

REGIONAL PILANNIG BULLETIN

HOUSATONIC VALLEY COUNCIL OF ELECTED OFFICIALS

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QUEEN STREET AREA TRAFFIC IMPROVEMENT PLAN Newtown, CT



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QUEEN STREET AREA TRAFFIC IMPROVEMENT PLAN- TECHNICAL APPENDIX (Under Separate Cover)

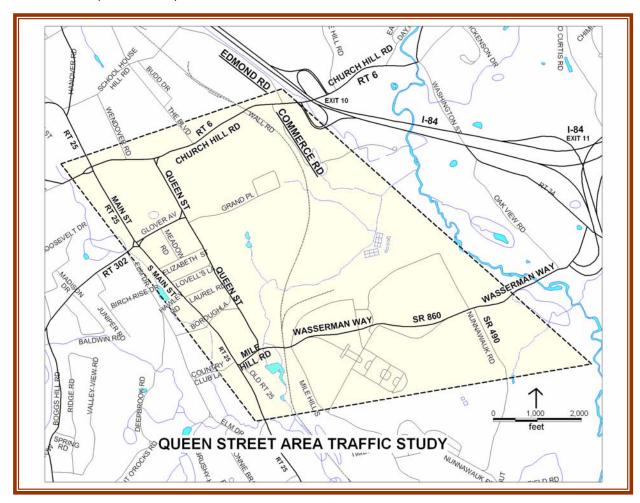
ACKNOWLEDGEMENTS

Special thanks are offered to the members of the <u>Queen Street Area Traffic Study Advisory Committee</u> for their participation in this study process: Herbert Rosenthal, Newtown First Selectman; Ronald Bolmer, Newtown Town Engineer; David Bratz, Newtown Public Works Department; Anthony DiLonardo, Newtown School District Transportation Director; Robert Geckle, Queen Street resident; Frederick Hurley, Newtown Public Works Director; Police Chief Michael Kehoe; Lt. James Mooney, Newtown Police Department; Robert Mulholland, Newtown Planning and Zoning Commission; Scott Sharlow, Newtown Geographic Information System Coordinator; Jean St. Jean, Newtown Zoning Official and former Borough resident; Elizabeth Stocker, Newtown Director of Community Development; and Bruce Walczak, Economic Development Commission member and Glover Avenue resident.

I. INTRODUCTION

Report Purpose

This traffic improvement plan was initiated to investigate traffic problems within the Queen Street Study Area, to evaluate existing and future traffic operations and to recommend improvement options that address identified problems. The focus of this study includes the following roadways: Queen Street, Glover Avenue, Church Hill Road (Route 6), Main Street (Route 25), Mile Hill Road (Route 860), and Commerce Road.



Transportation issues within this area of Newtown have been the focus of attention for many decades. Newtown's 1958 Plan of Development states, "Within the Borough, however, Glover Ave., the north part of Queen Street, Church Hill Road to Main Street, and Main Street (from Schoolhouse Hill Road south) are all performing as major roads – as well as, in some cases, the access to major business and civic properties." In discussing circulation issues and "Points of Congestion," the Town's 1993 Plan of Development states: "Based on the information obtained in recent studies and discussions with the Newtown Police Department, the following intersections and roadways have been identified as problematic due to congestion or high accident occurrences.

- Church Hill Road/Route 25 (Main Street)
- Queen Street/Glover Avenue
- Church Hill Road/The Boulevard"

Regarding the intersection of Queen Street and Glover Avenue, the Town's 2004 Plan of Conservation and Development states: "It is recommended that an analysis of past traffic accidents and future traffic volumes be performed and that design alternatives for this intersection be prepared, with public involvement, to result in safety improvements to this intersection that are sensitive to the residential characteristics of the adjacent neighborhood."

Report Process

Under the guidance of the Queen Street Area Traffic Study Advisory Committee, the study consultant, Vollmer Associates, collected traffic data, conducted traffic analyses and sought public input from area residents and Town officials.

This process included a "site walk" by the Advisory Committee to observe and discuss traffic issues to be investigated, and four meetings of the Advisory Committee to discuss the study's work program, review and comment on the study's technical analysis findings, review and comment on improvement options to be investigated, and the development of a comprehensive listing of improvements recommended to address identified traffic and safety issues.

A public work shop was held to enable the interested public to identify the issues they desired to be addressed by the Queen Street Area Traffic Study,



Advisory Committee "Site Walk"

and to review and comment on draft improvement options. During the course of this analysis and public discussions, many traffic issues were identified, including operational deficiencies, vehicular safety concerns, pedestrian safety concerns, speeding issues, and delays and queuing at intersections.

Report Products

The products of this traffic study include a technical evaluation of existing and projected traffic conditions and deficiencies within the Study Area, the identification of traffic and safety issues to be addressed by specific locations, the development of improvement recommendations to address identified problems, and the preparation of an overall prioritized traffic improvement plan, budget and action schedule to serve as a guide for the implementation of proposed improvement recommendations.

Report Organization

This report begins with a description of the traffic issues identified during the course of this analysis and the improvement options recommended to address those issues. This information is followed by the summary of the traffic improvement plan recommended for the Queen Street Study Area, which includes a description of costs, potential sources of project funding and

recommended phasing of improvement options. The technical presentation of the findings of the analyses performed to help identify and define the operational and safety issues addressed by proposed improvement recommendations in this report are contained in a separate appendix: Queen Street Area Traffic Improvement Plan- Technical Appendix.

II. IDENTIFIED TRAFFIC ISSUES AND RECOMMENDED IMPROVEMENT OPTIONS

Following the identification of operational and safety deficiencies in the study area, a wide range of improvement options were investigated and presented for review and comment to the Advisory Committee and to the public at the Queen Street Public Workshop meeting. Based on suggestions from this public input process, a set of recommended improvement options were developed and are described below. In addition, Figures 1 through 6 present the existing and future roadway conditions at select locations within the study area where major improvements are recommended.

The following is a description of the traffic issues and deficiencies identified during the course of this analysis and the improvement options recommended to address those issues. This information is organized along roadway corridors and around key intersections within the Study Area.

A. Church Hill Road

The north end of Queen Street begins with its intersection with Church Hill Road (Route 6). Within the Queen Street Study Area, Church Hill Road is classified by the Connecticut Department of Transportation as a principal arterial highway. Church Hill Road also functions to provide local access to the businesses, institutions and residences which front on this State highway. The following transportation issues were identified and addressed.

