

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

PUBLIC INFORMATION MEETING

PROJECT: Keene (16152)
X-A001(056)
NH Route 9 & NH Route 10 over Elm Street
Bridge 129/099 Rehabilitation (Deck Replacement)

DATE OF MEETING: June 12, 2013

LOCATION OF MEETING: Keene City Council Chambers

ATTENDED BY: **KEENE CITY COUNCIL**

James P. Duffy
Robert J. O'Connor
Janis O. Manwaring
Ruth R. Venezia
Philip M. Jones
David R. Meader
Carl B. Jacobs
David J. Curran
Terry M. Clark
Bettina A. Chadbourne
David C. Richards

NHDOT

Robert Bob Landry (Bridge Design)
Doug Graham (District Engineer)
Joe Patusky (JWP) (Bridge Design)

Josh Lund (McFarland Johnson)

SUBJECT: Proposed Bridge Rehabilitation and Traffic Control

TRANSACTIONS AND DETERMINATIONS:

Introduction

Bob Landry introduced himself, Joe Patusky, DougGraham, and Josh Lund.

Bob explained that the purpose of the meeting was to present citizens and public officials with information regarding the proposed project and to solicit public input before proceeding with the design.

Bob indicated that the bridge is on the State's Red List of deficient bridges due to the poor condition of the bridge deck. The principal focus of the bridge rehabilitation will be the full replacement of the deck.

The project will not require local funding. 80% of the project cost will be Federally Funded. 20% of the project cost will be State funded.

The project cost is estimated to be between \$1,000,000 to \$1,500,000.

Bob turned the presentation over to Joe Patusky to describe the proposed bridge work and to read an Environmental Document on behalf of the NHDOT Bureau of Environment.

Bridge Background:

JWP presented a brief summary of the bridge, the bridge condition and the proposed Scope of Work:

- The bridge span is a 71'-3". The bridge width is 52'-10".
- Steel stringers support a reinforced concrete bridge deck.
- The bridge was constructed in 1978 and is therefore, 35 years old.
- The present day AADT over the bridge is 9700. The future (2032) AADT is 14,400. It is estimated that 5% of the traffic over the bridge represents truck traffic.
- The roadway over the bridge is on a tangent grade of 4.8%. The bridge accommodates two lanes in the direction of Concord (East). Due to this steep grade, the inside lane is intended as a truck climbing lane.
- The bridge deck cross-slope is 1/2" per foot or 4.2% as the bridge is located on a horizontal curve in the road.
- The bridge condition is satisfactory with the exception of the bridge deck, which is poor. Photos of the underside of the bridge deck condition were presented. The photos show spalled concrete and rusted reinforcing bars indicative of active corrosion of the steel.
- The Scope of Work is to replace the bridge deck, deck end joints, bridge brush curbs, wingwall copings, bridge and approach rail and snow fence.
- Due to their age and with the weight of the bridge deck removed, replacement of the existing bridge bearings is under consideration.
- The proposed bridge deck will be 8" thick. The new deck will be constructed with a modern concrete mix and (epoxy) coated reinforcing bars designed to minimize the onset of corrosion and concrete deterioration.
- The roadway portion of the bridge deck will be covered with a modern waterproofing material prior to paving. This membrane will inhibit the infiltration of water and chlorides (salt) that could initiate corrosion of the new reinforcing steel.
- Deck construction will be completed in phases.

- Phased roadway widths are being designed to accommodate New England Transportation Consortium (NETC) truck route width requirements (14'-6") for transporting modular home units.
- To facilitate construction, a partial (phased) closure of Elm Street is being considered. This would require the contractor to maintain one lane of traffic and a sidewalk while cordoning off the other lane and sidewalk for deck removal and equipment and material staging.
- Construction duration is estimated to be within one construction season (7-9 months).
- Utilities are located along Elm Street. They go aerial 9, and under the bridge, and are in-ground under Elm Street. Utilities will be protected during construction. See Bridge Facts Sheet on the NHDOT project website.

Environmental Documentation

On behalf of the NHDOT Bureau of Environment, Joe Patusky read an Environmental Statement. See Environmental Documentation on the NHDOT project website.

Joe Patusky introduced Josh Lund to present the proposed traffic control for the project.

Traffic Control

Josh Lund reiterated the current travel lane configurations (one travel lane heading into Keene, two travel lanes heading towards Concord) and the need for traffic control to perform the deck replacement. The Replacement will be completed in two phases. Each construction phase will maintain two-way traffic (one lane in each direction) for the duration of the project. The lane widths associated with the traffic control will be 11'-0".

Josh presented the typical bridge section illustrating the phased construction and associated traffic control. Josh briefly explained the concept of phased construction whereas traffic control would be installed to maintain two lanes of traffic while the remaining section of the bridge deck is demolished and reconstructed. After construction of the phase I portion of the new bridge deck, two lanes of traffic would be shifted onto the newly constructed deck while the remainder of the old deck was demolished and reconstructed. After construction of the phase II portion of the new bridge deck, the project is complete and traffic will be returned to the pre-construction condition.

Josh presented two exhibit boards illustrating the proposed traffic control in plan view. The portion of the roadway colored yellow indicates the portion of the roadway used for traffic control travel lanes. One board presented the Phase I traffic control and the other board presented the Phase II traffic control. Josh noted that although not shown on the traffic control plan, the two lanes in the Concord direction would be merged, with standard signage, to the one lane prior to the bridge.

Discussion:

Question: Highway noise adjacent to the Elm Street neighborhood is considered objectionable. Can Sound Walls be included in this project to reduce the highway noise?

NHDOT Response (Bob Landry): *The project is a Bridge Rehabilitation Project. Funds being used on the project are dedicated to that purpose. Because we are not changing the physical limits of the bridge (widening/lengthening) the cost of designing and constructing sound walls cannot be considered under the requirements for Bridge Rehabilitation.*

SUBMITTED BY: Josh Lund

NOTED BY: Joseph Patusky
Bob Landry

Attachments

cc: Mark Richardson
R. Landry
File