	72900	\$ 5	\$ 126,600	\$ 18,450	\$ 65,100	\$ 22,200	\$ 12,150	\$ -	\$ 63,900	\$ 56,100	\$ 364,500
Turf Establishment	SY	25,320	3,690	13,020	4,440	2,430	0	12780	11220	72900	\$ 2	\$ 50,640	\$ 7,380	\$ 26,040	\$ 8,880	\$ 4,860	\$ -	\$ 25,560	\$ 22,440	\$ 145,800
Epoxy Resin Pavement Markings, Symbols and Legends (Sharrows)	SF	0	175	345	230	460	775	0	290	2275	\$ 5	\$ -	\$ 875	\$ 1,725	\$ 1,150	\$ 2,300	\$ 3,875	\$ -	\$ 1,450	\$ 11,375
Custom Greenway Trail Sign	Ea.	4	2	4	2	6	9	6	4	37	\$ 500	\$ 2,000			\$ 1,000	\$ 3,000	\$ 4,500	\$ 3,000	\$ 2,000	, .,
Custom Greenway Trail Sign w/ Arrow Plaque	Ea.	2	2	1	2	2	5	0	0	14	\$ 550	\$ 1,100	\$ 1,100	\$ 550	\$ 1,100	\$ 1,100	\$ 2,750	\$ -	\$ -	\$ 7,700
Trafficperson (Municipal Police Officer)	Hr.	150	80	130	70	200	90	50	150	920	\$ 75	\$ 11,250	\$ 6,000	\$ 9,750	\$ 5,250	\$ 15,000	\$ 6,750	\$ 3,750	\$ 11,250	
Trafficperson (Uniformed Flagger)	Hr.	200	120	190	110	300	140	70	220	1350	\$ 25	\$ 5,000	\$ 3,000	\$ 4,750	\$ 2,750	\$ 7,500	\$ 3,500	\$ 1,750	\$ 5,500	\$ 33,750
Minor Items/Contingency Costs	Est. Cost	1	1	1	1	1	1	1	1	-	25% of cost to this item	\$ 213,423	\$ 47,670	\$ 74,817	\$ 62,508	\$ 134,015	\$ 72,844	\$ 73,778	\$ 86,398	\$ 765,450
Clearing and Grubbing	L.S.	1	0.5	0.5	0.5	0.5	0.5	1	0.5	-	2% of cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance & Protection of Traffic	L.S.	0.5	1	1	1	1	1	0.5	1	-	4% of cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mobilization	L.S.	1	1	1	1	1	1	1	1	-	7.5% of cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction Staking	L.S.	1	1	1	1	1	1	1	1	-	1% of cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Land Acquisitions	L.S.									-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

#### Note:

31,254 \$ 67,008 \$ 43,199 \$ 382,725 INCIDENTALS TO CONSTRUCTION ±21% = \$ 224,094 \$ 50,054 \$ 78,558 \$ 76,486 \$ 65,633 \$ 140,716 \$ 77,467 \$ 90,718 \$ 803,723 
 SURVEY AND DESIGN
 \$
 120,000
 \$
 25,000
 \$
 40,000
 \$
 35,000 \$ 75,000 \$ 40,000 \$ 40,000 \$ 45,000 \$ 420,000 **PROJECT TOTAL** = \$ 1,517,919 \$ 313,404 \$ 530,049 \$ 444,425 \$ 952,799 \$ 523,244 \$ 610,905 \$ 5,433,698 TOTAL (ROUNDED) = \$ 1,518,000 \$ 314,000 \$ 531,000 \$ 445,000 \$ 953,000 \$ 518,000 \$ 524,000 \$ 611,000 \$ 5,440,000

ENTIRE PROJECT TOTAL (ROUNDED) = \$ 6,000,000

Conceptual cost shown are preliminary in nature and suitable for planning purposes only.

Detailed design will impact the determination of actual costs.

# CONCEPTUAL OPINION OF PROBABLE CONSTRUCTION COST MULTI-USE TRAIL DESIGN STUDY PLAINVILLE, CONNECTICUT OCTOBER 13, 2009

#### **ALTERNATIVE ROUTES**

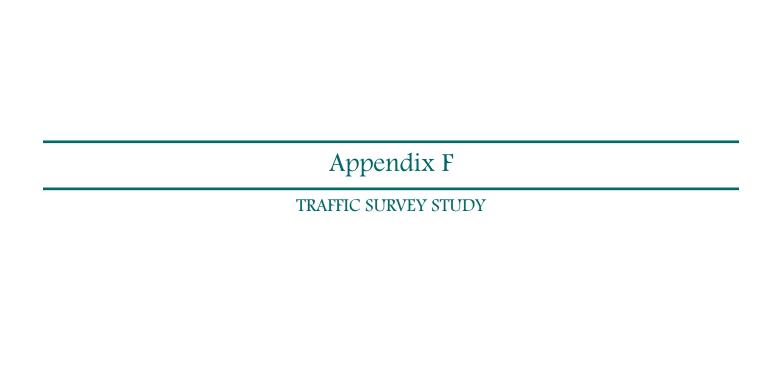
			QUANTITY					AMOUNT IN FIGURES							
ITEM DESCRIPTION	UNIT	ALTERNATIVE 1 - CRONK ROAD TO NORTON PLACE	ALTERNATIVE 2 - ROUTE 10 TO BROAD/PIERCE STREET	ALTERNATIVE 3 NORTON PARK TO ROUTE 177	ALTERNATIVE 4- BRIDGE OVER NORTHWEST DRIVE	TOTAL	UNIT COST	ALTERNATIVE 1 - CRONK ROAD TO NORTON PLACE	ALTERNATIVE 2 - ROUTE 10 TO BROAD/PIERCE STREET	ALTERNATIVE 3 NORTON PARK TO ROUTE 177	ALTERNATIVE 4- BRIDGE OVER NORTHWEST DRIVE	TOTAL			
Bridge over Northwest Drive	L.S.				1	1	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000			
Multi-Use Trail	LF	0	0	1590		1590	\$ 55	\$ -	\$ -	\$ 87,450	\$ -	\$ 87,450			
Concrete Sidewalk	SF	12550	0	5400		17950	\$ 11	\$ 138,050	\$ -	\$ 59,400	\$ -	\$ 197,450			
Intersection/Rail Crossing Improvements	L.S.	0	6	0	0	6	\$ 75,000	\$ -	\$ 450,000	\$ -	\$ -	\$ 450,000			
Bicycle-safe CB grate	Ea.	22	36	8		66	\$ 1,000	\$ 22,000	\$ 36,000	\$ 8,000	\$ -	\$ 66,000			
Furnishing and Placing Topsoil	SY	15060	0	16020		31080	\$ 5	\$ 75,300	\$ -	\$ 80,100	\$ -	\$ 155,400			
Turf Establishment	SY	15060	0	16020		31080	\$ 2	\$ 30,120	\$ -	\$ 32,040	\$ -	\$ 62,160			
Epoxy Resin Pavement Markings, Symbols and Legends (Sharrows)	SF	460	630	175		1265	\$ 5	\$ 2,300	\$ 3,150	\$ 875	\$ -	\$ 6,325			
Bicycle & Share The Road Signs	Ea.	6	6	6		18	\$ 350	\$ 2,100	\$ 2,100	\$ 2,100	\$ -	\$ 6,300			
Bicycle & Share The Road Signs w/ Arrow	Ea.	3	2	0		5	\$ 400	\$ 1,200	\$ 800	\$ -	\$ -	\$ 2,000			
Trafficperson (Municipal Police Officer)	Hr.	110	50	70		230	\$ 75	\$ 8,250	\$ 3,750	\$ 5,250	\$ -	\$ 17,250			
Trafficperson (Uniformed Flagger)	Hr.	180	70	100		350	\$ 25	\$ 4,500	\$ 1,750	\$ 2,500	\$ -	\$ 8,750			
Minor Items/Contingency Costs	Est. Cost	1	1	1		-	25% of cost to this item	\$ 70,955	\$ 124,388	\$ 69,429	\$ 50,000	\$ 314,772			
Clearing and Grubbing	L.S.	0.5	0.5	1		-	2% of cost	\$ 3,548	\$ 6,220	\$ 86,786	\$ 62,500	\$ 159,054			
Maintenance & Protection of Traffic	L.S.	1	1	0.5		-	4% of cost	\$ 14,191	\$ 24,878	\$ 6,943	\$ 27,478	\$ 73,490			
Mobilization	L.S.	1	1	1		-	7.5% of cost	\$ 26,609	\$ 46,646	\$ 26,036	\$ 103,040	\$ 202,331			
Construction Staking	L.S.	1	1	1		-	1% of cost	\$ 3,548	\$ 6,220	\$ 3,472	\$ 13,739	\$ 26,979			
Land Acquisitions	L.S.						-	\$ -	\$ -	\$ -	\$ -	\$ -			
						PROJECT S	SUBTOTAL =	\$ 402,671	\$ 705,902	\$ 470,381	\$ 456,757	\$ 2,035,711			

