

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DESIGN**

CONFERENCE REPORT

PROJECT: LYME
X-A000(887)
15695
NH 10 / East Thetford Road Safety Improvements Study

DATE OF CONFERENCE: June 16, 2010

LOCATION OF CONFERENCE: Lyme Town Office

ATTENDED BY:	<u>NHDOT</u>	<u>Others</u>
	C. Green	N. Miller - UVLSRPC
	M. Dugas	Residents and officials (list attached)
	A. Hanscom	
	B. Campbell	

SUBJECT: Public Informational Meeting

NOTES ON CONFERENCE:

Nate Miller opened the meeting with introductions and discussed the process that had been used to identify alternatives for safety improvements at the intersection and the consensus that had been reached with the Working Group members. He noted that the Working Group had been formed in January 2010, and there had been two meetings since. A meeting in February consisted of identifying problems and concerns, as well as brainstorming alternatives for the Department to study. The second meeting of the Working Group consisted of evaluating the alternatives and reaching a consensus on the preferred alternative to present at a Public Informational Meeting.

C. Green provided an overview of the Highway Safety Improvement Program (HSIP). The purpose of HSIP is to reduce the number of fatal or serious injury crashes on New Hampshire roadways. The New Hampshire Department of Transportation receives approximately \$5.5 million per year to implement safety improvements in locations where accident data indicates safety deficiencies. The selection of HSIP candidate projects is largely data-driven and the funds must be used in locations that have a demonstrated safety need. This intersection had been a location where District 2 and the Bureau of Traffic had indicated a need to improve safety. This was further supported by input from the Town Officials and Working Group.

C. Green provided an overview of the Route 10/East Thetford Road intersection and recapped the problems identified at the Working Group's first meeting in February. The problems at the intersection include:

- Expansive pavement with poor definition/traffic markings leads to conflicting traffic patterns

- Intersection geometry that facilitates speeding and unsafe turning movements from NH Route 10 Southbound onto East Thetford Road
- On the Common is the fourth leg of the intersection with a geometry that adds to the conflicting turns
- Lack of bicycle and pedestrian facilities
- Driveways at the intersection that create additional traffic conflict points
- Inadequate sight distances for vehicles turning from East Thetford Road and On the Common onto NH Route 10
- Snow removal of the wide expanse of pavement results in high snow banks that restrict sight distance.

M. Dugas reported that, following the Working Group’s February meeting, NHDOT staff developed three design alternatives for consideration based on concept sketches provided by the Working Group.

M. Dugas provided an overview of “Alternative #1,” noting that the alternative was based on a sketch provided by a local architect at the first Working Group meeting. This alternative shows a combination of triangular median islands that would channelize the traffic turning onto and from East Thetford Road. M. Dugas discussed the pros and cons of Alternative #1:

Pros of Alternative #1	Cons of Alternative #1
<ul style="list-style-type: none"> • Reduces the expansive pavement at the intersection 	<ul style="list-style-type: none"> • Does not provide adequate turning radius for trucks turning onto East Thetford Road from NH Route 10 Northbound
<ul style="list-style-type: none"> • Channelizes traffic turning onto and from East Thetford Road 	<ul style="list-style-type: none"> • Creates additional traffic conflict points
<ul style="list-style-type: none"> • Dual medians help to prevent traffic traveling southbound on NH Route 10 from speeding onto East Thetford Road. 	<ul style="list-style-type: none"> • Significantly impacts the “Little Common” area of the village, which is on the National Register of Historic Places
	<ul style="list-style-type: none"> • Creates difficulties exiting the park-and-ride and bank driveways to NH Route 10

M. Dugas continued, with an overview of “Alternative #2.” This alternative would shift East Thetford Road significantly to the southwest. Much of the pavement in front of the park-and-ride facility and bank building would be removed and replaced with a curbed, planted “bump out.” As a result, the geometry becomes more like that of a traditional four-way intersection. The driveway to the Mascoma Bank Building would be connected to the park-and-ride facility driveway. Thus, the building would no longer have direct access to East Thetford Road. M. Dugas discussed the pros and cons of Alternative #2:

Pros of Alternative #2	Cons of Alternative #2
<ul style="list-style-type: none"> • Reduces the expansive pavement at the intersection 	<ul style="list-style-type: none"> • Significantly impacts the “Little Common” area of the village, which is on the National Register of Historic Places
<ul style="list-style-type: none"> • Improves sight distances for drivers turning onto and from East Thetford Road. 	<ul style="list-style-type: none"> • Reduces access to the Mascoma Bank building and results in a problematic driveway configuration

<ul style="list-style-type: none"> • Slows traffic turning from NH Route 10 Southbound onto East Thetford Road 	
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M. Dugas noted that Alternative #2 has very significant impacts on the “Little Common” area of Lyme’s village. The NHDOT Bureau of Environment has researched the Little Common and found that it is part of the National Register of Historic Places. As a result, it is considered a “Section 4(f)” property by the federal government. Regulatory agencies will not allow impacts to the Little Common unless NHDOT demonstrates that there is no other prudent or feasible alternative that would avoid impacts to the property.