- Issue A1: Facilitate safe pedestrian access along Church Hill Road.
- <u>Proposed Improvement Recommendation</u>:
 Continue to implement the development of sidewalks along Church Hill Road.
- Issue A2: Improve safety of pedestrian crossings of commercial driveways along Church Hill Road.
- Proposed Improvement Recommendation: Paint crosswalks across the driveways of all commercial and institutional uses on Church Hill Road.
- Issue A3: Improve the safety of pedestrian crossings of intersecting streets along Church Hill Road.
- Proposed Improvement Recommendation: Paint crosswalks across the streets intersecting with Church Hill Road.



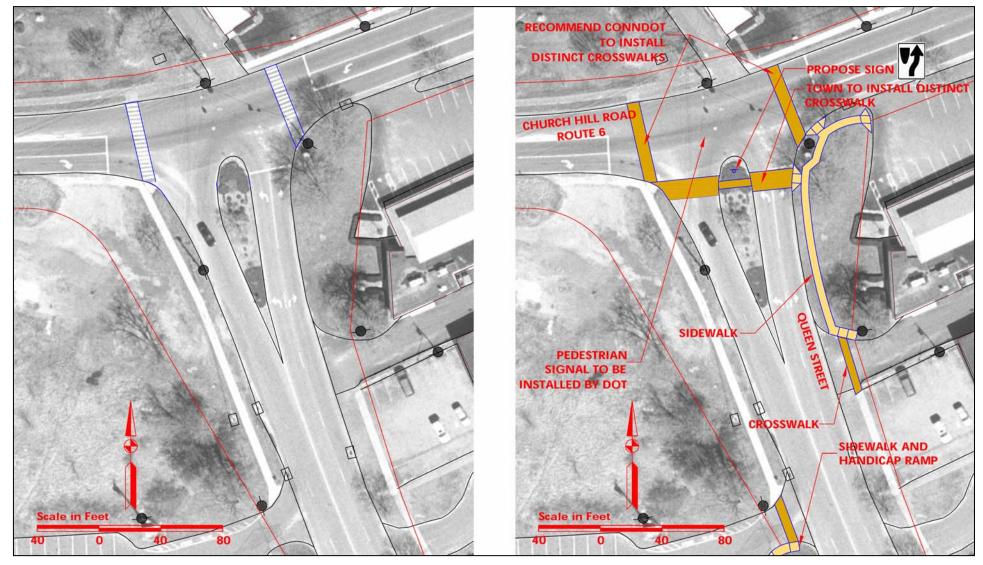


FIGURE 1
INTERSECTION OF CHURCH HILL ROAD (RT 6) & QUEEN STREET
EXISTING CONDITIONS AND PROPOSED IMPROVEMENT OPTIONS

- Issue A4: Improve the connectivity of the sidewalk system serving Church Hill Road, Queen Street and Main Street.
- Proposed Improvement Recommendation: Complete the sidewalk connections along Church Hill Road, between Queen Street and Main Street.



Church Hill Road; Near Flagpole

Queen Street Corridor:

Queen Street is a town maintained road located in the historic village center of the Borough and Town of Newtown. Queen Street is approximately one mile long and runs between Church Hill Road (Route 6) on the north to Mile Hill Road (SR 860) on the south. The north end of Queen Street serves commercial, institutional and residential uses. The balance of Queen Street is primarily residential in character.

The commercial and institutional uses along the northern portion of Queen Street generate "significant traffic" and all of Queen Street carries through traffic that is unrelated to the street's land and building uses.

Beginning at the northern end of Queen Street, at its intersection with Church Hill Road (Route 6) and proceeding southward to Mile Hill Road, the following issues were identified and addressed.

B. Queen Street Intersection with Church Hill Road (Route 6)

The major issues identified at the intersection of Queen Street and Church Hill Road were pedestrian related. The completion of the new shopping center located on the southwest corner of this intersection provides new opportunities for pedestrian destinations and new concerns for pedestrian safety and accessibility. Many of these issues were raised and addressed during the development's application process and have been implemented by the projects developer. Additional issues to be addressed include the following:

- Issue B1: Facilitate the safe pedestrian crossing of Queen Street at this intersection.
- Proposed Improvement Recommendation: ConnDOT plans to install upgraded pedestrian signals at this intersection. Also request ConnDOT to install a "Keep Right" sign in the island entrance to Queen Street to assist motorists.
- Issue B2: Facilitate the safe pedestrian crossing of Church Hill Road at this intersection.



Pedestrian Crossing – Church Hill Road at Queen Street

- Proposed Improvement Recommendation:
 - Town to request ConnDOT to install distinct stamped pavement in Church Hill Road (Route 6) crosswalks at the east and west end of this intersection with Queen Street. Evaluate the noise impact from these stamped crosswalks to determine their suitability in residential areas.
- Issue B3: Facilitate the safe pedestrian crossing of Queen Street at this intersection.
- <u>Proposed Improvement Recommendation</u>: Town to install distinct stamped pavement in this crosswalk across Queen Street.



Pedestrian Crossing – Queen Street at Church Hill Road



Pedestrian Crossing – Queen Street at Church Hill Road

- <u>Issue B4</u>: Improve the connectivity of the sidewalk system on Queen Street.
- Proposed Improvement Recommendation: Install a sidewalk along the east side of Queen Street, extending from Church Hill Road south to connect to the existing Queen Street sidewalk system.



Missing Sidewalk on Queen Street

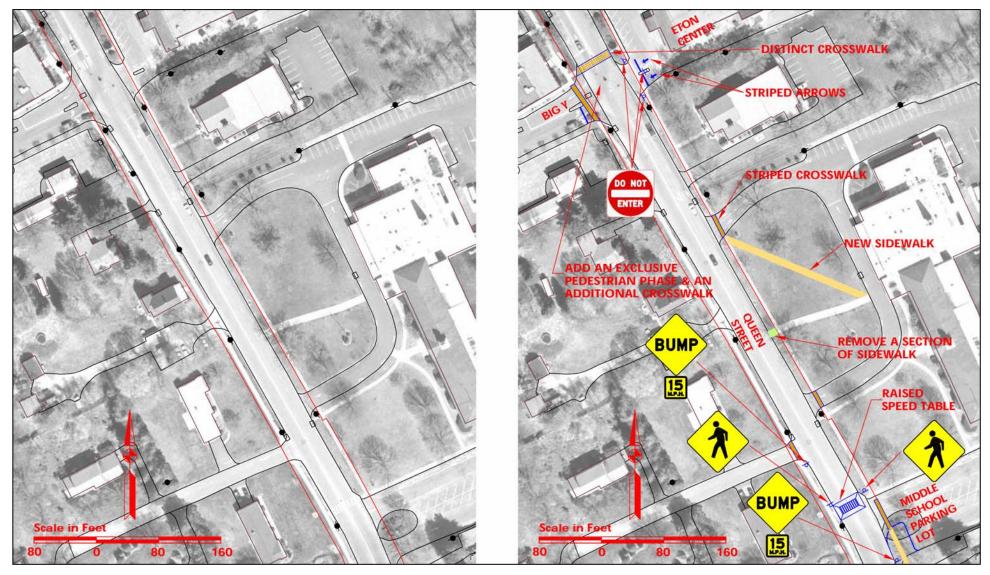


FIGURE 2 **NORTHERN QUEEN STREET EXISTING CONDITIONS AND PROPOSED IMPROVEMENT OPTIONS**



C. Queen Street

The following issues and improvement recommendations were identified for Queen Street from south of Church Hill Road to Mile Hill Road:

 Issue C1: Improve safety of pedestrian crossings of commercial driveways along Queen Street.

