

REPORT OF THE COMMISSIONER

SWANZEY, NH
X-A000(889), 15697

NH 12/Lake Street/Swanzey Factory Road Intersection Safety Improvement

October 11, 2011

Monadnock Regional High School
Special Committee
PUBLIC HEARING

7:00 P.M.

As a result of the Public Hearing held on October 11, 2011 for the Swanzey, X-A000(889), 15697 project, the following layout with limitations to access is established as shown on the Hearing Plan and as described below:

This project will reconstruct the intersection of NH 12, Lake Street, and Swanzey Factory Road and reconfigure the intersection to a modern roundabout. The proposed reconstruction of NH 12 will extend approximately 300' to the south and 300' to the north of Lake Street for a total project length along NH 12 of approximately 600'. The improvements to the side roads will extend west on Lake Street approximately 300' from NH 12, and east on Swanzey Factory Road approximately 300' from NH 12.

This project will also construct minor improvements at the intersection of NH 12 and NH 32. The existing stockade fence and vegetation on the south side of NH 32 will be removed to improve the sight distance looking south from the intersection.

Limitations of access on NH Route 12, Swanzey Factory Road, and Lake Street were established under State Project Swanzey P-1026 and modifications are not being considered as part of this project.

The following decisions are the Department's resolution of issues as a result of the testimony presented at the October 11, 2011 Public Hearing and written testimony subsequently submitted.

- 1) Representative Gus Leraudeau, Chairman of the Swanzey Selectboard, Bruce Tatro, Chairman of the Swanzey Planning Board, Glenn Page, Swanzey Police Chief Richard Busick, Southwest Regional Planning Commission Executive Director Tim Murphy, owner of the Coach House Motel KT Patel expressed support for the project.

Response: The Department appreciates the support for the project. Coordination with the Town and abutters will continue as the final design efforts on the project move forward.

- 2) Brad and Stan Borofsky (Parcel 7 and 8), owners of Sam's Outdoor Outfitters, and Ken Colby (60 Longwood Drive), expressed concern about not being able to access the store's loading dock with the temporarily relocated section of Swanzey Factory Road in place. The proposed temporary relocation is too close to the rear door of the building's loading dock and would hinder its usage.

Response: The Department will coordinate with the Borofskys throughout the design process to determine the most suitable location for a temporary relocation that facilitates their daily operations and access to the loading dock.

- 2) Stan Borofsky, (Parcel 7 and 8), expressed concern over traffic attempting to turn left from the temporarily relocated Swanzey Factory Road onto NH Route 12 and then immediately left again to access his establishment's parking lot on NH Route 12. He requested consideration of a drive connection from the temporarily relocated Swanzey Factory Road to the back of the existing parking lot.

Response: The Department recognizes the concern expressed. During final design, the Department will evaluate alternatives to provide a connection from Swanzey Factory Road to the back of the parcel's lot and the Traffic Control Plan for the project will be developed in an effort to minimize impacts to motorists along NH Route 12, as well as to businesses and residents within the project area.

- 3) Sally Candello (Parcel 14), operator of Stromgren Plumbing and Heating, expressed concerns regarding truck access to and from her parcel along both NH Route 12 and Lake Street and the proximity of the NH Route 12 temporary widening toward the house on her property to accommodate traffic along NH Route 12 during construction. She also noted the number of trees and other vegetation that will be lost to accommodate traffic during the construction. Ms. Candello asked if the property will be returned to its original state once the temporary easements are no longer needed.

Response: The Department acknowledges the concerns expressed. The proposed traffic islands extending toward the drive entrances on the parcel are painted and should not hinder truck movements entering or exiting either of the access points to the property. Access to the property will be maintained at all times during construction. Trucking routes will need to be evaluated throughout the duration of the project and the Department will work with the property owner to make modifications to facilitate construction activities as required. The Department will continue to refine the traffic control plans through the final design process in an effort to minimize impacts and provide as much buffer as possible to existing structures while the temporary travel lane is in place. The temporary widening will be removed once the roundabout is constructed and it is no longer necessary to divert traffic for the construction. The loss of trees and other vegetation resulting from the project will be treated as elements of Right-of-Way damages and the property owner will be compensated in accordance with State and Federal law.

- 4) Katherine Snow-Ledell (on behalf of Roseanne Snow, Old Lake Street), requested that additional consideration be given to limiting property impacts on the Lake Street side of NH Route 12.