M. Dugas then presented “Alternative #3,” which accomplishes many of the same goals as Alternative #2 with minimal impacts to the Little Common. Pavement in front of the park-and-ride facility and bank building would be removed and replaced with a planted “bump out.” On the common would be shifted slightly to the northeast to align with East Thetford Road, and the existing On the Common median would be removed. The pavement removal results in the formalization of a more traditional 4-way intersection. Drivers would be forced to slow down to take a right from NH Route 10 Southbound onto East Thetford Road. A small median on East Thetford further calms traffic and provides a refuge for pedestrians crossing East Thetford Road. M. Dugas discussed the pros and cons of Alternative #3:

Pros of Alternative #3	Cons of Alternative #3
<ul style="list-style-type: none"> • Avoids significant impacts to the “Little Common” area of Lyme Village, which is on the National Register of Historic Places 	<ul style="list-style-type: none"> • Bank driveway may need to be slightly shifted to the west to allow for vehicles to exit to NH Route 10 southbound via East Thetford Road
<ul style="list-style-type: none"> • Reduces the expansive pavement at the intersection 	
<ul style="list-style-type: none"> • Calms traffic turning from NH Route 10 Southbound onto East Thetford Road 	
<ul style="list-style-type: none"> • Maintains direct access for park-and-ride and bank building 	
<ul style="list-style-type: none"> • Median provides a refuge for pedestrians crossing East Thetford Road 	

The meeting was then opened up to the public for questions and comments.

A number of attendees felt the raised concrete island proposed for E. Thetford Road (Alternative #3) would detract from the historic nature of the Common. Some preferred that it be removed and some preferred that it be retained with a planting area instead of concrete. Considerable discussion took place. Some felt the stop sign on the island would obstruct the view of the Common. There was a suggestion that the raised island should be eliminated and only painted.

Response: The raised island provides several safety benefits including providing a refuge for pedestrians crossing E. Thetford Road; providing positive guidance for turning traffic, particularly large trucks and keeping them from encroaching on traffic on E. Thetford Road waiting to turn onto NH 10; and provides an area for an added stop sign (for flanking stop signs) for safety on the curve approaching the NH 10 intersection.

Resolution: The raised island will be provided, and will be an area for plantings by the Town.

A number of people felt the Bank drive should not be connected to E. Thetford Road. They felt there would be too many conflicts where people turning and entering on E. Thetford Road would conflict with people entering and exiting the Bank drive. They also felt that combining the Bank drive with the park and ride drive (shown in Alternative #2) and having the drive off of NH 10 was preferable over coming out onto E. Thetford Road. A representative for the owner of the Bank property stated that the owner would be receptive to interconnecting the drives.

Response: The Bank drive was configured to give the Bank its own access onto the highway (E. Thetford Road) and put in a location as far from the intersection as possible within the property limits. If the owner of the Bank were interested in combining the Bank drive to the park and ride drive then this could be considered.

Resolution: The Department will work with the owner of the Bank property to determine the possibility of interconnecting the Bank drive and the park and ride drive. If an agreement can be reached with the owner of the Bank property and can be done without creating a safety problem, this will be included in the project.

Some attendees preferred Alternative #2, feeling that it provided a flatter curvature on E. Thetford Road as it approached the intersection. Considerable discussion took place, with some feeling that the historic restrictions could be overcome.

Response: The relocation of E. Thetford Road southerly would have an impact onto the "Little" Common, which is a contributing element of the Lyme Common Historic District and is listed in the National Register of Historic Places. Any impacts to the Common would require a Section 4(f) evaluation as to the prudence and feasibility of the impact. Since there are federal funds involved and there is an alternative (Alternative #3) that avoids impacts to the historic Common while still reasonably addressing the safety issues, it would be very unlikely that an alternative that shifts E. Thetford Road (southerly and impacting the Common) would receive approval by the State and Federal regulatory agencies.

Resolution: Alternative #3, which avoids impacts into the historic Common will be the alternative the Department will move forward with.

There was a suggestion that a roundabout be considered instead of the current alternatives being presented.

