

July 27, 2011

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

CONFERENCE REPORT

PROJECT: Fitzwilliam
16211
NH 12/ NH 119 intersection safety improvements

DATE OF CONFERENCE: July 18, 2011

LOCATION OF CONFERENCE: Highway Design Large Conference Room

ATTENDED BY: DEPARTMENT OF TRANSPORTATION

Butch Knowlton	Mike Dugas	Steve Babalis
Craig Green	Ted Kitsis	Bill Lambert
Lennart Suther	Chuck Schmidt	Doug Gosling

Doug Graham, John Kallfelz (District 4) and Tim Murphy (SWRPC) were present through teleconference

SUBJECT: Front Office Project Introduction

Mike Dugas introduced the Fitzwilliam 16211 project. The objective of this project is to investigate and apply safety improvements at the intersection of NH 12/ NH 119. The intersection was previously part of the Ten Year Plan but was removed when the Ten Year Plan was reduced in 2009. The Ten Year Plan initially had \$2,100,000 dollars allocated for the project construction. The intersection is eligible for limited Highway Safety Improvement Program funding due to a recent Road Safety Audit that was undertaken by the Southwest Region Planning Commission and the Town of Fitzwilliam.

The intersection is located 12 miles southeast of Keene. The two roadways cross at a 140° angle. NH 119 is stop controlled on both approaches. The NH 12 speed limit at the intersection is 35 mph, but further north and south the speed limit is 50 mph. The NH 119 speed limit at the intersection is 30 mph. Jaffrey Road links NH 12 and NH 119 400 feet northwest of the intersection. The intersection has a flashing beacon. Mr. Mike's Store and gas station is located in the northeast quadrant. The intersection meets the MUTCD signal warrants for traffic volume (warrants one and two), and crash history (warrant seven).

The preferred alternative is signalizing the existing intersection and closing the northern Jaffrey Road Extension approach as this would improve the safety deficiencies at a modest cost and with no right of way impacts. Additional minor roadway improvements are to be investigated. The estimated cost to signalize the intersection is \$200,000. Implementing any meaningful realignment of the approaches to reduce the skew would be expensive and would impact substantial right of way.

(In the presentation, Mike incorrectly stated that signals had been recommended by the road safety audit. This was not one of the recommendations of the RSA. Nevertheless, this alternative would typically be investigated as part of any intersection improvement study.)

Discussion

Butch Knowlton commented when the intersection was initially reviewed when it was in the Ten Year Plan, intersection recognition and the surrounding drives were issues. Installing raised median islands was considered to help make the intersection more perceivable and would help control drive access. Ted Kitsis added that the queues created by the signals perform many of the same functions of a raised median. Lennart Suther added that overhead lighting would need to be investigated if median islands were to be installed.

Butch noted that to the west on NH 119 there is a steep downward grade leading into the intersection. Preliminary Design will investigate the grades and the sightlines to the signals and the backs of the queues on all approaches.

Bill Lambert felt that after discussions with the Commissioner, the need for signals should be carefully reviewed.

Mike Dugas relayed that Bill Oldenburg felt that NHDOT should meet with the team responsible for developing the RSA for their input. The signal alternative will be discussed, as well as the other recommendations that were contained in the road safety audit.

District 4 commented that parking along the NH 12 northbound roadside in front of Mr. Mike's has been an issue. They feel that if that section of roadway were curbed it would discourage parking.

Bill Lambert inquired if pedestrian facilities are being considered, and if there are any existing facilities in the vicinity of the intersection. Mike responded that there are no pedestrian facilities nearby. The RSA report commented that no pedestrians were seen during their investigation. Currently, no pedestrian facilities are being proposed.

District 4 commented that there is a crest located on the eastern NH 119 approach. The crest is rather abrupt and may limit sight distance.

Preliminary Design reviewed the NH 119 roadway profile and found that the stopping sight distance leading up to the intersection is good for 35 mph.

Both Craig Green and Bill Lambert commented that right turn lanes are not recommended for the NH 119 approaches. Due to the extreme skew of the intersection, vehicles stacked side by side will block each other's sight lines. Additional curbing may be needed to prevent informal side-by-side queuing. Truck turn paths still need to be evaluated.

Ted Kitsis asked if a construction year had yet been identified. Mike responded that construction could begin as soon as next year.

Submitted by:

Steven J. Babalis, P.E.
Preliminary Design

Noted by M. Dugas

cc: W. Cass W. Lambert W. Oldenburg
D. Graham – District 4
T. Murphy - SWRPC

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