#### Note:

**CONTINGENCIES**  $\pm 10\% = \$$ 40,268 \$ 70,591 \$ 47,039 \$ 45,676 \$ 203,572 84,561 \$ 148,240 \$ 98,781 \$ 95,919 \$ 427,500 INCIDENTALS TO CONSTRUCTION ±21% = \$ **SURVEY AND DESIGN** \$ 40,000 \$ 70,000 \$ 50,000 \$ 40,000 \$ 200,000 PROJECT TOTAL = \$ 567,500 \$ 994,733 \$ 666,201 \$ 638,352 \$ 2,866,783 TOTAL (ROUNDED) =\$ 2,870,000 568,000 \$ 995,000 \$ 667,000 \$ 639,000 \$

ALTERNATIVE PROJECT TOTAL (ROUNDED) = \$ 2,900,000

<sup>1.</sup> Conceptual cost shown are preliminary in nature and suitable for planning purposes only. Detailed design will impact the determination of actual costs.



Weather : Counted by: Board # : Other :

#### Broad Street Plainville, CT Speed

Site Code : 0000000000001 Start Date: 09/01/2009 File I.D. : PLAINVILLE BR Page : 1

Other :								t- D D	L - 7					File Page	I.D. :
n .			1.0	0.1	0.0	2.3		to B, B	46 -	51 -	56 -	61 -	66 -	71 -	76 -
Begin		0 -	16 -	21 -	26 -	31 -	30				60	65	70	75	999
Time	Total	15	20	25	30	35	40	45	50	55	60	0.5	70	13	333
11:00 am		6	0	5	16	37	40	4	0	0	0	0	0	0	2
11:15	110	5	0		17	5 / 69	39	14	2	0	1	0	0	0	4
11:30	152		2	1		55	52	13	1	0	0	1	0	1	i
11:45	140	1		1	12	55	52	13		- 0					
Hour Total															
12:00 pm	160	3	2	0	14	69	47	16	3	0	0	0	0	0	6
12:15	171	7	1	1	18	66	51	17	3	0	1	0	0	0	6
12:30	157	11	0	4	14	60	54	10	3	0	1	0	0	0	0
12:45	136	8	2	4	10	41	51	11	3	0	0	1	1	1	3
Hour Total	624	29	5	9	56	236	203	54	12	0	2	1	1	1	15
01:00 pm	153	5	1	2	4	71	46	20	2	0	0	0	0	0	2
01:15	164	1	0	2	14	70	54	18	1	0	0	0	0	0	4
01:30	142	6	1	3	12	56	39	18	5	0	0	0	0	0	2
01:45	128	4	2	2	21	42	42	9	1	1	1	0	1	0	2
Hour Total	587	16	4	9	51	239	181	65	9	1	1	0	1	0	10
02:00 pm	130	0	0	1	24	43	46	10	1	1	0	0	0	1	3
02:00 piii	181	4	3	4	39	74	44	8	0	0	0	o	1	0	4
02:15	168	3	0	5	39	70	38	5	1	0	1	ō	1	0	5
02:30	163	5	0	3	13	72	42	24	2	0	ō	0	0	0	2
Hour Total	642	12	3	13	115	259	170	47	4	1	1	0	2	1	14
											0	2	0	1	4
03:00 pm	167	6	4	0	27	61	47	14	0	0		3	1	0	8
03:15	172	9	3	2	14	74	46	11	4	0	0	1	1	0	7
03:30	176	5	0	1	23	80	45	12	0		1 0	0	0	0	5
03:45	185	6	0	2	13	69	68	16	4	2		4	2	1	24
Hour Total	700	26	7	5	77	284	206	53	8	2	1	*		1	44
04:00 pm	189	5	)1	1	33	74	56	10	2	2	0	0	0	0	5
04:15	178	6	1	0	15	90	44	11	4	0	1	1	0	0	5
04:30	185	3	0	1	19	88	49	13	3	1	0	3	0	0	5
04:45	193	7	0	1	18	74	62	24	0	0	1	0	0	0	6
Hour Total	745	21	2	3	85	326	211	58	9	3	2	4	0	0	21
05:00 pm	211	2	1	2	22	88	71	13	2	0	0	0	1	0	9
05:15	203	1	0	3	22	88	55	25	2	0	0	1	0	0	6
05:30	207	6	1	3	27	81	57	22	3	1	1	0	0	0	5
05:45	188	2	0	2	17	80	54	22	4	0	0	1	0	2	4
Hour Total	809	11	2	10	88	337	237	82	11	1	1	2	1	2	24
06.00 mm	193	5	0	3	32	72	55	15	4	0	0	0	0	0	7
06:00 pm 06:15	183	3	1	0	10	84	62	18	2	0	0	1	0	1	í
	157	3	0	0	13	69	52	16	2	0	0	0	1	0	1
06:30 06:45	164	7	1	2	29	54	49	12	3	3	2	0	0	0	2
Hour Total	697	18	2	5	84	279	218	61	11	3	2	1	1	1	11
2												-			0
07:00 pm	146	11	0	4	19	53	44	12	1	0	0	0	0	0	2
07:15	160	5	0	2	24	73	42	10	1	0	1 0	0	0	2	1
07:30	128	6	0	2	17	67	28	5 9	0	0	0	1	0	0	
07:45	137	7	0	2	11	59 252	46 160	36	3	0	1	1	0	2	1
Hour Total	571	29	0	10	71	252	T00	30	3	U		1	U	4	U

Weather : Counted by: Board # : Other :