Response: The intent of the Highway Safety Improvement Program is to provide modest safety improvements that have a significant cost benefit with addressing the safety. In this location, the number of crashes that have occurred would not warrant a large expenditure of public funds to address this safety need. The cost for the alternatives under consideration would have a positive cost benefit in addressing the safety and is felt to be an appropriate expenditure for this location. C. Green noted that this safety improvement did not preclude the Town from pursuing a roundabout in the future.

One attendee suggested that the intersection be made into a four-way stop to help reduce speeds through the intersection.

Response: A. Hanscom noted that four-way stops are not considered appropriate for use as speed control measures. They are only considered in locations where all four approaches need to stop.

There was concern expressed regarding the curvature (shown in Alternative #3) of the E. Thetford Road intersection, and the ability of drivers negotiating the curves and also a concern for cyclists being pushed over off the pavement due to the tight curvature.

Response: The geometry of the intersection was intended to fit within the constraints of the Historic resources and within the existing pavement, thus not requiring shifting the pavement edge towards

private property. A. Hanscom agreed to layout the curvature on E. Thetford Road on a temporary basis to give the community an idea of what it would look like. Due to the upcoming events in the community, this will take place in mid to late July.

Resolution: District 2 will provide a temporary layout of the E. Thetford Road curvature for a short period of time to give the residents an opportunity to view it.

One attendee asked if any additional pavement could be provided on the inside of the NH 10 curve to provide a place for cyclist to ride. Today cyclists ride in a very narrow shoulder, which is further restricted by a utility pole and catch basin.

Response: The Department is investigating the possibility of shifting the NH 10 centerline alignment slightly (1 to 2 feet) to the north, which will provide added shoulder width for cyclists, particularly near the utility pole opposite Stella's Restaurant.

Resolution: Investigate an alignment shift for NH 10.

There was some discussion regarding pedestrians and how to best provide for their safety at the intersection. Some felt sidewalks should be provided along with a crosswalk on E. Thetford Road.

Response: N. Miller noted that the inclusion of a sidewalk in the area of the intersection was an issue for the Town to resolve. Any sidewalk would require the Town to acquire equipment to maintain the sidewalks. C. Green noted that the Town would be required to enter into a sidewalk agreement agreeing that they would be responsible for the maintenance of the sidewalks after they were constructed. Some attendees felt a crosswalk could be provided on E. Thetford road without a sidewalk being provided. C Green agreed to contact the Bureau of Traffic for their input on that request.

Resolution: C Green will contact Bureau of Traffic regarding including a crosswalk on E. Thetford Road if sidewalks are not provided. The Town will determine if they will want sidewalks included as part of the project. C. Green agreed to have the sidewalks added to the concept plan as a future effort by others.

One attendee asked if the pothole at the northern end of the park and ride could be filled in.

Response: A. Hanscom agreed to look into it.

N. Miller called for consensus that Alternative #3, amended as discussed, be formally recommended to NHDOT. The attendees concurred on Alternative #3 as the preferred alternative for the project, with changes as discussed. It was agreed that the Department would move forward, and that another public informational meeting would not be necessary, unless there were additional concerns brought to the Town's attention once the temporary layout was observed.

Submitted by:

Craig A. Green, PE
Administrator, Highway Design

cc: W. Cass, C. Green, W. Lambert

MEETING ATTENDANCE

PROJECT Lyme: NH 10 / East Thetford Road intersection safety improvements
LOCATION Lyme Town Office
PROJECT NO. X-A000(887) 15695
 Federal State

Name	Agency or Address	Comments
NATHAN MILLER Dick James Pauline Reed Sima Cur Earl Street Bob Abbott Dan Okura Alan Hanscom Colin Robinson MURRAY MURDY Lynda Co- Jack Smith Kelley Monahan JOHN BILLOTT Rebecca Gray ED CAMP	UULSRPC Lyme Selectboard (Chair) Lyme Police Chief Lyme Selectboard Lyme Resistor/Commission Lyme - On the Common Lyme - D.C. Hwy NH DOT Dist 2 Union St Lyme 4 EAST THETFORD RD LYME 522 River Road 24 Union St Oxford Planning board volunteer 2 EAST THETFORD RD. 1 Main St (Massena Bank) " " NH DOT Highway Desig 14 Franklin Hill Rd, Lyme PO Box 107, Lyme Ctr. HANOVER RIGHT ANGLE ENGINEERING 21 Flint Hill Rd 45 Dorchester - Planning Bd	NO ROUND-A-BOUT? SIDEWALKS ??? PROGRAM SAKK17. This is a perfect place for a round-a-bout round about? combined access from commercial property roundabout with additional community funding