Brookline Historical Summary of Infrastructure 66-11

Partial Stone Arch and Partial Concrete Box Culvert

Located on Hill Rd

Report Dated July 18, 2025

By Stanley E. Noga, Jr., Brookline Citizen, Former Selectperson, FEMA Contact, and Volunteer

In performing research on this infrastructure, I reviewed not only available Brookline maps but also the known/available Brookline Selectboard Minutes and Brookline Treasurer's Volumes covering a timeframe from the 1790s to 1913. I also searched for the available Brookline Selectboard Minutes from 1950 through 1960s searching for documentation pertaining to a concrete box culvert being added to the stone arch structure. Mention in the Selectboard Minutes of that era of a concrete box culvert could not be found. Treasurer's records covering that same period could not be found. I searched for approximately two hours to no avail.

I. Approach to Research

I first researched online Brookline maps and found them for 1821, 1856, and of later dates. This provided an understanding of what roads in Brookline existed at those two points in time. A review of Vermont State Maps shows the very first map of Brookline, VT, to have been produced as of 1796. Attached to this report are copies of the 1821 and 1856 maps of Brookline. The 1821 map does not show Hill Rd. The 1856 Brookline map shows Hill Rd., and a crossing of the stream referred to in the Treasurer's records as Cutler Brook.

II. The Next Research Phase

A review of both Selectboard and Treasure's documents was made. In searching for the Selectboard Minutes, I noted that in most of

the 1800s, Brookline did not have a Highway Department. When roads, culverts, and bridges were constructed, individuals in the general location of the needed infrastructure joined in constructing what was needed to serve their neighborhood. This is found to apply to Woolley Bridge, Ellen Ware Rd., Whitney Hill Rd., Putney Mountain Rd., Kirsch Rd. and the subject of this research. The Treasure's Disbursement Journal shows payments to those individuals for labor and materials.

The subject bridge/culvert, per current Brookline infrastructure notation for the MRGP State Program, is named 66-11. The stone arch structure is the only stone culvert/bridge in Brookline. A chronological listing of dates, individuals, and labeling in both the Selectboard Minutes (**SBM**) and the Treasure's Disbursement Journal (**TDJ**) related to this particular infrastructure follows:

III Findings

In the Treasure's Disbursement Journal, I found dated March 21, 1832, disbursements to the Cutler family, their neighbors, and town citizens totaling approximately \$624.70. Labeling of those disbursements were for 'bridge work' and 'per order'. Please note that Hill Rd. was then and remains to today approximately 2.5 miles long, which includes the subject bridge/culvert. The Cutler family owned land, referenced as Cutler Field and Cutler Hill on both maps and petitions, at both ends of the stone arch bridge and along Hill and Kirsch Rds. The hill at the south end of the subject bridge is referenced as Cutler Hill. The area at the top of said hill and extending south and north up Kirsch Rd. to the Townshend, VT town line is referenced as Culter Field. Historical records in Townshend, VT show James O. Follett to be born in 1843. Therefore, obviously, James O. Follett could not have constructed the original portion of the stone arch structure.

March 21, 1832, TDJ- Note that five of the first six disbursements for that date state, 'Bridge Order'. Others were for 'order'. At the bottom of that page is a description for a 'summary receipt' for an 'Agent for the town and Ira Cutler for making road - \$16.97'.

February 29, 1868, TDJ– 'Paid A. Stebbins for fees and costs on Follett case - \$17.00'.

J.O. Follett, the stone arch bridge builder, was born in 1843 and did not begin building bridges until 1894 in Townshend, VT. Mr. Follet had joined the Union Army in 1862 and left the army in 1863. He married in 1864 and over the next decade had six children and worked on his farmstead. No other description in town records was provided to be able to discern who is being referred to in regard to this \$17.00 disbursement. It is included for completeness.

December 23, 1879, TDJ - C. Atherton for drawing stone \$2.50'. T.M. Albee – 'Stone and highway work \$5.50'.

January 5, 1887, TDJ – 'H.M. Whitney – repairing stone bridge and highway work \$39.25'.

June 17, 1893, SBM— Selectboard Minutes Volume 3, Page 290 – 292 states that families along Hill Rd. petitioned the Selectboard to alter the course of Hill Rd. just south of the stone bridge over the Cutler Brook.