#### Broad Street Plainville, CT Speed

Site Code: 000000000001 Start Date: 09/01/2009 File I.D.: PLAINVILLE BR

Other :							A	to B, B	to A					File		: PLA
Begin		0 -	16 -	21 -	26 -	31 -	36 -	41 -	46 -	51 -	56 -	61 -	66 -	71 -	76 -	
Time	Total	15	20	25	3.0	35	40	45	50	55	60	65	70	75	999	
08:00 pm	119	5	0	2	14	43	41	11	1	0	0	0	1	.0	1	
08:15	120	3	0	3	13	43	45	10	0	0	0	0	0	0	3	
08:30	77	1	0	2	10	36	21	5	1	0	0	1	0	0	0	
08:45	96	3	0	1	10	50	19	9	1	0	0	1	0	1	1	
Hour Total	412	12	0	8	47	172	126	35	3	0	0	2	1	1	5	
09:00 pm	86	2	2	1	11	34	26	7	0	0	0	1	0	0	2	
09:00 piii	62	1	1	0	10	20	21	6	2	1	0	0	0	0	0	
09:13	73	2	1	0	7	23	32	6	1	0	0	0	0	0	1	
09:45	53	3	0	4	9	10	18	6	2	0	0	0	0	0	1	
Hour Total	274	8	4	5	37	87	97	25	5	1	0	1	0	0	4	
				-	2017	-	2.0		2	_	0	0	0	0	0	
10:00 pm	46	0	2	1	3	11	16	8	3	2	0	0	0	0	0	
10:15	30	0	0	0	2	12	13	2	1	0	0	0	0	0	0	
10:30	29	0	0	0	2	12	12	2	1	0	0	0	0	0	0	
10:45 Hour Total	39 144	1	0	0	11	12	15 56	18	5	2	1	0	0	0	0	
HOUR TOTAL	工修设	1														
11:00 pm	26	0	1	2	1	10	5	5	1	0	0	0	0	1	0	
11:15	17	0	0	1	3	2	10	1	0	0	0	0	0	0	0	
11:30	23	2	1	0	2	7	8	2	0	1	0	0	0	0	0	
11:45	15	1	0	1	0	8	4	1	0	0	0	0	- 0	0	0	
Hour Total	81	3	2	4	6	27	27	9	1	1	0	0	0	1	0	
Day Totals	6688	198	35	89	773	2706	2023	574	84	15	13	17	9	11	141	
12:00 09/02	21	0	0	0	1	7	11	2	0	0	0	0	0	0	0	
12:15	24	o	0	ō	1	5	14	3	1	0	0	0	0	0	0	
12:30	11	0	0	0	2	2	4	3	0	0	0	0	0	0	0	
12:45	7	ő	0	- 0	0	0	5	1	1	0	0	0	0	0	0	
Hour Total	63	0	0	0	4	1.4	34	9	2	0	0	0	0	0	0	
01 00	10	^	0	0	0	4	6	2	0	0	0	0	0	0	0	
01:00 am	12	0	0	1	3	1	2	1	1	0	0	0	0	0	0	
01:15	9				1	1	3	0	0	0	0	0	0	0	0	
01:30 01:45	6 2	0	0	1	0	0	1	1	0	0	0	0	0	0	0	
Hour Total	29	0	0	2	4	6	12	4	1	0	0	0	0	0	0	
									_		-				0	
02:00 am	5	0	0	2	1	2	0	0	0	0	0	0	0	0	0	
02:15	2	0	0	0	1	0	1	0	0	0	0		0	0	0	
02:30	2	0	0	0	0	0	1	1	0	0	0	0		0	0	
02:45	9	0	0	0	0	1	3	5	0	0	0	0	0	0	0	
Hour Total	18	0	0	2	2	3	5	6	0	0	0	· ·	0	U	Ü	
03:00 am	7	0	0	1	0	2	2	2	0	0	0	0	0	0	0	
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:30	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0	
03:45	7	0	0	0	0	1	1	3	2	0	0	0	0	0	0	
Hour Total	17	0	0	1	0	4	4	6	2	0	0	0	0	0	0	
04:00 am	7	0	2	0	0	1	3	1	0	0	0	0	0	0	0	
04:00 am	5	0	0	0	1	ō	3	1	0	ō	0	0	0	0	0	
04:15	4	1	0	0	0	0	3	0	0	Ö	Ö	0	0	Ō	0	
04:45	12	0	0	1	3	2	4	2	0	0	0	0	0	0	0	
Hour Total	28	1	2	1	4	3	13	4	0	0	0	0	0	0	0	
HOUL TOTAL	20		-		100		0.5	100								

Weather	:
Counted	by:
Board #	:
Other	:

## Broad Street Plainville, CT Speed

Site Code: 000000000001 Start Date: 09/01/2009 File I.D.: PLAINVILLE BR Page: 3

Other :															∋ I.D.	
		A to B, B to A														
Begin		0 -	1.6	21 -	26 -	31 -	36 -	41 -	46 -	51 -	56 -	61 -	66 -	71 -	76 -	
Time	Total	15	20	25	3 0	35	40	45	50	55	60	65	70	75	999	
05:00 am	11	0	0	0	1	2	4	4	0	0	0	0	0	0	C	
05:15	18	0	0	0	1	8	5	3	1	0	0	0	0	0	C	
05:30	43	0	0	0	2	13	16	8	3	1	0	0	0	0	C	
05:45	53	0	0	0	6	20	18	6	3	0	0	0	0	0		
Hour Total	125	0	0	0	10	43	43	21	7	1	0	0	0	0	C	
06:00 am	54	0	0	0	4	25	19	4	1	1	0	0	0	0	C	
06:15	71	1	0	3	8	25	24	9	O.	0	0	0	0	0	1	
06:30	79	1	0	1	10	29	25	13	0	0	0	0	0	0	C	
06:45	109	2	0	3	19	36	35	11	2	0	0	0	0	0	]	
Hour Total	313	4	0	7	41	115	103	37	3	1	0	0	0	0	2	
07:00 am	167	5	3	6	15	58	65	12	1	0	0	0	0	1	3	
07:15	166	5	1	6	12	66	61	10	2	1	0	0	0	0	2	
07:30	155	6	5	2	18	42	54	22	2	0	0	0	0	0	4	
07:45	155	2	1	4	13	53	49	27	1	0	0	0	0	1	4	
Hour Total	643	18	10	18	58	219	229	71	6	1	0	0	0	2	11	
08:00 am	114	0	0	1	6	50	37	18	2	0	0	0	0	0	C	
08:15	123	1	0	1	13	41	41	24	1	0	0	0	0	0	1	
08:30	123	3	0	3	10	52	41	13	1	0	0	0	0	0	(0	
08:45	132	1	0	1	18	46	45	15	1	0	1	1	0	1	2	
Hour Total	492	5	0	6	47	189	164	70	5	0	1	1	0	1	3	
09:00 am	115	1	1	0	18	34	44	14	3	0	0	0	0	0	C	
09:15	155	4	1	3	13	58	56	14	0	0	1	0	0	0	5	
09:30	131	2	0	3	17	57	44	5	2	0	0	0	0	0	1	
09:45	138	1	1	1	20	55	40	16	2	1	0	0	0	- 1	C	
Hour Total	539	8	3	7	68	204	184	49	7	1	1	0	0	1	6	
10:00 am	123	9	2	3	17	40	35	12	O	1	0	0	0	0	4	
10:15	107	1	0	2	13	41	33	11	3	0	0	1	0	0	2	
10:30	121	1	2	2	20	48	34	13	1	0	0	0	0	0	C	
10:45	137	5	0	8	13	49	46	13	1	1	0	0	0	0	1	
Hour Total	488	16	4	15	63	178	148	49	5	2	0	1	0	0	7	
11:00 am	131	5	1	1	25	56	31	6	3	1	0	0	0	0	2	
	9574	255	55	149	1099		2993	906	125	22	15	19	9	15	172	

A global correction factor of 01.000 has been applied to all data points.

