

July 22, 2009

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

CONFERENCE REPORT

PROJECT: BRENTWOOD
X-A000(826)
15619
NH 125 / NH 111A safety improvements study

DATE OF CONFERENCE: July 7, 2009

LOCATION OF CONFERENCE: Brentwood Community Center

ATTENDED BY: <u>NHDOT</u>	<u>Others</u>
C. Green	Brentwood Selectmen
M. Dugas	Julie Stevens – Town Administrator
D. Deporter	Chief Kevin Lemoine – Brentwood F.D.
	David Walker – RPC
	Senator Jack Barnes
	Councilor Beverly Hollingworth
	approx. 20 attendees

SUBJECT: Public Informational Meeting

NOTES ON CONFERENCE:

C. Green opened the meeting by noting the Town had expressed an interest in signaling the NH 125 intersections with NH 111A and North Road. He explained these intersections were also identified recently through the work the Department had done on the Highway Safety Improvement Program (HSIP). C. Green explained that the current Federal highway funding law, known by its acronym of SAFETEA-LU, created the Highway Safety Improvement Program (HSIP) to identify highway safety issues and to provide for modest safety improvements that would achieve a significant reduction in traffic fatalities and serious injuries. The HSIP provides New Hampshire \$5.5 million per year to implement modest safety improvements in locations where crash data indicates safety deficiencies.

These particular intersections were identified through the development of the NHDOT's annual "5% Report" identifying the State's most severe safety needs. The NHDOT identified the locations with the highest crash rates for roadway segments and highest number of crashes for intersections for each functional class of roadway. These locations are among the 30 that have been selected from the 5% Report for further study. M. Dugas presented the proposed improvements at the intersection of NH 125 and NH 111A.

The existing traffic volume of 14,000 vehicles per day is projected to increase to 17,000 vpd by 2029. The NH 125 cross-section provides two through lanes and 10' wide shoulders. Twenty-six crashes were recorded near the intersection in a recent three-year period, eight of which resulted in injuries. Most of the crashes were collisions at right angles. The greatest concerns noted by the Selectmen when the project was discussed with them in January 2009 were the lack of left turn lanes on NH 125 and the difficulty entering or crossing NH 125 from NH 111A due to the heavy traffic volumes and high speeds.

The proposed improvements will signalize the intersection. Traffic counts confirm that signals are warranted. The improvements will also include providing exclusive left turn lanes on NH 125, which will be created by narrowing the 10' shoulders to 4'. The shoulders will need to be reconstructed to ensure they can bear traffic loading. Exclusive right turn lanes will also be provided on NH 125; the northbound right turn lane will be shorter than desired due to the proximity of the bridge over the Exeter River. Lengthening the right turn lane would require that the bridge be widened, which is beyond the means of this project. The pavement resurfacing will extend 700' north and south of NH 111A along NH 125, and 200' east and 300' west of NH 125 along NH 111A. Traffic operations are expected to be very good (i.e., level of service A or B) for the foreseeable future.

When the project was reviewed in January 2009, the selectmen noted that the NH 125 crest north of the intersection would limit southbound sight distance to stopped vehicles. M. Dugas explained that the sight distance available to the back of the expected queue will be approximately 800'; the required stopping sight distance for a 50 mph approach speed is 425'. The selectmen had also noted that northbound trucks starting from a stop at the new signal will struggle to accelerate due to the climbing grade north of the signal. M. Dugas explained that the grade is modest (approximately 4.4%) and relatively short (about 1,000'). A climbing lane is not proposed because it would be beyond the means of this program, and would likely encourage passing and aggressive driving. Slow trucks would be able to pull to the side just beyond the intersection if needed.

Senator Barnes asked about the project schedule. C. Green answered that the project would likely be advertised for construction in October 2009 with most of the work occurring in 2010.

An attendee noted that peak season queuing could be longer than anticipated, and recommended that a "Signal Ahead" sign with beacons be installed north of the crest on NH 125. C. Green responded that he would pose the question to the Traffic Engineer.

Fire Chief Kevin Lemoine commented that the Town proposes to relocate the fire station to the northwest quadrant of the intersection. He asked that the signal controller cabinet be located to permit the fire department to link to the signal controls. He also asked that the signals include emergency preemption. C. Green responded that the Town should request in writing that the Opticom receivers be installed.

An attendee suggested that the existing passing lane south of the intersection be shortened or eliminated. C. Green answered that the Bureau of Traffic and District 6 would review the layout of the passing lane in relation to the new traffic signals.

In conclusion, C. Green mentioned that he would meet with the Selectmen at a later date to discuss and execute a Memorandum of Understanding regarding workzone traffic control.

Submitted by:

Michael J. Dugas, P.E.
Chief of Preliminary Design

MJD/mjd

cc: W. Cass, C. Green, D. Smith, W. Lambert, D. Deporter – District 6
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