Tighe&Bond



PRESERVATION OF THE BRIDGE OF FLOWERS

Public Information Session

Andrea Lacasse, PE Zach Chornyak, PE

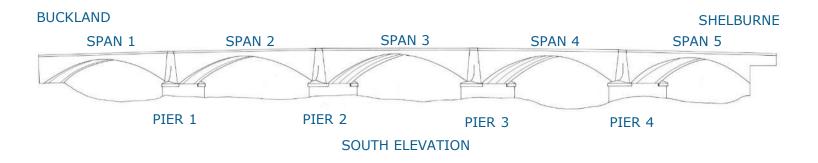
PRESENTATION CONTENTS

- History
- Assessment Findings and Recommendations
- Preservation Project

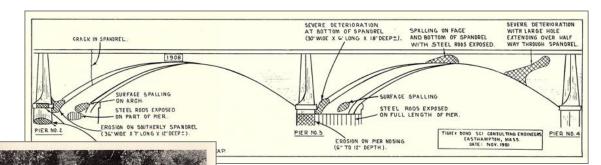


HISTORY

- Original Construction as Trolley Bridge in 1908
- Trolley Closes 1927
- 1928 Bridge Purchased by the Shelburne Falls Fire District, Bridge Continues to Support Buckland Water Main
- Recreation as Bridge of Flowers 1929
- Major Rehabilitation 1983
- 1987 Shelburne Falls Historic District Listed in the National Registry of Historic Places – Includes The Bridge of Flowers



1983 REHABILITATION – FUNDRAISING CAMPAIGN



Donations in Service

Rita Augustinowitz - Loan of Clippings Bleanor Avery - Newspaper Clippings Eleanor Avery - Newspaper Clippings James Basile - Buckland Police Chief Richard C. Bishop, Esq. - Legal Services David Bodenstein - Football Coach MTRHS Mike Chrisman - Photo Search Nancy Dean - Barometer Mark DeJackome - Shelburne Police Chief Philip Dzialo - Principal MTRHS Kristie Faufaw - Letter written Peter Gale - Trucking and Barometer Laura Griswold - Typing Mary Hancock - Typing and Proof Reading E. Will Heiser - Trucking
Jeanne Ray Juster - Design Consultation
Viola Lyons - Proof Reading
William Meyers - Volunteer Recruitment Carrie Miller - Letter written Rev. Benjamin E.I. New - Invocation and Benediction at Kickoff Mildred B. Parks - Typing Elaine Parmett - Typing
Margaret Parsons - Volunteer Coordinator
Mary & Michelle Phillips - Letters written Donald & Gladys Richardson - Printing Amy Roberts - Picture and Letter James E. Scott - Blackboard
Marilyn Shea - Watercolor Painting Rose Shippee - Proof Reading Hazel M. Streeter - Filing John Taylor - Typing Debbie Schafer Valvo - Photography David Washer - Kickoff Music Nick Waynelovich - Musical Director MTRHS Nicoletta Welsh, C.P.A. - Accounting Services Harold Wheeler - Movie Benefit Ticket Sales Jill & Julie Wheeler - Letters written Robert & Jane Wishart - Publications

Government Leadership

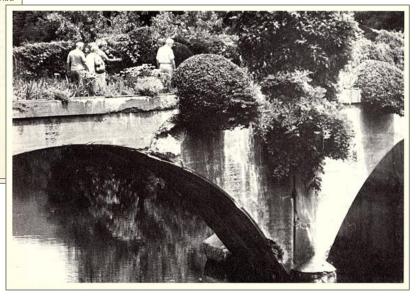
Jonathan Healy - State Representative John Olver - State Senator Stanley Rosenberg - Aide to Senator Olver Elizabeth D. Ertel - Aide to Senator Olver Byron J. Matthews - Secretary, Executive Office of Communities and Development John F. Bradshaw - Asst. Secretary, E.O.C.D. John F. Bassett - County Commissioner Everett B. Hatch - County Commissioner Margaret H. Herlihy - County Commissioner Bernard H. Shippee - Buckland Selectman Edmund F. Smith - Buckland Selectman Ruth A. Truesdell - Buckland Selectman Gordon F. Finck - Shelburne Selectman Stanley E. Gawle - Shelburne Selectman Harry S. Zaluzny - Shelburne Selectman Frank M. Field - Shelburne Falls Water Robert D. Howson - Shelburne Falls Water

Leadership Donors

Bank of Boston - Western Massachusetts N.A. Lamson & Goodnow Mfg. Co. Carrolle Markle Roger E. Peck Shelburne Falls Community House, Inc. Shelburne Falls Super Market Florence Temple

LEADERSHIP DONORS

Robert A. Pike - Shelburne Falls Water



1983 REHABILITATION - CONSTRUCTION













ASSESSMENT – TIGHE & BOND 2019

Approach:

- Drone Flights and Videos
- River Level Dropped
- Assessment in River of Arch Intrados and Foundations
- Assessment of Spandrel Walls
- Test pit





ASSESSMENT FINDINGS

Spandrel Walls

- Extensive cracking / bulge north wall
- Failure of protective coating and spall repairs applied in 1983





ASSESSMENT FINDINGS

Arch Intrados

- Staining and efflorescence along the construction joints
- Spall repairs from 1983 in fair to poor condition
- Weeps added in 1983 appear to be active



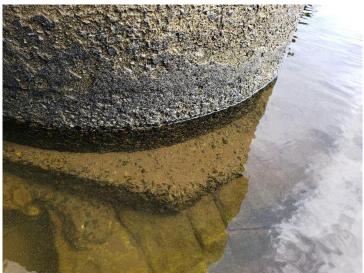
ASSESSMENT FINDINGS

Piers

- Scour pockets not found
- Overpour visible
- Appear to be socketed into bedrock
- Abrasion on nosings