Weather : Counted by: Board # : Other : Broad Street Plainville, CT Gap

Site Code : 000000000001 Start Date: 09/01/2009 File I.D. : PLAINVILLE\_BR Page : 1 7- 29 -

Other :								- D D						Fil Pag	e I.D.
Pogin		0 -	5 -	7 -	9 -	11 -	13 -	to B, B	17 -	19 -	21 -	23 -	25 -	27 -	29 -
Begin Time	Total	4	6	8	10	12	14	16	18	20	22	24	26	28	999
11:00 am	10tai	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:15	110	40	8	7	8	7	4	3	4	3	2	3	4	3	14
11:15	152	57	15	7	9	8	10	1	5	9	2	4	6	2	17
11:45	140	46	11	12	11	6	5	8	4	8	2	3	1	4	19
	140	46	11	12	7.1	- 6	5	0		0					10
Hour Total															
12:00 pm	160	66	19	15	7	6	6	3	6	5	3	3	0	2	19
12:15	171	81	16	7	5	13	4	8	7	2	4	1	5	2	16
12:30	157	68	13	11	8	5	7	4	10	4	1	3	2	6	15
12:45	136	57	10	11	6	3	6	3	7	3	1	2	2	3	22
Hour Total	624	272	58	44	26	27	23	18	30	14	9	9	9	13	72
01:00 pm	153	49	19	8	117	10	11	3	6	4	3	3	1	3	16
01:15	164	61	20	19	9	5	6	7	5	6	4	0	2	3	17
01:30	142	49	17	13	8	5	7	6	3	5	2	2	3	3	19
01:45	128	42	11	11	12	9	4	4	1_	1	5	_ 1	4	1	22
Hour Total	587	201	67	51	46	29	28	20	15	16	14	6	10	10	74
nour rocur	200		1000												
02:00 pm	130	43	18	7	7	4	9	6	7	2	3	1	3	0	20
02:15	181	86	16	13	10	10	8	3	2	2	4	4	2	4	17
02:30	168	72	15	17	7	7	8	3	4	4	4	4	3	4	16
02:45	163	59	23	19	8	4	6	б	6	3	3	4	6	4	12
Hour Total	642	260	72	56	32	25	31	18	19	11	14	13	14	12	65
03:00 pm	167	63	21	16	9	7	6	6	4	6	4	2	3	5	15
03:00 piii	172	83	17	7	8	7	2	7	3	6	7	3	2	2	18
03:10	176	89	19	13	12	5	3	4	3	7	3	1	0	2	15
03:45	185	77	22	17	17	6	9	7	5	4	4	2	1	2	12
Hour Total	700	312	79	53	46	25	20	24	15	23	18	8	6	11	60
04:00 pm	189	92	19	20	6	7	10	0	3	6	6	1	2	2	15
04:15	178	74	21	13	10	10	7	4	11	4	4	1	5	0	14
04:30	185	82	19	16	10	15	11	5	1	3	4	0	3	2	14
04:45	193	91	15	21	10	4	11	7	8	4	1	2	5	1	13
Hour Total	745	339	74	70	36	36	39	16	23	17	15	4	15	5	56
05:00 pm	211	104	24	12	14	11	9	6	3	7	6	1	1	2	11
05:15	203	103	18	16	8		9	8	3	6	1	6	2	2	13
05:30	207	95	22	17	11	12	13	9	6	5	4	2	1	0	10
05:45	188	78	28	18	13	5	_5	5	7	3	2	2	5	3	14
Hour Total	809	380	92	63	46	36	36	28	19	21	13	11	9	7	48
						_	_		_			_	2	^	7.4
06:00 pm	193	83	28	9	14	5	5	12	6	3	4	5	3	2	14 14
06:15	183	81	23	16	6	6	2	11	3	8	6	7	4		
06:30	157	53	16	20	7	8	7	4	5	6	4		6	3	11
06:45	164	56	16	22	10	10	10	5	9	5	3	0	4	5_	9
Hour Total	697	273	83	67	37	29	24	32	23	22	17	12	17	13	48
07:00 pm	146	48	18	16	6	9	9	3	4	6	1	5	2	4	15
07:15	160	68	15	11	10	6	8	3	9	3	3	3	3	2	16
07:30	128	42	10	13	5	9	6	9	5	3	2	2	0	2	20
07:45	137	46	20	9	4	4	9	- 5	3	3	3	4	- 5	4	18
Hour Total	571	204	63	49	25	28	32	20	21	15	9	14	10	12	69

Weather : Counted by: Board # : Other :

#### Broad Street Plainville, CT Gap

Site Code : 0000000000001 Start Date: 09/01/2009 File I.D. : PLAINVILLE BR

Other :							A t	о В, В	to A					Page		: 2
Begin		0 -	5 -	7 -	9 -	11 -	13 -	15 -	17 -	19 -	21 -	23 -	25 -	27 -	29 -	
Time	Total	4	6	8	10	12	14	16	18	20	22	24	26	28	999	
08:00 pm	119	33	13	7	3	9	6	6	8	6	3	3	3	3	16	
08:15	120	36	12	10	8	11	5	3	4	3	2	2	2	1	21	
08:30	77	19	4	3	0	3	2	4	4	0	2	7	3	2	24	
08:45	96	35	8	4	2	3	1	0	5	6	1	2	0	4	25	
Hour Total	412	123	37	24	13	26	14	13	21	15	8	14	8	10	86	
									- 1		_	_	-	0	25	
09:00 pm	86	17	6	4	6	7	3	6	2	3	1	5	1			
09:15	62	9	3	4	2	3	6	2	2	3	1	0	4	2	21	
09:30	73	13	6	7	4	3	1	3	3	0	1	2	3	2	25	
09:45	53	14	3	2	0	1	4	2	1	1	- 0	0_	2	1	22	
Hour Total	274	53	18	17	12	14	14	13	8	7	3	7	10	5	93	
10:00 pm	46	6	3	0	1	1	2	0	4	4	0	1	1	2	21	
10:15	30	4	2	1	0	0	1	0	1	0	0	0	1	0	20	
10:15	29	3	1	1	0	1	1	1	1	0	0	0	0	1	19	
	39	6	0	2	3		1	1	î	1	1	2	1	0	20	
10:45 Hour Total	144	19	6	4	4	2	5	2	7	5	1	3	3	3	80	
0						-	1	7	0	0	1	2	0	1	14	
11:00 pm	26	2	1	0	2	1	1	1	0	1	0	0	0	1	13	
11:15	17	1	0	0	1	0		_	-	0	0	0	2	ō	13	
1.1:30	23	6	1	0	0	1	0	0	0	0	0	0	0	1	12	
11:45	15	0	0	0	0	1	1	0	0			2	2	3	52	
Hour Total	81	9	2	0	3	3	2	1	0	1	1	2	2	3	52	
Day Totals	6688	2588	685	524	354	301	287	217	214	187	128	113	124	113	853	
12:00 09/02	21	2	1	0	0	1	0	0	1	0	1	0	1	0	14	
12:15	24	1	4	1	1	1	0	0	0	0	2	0	0	1	13	
12:30	11	0	0	0	1	0	0	0	0	0	0	0	0	0	10	
12:45	7	0	0	0	0	1	0	0	0	0	0	0	0	0	6	
Hour Total	63	3	5	1	2	3	0	0	1	0	3	:0	1	1	43	
01 00	12	1.	0	0	0	0	0	0	1	0	0	0	0	0	10	
01:00 am	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
01:15	6	0	0	ő	0	0	0	0	0	.0	0	0	0	1	5	
01:30	2	0	0	0	0	0	0	_ 0	0	0	0	ō	0	0	2	
01:45 Hour Total	29	1	0	0	0	0	0	0	1	0	0	0	0	1	26	
											0	0	0	0	5	
02:00 am	5	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
02:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
02:30	2	0	0	0	0	0	0	0	0	0	1	- 0	0	Ö	7	
02:45	9	1	0	0	0	0	0	0	0			0	0	- 6	16	
Hour Total		1	0	0	.0	0	0	0	0	0	1	0	0		10	
	18															
03:00 am	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
			0	ō	0	0	0	0	0	0	0	0	0	0	0	
03:15	7	0		0	0	0	0	0	0	0	0	0	0	0	0	
03:15 03:30	7 0	0	0	ō	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 3 7	
03:15 03:30 03:45	7 0 3	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:15 03:30 03:45 Hour Total	7 0 3 7	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 3 7	
03:15 03:30 03:45 Hour Total	7 0 3 7 17	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0	0 0 0	0 3 7 17	
03:15 03:30 03:45 Hour Total 04:00 am 04:15	7 0 3 7 17	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0	0 3 7 17	
03:00 am 03:15 03:30 03:45 Hour Total 04:00 am 04:15 04:30 04:45	7 0 3 7 17	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0 0	0 3 7 17 5 5	