August 24, 1893, SBM- Selectboard holds a hearing to decide on the petition.

August 30, 1893, SBM— Selectboard met and decided to approve the petition and in describing the new road course referenced the beginning to be on the north end in the middle of the stone culvert.

September 5, 1893, SBM— Minutes fully describe the new road course to include reference to stone culvert.

October 23, 1893, SBM - Selectboard minutes state the new road course is open and in use and the selectboard formally votes to discontinue the former road course which began at the north end of the stone culvert.

December 26, 1893, TDJ – 'S.B. Stebbins -labor on new road near Cutler Field - \$11.00'. 'F.H. Morse labor new road - \$6.25'. 'J.C. Church- labor new road and long bridge _ \$11.87'.

D.J. Hitchcock labor on long bridge and new road - \$10.35'.

August 1, 1901, TDJ – 'J.O. Follett building bridge, stone on Cutler brook \$37.00.'

IV Summary

- A) Hill Rd. and a bridge over the Cutler Brook appears to have been constructed in 1832, per the Treasure's Disbursement Journal and reviewing whose property surrounded the bridge site; and who participated and was paid for 'Bridge order' provides for an educated guess that the Cutler family was involved in its construction.
- B) Stone infrastructures were acceptable to the town. In Selectboard Minutes Volume 2, Page 99 dated March 7, 1836, the Selectboard authorized 'repairing the road from the Meetinghouse to the south Athens town line. Currently, the very last culvert in Brookline, very near the Brookline/Athens town line, is of stone construction. It is at its inlet about three feet wide and 30 inches high of stone sides and flat stones laid across its top. It is not of stone arch construction. The outlet is about four feet wide and three feet high. It is shown in the Brookline Culvert inventory as infrastructure 51-84. Although the VTCulvert State website shows said culvert to be in Athens due to a mapping error, it is in Brookline-.

In the early 1870s the bridge called the Woolly Bridge at the intersection of Putney Mountain Rd. and Grassy Brook Rd. was being replaced. The Selectboard as stated in Volume 3 between

Pages 108 and 275 periodically interfaced with the Woolley family and neighbors both as to what the anticipated cost would be, and if they had decided upon either stone or wood construction. On Page 276 of Volume 3, the town voted to construct an iron bridge. The 'survey and layout cost was \$25.00 granted October 17, 1870. The layout was referenced again on Page 116 dated February 13, 1871.

C.) The extent of Follett involvement in work on infrastructure 66-11on Hill Rd., Brookline, VT is unknown. The Brookline TDJ of that era states that Mr. Follett was paid \$37.00 for 'building stone bridge on Cutler Brook'. It is interesting to note that in the pamphlet called, 'James Otis Follett: "Builder of Bridges and Men" by Karson Petty' it states that Mr. Follett charged \$160.00 to build his first bridge'. The first few bridges were in Townshend, VT, and had spans ranging from 14 ft. to 16 ft. In 1902, Mr. Follett constructed the East Putney Brook Stone Arch Bridge in Putney, VT for a cost of \$1,500.00. It was a one lane structure with a span of 16.5 ft. He constructed another bridge in Putney, VT in 1906 called the Sackets Brook Stone Arch Bridge (a/k/a the Hi-lo Biddy Stone Arch Bridge) for \$1,560.00. It was also a single lane structure with a 15.5 ft span. It is believed that the last stone arch bridge constructed by Mr. Follett was at Tannery Brook in West Townshend, VT. It was constructed in 1910, the year before his death, at a cost of \$900.00. The \$37.00 cost to Brookline for Mr. Follett's involvement in infrastructure 66-11 on Hill Rd. is slightly less than 25% of the lowest fee which he charged to date. Its span is 11.5 ft. Does the smaller fee paid indicate a minimum amount of work on this structure?

