

TOWN OF MILLIS

OFFICE OF THE BOARD OF SELECTMEN Veterans Memorial Building 900 Main Street • Millis, MA 02054 Phone: 508-376-7040 Fax: 508-376-7053 Christopher J. Smith, *Chairman* James G. Neville, *Vice Chairman* James J. McCaffrey, *Clerk*

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February 29, 2016

Senator Richard Ross Representative David Linsky Representative Shawn Dooley

Dear Senator Ross, Representative Linsky, Representative Dooley,

The Dover Road -West Street Bridge was constructed in 1969 by the Massachusetts Department of Public Works now called MassDOT. The bridge spans the Charles River in the Towns of Millis and Medfield. It is a two span steel stringer bridge with a reinforced concrete deck and a bituminous concrete wearing surface supported by eight (8) steel stringers. The bridge is 155 feet long and the spans are about equal in length. The Average Annual Daily Traffic (AADT) is 11,600 vehicles and it serves as a commuter route bypassing the center of Medfield and Westwood on the way to Boston. The detour for this bridge is approximately 2.6 miles and would funnel traffic onto the already congested Route 109, the main arteries of these communities. There has been no significant rehabilitation to this bridge.

Bridges such as the Dover Road-West Street Bridge have historically been operated and maintained by MassDOT. Some time ago, the maintenance and ownership of such structures not on state routes was transferred to the care and control of municipalities. In most instances this occurred with the municipality not fully understanding the condition of the structure or the need for routine maintenance to preserve the life of the structure.

All bridges have a useful life and their components play a major role in this life cycle. Maintenance plays a significant role in controlling rehabilitation/replacement costs. For example, the steel stringers on the West Street Bridge have a potential life in excess of 100 years if they are protected by paint and the bridge joints. Due to failing joints, there is significant deterioration to a beam on the bridge. This will require at least a partial replacement of the beam. Also, while the bridge deck currently shows little distress, its age and the construction techniques of the time as well as the lack of maintenance will cause acceleration of its deterioration. This will lead to a significant cost to the Towns. MassDOT has already indicated that there is no funding for this bridge and unless repairs are carried out soon the bridge will need to load restricted, i.e. posted. The required work of repairing the beam is the immediate repair needed. However, in order to eliminate the root cause the joints must be repaired or replaced. The joints, there are three, do not appear to be functioning as intended. This will likely translate to a less than successful repair. Ultimately, the joints will need to be replaced to attain the desired effect. In doing so the bridge deck will be compromised and given its age, 47 years, partial repair will speed up the deterioration process. The typical life of a bridge deck constructed in the late 1960s with an AADT of 11,000 vehicles is approximately 60 years with good maintenance. Given that this deck has not been maintained, the deterioration curve is approaching its geometric progression stage and the deck will soon be at the end of its useful life. The cost to rehabilitate the bridge is approximately \$2,500,000.00 including engineering.

The circumstances that the Towns of Millis and Medfield face are not usual. These towns have a history maintaining their facilities and planning ahead to repairs and rehabilitation. The needed repair of the bridge and the rehabilitation that will develop in the next few years could not have been foreseen or planned for without guidance. For these reasons we request assistance in the way of state funding.

Respectfully,

Christopher J. Smith, Chairman

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James J. McCaffrey, Clerk

Millis Board of Selectmen