Totals

### Broad Street Plainville, CT Gap

Site Code : 000000000001 Start Date: 09/01/2009 File I.D. : PLAINVILLE\_BR

Page 29 -A to B, B to A : 3 21 -Begin 19 -11 -Total 11 18 Time 05:00 am 05:15 0 0 1 1 25 05:30 05:45 Hour Total 06:00 am 23 79 17 10 06:15 б 06:30 06:45 Hour Total 07:00 am 07:15 07:30 155 69 15 10 **1**3 63 07:45 70 37 Hour Total 08:00 am 48 7 08:15 08:30 81 08:45 Hour Total 492 38 09:00 am 17 15 09:15 09:30 09:45 Hour Total 72 539 25 10:00 am 10:15 10:30 10:45 Hour Total 161 11:00 am 

# Broad Street Plainville, CT Class

Site Code: 000000000001 Start Date: 09/01/2009 File I.D.: PLAINVILLE\_BR Page: 1

Other :														File
- D		Class	Class	Class	Class	Class	Class	to B, E	Class	Class	Class	Class	Class	Page
Begin	Total	1	Class 2	3	4	5	6	7	8	9	10	11	12	13
Time 11:00 am	TOTAL *	*	*	*	*	*	*	*	*	*	*	*	*	*
11:15 am	109	1	91	11	0	1	0	0	5	0	0	0	0	0
11:13	152	2	115	30	0	1	0	0	3	0	Ö	0	1	Ō
11:45	139	1	107	22	2	1	0	0	3	0	1	ō	2	0
Hour Total	133		107		-		-							
nour Total														
12:00 pm	160	3	137	11	1	2	0	1	4	1	0	0	0	0
12:15	171	2	126	30	2	1	2	0	7	0	1	0	0	0
12:30	157	2	128	19	1	2	0	1	4	0	0	0	0	0
12:45	136	2	106	19	3	0	1	1	4	0	0	0	0	0
Hour Total	624	9	497	79	7	5	3	3	19	1	1	0	0	0
01:00 pm	152	3	123	19	1	4	0	0	2	0	0	0	0	0
01:15	164	1	131	16	1	3	ĩ	2	9	0	0	0	0	0
01:30	141	î	109	18	2	4	0	1	4	0	1	0	0	1
01:45	128	4	94	23	2	2	0	0	3	0	0	0	0	0
Hour Total	585	9	457	76	- 6	13	1	3	18	0	1	0	0	1
nour rocar	300	-					_	_		_				
02:00 pm	129	2	96	26	3	2	0	0	0	0	0	0	0	0
02:15	182	3	138	20	1	10	1	0	7	1	1	0	0	0
02:30	169	0	125	31	3	3	0	2	3	1	0	0	1	0
02:45	162	0	126	23	2	3	0	0	- 6	1	0	0	0	1
Hour Total	642	5	485	100	9	18	1	2	16	3	1	0	1	1
03:00 pm	167	2	114	31	3	8	1	0	6	0	1	0	0	1
03:00 pm	172	2	123	30	3	5	0	Ö	6	1	0	0	0	2
03:30	175	2	124	29	5	2	1	1	9	1	0	0	0	1
03:45	185	1	137	36	3	4	0	0	4	0	0	0	0	0
Hour Total	699	7	498	126	14	19	2	1	25	2	1	0	0	4
						-		-	_		3	0	0	Ō
04:00 pm	189	2	147	25	2	3	0	1	6	0		0	1	0
04:15	179	3	140	24	0	5	0	0	4	1	1	0	1	1
04:30	185	2	143	23	4	2	1	1	7	0	0	0	1	1
04:45	194	0	151	30	2	5	0	3	3 20	0	4	0	3	
Hour Total	747	7	581	102	8	15	1	3	20	1	4	U	3	2
05:00 pm	211	1	166	28	2	3	0	1	8	0	1	0	1	0
05:15	202	5	152	27	4	1	0	1	8	0	3	0	1	0
05:30	207	3	173	20	1	1	0	0	8	0	0	0	1	0
05:45	187	0	159	19	3	1	0	0	_ 3	0	_ 1	0	1	0
Hour Total	807	9	650	94	10	6	0	2	27	0	5	0	4	0
06.00 pm	194	3	152	31	0	1	Ō	1	5	0	0	0	0	1
06:00 pm 06:15	183	2	148	24	1	2	0	1	5	0	ő	o	ő	õ
06:15	156	3	129	16	3	1	1	0	1	0	0	o	2	ő
06:45	164	3	136	13	1	3	0	0	7	0	1	0	0	o
Hour Total	697	11	565	84	5	7	1	2	18	0	1	0	2	1
07:00 pm	146	7	117	14	0	2	0	Ō	5	1	0	0	0	0
07:15	160	3	125	24	2	1	0	0	4	0	1	0	0	0
07:30	127	2	107	15	0	3	0	0	0	0	0	0	0	1
07:45	137	6	112	13	0	2	0	0	3	0	0	0	0	1
Hour Total	570	18	461	66	2	8	0	0	12	1	1	0	U	Τ.

