

# Effingham Snow Road Bridge Project

September 3, 2019

Effingham Board of Selectmen



# What is this document about?

The Snow Road Bridge is in critical need of replacement. This bridge is on the main road leading to the Town Transfer Station. This lower portion of Snow Road off Route 153 sees higher volumes of vehicle traffic in a typical week on a year-round basis.

Since 2016, there has been different levels of work and discussion about what to do and how to handle the bridge replacement in a cost-effective manner.

The Town's people should have an idea of what progress is happening around this important taxpayer funded project. This document will help provide a chronological list of key events affecting this project.

**NOTE:** Please watch for a Board of Selectmen Meeting announcement about an upcoming visual presentation by HEB Engineering to the Board of Selectmen about the Snow Road Bridge. The presentation is being targeted for the September-October 2019 timeframe.

# Project Status Overview

- 2016 information and facts about the bridge project at that time
- March Town Meeting 2017 – Engineering firm provided presentation to the Town's people
- March Town Meeting 2018 – previous 2016 warrant article appropriation of funds lapsed into the general fund January 1, 2019.
- Additional research by Mike Cahalane, Selectman, with NH DOT and new firm hired, HEB Engineering, North Conway, NH
- 2019 ongoing research for bridge replacement or repair options; DES wetlands permitting; contract with engineering firm
- 2020 *replace* Snow Road Bridge after Town Warrant Article approval

## \*Time Line: 2016

- A sub-contracted firm did the bridge site core test borings for analysis about bridge footings and bridge abutment placements.
- The engineering firm obtained a NH DES wetlands permit. Subsequent State bridge review showed the bridge design was going outside/beyond the boundaries of the permit – a problem.
- Snow Road Bridge design proposal plan was not submitted for review or approved by NH DOT.
- Information is provided to the Town that the bridge can be replaced for about a \$160,000 construction price.
- Updated facts in writing to a Town representative = bridge cannot be built for \$160,000 price being discussed with the public.
  - Note: In 2016, written documentation was provided to the Town that showed the bridge could not be built for \$160,000. For unknown reasons, the engineering firm presentation at the Town Meeting and Town Warrant Article were never updated with the new higher cost information for the March 2017 Town Meeting.

## \*Time Line: 2017

- The engineering firm under contract with the Town made a presentation to the Town's people at March 2017 Town Meeting. Information was provided that the bridge replacement (not repair) could be completed for a cost near \$160,000.
- As it later turned out, actual construction bid proposals reviewed by the Board of Selectmen were all higher than \$160,000. Average construction bid price in the ballpark of 500K.
- In short, not enough money has been allocated by the Town Warrant Article process to complete the project.

# Time Line: 2018 Background Information

NH DOT confirmed bridge rated as E-2 bridge; all legal loads. During the next NH DOT review performed annually on red listed bridges.

- *When* NH DOT reduces the bridge weight, example maximum of 6-tons, the waste hauling company cannot use the bridge to service the Transfer Station. Transfer Station operations would then shut down. A secondary transportation route using Colcord Hill Road and Snow Road would be required to reopen the Station. These roads would require extensive work in many areas to widen the road for truck transport and two-way traffic purposes prior to reopening the Station. The cost would be in the tens of thousands of dollars.
- Repairs/upgrades would include about 1.75-road miles: tree/stump removal along roads to widen roads, ledge & boulder removal in many areas, replacing culverts, adding road base material in areas, etc.
- *A very important NOTE:* Winter driving by residents on the hills of the two roads with two-wheel vehicles and two-way traffic meeting with regularity would be extremely problematic. Waste Management vehicles would highly likely have major issues with being able to pull heavy loads up the hills through the winter season. The roads are very slippery & icy throughout much of the winter season. Winter road maintenance would most likely be expanded to several times per week on these roads throughout the season.

## Time Line: 2018

**Completed** - HEB Engineering, North Conway, hired to help create updated RFP process and review bids for possible bridge repair only solution. Repair bids where 225k+ and higher. The Town Office has file copies of each bid.

**Completed** - A written request was submitted to NH DOT to add Snow Road Bridge to the NH Bridge Aid program.

- Note: NH Bridge Aid pays for 80% of the bridge and bridge engineering oversight and bridge design architectural plans; Town would be responsible for 20%.
- Previous estimated projected NH Bridge Aid Program cost was approximately \$900,000 for a new NH DOT standard concrete & steel girder bridge; about \$180,000 would be the town taxpayer funding requirement.

# Time Line: 2019

**Town confirmed** – NH DOT - No application letter submissions to NH Bridge Aid Program are being reviewed and accepted at this time.

- Applications have been in a holding status since 2017 and are expected to remain outside the queue piling up until some point in 2021. Without a significant increase in funding the queue starts with a 12-year waiting line. Effingham sent our applications to the State in 2018. We will be at 2033 or beyond at best guess for acting on our application.

**Completed** - HEB confirmed that test core borings from 2016 era were drilled in some spots in impractical locations outside the scope of the project and overall had insufficient analysis information.

- Requires new core boring testing to determine type and depth for bridge footings & abutment placements. New tests took place in August 2019.

**In-process** - HEB contract for engineering and testing services signed by Board of Selectmen, August 6, 2019. Very tight timeline: Goal is to have a complete bridge design with an approved wetland permit, a selected contractor with a total price for the project under agreement contingent upon Town vote to accept the contract at the March 2020 Town Meeting.



# Time Line: 2019 Town Options

- Taxpayer funded options for dealing with the bridge replacement, repair or relocation:
  - *Replace* - New NH DOT standard concrete & steel girder bridge at \$900,000+. Likely life span of up to 75-years.
  - *Replace* - New NH DOT approved standard steel girder laminated timber bridge at a total cost of approximately \$300,000. Likely life span of up to 50-years. E-2 rated for all legal loads.
  - *Repair* - Culvert temporary repairs for \$132,000 plus engineering costs. Likely life span up to 10-years then bridge needs full replacement.
  - *Relocate Transfer Station* – Move & build a new and improved Transfer Station at a better Town location – Currently not feasible; cost prohibitive at this time.
- **Funding Note:** Town Owned Bridges Capital Reserve Fund has \$208,722 funding level as of June 2019 (updated from Trust Fund Data).

# Time Line: 2020 Next Steps

- HEB Engineering assists with the open RFP proposal process, bid review, legal contracting process and construction site supervision process.
  - Note: One contractor likely to bid on the contract is Hansen Bridge, Springfield, NH. They are on the NH DOT pre-approved bridge contractor list. This company is currently under contract with the Town to complete the Elm Street bridge repairs in 2020. They have solid and proven experience with installing laminated timber bridges. [www.hansenbridge.com](http://www.hansenbridge.com)
- **Request** - March 2020 Town Meeting Warrant Article for \$100,000. When approved by Town vote, funds will be added to the existing \$200,000+ Town Owned Bridges Capital Reserve Fund to *replace* the bridge with a new steel girder laminated timber bridge.
- Total projected Snow Road, total bridge replacement and guardrail costs:
  - preliminary estimate at this time of \$300,000.

On behalf of the  
Effingham Board of Selectmen,

*Thank You* for taking the time to review this  
information on the Snow Road Bridge Project.

**\*Disclaimer:** The Board of Selectmen has provided this document to assist with educating the Town's citizens. It is compiled with the best intentions from our knowledge with currently available research, supporting documentation and contractual information as of September 3, 2019. Any new and/or updated information from any time period may affect the statements in this document.