Response: The temporary property impacts for the project are those which are necessary to maintain access through the construction site and provide a safe environment for the workers, residents, and the traveling public during construction. The permanent property impacts are those that are necessary to maintain the condition and accessibility of the roadway in the future. Both temporary and permanent property impacts will be minimized as much as practicable. The majority of the required property impacts will be temporary in nature to maintain traffic throughout construction and the impacted areas will be returned as close as practical to the original state once construction has been completed. All temporary easements will expire one year following the completion of construction activities.

- 5) Dianne Paulson (15 Park Street), requested that the intersection of Park Street and NH Route 12 be signalized in an effort to slow NH Route 12 through traffic instead of completing the proposed intersection improvements at NH Route 12 / Swanzey Factory Road / Lake Street.

Response: The federal Highway Safety Improvement Program (HSIP) is a data driven program administered by the Federal Highway Administration, and any safety improvement project that utilizes these funds must have a crash history that demonstrates there is a safety problem. The NH Route 12/Lake Street/Swanzey Factory Road intersection has a crash history which meets the threshold criteria to be considered for HSIP funding. The Park Street intersection was also reviewed during the study process for the project and did not have a crash history that met the threshold criteria for using HSIP funding.

- 6) Ben Tatro (90 Kendall Lane), expressed opposition to improvements to this intersection when the intersections of Park Street and NH 32 were, in his opinion, prone to a higher number of and more severe crashes. He questioned why the Swanzey Factory Road/Lake Street intersection was selected over those.

Response: The Federal highway funding available for this project is allocated through the Highway Safety Improvement Program (HSIP). In order to qualify for HSIP funding, the project must provide for modest safety improvements in locations where crash data indicates safety deficiencies exist. The NH Route 12 /Lake Street /Swanzey Factory Road intersection was identified through the development of the NHDOT's annual Transparency

Report identifying the State's most severe safety needs; that is 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 10 intersections that have been identified from the 2008 Transparency Report for further study. The NH Route 12 intersections with Park Street and NH Route 32 were not identified in the 2008 report or subsequent reports.

- 7) Ben Tatro (90 Kendall Lane), expressed concern about encouraging pedestrian traffic along NH Route 12 once the roundabout has been constructed. He feels that pedestrians have to wait an inordinate amount of time to cross at the Winchester Street roundabout.

Response: The Department's concept is to reconstruct an existing sidewalk to accommodate pedestrians along NH Route 12 if the Town agrees to accept maintenance responsibility. The Winchester Street roundabout has a considerably higher traffic volume and roadway width than this location and the Department is only proposing to perpetuate the existing pedestrian crossing of Lake Street.

- 8) Ben Tatro (90 Kendall Lane), expressed concern about the impact that this project will have on the condition of Swanzey Factory Road.

Response: The Department acknowledges the concern expressed. This project is intended to address a safety need at the existing intersection. It is not anticipated that the safety improvements will generate additional traffic beyond what currently uses the intersection plus normal growth. Improvements to the surface of Swanzey Factory Road beyond the proposed limits are outside the scope of the project.

- 9) Don Nason (25 Longwood Drive), expressed a desire to have Swanzey Factory Road remain closed to through trucking after the intersection improvements have been completed.

Response: It is not the intent of this project to modify standing ordinances or codes set forth by either the Town of Swanzey or the City of Keene. Currently Swanzey Factory Road is posted as no through trucking and is anticipated to remain as such. The City of Keene ordinances (Sec 94-401 - Applicability) state that "*All trucks operated in the city having an empty weight of eight tons or more shall be operated only over and along the truck routes established in this division or in compliance with this chapter.*"; and Sec 94-403 – Established states "*Generally, there is hereby within the city the following truck routes; these are to be considered the state-numbered and state-maintained highways: Route 9 from the Town of Roxbury to the Town of Chesterfield; Route 10 from the Town of Gilsum to the Town of Swanzey; Route 12 from the Town of Surry to the Town of Swanzey; Route 12A from Maple Avenue to the Town of Surry; Route 32 from Route 12 to the Town of Swanzey; and Route 101 from the Town of Marlborough to Route 9.*"

- 10) Bob Rountree (Brattleboro, Vermont), requested that consideration be given to completing the work at night to limit impacts to daytime traffic volumes.

Response: The Department recognizes the difficulties the project imposes on businesses and commuters within the project area. This type of work/location does not lend itself to night work as this is a residential area. The Department's standard practice is to disallow noise from construction activities prior to 7:00 am or after 7:00 pm. In addition, no work will be allowed on Sundays or holidays without Department approval. During final design, traffic control measures and construction phasing will be developed to minimize impacts to motorists along NH Route 12, as well as to businesses and residents within the project area. In addition, completion dates will be established that minimize delays in the prosecution of the construction.