## Broad Street Plainville, CT Class

Site Code: 000000000001 Start Date: 09/01/2009 File I.D.: PLAINVILLE\_BR Page: 2

Other :															I.D.	
								to B, E						Page	>	_:_
Begin		Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class	Class		
Time	Total	1	2	3	4	5	- 6	7	8	9	10	11	12	13		
08:00 pm	117	1	95	14	2	2	0	0	3	0	0	0	0	0		
08:15	119	2	103	10	2	1	0	0	1	0	0	0	0	0		
08:30	77	0	64	10	0	1	0	0	2	0	0	0	0	0		
08:45	96	1	81	9	1	0	1	1	2	0	0	0	0	0		
Hour Total	409	4	343	43	5	4	1	1	8	0	0	0	0	0		
09:00 pm	86	1	76	5	1	2	0	0	1	0	0	0	0	0		
09:15	62	1	55	б	0	0	0	0	0	0	0	0	0	0		
09:30	73	3	61	9	0	0	0	0	0	0	0	0	0	0		
09:45	53	0	47	5	0	0	- 0	0	0	0	0	0	1	0		
Hour Total	274	5	239	25	1	2	0	0	1	0	0	0	1	0		
10:00 pm	46	1	38	7	0	0	0	0	0	0	0	0	0	0		
10:15	30	0	27	3	0	0	0	0	0	0	0	0	0	0		
10:30	29	1	23	5	0	0	0	Ö	0	0	0	0	0	0		
10:45	39	0	37	2	0	0	0	0	0	0	0	0	0	0		
Hour Total	144	2	125	17	0	0	0	0	0	0	0	0	0	0		
11:00 pm	26	0	25	1	0	0	0	0	0	0	0	0	0	0		
11:15 pm	17	0	15	2	0	0	0	0	0	0	0	0	0	0		
11:30	23	0	20	3	0	0	0	0	0	0	ő	0	0	0		
11:45	15	0	15	0	0	0	0	0	0	0	0	0	0	ő		
Hour Total	81	0	75	6	0	0	0	0	0	0	0	0	0	0		
D	6670	0.0	5000	0.01	69	100	10	17	175		16	*	14	10		
Day Totals	6679	90	5289 20	881	0		0	0	1/5	8	0	0	0	0		
12:00 09/02	21		20	1 2	0	0	0	0	0	0	0	0	0	0		
12:15	24	0	11	0	0	0	0	0	0	0	0	0	0	0		
12:30	11 7	0	7	0	0	0	0	0	0	0	0	0	0	0		
12:45 Hour Total	63	0	60	3	0	0	0	0	0	0	0	0	0	0		
HOUR TOTAL	0.5	0	00	3	U	0	Ü	U	0	0	0	0	Ů	· ·		
01:00 am	12	0	12	0	0	0	0	0	0	0	0	0	0	0		
01:15	9	0	7	2	0	0	0	0	0	0	0	0	0	0		
01:30	6	0	6	0	0	0	0	0	0	0	0	0	0	0		
01:45	2	- 0	2	0	0	0	0	0	0	- 0	0	0	0	0		
Hour Total	29	0	27	2	0	0	0	0	0	0	0	0	0	0		
02:00 am	5	0	5	0	0	0	0	0	0	0	0	0	0	0		
02:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
02:30	2	0	2	0	0	0	0	0	0	0	0	0	0	0		
02:45	9	0	8	1	0	0	0	0	0	0	0	0	0	0		
Hour Total	18	0	17	1	0	0	0	0	0	0	0	0	0	0		
03:00 am	7	0	6	1	0	0	0	0	0	0	0	0	0	0		
03:00 4	0	0	0	0	0	0	ō	0	ō	0	ō	0	0	0		
03:30	3	0	2	1	0	0	0	0	0	0	0	0	0	0		
03:45	7	0	6	1	ō	0	0	0	0	0	0	0	0	0		
Hour Total	17	0	14	3	0	0	0	0	0	0	0	0	0	0		
04:00 am	7	0	5	0	0	0	2	0	0	0	0	0	0	0		
04:00 am	5	0	4	1	0	0	0	0	0	0	0	0	0	0		
04:15	4	0	4	0	0	0	0	0	0	0	0	0	ő	o		
04:45	12	0	5	6	0	0	0	0	1	0	0	0	0	Ö		
Hour Total	28	0	18	7	0	0	2	0	1	0	0	0	0	0		
Hour Total	∠6	0	4.0	363	0	9			*			, i		× ×		

# Broad Street Plainville, CT Class

Site Code: 000000000001 Start Date: 09/01/2009 File I.D.: PLAINVILLE\_BR Page: 3

Other :														Fil∈
								to B, B						Page
Begin		Class	Class	Class	Class	Class	Class	Class						
Time	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
05:00 am	11	0	7	4	0	0	0	0	0	0	0	0	0	0
05:15	18	0	14	4	0	0	0	0	0	0	0	0	0	0
05:30	43	0	33	9	0	1	0	0	0	0	0	0	0	0
05:45	53	1	37	12	0	3	0	0	0	0	0	0	0	0
Hour Total	125	1	91	29	0	4	0	0	0	0	0	0	0	0
06:00 am	54	1	38	11	0	2	0	0	2	0	0	0	0	0
06:15	71	1	48	16	1	5	0	0	0	0	0	0	0	0
06:30	79	1	56	15	0	5	0	0	2	0	0	0	0	0
06:45	108	4	71	25	0	6	0	0	2	0	0	0	0	0
Hour Total	312	7	213	67	1	18	0	0	6	0	0	0	0	0
07:00 am	167	0	128	34	2	3	0	0	0	0	0	0	0	0
07:15	167	3	123	28	0	7	0	2	3	0	1	0	0	0
07:30	155	2	117	20	2	7	0	0	4	2	0	1	0	0
07:45	155	1	116	24	0	8	0	1		0	0	0	0	0
Hour Total	644	6	484	106	4	25	0	3	12	2	1	1	0	0
08:00 am	114	1	82	19	0	7	0	0	5	0	0	0	0	0
08:15	123	1	92	23	0	4	1	1	1	0	0	0	0	0
08:30	123	0	102	18	0	3	0	0	0	0	0	0	0	0
08:45	131	2	103	17	2	3	0	0	4	0	0	0	0	0
Hour Total	491	4	379	77	2	17	1	1	10	0	0	0	0	0
09:00 am	115	0	87	22	0	0	0	3	3	0	0	0	0	0
09:15	155	0	121	22	2	4	0	0	4	0	1	1	0	0
09:30	130	1	104	18	0	2	0	1	2	1	0	0	0	1
09:45	138	0	101	26	0	4	1	0	4	1	0	1	0	0
Hour Total	538	1	413	88	2	10	1	4	13	2	1	2	0	1
10:00 am	123	2	90	20	2	2	1	0	4	1	0	0	0	1
10:15	107	1	76	23	2	3	0	0	2	0	0	0	0	0
10:30	121	1	95	20	0	4	0	0	1	0	0	0	0	0
10:45	137	1	109	18	3	3	0	0	3	0	0	0	0	0
Hour Total	488	5	370	81	7	12	1	0	10	1	0	0	0	1
11:00 am	130	1	97	22	1	2	2	0	4	0	0	0	1	0
Totals	9562	115	7472	1367	86	188	17	25	231	13	18	3	15	12

#### Northwest Drive Plainville, CT Class

Site Code : 000000000001
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Page : 1

A to B, B to A ss Class Class 6 7 8 Class Begin Class Time 10:00 am Total 10:15 10:30 10:45 Hour Total 11:00 am 8.1 11:15 11:30 11:45 Hour Total 12:00 pm 12:15 12:30 12:45 Hour Total 01:00 pm 01:15 01:30 112 79 01:45 Hour Total 74 02:00 pm 02:15 02:30 02:45 Hour Total 70 03:00 pm 03:15 2 03:30 03:45 Hour Total 1.03 634 465 04:00 pm 04:15 04:30 5 04:45 Hour Total 05:00 pm 05:15 05:30 05:45 Hour Total 487 61 06:00 pm 73 78 12 06:15 06:30 06:45 Hour Total 