<u>Proposed Improvement Recommendation</u>: Paint crosswalks across the driveways of all commercial uses.

 <u>Issue C2</u>: Improve safety of pedestrian crossings of intersections along Queen Street.

<u>Proposed Improvement Recommendation:</u>
Paint crosswalks across intersections.



<u>Issue C3</u>: Improve safety of pedestrian crossings of commercial driveways along Queen Street.

Proposed Improvement Recommendation: Request the paint store, bakery and Eton Center to provide cross access and share a single driveway. As an alternative, narrow the throat widths of existing driveways to reduce the distance of unprotected pedestrian crossings.



- <u>Issue C4</u>: Improve the connectivity of the sidewalk system on Queen Street.
- Proposed Improvement Recommendation: Request the Bank of America to provide a handicap accessible connection between the north driveway crosswalk and the existing sidewalk in front of the bank.
- <u>Issue C5</u>: Improve the connectivity of the sidewalk system on Queen Street.
- Proposed Improvement Recommendation:
 Provide a handicap ramp on the corner of "My Place," to be aligned with the proposed painted crosswalk across the Big "Y" driveway.



- <u>Issue C6</u>: Facilitate the safe pedestrian crossing of Queen Street between the Big "Y" and Eaton Centers.
- <u>Proposed Improvement Recommendation</u>: Install distinct stamped pavement in this crosswalk across Queen Street between the Big "Y" Center and the "Eton Center."



Location of Proposed Pedestrian Improvements at the Big "Y" Driveway on Queen Street

- Issue C7: Facilitate pedestrian crossing of Queen Street between the Big "Y" and Eaton Centers.
- Proposed Improvement Recommendation: Provide an exclusive pedestrian crossing phase at this traffic signal during which all approaching vehicles stop for crossing pedestrians at the intersection of the Big "Y" and "Eton Center" driveways with Queen Street. Add pedestrian signals and push buttons on all four corners of the intersection.
- Issue C8: Facilitate improved pedestrian and motorist safety.
- <u>Proposed Improvement Recommendation</u>: Remove landscaping that restricts sightlines at driveways.
- Issue C9: Improve the safety of pedestrian crossings of commercial driveways along Queen Street.
- Proposed Improvement Recommendation: Erect two new "Do Not Enter" signs at the southern driveway of the "Eaton Center" and paint arrows in the driveway pointing toward Queen Street to help eliminate two way traffic at this driveway.
- <u>Issue C10</u>: Improve pedestrian safety.
- Proposed Improvement Recommendation: Remove a short section of connecting sidewalk between the edge of pavement on Queen Street and the main sidewalk passing in front of the Middle School to deter crossing of Queen Street at this unprotected crossing location.

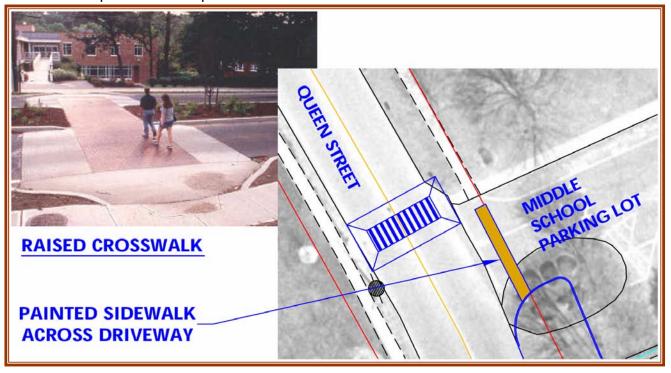






- Issue C11: Improve the connectivity of the sidewalk system on Queen Street.
- Proposed Improvement Recommendation: Construct a new diagonal sidewalk that extends from the Middle School entrance to the Queen Street sidewalk near the schools northernmost driveway entrance.

- <u>Issue C12</u>: Facilitate the safe pedestrian crossing of Queen Street in front of the Middle School.
- Proposed Improvement Recommendation: Install a raised "speed reducing table" containing a crosswalk, with appropriate warning signage for motorists. This improvement will be located on the north side of the rebuilt southernmost driveway entrance to the Middle School. Provide handicap ramp and appropriate curbing near the proposed speed reducing table. Consider the use of flashing signs activated by push buttons at this Middle School crosswalk that would warn approaching drivers of the presence of a pedestrian in the crosswalk.



- Issue C13: Improve pedestrian and motorist safety.
- Proposed Improvement Recommendation: Reconstruct the southernmost driveway entrance to the Middle School.
- Issue C14: Improve motorist pedestrian safety at the intersection of Queen Street and Glover Avenue.



Area of Proposed Middle School Driveway Improvements

Proposed Improvement Recommendation: Reconstruct the intersection of Queen Street and Glover Avenue as a modified "T" with a southbound right-turn bypass lane and associated crosswalks and signage. Install all-way stop control and yield signs. Provide crosswalks across the westerly and northerly legs of the "T" intersection. Provide a landscaped buffer in front of the house on the east side of this intersection to reduce headlight glare.

