

January 23, 2009

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

CONFERENCE REPORT

PROJECT: BOSCAWEN
X-A000(828)
15621
US 4 / Harris Hill Road safety improvements study

DATE OF CONFERENCE: January 14, 2009

LOCATION OF CONFERENCE: Boscawen Town Office

ATTENDED BY: <u>NHDOT</u>	<u>Others</u>
C. Green	Boscawen Selectmen
M. Dugas	Michael Wright – Town Administrator
R. Radwanski	Rodrigo Marion – CNHRPC
W. Lambert	Boscawen Police

SUBJECT: Project Review with Selectmen

NOTES ON CONFERENCE:

C. Green opened the meeting by noting the Town had expressed an interest in signaling this US 4/Harris Hill Road intersection when the US 4 bridge east of the intersection was going to be rehabilitated. He explained this intersection was 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.

This particular intersection was 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. This location is one of 30 that have been identified from the 5% Report for further study.

C. Green then asked the selectmen and attendees to discuss their observations of the problems and issues they experienced at the intersection.

- M. Wright and S. Sweeney observed that vehicular speeds on US 4 are high; traffic does not observe the 35 mph zone through the intersection.
- S. Sweeney added that there can be long AM queues on Harris Hill Road. Also, there is no speed limit sign on US 4 eastbound between Harris Hill Road and the Merrimack River bridge to remind traffic entering from Harris Hill Road of the 35 mph speed limit.
- Peak hour traffic volumes are very high, with the principal turning movements being the heavy right turns from Harris Hill Road in the morning and the left turns from US 4 in the evening.
- Some vehicles turning right from Harris Hill Road carry too much speed into their turn, and their momentum can propel them into the westbound left turn lane on US 4.
- W. Lambert stated that school buses headed from Loudon to the middle and high schools in Penacook make the westbound left turn in the morning against the heavy opposing traffic on US 4.
- M. Wright recommended that traffic signals be installed and that the northbound right turn slip ramp be retained but modified to create a merge rather than a yield condition at its intersection with US 4 eastbound. He also suggested that the 50 mph speed limit between Harris Hill Road and US 3 be reduced.
- W. Lambert noted that the Town has been studying ways to improve access to River Road by providing a new connection to US 4 either at Harris Hill Road (where grades would make the connection very difficult) or between Harris Hill Road and US 3.
- He also mentioned that because the right of way at the intersection is quite wide a roundabout could be considered rather than a traffic signal.
- S. Sweeney suggested that trees be cleared in the southwest corner of the intersection to improve the sight line to the left from Harris Hill Road.

M. Dugas provided a brief explanation of roundabout design, performance, and safety, and distributed an informational pamphlet. M. Wright and the Selectmen agreed that both the signal and roundabout alternatives should be studied further. M. Wright asked that concept drawings of both alternatives be provided to the town by March 10 so they can be available for the Town Meeting.

C. Green explained that the Department would gather topographic survey and traffic counts shortly and develop the two improvement concepts, which will be presented at a spring public informational meeting. If no major issues arise at that meeting and the traffic signal is selected as the preferred alternative, because the signal conduit is already in place, it could be possible to advertise a project to install the new signals this year. The roundabout concept would require more design effort, which would likely delay the start of construction to 2010. The

project would be funded with federal and state funds only, unless there were Town utilities that were impacted by the project, which may require participation by the Town.

Submitted by:

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

MJD/mjd

cc: W. Cass, C. Green, D. Smith, W. Lambert, P. Mitchell – District 5
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