RECOMMENDATIONS

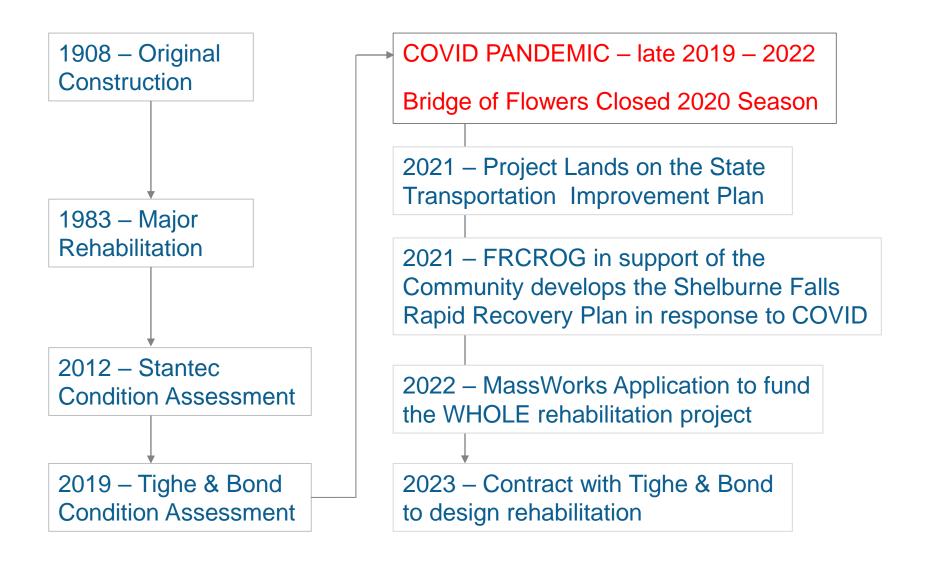
- Stabilize the wall
- Replace guardrails
- Improve drainage
- Address global deterioration of concrete

Cost Estimate: \$1,800,000 to \$2,000,000 (2019 dollars).





REHABILITATION PROJECT TIMELINE



SHELBURNE FALLS RAPID RECOVERY PLAN

Rapid Recovery Plan (RRP) Program:

Develop Actionable, project-based recovery plans tailored to the unique economic challenges and COVID-19 related impacts to downtowns, etc.

- 10 Projects Identified
- One was Structural Improvements to the Bridge of Flowers

SHELBURNE FALLS RAPID RECOVERY PLAN

Final Plan Recognizes:

- Struggles associated with work on Bridge Street.
 - Plan mentions taking efforts to mitigate any access issues during the construction phase.
- If construction temporarily limits access to the Bridge of Flowers...
 - Actions should be undertaken to mitigate these issues.
 - Programming that continues to engage visitors
- Ongoing communication throughout design and construction

MASSWORKS GRANT PROGRAM/APPLICATION

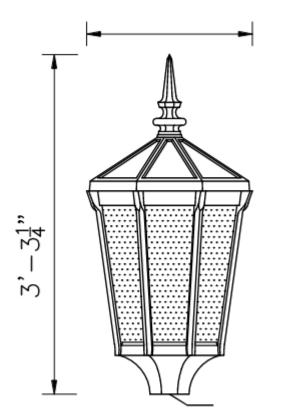
- SFFD, FRCROG, and Tighe & Bond
- Application for FY23
- Requested: \$2,455,000
- Awarded: \$2,298,000
- Target Start Date: 11/01/2022
- Target End Date: 11/01/2024



REHABILITATION PROJECT

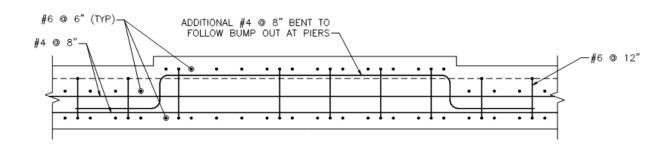
- Address Structural Deficiencies
 - Rebuild the North Spandrel Wall
- Improve Resiliency of the Bridge
 - Concrete protective coating
 - Improved waterproofing and drainage
- Address accessibility
 - New pathway meeting ADA requirements
- Update Bridge Features
 - Lighting
 - Irrigation





REHABILITATION PROJECT

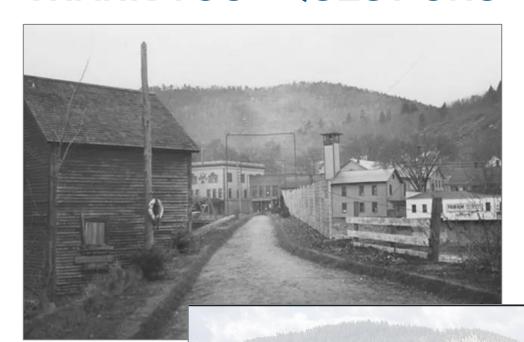
- Address Safety Concerns
 - New Bridge Rail on the North and South Walls
- Water Main Operation Enhancements
- Preservation of large shrubs and bridge features
- Minimize Impacts to the Community

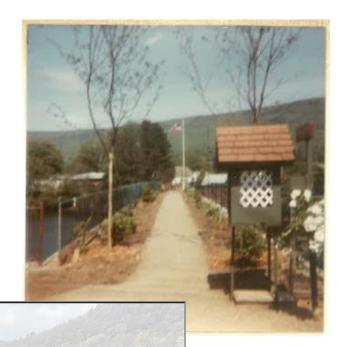


REINFORCING PLAN AT PIER 3

SCALE: 1" = 1'-0"

THANK YOU - QUESTIONS





1929 - 2024