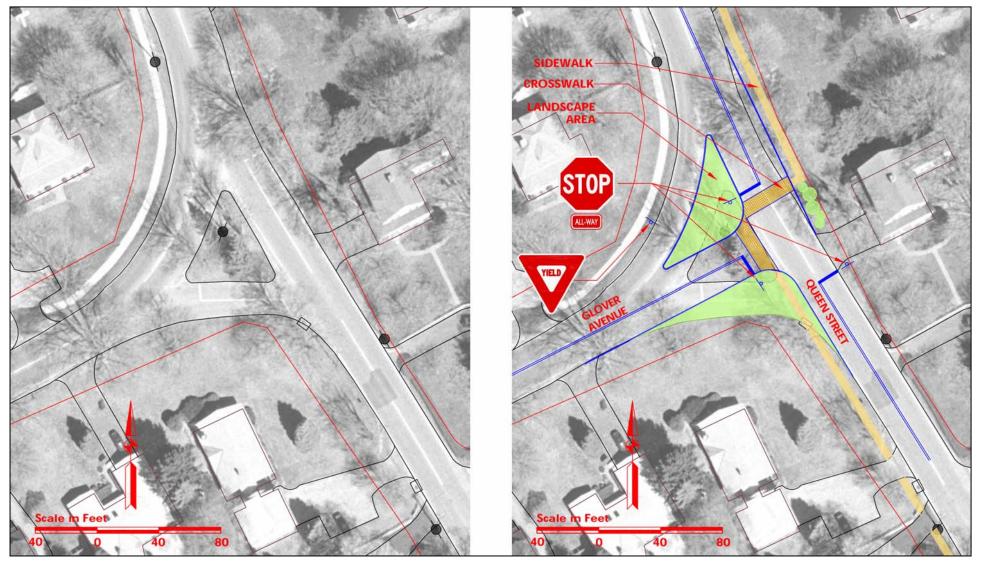


FIGURE 3
INTERSECTION OF QUEEN STREET AND GLOVER AVENUE
EXISTING CONDITIONS AND PROPOSED IMPROVEMENT OPTIONS







Glover Avenue Eastbound Approaching Queen Street

<u>Issue C15</u>: Reduce speeding on Queen Street between Glover Avenue and Mile Hill Road.

<u>Proposed Improvement Recommendation</u>: Request the Town's Traffic Calming Committee to construct three "speed reducing tables" on Queen Street between Glover Avenue and Mile Hill Road. Consider the use of temporary speed reducing tables to assess the effectiveness of this concept.

- Issue C16: Improve motorist and pedestrian safety.
- Proposed Improvement Recommendation: Reconstruct Queen Street between Glover Avenue and Mile Hill Road to a uniform pavement width of two 11' lanes, two 2' shoulders and a 5' landscape strip. The exceptions would be at intersections where more than one approach lane or slightly wider receiving lanes are required.
- Issue C17: Improve pedestrian safety on Queen Street.
- Proposed Improvement Recommendation:
 Construct a new four foot wide sidewalk on the west side of Queen Street between Glover Avenue and Mile Hill Road.



- <u>Issue C18</u>: Address speeding problems and improve pedestrian safety on Queen Street between Glover Avenue and Mile Hill Road.
- <u>Proposed Improvement Recommendation</u>: Plant trees on both sides of Queen Street south of Glover Avenue, outside the snow shelf and potential sidewalk areas, as part of the effort to "calm" traffic on this segment of Queen Street.
- Issue C19: Improve pedestrian safety.
- <u>Proposed Improvement Recommendation</u>: Improve school zone warning signage along Queen Street.
- <u>Issue C20</u>: Improve pedestrian safety and the connectivity of the sidewalk system on Queen Street.
- Proposed Improvement Recommendation: Construct a new sidewalk on the east side of Queen Street from the southern most Middle School driveway to the crosswalk across the northerly leg of the rebuilt intersection with Glover Avenue.

D. Intersection of Queen Street and Mile Hill Road.

- Issue D1: Address motorist safety at this intersection.
- Proposed Improvement Recommendation: Town to recommend that ConnDOT evaluate the feasibility of a traffic signal at this intersection. If ConnDOT determines that a signal is feasible, Town to recommend that ConnDOT install a signal at this intersection with appropriate lane configurations. If ConnDOT determines that a signal is not warranted, Town to work with ConnDOT to implement geometric improvements to the throat of Queen Street and provide a westbound deceleration lane on Mile Hill Road to Queen Street. The revised throat of Queen Street should be wide enough for emergency vehicle access.



Westbound Mile Hill Road Approach to Queen Street



Tinkerfield Road View of Mile Hill Road and Queen Street Intersection



FIGURE 4
INTERSECTION OF QUEEN STREET AND MILE HILL ROAD (SR 860)
EXISTING CONDITIONS AND PROPOSED IMPROVEMENT OPTIONS

E. Glover Avenue:

Glover Avenue is a town maintained road located in the historic village center of the Borough and Town of Newtown. It is approximately one quarter mile long and runs between Main Street/South Main Street (Route 25) on the west and Queen Street on the east. Glover Avenue is residential in character.

In addition to providing access to the residences of Glover Avenue and the adjacent residential neighborhood served by Meadow Road, this street provides connecting access to Queen Street. Glover Avenue carries through traffic that is unrelated to the street's land and building uses. The following issues and improvement recommendations were identified for Glover Avenue:

- Issue E1: Address speeding problems and improve pedestrian safety.
- Proposed Improvement Recommendation: Request the Town's Traffic Calming Committee to construct a raised "speed reducing table" containing a crosswalk, with appropriate warning signage for motorists, on Glover Avenue east of Meadow Road. Town to evaluate drainage issues related to construction of the speed table at this location. Consider the use of temporary speed tables to assess the effectiveness of this concept.
- Issue E2: Improve motorist and pedestrian safety.
- Proposed Improvement Recommendation: Reconstruct Glover Avenue to a uniform pavement width of two 11' lanes and two 2' shoulders. The exceptions would be at intersections where more than one approach lane or slightly wider receiving lanes are required.



Glover Avenue Looking East

F. Intersection of Glover Avenue and Main Street

- Issue F1: Address motorist safety problems at this intersection.
- Proposed Improvement Recommendation:

Provide geometric improvements to the throat of this intersection, using the same approach as proposed for the intersection of Queen Street and Mile Hill Road.

- Issue F2: Improve pedestrian safety and address sidewalk continuity problems at this intersection.
- Proposed Improvement
 Recommendation:
 Address pedestrian crossing issues at this intersection to provide safe access to Ram's

Pasture, ball fields, parks, police station and Main Street commercial and institutional uses.



- Issue F3: Develop Baseline Traffic Database for Glover Avenue.
- Proposed Improvement Recommendation: Town to collect baseline Average Daily Traffic (ADT) and speed information for Glover Avenue prior to the implementation of proposed improvements. Update this information annually and use it to assess the effectiveness of implemented improvements.

G. Borough Lane/Lovells Lane/Elizabeth Street/Meadow Road

- <u>Issue G1</u>: Develop Baseline Traffic Database.
- <u>Proposed Improvement Recommendation</u>: Town to collect baseline Average Daily Traffic (ADT) and speed information for these roads prior to the implementation of

proposed transportation improvements. Update this information annually and use it to assess the effectiveness of implemented improvements. If traffic volumes/ speed rise significantly, the Town will consider implementing traffic calming measures, which may include mid-block raised speed tables and stamped distinct crosswalks.

H. Main Street

Issue H1: Improve pedestrian safety and address sidewalk continuity problems at the intersection of Main Street with Glover Avenue



and Sugar Street (Route 302).