D.) Design

Infrastructure 66-11 Hill Rd. is different than any of the other Follett constructed stone arch bridges in the area. I have either reviewed pictures and articles and/or personally viewed most of the Follett stone arch bridges constructed in Townshend and Putney. I point out that all Follett

bridges' archways start at the very bottom of the span, at ground level. The Brookline structure has support walls which extend perpendicular approximately 30 inches upward at which point the arch portion of the structure begins. This is not visible at the outlet end of this structure. It is very evident inside the structure. This is completely different from every other drystone arched bridge that Mr. Follett built. I conjecture that he simply continued the design which he found to already exist and intermeshed with it for continuity. Per above dates in Section III, in 1879 stonework was paid for. In 1887 more repairs to the stone bridge were made. In 1893 and 1894 the stone arch bridge was referenced as the starting point of an alternate course for Hill Rd.

E. Continuity of Quality

There is significant disparity in this structure in quality of work of the two sections of stone arch construction. The middle portion has larger stone with significant spacing between them in both support walls and arch. The east end has smaller stone with tight spacing in both the support walls and arch. The larger stone and spaces might explain the repair work of 1879 and 1887. Concrete used in America began in bridge work approximately 1881. The concrete is not applied to all the arch in all the middle section but to where spaces were. And the west end of the subject is obviously a concrete box culvert reported to have been installed at some point in time between the early 1950s and late 1960s.

V. EXHIBITS

Exhibit A – Map 1821

Exhibit B – Map 1856

Exhibit C – March 21, 1832, Cutler Treasurers Disbursements

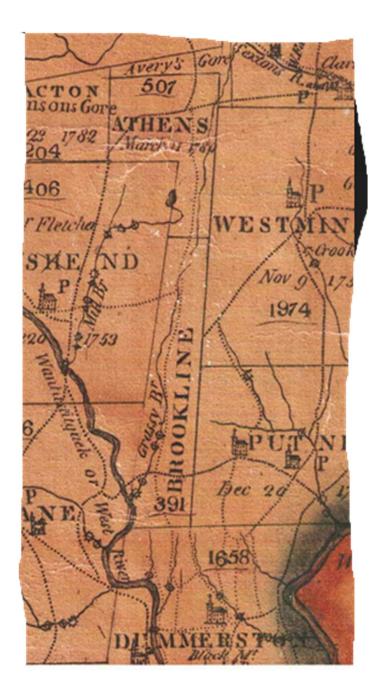
Exhibit D – Atherton Stone expense Treasurer's Disbursements

Exhibit E – Whitney Stone Repair Expense

Exhibit F – August 1, 1901, Follett Payment & Description

Exhibit G – June 17, 1893, New Road and its Description

EXHIBIT A



1821 www.old-maps.com

EXHIBIT B

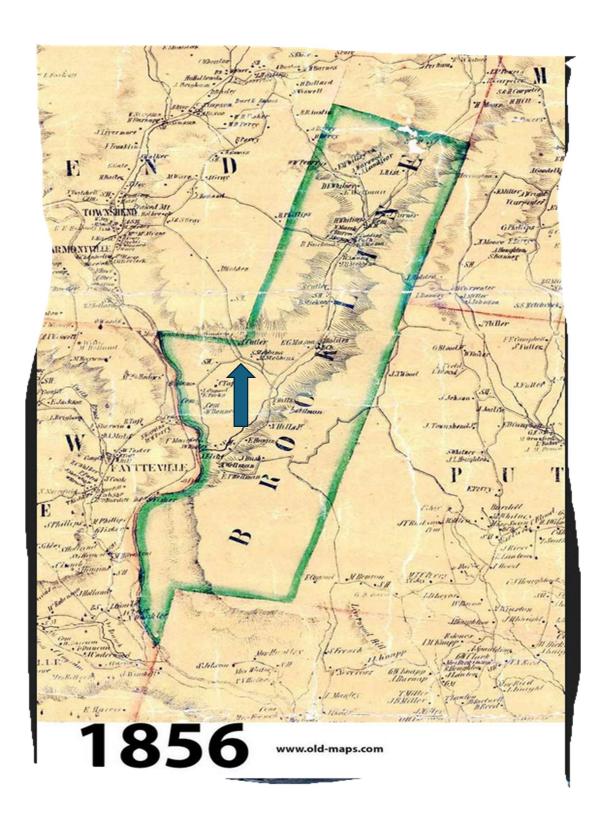


EXHIBIT C

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