## Northwest Drive Plainville, CT Class

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								to B, B	to A	62	617	29.3	(12 - 0.0	Page	: 2
Begin		Class	Class	Class	Class	Class	Class 12	Class 13							
Time _	Total	1	2	3	4	5	6	7	8	9	10	11		0	
07:00 pm	74	2	58	11	0	0	0	0	2	1	0	0	0		
07:15	79	2	62	15	0	0	0	0	0	0	0	0	0	0	
07:30	73	0	55	15	0	2	0	0	0	1	0	0	0	0	
07:45	78	3	64	8	1	1	0	0	1	0	0	0	0	0	
Hour Total	304	7	239	4.9	1	3	0	0	3	2	0	0	0	0	
08:00 pm	55	2	43	9	0	0	0	0	0	0	0	0	0	1	
08:15	56	0	47	8	0	1	0	0	0	0	0	0	0	0	
08:30	49	0	37	12	0	0	0	0	0	0	0	0	0	0	
08:45	56	0	47	9	0	0	0	0	0	0	0	0	0	0	
Hour Total	216	2	174	38	0	1	0	0	0	0	0	0	0	1	
09:00 pm	34	0	30	2	0	2	0	0	0	0	0	0	0	0	
09:15	39	0	36	3	0	0	0	0	0	0	0	0	0	0	
09:30	34	0	31	3	0	0	0	0	0	0	0	0	0	0	
09:45	26	0	23	3	0	0	0	0	0	0	0	0	0	0	
Hour Total	133	0	120	11	0	2	0	0	0	0	0	0	0	0	
10:00 pm	26	0	22	4	0	0	0	0	0	0	0	0	0	0	
10:00 pm	25	0	22	2	0	1	0	0	0	0	0	0	0	0	
10:30	19	o	16	3	0	0	0	0	0	0	0	0	0	0	
10:45	20	1	17	1	1	0	0	0	0	0	0	0	0	0	
Hour Total	90	1	77	10	1	1	0	0	0	0	0	0	0	0	
11:00 pm	10	0	9	0	0	1	0	0	0	0	0	0	0	0	
11:15	10	0	8	2	0	0	0	0	0	0	0	0	0	0	
11:30	8	0	7	1	0	0	0	0	0	0	0	0	0	0	
11:45	8	0	8	0	0	0	0	0	Ö	0	0	0	0	0	
Hour Total	36	0	32	3	0	1	0	0	0	0	0	0	0	0	
Day Totals	5292	88	4117	754	54	98	5	5	114	19	7	4	3	24	
12:00 08/27	6	0	4	2	0	0	0	0	0	0	0	0	0	0	
	4	0	4	0	0	0	0	0	0	0	0	0	0	0	
12:15	7	0	7	0	0	0	0	0	0	0	0	0	0	ō	
12:30	6	0	4	2	0	0	0	0	0	0	0	0	0	0	
12:45 Hour Total	23	0	19	4	0	0	0	0	0	0	0	0	0	- 0	
	8	0	4	1	1	ī	0	0	0	1	0	0	0	0	
01:00 am	10	0	8	2	0	0	0	0	0	0	0	o o	0	0	
01:15 01:30	4	0	4	0	0	0	0	0	0	0	0	0	ő	0	
	13	0	9	3	0	0	0	0	1	0	0	o o	0	0	
01:45 Hour Total	35	0	25	6	1	1	0	0	1	1	0	0	0	0	
02.00	23	0	20	2	0	1	0	0	0	0	0	0	0	0	
02:00 am	12	0	10	1	0	0	1	0	0	0	0	0	0	ō	
02:15	8	0	7	1	0	0	0	0	0	0	0	0	0	ō	
02:30	11	0	10	1	0	0	0	0	0	0	0	0	- 0	0	
02:45 Hour Total	54	0	47	5	0	1	1	0	0	0	0	0	0	0	
03.00	7	0	6	0	0	1	0	0	0	0	0	0	0	0	
03:00 am	9	0	8	1	0	0	0	0	0	ō	0	0	0	ō	
3:15	5	0	3	1	0	0	1	0	0	0	0	0	0	ō	
03:30		0	11	1	0	1	- 0	0	0	0	0	0	0	0	
03:45	13			3	0	2	1	0	0.	0	0	0	0	0	
Hour Total	34	0	28	3	0	2	1	0	v.		U	, o		_	

## Northwest Drive Plainville, CT Class

Site Code: 000000000001 Start Date: 08/26/2009 File I.D.: PLAINVILLE NO Page: 3

Other							D.	to B, B	: to 1					Page
Begin		Class	Class	Class	Class	Class	Class	Class						
Time	Total	1	2	3	4	5	6	7	8	9	10	11	12	13
04:00 am	20	0	13	4	0	1	2	0	0	0	0	0	0	0
04:15	14	0	12	2	0	0	0	0	0	0	0	0	0	0
04:30	23	0	22	0	0	0	0	0	1	0	0	0	0	0
04:45	8	0	8.	0	0	0	0	0	0	0	0	0	0	0
Hour Total	65	0	55	б	0	1	2	0	1	0	0	0	0	0
05:00 am	28	0	25	3	0	0	0	0	0	0	0	0	0	0
05:15	46	1	41	4	0	0	0	0	0	0	0	0	0	0
05:30	46	1	35	9	0	0	0	0	1	0	0	0	0	0
05:45	48	2	3.5	8	0	3	0	0	0	0	0	0	.0	0
Hour Total	168	4	136	24	0	3	0	0	1	0	0	0	0	0
06:00 am	73	2	55	13	0	2	0	0	1	0	0	0	0	0
06:15	86	5	62	18	0	1	0	0	0	0	0	0	0	0
06:30	124	6	89	21	1	3	0	1	1	1	1	0	0	0
06:45	101	2	82	15	0	2	0	0	0	0	0	0	0	0
Hour Total	384	15	288	67	1	8	0	1	2	1	1	0	0	0
07:00 am	127	1	93	25	0	4	1	0	3	0	0	0	0	0
07:15	123	0	100	18	0	2	0	0	3	0	0	0	0	0
07:30	199	8	158	19	2	4	1	0	4	0	0	1	1	1
07:45	155	2	119	26	3	1	0	0	2	0	1	0	0	1
Hour Total	604	11	470	88	5	11	2	0	12	0	1	1	1	2
08:00 am	148	2	116	17	1	2	1	1	6	0	0	0	0	2
08:15	125	3	93	21	1	4	0	0	2	0	0	0	0	1
08:30	115	1	84	20	1	3	1	0	5	0	0	0	0	0
08:45	90	0	70	14	11_	1	0	0	3	0	0	0	1	0
Hour Total	478	6	363	72	4	10	2	1	16	0	0	0	1	3
09:00 am	108	1	76	21	2	5	1	0	2	0	0	0	0	0
09:15	97	2	71	21	0	0	2	0	0	0	0	0	0	1
09:30	99	1	79	10	3	3	0	0	1	0	1	0	0	1
09:45	91	0	69	16	1	2	0	1	1	0	0	0	0	1
Hour Total	395	4	295	68	6	10	3	1	4	0	1	0	0	3
10:00 am	115	2	97	15	0	0	0	0	0	0	0	0	0	1
10:15	103	2	79	14	3	1	0	0	2	2	0	0	0	0
10:30	86	3	66	15	0	1	0	0	1	0	0	0	0	.0
Totals	7836	135	6085	1141	74	147	16	8	154	23	10	5	5	33

Northwest Drive Plainville, CT Gap

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Page A to B, B to A - 15 - 17 Begin Ð Total Time 10:00 am 10:15 10:30 10:45 Hour Total 11:00 am 11:15 20 16 11:30 11:45 25 Hour Total 12:00 pm 11 12:15 12:30 562 12:45 Hour Total 22 01:00 pm 5 9 01:15 01:30 77 456 01:45 157 Hour Total Ö 02:00 pm 5 7 02:15 97 02:30 30 02:45 Hour Total 26 11 03:00 pm 03:15 03:30 03:45 Hour Total 274 04:00 pm 04:15 04:30 04:45 Hour Total 719 2.4 05:00 pm 7 05:15 05:30 160 05:45 Hour Total 597 63 06:00 pm 27 06:15 06:30 06:45 Hour Total 