- Proposed Improvement Recommendation: Extend the sidewalk on the west side of Main Street to connect with the pedestrian crossing to Glover Avenue at the intersection of Main Street, Glover Avenue and Sugar Street (Route 302).
- <u>Proposed Improvement Recommendation</u>: Paint crosswalk across Town Hall South driveways.
- Issue H2: Address pedestrian safety problems associated with the Main Street pedestrian crosswalk located in front of Edmond Town Hall.
- Proposed Improvement Recommendation: Provide a curb bump-out for this Main Street crosswalk in front of the Town Hall and consider installing flashing pedestrian signs activated by push buttons to alert Main Street motorists of the presence of a pedestrian in the crosswalk.



- Issue H3: Address motorist safety.
- Proposed Improvement Recommendation: Consider replacing the existing angled parking on Main Street with parallel parking. As an alternative, consider angled parking that allows motorists to back into parking stalls.
- I. Main Street, Church Hill Road, West Streets The "Flagpole" Intersection

The Flagpole which stands in the middle of the Main Street intersection of Route's 6 and 25 and the two legs of West Street has been described as the "emotional heart" of Newtown. The current 100' high Flagpole was erected in 1950. Because the Flagpole sits unprotected in the middle of a busy intersection with five roadway legs, it has been the site of many accidents, which tragically include fatalities.

The analysis of traffic flows within the Queen Street Study Area indicates that a significant amount of traffic on Queen Street and Glover Avenue is comprised of Church Hill Road and Main Street motorists who seek to avoid the Flagpole intersection. Considerations for the management of traffic flows within the Queen Street Study Area need to address this issue. (See Figure 5)

Over the years, proposals to improve safety and traffic flow at this intersection, such as moving the Flagpole out of the roadway or signalizing the intersection, have met with resistance from the community because of their adverse affects on the visual character of this historic intersection. Two improvement options were considered during the course of this study. One featured a "roundabout" design and the other a signalization concept. The roundabout option was not recommended because of its potential to adversely impact the Flagpole intersection and surrounding historic properties.

The analysis of a signalized solution to improve traffic and pedestrian movement and safety at this intersection included a traffic engineering signal needs study that was made

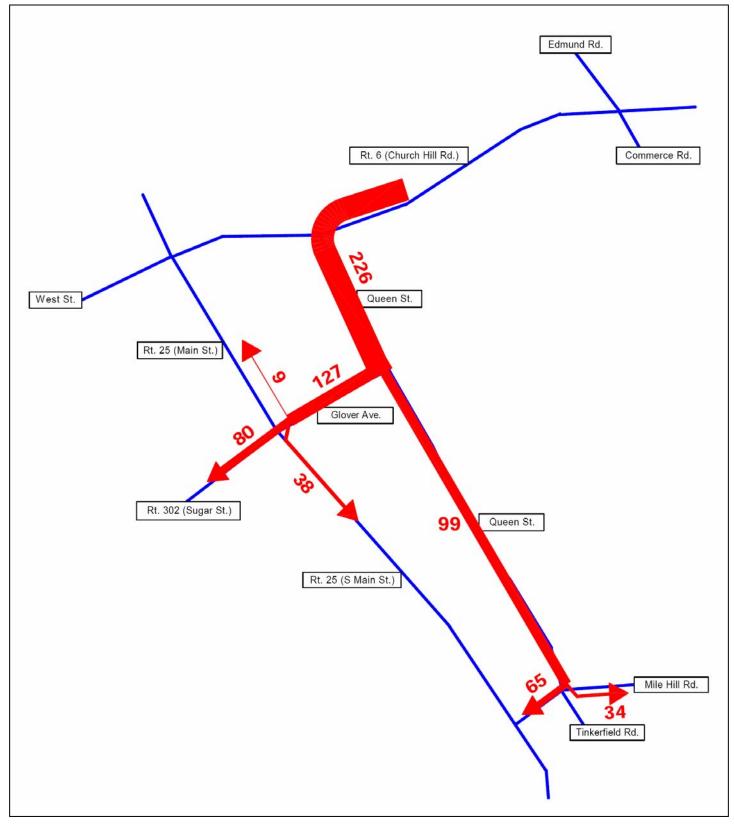


FIGURE 5
TRACKED THROUGH TRAFFIC ORIGINATING FROM WESTBOUND
CHURCH HILL ROAD (ROUTE 6)
WEEKDAY AFTERNOON PEAK HOUR









according to the criteria outlined in *MUTCD* (*Manual on Uniform Traffic Control Devices*). The analysis concluded that a traffic signal is "warranted" for this intersection based on 2006 traffic volumes. All volume-based *MUTCD* signal warrants, 1, 2 and 3, were satisfied for this location.

Improvement Option for Consideration

A new concept for the signalization of this intersection (see attached figure) was fashioned to address traffic safety and traffic flow issues, while respecting the historic character of the intersection and the surrounding area. Under this concept, the Flagpole would remain in its current location and it would become part of a small center island. No signal lights or wiring would be attached to or hung from the Flagpole.

- <u>Issue I1</u>: Address motorist and pedestrian safety problems at the Flagpole intersection.
- Proposed Improvement Recommendation: Propose to ConnDOT the implementation of the signalized improvement concept for this intersection, as described in the attached figure, in which the currently eastbound West Street will be converted to two-way operation, and the currently westbound West Street will be closed off to

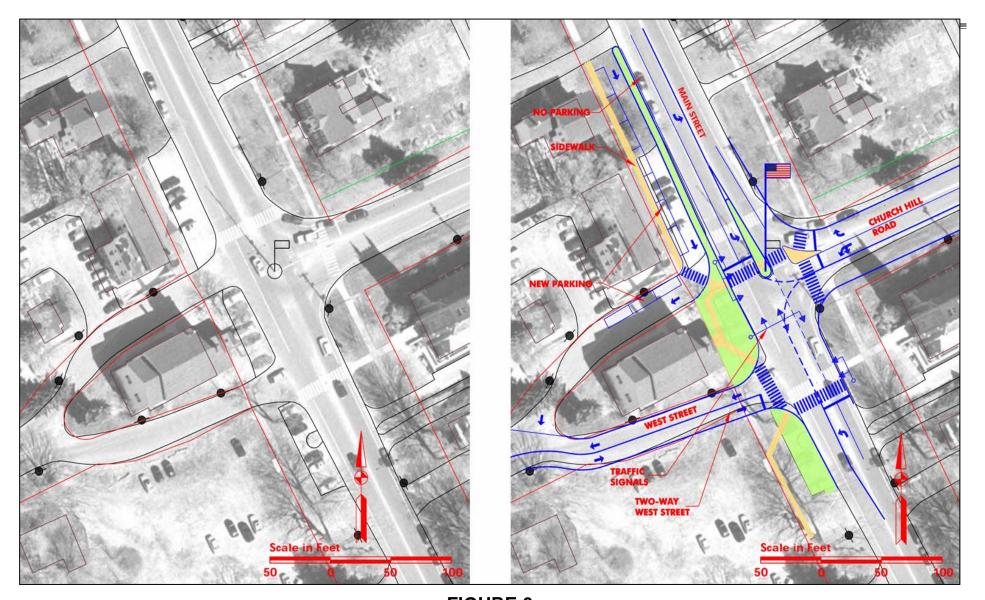


FIGURE 6
INTERSECTION OF CHURCH HILL ROAD (RT 6), MAIN STREET (RT 25) & WEST STREET(S)
FLAGPOLE INTERSECTION - SIGNALIZATION IMPROVEMENT OPTION

through traffic and be used for parallel parking, accessible via a driveway from Main Street.