- 11) Bob Rountree (Brattleboro, Vermont), requested that consideration be given to limiting the central island landscaping to low maintenance plantings so as to not provide an eyesore should annual maintenance not be provided.

Response: The Department will discuss appropriate landscape treatments with the Town of Swanzey and the Department's Roadside Development Section of Highway Design as the design progresses.

- 12) Bob Rountree (Brattleboro, Vermont), requested that consideration be given to providing adequate pavement area for large trucks to maneuver through the intersection without running over the curb or center island.

Response: The proposed layout has been designed to accommodate the largest tractor trailer with a 53 foot trailer. Roundabouts are specifically designed to limit excessive speeds through the intersection. Accordingly, the central concrete island, or "truck apron", provides the extra width needed for the rear wheels of large trucks to off-track while maneuvering through the intersection. Beveled curb will be utilized where large trucks may need to ride up and over the curb on the center "truck apron". Entering approaches to the roundabout will have adequate width, along with rounded curb, to accommodate large trucks.

- 13) J.B. Mack, Southwest Regional Planning Commission and Glenn Page, Chairman of Swanzey Planning Board, requested that any intersection sight distance improvements proposed as part of this project for the intersection of NH Route 12 and NH Route 32 be completed sooner in the process rather than later.

Response: The Department agrees that the modest improvements proposed for the NH Route 12 and NH Route 32 intersection to increase horizontal sight distance will be completed in advance of the proposed roundabout improvements.

- 14) Bill Hutwelker (Special Committee Chairman), requested a cost comparison of the construction of a roundabout versus signalization of the intersection.

Response: The construction of the proposed roundabout is estimated to cost \$1.1 million. The construction of traffic signals at this location is estimated to cost \$400,000 and would also incur costs for regular maintenance and electricity which together would cost approximately \$2000 annually. It should be noted that the traffic volumes from Lake Street and Swanzey Factory Road do not warrant a traffic signal at this time.

- 15) Bill Hutwelker and Richard Powers (Special Committee Members), requested a comparison of the layout of the proposed roundabout to the Peterborough roundabout on NH Route 101.

Response: The Department has compiled all the requested information for further discussion with the Special Committee.

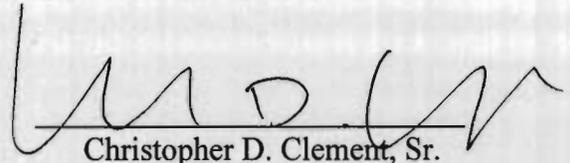
	<u>Swanzey</u>	<u>Peterborough</u>
Design Vehicle	WB-67 (53' TT)	WB-67 (53' TT)
Inscribed Diameter	120 feet	120 feet
Central Island Diameter	56 feet	60 feet
Circulating Roadway Width	16 feet	18 feet
Truck Apron Width	16 feet	12 feet
Truck Apron Curb Reveal	3 inches	1 inch
Entry Width	19 feet (NH 12)	18 feet (NH 101)
Exit Width	19 feet (NH 12)	18 feet (NH 101)
Average Daily Traffic	13,000 vpd *	8500 vpd *

* NOTE: vpd stands for Vehicles per Day

On November 8, 2011, Department staff met with the Special Committee and discussed the comparison of the design elements of the two listed roundabouts. Due to concerns about the operation of the Peterborough roundabout, the Special Committee requested that the Department investigate making 3 modifications to the Swanzey layout: increasing the inscribed diameter from 120 feet to 130 feet, increasing the circulating roadway width from 16 feet to 20 feet, and reducing the truck apron curb reveal from 3 inches to 1 inch. The Department investigated increasing the inscribed diameter and increasing the circulating roadway width and found that these increases would provide a less restrictive design, particularly for trucks, while not substantially increasing intersection speeds. Based on national criteria and engineering practice, it is reasonable to increase the inscribed diameter to 130 feet and the circulatory roadway width to 20 feet. However, the Department does not concur with reducing the truck apron curb reveal from 3 inch to 1 inch as it would encourage automobiles to travel over the truck apron thereby increasing speeds through the roundabout and compromising overall intersection safety. The Department is

prepared to reduce the curb reveal to 2 inches with the understanding that the reduced curb reveal will make future maintenance more expensive as any pavement overlays would first require pavement milling to maintain the curb reveal. Accordingly, the design will be modified to a larger, 130 foot inscribed diameter and circulatory roadway width of 20 feet.

Date: 12/5/11



Christopher D. Clement, Sr.
Commissioner
N.H. Department of Transportation