Northwest Drive Plainville, CT Gap

Site Code: 000000000001 Start Date: 08/26/2009 File I.D.: C:\PROGRAM FI Page : 2

Other :								_								: C:\PI
							A	to B, B	to A					Page		: 2
Begin		0 -	5 -	7 -	9 -	11 -	13 -	15 -	17 -	19 -	21 -	23 -	25 -	27 -	29 -	
Time	Total	4	- 6	В	10	12	14	16	18	20	22	24	26	28	999	
07:00 pm	75	28	4	3	4	2	2	0	1	0	1	1	1	1	27	
07:15	80	17	7	6	3	4	4	1	4	2	4	2	4	5	17	
	74	19	9	3	4	2	4	6	0	1	0	0	0	1	25	
07:30	78	19	4	4	5	5	5	Ō	2	4	5	3	0	1	21	
07:45				16	16	13	15	<del>7</del>	7	_ <del></del>	10	6	- 5	8	90	
Hour Total	307	83	24	Τρ	10	Т2	13	,	,	,						
mq 00:80	55	9	4	2	3	0	4	1	2	2	1	0	1	1	25	
08:15	56	15	5	1	4	0	0	2	2	2	1	0	1	2	21	
08:30	49	11	3	2	Ω	1	1	3	0	2	2	1	0	0	23	
08:45	56	15	2	3	4	2	2	2	0	0	0	2	1	0	23	
Hour Total	216	50	14	8	11	3	7	8	4	6	4	3	3	3	92	
						0	1	1	3	1	0	0	0	2	13	
09:00 pm	34	9	1	2	1					ō	1	0	o o	2	19	
09:15	40	9	0	3	1	0	3	1.	1			0	0	1	18	
09:30	34	10	1.	1	0	1	0	1.	0	0	1			0	15	
09:45	26	4	3_	0 _	0	0	3	0	0	0	1	0	0		65	
Hour Total	134	32	5	6	2	1	7	3	4	1	3	0	0	5	65	
10:00 pm	26	8	0	1	i	0	0	0	0	0	0	0	0	0	16	
10:00 pm	25	3	2	0	0	0	1	0	1	0	0	0	2	0	16	
	19	2	.0	0	0	0	0	Ō	0	1	0	1	0	0	15	
10:30		1	2	0	0	0	1	1	0	0	0	1	0	0	14	
10:45 Hour Total	20 90	14	4		1	- 0	2	1	1	1	0	2	2	0	61	
nour rocur			_											0	8	
11:00 pm	10	1	0	0	1	0	0	0	0	0	0	0	0	0	9	
11:15	10	0	0	1	0	0	0	0	0	0	0	0	0	0	8	
11:30	8	0	0	0	0	0	0	0	0	0	0	_		0	- 6	
11:45	8	1	1	0	0	0	Q	0	0	0	0	0	0	0	31	
Hour Total	36	2	1	1	1	0	0	0	0	0	0	0	0	0	-31	
Day Totals	5300	1966	548	377	297	205	198	154	149	97	99	100	68	74	968	
	5300	1300	240	0	0	0	0	0	0	0	0	0	0	0	6	
12:00 08/27		0	0	0	0	0	0	0	ō	0	0	0	0	0	4	
12:15	4 7	1	0	0	0	0	0	0	0	0	Ō	1	0	0	5	
12:30			0	0	0	0	0	0	0	O.	0	1	0	0	5	
12:45	6	0			0	0	0	0	0	0	0	2	0	0	20	
Hour Total	23	1	0	0		U	Ů,				.1961)			3,000		
01:00 am	8	0	0	0	0	0	0	0	0	1	0	0	0	0	7	
01:15	10	3	0	1	0	0	0	0	0	0	0	0	0	0	6	
01:30	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
01:45	13	0	ō	1	0	0	0	1	0	0	1	0	0	0	10	
Hour Total	35	3	0	2	0	0	0	1	0	1	1	0	0	0	27	
	0.7	-	0	1	2	1	0	1	1	1	0	0	0	0	15	
02:00 am	23	1	0	1		0	0	0	2	1	0	0	0	0	9	
02:15	12	0	0	0	0			0	0	0	0	0	0	0	7	
02:30	В	0	0	0	1	0	0		0	i	0	0	0	0	9	
	11	0	0	0	3	.0	1	0	3	3	0	0	0	0	40	
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Northwest Drive Plainville, CT Gap

Site Code: 000000000001
Start Date: 08/26/2009
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Page : 3

Begin Total 4 6 8 10 12 14 16 18 20 22 24 26 28 5 04:00 am 20 0 0 0 0 1 1 1 1 1 1 2 2 0 0 0 0 0 0	Other :							A	to B, B	to A					Page	
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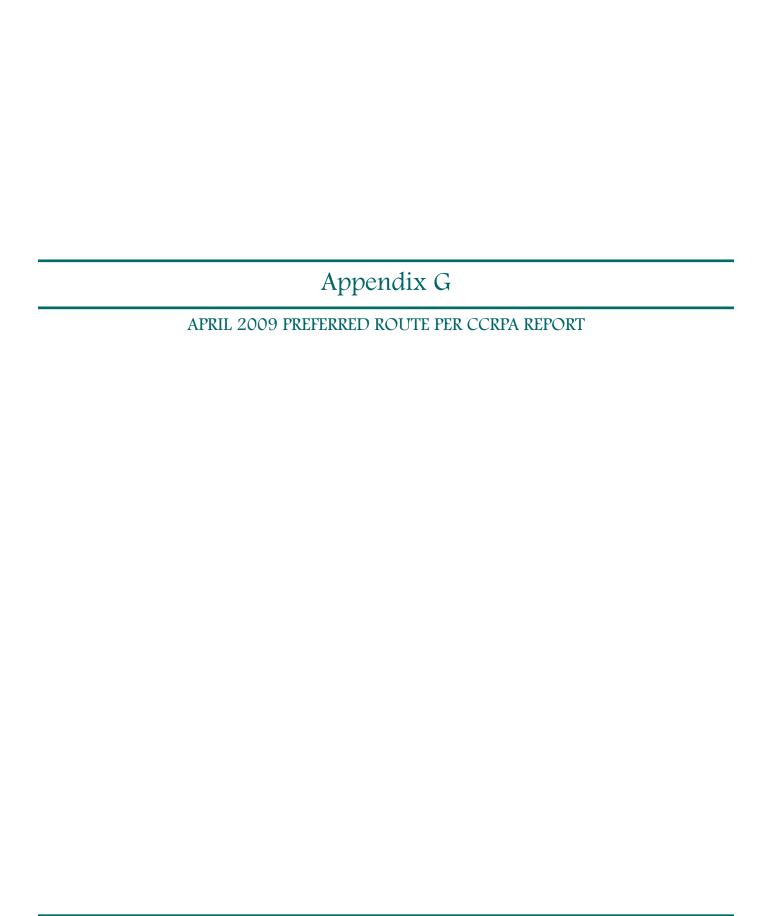
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Time	Total	15	20	25	30	3.5	40	45	50	55	60	65	70	75	999	
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07:15	80	9	0	0	4	17	32	15	2	0	0	0	0	0	1	
07:30	74	1	1	1	1	19	29	18	3	0	0	0	0	0	1	
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Hour Total	34	1	1	5	11	8	3	5	0	0	0	0	0	0	0	

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Other :							Δ	to B, B	to A					File Page	e 1.Da : P.
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05:45	48	1	0	1	3	13	24	4	2	0	0	0	0	0	0
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Hour Total	393	35	2	2	16	83	158	75	11	4	1	0	0	0	6
10:00 am	115	11	0	0	4	25	47	24	3	1	0	0	0	0	0
10:15	102	9	2	5	8	19	32	19	7	0	0	0	0	0	1
10:30	87	14	3	1	4	12	42	10	1	0	0	0	0	0	0
m-+-1	7841	675	96	115	487	1835	2949	1307	225	29	11	12	8	4	88
Total	/841	6/5	96	112	40/	T032	2349	1307	223	4.0	11	12		0.050	70.70

A global correction factor of 01.000 has been applied to all data points.



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