There would be a loss of parking spaces in front of the Meeting House, however the visual quality of this landmark would be enhanced with the addition of a front lawn. The lane configuration shown in this report is based on 2006 traffic volumes.

 Issue I2: Address community concerns for preserving the historical and visual character of the Flagpole intersection.

<u>Proposed Improvement Recommendation</u>: Discuss the need for improvements to this intersection and the desire to preserve the historic character and beauty of this location with the Borough Historic District Commission.

J. Extension of Commerce Road to Wasserman Way

- Issue J1: Address the need to provide alternative travel routes within and through the study area.
- Proposed Improvement Recommendation: Propose the development of this road. While it may not significantly reduce traffic in the center of town, it will help alleviate pressures on Queen Street and Glover Avenue, and future travel patterns will adjust to the presence of this new connector road between Church Hill Road and Wasserman Way/Mile Hill Road. The 1992 and 2004 Town Plans of Conservation and Development recommended the consideration of the extension of Commerce Road to Wasserman Way. The environmental impacts of such an extension should be considered, including an understanding of any affects to Deep Brook and the Pootatuck River, and remedial actions if required.

K. Automated Traffic Enforcement Technology

- <u>Issue K1</u>: Address speeding and other traffic control problems.
- Proposed Improvement Recommendations:

Propose the consideration of automated speed control devices at test locations within the Study Area to the Town's Board of Police Commissioners. Such devices indicate the speeds of approaching vehicles. Monitor the effectiveness of these devices to reduce speeding and assess their potential for application in other areas of Town.



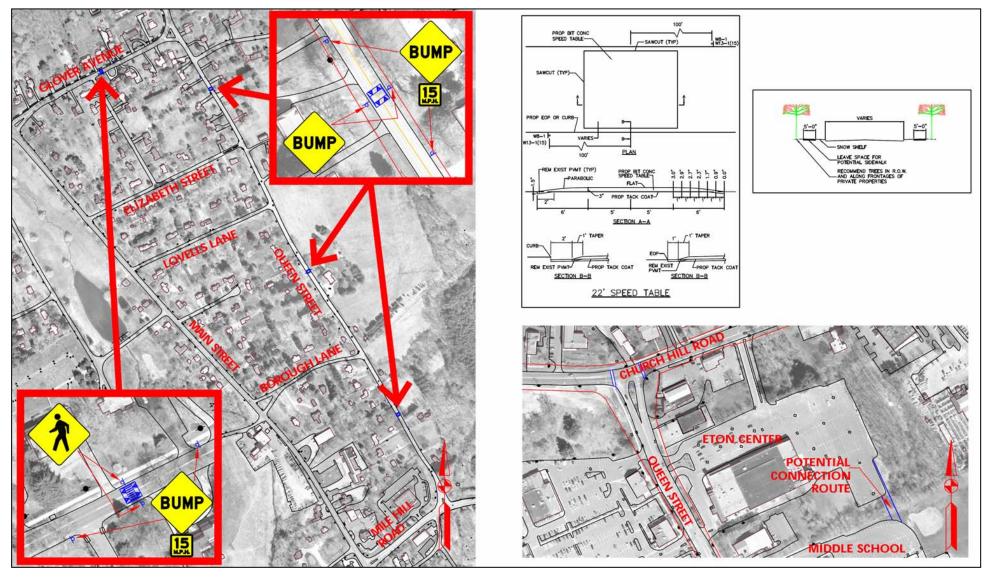


FIGURE 7

TRAFFIC CALMING DETAILS AND
POTENTIAL NEW ACCESS TO MIDDLE SCHOOL NORTH PARKING LOT

- Issue K2: Address speeding and other traffic control problems.
- Proposed Improvement Recommendations:
 The recording of license plate photos for traffic control enforcement is not currently permissible in Connecticut. Monitor the technical and legal aspects of such practice for future consideration.

L. Study-Area Traffic Enforcement Program

- Issue L1: Address speeding and other traffic control problems.
- Proposed Improvement Recommendations: Propose the development of a "zero-tolerance" traffic enforcement program within the Queen Street Study Area to the Town's Board of Police Commissioners. Adequate signing of the enforcement area should be provided. This could be implemented as a first step to a phased town-wide program.

M. Consider New Access to the Queen Street Middle School North Parking Lot

- <u>Issue M1</u>: Address pickup and drop-off congestion and safety concerns at the Middle School.
- Proposed Improvement Recommendations: Consider implementing a recommend-dation from the 2003 Pedestrian Safety Improvement Plan for Queen Street which suggested the investigation of a new bus and parent pickup/drop-off route between the north parking lot of the Middle School and Church Hill Road, via the Eton Center parking lot. New vehicle movements between the two lots might help to relieve congestion at the school's driveways on Queen Street during pickup and drop-off periods. School-related traffic should not conflict with customer access and parking at the Eton Center. These considerations could be addressed during the anticipated redesign of this commercial plaza.

III.TRAFFIC IMPROVEMENT PLAN, BUDGET AND SCHEDULE

The overall Project Summary and Cost Estimates for the Queen Street Area Traffic Improvement Plan are included in Table 1, along with a description of potential funding sources. A Project Schedule of recommended improvements is included in Table 2.

Excluding the Commerce Road extension project, the total estimated cost of the recommended improvements is \$1,894,800. These improvements would be funded through a combination of local, state/federal and private resources. It is recommended that once the Town and Borough have selected which improvement options to support, that a comprehensive funding request be prepared, with HVCEO's support, and presented to the Connecticut Department of Transportation for the funding of a coordinated program of area wide transportation improvements under the Federal Surface Transportation Program.

Cost estimates are "order of magnitude" estimates based on 2006 information. Construction costs, especially material costs, may increase in the future and result in higher expenses.

QUEEN STREET AREA TRAFFIC IMPROVEMENT PLAN

Table 1 - Project Summary and Cost Estimates

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					Total Cost	Near Term (0- 5 Years) Cost Estimate* (Town Funding	`	Long Term (Over 5 Years) Cost Estimate* (State and Federal	Potential State and Federal Source: Surface Transpor-	
Area	Code	Improvement	Benefit	Impact	Estimate*	Sources)	Sources)	Sources)	tation Program	Lead Agency
	A1	Implement on-going sidewalk project.	Pedestrian		Unknown				STP	Town
	A2	Paint Crosswalks across driveways.	Pedestrian		\$3,000	\$0	\$3,000		STP	Town
A. Church Hill Road	A3	Paint Crosswalks across intersections.	Pedestrian		\$10,000	\$0	\$10,000		STP	Town
	A4	Complete Sidewalk Connections on Church Hill Road between Queen Street and Main Street.	Pedestrian		\$200,000	\$0	\$200,000		STP	Town/Borough
	B1	ConnDOT will install pedestrian signals.	Pedestrian		\$0	\$0	\$0			ConnDOT
B. Queen Street and Church Hill Road	B2	Stamped distinct crosswalks on Church Hill Road.	Pedestrian		\$10,000	\$0	\$10,000		STP	ConnDOT / Town
Intersection	B3	Stamped distinct crosswalks on Queen Street.	Pedestrian		\$10,000	\$0	\$10,000		STP	Town
	B4	Sidewalks on the southeast corner of the intersection.	Pedestrian		\$20,000	\$0	\$20,000		STP	Town
	C1	Paint Crosswalks across commercial driveways.	Pedestrian		\$3,000	\$0	\$3,000		STP	Town
	C2	Paint Crosswalks across intersections.	Pedestrian		\$10,000	\$0	\$10,000		STP	Town
	C3	Seek cross access among paint store, bakery and Eton Center. Alternatively, narrow the throats of driveways.	Safety and Pedestrian		\$0	\$0	,			Town / Borough / Private Owner
	C4	Request bank to make handicap sidewalk improvement.	Pedestrian		\$2,500	\$0				Town / Borough / Private Owner
	C5	Provide handicap ramp on the corner of "My Place."	Pedestrian		\$1,000	\$1,000				Town / Borough / Private Owner
	C6	Distinct crosswalks at the Big "Y" intersection.	Pedestrian		\$15,000	\$15,000				Town / Borough / Private Owner
	C7	Exclusive pedestrian phase and additional pedestrian signals at the Big "Y" intersection.	Pedestrian		\$35,000	\$35,000				Town / Borough / Private Owner
	C8	Remove landscaping obstructing sight lines.	Safety		\$200	\$200				Town / Borough / Private Owner
	C9	"Do Not Enter" signs at the southern Eton Center driveway.	Safety		\$800	\$800				Town
	C10	Remove a short section of sidewalk in front of the Middle School leading to Queen Street.	Pedestrian		\$800	\$800				Town
C. Queen Street:	C11	New sidewalk from Middle School entrance to Queen Street sidewalk near northernmost school driveway entrance.	Pedestrian		\$20,000	\$20,000				Town
South of Church Hill Road Intersection to Intersection with Mile Hill Road.	C12	Town to install a speed reducing table and crosswalk and signs on the north side of the southernmost driveway entrance to the Middle School. Provide handicap ramp and appropriate curbing near the proposed speed reducing table. Consider pedestrian operated flashing warning signs.	Pedestrian	Potential noise	\$20,000	\$20,000				Town
	C13	Reconstruct the southernmost driveway to the Middle School.	Safety		\$5,000	\$5,000				Town
	C14	Three-way stop-controlled "T" intersection for the intersection of Glover Avenue and Queen Street.	Safety		\$100,000	\$0	\$100,000		STP	Town
	C15	Traffic Calming Committee to consider speed reducing tables on southern Queen Street.	Safety	Potential noise	\$22,000	\$0	\$22,000		STP	Town
	C16	Uniform pavement width for southern Queen Street.	Safety and Pedestrian		\$200,000	\$0	\$200,000		STP	Town
	C17	Sidewalk on the west side of southern Queen Street.	Pedestrian		\$300,000	\$0	\$300,000		STP	Town / Borough
	C18	Planting trees along southern Queen Street.	Safety and Pedestrian		Unknown					Town / Garden Club / Owners
	C19	Improve school zone signing.	Safety and Pedestrian		\$1,500	\$1,500				Town
	C20	Add sidewalk on the east side of Queen Street from the southern most Middle School driveway to pedestrian crosswalk at rebuilt intersection with Glover Avenue.	Pedestrian		\$20,000	\$0	\$20,000		STP	Town

Table 1 - Continued Project Summary and Cost Estimates										
Area	Code	Improvement	Benefit	Impact	Total Cost Estimate	Near Term (0-	Near Term (0- 5 Years) Cost Estimate (State and Federal Sources)		Potential State and Federal Source: Surface Transpor- tation Program	Lead Agency
		DOT to evaluate the feasibility of a signal. If a signal		•		ĺ	Í	,		<u> </u>
D. Queen Street and Mile Hill Road Intersection	D1	is not warranted, provide geometric improvement to the throat of Queen Street at Mile Hill Road and provide a westbound deceleration lane on Mile Hill Road.	Safety		\$250,000	\$0	\$250,000		STP	ConnDOT
E. Glover Avenue	E1	Traffic calming committee to consider speed reducing table with crosswalk on Glover Avenue east of Meadow Street.	Safety and Pedestrian	Potential noise	\$5,000	\$5,000				Town
	E2	Uniform pavement width for Glover Avenue.	Safety and Pedestrian		\$100,000	\$0	\$100,000		STP	Town
	F1	Provide geometric improvement to the throat of Glover Avenue.	Safety and Pedestrian		\$20,000	\$0	\$20,000		STP	ConnDOT / Town
F. Glover Avenue and Main Street Intersection	F2	Address pedestrian safety at this intersection.	Pedestrian		\$20,000	\$0	\$20,000		STP	ConnDOT / Town
	F3	Collect baseline ADT and speed information for Glover Avenue.	Safety and Pedestrian		G1					Town
G. <u>Borough Lane/Lovells</u> <u>Lane/Elizabeth</u> Street/Meadow Road	G1	Collect baseline ADT and speed information; consider traffic calming measures if needed.	Safety and Pedestrian		\$15,000	\$15,000				Town
	H1	Add sidewalk in front of the police station.	Pedestrian		\$60,000	\$0	\$60,000		STP	Town / Borough
H. Main Street	H2	Provide curb bump-out at the crosswalk on Main Street in front of the Town Hall. Consider flashing pedestrian signs activated by push buttons.	Pedestrian		\$10,000	\$0	\$10,000		STP	ConnDOT / Town
Ti. <u>Want Street</u>	H3	Consider replacing existing angle parking with parallel parking on Main Street. Alternatively, explore the option of angle parking that allows drivers to back into stalls.	Safety		\$0	\$0				Town
i. <u>Main Street and</u> <u>Church Hill Road -</u>	l1	Signalization and landscape improvement to the Flagpole intersection.	Safety and Intersection Capacity		\$400,000	\$0	\$400,000		STP	ConnDOT / Town / Borough
Flagpole Intersection	12	Seek input from Borough Historic District Commission.	Preserve Historic Main Street		\$0	\$0				Borough
J. Extension of Commerce Road to Wasserman Way	J1	Implement Commerce Road Extension to Wasserman Way.	Alternative Route and Safety	Potential environmental impact	Unknown			X	STP	Town
K. Automated Traffic	K1	Consider automated speed control devices.	Safety	Technical and legal considerations	Unknown					Town
Enforcement Technology	K2	Consider devices recording license plate photos for speed enforcement, as laws permit.	Safety	Technical and legal considerations	Unknown					Town
L. Study-Area Traffic Enforcement Program	L1	"Zero-tolerance" traffic enforcement program for the study area (Cost for signing only, not including manpower).	Safety and Pedestrian		\$5,000	\$5,000				Town
M. <u>Middle School Access</u>	M1	Explore new access connection to Church Hill Road via the Eton Center parking lot.	Alternative route and safety		Unknown					Borough / Town / Private Owner
Total**					\$1,894,800	\$124,300	\$1,768,000			
*Order of Magnitude Cost Estimates					**(Not Including Extension of Commerce Rd					

QUEEN STREET AREA TRAFFIC IMPROVEMENT PLAN

Table 2 - Project Schedule

	lable 2 - Project Schedule									
Area	Code	Improvement	2006	2007	2008	2009	2010	2011	Beyond 2011	
	A1	Implement on-going sidewalk project.								
	A2	Paint Crosswalks across driveways.								
A. Church Hill Road	A3	Paint Crosswalks across intersections.								
	A4	Complete Sidewalk Connections on Church Hill Road								
		between Queen Street and Main Street.								
	B1	ConnDOT will install pedestrian signals.								
B. Queen Street and	B2	Stamped distinct crosswalks on Church Hill Road.								
Church Hill Road Intersection	B3	Stamped distinct crosswalks on Queen Street.								
	B4	Sidewalks on the southeast corner of the intersection.								
	C1	Paint Crosswalks across commercial driveways.								
	C2	Paint Crosswalks across intersections.								
	С3	Seek cross access among paint store, bakery and Eton Center. Alternatively, narrow the throats of								
		driveways.								
	C4	Request bank to make handicap sidewalk								
	C4	improvement.								
	C5	Provide handicap ramp on the corner of "My Place."								
	C6	Distinct crosswalks at the Big "Y" intersection.								
		Exclusive pedestrian phase and additional pedestrian								
	C7	signals at the Big "Y" intersection.								
	C8	Remove landscaping obstructing sight lines.								
		"Do Not Enter" signs at the southern Eton Center							+	
	C9	driveway.								
		Remove a short section of sidewalk in front of the								
	C10	Middle School leading to Queen Street.								
		New sidewalk from Middle School entrance to Queen								
	C11	Street sidewalk near northernmost school driveway								
		· ·								
C. Queen Street		entrance. Town to install a speed reducing table and crosswalk								
O. Queen once		and signs on the north side of the southernmost								
		S S								
	C12	driveway entrance to the Middle School. Provide								
		handicap ramp and appropriate curbing near the								
		proposed speed table. Consider push button activated								
		flashing warning signs.								
	C13	Reconstruct the southernmost driveway to the Middle School.								
		Three-way stop-controlled "T" intersection for the								
	C14	intersection of Glover Avenue and Queen Street.								
	C15	Traffic Calming Committee to consider speed reducing								
	0.10	tables on southern Queen Street.								
	C16	Uniform pavement width for southern Queen Street.								
	C17	Sidewalk on the west side of southern Queen Street.								
	C18	Planting trees along southern Queen Street.								
	C19	Improve school zone signing.								
		Add sidewalk on the east side of Queen Street from								
	C20	the southernmost Middle School driveway to								
	020	pedestrian crosswalk at rebuilt intersection with Glover								
		Avenue.								
		DOT to evaluate the foodbillt of a size of the size of								
D 0		DOT to evaluate the feasibility of a signal. If a signal is								
D. Queen Street and Mile	D1	not warranted, provide geometric improvement to the								
Hill Road Intersection	יכ	throat of Queen Street at Mile Hill Road and provide a								
		westbound deceleration lane on Mile Hill Road.								
		Traffic calming committee to consider speed reducing							1	
	E1	table with crosswalk on Glover Avenue east of Meadow				1				
E. Glover Avenue	-'	Street.				1				
	E2	Uniform pavement width for Glover Avenue.				1			 	
	ᆫᄼ	Ormonn pavornent width to Glover Avenue.								

	Table 2 - Project Schedule Continued										
Area	Code	Improvement	2006	2007	2008	2009	2010	2011	Beyond 2011		
F. Glover Avenue and	F1	Provide geometric improvement to the throat of Glover Avenue.									
Main Street Intersection	F2	Address pedestrian safety at this intersection.									
	F3	Collect baseline ADT and speed information for Glover Avenue.									
G. Borough Lane/Lovells Lane/Elizabeth Street/Meadow Road	G1	Collect baseline ADT and speed information; consider traffic calming measures if needed.									
	H1	Add sidewalk in front of the police station.									
H. Main Street	H2	Provide curb bump-out at the crosswalk on Main Street in front of the Town Hall. Consider flashing pedestrian signs activated by push buttons.									
T. IVALITI ORIGIN	H3	Consider replacing existing angle parking with parallel parking on Main Street. Alternatively, explore the option of angle parking that allows drivers to back into stalls.									
i. <u>Main Street and</u> Church Hill Road -	l1	Signalization and landscape improvement to the Flagpole intersection.									
Flagpole Intersection	12	Seek input from Borough Historic District Commission.									
J. Extension of Commerce Road to Wasserman Way	J1	Implement Commerce Road Extension to Wasserman Way.									
K. Automated Traffic	K1	Consider automated speed control devices.									
Enforcement Technology	K2	Consider devices recording license plate photos for speed enforcement, as laws permit.									
L. Study-Area Traffic Enforcement Program	L1	"Zero-tolerance" traffic enforcement program for the study area (Cost for signing only, not including manpower).									
M. <u>Middle School Access</u>	M1	Explore new access connection to Church Hill Road via the Eton Center parking lot.									